## IHIERM LEVEL V2.M01

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X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIERM)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
```

SYSPRINT

SYSUT1 SYSUT2

SYSUT3

JES2.J0B09284.S00102

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

00097001

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                  X390 3.1.04 2012/08/17 13.21
                                                                                                                         00002001
                                         2 *
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
                                                                                                                         00004001
                                         5
                                                     STATUS - LEVEL 2.1
                                                                                                                         00005001
                                         6
                                                                                                                         00006001
                                                     FUNCTION/OPERATION - THIS CONTROL SECTION CONTAINS ALL
                                                                                                                         00007001
                                           *
                                         8
                                                     THE MESSAGES USED BY THE ERROR ROUTINE
                                                                                                                         00008001
                                         9
                                                                                                                         00009001
                                                     ENTRY POINTS - N/A
                                        10
                                                                                                                         00010001
                                                                                                                         00011001
                                        11
                                        12
                                                     OUTPUT - N/A
                                                                                                                         00012001
                                        13
                                                                                                                         00013001
                                        14
                                                     EXTERNAL ROUTINES - N/A
                                                                                                                         00014001
                                        15
                                                                                                                         00015001
                                                                                                                         00016001
                                                     EXITS - N/A
                                        16
                                                                                                                         00017001
                                        17
                                                     TABLES/WORK AREAS -
                                                                                                                         00018001
                                        19
                                                     THIS CONTROL SECTION IS MADE UP OF TABLES
                                                                                                                         00019001
                                        20
                                                                                                                         00020001
                                                                                                                         00021001
000000
                       00000 009B1
                                        21 IHIERMSG CSECT
                                                                                                                         00022001
                                        22
                                        23
                                                     ENTRY IHIERM01
                                                                                                                         00023001
                                        24
                                                                                                                         00024001
                                                           X'03'
                       ааааз
                                        25 FLAGIDS
                                                                                     INSERT DSNAME INTO MSG
                                                                                                                         00025001
                                                                                                                         00026001
                       99991
                                        26
                                           FLAGTPS
                                                    FOU
                                                           X'01
                                                                                     TNSERT PSW TNTO MSG
                       00004
                                        27 FLAGMC
                                                           X'04'
                                                                                     MSG CONTINUATION
                                                                                                                         00027001
                                                     EQU
                                        28
                                                                                                                         00028001
000000 000000C3
                                        29
                                                     DC
                                                           A(MESS0)
                                                                                     MESSAGE NUMBER 0-43 MUST BE
                                                                                                                         00029001
000004 000000E0
                                        30
                                                     DC
                                                           A(MESS1)
                                                                                     KEPT TOGETHER
                                                                                                                         00030001
000008 0000011D
                                        31
                                                     DC
                                                           A (MESS2
                                                                                                                         00031001
00000C 00000149
                                        32
                                                     DC
                                                           A (MESS3)
                                                                                                                         00032001
000010 0000016E
                                        33
                                                     DC
                                                           A (MESS4
                                                                                                                         00033001
000014 000001A6
                                        34
                                                     DC
                                                           A (MESS5
                                                                                                                         00034001
000018 000001D6
                                        35
                                                     DC
                                                           A(MESS6)
                                                                                                                         00035001
                                                           A(MESS7
00001C 0000022E
                                        36
                                                     DC
DC
                                                                                                                         00036001
999939 9999939D
                                        37
                                                           A (MFSS8
                                                                                                                         00037001
000024 000002DD
                                                     DC
                                                           A(MESS9
                                                                                                                         00038001
                                        38
000028 00000317
                                        39
                                                     DC
                                                           A(MESS10)
                                                                                                                         00039001
00002C 00000332
                                        40
                                                     DC
                                                           A(MESS11
                                                                                                                         00040001
000030 0000034B
                                        41
                                                     DC
                                                           A(MESS12)
                                                                                                                         00041001
                                                    DC
000034 00000387
                                        42
                                                           A(MESS13)
                                                                                                                         00042001
000038 000003BD
                                        43
                                                     DC
                                                           A(MESS14)
                                                                                                                         00043001
00003C 000003EC
                                        44
                                                     DC
                                                           A(MESS15
                                                                                                                         00044001
                                                                                                                         00045001
000040 00000424
                                        45
                                                     DC
                                                           A(MESS16
000044 0000045E
                                        46
                                                     DC
                                                           A(MESS17
                                                                                                                         00046001
                                                           A(MESS18)
000048 0000047D
                                        47
                                                     DC
DC
                                                                                                                         00047001
                                                                                                                         00048001
99994C 99999446
                                        48
                                                           A (MFSS19)
000050 000004E4
                                                     DC
                                                           A(MESS20)
                                        49
                                                                                                                         00049001
000054 00000529
                                        50
                                                     DC
                                                           A(MESS21
                                                                                                                         00050001
000058 0000058D
                                        51
                                                     DC
                                                           A (MESS22
                                                                                                                         00051001
00005C 000005BA
                                        52
                                                     DC
                                                           A(MESS23)
                                                                                                                         00052001
                                                     DC
                                                                                                                         00053001
000060 000005DB
                                        53
                                                           A(MESS24)
000064 00000601
                                                     DC
                                        54
                                                           A(MESS25)
                                                                                                                         00054001
000068 00000627
                                        55
                                                     DC
                                                           A(MESS26)
                                                                                                                         00055001
00006C 00000663
                                        56
                                                     DC
                                                           A(MESS27)
                                                                                                                         00056001
000070 0000069F
                                        57
                                                     DC
                                                           A (MESS28)
                                                                                                                         00057001
                                                           A(MESS29
                                                    DC
DC
000074 000006D6
                                        58
                                                                                                                         00058001
000078 00000719
                                        59
                                                           A (MFSS30)
                                                                                                                         00059001
00007C 0000074F
                                                     DC
                                                           A(MESS31)
                                                                                                                         00060001
                                        60
000080 00000788
                                        61
                                                     DC
                                                           A(MESS32)
                                                                                                                         00061001
000084 000007AC
                                                     DC
                                                           A (MESS33)
                                                                                                                         00062001
                                        62
000088 000007D6
                                        63
                                                     DC
                                                           A(MESS34)
                                                                                                                         00063001
                                                     DC
00008C 00000817
                                        64
                                                           A(MESS35)
                                                                                                                         00064001
000090 00000833
                                        65
                                                     DC
                                                                                                                         00065001
                                                           A(MESS36)
000094 00000890
                                        66
                                                     DC
                                                           A(MESS37
                                                                                                                         00066001
000098 000008D0
                                        67
                                                     DC
                                                           A (MESS38)
                                                                                                                         00067001
00009C 000008EC
                                        68
                                                     DC
                                                           A (MESS39)
                                                                                                                         00068001
                                                           A(MESS40
0000A0 00000911
                                        69
                                                     DC
                                                                                                                         00069001
                                                                                                                         00070001
0000A4 00000943
                                        70
                                                    DC
                                                           A(MESS41)
0000A8 0000096C
                                        71
                                                    DC
                                                           A(MESS42
                                                                                                                         00071001
0000AC 00000986
                                        72
                                                     DC
                                                           A(MESS43)
                                                                                                                         00072001
                                                                                                                         00073001
                                        73
0000B0 C9C8C9F04040C940
                                        74 IHIERM01 DC
                                                           C'IHI0 I SC=
                                                                                                                         00074001
                                                                                                                         00075001
                                        75
                                        76 MESS0
                                                           AL1(L'MESSØT)
                                                                                                                         00076001
0000C3 1B
                                                    DC
                                                                                                                         00077001
0000C4 00
                                        77
                                                     DC
                                                           AI 1 (0)
0000C5 C4C1E3C1E2C5E340
                                        78 MESSØT
                                                           C'DATASET NUMBER OUT OF RANGE'
                                                                                                                         00078001
                                                    DC
                                        79
                                                                                                                         00079001
0000F0 3B
                                                     DC
                                                           AL1(L'MESS1T)
                                                                                                                         99989991
                                        80 MESS1
0000E1 03
                                                           AL1(FLAGIDS)
                                                                                     FLAGS
                                                                                                                         00081001
                                                     DC
                                        81
0000E2 C4E2D57E40404040
                                                                         REAL NUMBER TO BE CONVERTED OUT OF INTEGER X00082001
                                        82 MESS1T
                                                    DC
                                                           C'DSN=
                                                           RANGE '
                                                                                                                         00083001
                                        83 *
                                                                                                                         00084001
00011D 2A
                                        84 MESS2
                                                     DC
                                                           AL1(L'MESS2T)
                                                                                                                         00085001
                                                                                     FLAGS
00011E 03
                                        85
                                                     DC
                                                           AL1(FLAGIDS)
                                                                                                                         00086001
                                        86 MESS2T
                                                                         INCOMPATIBLE ACTIONS ON DATASET'
                                                                                                                         00087001
00011F C4E2D57E40404040
                                                    DC
                                                           C'DSN=
                                        87
                                                                                                                         00088001
000149 23
                                        88 MESS3
                                                     DC
                                                           AL1(L'MESS3T)
                                                                                                                         00089001
                                        89
                                                           AL1(FLAGIDS)
                                                                                     FLAGS
                                                                                                                         00090001
00014A 03
                                                     DC
                                                                         INPUT BEYOND LAST OUTPUT'
00014B C4E2D57E40404040
                                        90 MESS3T
                                                    DC
                                                           C'DSN=
                                                                                                                         00091001
                                        91
                                                                                                                         00092001
00016E 23
                                        92 MESS4
                                                     DC
                                                           AL1(L'MESS3T)
00016F 00
                                                                                     FLAGS
                                        93
                                                     DC
000170 E3D6D640D4C1D5E8
                                        94 MESS4T
                                                           C'TOO MANY REPOSITIONINGS IN DATASETS. INTERNAL OVERFLOWX00095001
                                                    DC
                                                                                                                         00096001
```

95 \*

Loc Object Code X390 3.1.04 2012/08/17 13.21 Addr1 Addr2 Stmt Source Statement 0001A6 2E 96 MESS5 DC AL1(L'MESS5T) 00098001 0001A7 03 DC AL1(FLAGIDS) FLAGS 00099001 97 0001A8 C4E2D57E40404040 98 MESS5T DC INPUT REQUEST BEYOND END OF DATASET' 00100001 C'DSN= 99 00101001 0001D6 3E 100 MESS6 DC AL1(L'MESS6T) 00102001 0001D7 07 AL1(FLAGIDS+FLAGMC) FLAGS 00103001 0001D8 C4E2D57E40404040 102 MESS6T C'DSN= EXPONENT PART OF INPUT NUMBER CONSISTS OF MX00104001 ORE THAN' 00105001 AL1(L'MESS6T1) 000216 16 103 DC 00106001 000217 00 00107001 104 DC AL1(0) FLAGS 000218 E3E6D640E2C9C7D5 105 MESS6T1 C'TWO SIGNIFICANT DIGITS 00108001 DC 00109001 106 \* 00022E 40 107 MESS7 DC AL1(L'MESS7T) 00110001 AL1(FLAGIDS+FLAGMC) 00022F 07 108 DC FLAGS 99111991 000230 C4E2D57E40404040 C'DSN= \*\*NO CONTROL CHARACTER SPECIFIED IN RECORD C00112001 109 MESS7T DC FORMAT OF ' 00113001 AL1(L'MESS7T1) 000270 2B DC 00114001 000271 00 DC AL1(0) FLAGS 00115001 111 C'DATASET. SPLITTING INTO SECTIONS IMPOSSIBLE' 000272 C4C1E3C1E2C5E34B 112 MESS7T1 DC 00116001 113 \* 00117001 00029D 3E 114 MESS8 DC AL1(L'MESS8T) 00118001 AL1(FLAGIDS) 00029E 03 115 DC FLAGS 00029F C4E2D57E40404040 116 MESS8T DC C'DSN= SOURCE IN PROCEDURE OUTSYMBOL DOES NOT MATCX00120001 H STRING' 00121001 117 00122001 118 MESS9 0002DD 38 DC AL1(L'MESS9T) 00123001 AL1(FLAGIDS) 119 FLAGS 00124001 0002DE 03 DC 0002DF C4E2D57E40404040 UNDEFINED FUNCTION NUMBER IN SYSACT PROCEDUX00125001 120 MESS9T C'DSN= 00126001 121 \* 00127001 AL1(L'MESS10T) AL1(FLAGIDS) 000317 19 122 MESS10 DC 00128001 FLAGS 00129001 000318 03 DC 123 000319 C4E2D57E40404040 124 MESS10T DATASET CLOSED' 00130001 125 \* 00131001 000332 17 126 MESS11 DC AL1(L'MESS11T) 00132001 AL1(FLAGIDS) 000333 03 127 DC FL AGS 00133001 DATASET OPEN' 00134001 000334 C4E2D57E40404040 128 MESS11T DC C'DSN= 00135001 129 130 MESS12 DC 00136001 00034C 03 131 DC AL1(FLAGIDS) FLAGS 00137001 QUANTITY IN SYSACT PROCEDURE MUST BE A VARIX00138001 00034D C4E2D57E40404040 132 MESS12T DC C'DSN= ABLE' 00139001 00140001 133 \* 134 MESS13 AL1(L'MESS13T) 00141001 135 **FLAGS** 00142001 000388 03 AL1(FLAGIDS) 000389 C4E2D57E40404040 136 MESS13T QUANTITY IN SYSACT PROCEDURE OUT OF RANGE' 00143001 DC C'DSN= 00144001 137 DC 0003BD 2D 138 MESS14 AL1(L'MESS14T) 00145001 AL1(FLAGIDS) 0003BE 03 139 DC **FLAGS** 00146001 0003BF C4E2D57E40404040 140 MESS14T DC C'DSN= BACKWARD REPOSITIONING NOT DEFINED' 00147001 141 \* 00148001 0003EC 36 142 MESS15 DC AL1(L'MESS15T) 00149001 0003ED 00 DC AL1(0) **FLAGS** 00150001 143 0003EE E4D7D7C5D940C2D6 144 MESS15T DC C'UPPER BOUND LESS THAN LOWER BOUND IN ARRAY DECLARATIONX00151001 00152001 145 \* 00153001 000424 38 146 MESS16 DC AL1(L'MESS16T) 00154001 000425 00 147 DC AI 1 (0) FI AGS 00155001 C'VALUE OF SUBSCRIPT EXPRESSION NOT WITHIN DECLARED BOUNX00156001 000426 E5C1D3E4C540D6C6 148 MESS16T DC 00157001 149 \* 00158001 00045E 1D 150 MESS17 DC AL1(L'MESS17T) 00159001 00160001 00161001 00045F 00 151 DC AL1(0) FLAGS 000460 C5D5C4D3C5E2E240 152 MESS17T C'ENDLESS LOOP IN FOR STATEMENT' DC 153 00162001 154 MESS18 00163001 00047D 27 DC AL1(L'MESS18T) 00047E 00 155 DC AL1(0) FLAGS 00164001 00047F E2E3D6D9C1C7C540 156 MESS18T DC C'STORAGE REQUEST FOR ARRAY EXCEEDS LIMIT' 00165001 00166001 157 158 MESS19 DC 00167001 0004A6 3C AL1(L'MESS19T) 0004A7 00 159 AL1(0) FLAGS 00168001 DC 0004A8 E4D5C5D8E4C1D340 160 MESS19T C'UNEQUAL NUMBER OF DIMENSIONS FOR ACTUAL AND FORMAL PARC00169001 DC AMETER' 00170001 161 \* 00171001 162 MESS20 AL1(L'MESS20T) 0004E4 43 DC 00172001 0004E5 00 AL1(0) 163 DC **FLAGS** 00173001 0004E6 C1C3E3E4C1D340C1 164 MESS20T C'ACTUAL AND CORRESPONDING FORMAL PARAMETER OF DIFFERENTX00174001 TYPE OR KIND' 00175001 00176001 165 166 MESS21 000529 43 DC AL1(L'MESS21T) 00177001 167 **FLAGS** 00178001 00052A 04 DC AL1(FLAGMC) C'UNEQUAL NUMBER OF PARAMETERS IN PROCEDURE DECLARATION X00179001 00052B E4D5C5D8E4C1D340 168 MESS21T DC AND PROCEDURE' 00180001 00056E 1D 169 DC AL1(L'MESS21T1) 00181001 00056F 00 170 DC AL1(0) FLAGS 00182001 171 MESS21T1 DC 00183001 000570 E2E3C1E3C5D4C5D5 C'STATEMENT/FUNCTION DESIGNATOR' 172 00184001 00058D 2B 173 MESS22 DC AL1(L'MESS22T) 00185001 174 00186001 00058E 00 DC **FLAGS** 175 MESS22T DC 176 \* 00187001 00188001 00058F C1E2E2C9C7D5D4C5 C'ASSIGNMENT TO FORMAL PARAMETER NOT POSSIBLE' 176 177 MESS23 DC AL1(L'MESS23T) 00189001 0005BA 1F 0005BB 00 178 DC 00190001 0005BC C1D9C7E4D4C5D5E3 179 MESS23T C'ARGUMENT OF SQRT LESS THAN ZERO' 00191001 DC 180 00192001 0005DB 24 181 MESS24 DC AL1(L'MESS24T) 00193001

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 0005DC 00 182 AL1(0) FLAGS 00194001 DC 0005DD C1D9C7E4D4C5D5E3 183 MESS24T DC C'ARGUMENT OF EXP GREATER THAN 174.673' 00195001 184 \* 00196001 185 MESS25 000601 24 DC AL1(L'MESS25T) 00197001 186 DC 00198001 000603 C1D9C7E4D4C5D5E3 187 MESS25T C'ARGUMENT OF LN NOT GREATER THAN ZERO' 00199001 DC 188 99299991 000627 3A 189 MESS26 DC AL1(L'MESS26T) 00201001 FLAGS 000628 00 190 DC AL1(0) 00202001 000629 C1C2E240E5C1D3E4 191 MESS26T C'ABS VALUE OF ARGUMENT OF SIN OR COS NOT LESS THAN PI\*2X00203001 DC 00204001 192 \* 00205001 000663 3A 193 MESS27 DC AL1(L'MESS27T) 00206001 FI AGS 999664 99 194 DC AI 1 (0) 99297991 000665 C1C2E240E5C1D3E4 195 MESS27T C'ABS VALUE OF ARGUMENT OF SIN OR COS NOT LESS THAN PI\*2X00208001 DC \*\*50' 00209001 196 \* 00210001 00069F 35 197 MESS28 DC AL1(L'MESS28T) 00211001 AL1(FLAGIPS) C'PSW= FLAGS 0006A0 01 198 DC 00212001 0006A1 D7E2E67E40404040 FIXED POINT OVERFLOW INTERRUPT' 199 MESS28T DC 00213001 00214001 200 AL1(L'MESS29T) 201 MESS29 DC 00215001 0006D7 01 202 DC AL1(FLAGIPS) FLAGS 00216001 0006D8 D7E2E67E40404040 C'PSW= FLOATING POINT EXPONENT OVERFLOX00217001 203 MESS29T DC W INTERRUPT' 00218001 204 \* 00219001 205 MESS30 DC AL1(L'MESS30T) 00220001 AL1(FLAGIPS) **FLAGS** 00221001 00071A 01 206 00071B D7E2E67E40404040 207 MESS30T C'PSW= DIVISION BY ZERO, FIXED POINT' 00222001 DC 208 \* 00223001 00074F 37 209 MESS31 DC AL1(L'MESS31T) 00224001 AL1(FLAGIPS) 000750 01 00225001 210 DC 000751 D7E2E67E40404040 211 MESS31T DC C'PSW= DIVISION BY ZERO, FLOATING POINX00226001 00227001 212 \* 00228001 213 MFSS32 000788 22 AL1(I 'MESS32T) 00229001 DC 000789 03 AL1(FLAGIDS) FLAGS 00230001 214 DC 00078A C4E2D57E40404040 215 MESS32T DC UNRECOVERABLE I/O ERROR' 00231001 00232001 216 \* 0007AC 28 217 MFSS33 DC AL1(L'MESS33T) 00233001 0007AD 01 218 DC AL1(FLAGIPS) FLAGS 00234001 0007AE D7E2E67E40404040 PROGRAM INTERRUPT' 00235001 219 MESS33T DC C'PSW= 00236001 220 221 MESS34 AL1(L'MESS34T) 00237001 0007D7 00 FLAGS 00238001 222 DC C'VALUE OF SWITCH DESIGNATOR NOT DEFINED IN DECLARATION X00239001 0007D8 E5C1D3E4C540D6C6 223 MESS34T DC 00240001 OF SWITCH! 224 \* 00241001 00242001 225 MESS35 DC AL1(L'MESS35T) 000818 00 226 **FLAGS** 00243001 C'BASE NOT GREATER THAN ZERO' 000819 C2C1E2C540D5D6E3 227 MESS35T DC 00244001 00245001 228 \* 229 MESS36 AL1(L'MESS36T) 000833 38 DC 00246001 FLAGS 000834 04 230 DC AL1(FLAGMC) 000835 E3D6D640D4C1D5E8 231 MESS36T C'TOO MANY NESTED BLOCKS AND CALLS OF PROCEDURES, SWITCHC00248001 DC ES' 00249001 9998ED 21 232 DC AL1(L'MESS36T1) 00250001 FL AGS 00086F 00 233 DC AI 1 (0) 00251001 00086F C1D5C440D7C1D9C1 234 MESS36T1 DC C'AND PARAMETERS. INTERNAL OVERFLOW' 00252001 235 236 MESS37 AL1(L'MESS37T) 00254001 DC AL1(FLAGIDS) FLAGS
C'DSN= \*\*BLOCKSIZE NOT A MULTIPLE OF LOGICAL RECORX00256001
00257001 000891 03 237 DC 000892 C4E2D57E40404040 238 MESS37T DC D LENGTH' 00257001 239 \* 00258001 0008D0 1A 240 MESS38 DC AL1(L'MESS38T) 00259001 0008D1 03 241 DC AL1(FLAGIDS) FLAGS 00260001 TOO LONG RECORD' 0008D2 C4E2D57E40404040 242 MESS38T DC C'DSN= 00261001 243 \* 00262001 0008EC 23 244 MESS39 DC AL1(L'MESS39T) 00263001 00264001 245 **FLAGS** DC 0008EE C7C5E361D7E4E340 246 MESS39T C'GET/PUT IDENTIFICATION OUT OF RANGE' 00265001 247 \* 00266001 248 MESS40 00267001 000911 30 DC AL1(L'MESS40T) 000912 00 00268001 **FLAGS** 249 DC C'REAL NUMBER TO BE CONVERTED OUT OF INTEGER RANGE' 000913 D9C5C1D340D5E4D4 250 MESS40T 00269001 DC 251 00270001 000943 27 252 MESS41 DC AL1(L'MESS41T) 00271001 FL AGS 00272001 000944 03 253 DC AL1(FLAGIDS) DD CARD INCORRECT OR MISSING' 000945 C4E2D57E40404040 254 MESS41T C'DSN= 00273001 DC 00274001 255 00275001 256 MESS42 DC AL1(L'MESS42T) 00096D 00 257 FI AGS 00276001 00096E C9D5E5C1D3C9C440 C'INVALID OPTION PARAMETER' 258 MESS42T DC 00277001 00278001 259 260 MESS43 AL1(L'MESS43T) 00279001 000986 29 DC 000987 00 261 DC FLAGS 00280001 000988 C9D3D3C5C7C1D340 262 MESS43T C'ILLEGAL CALL OF GET/PUT OR LIST PROCEDURE' 00281001 263 \* 00282001 264 FND 00283001

ı	MSG					Symbol	Cross	Refe	rence									PAGE	5
,	Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	5				X390	3.1.	94	2012/0	8/17	13.21
•	.,o <u>-</u>	2080			. , p c	08. u	50			_				7,550	5.1.	• •	-01-,	.0,	13111
ı	FLAGIDS	1	00000003		U		25	81	85	89	97		108	115	119	123	127	131	135
		_						139	214	237	241	253							
	FLAGIPS FLAGMC		00000001 00000004		U U		26 27	198 101	202 108	206 167	210 230	218							
	IHIERM01		00000004 000000B0	00000001	-		74	23	100	107	230								
	MESS0		000000C3				76	29											
1	MESSØT	27	000000C5	00000001	. сс		78	76											
	MESS1		000000E0				80	30											
	MESS1T		000000E2				82	80											
	MESS10 MESS10T		00000317 00000319				122 124	39 122											
	MESS11		00000313				126	40											
	MESS11T		00000334				128	126											
	MESS12		0000034B				130	41											
	MESS12T		0000034D				132	130											
	MESS13 MESS13T		00000387 00000389				134 136	42 134											
	MESS14		00000389				138	43											
	MESS14T		000003BF				140	138											
	MESS15		000003EC				142	44											
	MESS15T		000003EE				144	142											
	MESS16 MESS16T		00000424 00000426				146 148	45 146											
	MESS17		00000426 0000045E				150	46											
	MESS17T		00000460				152	150											
1	MESS18		0000047D				154	47											
	MESS18T		0000047F				156	154											
	MESS19 MESS19T		000004A6 000004A8				158 160	48 158											
	MESS191		000004A8				84	31											
	MESS2T		0000011B				86	84											
1	MESS20	1	000004E4	00000001	. R A		162	49											
	MESS20T		000004E6				164	162											
	MESS21 MESS21T		00000529				166 168	50 166											
	MESS211		0000052B 00000570				171	169											
	MESS22		00000570				173	51											
1	MESS22T		0000058F				175	173											
	MESS23		000005BA				177	52											
	MESS23T		000005BC				179	177											
	MESS24 MESS24T		000005DB 000005DD				181 183	53 181											
	MESS25		00000300				185	54											
	MESS25T		00000603				187	185											
1	MESS26	1	00000627	00000001	. RA		189	55											
	MESS26T		00000629				191	189											
	MESS27		00000663				193	56											
	MESS27T MESS28		00000665 0000069F				195 197	193 57											
	MESS28T		00000031 000006A1				199	197											
	MESS29		000006D6				201	58											
	MESS29T		000006D8				203	201											
	MESS3		00000149				88	32											
	MESS3T MESS30		0000014B 00000719				90 205	88 59	92										
	MESS30T		0000071B				207	205											
	MESS31	1	0000074F	00000001	. R A		209	60											
	MESS31T		00000751				211	209											
	MESS32		00000788				213	61											
	MESS32T MESS33		0000078A 000007AC				215 217	213 62											
	MESS33T		000007AC				219	217											
1	MESS34	1	000007D6	00000001	. R A		221	63											
	MESS34T		000007D8				223	221											
	MESS35		00000817				225	64											
	MESS35T MESS36		00000819 00000833				227 229	225 65											
	MESS36T		00000835					229											
1	MESS36T1	33	0000086F	00000001	. сс		234	232											
	MESS37		00000890				236	66											
	MESS37T MESS38		00000892 000008D0				238 240	236 67											
	MESS38 MESS38T		000008D0				240	240											
	MESS39		000000BEC				244	68											
	MESS39T		000008EE				246	244											
	MESS4		0000016E				92	33											
	MESS40 MESS40T		00000911 00000913				248 250	69 248											
	MESS41		00000913				252	70											
	MESS41T		00000945				254	252											
1	MESS42	1	0000096C	00000001	. RA		256	71											
	MESS42T		0000096E				258	256											
	MESS43 MESS43T		00000986 00000988				260 262	72 260											
	MESS431 MESS5		00000988 000001A6				262 96	34											
	MESS5T		000001A0				98	96											
1	MESS6	1	000001D6	00000001	. R A		100	35											
	MESS6T		000001D8					100											
	MESS6T1		00000218				105	103											
	MESS7 MESS7T		0000022E 00000230				107 109	36 107											
	MESS7T1		00000230					110											
1	MESS8	1	0000029D	00000001	. R A		114	37											
	MESS8T		0000029F				116												
	MESS9		000002DD				118	38											
	MESS9T	56	000002DF				120	TIQ											

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIERM PROCSTEP: X390

Primary input: lines 1 to 283 of SYSD.ALGOLFRT.ASM(IHIERM)

SYSLIB library records read: 0 SYSUT1 work file size: 29705 bytes SYSUT3 work file size: 22640 bytes SYSLIN file records written: 51

TXA000I Return code 0, elapsed time 0.16 seconds.

## IHIERR LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                       -S2//DDN:SYSUT2
                                                       -S3//DDN:SYSUT3
                                                       -SN//DDN:SYSLIN
                                                       -SL//DDN:SYSLIB
                                                       -ST//DDN:SYSPRINT
                                                       -SH//DDN:SYSPUNCH
                                                       -SA//DDN:SYSADATA
                                                       -SM1
Options for this Assembly
                                                                   Source
                                                                   (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                    (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                   Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                   (default)
NoFO1d
                                                                   (default)
    IDR('X390ASM
                                  3104')
                                                                    (default)
NoINFÒ
                                                                   Command Line
     LAnguage(EN)
                                                                   (default)
     LineCount(101)
                                                                   Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                   Command Line
                                                                   (default)
     Object(Omf)
                                                                   Command Line
     OPtable(Uni,NoList)
                                                                   (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                   Command Line
                                                                   (default)
NoPControl
    PRintctl(Asa)
                                                                   //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                   (default)
NoProFile
                                                                    (default)
                                                                   Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                   (default)
     SiZe(3145728)
                                                                   Command Line
NoSUppress
                                                                   (default)
     SysadatA(//DDN:SYSADATA)
                                                                   Command Line
     SvsLib(//DDN:SYSLIB)
                                                                   Command Line
    SysliN(//DDN:SYSLIN)
                                                                   Command Line
                                                                   (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                   Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                   Command Line
                                                                   (default)
                                                                   Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                   Command Line
     Sysut2(//DDN:SYSUT2)
                                                                   Command Line
     Sysut3(//DDN:SYSUT3)
                                                                   Command Line
NoTerm
                                                                   Command Line
NoTEst
                                                                    (default)
    TypeCheck(Magnitude,Register)
                                                                   (default)
NoUsingLimit
                                                                    (default)
    UsingMap
                                                                   (default)
    Xref(Short)
                                                                   Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                         SYSD.ALGOLFRT.ASM(IHIERR)
SYSLIB
                          SYS1.MACLIB
                         SYSD. TOOLS. MACLIB
                         SYSD.ALGOLFRT.ASM
                         SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                         SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                         JES2.J0B09284.S00106
                         SYS12230.T132141.RA000.T1BLD.SYSUT1
SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                      Addr1 Addr2 Stmt Source Statement
                                                                                              X390 3.1.04 2012/08/17 13.21
                                                                                                                    00002001
                                       3
                                         *
                                                   COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                     00003001
                                       4
                                                                                                                    00004001
00005001
                                         *
                                                   STATUS - LEVEL 2.1
                                       5
                                                                                                                     00006001
                                       6
                                                   FUNCTION/OPERATION
                                                                                                                     00007001
                                       8 *
                                                   IF AN ERROR OCCURS DURING EXECUTION OF AN ALGOL PROGRAM
                                                                                                                     00008001
                                       9
                                                   THIS ROUTINE IS CALLED BY IHIFSARA
                                                                                                                    00009001
                                                   A MESSAGE IS GIVEN SPECIFYING THE ERROR. IF DUMP IS
                                                                                                                     00010001
                                      10
                                                   SPECIFIED THE ROUTINE EDITS AND PRINTS THE DATA STORAGE
                                                                                                                    00011001
                                      11
                                                   AREAS CONTAINING THE VALUES OF THE IDENTIFIERS
                                                                                                                     00012001
                                      12
                                         *
                                      13
                                                                                                                     00013001
                                      14
                                                   ENTRY POINT - IHIERROR
                                                                                                                    00014001
                                                                                                                     00015001
                                      15
                                                   OUTPUT-
                                                                                                                    00016001
                                      16
                                                   ERROR MESSAGES AND ALGOL DUMPS ARE PRINTED ON THE
                                                                                                                     00017001
                                      17
                                                   PRINTER AS 90 CHARACTER RECORDS WITH CONTROL CHARACTER
                                      18
                                                                                                                     00018001
                                      19
                                                   IN SOME CASES A MESSAGE IS ISSUED TO THE CONSOLE
                                                                                                                    9991 9991
                                      20
                                                                                                                     00020001
                                                                                                                    00021001
                                      21
                                                   EXTERNAL ROUTINES -
                                                   IHIIORCL - FOR CLOSING DATASET NUMBER 1 (PRINTER)
IHIIOROP - FOR OPENING DATASET NUMBER 1
                                                                                                                     00022001
                                      22
                                      23
                                                                                                                     00023001
                                      24
                                         *
                                                   FRDSA
                                                              ROUTINE IN IHIFSARA WHICH ISSUES FREEMAIN FOR
                                                                                                                     00024001
                                         *
                                                                                                                    00025001
00026001
                                      25
                                                              THE CURRENT DATA STORAGE AREAS
                                      26
                                                   EXIT - NORMAL - TO TERMINATION ROUTINE IN IHIFSARA
                                                                                                                     00027001
                                      27
                                      28
                                                                                                                     00028001
                                                   EXIT - ERROR - N/A
                                                                                                                     00029001
                                      29
                                      30
                                         *
                                                                                                                     00030001
                                      31
                                                   TABLES/WORK AREAS -
                                                                                                                    00031001
                                                   THE CONTROL SECTION NAMED IHIGERMSG CONTAINS ALL
                                      32
                                                                                                                     00032001
                                                   MESSAGES TO BE PRINTED
                                                                                                                     00033001
                                      33
                                                                                                                     00034001
000000
                      00000 006E4
                                      35 IHIERROR CSECT
                                                                                                                     00035001
                                      36
                                                                                                                    00036001
                 R:5 00000
                                                  USTNG DSTABLE . R5
                                      37
                                                                                                                     00037001
                                                                                                                    00038001
                                      38
                                         ****************
                                                                                                                     00039001
                                      40 *
                                                                                                                     00040001
                                      41 *
                                                   REGISTER USAGE
                                                                                                                    00041001
                                      42 *
                                                                                                                    00042001
                                      43 ***
                                                         ******************
                                                                                                                    00043001
                                         *
                                                                                                                     00044001
                                      44
                                      45 CDSA
                                                                                                                     00045001
                       0000A
                                                                                  ADDRESS OF CURRENT DSA
                       0000B
                                      46 PBT
                                                   EQU
                                                                                                                    00046001
                                                         11
                                                                                                                    00047001
00048001
                                      47
                                      48 *
                                                   MESSAGE FORMAT FLAGS
                                                                                                                     00049001
                                      49
                                      50 FLAGIDS
                                                                                  INSERT DSNAME INTO MSG
                       00003
                                                  EOU
                                                         X'03'
                                                                                                                     00050001
                       00001
                                      51 FLAGIPS
                                                   EQU
                                                         X'01
                                                                                  INSERT PSW INTO MSG
                                                                                                                     00051001
                       99994
                                      52 FLAGMC
                                                   EOU
                                                         X'04'
                                                                                  MSG CONTINUATION
                                                                                                                     00052001
                                                                                                                    00053001
                                      53
                                                         (14,12), 'IHIERROR LEVEL 2.1 &SYSDATE &SYSTIME'
                                      54
                                                   SAVE
                                                                                                                    00054001
000000 47F0 F026
                                                                                            BRANCH AROUND ID
                             00026
                                      55+
                                                   В
                                                         38(0,15)
                                                                                                                    01-SAVE
000004 21
                                                                                            LENGTH OF IDENTIFIER
                                                                                                                    01-SAVE
                                      56+
                                                   DC
000005 C9C8C9C5D9D9D6D9
                                      57+
                                                   DC
                                                         CL32'IHIERROR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                    01-SAVE
000025 F1
000026 90EC D00C
                                                                                                                    01-SAVE
                                      58+
                                                   DC
                                                         CL1'1'
                                                                                            IDENTIFIER
                                                         14.12.12(13)
                                                                                            SAVE REGISTERS
                             aaaac
                                      59+
                                                   STM
                                                                                                                    00055001
                                      60
00002A 187F
                                                   LR
                                                         R7.R15
                                                                                                                     00056001
                                      61
                  R:7 00000
                                                   USING IHIERROR, R7
                                                                                                                     00057001
                                      62
                                                                                  STORE EXTERNAL ADDR PARAMETERS
00002C D213 76B8 1000 006B8 00000
                                      63
                                                   MVC
                                                         VFRDSA(20),0(R1)
                                                                                                                    00058001
                                                                                                                     00059001
000032 18CD
                                      64
                                                   LR
                                                         R12,R13
                                                                                  R12 -> FSA
000034 41D0 74E0
                                                                                  R13 -> SAVEAREA
                                                         R13, SAVEAREA
                                                                                                                    00060001
                             004E0
                                      65
                                                   LA
                                                                                                                     00061001
                                      66
                                                 67 ***
                                                                                                                    00062001
                                      68
                                                                                                                    00063001
                                      69
                                                   TEST IF ERROR MESSAGE NUMBER IS 32 OR 41 FOR DATASET 1
                                                                                                                    00064001
00065001
                                      70
                                                  *************************************
                                                                                                                    00066001
                                      71
                                      72
                                                                                                                     00067001
000038 4660 70D6
                             000D6
                                      73
                                                                                                                    00068001
                                                                                                                    00069001
00070001
00003C 9110 501B
                      9991B
                                      74
                                                   TM
                                                         DSF+1,DS11
                                                                                  DS11 = 0?
000040 4780 70D6
                                      75
                             000D6
                                                   ΒZ
                                                         В1
                                                                                  YES
000044 9580 C0C3
                      000C3
                                                         FSAERCOD(R12),X'80'
                                                                                  I/O ERROR (32) ?
                                                                                                                    00071001
                                      76
                                                   CLI
000048 4780 7094
                                      77
                                                   BE
                                                         IOERR
                                                                                  YES, EXECUTE WTO INSTRUCTION
                                                                                                                    00072001
                             00094
00004C 95A4 C0C3
                       000C3
                                                         FSAERCOD(R12),X'A4'
                                                                                  DD CARD ? (41)
                                                                                                                     00073001
                                      78
000050 4770 70D6
                             000D6
                                      79
                                                   BNE
                                                                                  YES, EXECUTE WTO INSTRUCTION
                                                                                                                     00074001
                                      80 *
                                                                                                                    00075001
                                                   WTO
                                                         'IHI041I SYSPRINT DD STMT INCORRECT OR MISSING',
                                                                                                                   X00076001
                                      81
                                                         ROUTCDE=11, DESC=7
                                                                                                                    00077001
000054
                                      82+
                                                   CNOP
                                                                                                                     01-WTO
                                                                                            BRANCH AROUND MESSAGE
000054 4510 708E
                             0008E
                                                         1, IHB0002A
                                                                                                                    01-WTO
                                      83+
                                                   BAL
000058 0031
                                      84+
                                                   DC
                                                         AI 2 (49)
                                                                             TEXT LENGTH
                                                                                                                    01-WTO
                                                         B'1000000000000000' MCS FLAGS
00005A 8000
                                      85+
                                                   DC
                                                                                                                    01-WTO
                                                         C'IHI041I SYSPRINT DD STMT INCORRECT OR MISSING'
00005C C9C8C9F0F4F1C940
                                                                                                                    01-WTO
                                                   DC
                                      86+
                                                         B'0000001000000000' DESCRIPTOR CODES
B'0000000001000000' ROUTING CODES
000089 0200
                                      87+
                                                   DC
                                                                                                                    01-WT0
00008B 0020
                                      88+
                                                   DC
                                                                                                                    01-WTO
00008E
                                      89+IHB0002A DS
                                                                                                                    01-WTO
                                      90+
91 *
00008E 0A23
                                                   SVC
                                                         35
                                                                                                                    01 - WTO
                                                                                                                    00078001
000090 47F0 70CA
                             000CA
                                      92
                                                   В
                                                         SETOPTSW
                                                                                                                    00079001
                                      93 *
                                                                                                                    00080001
                                      94 IOERR
                                                         'IHI032I SYSPRINT UNRECOVERABLE I/O ERROR',
                                                                                                                   X00081001
                                                   WTO
                                                         ROUTCDE=11, DESC=7
                                                                                                                    00082001
000094
                                      95+
                                                   CNOP
                                                         0.4
                                                                                                                    01-WT0
```

00170001

Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 000094 4510 70C8 000C8 96+I0ERR 1,IHB0003A BRANCH AROUND MESSAGE 01-WTO BAL 97+ 000098 002C DC AL2(44) TEXT LENGTH 01-WT0 B'10000000000000000 MCS ELAGS 0009A 8000 98+ DC 01-WTO 00009C C9C8C9F0F3F2C940 C'IHI032I SYSPRINT UNRECOVERABLE I/O ERROR' 99+ DC 01-WTO B'0000001000000000' DESCRIPTOR CODES 0000C4 0200 100+ DC 01-WT0 0000C6 0020 B'000000000100000' ROUTING CODES 101+ DC 01-WT0 aaaac8 102+IHB0003A DS 01-WTO 0000C8 0A23 103+ SVC 35 01-WT0 104 \* 00083001 105 SETOPTSW OI OPTSW(R12), X'02' SET SWITCH IN FSA 00084001 0000CA 9602 C0C2 99902 000C2 0000CE 947F C0C2 DTSW(R12),X'7F' REMOVE DUMP SWITCH 00085001 106 NI 0000D2 47F0 71F2 001F2 SPDAFREE 00086001 107 108 00087001 00088001 00089001 110 111 \* 00090001 EDIT AND PRINT ERROR MESSAGE 00091001 113 \*\*\* 00092001 114 \* 00093001 00094001 SAVE DSNR FOR EDITING IF NEEDED 0000D6 4180 6001 00001 115 B1 R8.1(,R6) LA R5 -> ADSTAB IN FSA
R5 -> DSTABLE ENTRY FOR DS NO 1 0000DA 585C 00AC 000AC R5, ADSTAB(R12) 00095001 116 L 0000DE 4150 5028 00028 117 LA R5, DSTABLEL+4(,R5) 00096001 0000E2 4160 0001 00001 118 LA R6,1 SET DSNR TO 1 00097001 FLAG CLOSE FROM IHIERR 0000E6 9601 501B 0001B 119 OI DSF+1,DS15 00098001 R15.VIORCP 00099001 0000EA 58F0 76C4 996C4 120 CLOSE ALL DATASETS 0000EE 05EF 00100001 BALR R14,R15 121 0000F0 9610 501B 0001B 122 SETDS11 ΟI DSF+1.DS11 DS11=1 TO INDICATE IHIERR-ROUT 00101001 0000F4 9632 501A 0001A DSF,DS2+DS3+DS6 DS2, DS3, DS6 = 100102001 ΟI 0000F8 943F 501A DSF,255-DS0-DS1 DS0, DS1 = 000103001 0001A 124 NI 0000FC 58F0 76C0 006C0 125 R15.VIOROP R15 -> IHIIOROP 00104001 000100 05EF 126 BALR R14,R15 BUFFER,C'' OPEN SYSPRINT 00105001 000102 9240 7543 00543 PRINT ONE BLANK LINE TO PREVENT 00106001 127 MVI 000106 D258 7544 7543 00544 00543 128 BUFFER+1(L'BUFFER-1), BUFFER OVERPRINTING 00107001 00010C 4530 7478 R3, OUTPUT 00108001 00478 129 BAL R2,R2 000110 1B22 130  $\mathsf{SR}$ 00109001 R2. FSAFRCOD (R12) GET ADDR OF FRROR MESSAGE 000112 4320 0003 agac 3 TC 131 99119991 000116 5860 76CC R6, VERMSG R6 -> IHIERMSG MODULE 00111001 006CC 132 L R6 -> MSG TEXT BLOCK 00011A 5862 6000 00000 133 R6,0(R2,R6) 00112001 00011E 8820 0002 CONVERT MESSAGE NUMBER TO 00113001 00002 134 SRI R2,2 000122 4F20 7528 00528 135 CVD R2.WORKD DECIMAL FOR PRINTING 00114001 ' STRING 000126 5830 76D0 006D0 136 R3.VERM01 R3 -> 'IHI0XXI SC= 00115001 00012A F317 3004 7528 00004 00528 4(2,R3),WORKD 5(R3),X'F0' MOVE IN MSG NUMBER 137 UNPK 00116001 000130 96F0 3005 00005 MAKE PRINTABLE 00117001 ΟI 138 000134 4820 C0C0 000C0 R2, SCRCS(,R12) CONVERT SEMICOLON COUNTER TO LH 00118001 000138 4E20 7528 00528 140 DECIMAL FOR PRINTING 00119001 CVD R2, WORKD 12(L'SCPATTN,R3),SCPATTN MOVE IN EDIT PATTERN
12(L'SCPATTN,R3),WORKD+5 FORMAT SEMICOLON COUNT MVC 00013C D205 300C 759D 0000C 0059D 141 00120001 12(L'SCPATTN,R3),WORKD+5 999142 DE95 399C 752D 9999C 9952D 00121001 142 FD 000148 9103 6001 00001 1(R6),FLAGIDS DSNAME TO BE INSERTED ? 00122001 143 TM 00014C 47E0 71B2 NO, BRANCH 001B2 144 BNO NOT1617A 00123001 000150 4280 7542 00542 145 STC R8, DSNUMBER YES, STORE DATASET NUMBER 00124001 000154 9510 7542 99542 146 CLT DSNUMBER, 16 DSN = 16? 00125001 000158 4770 7166 NO. BRANCH 00126001 00166 147 BNE DSN17 00015C D205 6002 76D8 00002 006D8 2(6,R6),=C'SYSUT2' 00127001 MVC SYSUT2 148 000162 47F0 71B6 00128001 001B6 149 В 150 00129001 000166 4740 71AA 001AA 151 DSN17 BL NOT1617 00130001 00016A D205 6002 76DE 00002 006DE 152 MVC 2(6,R6),=C'SYSUT1' SYSUT1 00131001 000170 47F0 71B6 001B6 153 В PSWDSN 00132001 00133001 154 000174 4E80 7528 00528 155 TAKEDSN CVD R8.WORKD CONVERT DATASET NUMBER TO 00134001 000178 F317 6006 7528 00006 00528 UNPK 6(2,R6),WORKD DECIMAL FOR PRINTING 00135001 156 00017F 96F0 6007 00007 157 ΟI 7(R6),X'F0' MAKE PRINTABLE 00136001 000182 47F0 71B6 001B6 158 В PSWDSN 00137001 00138001 159 000186 F384 6007 C0B4 00007 000B4 160 TAKEPSW UNPK 7(9,R6),PGOPSW(5,R12) UNPACK OLD PSW FOR PRINTING 00139001 00018C DC07 6007 7440 00007 00440 7(8,R6),TRTABLE-240 00140001 161 TR 000192 9240 600F 0000F 162 MVI 15(R6),C' 00141001 16(9,R6),PGOPSW+4(5,R12) 24(R6),C' ' 000196 F384 6010 C0B8 00010 000B8 163 HNPK 00142001 00019C 9240 6018 00143001 00018 164 MVI 0001A0 DC07 6010 7440 00010 00440 TR 16(8,R6), TRTABLE-240 00144001 165 0001A6 47F0 71B6 001B6 В 00145001 166 00146001 0001AA 9103 6001 00001 168 NOT1617 TM 1(R6), FLAGIDS INSERT DATASET NUMBER ? 00147001 00174 0001AE 4710 7174 00148001 169 BO TAKEDSN YES, BRANCH 0001B2 4740 7186 170 NOT1617A BM 00149001 TAKEPSW 00186 00150001 171 0001B6 D212 7543 3000 00543 00000 172 PSWDSN BUFFER(19),0(R3) MOVE MESSAGE INTO BUFFER 00151001 MVC 0001BC 1B22 173  $\mathsf{SR}$ R2,R2 00152001 0001BF 4326 0000 99999 GET I'MSG TEXT 174 I TNF2 TC R2.0(R6) 00153001 0001C2 0620 DECR FOR EXE 00154001 **BCTR** R2,0 175 0001C4 4420 71DC R2, EXMVC MOVE MSG TEXT 00155001 001DC 176 EX 0001C8 9104 6001 00001 177 ТМ 1(R6),FLAGMC MSG HAS CONTINUATION ? 00156001 NO, BRANCH 0001CC 4780 71E2 001E2 ENDLINE 00157001 178 ΒZ 0001D0 4530 7478 00478 179 BΔI R3.OUTPUT 00158001 R6 -> NEXT LINE OF MESSAGE 00159001 0001D4 4162 6003 00003 180 LA R6,3(R2,R6) 0001D8 47F0 71BE LOOP FOR CONTINUATION LINE 00160001 001BE 181 В I TNF2 182 00161001 0001DC D200 7556 6002 00556 00002 183 EXMVC MVC BUFFER+19(0),2(R6) EXE MVC 00162001 184 \* 00163001 0001F2 9604 7540 00540 185 ENDLINE ΩT FI AG X'04' 00164001 00165001 0001E6 4530 7478 00478 BAL R3, OUTPUT 186 0001EA 92F0 7541 00541 187 MVI SPACE C'0 SET ASA SKIP CHARACTER 00166001 0001EE 9201 74AD 004AD 188 INSERT NEW STEP LENGTH FOR S 00167001 189 \* 00168001 00169001

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Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 Loc Object Code 192 \* GO THROUGH THE RETURN ADDR STACK 00171001 193 \* IF A BLOCK OR PROCEDURE ENTRY IS FOUND THE DATA STORAGE 00172001 194 AREAS ARE EDITED AND FSA IS CALLED FOR ISSUEING 00173001 FREEMAIN 00174001 195 196 00175001 00176001 198 \* 00177001 0001F2 5810 76BC 006BC 199 SPDAFREE L R1, VSPDAP FREEMAIN FOR SPDA AREAS 00178001 0001F6 5820 1000 00000 200 R2,0(,R1) 00179001 201 MORESPDA LTR 00180001 0001FA 1212 R1 R2 0001FC 4780 7212 00212 MORERAS 00181001 202 ΒZ 000200 5820 1000 00182001 00000 203 R2,0(,R1) 204 00183001 205 FREEMAIN R.LV=64,A=(R1) 00184001 OS/VS2 RELEASE 3 VERSION -- 10/25/74 206+ 01-FREEM 000204 4100 0040 0,64(0,0) 01-FREEM 00040 207+ LA LOAD LENGTH LOAD AREA ADDRESS 000208 4110 1000 00000 208+ LA 1,0(0,R1) 01-FREEM 209+ ABAZAC AAAA SVC 10 ISSUE FREEMAIN SVC 01\_EREEM 210 \* 00185001 00020E 47F0 71FA 001FA В MORESPDA LOOP AROUND 00186001 211 212 \* 00187001 000212 58EC 00C8 000C8 213 MORERAS R14.RASPT(R12) TEST IF MORE ENTRIES IN RAS 00188001 000216 59EC 00C4 000C4 214 MORERASA C R14, RASSTART (R12) 00189001 215 00021A 47D0 725A 0025A **BNH** ENDOFR 00190001 00021F 9500 F000 0(R14), X'00' PROCEDURE OR BLOCK ENTRY ? 00191001 99999 216 CLT 000222 4780 7232 PRENTRY 00232 00192001 217 ΒE 000226 9180 C0C2 000C2 тм DTSW(R12),X'80' DUMP SPECIFIED ? 00193001 218 00022A 4780 7240 00240 00194001 219 ΒZ RELDSA 00022E 47F0 7262 00195001 00262 220 В EDIT 221 \* 00196001 000232 4120 0008 00008 222 PRENTRY LA R2.8 GET PRECEDING ENTRY IN RAS 00197001 000236 1BE2 00198001 SR R14, R2 223 000238 50EC 00C8 000C8 224 R14, RASPT(R12) NEW ADDR TO RASTP IN FSA 00199001 00023C 47F0 7216 00200001 00216 225 В MORERASA 226 \* 00201001 227 RELDSA I R RELEASE CURRENT DATA STORAGE 000240 18DC R13.R12 99292991 000242 58A0 E000 CDSA,0(,R14) 00203001 00000 228 **AREA** L 000246 58B0 A010 00010 PBT,16(,CDSA) 00204001 229 Ĺ 00024A 5810 76B8 R1, VFRDSA 00205001 230 00024F 05F1 231 **BALR** R15.R1 00206001 000250 18CD 232 LR R12, R13 00207001 00208001 000252 41D0 74E0 004E0 233 LA R13. SAVEAREA 000256 47F0 7212 00209001 00212 MORERAS 234 В 00210001 00025A 18DC 236 ENDOFR LR R13,R12 00211001 237 \* 00212001 TO TERMINATION ROUTINE IN ESA **RETURN (14.12)** 238 00213001 00025C 98EC D00C 0000C 14,12,12(13) 239+ LM RESTORE THE REGISTERS 01-RETUR 000260 07FE 240+ 241 \* 00214001 00215001 243 \* 00216001 244 \* PRINT CURRENT DATA STORAGE AREAS IF DUMP IS SPECIFIED 00217001 245 \* 00218001 00219001 247 \* 00220001 248 \* BLOCK NUMBER AND TYPE OF BLOCK MOVED INTO TEXT 00221001 249 \* 00222001 \* 250 \*\*\* 00223001 251 \* 00224001 000262 58A0 E000 00000 252 EDIT POINTER TO CURRENT DSA 00225001 CDSA,0(,R14) ADDR OF PBTAB NAME OF LOAD MODULE 000266 58B0 A010 00010 253 ï PBT,16(,CDSA) 00226001 ERM02M(4),4(PBT) 00026A D203 75B0 B004 005B0 00004 254 MVC 00227001 000270 4AB0 A008 PBT,8(,CDSA) 00228001 TYPE OF BLOCK 00008 255 AΗ 000274 1B22 SR 00229001 256 R2,R2 000276 4320 B006 00006 R2,6(,PBT) 00230001 257 00027A 8920 0002 00002 258 SLL R2,2 00231001 LA 00027E 4162 75E7 0005E7 000282 D20F 75D7 6000 005D7 00000 259 R6, ERM02BK(R2) 00232001 ERM02TP,0(R6) MOVE IN BLOCK TYPE TEXT 00233001 260 MVC 000288 482A 0008 00008 261 LH R2,8(CDSA) CONVERT BLOCK NUMBER TO DECIMAL 00234001 00028C 8820 0003 00003 SRL FOR PRINTING 00235001 262 000290 4E20 7528 R2, WORKD 00236001 00528 CVD 000294 D203 75D1 75A3 005D1 005A3 264 MVC ERM02BN, BNPATTN 00237001 00029A DE03 75D1 752E 005D1 0052E ERM02BN, WORKD+6 00238001 265 ED 0002A0 9604 7540 SET SKIP FLAG 00540 FLAG.X'04' 00239001 266 OI 0002A4 D23F 7543 75A7 00543 005A7 267 BUFFER(ERM02L), IHIERM02 MOVE MSG INTO BUFFER 00240001 MVC 0002AA 4530 7478 R3,OUTPUT 00478 268 00241001 269 \* 00242001 270 \* 00243001 271 \* 00244001 00245001 272 EDIT THE FORMAL PARAMETERS IF PROCEDURE BLOCK 273 00246001 \* 274 \*\*\* 00247001 275 \* 00248001 0002AE 1B11 276 SR R1.R1 00249001 FIRST BYTE TO BE EDITED 00250001 0002B0 4190 A018 00018 277 LA R9, 24(, CDSA) 6(PBT),X'FF' 0002B4 91FF B006 00006 278 ТМ TEST FOR FORMAL PARAMETERS 00251001 0002B8 4780 72E6 002E6 279 ΒZ NOFPARAM 00252001 0002BC D210 754C 7617 0054C 00617 280 BUFFER+9(L'KFORMAL), KFORMAL HANDLING FORMAL PARAMETERS 00253001 MVC 0002C2 1B55 0002C4 4350 B007 R5, R5 R5, 7(, PBT) 00254001 00255001 281 SR PARAMETERS BY EIGHT 00007 IC 282 0002C8 8950 0003 283 R5,3 MULTIPLY NUMBER OF FORMAL 00256001 00003 SLL 0002CC 9108 B006 ТМ 6(PBT),X'08' 00257001 00006 284 0002D0 4780 72D8 002D8 NOTYPE 00258001 285 ΒZ 0002D4 4150 5008 00008 286 ΙΔ R5,8(,R5) ADD EIGHT IF TYPE PROCEDURE 00259001 0002D8 1A59 287 NOTYPE AR R5, R9 END OF FORMAL PARAMETERS IN R5 00260001

Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 0002DA 4540 7348 00348 288 R4, TRANSDAT PRINT FORMAL PARAMETERS BAL 00261001 0002DE 9604 7540 00540 289 NFPARM OI FLAG, X'04' SET SKIP FLAG 00262001 0002E2 4530 7478 00478 290 BAL R3,OUTPUT LAST PARAMETERS
GET END OF OBJECT TIME STACK 00263001 291 NOFPARAM LH 0002E6 4820 B004 00004 R2.4(,PBT) 00264001 0002EA 4152 A000 R5,0(R2,CDSA) 00000 292 LA 00265001 0002EE 1995 293 CR 00266001 0002F0 47B0 73CA 003CA 294 BNI ARRAYS 00267001 295 \* 00268001 296 \* 00269001 00270001 297 EDIT OBJECT TIME STACK 00271001 299 \* 00272001 300 \*\*\*\*\* 00273001 301 \* 00274001 0002F4 D229 754C 7628 0054C 00628 BUFFER+9(L'IHIERM05), IHIERM05 00275001 302 0002FA 947D 7540 FLAG, X'7D' BUFFER AND ARRAY FLAG 00276001 00540 303 NI ANY FORMAL PARAMETER PRINTED 0002FE 1211 304 R1.R1 00277001 000300 4770 7318 00318 305 BN7 NOTZERO 00278001 000304 47F0 730C 0030C 306 В MULT32A 00279001 307 \* 00280001 0001B 00281001 000308 8C00 001B 308 MULT32 SRDL R0.27 FLAG, X'80' 00030C 9680 7540 00540 309 MULT32A OI BUFFER FLAG 00282001 000310 4140 72DE 002DE 310 LA R4, NFPARM 00283001 000314 47F0 7348 00348 311 В TRANSDAT 00284001 312 \* 00285001 0001B TEST IF END OF LINE 00286001 000318 8D00 001B 313 NOTZERO SLDL R0,27 00031C 1211 314 LTR R1, R1 00287001 00031E 4780 7308 00308 YES, BRANCH TO MULT32 00288001 MULT32 000322 8C00 001B SRDL R0,27 00289001 0001B 316 000326 1995 317 CR R9. R5 TEST IF ANY DATA TO BE PRINTED 00290001 000328 47B0 72DE 002DE 318 BNL NFPARM 00291001 00032C 4530 7478 R3,OUTPUT YES, PRINT HEADING 00292001 00478 319 BAL 000330 4210 7542 00542 320 STC R1.IF16 TEST IF TIME FOR ONE STEP 00293001 000334 940F 7542 00542 NI IF16,X'0F' 00294001 321 000338 4770 7340 00340 322 BNZ LABAA 00295001 R8,1(,R8) R4,INSETDA 00033C 4180 8001 99991 00296001 323 ΙΔ 000340 4540 7398 00398 00297001 324 LABAA BAL 000344 47F0 72DE 002DE 325 00298001 В 00299001 327 \*\*\*\*\* 00300001 328 \* 00301001 329 \* CONVERSION OF DATA FOR PRINTING AND EDITING OF THE OUTPUT 00302001 330 \* 00303001 00304001 332 \* 00305001 00306001 00307001 000348 1995 333 TRANSDAT CR R9. R5 TEST IF MORE DATA IS TO BE BNIR R4 00034A 07B4 334 FDTTFD 00034C 8D00 001B R0,27 0001B SLDL 00308001 335 000350 1211 336 LTR R1,R1 PRINT BUFFER IF END OF LINE 00309001 000352 4780 7388 00388 SETDISP 00310001 000356 8D00 0001 00001 338 SLDL R0,1 00311001 IF INDEX MULTIPLE OF 16 THEN 00035A 1211 339 LTR R1.R1 00312001 00035C 4770 7364 00364 00313001 340 BNZ SHIFTB MAKE ONE EXTRA SPACE 000360 4180 8001 R8,1(,R8) 00001 341 00314001 LA 000364 8C00 001C 0001C 342 SHIFTB SRDL RØ 28 00315001 000368 F384 8000 9000 00000 00000 343 TRANS UNPK 0(9,R8),0(5,R9) UNPACK HEXADECIMAL DATA FOR 00316001 00036E 9240 8008 00008 344 MVI 8(R8),C' **PRINTING** 00317001 0(8,R8),TRTABLE-240 000372 DC07 8000 7440 00000 00440 345 TR 00318001 000378 4111 0004 00004 R1,4(R1) 00319001 346 LA 00037C 4188 000A 0000A LA R8,10(R8) 00320001 000380 4199 0004 348 00321001 00004 000384 47F0 7348 00348 349 TRANSDAT 00322001 В 350 \* 00323001 351 \*\*\*\* 00324001 352 00325001 353 \* DISPLACEMENT FOR DATA EDITED 00326001 354 \* 00327001 00328001 356 \* 00329001 000388 8C00 001B 0001B 357 SETDISP SRDL R0,27 00330001 R3, OUTPUT 00038C 4530 7478 00478 358 BAL 00331001 000390 9102 7540 00540 TM CHECK IF EDITING ARRAYS TO GET 00332001 359 FLAG, X'02' 000394 4710 73C4 993C4 360 RΩ ADDR RIGHT DISPLACEMENT 00333001 R3,24(,R1) 00018 361 INSETDA 00334001 000398 4130 1018 LA 00039C 5030 7528 R3, WORKD UNPACK HEXADECIMAL ADDR FOR 00335001 00528 362 INSETD ST 0003A0 F363 7543 7529 00543 00529 BUFFER(7), WORKD+1(4) 00336001 363 **UNPK** PRINTING 0003A6 9640 7549 00549 BUFFER+6,C' ' 00337001 OI BUFFER(6),TRTABLE-240 FLAG,X'80' 0003AA DC05 7543 7440 00543 00440 365 TR 00338001 0003B0 9180 7540 PRINTING IS TO BE CONTINUED ? 00339001 00540 366 TM 0003B4 4780 73BC 003BC INSETDB AND NOT START AT THE 00340001 367 ΒZ 0003B8 4180 754C R8, BUFFER+9 BEGINNING OF A NEW LINE 00341001 0054C 368 LA 0003BC 9680 7540 369 INSETDB OI FLAG, X'80' 00342001 0003C0 47F0 7368 00368 TRANS 00343001 370 371 \* 00344001 0003C4 1831 372 ADDR LR R3.R1 DISPLACEMENT FOR ARRAY 00345001 0003C6 47F0 739C 0039C 373 INSETD 00346001 В 374 \* 00348001 376 \* 00349001 377 \* **EDITING OF DECLARED ARRAYS** 00350001 378 00351001 379 \*\*\*\*\*\* \* 00352001 00353001 0003CA BF2F A00C 0000C R2, B'1111', 12(CDSA) ANY DECLARED ARRAYS ? 00354001 381 ARRAYS 0003CE 4780 7414 00414 382 **B**7 VALUE 00355001 FLAG,X'02' 0003D2 9602 7540 00540 383 MOREARRY OI 00356001

1 0	٠	A	C++	C	C+-+-		V200 2 1 04 2012/00	/17 12 21
Loc Object Code Ad	ddr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08,	/1/ 13.21
0003D6 5892 A008		80000		VARRSMF	L	R9,8(R2,CDSA)	STARTING ADDR OF ARRAY	00357001
0003DA 5020 7528		00528	385		ST	R2, WORKD	UNPACK HEXADECIMAL DISPLACEMENT	
0003DE F363 766C 7529 00 0003E4 9240 7672 00	365C 3672	00529	386 387		UNPK MVI	ERM06SMF, WORKD+1(4) ERM06SMF+6,C''	OF SMF FOR PRINTING	00359001 00360001
0003E4 5240 7072 00 0003E8 DC05 766C 7440 00		00440	388		TR	ERM06SMF(6),TRTABLE-240		00361001
0003EE D22E 754C 7652 00			389		MVC	BUFFER+9(ERM06L), IHIERM0	96	00362001
0003F4 5852 A00C		0000C	390		L	R5,12(R2,CDSA)	END ADDR OF ARRAY	00363001
0003F8 1B11			391		SR	R1,R1		00364001
0003FA 4540 7348		00348	392		BAL	R4, TRANSDAT	CET CHAINING ADDR	00365001
0003FE 5822 A000 000402 4120 2000		00000 00000	393 394		L LA	R2,0(R2,CDSA) R2,0(,R2)	GET CHAINING ADDR	00366001 00367001
	<b>0540</b>	00000	395		0I	FLAG, X'04'	SET SKIP FLAG	00368001
00040A 4530 7478		00478	396		BAL		PRINT LAST LINE	00369001
00040E 1222			397		LTR	R2,R2		00370001
000410 4770 73D2		003D2	398	a.	BNZ	MOREARRY		00371001
			399 400		k****	********	**********	00372001
			401					00373001
			402		EDITI	NG OF VALUE ARRAYS		00375001
			403					00376001
					*****	*********	**********	
000414 4024 0004		00004	405			D2 40(CDCA)	TEST FOR VALUE APPAYS	00378001
000414 482A 000A 000418 1222		0000A	406	VALUE	LH LTR	R2,10(CDSA) R2,R2	TEST FOR VALUE ARRAYS	00379001 00380001
000418 1222 00041A 4780 7468		00468	408		BZ	ENDVALAR		00381001
	<b>2540</b>			VALARRAY		FLAG, X'02'		00382001
000422 5020 7528		00528	410		ST	R2,WORKD	UNPACK HEX DISPLACEMENT OF	00383001
000426 F363 769B 7529 00		00529	411			ERM07SMF, WORKD+1(4)	SMF FOR PRINTING	00384001
	96A1	00440	412		MVI	ERMO7SMF+6,C' '		00385001
000430 DC05 769B 7440 00 000436 D235 754C 7681 00			413 414		TR MVC	ERM07SMF(6),TRTABLE-240 BUFFER+9(ERM07L),IHIERM0	77 TO BUFFER	00386001 00387001
00043C 5892 A000		00000	415		L	R9, 0(R2, CDSA)	ADDR OF SMF	00387001
000440 5850 900C		0000C	416		L	R5,12(,R9)	END OF ARRAY	00389001
000444 5890 9008		80000	417		L	R9,8(,R9)	BEGINNING OF ARRAY	00390001
000448 1B11			418		SR	R1,R1		00391001
00044A 4540 7348 00044E 9604 7540 00	<b>2540</b>	00348	419 420		BAL OI	R4, TRANSDAT	PRINT DATA	00392001 00393001
00044E 9604 7540 00		00478	420		BAL	FLAG,X'04' R3,OUTPUT	PRINT LAST LINE	00394001
000456 5892 A000		00000	422		L	R9,0(R2,CDSA)	GET CHAINING DISPLACEMENT	00395001
00045A 4820 9002		00002	423		LH	R2,2(,R9)		00396001
00045E 1222			424		LTR	R2, R2		00397001
000460 4780 7468		00468	425		BZ	ENDVALAR		00398001
000464 47F0 741E		0041E	426	*	В	VALARRAY		00399001
000468 4530 7478		00478	427	ENDVALAR	RΛI	R3,OUTPUT	PRINT ONE EXTRA BLANK LINE	00400001 00401001
	<b>0540</b>	00470	429	LINDVALAR	0I	FLAG, X'04'	TRINI ONE EXTRA BEARK EINE	00402001
	9540		430		NI		RESET ARRAY FLAG	00403001
000474 47F0 7240		00240	431		В	RELDSA		00404001
000474 47F0 7240		00240	432					00405001
0004/4 4/F0 /240		00240	432 433	*****		RELDSA **********	**********	00405001 00406001
0004/4 4/F0 /240		00240	432 433 434	******	*****	********		00405001 00406001 00407001
0004/4 4/F0 /240		00240	432 433	******* *	*****			00405001 00406001
0004/4 4/F0 /240		00240	432 433 434 435	******* * *	*****	**************************************		00405001 00406001 00407001 00408001
			432 433 434 435 436 437 438	********  *  *  *  *  *  *  *  *  *  *	***** PRINT *****	**************************************	THE IHIIORNX ROUTINE	00405001 00406001 00407001 00408001 00409001 00410001
000478 9058 C028		00028	432 433 434 435 436 437 438 439	******* * * * *	PRINT *****	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001
000478 9058 C028 00047C 4160 0001		00028 00001	432 433 434 435 436 437 438 439	********  *  *  *  *  *  *  *  *  *  *	PRINT  *****  STM LA	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00413001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC		00028	432 433 434 435 436 437 438 439	********  *  *  *  *  *  *  *  *  *  *	PRINT *****	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001
000478 9058 C028 00047C 4160 0001		00028 00001 000AC	432 433 434 435 436 437 438 439 440 441	********  *  *  *  *  *  *  *  *  *  *	****** PRINT  *****  STM LA L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00412001 00413001 00414001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 00048C 9610 501A 00	ð01A	00028 00001 000AC 00028 00004	432 433 434 435 436 437 438 439 440 441 442 443 444	********  *  *  *  *  *  *  *  *  *  *	****** PRINT  ******  STM LA L LA L OI	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00407001 00407001 00408001 00409001 00410001 00412001 00413001 00415001 00415001 00415001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 00048C 9610 501A 00 000490 D259 8000 7543 00	ð01A	00028 00001 000AC 00028 00004	432 433 434 435 436 437 438 439 440 441 442 443 444 445	********  *  *  *  *  *  *  *  *  *  *	PRINT  ******  STM  LA  L  LA  L  OI  MVC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00412001 00413001 00415001 00415001 00417001 00418001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000480 9610 501A 00 000490 D259 8000 7543 00 000496 180E	901A 9000	00028 00001 000AC 00028 00004	432 433 434 435 436 437 438 449 441 442 443 444 445 446	********  *  *  *  *  *  *  *  *  *  *	PRINT  ******  STM  LA  L  LA  L  OI  MVC  LR	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00408001 004110001 004110001 00413001 00415001 00415001 00416001 00416001 00418001 00419001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 00048C 9610 501A 00 000490 D259 8000 7543 00	901A 9000	00028 00001 000AC 00028 00004	432 433 434 435 436 437 438 439 440 441 442 443 444 445	********  *  *  *  *  *  *  *  *  *  *	PRINT  ******  STM LA L LA L OI MVC LR L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00412001 00413001 00415001 00415001 00417001 00418001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 00048C 9610 501A 00 000490 D259 8000 7543 00 000496 180E 000498 58F0 76C8	901A 9000	00028 00001 000AC 00028 00004	432 433 434 435 436 437 438 449 441 442 443 444 445 446 447	********  *  *  *  *  *  *  *  *  *  *	PRINT  ******  STM LA L LA L OI MVC LR L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00408001 00410001 00411001 00412001 00413001 00415001 00415001 00417001 00417001 00419001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000490 D259 8000 7543 00 000496 180E 000498 58F0 76C8 00049C 05EF 000492 05EF 0004A2 4780 74CA	001A 0000 0540	00028 00001 000AC 00028 00004 00543 006C8	432 433 434 435 436 437 438 449 440 441 442 443 444 445 446 447 448 449 450	********  *  *  *  *  *  *  *  *  *  *	PRINT  *****  STM  LA  L  LA  L  OI  MVC  LR  L  BALR  TM  BZ	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00408001 004110001 004112001 00413001 00415001 00415001 00415001 00417001 00419001 00420001 00420001 00422001
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000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000490 D259 8000 7543 00 000490 D259 8000 7543 00 000496 180E 000498 58F0 76C8 00049C 05EF 00049C 95EF 00049C 95EF 00049C 95EF 0004AC 4780 74CA 0004AA 4160 6002 0004AA 4160 6002 0004AE 4960 5014 0004BE 5850 5004 0004BE 5850 5004	001A 00000	00028 00001 000AC 00028 00004 00543 006C8	432 433 434 435 436 437 448 441 444 445 446 447 448 449 450 451 452 453 454	******** * * ******** * OUTPUT	******  PRINT  ******  STM LA L LA L OI MVC LR L BALR TM BZ LH LA STH L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00410001 00411001 004112001 00415001 00415001 00415001 00415001 00419001 00420001 00420001 0042001 00425001 00425001 00426001 00425001
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000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000490 D259 8000 7543 00 000490 180E 000496 180E 000496 9104 7540 00 000406 4860 5014 0004AC 4780 74CA 0004AC 4780 74CA 0004AC 4860 5014 0004BC 5850 5004 0004BC 5850 5004 0004BC 9560 7541 00 0004C 1800 0004CC 1800 0004CC 1800 0004CC 1800 0004CC 9240 7543 00 0004CC 9240 7543 00	001A 0000 00540 0000 0000 0540	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 440 441 442 443 444 445 450 451 453 454 455 456 457 458 459 461 462 463 464 465	********  * ******** OUTPUT  SCOUNT  RESFLAG NOFLAG	******  PRINT  ******  STM LA L LA L OI MVC LR L BALR TM BZ LH LA STH L BCTR CLI BE MVC NI LR SR MVI MVC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00408001 00411001 00411001 00412001 00415001 00415001 00415001 00417001 00419001 00420001 00422001 00422001 00424001 00425001 00425001 00427001 00427001 00430001 0043001 0043001 00435001 00435001 00435001 00435001
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000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000490 D259 8000 7543 00 000490 D259 8000 7543 00 000496 58F0 76C8 00049E 9104 7540 00 00049E 9104 7540 00 0004AC 4780 74CA 0004AC 4860 5014 0004AC 4860 5014 0004AB 9551 5000 0004BC 650 0004BC 4780 74C6 0004C0 D200 5000 7541 00 0004C6 94FB 7540 00 0004CC 1B00 0004CC 1B00 0004CC 1B00 0004DE 0240 7543 00 0004DB 9858 C028 0004DB 9858 C028	2001A 200000 200000 200000 200	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 449 440 441 442 443 445 450 451 452 454 455 456 457 458 459 460 461 462 463 464 465 466	********  * ******** OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA	******  PRINT  ******  STM  LA  L  LA  L  OI  MVC  LR  L  BALR  TM  BZ  LH  LA  STH  L  BCTR  CLI  BE  MVC  NI  LR  LR  LL  BCTR  CLI  BE  MVC  NI  LR  LR  MVC  NI  LR  BE  MVC  NI  LR  SR  MVI  MVC  LM  BR	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00410001 00411001 00411001 00415001 00415001 00415001 00415001 00415001 00416001 00420001 0042001 0042001 0042001 0042001 0042001 0042001 0042001 0042501 0042601 0042601 0043001 0043001 0043001 0043001 00435001 00437001 00437001 00437001 00437001 00438001 00437001 00438001 00438001 00438001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000496 5860 501A 00 000490 D259 8000 7543 00 000496 180E 000498 58F0 76C8 00049E 9104 7540 00 0004A2 4780 74CA 0004A6 4860 5014 0004A6 4860 5014 0004A6 4060 5014 0004A6 0650 0004B8 95F1 5000 00 0004B6 0650 0004B8 95F1 5000 00 0004C0 D200 5000 7541 00 0004C0 94FB 7540 00 0004C1 B00 0004C2 1B00 0004C2 1B00 0004C3 9858 C028 0004DE 07F3 0004DE 0000 0004DE 0000 0004DE 000000000000000000000000000000000	2001A 200000 200000 200000 200	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 440 441 442 443 444 445 450 451 453 454 455 456 457 458 459 460 461 462 463 464 466 467 466 469	********  * ******** OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA * WORKD	******  PRINT  ******  STM  LA  L  L  L  L  L  L  L  L  L  L  L  L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00412001 00415001 00415001 00415001 00415001 0042001 0042001 00423001 00424001 00425001 00425001 00426001 00426001 00426001 0043001 0043001 0043001 00436001 00436001 00436001 00436001 00436001 00436001 00436001 00436001 00436001 00436001 00436001 00436001 00439001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000488 5880 5004 000480 0259 8000 7543 00 000490 0259 8000 7543 00 000496 180E 000498 58F0 76C8 00049C 05EF 00049E 9104 7540 00 0004AC 4780 74CA 0004AA 4160 6002 0004AE 4060 5014 0004BC 5850 5004 0004BC 6550 0004BE 95F1 5000 00 0004BC 4780 74C6 0004C0 D200 5000 7541 00 0004C6 94FB 7540 00 0004CA 18E0 0004CC 1B00 0004CB 9240 7543 00 0004CB 9258 7544 7543 00 0004DB 9858 C028 0004DC 07F3 0004DE 0000 0004E0 00000000000000000000000000	2001A 200000 200000 200000 200	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 439 440 441 442 443 445 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 466 467 468 468 470	********  * ******** OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA * WORKD TRTABLE	******  PRINT  ******  STM LA L LA L OI MVC LR L BALR TM BZ LH LA STH L BCTR CLI BE MVC NI LR SR MVI MVC LR L BCTR CLI BE DC DC DC DC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00415001 00415001 00415001 00415001 00420001 00420001 0042001 00423001 00424001 00425001 00426001 00426001 00426001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000486 5880 5004 000490 D259 8000 7543 00 000496 180E 000496 05EF 00049E 9104 7540 00 0004AC 4780 74CA 0004AC 4780 74CA 0004AC 460 5014 0004AC 460 5014 0004AC 4780 74CA 0004BC 95EF 00049E 95EF 00049E 9104 7540 00 004AC 4780 74CA 0004AC 4160 6002 0004AB 95F1 5000 00 0004BC 4780 74C6 0004C0 D200 5000 7541 00 0004C6 94FB 7540 00 0004CC 1800 0004CC 1800 0004CC 9240 7543 00 000528 000000000000000000000000000000000	2001A 200000 200000 200000 200	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 439 441 442 443 445 446 451 452 453 454 455 456 457 468 466 467 468 469 471	********  * ******** * OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA * WORKD TRTABLE FLAG	******  PRINT  ******  STM LA L LA L OI MVC LR L BALR TM BZ LH LA STH L BCTR CLI BE MVC NI LR SR MVI MVC LM BR  DC DC DC DC DC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 004010001 00411001 004112001 00415001 00415001 00415001 00415001 00415001 00420001 00420001 0042001 0042001 0042001 00425001 0042601 0042501 0042501 0042501 0042501 0042501 0042501 00435001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000485 8580 5004 00048C 9610 501A 00 000490 D259 8000 7543 00 000496 180E 000498 95FF 00049E 9104 7540 00 0004A2 4780 74CA 0004A6 4860 5014 0004A6 4860 5014 0004AB 95FF 5000 0004B8 95FF 5000 0004B8 95FF 5000 0004B8 95FF 9000 0004CC 1800 0004CC 1800 0004CC 1800 0004CC 9240 7543 00 0004CC 1800 0004CC 9240 7543 00 0004CC 1800 0004CC 9240 7543 00 0004CC 9240 7	2001A 200000 200000 200000 200	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 440 441 442 443 444 445 450 451 452 453 454 455 456 457 458 459 461 462 463 464 465 466 467 468 469 470 471 472	********  * ******** * OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA * WORKD TTABLE FLAG SPACE	******  PRINT  ******  STM  LA  L  OI  MVC  LR  L  BALR  TM  BZ  LH  LA  STH  L  BCTR  CLI  BE  MVC  NI  LR  SR  MVI  MVC  DC  DC  DC  DC  DC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00408001 00410001 00411001 00412001 00415001 00415001 00415001 00415001 0042001 0042001 00422001 00422001 00423001 00424001 00425001 00425001 00425001 00435001 00435001 00435001 00436001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00444001 00445001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000486 5880 5004 000490 D259 8000 7543 00 000496 180E 000496 05EF 00049E 9104 7540 00 0004AC 4780 74CA 0004AC 4780 74CA 0004AC 460 5014 0004AC 460 5014 0004AC 4780 74CA 0004BC 95EF 00049E 95EF 00049E 9104 7540 00 004AC 4780 74CA 0004AC 4160 6002 0004AB 95F1 5000 00 0004BC 4780 74C6 0004C0 D200 5000 7541 00 0004C6 94FB 7540 00 0004CC 1800 0004CC 1800 0004CC 9240 7543 00 000528 000000000000000000000000000000000	2001A 200000 200000 200000 200	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 440 441 442 443 444 445 450 451 453 454 455 456 457 458 459 461 462 463 464 465 466 467 467 468 469 470 471 471 473	********  * ******** * OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA * WORKD TRTABLE FLAG	******  PRINT  ******  STM  LA  L  L  L  L  L  L  L  L  L  L  L  L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 004010001 00411001 004112001 00415001 00415001 00415001 00415001 00415001 00420001 00420001 0042001 0042001 0042001 00425001 0042601 0042501 0042501 0042501 0042501 0042501 0042501 00435001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000485 5880 5004 00048C 9610 501A 00 000490 D259 8000 7543 00 000496 180E 000498 58F0 76C8 00049E 9104 7540 00 0004A2 4780 74CA 0004A6 4860 5014 0004A6 4860 5014 0004AB 5850 5004 0004B8 95F1 5000 00 0004B8 95F1 5000 00 0004B8 4780 74C6 0004C0 D200 5000 7541 00 0004C6 94FB 7540 00 0004C6 94FB 7540 00 0004C6 1800 0004CC 1B00 0004CC 1B00 0004CC 9200 7543 00 0004D2 D258 7544 7543 00 0004D2 D258 7544 7543 00 0004D2 D258 7544 7543 00 0004D2 0005000000000000000000000000000000000	001A 00000 0000 0000 0540 00543 0544	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 439 440 441 442 443 445 450 451 452 453 454 466 465 466 467 468 469 470 471 472 473 474 474 475 476 477 477 477 477 477 477 477 477 477	********  * ******** * OUTPUT  SCOUNT  RESFLAG NOFLAG  * SAVEAREA * WORKD TRTABLE FLAG SPACE IF16	******  PRINT  ******  STM  LA  L  L  L  L  L  L  L  L  L  L  L  L	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00409001 00410001 00411001 00412001 00415001 00415001 00415001 00415001 0042001 0042001 00423001 00424001 00425001 00425001 00426001 00426001 0043001 0043001 0043001 0043001 00435001 00436001 00436001 00436001 00446001 00445001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000485 5860 5004 00048C 9610 501A 00 000496 180E 000498 58F0 76C8 00049C 05EF 00049E 9104 7540 00 0004AC 4780 74CA 0004AA 4160 6002 0004AE 4060 5014 0004AE 25850 5004 0004BE 0550 0004BB 95F1 5000 00 0004BC 4780 74C6 0004C0 D200 5000 7541 00 0004CC 1800 0004CE 9240 7543 00 0005CE 000000000000000000000000000000000	001A 00000 0000 0000 0540 00543 0544	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 440 441 442 443 444 445 450 451 452 453 454 455 456 457 458 459 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 476 477 477 477 477 476	*********  * *********  COUNT  RESFLAG NOFLAG  *  SAVEAREA * WORKD TRTABLE FLAG SPACE IF16 DSNUMBER BUFFER SCPATTN	******  PRINT  ******  STM  LA  L  OI  MVC  LR  L  BALR  TM  BZ  LH  LA  STH  L  BCTR  CLI  BE  MVC  NI  LR  SR  MVI  MVC  DC  DC  DC  DC  DC  DC  DC  DC  DC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00408001 00410001 00411001 00412001 00415001 00415001 00415001 00417001 00418001 00421001 00422001 00422001 00422001 00422001 00425001 00425001 00425001 00437001 00437001 00437001 00437001 00437001 00437001 00437001 00443001 00437001 00437001 00444001 00445001 00445001 00445001 00444001 00445001 00446001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00446001 00445001 00446001 00445001 00446001 00445001 00446001
000478 9058 C028 00047C 4160 0001 000480 585C 00AC 000484 4150 5028 000485 5880 5004 000486 9610 501A 00 000490 D259 8000 7543 00 000496 180E 000498 9104 7540 00 0004AC 4780 74CA 0004AC 4860 5014 0004AC 4860 5014 0004AC 4860 5014 0004AC 4860 5014 0004BC 5850 5004 0004BC 650 0004BB 95F1 5000 00 0004BC 4780 74C6 0004C0 D200 5000 7541 00 0004C6 94FB 7540 00 0004C6 94FB 7540 00 0004CC 1B00 0004CC 1B00 0004CC 9240 7543 00 0004CC 9240 7543 00 0004CC 97F3 0004DE 0000 0004CB 9258 7544 7543 00 0004DC 07F3 0004DE 0000 000528 000000000000000000000000000000000	001A 00000 0000 0000 0540 00543 0544	00028 00001 000AC 00028 00004 00543 006C8 004CA 00014 00002 00014 00004	432 433 434 435 436 437 438 440 441 442 443 444 445 450 451 452 453 454 455 456 457 458 459 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 476 477 477 477 477 476	********  * ********  * ********  * * ****	******  PRINT  ******  STM  LA  L  OI  MVC  LR  L  BALR  TM  BZ  LH  LA  STH  L  BCTR  CLI  BE  MVC  NI  LR  SR  MVI  MVC  DC  DC  DC  DC  DC  DC  DC  DC  DC	**************************************	THE IHIIORNX ROUTINE  ***********************************	00405001 00406001 00407001 00408001 00410001 00411001 00411001 00415001 00415001 00415001 00415001 00415001 00415001 00420001 0042001 0042001 0042001 00422001 0042601 0042501 0042601 0042601 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0043001 0044001 0044001 0044001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001

0000A9 00

573=

DC

X'00

00045001

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                     Addr1 Addr2 Stmt Source Statement
                                    479 *
                                                 HEADINGS
                                                                                                                 00452001
                                    480 *
                                                                                                                 00453001
0005A7 D4D6C4E4D3C5407E
                                    481 IHIERM02 DC
                                                       C'MODULE = '
                                                                                                                 00454001
0005B0 4040404040404040
                                    482 ERM02M
                                                 DC
                                                                                                                 00455001
                                                       CL8'
                                                       C' PROGRAM BLOCK NUMBER = '
                                                                                                                 00456001
0005B8 4040D7D9D6C7D9C1
                                    483
                                                 DC
0005D1 40404040
                                                                                                                 00457001
                                    484 ERM02BN
                                                       C' ('
0005D5 404D
                                    485
                                                 DC
                                                                                                                 00458001
                                                       CL16' '
0005D7 4040404040404040
                                    486 ERM02TP
                                                 DC
                                                                                                                 00459001
                                                                                L'IHIERM02
                      00040
                                    487 ERM02L
                                                 EQU
                                                       *-IHIERM02
                                                                                                                 00460001
                                                                                                                 00461001
                                    488
0005E7 C2D3D6C3D25D4040
                                    489 ERM02BK
                                                 DC
                                                                                                                 00462001
                                                       CL16'BLOCK)
0005F7 D7D9D6C3C5C4E4D9
                                    490
                                                       CL16'PROCEDURE)
                                                                                                                 00463001
                                                 DC
000607 E3E8D7C540D7D9D6
                                    491
                                                 DC
                                                       CL16'TYPE PROCEDURE) '
                                                                                                                 00464001
                                    492
                                                                                                                 00465001
000617 C6D6D9D4C1D340D7
                                    493 KFORMAL DC
                                                       C'FORMAL PARAMETERS'
                                                                                                                 00466001
                                    494
                                                                                                                 00467001
                                                       C'DECLARED IDENTIFIERS AND OBJECT TIME STACK'
000628 C4C5C3D3C1D9C5C4
                                    495 IHIERMØ5 DC
                                                                                                                 00468001
                                    496
                                                                                                                 00469001
000652 E2D4C640C4C9E2D7
                                    497 IHIERM06 DC
                                                       C'SMF DISPLACEMENT IN DSA = '
                                                                                                                 00470001
                                                       CL7' '
                                                                                                                 00471001
00066C 40404040404040
                                    498 ERM06SMF DC
000673 C4C5C3D3C1D9C5C4
                                                       C'DECLARED ARRAY'
                                    499
                                                 DC
                                                                                                                 00472001
                      0002F
                                    500 ERM06L
                                                 EQU
                                                                               L'IHIERM06
                                                                                                                 00473001
                                    501
                                                                                                                 00474001
                                                       C'SMF DISPLACEMENT IN DSA = 'CL7''
000681 E2D4C640C4C9E2D7
                                    502 IHIERM07 DC
                                                                                                                 00475001
                                                                                                                 00476001
00069B 40404040404040
                                    503 ERM07SMF DC
                                                       C'ARRAY CALLED BY VALUE'
0006A2 C1D9D9C1E840C3C1
                                    504
                                                                                                                 00477001
                                                 DC
                      00036
                                    505 ERM07L
                                                       *-IHIERM07
                                                                               L'IHIERM07
                                                                                                                 00478001
                                                 EQU
                                    506
                                                                                                                 00479001
                                    00480001
                                    508
                                                                                                                 00481001
                                    509
                                                 EXTERNAL ADDRS
                                                                                                                 00482001
                                    512 *
                                                                                                                 00485001
                                    513 *
                                                 PASSED IN PARAMETER LIST FROM CALLER IHIFSA
                                                                                                                 00486001
                                    514 *
                                                                                                                 00487001
0006B7 00
0006B8 00000000
                                    515 VFRDSA
                                                       A(0)
                                                                 V(FRDSA)
                                                                                                                 00488001
                                                 DC
                                    516 VSPDAP
                                                       A(0)
                                                                 V(SPDAP)
                                                                                                                 00489001
0006BC 00000000
                                                 DC
999669 99999999
                                    517 VTOROP
                                                 DC
                                                       A(0)
                                                                 V(IHIIOROP)
                                                                                                                 00490001
0006C4 00000000
                                    518 VIORCP
                                                 DC
                                                       A(0)
                                                                 V(IHIIORCP)
                                                                                                                 00491001
                                                                                                                 00492001
0006C8 00000000
                                    519 VIORNX
                                                 DC
                                                       A(0)
                                                                 V(IHIIORNX)
                                                                                                                 00493001
                                    520
                                                 ADDRS IN IHIERMSG MODULE
                                                                                                                 00494001
                                    521
                                    522 *
                                                                                                                 00495001
0006CC 00000000
                                    523 VERMSG
                                                       V(IHIERMSG)
                                                                                                                 00496001
                                                                                                                 00497001
999609 99999999
                                    524 VERM01
                                                 DC
                                                       V(THTFRM01)
                                                                                                                 00498001
                                    525
000000
                      00000 00120
                                    526 FSARE
                                                 DSECT
                                                                                                                 00499001
                                    527
                                                                                                                 00500001
                                    528
                                                 COPY FSAREA
                                                                                                                 00501001
                                    529=
                                                                                                                 00001001
                                                 COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                 00002001
                                    530=
                                    531=
                                                                                                                 00003001
                                    532=
                                                 STATUS - LEVEL 2.1
                                                                                                                 00004001
                                    533=*
                                                                                                                 00005001
                                    534=
                                                                                                                 99996991
                                    535=
                                                                                                                 99997991
                                                                                                                 00008001
                                    536=
                                                 COMMON DATA AREA
                                    537=
                                                                                                                 00009001
                                                                                                                 00010001
                                    538=
                                    539=
                                                                                                                 00011001
                                    540=
                                                                                                                 00012001
                                                                                                                 00013001
                                    541=
                                    542=
                                                 DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL
                                                                                                                 00014001
                                    543=*
                                                 MODULES DURING THE EXECUTION
                                                                                                                 00015001
                                    544=*
                                                                                                                 00016001
                                    545=*
                                                 ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY
                                                                                                                 00017001
                                    546=
                                                 SUBROUTINES) BY R12
                                                                                                                 00018001
                                    547=*
                                                                                                                 00019001
                                                                                                                 00020001
                      00000
                                    548=FSAREA
                                                 EOU
                                    549=
                                                                                                                 00021001
                                    550=*
                                                 SAVE AREAS
                                                                                                                 00022001
                                                                                                                 00023001
                                    551=
000000
                                                 DS
                                                                                STANDARD SAVE AREA
                                                                                                                 00024001
                                    552=
                                                       18F
                                                       *-FSAREA
                      00048
                                    553=ASAVE
                                                                                ALTERNATE SAVE AREA USED BY
                                                                                                                 00025001
                                                 EOU
000048
                                                       18F
                                                                                CERTAIN SUBROUTINES
                                                                                                                 00026001
                                    554=
                                    555=*
                                                                                                                 00027001
                                                 MISCELLANEOUS WORK AREAS AND CONSTANTS
                                    556=*
                                                                                                                 00028001
                                    557=*
                                                                                                                 00029001
                                    558=FCTVALST EQU
                                                       *-FSAREA
                                                                                TEMPORARY STORAGE FOR
                                                                                                                 00030001
                      00090
000090
                                                                                FUNCTION VALUES
                                                                                                                 00031001
                                    559=
                                                 DS
                      00098
                                    560=ASTLOC
                                                       *-FSAREA
                                                                                DISPL FOR ADDR OF STAND LOCTN
                                                                                                                 00032001
99998 9999999
                                    561=
                                                 DC
                                                       A(FSAREA+FCTVALST)
                                                                                                                 00033001
                                    562=BRRST
                      0009C
                                                 EOU
                                                        *-FSAREA
                                                                                TEMPORARY SAVE REG BRR
                                                                                                                 00034001
                                                                                TEMPORARY HALFWORD STORAGE
                                                                                                                 00035001
                                    563=HW
                                                 EOU
                                                       BRRST
                      0009C
00009C
                                    564=
                                                 DS
                                                                                                                 00036001
                      000A0
                                    565=PROLREG
                                                 EQU
                                                       *-FSAREA
                                                                                STORAGE FOR PBT AND LAT WHEN
                                                                                                                 00037001
0000A0
                                    566=
                                                                                A PROCEDURE IS FORMAL PARAM
                                                                                                                 00038001
                                                 DS
                                    567=*
                                                                                                                 00039001
                                                 HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE
                                                                                                                 00040001
                                    568=
                                    569=*
                                                                                                                 00041001
                                                                                                                 00042001
0000A8
                                    570=
                                                 DS
                                                 DC
                                                       X'00'
                                                                                                                 00043001
0000A8 00
                                    571=
                      99949
                                    572=PROLPBN
                                                 EOU
                                                       *-FSARFA
                                                                               STORAGE FOR CALLED PBN
                                                                                                                 99944991
```

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 000AA 574=EIGHT \*-FSAREA CONST FOR REDUCING RAS 00046001 EQU 00047001 0000AA 0008 575= H'8' DC 576= 00048001 0000AC DS 00049001 577= 00050001 000AC 578=ADSTAB EQU \*-FSAREA ADDR OF DSTABLE 0000AC IN THE OBJECT PROGRAM 00051001 ааава 580=ANOTTAR EOU \*-FSARFA ADDR OF NOTE TABLE 00052001 0000B0 581= DS (INSERTED BY THE OPEN ROUTINE) 00053001 582= 00054001 583=IHIFSAST EQU 000B4 00055001 000B4 584=PGOPSW \*-FSAREA PROGRAM CHECK OLD PSW 00056001 EQU 585= 0000B4 00057001 DS 2F 000BC 586=FSAPICA EQU \*-FSAREA OLD PICA ADDR 00058001 арары арарара F'0' 587= DC 00059001 000C0 588=SCRCS \*-FSAREA SEMICOLON NUMBER 00060001 EQU 0000C0 00061001 589= DS Н 590=DTSW \*-FSAREA 000C2 EQU OPTION SWITCHES 00062003 000C2 591=0PTSW EQU DTSW 00063001 DUMP-80, TRACE-40, SHORT-20 ERROR CODE FOR ERROR ROUTINE 0000C2 00 592= DC X'00 00064001 \*-FSAREA 000C3 593=FSAERCOD EOU 00065001 00066001 0000C3 594= DS 595= 00067001 596=\* RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 597= 00069001 999904 99979991 598= DS 0F 000C4 599=IHIFSARS EQU 00071001 000C4 600=RASSTART EQU \*-FSAREA ADDR OF FIRST ENTRY IN RAS-8 00072001 0000C4 00073001 601= 000C8 602=RASPT RAS POINTER FROM TOP 00074001 EQU \*-FSAREA 0000C8 603= DS 00075001 000CC 604=RASEND EOU \*-FSAREA ADDR OF LAST ENTRY IN RAS+8 00076001 0000CC 00077001 605= DS 000D0 606=RASPB EOU \*-FSAREA RAS POINTER FROM BOTTOM 00078001 0000D0 607= 00079001 DS 608= 00080001 LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROLITINES 609= 99981991 610= 00082001 0000D4 611=BRLIST DS 00083001 FIRST PART CAPS 00084001 000D4 612=CAP1 EQU \*-FSAREA 000004 4700 0000 99999 613= NOP a 00085001 000D8 614=CAP2 EOU \*-FSAREA SECOND PART CAPS 00086001 0000D8 4700 0000 00000 615= NOP 00087001 000DC 616=PROLOGP -FSAREA PROLOGUE FORMAL PARAMETER ENTRY 00088001 EOU 000DC 617=PROLOGFP PROLOGP 00089001 EQU 0000DC 4700 0000 00000 618= 00090001 NOP 000E0 619=PROLOG EQU \*-FSAREA PROLOGUE PROGRAM USUAL ENTRY 00091001 9999F9 4799 9999 aaaaa 620= NOP 99999991 000E4 -FSAREA 621=RETPROG DISPLACEMENT RETURN PROGRAM 00093001 EQU 0000E4 4700 0000 00000 622= NOP 00094001 000E8 623=EPILOGP EQU \*-FSAREA EPILOGUE PROGRAM, PROCEDURE ENTRY 00095001 0000E8 4700 0000 00000 624= NOP 00096001 EPILOGE PROGRAM, BETA-BLOCK ENTRY 000EC 625=EPILOGB EOU \*-FSAREA 00097001 0000EC 4700 0000 00000 00098001 626= NOP 000F0 627=EPILPR3 -FSAREA EPILOGUE PROGRAM ENTRY 3 00099001 EQU 0000F0 4700 0000 00000 NOP 00100001 628= 000F4 629=CSWE1 \*-FSAREA FIRST PART CSWES 00101001 EQU 0000F4 4700 0000 00000 630= NOP 00102001 999E8 631=CSWF2 FOU \*-FSARFA SECOND PART CSWES 00103001 0000F8 4700 0000 00104001 00000 632= NOP 633=LOADPF 000FC EQU -FSAREA LOAD PRECOMPILED PROC ROUTINE 00105001 0000FC 4700 0000 00000 00106001 634= NOP 99199 635=TRACE EQU \*-FSARFA 00107001 000100 D200 0000 0000 00000 00000 636= MVC 0(0),0 00108001 000106 4700 0000 NOP 00109001 00000 637= 00010A 4700 0000 00000 NOP 00110001 638= 0010E 639=TERMNTE \*-FSAREA NORMAL TERMINATION EXIT 00111001 EQU 00010E 4700 0000 00000 640= NOP 00112001 00112 641=BCR EOU \*-FSAREA 00113001 000112 0700 VARIABLE CONDITIONAL BRANCH 00114001 642= **BCR** 0.0 00114 643=GETMSTO -FSAREA 00115001 EQU 000114 4700 0000 00000 644= NOP 00116001 00117001 645= 00118 646=VALUCALL EOU \*-FSARFA 00118001 000118 4700 0000 00000 647= NOP 00119001 0011C 648=IORLST \*-FSAREA EOU 00120001 00011C 4700 0000 00000 00121001 649= NOP a 650= 00122003 001CC 651=FSAERR EQU X'1CC' DISPL FOR ERROR LIST 00123001 652= 99124991 653= DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 00126001 654= 655=OUTOFB 0020C 00127001 EQU 00218 656=NUMBIND FSAERR+4\*19 00128001 EQU 00208 657=ARRAYBD EOU FSAFRR+4\*15 00129001 FSAERR+4\*40 0026C 658=ERROR40 EOU 00130001 659=0ERR22 FSAERR+4\*22 00131001 00224 EOU 00210 660=ENDLESL EQU FSAERR+4\*17 00132001 00220 661=0ERR21 FSAERR+4\*21 00133001 662= 00134001 663 \* 00502001 DATASET TABLE MAPPING DSECT 00503001 664 665 00504001 **DSTABLE DSECT=YES** 666 00505001 000000 00000 00024 667+DSTABLE DSECT 668+ 01-DSTAR 000000 00000000 669+ADCB DC F'0 -> DCB 01-DSTAB

0006D8 E2E8E2E4E3F2

0006DE E2E8E2E4E3F1

Addr1 Addr2 Stmt X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Source Statement 000004 000000000 670+R DC F'0' CHARACTER POINTER 01-DSTAB 0000008 000000000 671+RE DC F'0' 01-DSTAB F'0' F'0' 00000C 00000000 000010 00000000 672+NBB DC DC 01-DSTAB 01-DSTAB 673+BB 000014 0001 674+S H'1' RECORD POINTER 01-DSTAB DC 000016 0050 675+P DC H'80' RECORD LENGTH 01-DSTAB NUMBER OF BLANK DELIM CHARS 000018 02 676+K DC X'02' 01-DSTAB 000019 00 677+0 DC X'00' NO OF RECORDS PER SECTION 01-DSTAB H'00' DATASET FLAGS 00001A 0000 678+DSF 01-DSTAB DC 01-DSTAB 679+\* 680+\* DATASET FLAGS - DSF 01-DSTAB 681+\* 01-DSTAB 00080 682+DS0 EQU X'80' DATASET OPEN 01-DSTAB 99949 683+DS1 X'40' 01-DSTAR EOU EQU X'20' 00020 684+DS2 LAST I/O OUTPUT 01-DSTAB 00010 685+DS3 EQU X'10' 01-DSTAB 686+DS4 EQU X'08' 01-DSTAB 00008 99994 687+DS5 EQU X'04' 01-DSTAB OPEN FOR OUTPUT 688+DS6 X'02' 01-DSTAB 00002 EQU 00001 689+DS7 X'01 END OF FILE 01-DSTAB EQU 690+\* 01-DSTAB 691+\* DATASET FLAGS - DSF+1 01-DSTAB 692+\* 01-DSTAB 693+DS8 END OF DATA 00080 EQU X'80' 01-DSTAB 00040 694+DS9 X'40' 01-DSTAR EOU 00020 695+DS10 EQU X'20' OPENED BY SYSACT 12 01-DSTAB 00010 696+DS11 EQU X'10' INDICATE IHIERR-ROUT 01-DSTAB 00008 697+DSEOD EQU X'08' 01-DSTAB 00004 698+DSIOERR EQU X'04' I/O ERROR 01-DSTAB DATASET OPENED 00002 699+DS14 EOU X'02 01-DSTAB CLOSE FROM IHIERR 00001 700+DS15 EQU X'01 01-DSTAB 701+ 01-DSTAB 00001C 00000000 702+NOTEADR DC F'0' 01-DSTAB 000020 0000 703+BL DC H'0' LRECL+ TWO ARB 01-DSTAB 000022 0000 704+ DC H'0' 01-DSTAB 705+ 01-DSTAR 00024 706+DSTABLEL EQU \*-DSTABLE L'DSTABLE ENTRY 01-DSTAB 707+\* 708 \* 00506001 709 \* REGISTER EQUATES 00507001 710 \* 00508001 **IEZREGS** 00509001 711 00000 712+R0 EQU 0 01-IEZRE 00001 713+R1 EQU 01-IEZRE 00002 714+R2 EQU 2 01-IEZRE 00003 715+R3 EQU 3 4 01-IEZRE 99994 716+R4 EOU 01-TF7RF 00005 717+R5 EQU 5 6 01-IEZRE 00006 718+R6 01-IEZRE EQU 00007 719+R7 EQU 01-IEZRE 00008 720+R8 EQU 8 01-IEZRE 00009 721+R9 9 EQU 01-IEZRE 0000A 722+R10 10 EOU 01-IEZRE 0000B 723+R11 01-IEZRE EQU 11 0000C 724+R12 EQU 12 01-IEZRE 0000D 725+R13 EQU 13 01-IEZRE 14 15 0000E 726+R14 EQU 01-IEZRE agage 727+R15 EOU 01-TF7RF 728 00510001 729 END 00511001 0006D4 00000000

=C'SYSUT2'

=C'SYSUT1'

730

731

- 1	ERR					Symbol	Cross	Refer	rence									PAGE	10
	Symbol I	Length	Value	Id ·	Type Asm	Program	Defn	Refer	rences	5				X390	3.1.0	ð4 20	012/0	8/17 1	13.21
	C'SYSUT1'																		
		6	000006DE	00000001	СС		731	152											
•	=C'SYSUT2'	6	000006D8	00000001	СС		730	148											
	ADDR	2	000003C4		I		372	360B											
	ADSTAB ARRAYS		000000AC 000003CA	99999991	U I		578 381	116 294B	441										
-	BNPATTN	4	000005A3		хх		477	264											
	BRRST BUFFER		0000009C 00000543	99999991	U C C		562 475	563 127M	128M	172M	183M	267M	280M	302M	363M	364M	365M	368	389M
								414M	445	462M	463M	20711	20011	30211	50511	30411	50511	300	30311
	B1 CDSA		000000D6 000000A	00000001	I U		115 45	73B 228M	75B 229		253	255	261	277	292	381	384	390	393
								406	415	422				_,,	2,72	501	304	330	333
	DSF DSNUMBER		0000001A 00000542				678 474	74 145M		122M	123M	124M	444M						
[	OSN17	4	00000166	00000001	I		151	147B											
	DSTABLE DSTABLEL		00000000 00000024	FFFFFFE	J U		667 706	37U 117	706 442										
1	OS0	1	00000080		U		682	124											
	OS1 OS11		00000040 00000010		U U		683 696	124 74	122										
1	OS15	1	00000001		U		700	119											
	DS2 DS3		00000020 00000010		U U		684 685	123 123	444										
1	OS6	1	00000002		U		688	123											
	DTSW EDIT		000000C2 00000262	99999991	U I		590 252	106M 220B	218	591									
-	ENDLINE		000001E2		Ī		185	178B											
	ENDOFR ENDVALAR		0000025A 00000468		I I		236 428	215B 408B	425B										
	ERM02BK		00000468 000005E7				489	259	4230										
	ERM02BN ERM02L		000005D1 00000040	00000001	C C U		484 487	264M 267	265M										
	ERMOZE ERMOZM		0000005B0	00000001			482	254M											
	RM02TP		000005D7	00000001			486	260M											
	ERM06L ERM06SMF		0000002F 0000066C	00000001	U C C		500 498	389 386M	387M	388M									
-	ERM07L	1	00000036		U		505	414											
	ERM07SMF EXMVC		0000069B 000001DC				503 183	411M 176X	412M	413M									
	CTVALST		00000090	0000001	Ū		558	561											
	ELAG	1	00000540	00000001	хх		471		266M 430M		303M	309M	359	366	369M	383M	395M	409M	420M
ı	LAGIDS	1	00000003		U		50		168	777	45511								
	-LAGMC -SAERCOD		00000004 000000C3		U U		52 593	177 76	78	131									
	SAERR		000000CS		U		651	655	656	657	658	659	660	661					
١	SAREA	1	00000000	FFFFFFF	U		548	553	558	560	561	562	565	572	574	578	580	584	586
								588 623	590 625	593 627	600 629	602 631	604 633	606 635	612 639	614 641	616 643	619 646	621 648
	IF16		00000542				473	320M	321M										
	[HB0002A [HB0003A		0000008E				89 102	83B 96B											
	THIERMSG		00000000				523												
	[HIERM01 [HIERM02		00000000 000005A7				524 481	524 267	487										
	IHIERM05	42	00000628	00000001	СС		495	302											
	[HIERM06 [HIERM07		00000652 00000681				497 502	389 414	500 505										
	THIERROR	1	00000000	00000001	J		35	62U	505										
	INSETD INSETDA		0000039C 00000398				362 361	373B 324B											
	INSETDB		0000033C				369	367B											
	IOERR (FORMAL		00000094 00000617				96 493	77B 280											
	_ABAA	4	00000340	00000001	I		324	322B											
	INE2		000001BE				174	181B											
	MOREARRY MORERAS		000003D2 00000212				383 213	398B 202B	234B										
	MORERASA		00000216				214	225B											
	MORESPDA MULT32		000001FA 00000308				201 308	211B 315B											
1	/ULT32A	4	0000030C	00000001	I		309	306B	265-	20									
	NFPARM NOFLAG		000002DE 000004CA				289 460	310 450B	318B	325B									
1	NOFPARAM	4	000002E6	00000001	I		291	279B											
	NOTYPE NOTZERO		000002D8 00000318				287 313	285B 305B											
1	NOT1617	4	000001AA	00000001	I		168	151B											
	NOT1617A OPTSW		000001B2 000000C2	00000001	I U		170 591	144B 105M											
	DUTPUT		00000478	00000001			439	105M 129B	179B	186B	268B	290B	319B	358B	396B	421B	428B		
	PBT		0000000B		U		46			254	255M	257	278	282	284	291			
	PGOPSW PRENTRY		000000B4 00000232	00000001	U I		584 222	160 217B	103										
-	PROLOGP	1	00000DC		U		616	617											
	PSWDSN R		000001B6 00000004				172 670		153B 454	158B	166B								
1	RASPT	1	000000C8		U		602	213	224M										
	RASSTART RELDSA		000000C4 00000240	00000001	U I		600 227	214 219B	/21D										
	RESFLAG		000004C6				459	457B	42TD										
	RØ		00000000		U		712				335M							21 444	220
	R1	1	00000001		U		713				201M 361			230M 418M	731R	∠/bM	304M	314M	32 <b>0</b>
1	R12	1	0000000C		U		724		76				116	131	139	160	163	213	214

Symbol	Length	Value	Id	Туре	Asm	Program	Defn	Refe	rence	5				X390	3.1.0	04 2	012/0	3/17 :	13.21
								218	224	227	232M	236	439	441	464				
R13	1	000000D		U			725	64			232								
R14		0000000E		Ü			726	121M			214			224	228	252	446	448M	460M
R15		0000000F		Ü			727	61			125M								
R2		00000002		Ü			714				134M					174M	175M	176	180
											222M						261M		
											384						406M		
								415	422	423M	424M								
R3	1	00000003		U			715	129M				141	142	172	179M	186M	268M	290M	319M
											372M								
R4	1	00000004		U			716				334B								
R5	1	00000005		Ü			717	37U	116M	117M	281M	282M	283M	286M	287M	292M	293	317	333
								390M	416M	439	441M	442M	454M	455M	456	458	464M		
R6	1	00000006		U			718				132M						157	160	161
																	259M		440M
								451M	452M	453									
R7	1	00000007		U			719	61M	62U										
R8	1	00000008		U			720	115M	145	155	323M	341M	343	344	345	347M	368M	439	443M
									464M										
R9	1	00000009		U			721	277M	287	293	317	333	343	348M	384M	415M	416	417M	422M
								423											
S	2	00000014	FFFFFFE	н н			674	451	453M										
SAVEAREA	4	000004E0	00000001	FF			467	65	233										
SCOUNT	4	000004AA	00000001	I			452	188M											
SCPATTN	6	0000059D	00000001	XX			476	141	142										
SCRCS	1	000000C0		U			588	139											
SETDISP	4	00000388	00000001	I			357	337B											
SETOPTSW	4	000000CA	00000001	I			105	92B											
SHIFTB	4	00000364	00000001	I			342	340B											
SPACE	1	00000541	00000001	C C			472	187M	458										
SPDAFREE	4	000001F2	00000001	I			199	107B											
TAKEDSN	4	00000174	00000001	I			155	169B											
TAKEPSW	6	00000186	00000001	I			160	170B											
TRANS	6	00000368	00000001	I			343	370B											
TRANSDAT	2	00000348	00000001	I			333	288B	311B	349B	392B	419B							
TRTABLE	16	00000530	00000001	C C			470	161	165	345	365	388	413						
VALARRAY	4	0000041E	00000001	I			409	426B											
VALUE	4	00000414	00000001	I			406	382B											
VERMSG	4	000006CC	00000001	VV			523	132											
VERM01		000006D0					524	136											
VFRDSA	4	000006B8	00000001	АА			515	63M	230										
VIORCP	4	000006C4	00000001	АА			518	120											
VIORNX	4	000006C8	00000001	АА			519	447											
VIOROP		000006C0					517												
VSPDAP		000006BC					516	199											
WORKD	8	00000528	00000001	D D			469	135M		140M	142	155M	156	263M	265	362M	363	385M	386
								410M	411										

13(D)

15(F)

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21 59 207M 239M 308M 313M 316M 335M 338M 342M 357M 446M 460 461M 59 63 83M 96M 199M 200 201M 203 208M 230M 231B 239M 276M 304M 308M 313M 314M 316M 320 335M 336M 338M 1(1) 339M 342M 346M 346N 357M 361 372 391M 418M 59 130M 131M 133N 134M 135 139M 140 173M 174M 175M 176 180N 200M 201 203M 222M 223 239M 256M 257M 258M 259N 261M 262M 263 291M 292N 381M 384N 385 390N 393M 393N 394M 395M 406M 407M 410 415N 422N 423M 424M 59 129M 136M 137 138 141 142 172 179M 186M 239M 268M 290M 319M 358M 361M 362 372M 396M 421M 428M 465B 2(2) 3(3) 59 239M 288M 310M 324M 334B 392M 419M 5(5) 37U 59 116M 117M 239M 281M 282M 283M 286M 287M 292M 293 317 333 390M 416M 439 441M 442M 454M 455M 456 458 464M 59 73M 115 118M 132M 133M 143 148 152 156 157 160 161 162 163 164 165 168 174N 177 180M 183 239M 259M 260 439 440M 451M 452M 453 464M 6(6) 7(7) 61M 62U 239M 439 464M 8(8) 59 115M 145 155 239M 323M 341M 343 344 345 347M 347N 368M 439 443M 445 464M 239M 277M 287 293 317 333 343 348M 348N 384M 415M 416 417M 422M 423 228M 229 239M 252M 253 255 261N 277 292 381 384 390 393 406N 415 422 229M 239M 253M 254 255M 257 278 282 284 291 9(9) 10(A) 59 11(B) 64M 76 78 105 106 116N 131N 139 160 163 213N 214N 218 224N 227 232M 236 239M 439 441N 464 59 12(C) 59 64 65M 227M 232 233M 236M 239 59 121M 126M 213M 214 216 223M 224 228 239M 240B 252 446 448M 460M

55B 59 61 120M 121B 125M 126B 231M 239M 447M 448B

ERR Dsect Cross Reference PAGE 13

 
 00000024
 FFFFFFFE
 667
 4
 DSTABLE

 00000120
 FFFFFFFF
 526
 PRIMARY INPUT
 DSTABLE FSARE

Dsect Id Defn Con Member X390 3.1.04 2012/08/17 13.21 Length

- 1 SYS1.MACLIB
  FREEMAIN IEZREGS RETURN SAVE WTO

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA
- 5 SYS1.AMODGEN

ERR USING Map PAGE 15

Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

37 USING Ordinary FFFFFFFE 00000000 00001000 5 0001B 454 DSTABLE,R5
62 USING Ordinary 00000001 00000000 00001000 7 0000E 463 IHIERROR,R7

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIERR PROCSTEP: X390

Primary input: lines 1 to 511 of SYSD.ALGOLFRT.ASM(IHIERR)

SYSLIB library records read: 1118 SYSUT1 work file size: 73052 bytes SYSUT2 work file size: 82324 bytes SYSUT3 work file size: 40880 bytes SYSLIN file records written: 35

TXA000I Return code 0, elapsed time 0.70 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIERROR 0006E4 4

## IHIFDD LEVEL V2.M01

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIFDD)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00110
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                                        00003001
                                        3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00004001
                                        4
                                                                                                                       00005001
                                        5
                                                    STATUS - LEVEL 2.1
                                                                                                                        00006001
                                        6
                                                                                                                        00007001
                                                    FUNCTION/OPERATION - SEE CODE
                                                                                                                        00008001
                                          *
                                        8
                                                                                                                        00009001
                                        9
                                                    ENTRY POINT - IHIFDD - POWER FUNCTION, REAL**REAL, LONG
                                                                                                                       00010001
                                                                   LA R1.PARMLIST
                                       10
                                                                                                                        00011001
                                                                   BALR R14, R15
                                                                                                                       00012001
                                       11
                                       12
                                                                   DATA PASSED BY NAME
                                                                                                                        00013001
                                       13
                                                    THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                        00014001
                                       14
                                                                                                                        00015001
                                                    TNPUT - N/A
                                       15
                                                                                                                        99916991
                                                                                                                       00017001
                                       16
                                                    OUTPUT - N/A
                                                                                                                        00018001
                                       17
                                       18
                                                                                                                        00019001
                                       19
                                                    EXTERNAL ROUTINES -
                                                                                                                        99929991
                                       20
                                                                                                                        00021001
                                                                                                                       00022001
                                       21
                                                    IHILLO - LOGARITHM FUNCTION, LONG PRECISION
                                                                                                                        00023001
                                       22
                                                    IHILEX - EXPONENTIAL FUNCTION, LONG PRECISION
                                       23
                                                                                                                        00024001
                                       24
                                                    EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                        00025001
                                       25
                                                                                                                        00026001
                                                    FXTT - FRROR
                                                                                                                       00027001
                                       26
                                                    IF BASE IS ZERO AND EXPONENT NOT POSITIVE GOTO ERROR
                                                                                                                        00028001
                                       27
                                       28
                                                    ROUTINE VIA
                                                                                                                        00029001
                                                         FSAERR+35*4(R13)
                                                                                                                        00030001
                                       29
                                       30
                                                                                                                        00031001
                                       31 *
                                                    TABLES/WORKAREAS - N/A
                                                                                                                       00032001
                                       32
                                                                                                                        00033001
000000
                       00000 000FC
                                       33 IHIFDDXP CSECT
                                                                                                                        00034001
                                       34
                                                                                                                        00035001
                                       35 *
                                                    FLOATING POINT REGISTERS
                                                                                                                        00036001
                                       36
                                                                                                                       00037001
                                       37 FPRØ
                                                                                    BASE NO. PASSING RESULT
                       99999
                                                    FOLL
                                                                                                                        00038001
                                                                                    EXPONENT IN COMPUTATION
                                                                                                                       00039001
                                       38 FPR2
                       00002
                                                    EQU
                                       39
                                                                                                                        00040001
                                       40
                                                    GENERAL PURPOSE REGISTERS
                                                                                                                        00041001
                                       41
                                                                                                                       00042001
                                       42
                                                    R1
                                                                                    PARAMETER LIST REF
                                                                                                                        00043001
                                                                                                                       00044001
                                       43
                                                    R3
                                                                                    INDEXING PARAMETER ADDR
                                                                                                                        00045001
                                       44
                                       45
                                                    ENTRY IHIFDD
                                                                                                                        00046001
                                                                                                                       00047001
                                       46 *
                                       47 IHIFDD
                                                    SAVE
                                                          (14,12),, 'IHIFDDXP LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                        00048001
000000 47F0 F026
                             99926
                                                                                              BRANCH AROUND ID
                                       48+THTFDD
                                                    В
                                                          38(0.15)
                                                                                                                       01-SAVE
                                                                                               LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
000004 21
                                       49+
                                                    DC
                                                          AL1(33)
                                                          CL32'IHIFDDXP LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000005 C9C8C9C6C4C4E7D7
                                       50+
                                                    DC
                                                                                                                       01-SAVE
                                                                                                                       01-SAVE
000026 90EC D00C
                              0000C
                                       52+
                                                    STM
                                                          14.12.12(13)
                                                                                               SAVE REGISTERS
                                                                                                                       01-SAVE
                                                                                                                       00049001
                                       53
00002A 182F
                                                    LR
                                       54
                                                          R2.R15
                                                                                                                        00050001
                  R:2 00000
                                       55
                                                    USING IHIFDDXP, R2
                                                                                                                        00051001
00002C 183D
                                       56
                                                          R3,R13
                                                                                    CHAIN SAVE AREAS
                                                                                                                        00052001
                                                    LR
00002E 41D0 2098
                              00098
                                       57
                                                          R13, SAVEAREA
                                                                                                                        00053001
000032 5030 D004
                              00004
                                       58
                                                    ST
                                                          R3,4(,R13)
                                                                                                                       00054001
000036 50D0 3008
                              99998
                                       59
                                                    ST
                                                          R13.8(.R3)
                                                                                                                        00055001
                              00000
                                                                                    PLIST OF BASE NO IN R3
                                                                                                                       00056001
00003A 5830 1000
                                       60
                                                          R3,0(,R1)
00003E 6800 3000
                              00000
                                       61
                                                    LD
                                                          FPR0,0(,R3)
                                                                                    BASE NO INTO FPRO
                                                                                                                        00057001
000042 5830 1004
                                                          R3,4(,R1)
                                                                                    PLIST OF EXPONENT IN R3
                                                                                                                        00058001
                              00004
                                       62
000046 6820 3000
                              00000
                                       63
                                                    LD
                                                          FPR2,0(,R3)
                                                                                    EXPONENT INTO FPR2
                                                                                                                       00059001
                                                          FPRØ. FPRØ
                                                                                    BASE NO +, - OR ZERO ? ZERO, BRANCH TO ERROR
00004A 2200
                                       64
                                                    LTDR
                                                                                                                        00060001
00004C 4780 208A
                                                                                                                       00061001
                              0008A
                                       65
                                                          ERROR
                                                    BZ
000050 4740 2090
                              00090
                                                    ВМ
                                                          ERRORM
                                                                                    NEGATIVE, UNDEFINED ERROR
                                                                                                                        00062001
                                       66
                                                                                    EXPONENT PLUS, MINUS, OR ZERO ?
000054 2222
                                       67
                                                    LTDR
                                                          FPR2, FPR2
                                                                                                                       00063001
000056 4780 207C
                              0007C
                                       68
                                                    ΒZ
                                                          LOAD1
                                                                                    ZERO, BRANCH TO LOAD1
                                                                                                                        00064001
00005A 6020 20E0
                              000E0
                                       69
                                                    STD
                                                          FPR2, PARAM
                                                                                    STORE EXPONENT
                                                                                                                        00065001
                                       70
                                                                                    R15 -> IHILLO ROUTINE
                                                                                                                       00066001
00005E 58F0 20F4
                              000F4
                                                          R15.VIHILLO
000062 05EF
                                       71
                                                          R14, R15
                                                                                    CALL IHILLO ROUTINE
                                                                                                                       00067001
                                                    BALR
                                                          FPR2, PARAM
000064 6820 20E0
                              000E0
                                       72
                                                    LD
                                                                                    RELOAD FPR2 WITH EXPONENT
                                                                                                                        00068001
000068 2C02
                                       73
                                                    MDR
                                                          FPRØ, FPR2
                                                                                    MULT LOG OF BASE NO BY EXPONENT
                                                                                                                       00069001
                                                                                    STORE RESULT AS EXP RTN PARM
00006A 6000 20E0
                              aaaFa
                                       74
                                                    STD
                                                          FPRØ. PARAM
                                                                                                                        00070001
                                       75
                                                                                                                       00071001
00006E 4110 20F0
                              000F0
                                                    LA
                                                          R1.ADCPAR
                                                                                    R1 -> EXP RTN PARM
000072 58F0 20F8
                                                          R15, VIHILEX
                                                                                    R15 -> IHILEX ROUTINE
                              000F8
                                                                                                                        00072001
                                       76
000076 05EF
                                       77
                                                          R14,R15
                                                                                    CALL IHILEX ROUTINE
                                                                                                                       00073001
                                                    BALR
000078 47F0 2080
                              00080
                                                                                    EXIT WITH RESULT IN FPR0
                                                                                                                        00074001
                                       78
                                                          EXIT
                                       79 *
                                                                                                                        00075001
00007C 6800 20F8
                              999F8
                                       80 LOAD1
                                                          FPRØ. KEPDONE
                                                                                    PLUS 1 AS RESULT IN EPRO
                                                                                                                       00076001
                                                    I D
000080 58D0 D004
                              00004
                                       81 EXIT
                                                          R13,4(,R13)
                                                                                    R13 -> CALLERS SAVE AREA
                                                                                                                        00077001
                                                    L
                                                                                                                        00078001
                                       82
                                       83
                                                    RETURN (14,12)
                                                                                    RESTORE CALLERS REGS AND RETURN
                                                                                                                        00079001
000084 98EC D00C
                              0000C
                                       84+
                                                          14,12,12(13)
                                                                                               RESTORE THE REGISTERS
                                                                                                                        01-RETUR
000088 07FE
                                       85+
                                                    BR
                                                          14
                                                                                               RETURN
                                                                                                                        01-RETUR
                                                                                                                        00080001
                                       86
                                                                                    EXPONENT PLUS, MINUS, OR ZERO ?
                                                                                                                       00081001
00008A 2222
                                       87 ERROR
                                                    LTDR
                                                          FPR2.FPR2
                                                                                    EXPN IS POSITIVE, BRANCH TO EXIT
00008C 4720 2080
                              00080
                                       88
                                                    ВР
                                                          EXIT
                                                                                                                       00082001
                                                          R13,4(R13)
000090 58DD 0004
                              00004
                                       89 ERRORM
                                                                                    R13 -> CALLERS SAVE AREA
                                                                                                                        00083001
000094 47FD 0258
                              00258
                                       90
                                                          FSAERR+35*4(R13)
                                                                                    BASENO EQUAL ZERO AND EXPONENT
                                                                                                                       00084001
                                                    В
                                       91
                                                                                    NO GREATER THAN ZERO, UNDERFINED
                                                                                                                       00085001
                                       92
                                                                                                                        00086001
                                       93
                                                    CONSTANTS AND ADCON AREAS
                                                                                                                        00087001
                                                                                                                        00088001
000098 00000000000000000
                                       95 SAVEAREA DC
                                                          18F'0'
                                                                                    SAVE AREA
                                                                                                                        00089001
                                                                                    PARAM FOR DATA IN DEXP MATH RTN
999959 999999999999999
                                       96 PARAM
                                                    DC
                                                          D'0'
                                                                                                                       9999991
0000E8 411000000000000000
                                       97 KFPDONE
                                                   DC
                                                          D'+1
                                                                                    CONSTANT ONE IN DOUBLE PREC FP
                                                                                                                       00091001
```

126

END

00104001

Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 98 \* 00092001 00093001 00094001 00095001 0000F0 000000E0 99 ADCPAR DC A(PARAM) ADDR OF PARAMETER FOR EXP RTN 100 \* 101 VIHILLO DC 0000F4 00000000 V(IHILLO) LOG MATH LIBRARY ROUT 0000F8 00000000 102 VIHILEX DC V(IHILEX) EXP MATH LIBRARY ROUT 00096001 103 00097001 00098001 00099001 00100001 00101001 001CC 104 FSAERR X'1CC' EQU 105 \* 106 \* REGISTER EQUATES 107 108 IEZREGS 00102001 109+R0 00000 00001 00002 110+R1 EQU 1 2 3 4 5 6 7 8 01-IEZRE EQU EQU 111+R2 01-IEZRE 01-IEZRE 00003 112+R3 00004 113+R4 EQU 01-IEZRE 00005 EQU 01-IEZRE 00006 115+R6 EQU 01-IEZRE 116+R7 117+R8 EQU EQU 01-IEZRE 01-IEZRE 00007 00008 00009 118+R9 EQU 9 01-IEZRE 0000A 119+R10 EQU 10 01-IEZRE 0000B 120+R11 EQU 11 01-IEZRE 0000C 0000D 121+R12 122+R13 EQU EQU 12 01-IEZRE 13 01-IEZRE 01-IEZRE 01-IEZRE 0000E 123+R14 14 0000F 124+R15 EQU 15 125 \* 00103001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences					X390 3.1.04	2012/08/17 13.21
ADCPAR	4	000000F0	00000001	LAA		99	75							
ERROR	2	0000008A	00000001	l I		87	65B							
ERRORM	4	00000090	00000001	l I		89	66B							
EXIT	4	00000080	00000001	l I		81	78B	88B						
FPR0	1	00000000		U		37	61M	64M	73M	74	80M			
FPR2	1	00000002		U		38	63M	67M	69	72M	73	87M		
FSAERR	1	000001CC		U		104	90B							
IHIFDD	4	00000000	00000001	l I		48	45							
IHIFDDXP	1	00000000	00000001	l J		33	55U							
IHILEX		00000000				102	102							
IHILLO	1	00000000	00000002	2 T		101	101							
KFPDONE	8	000000E8	00000001	LDD		97	80							
LOAD1	4	0000007C	00000001	l I		80	68B							
PARAM		000000E0	00000001	L D D		96	69M	72	74M	99				
R1		00000001		U		110	60	62	75M					
R13	1	000000D		U		122	56	57M	58	59	81M	89M	90	
R14	1	000000E		U		123	71M	77M						
R15	1	0000000F		U		124	54	70M	71B	76M	77B			
R2		00000002		U		111	54M	55U						
R3		00000003		U		112	56M	58	59	60M	61	62M	63	
SAVEAREA	4	00000098	00000001	LFF		95	57							
VIHILEX		000000F8				102	76							
VIHILLO	4	000000F4	00000001	LVV		101	70							

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

0(0) 52 84M
1(1) 52 60 62 75M 84M
2(2) 52 54M 55U 84M
3(3) 52 56M 58 59 60M 61 62M 63 84M
4(4) 52 84M
5(5) 52 84M
6(6) 52 84M
7(7) 52 84M
8(8) 52 84M
9(9) 52 84M
10(A) 52 84M
11(B) 52 84M
12(C) 52 84M
12(C) 52 84M
13(D) 52 56 57M 58 59 81M 84 89M 89N 90N
14(E) 52 71M 77M 84M 85B
15(F) 48B 52 54 70M 71B 76M 77B 84M

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

FDD USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

USING Ordinary 00000001 00000000 00001000 2 000F8 88 IHIFDDXP,R2

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIFDD PROCSTEP: X390

Primary input: lines 1 to 104 of SYSD.ALGOLFRT.ASM(IHIFDD)

SYSLIB library records read: 161
SYSUT1 work file size: 12124 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8320 bytes
SYSLIN file records written: 9

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHIFDDXP 0000FC 4

## IHIFDI LEVEL V2.M01

(c) Copyright 1995-2010 Tachyon Software LLC

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIFDI)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00114
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

00090001

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                   X390 3.1.04 2012/08/17 13.21
                                                                                                                           00003001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00004001
                                         4
                                                                                                                          00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                                                                                                           00006001
                                         6
                                                                                                                           00007001
                                                      FUNCTION/OPERATION - SEE CODE
                                                                                                                           00008001
                                         8
                                                                                                                           00009001
                                         9
                                                     ENTRY POINT -
                                                                                                                          00010001
                                                     IHIFDI - POWER FUNCTION, REAL**INT, LONG
                                        10
                                                                                                                           00011001
                                                                                                                           00012001
                                                             R1.PARMLIST
                                        11
                                        12
                                                     BALR
                                                             R14, R15
                                                                                                                           00013001
                                        13
                                                     DATA PASSED BY NAME
                                                                                                                           00014001
                                        14
                                                     THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                           00015001
                                        15
                                                                                                                           99916991
                                                     INPUT - N/A
                                                                                                                          00017001
                                        16
                                                                                                                           00018001
                                        17
                                                     OUTPUT - N/A
                                        18
                                                                                                                           00019001
                                        19
                                                                                                                           99929991
                                        20
                                                     EXTERNAL ROUTINES - N/A
                                                                                                                           00021001
                                                                                                                          00022001
                                        21
                                                     EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                           00023001
                                        22
                                        23
                                                                                                                           00024001
                                        24
                                                                                                                           00025001
                                                     IF BASE IS ZERO AND EXPONENT NOT POSITIVE GOTO ERROR ROUTINE VIA
                                        25
                                                                                                                           00026001
                                        26
                                                                                                                          00027001
                                                          FSAERR+35*4(R13)
                                                                                                                           00028001
                                        27
                                        28
                                                                                                                           00029001
                                                     TABLES/WORKAREAS - N/A
                                                                                                                           00030001
                                        29
                                        30 *
                                                                                                                           00031001
999999
                        αρρορ οροδο
                                        31 IHIFDIXP CSECT
                                                                                                                           00032001
                                        32
                                                                                                                           00033001
                                                     ENTRY
                                                            IHIFDI
                                                                                                                           00034001
                                        33
                                        34
                                                                                                                           00035001
                                        35
                                                     FLOATING POINT REGISTERS
                                                                                                                           00036001
                                        36
                                                                                                                           00037001
                                        37 FPRØ
                                                                                      BASE NO. PASSING RESULT
                        99999
                                                     FOLL
                                                                                                                           00038001
                                                                                                                          00039001
                                        38 FPR2
                                                                                      FACTOR, COMPUTING RESULT
                        00002
                                                     EQU
                                        39
                                                                                                                           00040001
                                        40
                                                     GENERAL PURPOSE REGISTERS
                                                                                                                           00041001
                                        41 *
                                                                                                                           00042001
                                        42
                                                     RØ
                                                                                      TESTING FOR MINUS EXPN
                                                                                                                           00043001
                                        43
                                                     R2
                                                                                      EXPONENT IN COMPUTATION
                                                                                                                          00044001
                                                                                                                           00045001
                                        44
                                        45 IHIFDI
                                                            (14,12),, 'IHIFDIXP LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                           00046001
000000 47F0 F026
                              00026
                                        46+IHIFDI
000004 21
000005 C9C8C9C6C4C9E7D7
                                        47+
                                                     DC
                                                            AL1(33)
                                                                                                 LENGTH OF IDENTIFIER
                                                                                                                          01-SAVE
                                                            CL32'IHIFDIXP LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                        48+
                                                     DC
                                                                                                                          01-SAVE
000025 F1
                                                                                                 IDENTIFIER
                                                                                                                          01-SAVE
                                        49+
                                                     DC
                                                            CL1'1
000026 90EC D00C
                              0000C
                                        50+
                                                           14,12,12(13)
                                                                                                 SAVE REGISTERS
                                        51
                                                                                                                           00047001
                  R:F 00000
                                        52
                                                     USING IHIFDIXP, R15
                                                                                                                           00048001
00002A 5830 1000
                              00000
                                                            R3,0(,R1)
FPR0,0(,R3)
                                                                                      LOAD PLIST OF BASE NO IN R3
                                                                                                                          00049001
                                        53
                                                                                      LOAD BASE NO INTO FPRO
00002E 6800 3000
                              00000
                                        54
                                                     LD
                                                                                                                           00050001
                                                                                      LOAD PLIST OF EXPONENT IN R3
000032 5830 1004
                              00004
                                        55
                                                            R3,4(0,R1)
                                                                                                                           00051001
                                                     L
                                                                                      LOAD EXPONENT INTO R2
000036 5820 3000
                              00000
                                        56
                                                            R2,0(0,R3)
                                                                                                                           00052001
00003A 2200
                                        57
                                                     LTDR
                                                            FPR0, FPR0
                                                                                      BASE NO +, - OR ZERO ?
                                                                                                                           00053001
00003C 4780 F08E
000040 1B00
                              0008E
                                        58
                                                     ΒZ
                                                            ERROR
                                                                                      ZERO, BRANCH TO ERROR
                                                                                                                           00054001
                                                                                      SET NEGATIVE EXPN SWITCH TO 0
                                        59
                                                     SR
                                                            R0. R0
                                                                                                                           00055001
                                                                                      EXPONENT +, - OR ZERO ?
000042 1222
                                        60
                                                     LTR
                                                            R2, R2
                                                                                                                          00056001
000044 4720 F052
                              00052
                                        61
                                                     ВР
                                                            PLUS
                                                                                      +VE, BRANCH TO PLUS
                                                                                                                           00057001
000048 4780 F084
                                                            LOAD1
                                                                                      ZERO, BRANCH TO LOAD1
                              00084
                                        62
                                                                                                                           00058001
00004C 1322
                                        63
                                                     LCR
                                                            R2, R2
                                                                                      MINUS, CONVERT TO 2S COMPLIMENT
                                                                                                                          00059001
                              00001
                                                                                      SET EXP SW TO ONE FOR MINUS EXPN
00004E 4100 0001
                                        64
                                                     LA
                                                            R0.1
                                                                                                                          00060001
                                                                                      LOAD FACTOR OF ONE IN FPR2
                                        65 PLUS
                                                                                                                           00061001
000052 6820 F098
                                                     LD
                                                            FPR2.KFPDONE
                              00098
000056 8C20 0001
                              00001
                                        66 LOOP
                                                     SRDL
                                                                                      SHIFT LOW BIT R2 INTO R3
                                                                                                                           00062001
                                                            R2,1
00005A 1233
                                                     LTR
                                                            R3, R3
                                                                                      LOWORDER BIT OF R2 MAKE R3 NEG ?
                                                                                                                          00063001
                                        67
00005C 47B0 F062
                              00062
                                        68
                                                     BNM
                                                            JUMP
                                                                                      NO, BRANCH TO JUMP
                                                                                                                          00064001
000060 2C20
                                        69
                                                     MDR
                                                            FPR2.FPR0
                                                                                      YES, MULTIPLY FPR2 BY FPR0
                                                                                                                           00065001
                                        70 JUMP
                                                                                      EXPONENT +, - OR ZERO ?
                                                                                                                          00066001
000062 1222
                                                     LTR
                                                            R2.R2
                                                                                      EXPONENT ZERO, BRANCH TO NEXT
000064 4780 F06E
                              0006E
                                                                                                                           00067001
                                        71
                                                     ΒZ
                                                            NEXT
                                                                                      MULT FPRØ NO BY DOUBLING ITSELF
000068 2C00
                                        72
                                                     MDR
                                                            FPRØ, FPRØ
                                                                                                                          00068001
00006A 47F0 F056
                              00056
                                        73
                                                            L00P
                                                                                      LOOP TO TEST NEXT EXPN BIT
                                                                                                                           00069001
                                                     В
                                        74 *
                                                                                                                           00070001
                                                                                      R0 +, - OR ZERO ?
EXPN - MINUS, BRANCH TO SWAP
LOAD ONE IN FPR0 AS DIVIDEND
                                                     LTR
                                                                                                                           00071001
00006E 1200
                                        75 NEXT
                                                            R0. R0
000070 4780 F07E
                              0007E
                                                            SWAP
                                                                                                                           00072001
                                        76
                                                     ΒZ
000074 6800 F098
                                        77
                                                     LD
                                                            FPR0, KFPDONE
                                                                                                                           00073001
                              00098
000078 2D02
                                        78
                                                            FPR0, FPR2
                                                                                      DIV FPRØ BY FPR2 (RESULT)
                                                                                                                           00074001
                                                     DDR
00007A 47F0 F088
                              00088
                                        79
                                                     В
                                                            EXIT
                                                                                      EXIT (RESULT IN FPR0)
                                                                                                                           00075001
                                        80 *
                                                                                                                          00076001
00007E 2802
                                        81 SWAP
                                                     LDR
                                                            FPR0, FPR2
                                                                                      LOAD FPR2 INTO FPR0
                                                                                                                           00077001
000080 47F0 F088
                              00088
                                                                                                                          00078001
                                                                                      EXIT (RESULT IN FPR0)
                                        82
                                                     В
                                                            EXIT
                                        83
                                                                                                                           00079001
000084 6800 F098
                              00098
                                        84 LOAD1
                                                     LD
                                                            FPR0, KFPDONE
                                                                                      LOAD PLUS 1 AS RESULT IN FPR0
                                                                                                                           00080001
                                        85
                                                                                                                           00081001
                                        86 EXIT
                                                     RETURN (14,12)
                                                                                      RESTORE CALLERS REGS AND RETURN
                                                                                                                          00082001
000088
                                        87+EXIT
                                                     DS
                                                                                                                           01-RETUR
000088 98EC D00C
                              0000C
                                        88+
                                                     LM
                                                            14,12,12(13)
                                                                                                 RESTORE THE REGISTERS
                                                                                                                          01-RETUR
00008C 07FE
                                        89+
                                                     BR
                                                                                                 RETURN
                                                                                                                           01-RETUR
                                        90 *
                                                                                                                          00083001
                                                                                      EXPONENT +, - OR ZERO ?
EXPN IS POSITIVE, BRANCH TO EXIT
00008E 1222
                                        91 ERROR
                                                     LTR
                                                            R2 R2
                                                                                                                           00084001
000090 4720 F088
                                                                                                                          00085001
                              00088
                                        92
                                                     BP
                                                            EXIT
000094 47FD 0258
                              00258
                                        93
                                                            FSAERR+35*4(13)
                                                                                      BASE NO = ZERO AND EXPONENT
                                                                                                                          00086001
                                        94 *
                                                                                       -> ZERO, UNDEFINED
                                                                                                                           00087001
                                        95
                                                                                                                           00088001
                                        96
                                                     ADCONS AND CONSTANTS AREA
                                                                                                                           00089001
```

97

111+R6 112+R7

113+R8

**114+**R9

115+R10

116+R11 117+R12

118+R13

119+R14

120+R15

121 \* 122

EQU

EQU

EQU

EQU EQU 11 12

EQU

EQU 14

EQU

END

13

15

00006

00007

00008

00009

0000A

0000B 0000C

0000D

0000E

0000F

01-IEZRE 01-IEZRE

01-IEZRE

01-IEZRE 01-IEZRE

01-IEZRE

01-IEZRE

00098001 00099001

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 000098 41100000000000000 CONSTANT ONE IN DOUBLE PREC FP 00091001 98 KFPDONE DC D'+1' 00092001 00093001 00094001 99 \* 100 FSAERR 101 \* 001CC EQU X'1CC' 102 \* REGISTER EQUATES 00095001 103 \* 00096001 **IEZREGS** 104 00097001 00000 00001 105+R0 01-IEZRE EQU EQU EQU 01-IEZRE 01-IEZRE 106+R1 1 2 3 4 5 6 7 8 9 00002 107+R2 00003 108+R3 EQU 01-IEZRE 00004 109+R4 EQU 01-IEZRE 00005 110+R5 EQU 01-IEZRE EQU EQU 01-IEZRE 01-IEZRE

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences					X390	3.1.04	2012/08/17	13.21
ERROR	2	0000008E	0000000	l I		91	58B									
EXIT	2	00000088	0000000	LHH		87	79B	82B	92B							
FPR0	1	00000000		U		37	54M	57M	69	72M	77M	78M	81M	84M		
FPR2	1	00000002		U		38	65M	69M	78	81						
FSAERR	1	000001CC		U		100	93B									
IHIFDI	4	00000000	0000000	l I		46	33									
IHIFDIXP	1	00000000	0000000	l J		31	52U									
JUMP	2	00000062	0000000	l I		70	68B									
KFPDONE	8	00000098	0000000	L D D		98	65	77	84							
LOAD1	4	00000084	0000000	l I		84	62B									
LOOP	4	00000056	0000000	l I		66	73B									
NEXT	2	0000006E	0000000	l I		75	71B									
PLUS	4	00000052	0000000	l I		65	61B									
RØ	1	00000000		U		105	59M	64M	75M							
R1	1	00000001		U		106	53	55								
R15	1	0000000F		U		120	52U									
R2	1	00000002		U		107	56M	60M	63M	66M	70M	91M				
R3	1	0000003		U		108	53M	54	55M	56	67M					
SWAP	2	0000007E	0000000	l I		81	76B									

1(1) 2(2) 3(3) 4(4) 5(5)

5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C)

13(D) 14(E) 15(F)

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

64M 75M 88M

88M

 50
 53
 55
 88M

 50
 56M
 60M
 63M

 50
 88M
 50
 88M

 50
 88M
 93N
 50

 46B
 50
 52U
 88M

53

X390 3.1.04 2012/08/17 13.21 60M 63M 66M 70M 88M 91M 55M 56 66M 67M 88M

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Ordinary 00000001 00000000 00001000 15 00098 92 IHIFDIXP,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIFDI PROCSTEP: X390

Primary input: lines 1 to 99 of SYSD.ALGOLFRT.ASM(IHIFDI)

SYSLIB library records read: 161
SYSUT1 work file size: 11628 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 7920 bytes
SYSLIN file records written: 5

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHIFII LEVEL V2.M01

(c) Copyright 1995-2010 Tachyon Software LLC

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIFII)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00118
```

SYSUT1

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Addr1 Addr2 Stmt Source Statement
                                                                                                    X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                                                                                                                            00002001
                                          3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                            00003001
                                          4
                                                                                                                           00004001
                                          5
                                                      STATUS - LEVEL 2.1
                                                                                                                            00005001
                                          6
                                                                                                                            00006001
                                                      FUNCTION/OPERATION - SEE CODE
                                                                                                                            00007001
                                          8
                                            *
                                                                                                                            00008001
                                          9
                                                      ENTRY POINT -
                                                                                                                           00009001
                                                      IHIFII - POWER FUNCTION, INT**INT
                                         10
                                                                                                                            00010001
                                                             R1, PARMLIST
                                                                                                                            00011001
                                         11
                                         12
                                                      BALR
                                                             R14, R15
                                                                                                                            00012001
                                         13
                                            *
                                                      DATA PASSED BY NAME
                                                                                                                            00013001
                                         14
                                                      THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                            00014001
                                         15
                                                                                                                            00015001
                                                      INPUT - N/A
                                                                                                                           00016001
                                         16
                                         17
                                                                                                                            00017001
                                                      OUTPUT - N/A
                                         18
                                                                                                                            00018001
                                         19
                                                                                                                            00019001
                                         20
                                                      EXTERNAL ROUTINES - N/A
                                                                                                                            00020001
                                                                                                                           00021001
                                         21
                                                      EXIT - NORMAL - RETURN VIA R14, RESULT IN R0
                                                                                                                            00022001
                                         22
                                         23
                                                                                                                            00023001
                                         24
                                                      EXIT - ERROR
                                                                                                                            00024001
                                         25
                                                      IF BASE IS ZERO AND EXPONENT NOT POSITIVE GOTO ERROR
                                                                                                                            00025001
                                                      ROUTTNE VTA
                                                                                                                           00026001
                                         26
                                                           FSAERR+35*4(R13)
                                         27
                                                                                                                            00027001
                                         28
                                                                                                                            00028001
                                                      TABLES/WORKAREAS - N/A
                                                                                                                            00029001
                                         29
                                                                                                                            00030001
                                         30
999999
                        99999 99909
                                         31 IHIFIIXP CSECT
                                                                                                                            00031001
                                         32
                                                                                                                            00032001
                                                      GENERAL PURPOSE REGISTERS
                                                                                                                            00033001
                                         33
                                         34
                                                                                                                            00034001
                                         35
                                                                                       PASSING ON FINAL RESULT
                                                                                                                            00035001
                                         36
                                                      R1
                                                                                       PARAMETER LIST REF
                                                                                                                           00036001
                                                                                       MPY REG FOR FACTOR
                                         37
                                                      R2
                                                                                                                            00037001
                                                                                                                           00038001
                                                                                       FACTOR AND ANSWER
                                         38
                                                      R3
                                         39
                                                      R4
                                                                                       MPY REG FOR BASE NO
                                                                                                                            00039001
                                                                                       BASE NO IN COMPUTATION
                                                                                                                            00040001
                                         40
                                         41
                                                      R6
                                                                                       EXPONENT IN COMPUTATION
                                                                                                                           00041001
                                         42
                                                      R7
                                                                                       INDEXING PARAMETER ADDR
                                                                                                                            00042001
                                         43
                                                                                                                           00043001
                                         44 IHIFII
                                                             (14,12), 'IHIFIIXP LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                            00044001
                                                      SAVE
000000 47F0 F026
                                                                                                                            01-SAVE
                               00026
                                         45+IHIFII
                                                      В
                                                             38(0,15)
                                                                                                  BRANCH AROUND ID
000004 21
                                                                                                  LENGTH OF IDENTIFIER
                                                                                                                           01-SAVE
                                         46+
                                                      DC
000005 C9C8C9C6C9C9E7D7
                                         47+
                                                      DC
                                                             CL32'IHIFIIXP LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                           01-SAVE
                                                            CL1'1
000025 F1
                                         48+
                                                      DC
                                                                                                  TDENTTETER
                                                                                                                           01-SAVE
000026 90EC D00C
                               0000C
                                         49+
                                                            14,12,12(13)
                                                                                                  SAVE REGISTERS
                                                                                                                           01-SAVE
                                                      STM
                                                                                                                            00045001
                                         50
                   R:F
                        00000
                                         51
                                                      USING IHIFIIXP, R15
                                                                                                                            00046001
00002A 5870 1000
                               99999
                                         52
                                                             R7,0(,R1)
                                                                                       LOAD PLIST OF BASE NO IN R7
LOAD BASE NO INTO R5
                                                                                                                            00047001
00002E 5850 7000
                               00000
                                         53
                                                      Ĺ
                                                             R5,0(,R7)
                                                                                                                           00048001
000032 5870 1004
                                                                                       LOAD PLIST OF EXPONENT IN R7
                                                                                                                            00049001
                               00004
                                         54
                                                             R7,4(,R1)
                                                      L
                                                                                       LOAD EXPONENT INTO R6
000036 5860 7000
                               00000
                                         55
                                                             R6,0(,R7)
                                                                                                                            00050001
00003A 1205
                                         56
                                                      LTR
                                                             R0, R5
                                                                                       LOAD BASE NO INTO RESULT REG
                                                                                                                            00051001
                                         57
                                                                                       BASE NO +, - OR ZERO ?
                                                                                                                            00052001
00003C 4780 F0B0
                               000B0
                                         58
                                                      ΒZ
                                                             FRROR
                                                                                       ZERO, BRANCH TO ERROR
                                                                                                                            00053001
000040 1266
                                         59
                                                      LTR
                                                            R6. R6
                                                                                       EXPONENT +, - OR ZERO ? ZERO, BRANCH TO LOAD1
                                                                                                                            00054001
000042 4780 F0A2
                                                             LOAD1
                                                                                                                           00055001
                               000A2
                                         60
                                                      ΒZ
000046 0650
                                         61
                                                      BCTR
                                                            R5,0
                                                                                       DECR VALUE OF BASE NO
                                                                                                                            00056001
000048 1255
                                                             R5, R5
                                                                                       BASE NO + - OR ZERO ?
                                                                                                                            00057001
                                         62
                                                      LTR
00004A 4780 F0A6
                               000A6
                                         63
                                                      ΒZ
                                                             EXIT
                                                                                       ZERO, BRANCH TO EXIT
                                                                                                                           00058001
                                                                                       INCR BY TWO VALUE OF BASE NO BASE NO +, - OR ZERO ?
00004E 4150 5002
                               00002
                                         64
                                                      LA
                                                             R5,2(,R5)
                                                                                                                            00059001
                                                                                                                           00060001
000052 1255
                                         65
                                                      LTR
                                                            R5, R5
                                                                                       ZERO, BRANCH TO TEST
000054 4780 F098
                               00098
                                         66
                                                      ΒZ
                                                             TEST
                                                                                                                            00061001
000058 1266
                                         67
                                                      LTR
                                                                                       EXPONENT +, - OR ZERO ?
                                                                                                                            00062001
                                                             R6, R6
00005A 4720 F064
                               00064
                                         68
                                                      ВР
                                                             PLUS
                                                                                       POSITIVE, BRANCH TO PLUS
                                                                                                                            00063001
00005E 1B00
                                         69
                                                      SR
                                                             R0. R0
                                                                                       EXPN MINUS, RESULT = ZERO
                                                                                                                            00064001
000060 47F0 F0A6
                               000A6
                                                                                       EXIT ROUTINE
                                                                                                                           00065001
                                         70
                                                      В
                                                             EXIT
                                                                                                                            00066001
                                         71
000064 1850
                                         72 PLUS
                                                      LR
                                                             R5, R0
                                                                                       RELOAD ORG BASE NO FROM RESULT
                                                                                                                            00067001
000066 5830 F0BC
                               000BC
                                                                                       LOAD FACTOR OF ONE IN R3
                                                                                                                            00068001
                                         73
                                                             R3,KF1
00006A 8C60 0001
                               00001
                                         74 LOOP
                                                      SRDL
                                                            R6,1
                                                                                       SHIFT LOW BIT R6 INTO R7
                                                                                                                            00069001
                                                                                                                           00070001
00006E 1277
                                         75
                                                      LTR
                                                            R7. R7
                                                                                       LOWORDER BIT OF R6 MAKE R7 NEG ?
000070 47B0 F07E
                               0007E
                                                                                       NO, BRANCH TO JUMP
                                         76
                                                      BNM
                                                             JUMP
                                                                                                                            00071001
000074 1C25
                                         77
                                                                                       MULTIPLY FACTOR REG BY R5
                                                                                                                            00072001
                                                      MR
                                                             R2. R5
000076 8F20 0020
                               00020
                                                      SLDA
                                                                                       CHECK OVERFLOW
                                                                                                                            00073001
                                         78
                                                             R2,32
00007A 8E20 0020
                               00020
                                         79
                                                      SRDA
                                                            R2,32
                                                                                                                            00074001
                                                                                       EXPONENT +, - OR ZERO ?
EXPONENT ZERO, BRANCH TO NEXT
                                                                                                                           00075001
00007F 1266
                                         80 TUMP
                                                      LTR
                                                            R6. R6
000080 4780 F092
                               00092
                                                                                                                            00076001
                                                      ΒZ
                                                            NEXT
                                         81
000084 1C45
                                                                                       MULT BASE NO BY DOUBLING ITSELF
                                                                                                                           00077001
                                                      MR
                                                             R4, R5
                                         82
000086 8F40 0020
                               00020
                                         83
                                                      SLDA
                                                             R4,32
                                                                                                                            00078001
00008A 8E40 0020
                               00020
                                                                                                                            00079001
                                         84
                                                      SRDA
                                                             R4,32
00008E 47F0 F06A
                               0006A
                                         85
                                                      В
                                                             LOOP
                                                                                       LOOP TO TEST NEXT EXPN BIT
                                                                                                                            00080001
                                         86
                                                                                                                            00081001
                                                                                                                            00082001
000092 1803
                                         87 NEXT
                                                      LR
                                                             R0, R3
                                                                                       LOAD FACTOR INTO RESULT
000094 47F0 F0A6
                               000A6
                                         88
                                                      В
                                                             EXIT
                                                                                       EXIT
                                                                                                                            00083001
                                         89 *
                                                                                                                            00084001
000098 8C60 0001
                               00001
                                         90 TEST
                                                      SRDL
                                                                                       SHIFT LOW BIT R6 INTO R7
                                                                                                                           00085001
                                                             R6,1
00009C 1277
00009E 4740 F0A6
                                                                                       LOWORDER BIT OF R6 MAKE R7 NEG ? MINUS (EXPN ODD), GOTO EXIT
                                         91
                                                      LTR
                                                             R7, R7
                                                                                                                           00086001
                                                                                                                           00087001
                               000A6
                                         92
                                                             EXIT
                                                      BM
0000A2 5800 F0BC
                               000BC
                                         93 LOAD1
                                                            R0,KF1
                                                                                       LOAD RO WITH VALUE OF PLUS 1
                                                                                                                            00088001
                                                                                       UPDATE SAVEAREA WITH RESULT
0000A6 9001 D014
                               00014
                                         94 EXIT
                                                      STM
                                                             RO, R1, 20(R13)
                                                                                                                            00089001
                                         95
                                                                                                                           00090001
                                         96
                                                      RETURN (14,12)
                                                                                       RESTORE CALLERS REGS AND RETURN
                                                                                                                           00091001
0000AA 98EC D00C
                               0000C
                                         97+
                                                      LM
                                                            14,12,12(13)
                                                                                                  RESTORE THE REGISTERS
                                                                                                                           01-RETUR
```

FII IHIFIIXP, POWER ROUTINE, INTEGER\*\*INTEGER, ALGOL F LIB Active USINGS: IHIFIIXP,R15 Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21

200 00,000 0000	71001 2 71001 2	50			7,550 51210 . 2022, 00,	1, 15,11
0000AE 07FE		98+ 99 *	BR	14	RETURN	01-RETUR 00092001
0000B0 1266		100 ERROR	LTR	R6, R6	EXPONENT +, - OR ZERO ?	00093001
0000B2 4720 F0A6	000A6	101	BP	EXIT	EXPN IS POSITIVE, BRANCH TO EXIT	00094001
0000B6 47FD 0258	00258	102	В	FSAERR+35*4(R13)		00095001
		103 *				00096001
		104 *	ADCO	NS AND CONSTANTS AREA		00097001
		105 *				00098001
0000BA 0000						
0000BC 00000001		106 KF1	DC	F'1'	INTERGER CONSTANT OF ONE	00099001
		107 *				00100001
	001CC	108 FSAERR	EQU	X'1CC'		00101001
		109 *				00102001
		110 *	REGIS	STER EQUATES		00103001
		111 *				00104001
		112	IEZRI	EGS		00105001
	00000	113+R0	EQU	0		01-IEZRE
	00001	<b>114+</b> R1	EQU	1		01-IEZRE
	00002	115+R2	EQU	2		01-IEZRE
	00003	116+R3	EQU	3		01-IEZRE
	00004	<b>117+</b> R4	EQU	4		01-IEZRE
	00005	118+R5	EQU	5		01-IEZRE
	00006	119+R6	EQU	6		01-IEZRE
	00007	120+R7	EQU	7		01-IEZRE
	00008	121+R8	EQU	8		01-IEZRE
	00009	122+R9	EQU	9		01-IEZRE
	0000A	123+R10	EQU	10		01-IEZRE
	0000B	124+R11	EQU	11		01-IEZRE
	0000C	125+R12	EQU	12		01-IEZRE
	0000D	126+R13	EQU	13		01-IEZRE
	0000E	127+R14	EQU	14		01-IEZRE
	0000F	128+R15	EQU	15		01-IEZRE
		129 *				00106001
		130	END			00107001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rences					X390	3.1.0	4 2012/08/17 13.21
ERROR	2	000000В0	0000000	l I		100	58B								
EXIT	4	000000A6	0000000	l I		94	63B	70B	88B	92B	101B				
FSAERR	1	000001CC		U		108	102B								
IHIFIIXP	1	00000000	0000000	L J		31	510								
JUMP	2	0000007E	0000000	l I		80	76B								
KF1	4	000000BC	0000000	LFF		106	73	93							
LOAD1	4	000000A2	0000000	l I		93	60B								
LOOP	4	0000006A	0000000	l I		74	85B								
NEXT	2	00000092	0000000	l I		87	81B								
PLUS	2	00000064	0000000	l I		72	68B								
RØ	1	00000000		U		113	56M	69M	72	87M	93M	94			
R1	1	00000001		U		114	52	54	94						
R13	1	000000D		U		126	94	102							
R15	1	0000000F		U		128	510								
R2	1	00000002		U		115	77M	78M	79M						
R3	1	00000003		U		116	73M	87							
R4	1	00000004		U		117	82M	83M	84M						
R5	1	00000005		U		118	53M	56	61M	62M	64M	65M	72M	77	82
R6	1	00000006		U		119	55M	59M	67M	74M	80M	90M	100M		
R7	1	00000007		U		120	52M	53	54M	55	75M	91M			
TEST	4	00000098	0000000	l I		90	66B								

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

```
69M 72
                                  87M 93M 94 97M
1(1)
         49
                      54
                            94
                                  97M
2(2)
         49
49
49
49
49
49
49
49
                77M
                     78M 79M
                                  97M
3(3)
4(4)
5(5)
               73M
82M
                     77M
83M
                           78M
84M
                                  79M
97M
                                       87
                                              97M
                53M
                     56
                           61M 62M 64M 65M 72M 77
                                                                82M 83M 84M 97M
6(6)
7(7)
8(8)
9(9)
10(A)
                55M
                     59M 67M
                                  74M
                                        80M 90M 97M 100M
                52M 53
                           54M 55
                                        74M 75M 90M 91M 97M
               97M
               97M
97M
11(B)
12(C)
                97M
                97M
         49 94 97 102N
49 97M 98B
45B 49 51U 97M
13(D)
14(E)
15(F)
```

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

FII USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

USING Ordinary 00000001 00000000 00001000 15 000BC 101 IHIFIIXP,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIFII PROCSTEP: X390

Primary input: lines 1 to 107 of SYSD.ALGOLFRT.ASM(IHIFII)

SYSLIB library records read: 161
SYSUT1 work file size: 12350 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8560 bytes
SYSLIN file records written: 6

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHIFRI LEVEL V2.M01

```
(c) Copyright 1995-2010 Tachyon Software LLC
```

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIFRI)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00122
```

SYSUT1

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

00090001

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                    X390 3.1.04 2012/08/17 13.21
                                                                                                                           00003001
                                         3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00004001
                                         4
                                                                                                                           00005001
                                         5
                                                      STATUS - LEVEL 2.1
                                                                                                                           00006001
                                         6
                                                                                                                           00007001
                                                      FUNCTION/OPERATION - SEE CODE
                                                                                                                           00008001
                                            *
                                         8
                                                                                                                           00009001
                                         9
                                                      ENTRY POINT -
                                                                                                                           00010001
                                                      IHIFRI - POWER FUNCTION, REAL**INT, SHORT
                                        10
                                                                                                                           00011001
                                                                       R1, PARMLIST
                                                                                                                           00012001
                                                               LA
                                        11
                                        12
                                                               BALR
                                                                       R14,R15
                                                                                                                           00013001
                                        13
                                                               DATA PASSED BY NAME
                                                                                                                           00014001
                                        14
                                                      THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                           00015001
                                        15
                                                                                                                           99916991
                                                      INPUT - N/A
                                                                                                                           00017001
                                        16
                                                                                                                           00018001
                                        17
                                        18
                                                      OUTPUT - N/A
                                                                                                                           00019001
                                        19
                                                                                                                           99929991
                                        20
                                                      EXTERNAL ROUTINES - N/A
                                                                                                                           00021001
                                                                                                                           00022001
                                        21
                                                      EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                           00023001
                                        22
                                        23
                                                                                                                           00024001
                                        24
                                                                                                                           00025001
                                                      IF BASE IS ZERO AND EXPONENT NOT POSITIVE GOTO ERROR ROUTINE VIA
                                        25
                                                                                                                           00026001
                                                                                                                           00027001
                                        26
                                                           FSAERR+35*4(R13)
                                                                                                                           00028001
                                        27
                                        28
                                                                                                                           00029001
                                                      TABLES/WORKAREAS - N/A
                                                                                                                           00030001
                                        29
                                        30 *
                                                                                                                           00031001
999999
                        99999 99990
                                        31 IHIFRIXP CSECT
                                                                                                                           00032001
                                        32
                                                                                                                           00033001
                                                      ENTRY
                                                            IHIFRI
                                                                                                                           00034001
                                        33
                                        34
                                                                                                                           00035001
                                        35 *
                                                      FLOATING POINT REGISTERS
                                                                                                                           00036001
                                        36
                                                                                                                           00037001
                                        37 FPRØ
                                                                                       REG FOR BASE NO. PASSING RESULT
                        99999
                                                      FOLL
                                                                                                                           00038001
                                        38 FPR2
                                                                                                                           00039001
                                                                                       REG FOR FACTOR, COMPUTING RESULT
                        00002
                                                      EQU
                                        39
                                                                                                                           00040001
                                        40
                                                      GENERAL PURPOSE REGISTERS
                                                                                                                           00041001
                                        41 *
                                                                                                                           00042001
                                        42
                                                      RØ
                                                                                       REG FOR TESTING FOR MINUS EXPN
                                                                                                                           00043001
                                        43
                                                      R2
                                                                                       REG FOR EXPONENT IN COMPUTATION
                                                                                                                           00044001
                                                                                                                           00045001
                                        44
                                        45 IHIFRI
                                                            (14,12),, 'IHIFRIXP LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                           00046001
000000 47F0 F026
                              00026
                                        46+IHIFRI
000004 21
000005 C9C8C9C6D9C9E7D7
                                        47+
                                                      DC
                                                            AL1(33)
                                                                                                  LENGTH OF IDENTIFIER
                                                                                                                           01-SAVE
                                                            CL32'IHIFRIXP LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                        48+
                                                      DC
                                                                                                                           01-SAVE
000025 F1
                                                                                                  IDENTIFIER
                                                                                                                           01-SAVE
                                        49+
                                                      DC
                                                            CL1'1
000026 90EC D00C
                               0000C
                                        50+
                                                      STM
                                                            14,12,12(13)
                                                                                                  SAVE REGISTERS
                                        51
                                                                                                                           00047001
                  R:F 00000
                                        52
                                                      USING IHIFRIXP, R15
                                                                                                                           00048001
00002A 5830 1000
                               00000
                                                                                       LOAD PLIST OF BASE NO IN R3
                                                                                                                           00049001
                                        53
                                                            R3,0(,R1)
                                                            FPR0,0(,R3)
                                                                                       LOAD BASE NO INTO FPRO
00002E 7800 3000
                              00000
                                                                                                                           00050001
                                        54
                                                      LE
                                                                                       LOAD PLIST OF EXPONENT IN R3
000032 5830 1004
                               00004
                                        55
                                                            R3,4(,R1)
                                                                                                                           00051001
                                                                                       LOAD EXPONENT INTO R2
000036 5820 3000
                               00000
                                        56
                                                            R2,0(,R3)
                                                                                                                           00052001
00003A 3200
                                        57
                                                      LTER
                                                            FPR0, FPR0
                                                                                       BASE NO +, - OR ZERO ?
                                                                                                                           00053001
00003C 4780 F08E
000040 1B00
                               0008E
                                        58
                                                      ΒZ
                                                            ERROR
                                                                                       ZERO, BRANCH TO ERROR
                                                                                                                           00054001
                                                                                       SET NEGATIVE EXPN SWITCH TO 0
                                        59
                                                      SR
                                                            R0. R0
                                                                                                                           00055001
                                                                                       EXPONENT +, - OR ZERO ?
                                                                                                                           00056001
000042 1222
                                        60
                                                      LTR
                                                            R2, R2
000044 4720 F052
                               00052
                                        61
                                                      ВР
                                                            PLUS
                                                                                       +VE, BRANCH TO PLUS
                                                                                                                           00057001
000048 4780 F084
                                                            LOAD1
                                                                                       ZERO, BRANCH TO LOAD1
                                                                                                                           00058001
                               00084
                                        62
                                                      ΒZ
00004C 1322
                                        63
                                                      LCR
                                                            R2, R2
                                                                                       MINUS, CONVERT TO 2S COMPLIMENT
                                                                                                                           00059001
                               00001
                                                                                       SET EXP SW TO ONE FOR MINUS EXPN
00004E 4100 0001
                                        64
                                                      LA
                                                            R0.1
                                                                                                                          00060001
                                                                                       LOAD FACTOR OF ONE IN FPR2
000052 7820 F098
                                        65 PLUS
                                                                                                                           00061001
                                                            FPR2.KFPONE
                               00098
                                                      LE
000056 8C20 0001
                               00001
                                        66 LOOP
                                                      SRDL
                                                                                       SHIFT LOW BIT R2 INTO R3
                                                                                                                           00062001
                                                            R2,1
00005A 1233
                                                      LTR
                                                            R3, R3
                                                                                       LOWORDER BIT OF R2 MAKE R3 NEG ?
                                                                                                                           00063001
                                        67
00005C 47B0 F062
                               00062
                                        68
                                                      BNM
                                                            JUMP
                                                                                       NO, BRANCH TO JUMP
                                                                                                                           00064001
000060 3C20
                                        69
                                                      MER
                                                            FPR2.FPR0
                                                                                       YES, MULTIPLY FPR2 BY FPR0
                                                                                                                           00065001
                                                                                      EXPONENT +, -, OR ZERO ?
EXPONENT ZERO, BRANCH TO NEXT
                                        70 JUMP
                                                      LTR
                                                                                                                           00066001
000062 1222
                                                            R2.R2
000064 4780 F06E
                               0006E
                                                                                                                           00067001
                                        71
                                                      ΒZ
                                                            NEXT
                                                                                       MULT BASE NO BY DOUBLING ITSELF
000068 3C00
                                        72
                                                      MER
                                                            FPRØ, FPRØ
                                                                                                                           00068001
00006A 47F0 F056
                               00056
                                        73
                                                            L00P
                                                                                       LOOP TO TEST NEXT EXPN BIT
                                                                                                                           00069001
                                                      В
                                        74 *
                                                                                                                           00070001
                                                                                      R0 +, - OR ZERO ?
EXPN - MINUS, BRANCH TO SWAP
LOAD ONE IN FPR0 AS DIVIDEND
                                                      LTR
                                                                                                                           00071001
00006E 1200
                                        75 NEXT
                                                            R0. R0
000070 4780 F07E
                               0007E
                                                            SWAP
                                                                                                                           00072001
                                        76
                                                      ΒZ
000074 7800 F098
                                        77
                                                      LE
                                                            FPRØ, KFPONE
                                                                                                                           00073001
                              00098
000078 3D02
                                        78
                                                            FPR0, FPR2
                                                                                       DIV BASE REG BY FPR2 (RESULT)
                                                                                                                           00074001
                                                      DER
00007A 47F0 F088
                               00088
                                        79
                                                      В
                                                            EXIT
                                                                                       EXIT (RESULT IN FPR0)
                                                                                                                           00075001
                                        80 *
                                                                                                                           00076001
00007E 3802
                                        81 SWAP
                                                      LER
                                                            FPR0, FPR2
                                                                                       LOAD FPR2 INTO FPR0
                                                                                                                           00077001
000080 47F0 F088
                               00088
                                                                                                                           00078001
                                                                                       EXIT (RESULT IN FPR0)
                                                            EXIT
                                        82
                                                      В
                                        83
                                                                                                                           00079001
000084 7800 F098
                               00098
                                        84 LOAD1
                                                            FPRØ, KFPONE
                                                                                       LOAD PLUS 1 AS RESULT IN FPR0
                                                                                                                           00080001
                                                      LE
                                        85
                                                                                                                           00081001
                                        86 EXIT
                                                      RETURN (14,12)
                                                                                       RESTORE CALLERS REGS AND RETURN
                                                                                                                           00082001
000088
                                        87+EXIT
                                                      DS
                                                                                                                           01-RETUR
000088 98EC D00C
                               0000C
                                        88+
                                                      LM
                                                            14,12,12(13)
                                                                                                  RESTORE THE REGISTERS
                                                                                                                           01-RETUR
00008C 07FE
                                        89+
                                                      BR
                                                                                                  RETURN
                                                                                                                           01-RETUR
                                        90 *
                                                                                                                           00083001
                                                                                      EXPONENT +, - ZERO ?
EXPN IS POSITIVE, BRANCH TO EXIT
                                                                                                                          00084001
00085001
00008E 1222
                                        91 ERROR
                                                      LTR
                                                            R2. R2
000090 4720 F088
                               00088
                                        92
                                                      BP
                                                            EXIT
000094 47FD 0258
                               00258
                                        93
                                                            FSAERR+35*4(R13)
                                                                                       BASE NO = ZERO AND EXPONENT
                                                                                                                           00086001
                                        94 *
                                                                                       -> ZERO, UNDEFINED
                                                                                                                           00087001
                                        95
                                                                                                                           00088001
                                        96
                                                      ADCONS AND CONSTANTS AREA
                                                                                                                           00089001
```

97

120+R15

121 \* 122 EQU

END

15

0000F

01-IEZRE 00098001 00099001

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 000098 41100000 CONSTANT ONE IN SINGLE PREC FP 00091001 98 KFPONE DC E'1' 00092001 00093001 00094001 99 \* 100 FSAERR 101 \* 001CC EQU X'1CC' 102 \* REGISTER EQUATES 00095001 103 \* 00096001 **IEZREGS** 104 00097001 00000 00001 105+R0 01-IEZRE EQU EQU EQU 01-IEZRE 01-IEZRE 106+R1 1 2 3 4 5 6 7 8 9 00002 107+R2 01-IEZRE 01-IEZRE 00003 108+R3 EQU 00004 109+R4 EQU 00005 110+R5 EQU 01-IEZRE EQU EQU 01-IEZRE 01-IEZRE 00006 111+R6 112+R7 00007 01-IEZRE 01-IEZRE 00008 113+R8 EQU 00009 **114+**R9 EQU 115+R10 0000A EQU 01-IEZRE 116+R11 117+R12 EQU EQU 11 12 01-IEZRE 01-IEZRE 0000B 0000C 01-IEZRE 0000D 118+R13 EQU 13 0000E 119+R14 EQU 14 01-IEZRE

Symbol	Length	Value	Id	Type Asm	Program	Defn	References						X390	3.1.04	2012/08/17	13.21
ERROR	2	0000008E	0000000	1 I		91	58B									
EXIT	2	00000088	0000000	1 H H		87	79B	82B	92B							
FPR0	1	00000000		U		37	54M	57M	69	72M	77M	78M	81M	84M		
FPR2	1	00000002		U		38	65M	69M	78	81						
FSAERR	1	000001CC		U		100	93B									
IHIFRI	4	00000000	0000000	1 I		46	33									
IHIFRIXP	1	00000000	0000000	1 J		31	52U									
JUMP	2	00000062	0000000	1 I		70	68B									
KFPONE	4	00000098	0000000	1 E E		98	65	77	84							
LOAD1	4	00000084	0000000	1 I		84	62B									
LOOP	4	00000056	0000000	1 I		66	73B									
NEXT	2	0000006E	0000000	1 I		75	71B									
PLUS	4	00000052	0000000	1 I		65	61B									
RØ	1	00000000		U		105	59M	64M	75M							
R1	1	00000001		U		106	53	55								
R13	1	000000D		U		118	93									
R15	1	000000F		U		120	520									
R2	1	00000002		U		107	56M	60M	63M	66M	70M	91M				
R3	1	00000003		U		108	53M	54	55M	56	67M					
SWAP	2	0000007E	0000000	1 I		81	76B									

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

```
0(0) 50 59M 64M 75M 88M 1(1) 50 53 55 88M 2(2) 50 56M 60M 63M 66M 70M 88M 91M 3(3) 50 53M 54 55M 56 66M 67M 88M 4(4) 50 88M 5(5) 50 88M 6(6) 50 88M 7(7) 50 88M 8(8) 50 88M 9(9) 50 88M 9(9) 50 88M 10(A) 50 88M 11(B) 50 88M 12(C) 50 88M 12(C) 50 88M 13(D) 50 88 93N 14(E) 50 88M 89B 15(F) 46B 50 52U 88M
```

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

FRI USING Map PAGE 7
Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

52 USING Ordinary 00000001 00000000 00001000 15 00098 92 IHIFRIXP,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIFRI PROCSTEP: X390

Primary input: lines 1 to 99 of SYSD.ALGOLFRT.ASM(IHIFRI)

SYSLIB library records read: 161
SYSUT1 work file size: 11657 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 7920 bytes
SYSLIN file records written: 5

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHIFRIXP 00009C 4

## IHIFRR LEVEL V2.M01

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIFRR)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00126
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                                         00003001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00004001
                                         4
                                                                                                                         00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                                                                                                         00006001
                                         6
                                                                                                                         00007001
                                                     FUNCTION/OPERATION - SEE CODE
                                                                                                                         00008001
                                           *
                                         8
                                                                                                                         00009001
                                         9
                                                     ENTRY POINT -
                                                                                                                         00010001
                                                     IHIFRR - POWER FUNCTION, REAL**REAL, SHORT
                                        10
                                                                                                                         00011001
                                                                      R1, PARMLIST
                                                                                                                         00012001
                                                              LA
                                        11
                                        12
                                                              BALR
                                                                      R14,R15
                                                                                                                         00013001
                                        13
                                                              DATA PASSED BY NAME
                                                                                                                         00014001
                                        14
                                                     THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                         00015001
                                        15
                                                                                                                         99916991
                                                     INPUT - N/A
                                                                                                                         00017001
                                        16
                                                                                                                         00018001
                                        17
                                                     OUTPUT - N/A
                                        18
                                                                                                                         00019001
                                        19
                                                                                                                         99929991
                                        20
                                                     EXTERNAL ROUTINES -
                                                                                                                         00021001
                                                     IHISLO - LOGARITHM FUNCTION, SHORT PRECISION
                                                                                                                         00022001
                                        21
                                                     IHISEX - EXPONENTIAL FUNCTION, SHORT PRECISION
                                                                                                                         00023001
                                        22
                                        23
                                                                                                                         00024001
                                        24
                                                     EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                         00025001
                                        25
                                                                                                                         00026001
                                                                                                                         00027001
                                        26
                                                     FXTT - FRROR
                                                     IF BASE IS ZERO AND EXPONENT NOT POSITIVE GOTO ERROR
                                                                                                                         00028001
                                        27
                                        28
                                                     ROUTINE VIA
                                                                                                                         00029001
                                                          FSAERR+35*4(R13)
                                                                                                                         00030001
                                        29
                                        30
                                                                                                                         00031001
                                        31 *
                                                     TABLES/WORKAREAS - N/A
                                                                                                                         00032001
                                        32
                                                                                                                         00033001
000000
                       00000 000F4
                                        33 IHIFRRXP CSECT
                                                                                                                         00034001
                                        34
                                                                                                                         00035001
                                        35
                                                     ENTRY IHIFRR
                                                                                                                         00036001
                                        36
                                                                                                                         00037001
                                                     FLOATING POINT REGISTERS
                                        37
                                                                                                                         00038001
                                                                                                                         00039001
                                        38
                       00000
                                        39 FPR0
                                                     EOU
                                                                                     BASE NO, PASSING RESULT
                                                                                                                         00040001
                                        40 FPR2
                                                                                     EXPONENT IN COMPUTATION
                                                                                                                         00041001
                                                     EQU
                                        41
                                                                                                                         00042001
                                        42
                                                     GENERAL PURPOSE REGISTERS
                                                                                                                         00043001
                                        43
                                                                                                                         00044001
                                                                                     PARAMETER LIST REF
                                                                                                                         00045001
                                        44
                                                     R1
                                        45
                                                     R2
                                                                                     SECOND BASE ADDR
                                                                                                                         00046001
                                        46
                                                     R3
                                                                                     INDEXING PARAMETER ADDR
                                                                                                                         00047001
                                        47
                                                                                                                         00048001
                                                           (14,12),, 'IHIFRRXP LEVEL 2.1 &SYSDATE &SYSTIME'
                                        48 THTFRR
                                                     SAVE
                                                                                                                         99949991
000000 47F0 F026
                              00026
                                                                                                BRANCH AROUND ID
                                        49+IHIFRR
                                                     В
                                                           38(0,15)
                                                                                                                         01-SAVE
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
000004 21
                                        50+
                                                     DC
                                                                                                                         01-SAVE
000005 C9C8C9C6D9D9E7D7
                                        51+
                                                     DC
                                                           CL32'IHIFRRXP LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000025 F1
                                        52+
                                                     DC
                                                           CI 1 '1'
                                                                                                TDENTTETER
                                                                                                                         01-SAVE
                                                                                                                         01-SAVE
000026 90EC D00C
                              0000C
                                        53+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         00050001
                                        54
00002A 182F
                                        55
                                                     LR
                                                           R2,R15
                                                                                                                         00051001
                  R:2 00000
                                        56
                                                     USING IHIFRRXP, R2
                                                                                                                         00052001
00002C 183D
                                        57
                                                           R3,R13
                                                                                     CHAIN SAVE AREAS
                                                                                                                         00053001
                                                     LR
00002E 41D0 2098
                              9999
                                        58
                                                     LA
                                                           R13, SAVEAREA
                                                                                                                         00054001
000032 5030 D004
                              99994
                                        59
                                                     ST
                                                           R3,4(,R13)
R13,8(,R3)
                                                                                                                         00055001
                              00008
                                                                                                                         00056001
000036 50D0 3008
                                        60
                                                     ST
00003A 5830 1000
                              00000
                                        61
                                                           R3,0(,R1)
                                                                                     LOAD PLIST OF BASE NO IN R3
                                                                                                                         00057001
00003E 7800 3000
                              00000
                                                           FPR0,0(,R3)
                                                                                     LOAD BASE NO INTO FPR0
                                                                                                                         00058001
                                        62
                                                     LE
                                                                                     LOAD PLIST OF EXPONENT IN R3
LOAD EXPONENT INTO FPR2
000042 5830 1004
                              00004
                                        63
                                                           R3,4(,R1)
                                                                                                                         00059001
000046 7820 3000
                              00000
                                        64
                                                     LE
                                                           FPR2,0(,R3)
                                                                                                                         00060001
                                                           FPRØ, FPRØ
                                                                                                                         00061001
00004A 3200
                                        65
                                                                                     BASE NO +, - OR ZERO ?
                                                     LTER
                                                                                     ZERO, BRANCH TO ERROR
00004C 4780 208A
                              0008A
                                        66
                                                     ΒZ
                                                           ERROR
                                                                                                                         00062001
000050 4740 2090
                                        67
                                                     ВМ
                                                           ERRORM
                                                                                     NEGATIVE UNDEFINED, ERROR
                                                                                                                         00063001
                              00090
000054 3222
                                        68
                                                     LTER
                                                           FPR2, FPR2
                                                                                     EXPONENT +, - OR ZERO ?
                                                                                                                         00064001
                                                                                     ZERO, BRANCH TO LOAD1
STORE EXPONENT IN PARAM
000056 4780 207C
                              aaa7C
                                        69
                                                     R7
                                                           LOAD1
                                                                                                                         00065001
00005A 7020 20E0
                                        70
                                                           FPR2.PARAM
                                                                                                                         00066001
                              000E0
                                                     STE
00005E 58F0 20EC
                                        71
                                                           R15 VIHISLO
                                                                                     R15 -> IHISLO ROUTINE
                                                                                                                         00067001
                              000EC
000062 05EF
                                        72
                                                     BALR
                                                           R14.R15
                                                                                     CALL IHISLO ROUTINE
                                                                                                                         00068001
000064 7820 20E0
                              000E0
                                        73
                                                           FPR2, PARAM
                                                                                     RELOAD FPR2 WITH EXPONENT
                                                                                                                         00069001
                                                     LE
000068 3C02
                                        74
                                                     MFR
                                                           FPR0.FPR2
                                                                                     MULT LOG OF BASE NO BY EXPONENT
                                                                                                                         00070001
00006A 7000 20E0
                              000E0
                                                                                     STORE RESULT IN PARAM
                                                                                                                         00071001
                                        75
                                                     STE
                                                           FPRØ PARAM
00006E 4110 20E8
                                                                                     R1 -> EXP RTN PARAM
                                                           R1.ADCPAR
                                                                                                                         00072001
                              000E8
                                        76
                                                     LA
                                                                                     R15 -> IHISEX ROUTINE
000072 58F0 20F0
                                        77
                                                           R15, VIHISEX
                                                                                                                         00073001
                              000F0
                                                                                     CALL IHISEX ROUTINE
                                                                                                                         00074001
000076 05EF
                                        78
                                                     BALR
                                                           R14, R15
000078 47F0 2080
                              00080
                                        79
                                                     В
                                                           EXIT
                                                                                     EXIT (RESULT IN FPR0)
                                                                                                                         00075001
                                        80 *
                                                                                                                         00076001
00007C 7800 20E4
                              000E4
                                        81 LOAD1
                                                           FPRØ, KFPONE
                                                                                     LOAD PLUS 1 AS RESULT IN FPRO
                                                                                                                         00077001
                                                     LE
                                                                                                                         00078001
000080 58D0 D004
                                                           R13,4(,R13)
                                                                                     R13 -> CALLERS SAVE AREA
                              00004
                                        82 EXIT
                                                     L
                                        83
                                                                                                                         00079001
                                                     RETURN (14,12)
                                                                                     RESTORE CALLERS REGS AND RETURN
                                                                                                                         00080001
                                        84
000084 98EC D00C
                              aaaac
                                        85+
                                                     I M
                                                           14,12,12(13)
                                                                                                RESTORE THE REGISTERS
                                                                                                                         01-RETUR
000088 07FE
                                        86+
                                                     BR
                                                           14
                                                                                                RETURN
                                                                                                                         01-RETUR
                                                                                                                         00081001
                                        87
00008A 3222
                                        88 ERROR
                                                     LTER
                                                           FPR2, FPR2
                                                                                     EXPONENT +, - OR ZERO
                                                                                                                         00082001
00008C 4720 2080
                              00080
                                        89
                                                     ΒP
                                                           EXIT
                                                                                     EXPN IS POSITIVE, BRANCH TO EXIT
                                                                                                                         00083001
                                                           R13,4(,R13)
000090 58D0 D004
                              00004
                                        90 ERRORM
                                                                                     R13 -> CALLERS SAVE AREA
                                                                                                                         00084001
                                       91
92
                                                                                     BASE NO = ZERO AND EXPONENT 
>> ZERO, UNDEFINED
000094 47FD 0258
                              00258
                                                     В
                                                           FSAERR+35*4(R13)
                                                                                                                         00085001
                                                                                                                         00086001
                                        93
                                                                                                                         00087001
                                                     CONSTANTS AND ADCON AREAS
                                                                                                                         00088001
                                        94
                                        95
                                                                                                                         00089001
99998 999999999999999
                                        96 SAVEAREA DC
                                                           18F'0'
                                                                                     SAVE AREA
                                                                                                                         9999991
0000E0 00000000
                                        97 PARAM
                                                    DC
                                                           F'0'
                                                                                     PARAM FOR DATA IN EXP MATH RTN
                                                                                                                         00091001
```

127

Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 0000E4 41100000 98 KFPONE DC E'1' CONSTANT ONE IN SINGLE PREC FP 00092001 99 \* 00093001 00094001 00095001 0000E8 000000E0 100 ADCPAR 101 \* DC A(PARAM) ADDR OF PARAMETER FOR EXP RTN 0000EC 00000000 102 VIHISLO DC V(IHISLO) LOG MATH LIBRARY ROUTINE 00096001 0000F0 00000000 103 VIHISEX DC V(IHISEX) EXP MATH LIBRARY ROUTINE 00097001 104 00098001 00099001 00100001 00101001 001CC 105 FSAERR EQU X'1CC' 106 \* 107 REGISTER EQUATES 108 \* 00102001 109 IEZREGS 00103001 00000 110+R0 EQU 01-IEZRE 01-IEZRE 00001 111+R1 EOU 00002 112+R2 EQU 2 01-IEZRE 00003 113+R3 EQU 3 4 5 6 7 01-IEZRE 00004 114+R4 EQU 01-IEZRE 00005 115+R5 EQU 01-IEZRE 116+R6 117+R7 EQU EQU 01-IEZRE 01-IEZRE 00006 00007 00008 118+R8 EQU 8 01-IEZRE 00009 119+R9 EQU 01-IEZRE 0000A 120+R10 EQU 10 01-IEZRE 121+R11 122+R12 EQU EQU 0000B 11 01-IEZRE 0000C 12 01-IEZRE 0000D 123+R13 13 01-IEZRE 0000E 124+R14 EQU 14 01-IEZRE 0000F 125+R15 EQU 15 01-IEZRE 126 \* 00104001 END 00105001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences					X390 3.1.04	2012/08/17 13.21
ADCPAR	4	000000E8	9999999	AA		100	76							
ERROR		000000E0				88	66B							
ERRORM		00000090				90	67B							
EXIT		00000080				82	79B	89B						
FPRØ		00000000	0000000	Ū		39	62M	65M	74M	75	81M			
FPR2		00000002		Ü		40	64M	68M	70	73M	74	88M		
FSAERR		000001CC		Ü		105	91B							
IHIFRR		00000000		I		49	35							
IHIFRRXP	1	00000000	00000001	L J		33	56U							
IHISEX	1	00000000	00000003	3 T		103	103							
IHISLO	1	00000000	00000002	2 T		102	102							
KFPONE	4	000000E4	00000001	LEE		98	81							
LOAD1	4	0000007C	00000001	I		81	69B							
PARAM	4	000000E0	00000001	FF		97	70M	73	75M	100				
R1	1	00000001		U		111	61	63	76M					
R13	1	000000D		U		123	57	58M	59	60	82M	90M	91	
R14	1	000000E		U		124	72M	78M						
R15	1	0000000F		U		125	55	71M	72B	77M	78B			
R2	1	00000002		U		112	55M	56U						
R3	1	00000003		U		113	57M	59	60	61M	62	63M	64	
SAVEAREA	4	00000098	00000001	LFF		96	58							
VIHISEX	4	000000F0	00000001	L V V		103	77							
VIHISLO	4	000000EC	00000001	L V V		102	71							

```
Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

0(0) 53 85M
1(1) 53 61 63 76M 85M
2(2) 53 55M 56U 85M
3(3) 53 57M 59 60 61M 62 63M 64 85M
4(4) 53 85M
5(5) 53 85M
6(6) 53 85M
7(7) 53 85M
8(8) 53 85M
9(9) 53 85M
10(A) 53 85M
11(B) 53 85M
11(B) 53 85M
12(C) 53 85M
13(D) 53 7 58M 59 60 82M 85 90M 91N
14(E) 53 72M 78M 85M 86B
15(F) 49B 53 55 71M 72B 77M 78B 85M
```

X390 3.1.04 2012/08/17 13.21

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

56 USING Ordinary 00000001 00000000 00001000 2 000F0 89 IHIFRRXP,R2

X390 3.1.04 2012/08/17 13.21

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIFRR PROCSTEP: X390

Primary input: lines 1 to 105 of SYSD.ALGOLFRT.ASM(IHIFRR)

SYSLIB library records read: 161
SYSUT1 work file size: 12208 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8400 bytes
SYSLIN file records written: 9

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHIFRRXP 0000F4 4

## IHIFSA LEVEL V2.M01

X390 3.1.04 2012/08/17 13.21

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIFSA)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00130
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

IHIDSTAB - INFORMATION ABOUT THE STATUS OF EACH DATASET USED

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY FUNCTION/OPERATION IHIFSA IS A COLLECTION OF ABOUT 20 ROUTINES WHICH ARE REQUIRED FOR THE EXECUTION OF ALGOL PROGRAMS. THE ENTRY \* POINT AND PURPOSE OF EACH ROUTINE IS LISTED UNDER ENTRY POINTS BELOW DETAILED INFORMATION ON THE FUNCTION, CALLING SEQUENCE, TRANSMISSION OF PARAMETERS ETC CAN BE FOUND IN THE COMMENTARY WHICH PRECEDES THE PROGRAM LISTING FOR EACH ROUTINE THE MODULE CONSISTS OF TWO CONTROL SECTIONS, IHIFSARA AND THIESARB. IHIFSARA CONTAINS THE ROUTINES, TABLES AND OTHER INFORMATION USED DURING THE EXECUTION OF THE ALGOL OBJECT PROGRAM IHIFSARB CONTAINS MAINLY THE INITIALIZATION AND TERMINATION ROUTINES WITH THEIR ASSOCIATED TABLES AND WORK AREAS R13 - BASE REGISTER FOR IHIFSARA - BASE REGISTER FOR IHIFSARB FNTRY POTNTS -MOST OF THE ENTRY POINTS LISTED HERE ARE COLLECTED IN A BRANCH LIST LOCATED AT BRLIST. THE ENTRY POINTS CONTAINED IN THIS BRANCH LIST ARE MARKED WITH AN ASTERISK AFTER THE NAME IN THE LISTING BELOW CAP1\* - CALL ACTUAL PARAMETER PART 1. ENTER THUNK ROUTINE FROM A PROCEDURE CAP2\* CALL ACTUAL PARAMETER 35 \* PART 2. RETURN FROM THE THUNK ROUTINE TO THE PROCEDURE ENTER A PROCEDURE WHEN IT IS CALLED VIA AN PROLOGP\* ACTUAL PARAMETER PROLOG\* ENTER A BLOCK OR A PROCEDURE LEAVE A BLOCK OR PROCEDURE VIA A 'GO TO' **RETPROG\*** STATEMENT EPILOGP\* RETURN FROM A PROCEDURE VIA THE 'END' STATEMENT LEAVE A BLOCK VIA THE 'END' STATEMENT **EPILOGB\*** FREE STORAGE FOR DSA AND ARRAYS **FRDSA** SYNONYM FOR EPILOGB WHEN USED AS A SUBROUTINE BY THE ERROR ROUTINE IHGERROR CSWF1\* CALL SWITCH ELEMENT, PART 1 CSWE 2\* CALL SWITCH ELEMENT, PART 2 LOAD A PRECOMPILED PROCEDURE LOADPP\* SPDECL STANDARD PROCEDURE DECLARATION ROUTINE (ENTERED VIA THE PROLOG ROUTINE) VALUCALL\* -HANDLE FORMAL PARAMETERS CALLED BY VALUE GET MAIN STORAGE FOR ARRAYS **GETMSTO\*** CNVIRD CONVERT INTEGER TO REAL CNVRDI CONVERT REAL TO INTEGER EXECUTE ALGOL ENTIER FUNCTION **ENTIER** TRACE\* STORE THE CURRENT SEMICOLON NUMBER THGESATN TNITTALITY FOR PROGRAM EXECUTION AND GIVE CONTROL TO THE OBJECT MODULE TERMNTE\* TERMINATE THE EXECUTION PROGRAM INTERRUPT ROUTINE **PIEROUT FSAERR** STORE ERROR NUMBER AND CALL THE ERROR ROUTINE IHIERROR IF THE TRACE OPTION IS USED, THE TERMINATION ROUTINE MAY READ A TABLE OF SEMICOLON NUMBERS, WHICH HAS BEEN WRITTEN ON SYSUT1 BY THE TRACE ROUTINE OUTPUT IF THE TRACE OPTION IS USED, THE TRACE ROUTINE MAY WRITE A TABLE OF SEMICOLON NUMBERS ON SYSUT1. THIS TABLE IS 74 \* READ AND THEN WRITTEN ON SYSPRINT IN EDITED FORMAT BY THE TERMINATION ROUTINE. THE MESSAGE 'END OF ALGOL PROGRAM EXECUTION' IS WRITTEN ON SYSPRINT AS THE FINAL OUTPUT FROM THE EXECUTION. EXTERNAL ROUTINES IHIIOROP - OPEN A DATASET (USED ONLY FOR SYSPRINT) CLOSE A DATASET (USED ONLY FOR SYSPRINT) IHIIORCL -CLOSE ALL OPEN DATASETS (EXCEPT SYSUT1) **IHIIORCP** IHIIORNX -HANDLE THE NEXT I/O RECORD IHIERROR - EDIT AND PRINT AN ERROR MESSAGE AND, IF REQUESTED, AN ALGOL STORAGE DUMP. (ENTERED BY CALL) THE FOLLOWING TWO EXTERNAL TABLES ARE IN THE OBJECT MODULE IHIENTIF - INFORMATION NEEDED FOR ENTERING THE OBJECT MODULE FORMAT IHIENTIF DC A(PBTAB) ADDR OF PROGRAM BLOCK TABLE DC A(LATAB) ADDR OF LABEL ADDR TABLE DC X'02' OR X'00' FOR SHORT/LONG PREC DC AL3(ENTRYPOINT) ADDR OF FIRST INSTRUCTION 

Loc Object Code Addr1 Addr2 Stmt Source Statement

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192 \*

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181 \*

R14

R15

R5

R6

R12

MODULE

I/O ROUTINES -

(DSN)

(DSNR)

(FSAA)

PAGE X390 3.1.04 2012/08/17 13.21 98 \* FORMAT AND USE -00098001 SEE THE DSECT DSTABLE AND THE LISTING OF 99 \* 00099001 100 THE I/O SUBROUTINE MODULE IHIIORTN 00100001 00101001 00102001 THE TERMINATION ROUTINE IS ENTERED BY A BRANCH TO 00103001 104 TERMNTE, AND A FINAL RETURN IS BY A RETURN MACRO WITH 00104001 00105001 105 THE RETURN CODE ZERO IN R15 00106001 106 00107001 ON RETURN FROM THE ERROR ROUTINE IHIERROR, THE 00108001 TERMINATION ROUTINE IS ENTERED BY A BRANCH TO ALGTRMA, 00109001 109 110 AND A FINAL RETURN IS MADE BY A RETURN MACRO WITH THE 00110001 RETURN CODE 16 TN R15 111 99111991 00112001 112 TABLES/WORK AREAS 00113001 THE LOWER PART OF IHIFSARA CONTAINS A BLOCK OF WORK 00114001 115 AREAS AND CONSTANTS WHICH ARE USED IN COMMON BY SEVERAL 00115001 116 ROUTINES. 00116001 00117001 THE MOST IMPORTANT ARE -SAVE STANDARD SAVEAREA USED BY ALL FIRST LEVEL 00118001 SUBROUTINES EXCEPT THOSE CONTAINED IN THIS MODULE 00119001 120 **ASAVE** SAVE AREA USED BY SOME ROUTINES IN THIS MODULE 00120001 STORAGE FOR THE RESULT OF AN ALGOL FUNCTION PROGRAM BLOCK NUMBER OF A BLOCK OR PROCEDURE 121 FCTVALST -00121001 00122001 122 PROLPRN TO BE ENTERED VIA THE PROLOG ROUTINE 00123001 THE OLD PSW IN CASE OF A PROGRAM INTERRUPT 00124001 THE CURRENT SEMICOLON NUMBER 00125001 125 SCRCS OPTSW FLAG BITS REPRESENTING EXECUTION TIME OPTIONS 00126001 126 AND SWITCHES FOR CONTROLLING THE PROGRAM FLOW 00127001 128 FSAERCOD -ERROR NUMBER IDENTIFYING AN EXECUTION ERROR 00128001 FOUR POINTERS FOR CONTROLLING THE RETURN IHIFSARS -00129001 130 ADDR STACK 00130001 131 \* BRLIST A LIST OF ENTRY POINTS TO MOST OF THE ROUTINES 00131001 MENTIONED UNDER 'ENTRY POINTS'. THE LIST CONSISTS MAINLY OF BRANCH INSTRUCTIONS 132 00132001 133 00133001 A LIST OF BAL INSTRUCTIONS, EACH 00134001 IHIFSAER -CORRESPONDING TO ONE TYPE OF ERROR, THE 00135001 NUMBER OF WHICH IS DETERMINED BY ITS POSITION 00136001 136 TN THE LIST 00137001 138 00138001 OTHER WORK AREAS AND CONSTANTS OF GENERAL 00139001 INTEREST ARE 00140001 A LIST OF THE VALID EXECUTION OPTION 00141001 PARMLIST -142 \* PARAMETERS 00142001 BUFFER POINTERS AND RECORD COUNTER FOR CONTROLLING THE OUTPUT OF TRACING 00143001 00144001 143 **TRBUF** 144 INFORMATION ON SYSUT1 00145001 A LIST OF 16 ADDR CONSTANTS EACH POINTING **PIETAB** 00146001 147 TO AN ENTRY IN IHIFSAER, WHICH CORRESPONDS 00147001 148 \* TO A TYPE OF PROGRAM INTERRUPT 00148001 00149001 A LIST OF FLOATING POINT INSTRUCTIONS USED BY **FPINST** THE VALUCALL AND SPDECL ROUTINES
INSTRUCTIONS TO BE INSERTED INTO THE CONVERT 00150001 CNVINSTE 00151001 ROUTINE FOR SHORT PRECISION 00152001 153 CNVINSTD -INSTRUCTIONS TO BE INSERTED INTO THE CONVERT 00153001 154 ROUTINE FOR LONG PRECISION 00154001 00155001 ATTRIBUTES - THIS MODULE IS SERIALLY REUSABLE 00156001 00157001 158 \* 00158001 159 THIS MODULE IS ONLY INTENDED TO BE USED WHEN LINKAGE 00159001 EDITED TOGETHER WITH AN OS/360 ALGOL OBJECT MODULE AND 00160001 160 WITH THE OS/360 ALGOL I/O ROUTINES. FOR REASONS OF 00161001 EFFICIENCY CERTAIN LOCAL CONVENTIONS ARE OBEYED IN THE 00162001 COMMUNICATION BETWEEN THESE MODULES 00163001 163 164 REGISTER SAVING AND RESTORING IS ONLY DONE WHEN 00164001 165 REQUIRED AND THEN GENERALLY IN A NON STANDARD FASHION 00165001 00166001 166 USE OF GENERAL REGISTERS WHEN COMMUNICATING WITH THE 00167001 OBJECT MODULE -00168001 R8 (ADR) MAY BE USED AS RETURN REGISTER AND 00169001 169 PARAMETER POINTER
-> CURRENT ACTIVE DATA STORAGE AREA 170 \* 00170001 00171001 171 R10 (CDSA) PROGRAM BLOCK TABLE IN THE OBJECT MODULE 00172001 R11 (PBT) R12 (LAT) -> LABEL ADDR TABLE IN THE OBJECT MODULE 173 00173001 R13 (FSA) SERVES BOTH AS THE STANDARD SAVE AREA 00174001 174

REGISTER AND AS BASE REGISTER FOR THE

RETURN REGISTER AND PARAMETER POINTER

BASE ADDR OF IHIFSARA

TRANSMIT REAL VALUES TO OR FROM CONVERT ROUTINES

-> RELEVANT ENTRY IN THE DATASET TABLE

TRANSMIT INTEGER VALUES TO OR

USE OF GENERAL REGISTERS WHEN COMMUNICATING WITH THE

DATASET NUMBER

WORKING STORAGE IN THE LOWER PART OF IHIFSARA AND (FOR

PARAMETER VALUES AND OTHER INFORMATION ARE OFTEN

TRANSMITTED IMPLICITLY VIA THE COMMONLY ACCESSIBLE

I/O ROUTINES) VIA THE DATASET TABLE IN THE OBJECT

FROM CONVERT ROUTINES

CSECT THTESARA

00175001 00176001

00177001

00178001

00179001

00180001

00181001

00182001

00183001

00184001

00185001

00186001

00187001 00188001

00189001

00190001

00191001

00192001

```
Loc Object Code
                                                                                                   X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt
                                             Source Statement
                                       194 *
                                                                                                                          00194001
                                       195 *
                                                     THE MODULE WORKS FOR EITHER SINGLE OR DOUBLE FLOATING
                                                                                                                          00195001
                                       196
                                                     POINT PRECISION. IT SENSES THE PRECISION FOR WHICH THE OBJECT MODULE WAS COMPILED AND INITIALIZES ITSELF
                                                                                                                          00196001
00197001
                                       197
                                                     ACCORDINGLY. THE AREAS AFFECTED ARE THE LIST OF FLOATING
                                                                                                                          00198001
                                       198
                                                     POINT INSTRUCTIONS AT FPINST AND THE BLOCK OF
                                                                                                                          00199001
                                       199
                                       200
                                                     INSTRUCTIONS STARTING AT CNVINST IN THE CONVERT
                                                                                                                          00200001
                                       201 *
                                                     ROUTINES
                                                                                                                          00201001
                                       202
                                                                                                                          00202001
                                                                                                                          00203001
                                                     THE OPERATION OF THIS MODULE DEPENDS UPON AN INTERNAL
                                       203
                                                     REPRESENTATION OF THE EXTERNAL CHARACTER SET WHICH IS
                                                                                                                           00204001
                                       204
                                       205
                                                     EQUIVALENT TO THE ONE USED AT ASSEMBLY TIME
                                                                                                                           00205001
                                       206
                                                                                                                          00206001
999999
                       00000 00F6F
                                       207 THTESARA CSECT
                                                                                                                           99297991
                                                                                                                          00208001
                                       208
                                                     REGISTERS FOR COMMUNICATION WITH THE OBJECT MODULE
                                                                                                                          00209001
                                       209
                                                                                                                           00210001
                                       210
                                       211 *
                                                     R8
                                                                                      ADDRESSING REGISTER
                                                                                                                          00211001
                                       212 GDSA
                                                                                                                          00212001
00213001
                        00009
                                                     EQU
                                                                                      GLOBAL DSA
                                                                                      CURRENT DSA
                       0000A
                                       213 CDSA
                                                     EOU
                                                           10
                                       214 PBT
                                                                                      PROGRAM BLOCK TABLE
                                                                                                                          00214001
                       0000B
                                                     EOU
                                                            11
                        00000
                                       215 LAT
                                                     EQU
                                                            12
                                                                                      LABEL ADDR TABLE
                                                                                                                           00215001
                                       216
                                                     R13
                                                                                      IHIFSARA BASE REGISTER
                                                                                                                          00216001
                                                                                                                          00217001
00218001
                                       217
                                                     REGISTERS FOR COMMUNICATION WITH I/O SUBROUTINES
                                       218
                                                                                                                          00219001
                                       219
                                       220
                                                     R5
                                                                                       -> DATASET TABLE ENTRY
                                                                                                                          00220001
                                                                                                                          00221001
                                       221
                                                     R6
                                                                                      DATASET NUMBER
                        0000C
                                       222 FSAA
                                                     EQU
                                                                                      ALTERNATE FSA BASE REGISTER
                                                                                                                          00222001
                                                            12
                                       223
                                                                                                                          00223001
                                       224
                                                     REGISTERS USED BY TRACE AND TERMINATION ROUTINES
                                                                                                                          00224001
                                       225
                                                                                                                          00225001
                                       226
                                                     R4
                                                                                      BYTE POINTER IN TRACE BUFFER
                                                                                                                           00226001
                                       227
                                                     R5
                                                                                      SEMICOLON NUMBER
                                                                                                                          00227001
                                       228
                                                     R6
                                                                                      LOWER TRACE LIMIT
                                                                                                                          00228001
                                                     R7
                                                                                      UPPER TRACE LIMIT
                                                                                                                          00229001
                                       229
                                                                                                                          00230001
                                                                                      TRACE BUFFER ADDR
                                       230
                                                     R8
                                       231
                                                     R9
                                                                                      ALTERNATE TRACE BUFFER ADDR
                                                                                                                          00231001
                                                                                      LENGTH OF TRACE BUFFER
NUMBER OF TRACE RECORDS
                                                                                                                           00232001
                                       232
                                                     R10
                                       233
                                                     R11
                                                                                                                          00233001
                                       234
                                                                                                                          00234001
                                                                                                                          00235001
                                       235
                                                     FLOATING POINT REGISTER
                                                                                                                           00236001
                                       236
                                       237 FPR0
                                                                                                                           00237001
                        00000
                                                     EQU
                                       238
                                                                                                                          00238001
                                                                                                                          00239001
00240001
                                       239
                                                     BIT PATTERNS
                                       240
                       0000C
                                       241 BETABM
                                                                                      MASK FOR BETA BLOCK FLAG IN PBT
                                                                                                                          00241001
                                                     EQU
                                                            X'0C
                                                                                      MASK FOR CODE PROCEDURE IN PBT
                                                                                                                           00242001
                        00010
                                       242 CODEPRM
                                                     EQU
                                                            X'10'
                        00004
                                       243 PIMASK
                                                     EQU
                                                            X'04'
                                                                                      MASK FOR PI PROCEDURE IN PBT
                                                                                                                           00243001
                                                                                                                          00244001
00245001
                        999FF
                                       244 RASLOADM EOU
                                                            X'FE'
                                                                                      LOAD PROCEDURE ENTRY IN RAS
                                       245 RASPARMM FOU
                                                                                      CAP OR CSWE ENTRY IN RAS
                        00000
                                                            X'00
                                       246 SHORTBIT EQU
                                                            X'10
                                                                                      FP OPCODE MODIFIER
                                                                                                                          00246001
                       00010
                                                                                                                          00247001
                                       247
                                                                                                                           00248001
                                       248
                                                     SWITCHES IN OPTSW
                                       249 *
                                                                                                                           00249001
                        00080
                                       250 DPSW
                                                     EQU
                                                            X'80
                                                                                      DUMP OPTION SWITCH
                                                                                                                          00250001
                                                                                      TRACE OPTION SWITCH
                        99949
                                       251 TRSW
                                                     FOU
                                                            X'40
                                                                                                                          00251001
                       00020
                                       252 SHSW
                                                            X'20
                                                                                      SHORT PRECISION OPTION SWITCH
                                                                                                                          00252001
                                                     EQU
                        00010
                                       253 TERMSW
                                                     EQU
                                                            X'10'
                                                                                      TERMINATION ROUTINE ENTERED
                                                                                                                           00253001
                        00008
                                       254 ERROR
                                                      EQU
                                                            X'08'
                                                                                      ERROR ROUTINE ENTERED
                                                                                                                           00254001
                        00004
                                       255 UT1ERR
                                                     EQU
                                                            X'04'
                                                                                      ERROR ON SYSUT1
                                                                                                                          00255001
                                       256 PRNTERR
                                                                                      ERROR ON SYSPRINT
                                                                                                                          00256001
                        00002
                                                     EOU
                                                            X'02
                                                                                                                          00257001
                                       257 UCTRSW
                                                            X'41
                                                                                      UNCONDITIONAL TRACE OPTION
                       00041
                                                     EOU
                                                                                      TRACE PRECOMP PROCEDURES
                                                                                                                           00258001
                        00001
                                       258 PPTRSW
                                                     EQU
                                                            X'01
                                       259
                                                                                                                           00259001
                                       260
                                                     ESD SYMBOLS
                                                                                                                          00260001
                                       261
                                                                                                                          00261001
00262001
                                       262
                                                     ENTRY IHIFSAIN
                                       263
                                                                                                                          00263001
                                                                                                                          00264001
                                       264
                                                     EXTRN IHIDSTAB
                                                                                                                          00265001
                                       265
                                                     EXTRN IHIENTIF
                                                                                                                          00266001
00267001
                                       266
                                                     EXTRN IHIIOROP, IHIIORCL, IHIIORNX, IHIIORCI, IHIIOREV
                                                     EXTRN IHIIOROQ, IHIIOREN, IHIIORGP, IHIIORCP, IHIIORER
                                       267
                                       268 *
                                                                                                                          00268001
                                                     COPY FSAREA
                                                                                                                          00269001
                                       269
                                       270=*
                                       271=*
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00002001
                                                                                                                          00003001
                                       272=
                                                     STATUS - LEVEL 2.1
                                                                                                                          00004001
                                       273=
                                                                                                                           00005001
                                       274=
                                       275=*
                                       276=*
                                                                                                                           00007001
                                       277=*
                                                     COMMON DATA AREA
                                                                                                                          00008001
                                       278=
                                                                                                                          00009001
                                                                                                                           00010001
                                       279=
                                                     FSARFA
                                       280=
                                       281=**
                                                     ********************
                                                                                                                          00012001
                                       282=*
                                                                                                                          00013001
                                                     DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL MODULES DURING THE EXECUTION
                                                                                                                          00014001
00015001
                                       283=
                                       284=
                                       285=
                                                                                                                          00016001
                                                     ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY
                                                                                                                           00017001
                                       286=
                                       287=*
                                                     SUBROUTINES) BY R12
                                                                                                                          00018001
                                       288=
                                                                                                                          00019001
                        00000
                                       289=FSAREA
                                                     EOU
                                                                                                                          00020001
```

	Object Code	Addr1	Addr2	Stmt Source	State	ement		X390 3.1.04 2012/	08/17 13.21
	,		-	290=*					00021001
				291=*	SAVE	AREAS			00022001
000000				292=* 293=	DS	18F		STANDARD SAVE AREA	00023001 00024001
000000		00048		294=ASAVE	EQU	*-FSAREA		ALTERNATE SAVE AREA USED BY	00025001
000048				295= 296=*	DS	18F		CERTAIN SUBROUTINES	00026001 00027001
				297=*	MISCE	ELLANEOUS W	IORK AREAS AND O	CONSTANTS	00027001
		00000		298=*	FOLL	* FCADEA		TEMPODARY STORAGE FOR	00029001
000090		00090		299=FCTVALST 300=	EQU DS	*-FSAREA D		TEMPORARY STORAGE FOR FUNCTION VALUES	00030001 00031001
		00098		301=ASTLOC	EQU	*-FSAREA		DISPL FOR ADDR OF STAND LOCTN	00032001
000098	00000090	0009C		302= 303=BRRST	DC EQU	A(FSAREA+ *-FSAREA	-FCTVALST)	TEMPORARY SAVE REG BRR	00033001 00034001
		0009C		304=HW	EQU	BRRST		TEMPORARY HALFWORD STORAGE	00035001
00009C		00010		305=	DS EQU	F *-FSAREA		STORAGE FOR DRY AND LAT LUISN	00036001
0000A0		000A0		306=PROLREG 307=	DS	2A		A PROCEDURE IS FORMAL PARAM	00037001 00038001
				308=*		IODD CONTAI	NITHE DON OF CAL	LED DLOCK THE SECOND DVTS	00039001
				309=* 310=*	HALF	IORD CONTAI	NING PBN OF CAL	LED BLOCK IN SECOND BYTE	00040001 00041001
0000A8				311=	DS	0H			00042001
8A0000	00	000A9		312= 313=PROLPBN	DC EQU	X'00' *-FSAREA		STORAGE FOR CALLED PBN	00043001 00044001
0000A9	00			314=	DC	X'00'			00045001
0000AA	0008	000AA		315=EIGHT 316=	EQU DC	*-FSAREA H'8'		CONST FOR REDUCING RAS	00046001 00047001
0000781				317=*		•			00048001
0000AC		000AC		318= 319=ADSTAB	DS EQU	0F *-FSAREA		ADDR OF DSTABLE	00049001 00050001
0000AC		OOOAC		320=	DS	A		IN THE OBJECT PROGRAM	00051001
0000B0		000B0		321=ANOTTAB	EQU DS	*-FSAREA		ADDR OF NOTE TABLE	00052001
000000				322= 323=*	כט	А		(INSERTED BY THE OPEN ROUTINE)	00053001 00054001
		000B4		324=IHIFSAST	-	* * FCADEA		DROCKAM CHECK OLD DEN	00055001
0000B4		000B4		325=PGOPSW 326=	EQU DS	*-FSAREA 2F		PROGRAM CHECK OLD PSW	00056001 00057001
000000	00000000	000BC		327=FSAPICA	EQU	*-FSAREA		OLD PICA ADDR	00058001
OOOOBC	00000000	000C0		328= 329=SCRCS	DC EQU	F'0' *-FSAREA		SEMICOLON NUMBER	00059001 00060001
0000C0				330=	DS	Н			00061001
		000C2 000C2		331=DTSW 332=OPTSW	EQU EQU	*-FSAREA DTSW		OPTION SWITCHES	00062001 00063001
0000C2	00			333=	DC	X'00'		DUMP-80, TRACE-40, SHORT-20	00064001
0000C3		000C3		334=FSAERCOD 335=	EQU DS	*-FSAREA C		ERROR CODE FOR ERROR ROUTINE	00065001 00066001
				336=*					00067001
				337=* 338=*	RETUR	RN ADDRESS	STACK POINTERS	DO NOT CHANGE ORDER	00068001 00069001
0000C4				339=	DS	0F			00070001
		000C4 000C4		340=IHIFSARS 341=RASSTART	-	* *-FSAREA		ADDR OF FIRST ENTRY IN RAS-8	00071001 00072001
0000C4				342=	DS	F			00073001
0000C8		000C8		343=RASPT 344=	EQU DS	*-FSAREA F		RAS POINTER FROM TOP	00074001 00075001
000000		000CC		345=RASEND	EQU	*-FSAREA		ADDR OF LAST ENTRY IN RAS+8	00076001
0000CC		000D0		346= 347=RASPB	DS EQU	F *-FSAREA		RAS POINTER FROM BOTTOM	00077001 00078001
0000D0				348=	DS	F			00079001 00080001
				349=* 350=*	LIST	OF BRANCH	INSTRUCTIONS TO	COMMONLY USED SUBROUTINES	00080001
000004				351=*	DC	0.5			00082001
0000D4		000D4		352=BRLIST 353=CAP1	DS EQU	0F *-FSAREA		FIRST PART CAPS	00083001 00084001
0000D4	4700 0000	00000	00000	354=	NOP	0 * FCAREA		SECOND DART CARS	00085001
0000D8	4700 0000	000D8	00000	355=CAP2 356=	EQU NOP	*-FSAREA 0		SECOND PART CAPS	00086001 00087001
		000DC 000DC		357=PROLOGP 358=PROLOGFP	EQU	*-FSAREA PROLOGP		PROLOGUE FORMAL PARAMETER ENTR	
0000DC	4700 0000	OUODC	00000	358=PROLOGFP	EQU NOP	0			00089001 00090001
aaaaFa	4700 0000	000E0	00000	360=PROLOG 361=	EQU NOP	*-FSAREA 0		PROLOGUE PROGRAM USUAL ENTRY	00091001 00092001
		000E4		362=RETPROG	EQU	*-FSAREA		DISPLACEMENT RETURN PROGRAM	00093001
0000E4	4700 0000	000E8	00000	363= 364=EPILOGP	NOP EQU	0 *-FSAREA		EPILOGUE PROGRAM, PROCEDURE ENT	00094001 RY 00095001
0000E8	4700 0000	00056	00000	365=	NOP	0			00096001
0000EC	4700 0000	000EC	00000	366=EPILOGB 367=	EQU NOP	*-FSAREA 0		EPILOGE PROGRAM, BETA-BLOCK ENT	00098001
AAAAEA	4700 0000	000F0	00000	368=EPILPR3 369=	EQU NOP	*-FSAREA		EPILOGUE PROGRAM ENTRY 3	00099001 00100001
000010	4700 0000	000F4	00000	370=CSWE1	EQU	*-FSAREA		FIRST PART CSWES	00101001
0000F4	4700 0000	000F8	00000	371= 372=CSWE2	NOP EQU	0 *-FSAREA		SECOND PART CSWES	00102001 00103001
0000F8	4700 0000		00000	373=	NOP	0		SECOND LANT COMES	00103001
0000EC	4700 0000	000FC	00000	374=LOADPP 375=	EQU NOP	*-FSAREA		LOAD PRECOMPILED PROC ROUTINE	00105001 00106001
		00100		376=TRACE	EQU	*-FSAREA			00107001
	D200 0000 0000 4700 0000	00000	00000 00000	377= 378=	MVC NOP	0(0),0 0			00108001 00109001
	4700 0000		00000	378= 379=	NOP	0			00109001
		0010E	00000	380=TERMNTE	EQU NOP	*-FSAREA		NORMAL TERMINATION EXIT	00111001
PARTRE	4700 0000	00112	00000	381= 382=BCR	EQU	0 *-FSAREA			00112001 00113001
000112	0700	00114		383=	BCR	0,0 *_ESADEA		VARIABLE CONDITIONAL BRANCH	00114001
000114	4700 0000	00114	00000	384=GETMSTO 385=	EQU NOP	*-FSAREA 0			00115001 00116001

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 386=\* 00117001 00118 387=VALUCALL EQU \*-FSAREA 00118001 000118 4700 0000 00000 388= NOP 00119001 0011C 389=IORLST EOU \*-FSAREA 00120001 00011C 4700 0000 00000 390= NOP 00121001 391=\* 00122001 001CC 392=FSAERR EQU X'1CC' DISPL FOR ERROR LIST 00123001 393=\* 00124001 DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 394=\* 00125001 395= 00126001 396=OUTOFB 0020C FSAERR+4\*16 00127001 EQU 00218 397=NUMBIND FSAERR+4\*19 00128001 00208 398=ARRAYBD EQU FSAERR+4\*15 00129001 399=FRROR40 FSAFRR+4\*40 9926C FOU 00130001 00224 400=0ERR22 FSAERR+4\*22 00131001 EQU 401=ENDLESL FSAERR+4\*17 00210 00132001 EQU 402=0ERR21 00220 EQU FSAERR+4\*21 00133001 403=\* 0013/001 404 \* 00270001 405 COPY FSACONV 00271001 406= 00001001 407=\* COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY 00002001 408=\* 00003001 409=\* STATUS - LEVEL 2.1 00004001 410= 00005001 411= 00006001 412= 00007001 00008001 413= TYPE CONVERSION ROUTINES 414=\* 00009001 415=\* **FSACONV** 99919991 416=\* 00011001 417=\* 00012001 418=\* 00013001 419=\* PERFORM CONVERSION BETWEEN INTEGER AND REAL TYPE 00014001 420=\* FOR EITHER SINGLE OR DOUBLE PRECISION 00015001 421=\* 99916991 CALLING SEQUENCES -00017001 422= 423= 00018001 REAL TO INTEGER CONVERSION 00019001 424= 425=\* R8, CNVRDI(R13) REAL NUMBER IN EPRO 99929991 426= RETURN WITH INTEGER IN R14 00021001 427= 00022001 INTEGER TO REAL CONVERSION 428= 00023001 INTEGER NUMBER IN R14 00024001 429=\* BAL R8, CNVIRD(R13) 430=\* RETURN WITH REAL NO IN FPRO 00025001 431=\* 00026001 ALGOL ENTIER FUNCTION 00027001 432= REAL NUMBER IN FPR0 433= R8, ENTIER(R13) 00028001 RETURN WITH INTEGER IN R14 434= 00029001 435= 00030001 436=\* INTEGER TO REAL CONVERSION 00031001 437=\* 00032001 00000 R:D USING FSAREA, R13 438= 00033001 00120 439=CONVIR 00034001 EQU 440=CNVIRD 00120 EQU 00035001 R14,CNVCNST1+4 000120 57E0 D1B4 001B4 441= 00036001 000124 50E0 D194 00194 442= ST R14.CNVBUF1+4 00037001 FPR0, CNVBUF1 000128 6800 D190 99199 443= I D 00038001 00039001 00012C 6B00 D1B0 001B0 444= FPR0, CNVCNST1 SD 00130 445=CNVINST EQU 00040001 000130 6000 D198 00198 FPR0, CNVBUF2 00041001 446= STD 000134 D202 D199 D1B1 00199 001B1 447= MVC CNVBUF2+1(3), CNVCNST1+1 00042001 00013A 6A00 D198 00198 448= AD FPR0, CNVBUF2 00043001 00013E 07F8 00044001 449= BR 450= FOR LONG PRECISION, THESE 00045001 451=\* REAL TO INTEGER CONVERSION ARE REPLACED AT EXECUTION 00046001 452=\* TIME BY THE INSTRUCTIONS 00047001 453= AT CNVINSTD 00048001 454=ENTIER EOU \*-FSAREA 00049001 00140 000140 7000 D1A0 001A0 FPR0, CNVBUF3 00050001 455= STE 456= FPR0, CNVBUF3 000144 6800 D1A0 001A0 LD 00051001 000148 47F0 D158 00158 ENTIER1 00052001 457= В 458=\* 00053001 \*-FSAREA 459=CNVRDI 00054001 0014C EOU 00014C 7000 D1A0 001A0 FPR0, CNVBUF3 00055001 460= STE 000150 6800 D1A0 00056001 001A0 461= LD FPR0, CNVBUF3 00057001 000154 6A00 D1B8 001B8 463= ΔD FPR0, CNVCNST2 00058001 464=FNTTFR1 000158 6000 D1A8 00148 STD FPR0, CNVBUF4 00059001 00015C 7900 D1C8 FPR0, CNVCNST3 00060001 001C8 465= CE 000160 47BD 026C ERROR40(R13) 00061001 0026C 466= BNL 000164 6E00 D1B0 001B0 467= ΑW FPR0, CNVCNST1 00062001 000168 4720 D176 ВР LABEL1 00063001 00176 468= 00016C D507 D1A8 D1C0 001A8 001C0 469= CLC CNVBUF4(8), CNVCNST4 00064001 000172 472D 026C 0026C 470= BH ERROR40(R13) 00065001 000176 6000 D198 FPR0, CNVBUF2 00066001 00198 471=LABEL1 STD 472= 00017A 58E0 D19C 0019C R14, CNVBUF2+4 00067001 00017E 57E0 D1B4 001B4 473= R14, CNVCNST1+4 00068001 000182 6B00 D1B0 001B0 474= SD FPR0, CNVCNST1 00069001 000186 6900 D1A8 00018A 07D8 001A8 475= CD FPR0, CNVBUF4 99979991 BNHR 00071001 476= R8 00018C 06E8 477= BCTR R14,R8 00072001 00073001 00018E 0000 000190 479= DC an'a' 00074001 000190 4E0000000000000000 480=CNVBUF1 DC X'4E00000000000000000 00075001

```
Addr1 Addr2 Stmt Source Statement
                                                                                              X390 3.1.04 2012/08/17 13.21
  Loc Object Code
000198 00000000000000000
                                     481=CNVBUF2 DC
                                                                                                                    00076001
0001A0 00000000000000000
                                     482=CNVBUF3 DC
                                                         X'0000000000000000000'
                                                                                                                    00077001
0001A8 000000000000000000
                                     483=CNVBUF4 DC
                                                        D'a'
                                                                                                                    00078001
                                                         X'4E00000080000000'
0001B0 4E00000080000000
                                     484=CNVCNST1 DC
                                                                                                                    00079001
0001B8 4080000000000000
                                     485=CNVCNST2 DC
                                                         X'40800000000000000'
                                                                                                                    00080001
0001C0 C8800000000000000
                                     486=CNVCNST4 DC
                                                         X'C88000000000000000'
                                                                                                                    00081001
0001C8 48800000
                                     487=CNVCNST3 DC
                                                         X'48800000'
                                                                                                                    00082001
                                     488=*
                                                                                                                    00083001
                                                        0F'0
0001CC
                                     489=
                                                  DC
                                                                                                                    00084001
                                     490=
                                                                                                                    00085001
                                     491=*
                                                  END OF SYMLIB PART OF FIXED STORAGE AREA
                                                                                                                    00086001
                                     492=*
                                                                                                                    00087001
                                     493 *
                                                                                                                    00272001
                      991CC 999AC
9991CC
                                     494
                                                  ORG
                                                        FSARFA+ADSTAR
                                                                                                                    00273001
0000AC 00000000
                                                                                                                    00274001
                                     495
                                                  DC
                                                        A(IHIDSTAB)
                                     496
                                                                                                                    00275001
                                                ********************
                                     497
                                                                                                                    00276001
                                     498 *
                                                                                                                    00277001
                                     499 *
                                                  INSTRUCTIONS/DATA INSERTED INTO THE FSA AT BRLIST
                                                                                                                    00278001
                                     500
                                                                                                                    00279001
                                     00280001
                                     502
                                                                                                                    00281001
0000В0
                      000B0 000D4
                                     503
                                                        BRLIST
                                                                                                                    00282001
                 R:D
                      00000
                                     504
                                                  USING IHIFSARA, R13
                                                                                                                    00283001
                                                                                                                    00284001
                                     505
0000D4 47F0 D36C
                             0036C
                                                        CAP1A
                                                                                  CAP1
                                                                                                                    00285001
                                     506
                                                  В
0000D8 47F0 D3B6
                             003B6
                                     507
                                                        CAP2A
                                                                                  CAP2
                                                                                                                    00286001
                                                  В
0000DC 47F0 D3E0
                             003E0
                                                         PROLP
                                                                                  PROLOGP
                                                                                                                    00287001
0000E0 47F0 D3E8
                             003E8
                                     509
                                                         PROL
                                                                                  PROLOG
                                                                                                                    00288001
                                                  В
0000E4 47F0 D828
                            00828
                                     510
                                                  В
                                                         RETPROGA
                                                                                  RETPROG
                                                                                                                    00289001
0000E8 47F0 D85C
                             0085C
                                     511
                                                  В
                                                         EPILP
                                                                                  EPILOGP
                                                                                                                    00290001
0000EC 47F0 D874
                            00874
                                                         EPILB
                                                                                  EPILOGB
                                                                                                                    00291001
                                     512
                                                  В
0000F0 47F0 D8A0
                             008A0
                                     513
                                                         EPIL3
                                                                                  EPILPR3
                                                                                                                    00292001
0000F4 47F0 DB4A
                             00B4A
                                     514
                                                         CSWE1A
                                                                                  CSWE1
                                                                                                                    00293001
                                                  В
0000F8 47F0 DB9E
                             00B9E
                                     515
                                                         CSWE2A
                                                                                  CSWE2
                                                                                                                    00294001
                                                  В
0000FC 47F0 DBC6
                             99BC6
                                     516
                                                  В
                                                        LOADPPA
                                                                                  LOADPE
                                                                                                                    00295001
                                                                                                                    00296001
                                     517
                                                  TRACE
                                                                                                                    00297001
                                     518
                                                                                                                    00298001
                                     519 *
000100 D201 D0C0 F000 000C0 00000
                                     520
                                                  MVC
                                                        SCRCS(2,R13),0(R15)
                                                                                 INSERT SEMICOLON NUMBER
                                                                                                                    00299001
000106 47FF 0002
                             00002
                                     521
                                                  В
                                                        2(R15)
                                                                                 MODIFIED TO NOP IF TRACE
                                                                                                                    00300001
00010A 47F0 DC44
                                                                                                                    00301001
                             00C44
                                     522
                                                  В
                                                         TRACEA
00010E 47F0 D2D2
                            002D2
                                                         TERMN
                                                                                  TERMNTE
                                                                                                                    00302001
                                     523
                                                  В
000112 070F
                                     524
                                                  NOPR
                                                                                                                    00303001
                                                        R15
                                                                                  BCR
000114 47F0 D344
                             00344
                                     525
                                                         GETMAIN
                                                                                  GETMSTO
                                                                                                                    00304001
000118 47F0 D60C
                             0060C
                                     526
                                                        VALUCAL
                                                                                  VALUCALL
                                                                                                                    00305001
                                                  В
                                                                                                                    00306001
                                     527
                                                  COMMON I/O ROUTINES IHIIOR @ IORLST
                                                                                                                    00307001
                                     528
                                     529
                                                                                                                    00308001
00011C 00000DD8
                                     530
                                                        A(ADRLST)
                                                                                                                    00309001
                                     531 *
                                                                                                                    00310001
                                     532 **
                                                                                                                   00311001
                                                                                                                    00312001
                                     533
                                     534
                                                  EXITS FOR EXECUTION ERRORS
                                                                                                                    00313001
                                     535 *
                                                                                                                    00314001
                                            ************************
                                     536 ***
                                                                                                                   00315001
                                     537
                                                                                                                    00316001
                                     538 *
                                                                                                                    00317001
                                                  ENTRY POINTS FOR ALL TYPES OF EXECUTION ERRORS
                                                                                                                    00318001
                                     539
                                     540
                                                                                                                    00319001
                                     541 *
                                                  STORE THE ERROR NUMBER AND LINK TO THE ERROR
                                                                                                                    00320001
                                     542 *
                                                  ROUTINE IHIFSAER
                                                                                                                    00321001
                                                  THE NUMBER OF EACH ERROR IS DETERMINED BY ITS POSITION
                                     543
                                                                                                                    00322001
                                                  IN THE BRANCH LIST
                                                                                                                    00323001
                                     544
                                     545
                                                                                                                    00324001
                                     546 *
                                                  CALLING SEQUENCE -
                                                                                                                    00325001
                                     547 *
                                                        ERRORCONDITION, FSAERR+4*ERRORNUMBER(R13)
                                                                                                                    00326001
                                                  BC
                                     548 *
                                                                                                                    00327001
000120
                      00120 001CC
                                                  ORG
                                                        FSAERR+FSAREA
                                                                                                                    00328001
                                     549
                                     550 *
                                                                                                                    00329001
0001CC 4510 D27C
                             0027C
                                     551 IHIFSAER BAL
                                                         R1.FSAERRL
                                                                                                                    00330001
0001D0 4510 D27C
                            0027C
                                                                                                                    00331001
                                                  BAL
                                                         R1, FSAERRL
0001D4 4510 D27C
                            0027C
                                     553
                                                  BΔI
                                                         R1, FSAERRL
                                                                                  2
                                                                                                                    00332001
                                                                                                                    00333001
0001D8 4510 D27C
                            0027C
                                     554
                                                  BAL
                                                         R1. FSAERRL
0001DC 4510 D27C
                            0027C
                                                         R1.FSAERRL
                                                                                  4
                                                                                                                    00334001
                                     555
                                                  BAL
0001E0 4510 D27C
                            0027C
                                                         R1, FSAERRL
                                                                                                                    00335001
                                     556
                                                  BAL
0001E4 4510 D27C
                                                         R1, FSAERRL
                                                                                                                    00336001
                             0027C
                                                  BAL
0001E8 4510 D27C
                             0027C
                                     558
                                                  BAL
                                                         R1, FSAERRL
                                                                                                                    00337001
0001FC 4510 D27C
                                                                                                                    00338001
                            99270
                                     559
                                                  BΔI
                                                         R1.FSAFRRI
                                                                                  8
0001F0 4510 D27C
                                                                                  9
                                                                                                                    00339001
                             0027C
                                     560
                                                  BAL
                                                         R1, FSAERRL
0001F4 4510 D27C
                                                                                                                    00340001
                            0027C
                                                  BAL
                                                         R1, FSAERRL
                                                                                  10
                                     561
0001F8 4510 D27C
                             0027C
                                     562
                                                  BAL
                                                         R1, FSAERRL
                                                                                  11
                                                                                                                    00341001
0001FC 4510 D27C
                             0027C
                                                         R1, FSAERRL
                                                                                                                    00342001
                                     563
                                                  BAL
                                                                                  12
000200 4510 D27C
                             0027C
                                     564
                                                  BΔI
                                                         R1, FSAERRL
                                                                                  13
                                                                                                                    00343001
000204 4510 D27C
                             0027C
                                     565
                                                  BAL
                                                         R1, FSAERRL
                                                                                  14
                                                                                                                    00344001
000208 4510 D27C
                                                                                                                    00345001
                            0027C
                                     566
                                                  BAL
                                                         R1.FSAERRL
                                                                                 15
00020C 4510 D27C
                             0027C
                                     567
                                                  BAL
                                                         R1, FSAERRL
                                                                                  16
                                                                                                                    00346001
000210 4510 D27C
                             0027C
                                     568
                                                  BAL
                                                         R1, FSAERRL
                                                                                 17
                                                                                                                    00347001
                      00214
                                     569 NOMAIN
                                                  EQU
                                                         *-FSAREA
                                                                                                                   00348001
                                                                                                                   00349001
00350001
000214 4510 D27C
                            9927C
                                     570
                                                  BAL
                                                         R1, FSAERRL
                                                                                  18
000214 4510 D27C
                            0027C
                                     571
                                                  BAL
                                                         R1, FSAERRL
                                                                                 19
                      0021C
                                     572 ERROR20
                                                  EQU
                                                                                                                    00351001
                                                        *-FSAREA
                                     573 OERR20
                                                                                                                    00352001
                      0021C
                                                  EQU
                                     574 PARERR
                                                         *-FSAREA
                                                                                                                    00353001
                      0021C
                                                  EQU
00021C 4510 D27C
                            9927C
                                     575
                                                  BΔI
                                                         R1.FSAERRL
                                                                                  20
                                                                                                                    00354001
000220 4510 D27C
                            0027C
                                     576 ERROR21 BAL
                                                        R1, FSAERRL
                                                                                  21
                                                                                                                   00355001
```

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Loc Object Code
                                                                                                 X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt
                                            Source Statement
000224 4510 D27C
                              0027C
                                                           R1, FSAERRL
                                                                                                                        00356001
                                      577
                                                    BAL
                                                                                     22
                                                           R1, FSAERRL
000228 4510 D27C
                              0027C
                                      578
                                                    BAL
                                                                                     23
                                                                                                                        00357001
00022C 4510 D27C 000230 4510 D27C
                              0027C
                                      579
                                                    BAL
                                                           R1, FSAERRL
                                                                                     24
25
                                                                                                                        00358001
                                                           R1. FSAERRL
                                                                                                                        00359001
                              0027C
                                      580
                                                    BAL
000234 4510 D27C
                                                                                     26
                              0027C
                                      581
                                                    BAL
                                                           R1, FSAERRL
                                                                                                                        00360001
000238 4510 D27C
                                       582 ERROR27
                                                                                     27
                                                                                                                        00361001
                              0027C
                                                    BAL
                                                           R1, FSAERRL
00023C 4510 D27C
                              0027C
                                      583 ERROR28
                                                    BΔI
                                                           R1, FSAERRL
                                                                                     28
                                                                                           OCS FROM SPTE
                                                                                                                        00362001
000240 4510 D27C
                              0027C
                                      584 ERROR29
                                                    BΔI
                                                           R1, FSAERRL
                                                                                     29
                                                                                           OCC FROM SPTE
                                                                                                                        00363001
000244 4510 D27C
                                      585 ERROR30
                                                                                           0C9 FROM SPIE
                              0027C
                                                    BAL
                                                           R1. FSAERRL
                                                                                     30
                                                                                                                        00364001
000248 4510 D27C
                                      586 ERROR31
                                                           R1, FSAERRL
                                                                                     31
                                                                                                                        00365001
                              0027C
                                                    BAL
00024C 4510 D27C
                              0027C
                                      587
                                           ERROR32
                                                    BAL
                                                           R1. FSAERRL
                                                                                     32
                                                                                                                        00366001
000250 4510 D27C
                                      588 ERROR33
                                                                                           OCX FROM SPIE
                                                                                                                        00367001
                              0027C
                                                    BAL
                                                           R1, FSAERRL
                                                                                     33
                       00254
                                      589 ERROR34
                                                    EQU
                                                                                                                        00368001
                       00254
                                      590 SWDMERR
                                                    FOU
                                                           *-FSARFA
                                                                                                                        00369001
000254 4510 D27C
                              0027C
                                                                                                                        00370001
                                      591
                                                           R1, FSAERRL
                                                                                     34
                                                    BAL
000258 4510 D27C
                                      592 ERROR35
                                                                                     35
                                                                                                                        00371001
                              0027C
                                                    BAL
                                                           R1, FSAERRL
                       0025C
                                      593 ERROR36
                                                    EOL
                                                                                                                        00372001
                                                           *-FSAREA
                       0025C
                                      594 RASOVERF
                                                    EOU
                                                                                                                        00373001
00025C 4510 D27C
                              0027C
                                      595
                                                    BAL
                                                           R1, FSAERRL
                                                                                     36
                                                                                                                        00374001
000260 4510 D27C
                                                                                                                        00375001
                              0027C
                                                    BAL
                                                           R1.FSAERRL
                                                                                     37
                                      596
000264 4510 D27C
                              0027C
                                                           R1, FSAERRL
                                                                                                                        00376001
                                      597
                                                    BAL
                                                                                     38
000268 4510 D27C
                              0027C
                                      598
                                                    BAL
                                                           R1, FSAERRL
                                                                                     39
                                                                                                                        00377001
00026C 4510 D27C
                              0027C
                                      599
                                                    BAL
                                                           R1, FSAERRL
                                                                                     40
                                                                                                                        00378001
                       00270
                                      600 DDERROR
                                                    EQU
                                                           *-FSAREA
                                                                                                                        00379001
000270 4510 D27C
                                                                                                                        00380001
                              9927C
                                      601
                                                    RΔI
                                                           R1.FSAERRL
                                                                                     41
                                                            -FSAREA
                       00274
                                      602 INVOPT
                                                                                                                        00381001
                                                    EQU
000274 4510 D27C
                              0027C
                                                    BAL
                                                           R1.FSAERRL
                                                                                                                        00382001
                                      603
000278 4510 D27C
                                                                                                                        00383001
                              0027C
                                      604
                                                    BAL
                                                           R1, FSAERRL
                                                                                     43
                                      605 *
                                                                                                                        00384001
                                      606
                                                    LINK TO ERROR ROUTINE IHIFSAERR
                                                                                                                        00385001
                                      607
                                                                                                                        00386001
00027C 4110 1000
                              00000
                                      608 FSAERRL
                                                                                     ZERO HIORDER BYTE
                                                                                                                        00387001
                                                    LA
                                                           R1.0(.R1)
000280 5B10 DE40
                              00E40
                                                           R1,=A(IHIFSAER+4)
                                                                                     ERRORNUMBER*4 IN R1
                                                                                                                        00388001
000284 421D 00C3
                              000C3
                                                           R1, FSAERCOD(R13)
                                                                                     SAVE ERROR CODE
                                                                                                                        00389001
                                      610
                                                    STC
000288 9108 D0C2
                       000C2
                                      611
                                                    TM
                                                           OPTSW(R13), ERROR
                                                                                     TO PREVENT ENTERING
                                                                                                                        00390001
                              992CA
                                                                                     FRROR ROUTTNE
00028C 4710 D2CA
                                      612
                                                    RΩ
                                                           TFRMΔΔ
                                                                                                                        00391001
                                                                                     MORE THAN ONCE
                                                                                                                        00392001
000290 9608 D0C2
                       000C2
                                                           OPTSW(R13), ERROR
                                      613
                                                    ΟI
                                                                                                                        00393001
                                      614
                                                                                                                       X00394001
                                      615
                                                           IHIERROR
                                                           (FRDSA, SPDAP, IHIIOROP, IHIIORCP, IHIIORNX)
                                                                                                                        00395001
000294
                                      616+
                                                    CNOP
                                                           0.4
                                                                                                                        01-CALL
                                                                                               BRANCH AROUND VCON
000294 47F0 D29C
                              0029C
                                      617+
                                                    В
                                                           *+8
                                                                                                                        01-CALL
000298 00000000
                                                           V(IHIERROR)
                                                                                               ENTRY POINT ADDRESS
                                      618+IHB0001B DC
                                                                                                                        01-CALL
                                      619+
                                                    CNOP
                                                           0.4
                                                                                                                        02-IHBOR
00029C 4510 D2B4
                              002B4
                                      620+
                                                           1,IHB0002A
                                                                                               LOAD LIST ADDR IN REG1 02-IHBOP
                       002A0
                                      621+IHB0002
                                                                                                                        02-IHBOP
                                                    EQU
                                                                                PROB. PROG. PARAMETER
000240 00000874
                                                           A(FRDSA)
                                      622+
                                                    DC
                                                                                                                        02-THROP
0002A4 00000B44
                                                           A(SPDAP
                                                                                PROB.PROG.PARAMETER
                                                    DC
                                      623+
                                                                                                                        02-IHBOF
                                                                                 PROB.PROG.PARAMETER
0002A8 00000000
                                      624+
                                                    DC
                                                           A(IHIIOROP)
                                                                                                                        02-IHBOP
0002AC 00000000
                                      625+
                                                    DC
                                                           A(IHIIORCP)
                                                                                PROB.PROG.PARAMETER
                                                                                                                        02-IHBOP
9992B9 99
                                      626+
                                                    DC
                                                           B'00000000
                                                                                               SET VL SWITCH BIT
                                                                                                                        02-IHBOP
0002B1 000000
                                      627+
                                                    DC
                                                           AL3(IHIIORNX)
                                                                                               PROB. PROG. PARAMETER
                                                                                                                        02-IHBOP
                                      628+IHB0002A EOU
                       002B4
                                                                                                                        02-IHBOF
0002B4 58F0 D298
                              00298
                                      629+
                                                           15, IHB0001B
                                                                                               LOAD 15 WITH ENTRY ADR 01-CALL
                                                                                               BRANCH TO ENTRY POINT
0002B8 05EF
                                      630+
                                                    BALR
                                                          14,15
                                      631 *
                                                                                                                        00396001
                  R:7 00E70
                                      632
                                                    USING IHIFSARB, R7
                                                                                                                        00397001
                                      633 *
                                                                                                                        00398001
                                                    ABNORMAL TERMINATION
                                                                                                                        00399001
                                      634
                                      635
                                                                                                                        00400001
0002BA 5870 DE44
                              00E44
                                      636 TERMA
                                                           R7,=A(IHIFSARB)
                                                                                                                        00401001
0002BE 9110 D0C2
                       000C2
                                      637
                                                    тм
                                                           OPTSW(R13), TERMSW
                                                                                                                        00402001
                                                           ALGTRMAA
                                                                                     IF ERROR IN TERM ROUTINE
                                                                                                                        00403001
0002C2 4710 74F2
                              01362
                                      638
                                                    BO
                                                                                                                        00404001
0002C6 47F0 72A8
                                      639
                                                           AI GTRMA
                              01118
                                                    В
                                      640
                                                                                                                        00405001
                                      641 *
                                                    VERY ABNORMAL TERMINATION
                                                                                                                        00406001
                                      642 *
                                                                                                                        00407001
0002CA 5870 DE44
                              00F44
                                      643 TERMAA
                                                           R7.=A(IHIFSARB)
                                                                                                                        00408001
                                                                                                                        00409001
0002CE 47F0 74F2
                              01362
                                      644
                                                    В
                                                           ALGTRMAA
                                      645
                                                                                                                        00410001
                                                    NORMAL TERMINATION
                                      646
                                                                                                                        00411001
                                                                                                                        00412001
                                       647
0002D2 5870 DE44
                              99F44
                                      648 TERMN
                                                           R7.=A(IHIFSARB)
                                                                                                                        00413001
                                                                                                                        00414001
0002D6 47F0 72B0
                              01120
                                      649
                                                    В
                                                           ALGTRMN
                                                                                                                        00415001
                                      650
                                                                                                                        00416001
                                      651
                                                    DROP
                                                           R7
0002DA
                       002DA 002DA
                                                                                                                        00417001
                                      653 *
                                                                                                                        00418001
                                      654 **
                                                                                                                        99419991
                                                                                                                        00420001
                                      655
                                                                                                                        00421001
                                      656
                                                    INSTRUCTIONS FOR SHORT OR LONG FLOATING POINT PRECISION
                                      657
                                                                                                                        00422001
                                       658 ******
                                                   *************************
                                                                                                                        00423001
                                      659
                                                                                                                        00424001
                                                    THE FOLLOWING INSTRUCTIONS ARE MODIFIED BY THE
                                      660
                                                                                                                        00425001
                                                    INITIALIZATION ROUTINE FOR SHORT OR LONG PRECISION AS
                                                                                                                        00426001
                                      661
                                      662
                                                    REQUIRED
                                                                                                                        00427001
                                      663 *
                                                                                                                        00428001
                       002DA
                                      664 FPINST
                                                                                                                        00429001
                                                    EQU
                                      665
                                                                                     USED BY VALUCALL
                                                                                                                        00430001
                                      666 VALLD
                                                                                                                        00431001
0002DA 7801 0000
                              00000
                                                    LE
                                                           0,0(R1)
0002DE 7002 0000
                                          VALST
                                                    STE
                                                                                                                        00432001
                              00000
                                      667
                                                          0,0(R2)
                                                                                                                        00433001
                                      668
                                                                                      USED BY SPDECL
0002E2 7802 0000
                              00000
                                                                                                                        00434001
                                      669 LINSTR
                                                           0,0(R2)
0002E6 700D 0090
                              00090
                                      670 STINSTR STE
                                                          0, FCTVALST(R13)
                                                                                                                        00435001
0002EA 3200
                                      671 LTRINSTR LTER
                                                          0.0
                                                                                                                        00436001
```

```
Addr1 Addr2 Stmt Source Statement
                                                                                             X390 3.1.04 2012/08/17 13.21
  Loc Object Code
0002EC 0700
                                                                                                                   00437001
                                                  NOPR 0
                      002EE
                                     673 FPINSTE EQU
                                                                                                                   00438001
0002EE 3000
                                     674 LPRINSTR LPER 0,0
                                                                                                                  00439001
00440001
                                     675
                                                                                                                   00441001
0002F0 000002DA00000004
                                     676 FPINSTAD DC
                                                        A(FPINST, 4, FPINSTE)
                                                                                                                   00442001
                                     678 *
                                                  ONE OF THE FOLLOWING SETS OF INSTRUCTIONS IS INSERTED
                                                                                                                   00443001
                                                  INTO THE CONVERT ROUTINE BY THE INITIALIZATION ROUTINE IN ORDER TO SET UP FOR LONG OR SHORT PRECISION AS
                                     679
                                                                                                                  00444001
                                                                                                                   00445001
                                     680
                                                                                                                   00446001
                                                  REOUIRED
                                     681
                                     682
                                                                                                                   00447001
                                     683 *
                                                  SHORT PRECISION
                                                                                                                   00448001
                                     684 *
                                                                                                                   00449001
                                     685 CNVTNSTE STD
0002FC 6000 D198
                            00198
                                                        FPR0. CNVBUE2
                                                                                                                   00450001
000300 D202 D199 D1B1 00199 001B1
                                                        CNVBUF2+1(3), CNVCNST1+1
                                                                                                                   00451001
                                     686
                                                  MVC
000306 6A00 D198
                                                        FPRØ, CNVBUF2
                            00198
                                     687
                                                  AD
                                                                                                                   00452001
                                                                                                                   00453001
00030A 07F8
                                     688
                                                  BR
                                     689 *
                                                                                                                   00454001
00030C 7000 D1A0
                            001A0
                                     690
                                                  STE
                                                        FPR0.CNVBUF3
                                                                                                                   00455001
                                                                                                                  00456001
000310 6800 D1A0
                            001A0
                                     691
                                                        FPR0, CNVBUF3
                                                  LD
000314 47F0 D158
                                                        ENTIER1
                                                                                                                   00457001
                            00158
                                     692
                                                  В
                                     693
                                                                                                                   00458001
000318 7000 D1A0
                             001A0
                                     694
                                                  STE
                                                        FPR0, CNVBUF3
                                                                                                                   00459001
                                                                                                                  00460001
00461001
00031C 6800 D1A0
                             001A0
                                     695
                                                  LD
                                                        FPR0, CNVBUF3
                                     696
                                                  LONG PRECISION
                                                                                                                   00462001
                                     697
                                     698 *
                                                                                                                   00463001
000320 07F8
                                     699 CNVINSTD BR
                                                                                                                   00464001
                                                        R8
                                     700 *
                                                                                                                   00465001
000322 FFFFFFFFFFFFFF
                                     701
                                                  DC
                                                        14X'FF'
                                                                                                                   00466001
000330 47F0 D158
                            00158
                                     702
                                                  В
                                                        ENTIER1
                                                                                                                   00467001
                                                                                                                   00468001
                                     703
000334 FFFFFFFFFFFFF
                                                  DC
                                                        8X'FF'
                                                                                                                   00469001
00033C 6A00 D1B8
                            001B8
                                                        FPR0, CNVCNST2
                                                                                                                   00470001
                                     705
                                                  AD
000340 47F0 D158
                            00158
                                     706
                                                  В
                                                        ENTIER1
                                                                                                                   00471001
                                     797
                                                                                                                   00472001
                      00024
                                                                                                                   00473001
                                     708 CNVINSTL EQU
                                                        *-CNVINSTD
                                                                                                                   00474001
                                     709
                                     00475001
                                     711 *
                                                                                                                   00476001
                                     712 *
                                                  GETMAIN ROUTINE
                                                                                                                   00477001
                                     713 *
                                                                                                                   00478001
                                            ******************
                                                                                                                   00479001
                                     714
                                                                                                                   00480001
                                     715
                                     716 *
                                                  ISSUE A CONDITIONAL GETMAIN IN RESPONSE TO A REQUEST BY
                                                                                                                   00481001
                                     717 *
                                                                                                                  00482001
00483001
                                                  THE OBJECT MODULE FOR STORAGE FOR AN ARRAY. IF STORAGE
                                                  IS NOT AVAILABLE, AN ERROR EXIT IS TAKEN
                                     718
                                                                                                                   00484001
                                     719
                                                                                                                   00485001
                                     720
                                                  CALLING SEQUENCE - (ENTRY VIA BRLIST)
                                                                                                                   00486001
                                     722 *
                                                  BAL
                                                        R8.GETMSTO(R13)
                                                                                 LENGTH OF AREA IN RO
                                                                                                                   00487001
                                     723 *
                                                                                                                   00488001
                                                                                 RETURN WITH ADDR IN R1
                                     724 *
                                                                                                                   00489001
                                                                                                                   00490001
000344 1820
                                     725 GETMAIN
                                                                                 LENGTH VALUE
                                                 LR
                                                        R2.R0
                                     726
                                                                                                                   00491001
                                     727
                                                  GETMAIN EC, LV=(R2), A=STORAGE
                                                                                                                   00492001
                                     728+
                                                  OS/VS2 RELEASE 4 VERSION -- 10/21/75
                                                                                                                  01-GETMA
000346 0700
                                     729+
                                                  CNOP
                                                        9.4
                                                                                                                  01-GETMA
000348 4510 D356
                                                        1,*+14
                                                                                           BRANCH AROUND LIST
                            00356
                                     730+
                                                  BAL
                                                                                                                  01-GETMA
00034C 00000000
                                     731+
                                                  DC
                                                        A(0)
                                                                                           LENGTH
                                                                                                                  01-GETMA
000350 00000368
                                                        A(STORAGE)
                                                                                ADDR. OF ADDR. LIST
                                                                                                                  01-GETMA
                                     732+
000354 20
                                     733+
                                                  DC
                                                        BL1'00100000'
                                                                                           MODE AND OPTION FLAGS
                                                                                                                  01-GETMA
                                                                                           SUBPOOL VALUE
000355 00
                                     734+
                                                  DC
                                                        AL1(0)
                                                                                                                   01-GETMA
                                                                                           STORE LENGTH INTO LIST
000356 5020 1000
                            00000
                                                                                                                  01-GETMA
                                    735+
                                                  ST
                                                        R2,0(0,1)
                                                                                           ISSUE GETMAIN SVC
00035A 0A04
                                     736+
                                                  SVC
                                     737 *
                                                                                                                   00493001
00035C 12FF
                                     738
                                                  LTR
                                                        R15,R15
                                                                                                                   00494001
00035E 477D 0214
000362 5810 D368
                             00214
                                     739
                                                  BNZ
                                                        NOMAIN(R13)
                                                                                                                   00495001
                                     740
                                                                                                                  00496001
                             00368
                                                        R1.STORAGE
000366 07F8
                                     741
                                                  BR
                                                                                 RETURN TO CALLING PROG
                                                                                                                   00497001
                                                        R8
                                                                                                                   00498001
                                     742 *
000368 00000000
                                                                                                                   00499001
                                     743 STORAGE DC
                                                                                 ADDR OF THE AREA
                                     744 *
                                                                                                                   00500001
                                                                                                                  00501001
                                     745
                                                                                                                   00502001
                                     746
                                     747 *
                                                  CALL ACTUAL PARAMETER ROUTINE
                                                                                                                   00503001
                                     748 *
                                                                                                                   00504001
                                     00505001
                                     750 *
                                                                                                                   00506001
                                     751 *
                                                                                                                   00507001
                                                  THIS ROUTINE IS AN INTERMEDIATE LINK BETWEEN A PROCEDURE
                                                                                                                   00508001
                                     752
                                                  AND THE THUNK FOR AN ACTUAL PARAMETER TO THE PROCEDURE.
                                                                                                                   00509001
                                     753
                                     754 *
                                                  IT SEARCHES THE DSA CHAIN FOR THE DSA OF THE PROCEDURE
                                                                                                                   00510001
                                     755 *
                                                  DECLARATION. THEN IT LOADS THE THUNK ADDR FROM THIS
                                                                                                                  00511001
                                                  DSA, LOADS CDSA WITH THE DSA ADDR OF THE ENCLOSING
                                     756
                                                                                                                   00512001
                                                  BLOCK AND BRANCHES TO THE THUNK
                                                                                                                   00513001
                                     757
                                     758
                                                                                                                   00514001
                                     759 *
                                                  CALLING SEQUENCE - (ENTRY VIA BRLIST)
                                                                                                                   00515001
                                     760
                                                                                                                  00516001
                                                                                                                  00517001
00518001
                                     761
                                                  BAL
                                                        R15, CAP1(R13)
                                                                                 PBN OF PROCEDURE
                                     762
                                                  DC
                                                        H'PBN1
                                     763
                                                  DS
                                                                                                                   00519001
                                     764 *
                                                        R8, DISPL(CDSA)
                                                                                 LOAD ADDR OF THUNK
                                                                                                                   00520001
                                     765
                                                                                 RETURN FROM THUNK VIA CAP2
                                                                                                                   00521001
                                     766
                                                                                 WITH PARAM ADDR IN R8
                                                                                                                   00522001
                                     767
                                                                                                                   00523001
```

		t Code	•	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08	/17 13.21
LUC	20760	Code	0036C	Auui Z		CAP1A	EOU	*	A330 3.1.04 2012/00	00524001
00036C	58ED	00C8	00300	000C8		CAPA	L	R14, RASPT(R13)	RAS POINTER FROM TOP	00525001
000370				0000C	770		ST	R15,12(,R14)	SAVE RETURN ADDR IN RAS	00526001
000374	4810	F000		00000	771		LH	R1,0(,R15)	PBN OF PROCEDURE	00527001
000378				00000	772		LA	R1,0(R1,PBT)	PROCEDURE ENTRY IN PBT	00528001
00037C				80000		CAPI1	LA	R14,8(,R14)	RESERVE ONE ENTRY IN RAS	00529001
000380				000D0	774		C	R14, RASPB (R13)	CHECK FOR STACK OVERFLOW	00530001
000384				0025C 00000	775 776		BNL ST	RASOVERF(R13)	SAVE DSA POINTER IN RAS	00531001
000388 00038C				00008	777		AH	CDSA,0(,R14) PBT,8(,CDSA)	ADDR OF CURRENT PBT ENTRY	00532001 00533001
000300				00000	778		L	R2,0(,CDSA)	LAST GENERATION DSA POINTER	00533001
000394				00000	779		ST	R2,0(,PBT)	IS STORED IN PBT ENTRY	00535001
000398	191B				780		CR	R1,PBT	RIGHT PROCEDURE REACHED	00536001
00039A				00004	781		EX	0,4(,R15)	LOAD ADDR OF THUNK	00537001
00039E				00004	782		L	CDSA,4(,CDSA)	LOAD DYNAMICALLY ENCLOSING DSA	00538001
0003A2				00010	783		LM	PBT, LAT, 16(CDSA)	PBT AND LAT CAN BE DIFFERENT	00539001
0003A6 0003AA		000		000C8	784 785		ST BZR	R14,RASPT(R13) R8	SAVE RAS TOP POINTER TO THUNK OF ACTUAL PARAM	00540001 00541001
0005AA	0,00				786	*	DZI		IF RIGHT BLOCK REACHED	00542001
0003AC	1B22				787		SR	R2, R2	ZERO TO RETURN ENTRY IN	00543001
0003AE	5020	E00C		0000C	788		ST	R2,12(,R14)	RAS INSTEAD OF R15	00544001
0003B2	47F0	D37C		0037C	789		В	CAPI1		00545001
					790					00546001
					791 792		HANDLE	THE TRANSFER FROM THE	THUNK BACK TO THE PROCEDURE	00547001
					793		RELOAD	CDSA WITH THE ADDR OF	THE DSA THAT WAS ACTIVE	00548001 00549001
					794			CAP1 WAS ENTERED	THE BOA THAT WAS ACTIVE	00550001
					795					00551001
					796	*	CALLI	NG SEQUENCE - (ENTRY VIA	BRLIST)	00552001
					797		В	CAP2(R13)		00553001
			00255		798		FOU	*		00554001
			003B6 003B6			CAP2A CAPB	EQU EQU	*		00555001 00556001
0003B6	58FD	00C8	00000	000C8	801	כתו ט	L	R14, RASPT(R13)	RAS POINTER FROM TOP	00557001
0003BA				00000		CAPI3	Ĺ	CDSA,0(,R14)	DSA POINTER FROM RAS	00558001
0003BE				00010	803		LM	PBT, LAT, 16(CDSA)	PBT AND LAT CAN BE DIFFERENT	00559001
0003C2	58FE	0004		00004	804		L	R15,4(R14)	RETURN ADDR FROM RAS	00560001
0003C6				000AA	805		SH	R14,EIGHT(R13)	RELEASE ONE ENTRY IN RAS	00561001
0003CA				00008	806		LH	R1,8(CDSA)	PROGRAM BLOCK NUMBER TO REG	00562001
0003CE 0003D2		вооо		00000	807 808		ST LTR	CDSA,0(R1,PBT) R15,R15	CURRENT DSA POINTER TO PBT CALLING BLOCK REACHED	00563001 00564001
0003D2		D3RΔ		003BA	809		BZ	CAPI3	NO CONTINUE	00565001
0003D4				000C8		CAPI4	ST	R14, RASPT(R13)	SAVE RAS TOP POINTER	00566001
0003DC				80000	811		В	8(,R15)	RETURN TO CALLING SEQUENCE	00567001
					812					00568001
							*****	*********	***********	
					814 815		PROLOG	GUE PROGRAM		00570001 00571001
					816		1 NOLO	T ROSHAIT		00572001
					817	******	*****	********	***********	00573001
					818					00574001
					819				EVER A BLOCK OR PROCEDURE	00575001
					820 821		15 10	BE ENTERED		00576001 00577001
					822		TT CRE	EATES AND INTITALIZES A	NEW DSA. FOR A PROCEDURE	00578001
					823				PARAMETER LIST TO THE DSA	00579001
					824	*	AND CH	HECKS IT AGAINST THE FOR	MAL PARAMETER LIST IN THE	00580001
					825			DURE DECLARATION. THEN I	T ENTERS THE BLOCK OR	00581001
					826		PROCE			00582001
					827 828			ITRY POINT PROLOGP IS US LLED VIA AN ACTUAL PARAM	ED ONLY WHEN THE PROCEDURE	00583001
					828 829		PROCEI		LIER TO ANOTHER	00584001 00585001
					830					00586001
					831		CALLI	NG SEQUENCE (ENTRY VIA B	RLIST)	00587001
					832		BAL	R15, PROLOG(R13)		00588001
					833		MVI	PROLPBN(R13), PBN	PBN OF BLOCK TO BE ENTERED	00589001
					834 835		DC	A(THINK1)	PARAMETER LIST FOR PROCEDURE ADDR OF THUNK FOR 1ST PARAM	00590001 00591001
					835		DC	A(THUNK1) H'CH'	CHARACTERISTICS OF 1ST PARAM	00591001
					837		DC	H'N'	NUMBER OF PARAMETERS	00593001
					838				-	00594001
					839					00595001
					840			A /TUUNIKAIN	ADDR OF THINK FOR LAST BARAT	00596001
					841 842		DC DC	A(THUNKN) H'CH'	ADDR OF THUNK FOR LAST PARAM	00597001 00598001
					843		DC	H'0'		00599001
					844			•		00600001
0003E0	9200	D0A8	000A8		845	PROLP	MVI	PROLPBN-1(R13),X'00'		00601001
					846		c== -		oc To DETECT	00602001
					847			FF SW SET BY GENERATE PR	UG TO DETECT ERROR	00603001
					848 849		SEE BE	ELOW		00604001 00605001
0003E4	98BC	D0A0		000A0	850		LM	PBT,LAT,PROLREG(R13)	UPDATE PBT AND LAT	00606001
		-			851	*				00607001
0003E8				8A000		PROL	LH	R3, PROLPBN-1(R13)	CALLED PROGRAM BLOCK NUMBER	00608001
0003EC		0003		00003	853		SLL	R3,3	CALCULATE PBT DISPLACEMENT	00609001
0003F0		D024		00024	854		LTR P7	R2, R3	STANDARD PROCEDURE CALLED ?	00610001
0003F2 0003F6				00924 00220	855 856		BZ BM	SPDECL(,R13) OERR21(R13)	YES, BRANCH ERROR, ACTUAL PROCEDURE	00611001 00612001
0003F0	7/4U	U220		00220	857	*	Di-I	OFWINET ( INTO )	ERROR, ACTUAL PROCEDURE	00612001
					858		PARAME	TER IS PARAMETERLESS WH	ILE FORMAL PROCEDURE IS	00614001
					859			WITH PARAMETERS		00615001
					860				GENERATED PROG BEFORE CAP1	00616001
					861		WAS CA	ALLED		00617001
0003FA	1 <b>43</b> R				862 863	•	AR	R3, PBT	ADDR OF PBT ENTRY	00618001 00619001

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							_				
Loc	Objec	t Code	е	Addr1	Addr2	Stmt	Source	Stater	ment	X390 3.1.04 2012/08,	/17 13.21
0003FC				00006		864		TM	6(R3),BETABM	PROCEDURE CALLED ?	00620001
000400 000404					00414 00098	865 866		BZ C	PROLOG1 R8,ASTLOC(,R13)	NO COMP CONT OF ADDR WITH ADDR OF	00621001 00622001
						867	*			FUNCTION VALUE STORAGE	00623001
000408 00040C				00006	00220	868 869		BE TM	OERR21(,R13) 6(R3),CODEPRM	EQUAL, BRANCH CODE PROCDURE CALLED ?	00624001 00625001
000410				00000	005EA	870		ВО	PROLOG2	YES.	00626001
000414		3004			00004		PROLOG1	LH	R0,4(,R3)	LENGTH OF DSA TO REG 0	00627001
000418	184F					872 873	*	LR	R4, R15	SAVE R15 DURING GETMAIN	00628001 00629001
						874			IN R, LV=(0)	GETMAIN FOR DSA	00630001
00041A	4510	D41F			0041E	875+ 876+		OS/VS2 BAL	2 RELEASE 4 VERSION 1 1,*+4	.0/21/75 INDICATE GETMAIN	01-GETMA 01-GETMA
00041E		D-11L			00412	877+		SVC	10	ISSUE GETMAIN SVC	01-GETMA
000420	105/					878	*	I D	D1E D4		00631001
000420 000422		В000			00000	879 880		LR L	R15,R4 R0,0(R2,PBT)	LOAD POINTER OF LAST GENERATION	00632001 00633001
000426					00000	881		ST	R0,0(,R1)	STORE IT IN DSA	00634001
00042A 00042E					00004 00008	882 883		ST STH	CDSA,4(,R1) R2,8(,R1)	STORE POINTER OF EMBRACING PB STORE PBT DISPLACEMENT	00635001 00636001
000432				A0000		884		MVI	10(R1),0	ZEROS TO VALUE ARRAY AND	00637001
000436 00043C			100A	0000B	0000A 00000	885 886		MVC ST	11(5,R1),10(R1) R1,0(R2,PBT)	ARRAY POINTERS STORE CURR DSA POINTER IN PBT	00638001 00639001
000440	18A1					887		LR	CDSA, R1	SET CDSA POINTER	00640001
000442 000446					00010 000C8	888 889		STM L	PBT,LAT,16(CDSA) R14,RASPT(R13)	RAS-POINTER TOP	00641001 00642001
00044A					00008	890		LA	R14,8(R14)	RESERVE ONE ENTRY	00643001
00044E					000D0	891		C	R14, RASPB(R13)	COMPARE WITH RAS-POINTER BOTTOM	00644001
000452 000456					0025C 00000	892 893		BNL ST	RASOVERF(R13) CDSA,0(,R14)	STACK OVERFLOW	00645001 00646001
00045A	92FF	E000		00000		894		MVI	0(R14),X'FF'		00647001
00045E 000462				00006	000C8	895 896		ST TM	R14,RASPT(R13) 6(R3),BETABM	SAVE POINTER PROCEDURE CALLED ?	00648001 00649001
000466						897		BZR	R15	NO, USUAL BLOCK RETURN, EXIT 1	00650001
000468 00046C				00007	005E4	898 899	A4	CLI BE	7(R3),0 F4	ANY FORMAL PARAMETERS ? ZERO, BRANCH	00651001 00652001
000460			F007	00007		900		CLC	7(1,R3),7(R15)	COMP NO OF FORM AND ACT PARAM	00653001
000476		D220			00220	901		BNE	OERR21(,R13)	¬=, BRANCH	00654001
00047A 00047C		3007			00007	902 903		SR IC	R2, R2 R2, 7(, R3)	FETCH NUMBER OF PARAMETERS	00655001 00656001
000480						904		LR	R4, R2	SAVE NUMBER IN R4	00657001
000482 000486		0003			00003	905 906		SLL BCTR	R2,3 R2,0	CALCULATE LENGTH OF PARAMETER ENTRY-1	00658001 00659001
000488	411A				00018	907		LA	R1,24(CDSA)	START OF PARAM IF PROC	00660001
00048C 000490				00006	004A8	908 909		TM BZ	6(R3),PIMASK PROLOG3	FUNCTION PROCEDURE CALLED YES	00661001 00662001
000494					0049C	910		EX	R2, PIMOVE	125	00663001
000498	47F0	D4B0			004B0	911 912	*	В	LOOP		00664001
00049C	D200	A018 F	F000	00018	00000		PIMOVE	MVC	24(1,CDSA),0(R15)	MOVE PROCEDURE PARAMETERS	00665001 00666001
0004A2			F000	00020				MVC	32(1,CDSA),0(R15)	MOVE FUNCTION PARAMETERS	00667001
0004A8 0004AC					004A2 00008	915	PROLOG3	EX LA	R2, PHIMOVE R1, 8(R1)	START OF PARAM. IF TYPE	00668001 00669001
0004B0				00000			LOOP	TM	0(R8),X'01'	FORM PAR 'STRING' ?	00670001
0004B4 0004B8				00001	004FC	918 919		BO CLI	STRTST 1(R8),X'D0'	YES, GOTO STRINGTEST FORM PAR 'PROC' WITHOUT TYP ?	00671001 00672001
0004BC	4780	D508			00508	920		BE	PROTST	YES, GOTO PROCEDURE TEST	00673001
0004C0 0004C4				00001	00514	921 922		CLI BE	1(R8),X'1C' SWTTST	FORM PAR 'SWITCH' ? YES, GOTO SWITCH TEST	00674001 00675001
0004C8				00001	00314	923		TM	1(R8),X'08'	FORM PAR 'LABEL' ?	00676001
0004CC 0004D0				00001	0051C	924 925		BO TM	LBLTST	YES, GOTO LABEL TEST FORM PAR 'ARRAY' ?	00677001
0004D0				00001	00530	926		BO	1(R8),X'04' ARRTST	YES, GOTO ARRAY TEST	00678001 00679001
0004D8				00001	00536	927		TM	1(R8),X'C0'	FORM PAR A TYP PROCEDURE ?	00680001
0004DC 0004E0				00005	0053C	928 929		BO TM	TPRTST 5(R15), X'04'	YES, GOTO TYP PROCEDURE TEST ACT PAR 'ARRAY' ?	00681001 00682001
0004E4	4710	D21C			0021C	930		ВО	OERR20(,R13)	YES, ERR 20	00683001
0004E8 0004EC				00001	00548	931 932	TYPTST	TM BM	1(R8),X'03' ARITST	TEST TYP IF ARITHM TYP GOTO ARITH TEST	00684001 00685001
0004F0	9103	F005		00005		933		TM	5(R15),X'03'	ACT PAR BOOL ?	00686001
0004F4 0004F8					00574 0021C	934 935		BO B	ASSFLAG OERR20(,R13)	YES, SPECIAL ASSIGNMENT TEST NO, GOTO ERR 20	00687001 00688001
000+10	-710	2210			JU21C	936	*	_		-	00689001
0004FC 000500				00004	005D4	937 938	STRTST	TM BO	4(R15),X'01' EXIT	ACT PAR 'STRING' ? YES, TEST NEXT PAR	00690001 00691001
000504					003D4 0021C	938		В	OERR20(,R13)	NO, BRANCH TO OBJEXT TIME ERR 20	
000508				00005		940		TM	5(R15),X'C0'	ACT PAR IS 'PROCEDURE' ?	00693001
00050C				00005	0021C	941	PROTST	BZ	OERR20(,R13)	NO, ERR 20	00694001 00695001
000510					005D4	943		В	EXIT	YES, TEST NEXT PAR	00696001
000514	9100	F005		00005		944 945	* SWTTST	TM	5(R15),X'0C'	ACT PAR 'SWITCH' ?	00697001 00698001
000518					00500	946		В	STRTST+4	BRANCH TO STRTST+4 TO TEST CC	00699001
00051C	9100	FOOF		00005		947 948	* LBLTST	ТМ	5(R15),X'08'	ACT PAR 'LABEL' ?	00700001 00701001
000510				50003	0021C	948	-0131	BZ	OERR20(,R13)	NO, ERR 20	00702001
000524				00005	00210	950		TM	5(R15),X'04'	ACT PAR 'SWITCH' ?	00703001
000528 00052C					0021C 005D4	951 952		BO B	OERR20(,R13) EXIT	YES, ERR 20 TEST NEXT PAR	00704001 00705001
				0005		953					00706001
000530 000534				00005	0021C	954 955	ARRTST	TM BZ	5(R15),X'04' OERR20(0,R13)	ACT PAR 'ARRAY' ? NO, ERR 20	00707001 00708001
000538					004E8	956		В	TYPTST	YES, GOTO TYP TEST	00709001
00053C	9100	F005		00005		957 958	* TPRTST	TM	5(R15),X'C0'	ACT PAR 'PROCEDURE' ?	00710001 00711001
000540				2000	0021C	959	131	BZ	OERR20(0,R13)	NO, ERR 20	00712001

Active USINGs: IHIFSARA,R13

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Addr1 Addr2 Stmt Source Statement
                                                                                                 X390 3.1.04 2012/08/17 13.21
  Loc Object Code
000544 47F0 D4E8
                                                           TYPTST
                                                                                     YES, GOTO TYP TEST
                              004E8
                                       960
                                                    В
                                                                                                                        00713001
                                       961 *
                                                                                                                        00714001
000548 9103 F005
                       00005
                                       962 ARITST
                                                    ТМ
                                                           5(R15),X'03'
OERR20(R13)
                                                                                     ACTUAL PAR ARITHMETIC ?
                                                                                                                        00715001
00054C 47BD 021C
                              0021C
                                                                                                                        00716001
                                       963
                                                    BNM
000550 9110 8001
                       00001
                                       964
                                                    ТМ
                                                           1(R8),X'10
                                                                                     FORMAL PARAMETER CALLED BY NAME?
                                                                                                                        00717001
000554 4780 D5B4
                                                           PARAMPR
                              005B4
                                       965
                                                    ΒZ
                                                                                                                        00718001
000558 9102 8001
                       99991
                                       966
                                                    TM
                                                           1(R8),X'02'
                                                                                     FORMAL PARAMETER REAL TYPE ?
                                                                                                                        00719001
00055C 4780 D56C
                              0056C
                                       967
                                                    B7
                                                           INTTST
                                                                                     NO, INTEGER TYPE
                                                                                                                        00720001
                                                           5(R15),X'02'
                                                                                     ACTUAL PARAMETER REAL ?
                       00005
000560 9102 F005
                                       968
                                                    TM
                                                                                                                        00721001
                                                           OERR20(R13)
                                                                                     NO, ERROR
                                                                                                                        00722001
000564 478D 021C
                              0021C
                                                    ΒZ
                                       969
                                                                                     SPECIAL ASSIGNMENT TEST
000568 47F0 D57C
                              0057C
                                       970
                                                           ASSFLAG2
                                                                                                                        00723001
                                                    В
                                       971 *
                                                                                                                        00724001
00056C 9101 F005
                       00005
                                       972 INTTST
                                                    ТМ
                                                           5(R15),X'01'
                                                                                     ACTUAL PARAMETER INTEGER ?
                                                                                                                        00725001
                              9921C
000570 478D 021C
                                      973
                                                    B7
                                                           OFRR20(R13)
                                                                                     NO. ERROR
                                                                                                                        00726001
                                       974
                                                                                                                        00727001
                                                    SPECIAL TEST IF ACTUAL PARAMETER IS FORMAL BY NAME AND
                                                                                                                        00728001
                                       975
                                                    THEN MOVE THE ASGNMENT FLAG FR ACT PARAMETER ENT IN DSA
                                       976
                                                                                                                        00729001
                                       977
                                                    TO THE NEW PARAMETER ENT IN DSA OF BLK TO BE ENTERED
                                                                                                                        00730001
                                       978
                                                                                                                        00731001
                                                    NOTE: THIS CODE IS EXTREMELY DEPENDENT ON CODE
                                                                                                                        00732001
                                       979
                                                    GENERATED FOR FORMAL PARAMETERS CALLED BY NAME
                                                                                                                        00733001
                                       980
                                       981
                                                                                                                        00734001
000574 9110 8001
                       00001
                                       982 ASSFLAG
                                                           1(R8),X'10'
                                                                                     FORMAL PARM BY NAME ?
                                                                                                                        00735001
000578 4780 D5B4
                              005B4
                                       983
                                                    ΒZ
                                                           PARAMPR
                                                                                                                        00736001
                                                           5(R15), X'10
                                                                                     ACT IS TYPE CALLED BY NAME ?
00057C 9110 F005
                                       984 ASSELAG2
                                                                                                                        00737001
                       99995
                                                    TM
                                                           PARAMPR
000580 4780 D5B4
                              005B4
                                                                                                                        00738001
                                       985
                                                    ΒZ
000584 9120 F005
                       00005
                                       986
                                                    ТМ
                                                           5(R15),X'20
                                                                                     IF NOT GOTO SPECIAL
                                                                                                                        00739001
000588 4710 D5B4
                              005B4
                                                                                     PARAMETERLESS PR TEST
                                                                                                                        00740001
                                       987
                                                    во
                                                           PARAMPR
00058C 582A 0004
                              00004
                                                           R2,4(CDSA)
                                                                                     DSA OF CALLING SEQUENSE
                                                                                                                        00741001
                                       988
000590 5820 2010
                              00010
                                       989
                                                    ī
                                                           R2,16(,R2)
                                                                                     PBT ADDR OF CALLING SEQ
                                                                                                                        00742001
                                                                                     ADDR OF THUNK OF ACT PARM
000594 5830 1000
                              00000
                                       990
                                                    L
                                                           R3,0(,R1)
                                                                                                                        00743001
                                                                                     WHICH IS FORMAL
                                                                                                                        00744001
                                       991
000598 D200 D5B3 300B 005B3 0000B
                                       992
                                                    MVC
                                                           ORI+5(1),11(R3)
                                                                                     MOVE DISPL OF PARAM FOUND
                                                                                                                        00745001
                                       993 *
                                                                                     IN THUNK CODE TO OR INST
                                                                                                                        00746001
00059E 4330 3004
                              00004
                                       994
                                                    IC
                                                           R3,4(,R3)
                                                                                     DISPLACEMENT OF
                                                                                                                        00747001
                                                                                     PROCEDURE IN PRI
0005A2 5430 D608
                              99698
                                       995
                                                    N
                                                           R3.MASKEE
                                                                                                                        00748001
0005A6 5833 2000
                              00000
                                                                                     ADDR OF DSA OF PROCEDURE
                                                                                                                        00749001
                                       996
                                                           R3,0(R3,R2)
0005AA 4130 3004
                              00004
                                       997
                                                    LA
                                                                                     ADDR CHARACTERISTIC PART
                                                                                                                        00750001
                                                           R3,4(,R3)
                                                                                     OF PARAMETER ENTRY
                                                                                                                        00751001
                                       998 *
0005AE D600 1004 3000 00004 00000
                                      999 ORT
                                                    oc
                                                           4(1,R1),0(R3)
                                                                                     MOVE ASSIMENT BIT FROM
                                                                                                                        00752001
                                     1000
                                                                                     CALLING PARAMETER ENT IN
                                                                                                                        00753001
                                                                                                                        00754001
                                     1001
                                                                                     DSA TO NEW DSA ENT
                                                                                                                        00755001
                                     1002
                                     1003
                                                    TEST IF ACTUAL PARAMETER IS PARAMETERLESS PROCEDURE
                                                                                                                        00756001
                                     1004 *
                                                                                                                        00757001
                                                                                                                        00758001
00759001
0005B4 91C0 F005
                       00005
                                      1005 PARAMPR
                                                    ТМ
                                                           5(R15), X'C0'
                                                                                     ACTUAL PARAMETER PROCEDURE ?
0005B8 4780 D5D4
                              995D4
                                     1006
                                                    B7
                                                           FXTT
0005BC 9130 F005
                                                                                                                        00760001
                       00005
                                                           5(R15),X'30
                                     1007
                                                    TM
0005C0 4740 D5D4
                              005D4
                                     1008
                                                    ВМ
                                                           EXIT
                                                                                                                        00761001
0005C4 91D0 8001
                       00001
                                      1009
                                                     TM
                                                           1(R8),X'D0'
                                                                                     FORMAL PROC CALLED BY NAME ?
                                                                                                                        00762001
0005C8 4710 D5D4
                              005D4
                                     1010
                                                    во
                                                           EXIT
                                                                                     YES, EXIT
                                                                                                                        00763001
0005CC 91C0 F004
                                                                                     PROCEDURE CALLED ?
                                                                                                                        00764001
                       00004
                                      1011
                                                    TM
                                                           4(R15), X'C0'
0005D0 471D 021C
                                                                                                                        00765001
                              0021C
                                                           OERR20(R13)
                                                    BO
                                     1012
0005D4 41F0 F008
                              80000
                                     1013 EXIT
                                                           R15,8(,R15)
                                                                                     GET NEXT ACT PAR ADDR
                                                                                                                        00766001
                                                    LA
                                                                                     GET NEXT FORM PAR ADDR
0005D8 4180 8002
                              00002
                                     1014
                                                    LA
                                                           R8,2(,R8)
                                                                                                                        00767001
0005DC 4110 1008
                              80000
                                     1015
                                                    LA
                                                           R1,8(,R1)
                                                                                     NEXT PARAMETER IN DSA
                                                                                                                        00768001
                                                                                     IF A NEXT PAR OCCURS GOTO LOOP STORE RETURN ADDR IN RAS
0005E0 4640 D4B0
                              004B0
                                     1016
                                                    BCT
                                                           R4, LOOP
                                                                                                                        00769001
                                     1017 F4
0005F4 50F0 F004
                              99994
                                                    ST
                                                           R15,4(,R14)
                                                                                                                        00770001
0005E8 07F8
                                                                                                                        00771001
                                     1018
                                                    BR
                                                                                     EXIT 2
                                                           R8
                                      1019
                                                                                                                        00772001
                                     1020 *
                                                    PRECOMPILED PROCEDURE CALLED
                                                                                                                        00773001
                                     1021 *
                                                                                                                        00774001
0005EA 5810 3000
                                     1022 PROLOG2
                                                                                     ADDR OF PRECOMP PR CONST
                              00000
                                                    Ĺ
                                                           R1.0(.R3)
                                                                                                                        00775001
                                                                                     LOAD NEW PBT AND LAT ADDRS
                                                                                                                        00776001
                                                           PBT, LAT, 0(R1)
0005EE 98BC 1000
                              00000
                                     1023
                                                    I M
                                                                                     PARAMETER DEFINITION IN CODE
0005F2 D500 3007 B00F 00007 0000F
                                     1024
                                                           7(1,R3),15(PBT)
                                                                                                                        00777001
                                                    CLC
                                                                                     PROCEDURE SAME AS IN LOADED
                                                                                                                        00778001
                                      1025 *
                                     1026
                                                                                     PRECOMPILED PROCEDURE ?
                                                                                                                        00779001
0005F8 477D 0220
0005FC 5880 1008
                              99229
                                     1027
                                                    BNE
                                                           OERR21(R13)
                                                                                     NO, ERROR 21
PROCEDURE DECLAR ENTRY POINT
                                                                                                                        00780001
                                                                                                                        00781001
                              00008
                                     1028
                                                           R8.8(,R1)
000600 9201 D0A9
                       000A9
                                      1029
                                                           PROLPBN(R13),1
                                                                                     PBN OF PROCEDURE IS 1
                                                                                                                        00782001
                                                    MVI
000604 47FD 00E0
                              000E0
                                     1030
                                                           PROLOG(R13)
                                                                                     CALL PRECOMPILED PROCEDURE
                                                                                                                        00783001
                                                    В
                                                                                                                        00784001
                                      1031
                                                           X'000000FF'
999698 999999FF
                                     1032 MASKFF
                                                    DC
                                                                                     MASK TO CLEAR 3 BYTES OF REG
                                                                                                                        00785001
                                     1033 *
                                                                                                                        00786001
                                     1034 ***
                                                                                                                        00787001
                                     1035
                                                                                                                        00788001
                                     1036
                                                    VALUE CALL ROUTINE
                                                                                                                        00789001
                                     1037 *
                                                                                                                        00790001
                                     1038 **
                                                       ********************
                                                                                                                        00791001
                                     1039
                                                                                                                        00792001
                                     1040
                                                    SUBROUTINE FOR HANDLING FORMAL PARAMETERS
                                                                                                                        00793001
                                      1041
                                                                                                                        00794001
                                     1042 *
                                                                                                                        00795001
                                                    CALLED BY VALUE
                                     1043 *
                                                                                                                        00796001
                                                    USED FOR FORMAL PARAMETERS OF TYPE REAL, INTEGER OR
                                     1044
                                                                                                                        00797001
                                                    BOOLEAN, INCLUDING ARRAYS
                                                                                                                        00798001
                                     1045
                                     1046
                                                                                                                        00799001
                                     1047 *
                                                    CALLING SEQUENCE - (ENTRY VIA BRLIST)
                                                                                                                        00800001
                                     1048 *
                                                    CALL ACTUAL PARAMETER
                                                                                                                        00801001
                                                                                                                        00802001
00803001
                                     1049
                                                    BAL
                                                           R15, VALUCALL(R13)
                                                                                     FORMAL PARAMETER DISPLACEMENT
                                     1050
                                                           H'DISPL
                                                    DC
                                     1051
                                                    DC
                                                           XL2'
                                                                                     CHARACTERISTIC OF PARAMETER
                                                                                                                        00804001
                                                                                                                        00805001
                                     1052
                                                                                     RETURN FROM VALUCALL
                                     1053
                                                                                                                        00806001
                                     1054
                                                    DISPL(CDSA) CONTAINS IF PARAMETER IS AN ARRAY ADDR OF
                                                                                                                        00807001
                                     1055
                                                    SMF OTHERWISE VALUE OF THE ACTUAL PARAMETER, CONVERTED
                                                                                                                        00808001
```

00904001

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Addr1 Addr2 Stmt Source Statement
                                                                                                  X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                                      1056 *
                                                     IF NECESSARY
                                                                                                                         00809001
                                     1057 *
                                                                                                                         00810001
00060C 9200 D826
                       00826
                                     1058 VALUCAL
                                                     MVI
                                                           CONVFL.0
                                                                                      ZERO TO CONVERSION FLAG
                                                                                                                         00811001
                              00810
                                                           R15 BRRSAVE
000610 50F0 D810
                                                     ST
                                                                                                                         00812001
                                     1059
                                                                                      SAVE R15, R8
000614 5080 D814
                                                           R8, ADRSAVE
                                                                                                                         00813001
                              00814
                                     1060
                                                     ST
000618 4810 F000
                                                                                                                         00814001
                              00000
                                      1061
                                                           R1,0(,R15)
00061C 41E1 A000
                              00000
                                     1062 VALUC10
                                                           R14,0(R1,CDSA)
                                                                                                                         00815001
                                                     LA
                                      1063 *
                                                                                                                         00816001
                                                     INSERT COMPONENT SIZE OF ORIGINAL
                                      1064
                                                                                                                         00817001
                                                                                                                         00818001
                                      1065
000620 9201 D823
                        00823
                                      1066
                                                     MVI
                                                           CSIZORIG+1,X'01'
                                                                                      ONE TO COMP SIZE INCASE BOOLEAN
                                                                                                                         00819001
000624 9103 E005
                       00005
                                                           5(R14),X'03'
                                                                                      TEST ACTUAL PARAMETER TYPE
                                                                                                                         00820001
                                      1067
                                                     TM
000628 4710 D668
                              00668
                                     1068
                                                     BO
                                                           VALUC12
                                                                                      BOOLEAN, BRANCH
FOUR TO COMPONENT SIZE
                                                                                                                         00821001
                       00823
                                                           CST70RTG+1. X'04'
00062C 9204 D823
                                      1069
                                                     MV/T
                                                                                                                         00822001
000630 9101 E005
                                                           5(R14),X'01
                                                                                      ACTUAL PAR INTEGER ?
                                                                                                                         00823001
                       00005
                                      1070
                                                     TM
000634 4710 D644
                                                     во
                                                           VALUC00
                                                                                      INTEGER, BRANCH
                                                                                                                         00824001
                              00644
                                     1071
                                                                                      PRECISION ?
000638 9120 D0C2
                                                                                                                         00825001
                        000C2
                                      1072
                                                     TM
                                                           OPTSW(R13), X'20'
00063C 4710 D644
                              00644
                                      1073
                                                     RΩ
                                                           VALUCÃO
                                                                                      SHORT PRECISION, BRANCH
                                                                                                                         00826001
                       00823
                                                           CSIZORIG+1,X'08'
                                                                                      LONG, EIGHT TO COMPONENT SIZE
000640 9208 D823
                                      1074
                                                     MVI
                                                                                                                         00827001
                                      1075 *
                                                                                                                         00828001
000644 9102 E005
                                      1076 VALUC00
                                                           5(R14),X'02'
                                                                                                                         00829001
                       00005
                                                     TM
                                                                                      ACTUAL PARAMETER REAL
                                                           VALUC11
                                                                                      YES, BRANCH
000648 4710 D65C
                              0065C
                                     1077
                                                     во
                                                                                                                         00830001
                                      1078
                                                                                                                         00831001
                                      1079
                                                     ACTUAL PARAMETER INTEGER
                                                                                                                         00832001
                                                                                                                         00833001
                                      1080
00064C 9101 F003
                                                           3(R15),X'01'
                                                                                      FORMAL PAR INTEGER ?
                                                                                                                         00834001
                       00003
                                      1081
                                                     TM
000650 4710 D668
                              00668
                                     1082
                                                     во
                                                           VALUC12
                                                                                      YES, BRANCH
                                                                                                                         00835001
                                                                                                                         00836001
                                      1083
000654 9201 D826
                       00826
                                                           CONVFL, X'01'
                                                                                      1 (= INTEGER TO REAL) TO FLAG
                                                                                                                         00837001
                                      1084
                                                     MVI
000658 47F0 D668
                              00668
                                     1085
                                                     В
                                                           VALUC12
                                                                                                                         00838001
                                      1086
                                                                                                                         00839001
                                                     ACTUAL PARAMETER REAL
                                                                                                                         00840001
                                      1087
                                      1088
                                                                                                                         00841001
00065C 9102 F003
                       00003
                                      1089 VALUC11
                                                           3(R15),X'02'
                                                                                      FORMAL PAR REAL ?
                                                                                                                         00842001
                                                     TM
000660 4710 D668
                              00668
                                     1090
                                                     BO
                                                           VALUC12
                                                                                      YES, BRANCH
                                                                                                                         00843001
                                                           CONVFL,X'03' 3 (=REAL TO INTEGER) TO FLG
CSIZCOPY+1(1),CSIZORIG+1 COPY COMPONENT SIZE
                                                           CONVFL.X'03'
000664 9203 D826
                       99826
                                      1091
                                                     MV/T
                                                                                                                         99844991
000668 D200 D825 D823
                                                                                                                         00845001
                       00825 00823
                                     1092 VALUC12
                                                     MVC
00066E 9104 F003
                       00003
                                      1093
                                                     тм
                                                           3(R15),X'04
                                                                                      ARRAY ?
                                                                                                                         00846001
                              006AA
                                                                                      YES, BRANCH
000672 4710 D6AA
                                                           VALUC21
                                                                                                                         00847001
                                      1094
                                                                                      MOVE CONT OF R8 TO CDSA
999676 D297 F999 8999 99999 99999
                                     1095 VALUC13
                                                     MVC
                                                           0(8,R14),0(R8)
                                                                                                                         00848001
                                                                                      ADDR OF FORMAL PARAM ENTRY
00067C 181E
                                      1096
                                                     LR
                                                           R1, R14
                                                                                                                         00849001
                                                                                      STORE BACK AFTER CONVERSION
                                                                                                                         00850001
00067E 1821
                                      1097
                                                     LR
                                                           R2.R1
000680 4150 F004
                                                           R5,4(,R15)
                                                                                      RETURN ADDR
                                                                                                                         00851001
                              00004
                                     1098
                                                     LA
000684 9103 D826
                                                                                      CONVERSION NECESSARY ?
                       00826
                                      1099 VALUC14
                                                     TM
                                                           CONVFL, X'03'
                                                                                                                         00852001
000688 0785
                                      1100
                                                                                      NO, RETURN
                                                                                                                         00853001
                                                     BZR
                                                           R5
                                                                                                                         00854001
00855001
00068A 4710 D69C
                              0069C
                                     1101
                                                     во
                                                           VALUC15
                                                                                      REAL INTEGER
                                      1102
                                                     CALL INTEGER REAL CONVERSION ROUTINE
                                                                                                                         00856001
                                      1103
                                      1104
                                                                                                                         00857001
00068E 58E0 1000
                              00000
                                     1105
                                                           R14,0(,R1)
                                                                                                                         00858001
000692 458D 0120
                              00120
                                     1106
                                                     BΔI
                                                           R8.CNVIRD(R13)
                                                                                                                         00859001
000696 4400 D2DE
                                                                                                                         00860001
                              002DE
                                     1107
                                                     EX
                                                           0.VALST
00069A 07F5
                                                                                      RETURN
                                                                                                                         00861001
                                      1108
                                                     BR
                                                           R5
                                      1109
                                                                                                                         00862001
                                      1110
                                                     CALL REAL-INTEGER CONVERSION ROUTINE
                                                                                                                         00863001
                                      1111 *
                                                                                                                         00864001
00069C 4400 D2DA
                              002DA
                                     1112 VALUC15
                                                     EX
                                                           0.VALLD
                                                                                                                         00865001
                                                           R8. CNVRDT (R13)
9996A9 458D 914C
                              9914C
                                     1113
                                                     BΔI
                                                                                                                         00866001
0006A4 50E0 2000
                                                                                                                         00867001
                              00000
                                     1114
                                                     ST
                                                           R14,0(,R2)
0006A8 07F5
                                      1115
                                                     BR
                                                                                      RETURN
                                                                                                                         00868001
                                                                                                                         00869001
                                      1116
                                     1117
                                                     HANDLE VALUE CALL OF ARRAY
                                                                                                                         00870001
                                      1118 *
                                                                                                                         00871001
0006AA D203 D81C 8010 0081C 00010
                                                                                      SIZE OF ORIGINAL ARRAY
                                                                                                                         00872001
                                     1119 VALUC21
                                                           SIZEARR(4), 16(R8)
                                                     MVC
                                                           R15,8(,R8)
R15,4(,R8)
0006B0 58F0 8008
                              00008
                                     1120
                                                                                                                         00873001
0006B4 5BF0 8004
                              00004
                                                                                      DIFF (ADDRLOWCOMP - ADRZEROCOMP)
                                                                                                                         00874001
                                     1121
0006B8 50F0 D818
                              00818
                                     1122
                                                     ST
                                                           R15, DIFFLZ
                                                                                                                         00875001
                                      1123 *
                                                                                                                         00876001
0006BC 9200 D827
                       00827
                                                           SMFFL.0
                                                                                      ZERO TO SMF FLAG
                                                                                                                         00877001
                                     1124
                                                     MVI
                                                                                                                         00878001
                                      1125
0006C0 9120 D0C2
                       000C2
                                      1126
                                                     ТМ
                                                           OPTSW(R13), X'20'
                                                                                      PRECISION ?
                                                                                                                         00879001
0006C4 4710 D70E
                              0070E
                                                                                      SHORT PRECISION, BRANCH
                                                                                                                         00880001
                                     1127
                                                     во
                                                           VALUC31
                                                           CONVFL,X'03'
0006C8 9103 D826
                       00826
                                      1128
                                                     тм
                                                                                      LONG, TEST CONV FLAG
                                                                                                                         00881001
                              0070E
                                                                                      NO CONV NEEDED, BRANCH
                                                                                                                         00882001
0006CC 4780 D70E
                                     1129
                                                     ΒZ
                                                           VALUC31
                                                                                      CONV FLAG TO SMF FLAG
0006D0 D200 D827 D826 00827 00826
                                                           SMFFL(1), CONVFL
                                                                                                                         00883001
                                     1130
                                                     MVC
0006D6 58F0 D81C
                              9981C
                                     1131
                                                           R15, SIZEARR
                                                                                                                         00884001
                                                     т
0006DA 58E0 D818
                                                           R14,DIFFLZ
                                                                                                                         00885001
                              00818
                                     1132
0006DE 4810 D824
                              00824
                                     1133
                                                     LH
                                                           R1, CSIZCOPY
                                                                                                                         00886001
0006F2 4710 D6F6
                                                                                                                         00887001
                              996F6
                                     1134
                                                     RΩ
                                                           VALUC25
                                      1135
                                                                                                                         00888001
                                                     INCREMENT 'SIZE OF ARRAY', DIFF AND COMPONENT SIZE
                                                                                                                         00889001
                                      1136
                                                                                                                         00890001
                                      1137
0006E6 8BF0 0001
                              00001
                                                                                                                         00891001
                                     1138
                                                           R15,1
0006EA 8BE0 0001
                              00001
                                     1139
                                                     SLA
                                                           R14,1
                                                                                                                         00892001
0006EE 8B10 0001
                              00001
                                     1140
                                                     SLA
                                                           R1.1
                                                                                                                         00893001
                                                           VALUC26
                                                                                                                         00894001
0006F2 47F0 D702
                              00702
                                     1141
                                      1142
                                                                                                                         00895001
                                      1143 *
                                                     DECREMENT 'SIZE OF ARRAY', DIFF AND COMPONENT SIZE
                                                                                                                         00896001
                                      1144 *
                                                                                                                         00897001
                                     1145 VALUC25
                                                           R15,1
0006F6 8AF0 0001
                              99991
                                                     SRA
                                                                                                                         00898001
0006FA 8AE0 0001
                                                                                                                         00899001
                              00001
                                                     SRA
                                                           R14,1
                                     1146
0006FE 8A10 0001
                              00001
                                     1147
                                                     SRA
                                                                                                                         00900001
                                                           R1,1
000702 50F0 D81C
                                                           R15, SIZEARR
                                                                                                                         00901001
                              0081C
                                     1148 VALUC26
                                                     ST
000706 50E0 D818
                                     1149
                                                           R14,DIFFLZ
                                                                                                                         00902001
                              00818
00070A 4010 D824
                              00824
                                     1150
                                                     STH
                                                           R1.CSIZCOPY
                                                                                                                         00903001
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Active USINGs: IHIFSARA,R13

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 Loc Object Code 1152 \* EXECUTE SUBROUTINE WITH GETMAIN 00905001 1153 \* 00906001 00070E 1BFF 1154 VALUC31 SR R15.R15 00907001 00908001 NUMBER OF SUBSCRIPTS 000710 43F8 0000 00000 IC R15.0(R8) 1155 000714 41FF 0005 R15,5(R15) 00909001 00005 1156 LA 00910001 000718 8BF0 0002 00002 SLA 00071C 9508 D825 00825 1158 CLT CSIZCOPY+1,X'08' REAL ARRAY LONG ? 00911001 000720 4770 D730 00730 1159 BNF VALUC32 NO 00912001 0(R8),X'01' 000724 9101 8000 00000 SMF LENGTH DOUBLE WORDS 1160 TM 00913001 000728 4710 D730 00914001 00730 VALUC32 1161 BO YES 00915001 00072C 41F0 F004 00004 R15,4(,R15) FORCE ARRAY TO DOUBLE WORD 1162 LA 000730 42F0 D821 00821 1163 VALUC32 R15,SIZESMF+1 INSERT SIZE OF SMF 00916001 STC 000734 4800 D820 00820 1164 LH 0.SIZESMF 00917001 NUMBER OF BYTES REQUESTED 000738 5A00 D81C 0081C 1165 0.ST7FARR 00918001 00073C 458D 0114 R8, GETMSTO(R13) 00919001 00114 1166 BAL 00920001 1167 1168 COPY SMF 00921001 1169 00922001 000740 5880 D814 R8. ADRSAVE 00814 1170 00923001 00924001 000744 D200 1000 8000 00000 00000 1171 VALUC33 MVC 0(1,R1),0(R8) 00925001 1172 1173 INSERT FIRST FOUR WORDS INTO SMF COPY 00926001 1174 00927001 1175 00074A D201 1002 A00A 00002 0000A MVC 2(2,R1),10(CDSA) CHAIN DISPL FROM DSA 00928001 00929001 000750 58F0 D810 00810 1176 R15 . BRRSAVE 000754 4820 F000 R2,0(,R15) R2,10(,CDSA DISPL OF FORMAL PARAM ENTRY 00930001 00000 LH 1177 000758 4020 A00A 0000A 1178 STH CHAIN DISPL 00931001 R1,0(R2,CDSA) 00075C 5012 A000 ADDR OF VALUE ARRAY 00932001 00000 1179 1180 \* TO FORMAL PARAMETER ENTRY 00933001 000760 18F1 1181 I R R15.R1 00934001 000762 4AF0 D820 00820 1182 AΗ R15,SIZESMF 00935001 000766 50F0 1008 00008 ST 00936001 1183 R15.8(,R1) 00076A 5BF0 D818 00818 1184 R15, DIFFLZ 00937001 00076E 50F0 1004 00004 1185 R15,4(,R1) 00938001 ST 000772 5AF0 D818 00818 1186 R15, DIFFLZ 00939001 000776 5AF0 D81C 9981C 1187 Δ R15.SIZEARR 9949991 00941001 00077A 50F0 100C 0000C 1188 ST R15,12(,R1) 1189 00942001 COPY DOUBLE OR HALF P-VALUES INTO NEW SMF 00943001 1190 1191 \* 00944001 00077E 41F0 1010 00010 1192 LA R15.16(,R1) 00945001 00946001 000782 4120 8010 00010 1193 LA R2,16(,R8) 00947001 1194 00948001 000786 58E2 0000 00000 1195 VALUC35 R14,0(R2) 00078A 9103 D827 00827 ТМ SMFFL,X'03' TEST IF P-VALUES MUST CHANGE 00949001 1196 00078E 4780 D79E 0079F 1197 ΒZ VALUC36 00950001 99991 00951001 000792 89F0 0001 1198 SII R14.1 000796 4740 D79E 0079E VALUC36 BR IF FLAG=1 (INCREM IS OK) 1199 00952001 BM 00079A 88E0 0002 00002 1200 SRL R14.2 DECREMENT INSTEAD 00953001 R14,0(,R15) 00079E 50E0 F000 00000 1201 VALUC36 ST 00954001 0007A2 41F0 F004 00004 1202 ΙΔ R15.4(,R15) 00955001 R2,4(,R2) R15,8(,R1) 00956001 0007A6 4120 2004 00004 1203 LA 0007AA 59F0 1008 00957001 00008 1204 0007AE 4740 D786 00786 1205 VALUC35 00958001 BL 1206 00959001 1207 \* COPY ARRAY 00960001 1208 00961001 TNTTTALTZE COPYING 1209 00962001 00963001 1210 0007B2 5830 D81C 0081C 1211 VALUC41 L R3.SIZEARR SIZE OF ARRAY 00964001 ADDR OF COPY ARRAY ADDR OF ORIGINAL ARRAY 0007B6 5820 1008 00965001 80000 1212 R2,8(,R1) 0007BA 5810 8008 00008 1213 R1.8(.R8 00966001 CONVERSION NECESSARY ? 0007BE 9103 D826 00826 1214 TM CONVFL, X'03 00967001 0007C2 4780 D7E2 007F2 00968001 VALUC61 NO, MOVE ARRAY 1215 ΒZ CONVERT ONE ELEMENT, STORE IT 00969001 0007C6 4550 D684 00684 1216 VALUC51 R5, VALUC14 BAL 0007CA 4A10 D822 00822 R1, CSIZORIG NEXT ELEMENT FROM ORIGINAL 00970001 1217 ΑН 0007CE 4A20 D824 00824 1218 ΑН R2, CSIZCOPY NEXT ELEMENT FROM COPY 00971001 0007D2 4B30 D824 00824 1219 SH R3.CSIZCOPY 00972001 00973001 CONTINUE IF ELEMENTS LEFT 0007D6 4720 D7C6 007C6 1220 BP VALUC51 0007DA 58F0 D810 00810 1221 VALUC52 R15, BRRSAVE 00974001 0007DE 47F0 F004 00004 4(,R15) RETURN 00975001 1222 00976001 1223 0007E2 4140 00FF 000FF 1224 VALUC61 LA R4, 255 MAX IN ONE MOVE 00977001 00978001 0007E6 0630 1225 VALUC61A BCTR R3.0 SIZE-1 0007E8 1934 00979001 R3.R4 1226 CR 0007EA 47D0 D800 00800 1227 VALUC62 NOT MORE THAN 256 BYTES 00980001 BNH 0007EE 4440 D808 R4, VALUC63 MOVE 256 BYTES 00981001 00808 1228 EX 0007F2 1B34 1229 SR R3,R4 REDUCE SIZE 00982001 99199 R1,256(,R1) 00983001 0007F4 4110 1100 1230 ΙΔ 0007F8 4120 2100 00100 R2,256(,R2) 00984001 1231 LA 0007FC 47F0 D7E6 007E6 VALUC61A CONTINUE 00985001 1232 В 1233 00986001 000800 4430 D808 80800 1234 VALUC62 R3. VALUC63 MOVE LAST PART OF ARRAY 00987001 EX 000804 47F0 D7DA 007DA 1235 VALUC52 RETURN 00988001 1236 00989001 000808 D200 2000 1000 00000 00000 0(0,R2),0(R1) ORIGINAL ARRAY TO COPY 00990001 1237 VALUC63 MVC 1238 00991001 1239 \* WORK AREA 00992001 1240 00993001 agasaf agaa 000810 00000000 1241 BRRSAVE STORAGE OF R15 00994001 F'0' DC 000814 00000000 1242 ADRSAVE F'0 00995001 DC 1243 DIFFLZ DIFFERENCE BETWEEN LOW 00996001 000818 00000000 F'0' 1244 \* AND ZERO COMPONENTS 00997001 SIZE OF ARRAY SIZE OF SMF 1245 STZFARR DC 00081C 00000000 F'0' 00998001 000820 0000 1246 SIZESMF DC H'0 00999001

0008B8 4020 A00A

0000A 1342

STH

R2,10(,CDSA)

STORE BEFORE LAST VALUE

01094001

Active USINGs: IHIFSARA,R13

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 Loc Object Code 000822 0000 1247 CSIZORIG DC H'0' COMPONENT SIZE, ORIGINAL 01000001 000824 0000 1248 CSIZCOPY DC H'0' COMPONENT SIZE, COPY 01001001 000826 00 1249 CONVFL DC X'00 CONVERSION FLAG 01002001 000827 00 1250 SMFFL X'00 ARRAY SIZE FLAG DC 01003001 1251 01004001 1252 1253 \* 01006001 1254 \* RETURN PROGRAM 01007001 1255 01008001 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 01009001 1256 1257 01010001 1258 \* THIS ROUTINE IS ENTERED WHEN A BRANCH IS MADE OUT OF A 01011001 1259 \* BLOCK OR PROCEDURE BY MEANS OF A 'GO TO' STATEMENT 01012001 1260 01013001 IT SEARCHES RAS FOR AN ENTRY POINTING TO THE DSA OF THE 01014001 1261 TARGET BLOCK. FOR EACH BLOCK THAT IS BYPASSED, THE 01015001 1262 FREEDSA ROUTINE IS INVOKED TO RELEASE STORAGE FOR DSA 1263 01016001 1264 AND ARRAYS. CALLING SEQUENCE - (ENTRY VIA BRLIST) 01017001 1265 01018001 01019001 1266 В RETPROG(R13) 01020001 1267 000828 05F0 1268 RETPROGA BALR SET RETURN REGISTER 01021001 00082A 58ED 00C8 000C8 1269 R14, RASPT(R13) FETCH RAS TOP POINTER 01022001 00082E 9500 E000 00000 1270 RETPR1 CLI 0(R14), RASPARMM RAS PARAMETER ENTRY ? 01023001 0083F 01024001 000832 4770 D83F 1271 BNF PRNFNTRY NO CLEAR PARAMETER ENTRY 000836 4BE0 D0AA 000AA R14, EIGHT(, R13) 01025001 1272 SH 00083A 47F0 D82E 0082E TEST NEXT ENTRY 01026001 1273 В 01027001 1274 \* 00083E 431E 0000 00000 1275 PBNENTRY IC R1,0(R14) SAVE FLAG 01028001 000842 9200 E000 99999 1276 MVI 0(R14),0 CLEAR FLAG 01029001 CDSA,0(,R14) GDSA,0(,R14) 000846 58A0 E000 00000 1277 L UPDATE DSA REG 01030001 00084A 5990 E000 00000 COMPARE DSA ADDR 01031001 1278 00084E 4210 E000 00000 1279 STC R1,0(,R14) RESTORE FLAG 01032001 000852 50ED 00C8 1280 ST R14, RASPT(R13) SAVE RAS POINTER 01033001 000C8 EQUAL, EXIT TO ADDR IN R8
FREE DSA SUBROUTINE IN EPILOG 000856 0788 1281 **BER** R8 01034001 000858 47FD 00FC 999FC FREEDSA(R13) 1282 В 01035001 1283 01036001 01037001 1285 \* 01038001 1286 \* EPILOGUE PROGRAM 01039001 1287 \* 01040001 1288 \*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\* 01041001 1289 01042001 1290 THIS ROUTINE IS EXECUTED WHENEVER AN EXIT IS MADE FROM 01043001 1291 A PROCEDURE (ENTRY POINT EPILOGP) OR BLOCK (ENTRY POINT 01044001 01045001 01046001 1292 EPILOGB) VIA THE 'END' STATEMENT 1293 CLEAR THE CORRESPONDING ENTRY FROM RAS AND FREES 1294 01047001 THE STORAGE FOR DSA AND ARRAYS. IF THE EXIT WAS FROM A 01048001 1295 1296 PRECOMPILED PROCEDURE, THE PROCEDURE IS DELETED 01049001 1297 01050001 CALLING SEQUENCE - (ENTRY VIA BRLIST) 01051001 1298 1299 01052001 1300 В EPILOGP(R13) 01053001 1301 01054001 00085C D207 D090 A018 00090 00018 1302 EPILP FCTVALST(8,R13),24(CDSA) FUNCTION VALUE TO FSA 01055001 MVC 000862 418D 0090 00090 1303 LA R8.FCTVALST(R13) FUNCTION VALUE ADDR TO R8 01056001 LEAVE BLOCK AND UPDATE REG 000866 45FD 00FC 999FC 1304 BΔI R15 FREEDSA (R13) 01057001 00086A 58ED 00C8 01058001 000C8 1305 R14, RASPT(R13) L 00086E 58F0 E00C 0000C 1306 R15,12(,R14) RETURN ADDR FROM RAS 01059001 000872 07FF 1307 01060001 BR 1308 \* 01061001 CALLING SEQUENCE - (ENTRY VIA BRLIST) 1309 01062001 01063001 1310 1311 EPILOGB(R13) 01064001 В 1312 \* 01065001 00874 1313 EPILB EQU 01066001 agaec 1314 FREEDSA **EPILOGB** LEAVE A BLOCK 01067001 EQU FREEMAIN UPDATE REG 01068001 00874 1315 FRDSA EOU 000874 50FD 009C 0009C R15, BRRST(R13) SAVE RETURN ADDR 01069001 1316 ST FETCH RAS POINTER 01070001 000878 58ED 00C8 000C8 1317 R14, RASPT(R13) 00087C 4BED 00AA 000AA SH R14, EIGHT (R13) REDUCE RETURN ADDR STACK 01071001 1318 000880 50ED 00C8 000C8 1319 ST R14 RASPT (R13) SAVE RAS POINTER 01072001 000884 95FE E008 00008 LOAD PROCEDURE ENTRY ? 01073001 1320 CLI 8(R14), RASLOADM 000888 4770 D8A0 008A0 01074001 1321 **BNE** VTEST NO 00088C 581D 00D0 R1, RASPB(R13) FETCH ADDR OF NAME OF 01075001 000D0 1322 000890 1801 PROCEDURE TO BE DELETED 01076001 1323 LR R1,8(,R1) 000892 4110 1008 80000 1324 CLEAR PRECOMPILED PROCEDURE 01077001 01078001 NAME FROM RAS 000896 501D 00D0 AGADA 1325 ST R1, RASPB(R13) 1326 \* 01079001 DELETE EPLOC=(0) 01080001 1327 00089A 0A09 1328+ SVC ISSUE DELETE SVC 01081001 1329 \* 00089C 47F0 D878 00878 1330 В FRDSA+4 CONTINUE 01082001 1331 \* 01083001 01084001 1332 VALUE ARRAY HANDLING 1333 01085001 008A0 1334 EPIL3 EOU 01086001 0008A0 BF03 A00A 0000A 1335 VTEST ICM R0, B'0011', 10(CDSA) TEST VALUE ARRAY FIELD 01087001 ATEST ZERO, GOTO NEXT TEST LOAD LAST VALUE ARRAY DISPL 01088001 01089001 0008A4 4780 D8DA 008DA 1336 **R7** 0008A8 4820 A00A 0000A R2,10(,CDSA) 1337 LH 0008AC 5812 A000 00000 1338 R1,0(R2,CDSA) LOAD ADDR OF STOR MAP FCT 01090001 L R0,16(,R1) 1339 LOAD LENGTH OF ARRAY 01091001 0008B0 5800 1010 00010 0008B4 4820 1002 1340 LOAD BEFORE LAST VALUE 01092001 00002 LH R2,2(,R1) 1341 \* ARRAY DISPLACEMENT 01093001

Loc	Objec	t Code	Addr1	Addr2	Stmt	Source	Stater	ment	X390 3.1.04 2012/08	/17 13.21
					1343	*			ARRAY DISPLACEMENT	01095001
0008BC					1344		SR	R2,R2	CLEAR A WORK REGISTER	01096001
0008BE					1345		IC	R2,0(,R1)	CALCULATE LENGTH OF STORAGE	01097001
0008C2 0008C6				00001 00002	1346 1347		LA SLL	R2,1(,R2) R2,2	CALCULATE LENGTH OF STORAGE MAPPING FUNCTION	01098001 01099001
0008CA				00010			LA	R2,16(,R2)	THAT I INC TONCTION	01100001
0008CE	1A02				1349		AR	RØ, R2	ADD ST MAP FUNCT LENGTH	01101001
					1350				AND ARRAY LENGTH	01102001
					1351	*	EDEEM	ATN D 11/ (0) A (1)	FREEMAIN FOR VAL ARRAY	01103001
					1352 1353+	*		AIN R,LV=(0),A=(1) 2 RELEASE 3 VERSION	INCL ST MAP FCT	<b>01104001</b> 01-FREEM
0008D0	4110	1000		00000			LA	1,0(0,1)	CLEAR HI ORDER BYTE	01-FREEM
0008D4	0A0A				1355+		SVC	10	ISSUE FREEMAIN SVC	01-FREEM
					1356	*				01105001
0008D6	4/F0	D8A0		008A0	135 / 1358	*	В	VTEST	RETURN TO VALUE ARRAY TEST	01106001 01107001
					1359		ARRAY	HANDLING		01107001
					1360		7			01109001
0008DA					1361	ATEST	SR	R2,R2	CLEAR WORK REGISTER	01110001
0008DC				0000E			ICM	R2, B'0011', 14(CDSA)	TEST LAST ARRAY DISPLACEMENT	01111001
0008E0 0008E4				008FE 00002			BZ LH	DSAHDL R3,2(R2,CDSA)	ZERO, GOTO DSAHDL LOAD BEFORE LAST ARRAY DISPL	01112001 01113001
0008E8				0000E			STH	R3,14(,CDSA)	STORE BEFORELAST ARRAY DISPL	01114001
0008EC				00008	1366		L	R1,8(R2,CDSA)	LOAD ADDR OF LOWEST COMPON	01115001
0008F0	5802	A010		00010			L	R0,16(R2,CDSA)	LOAD LENGTH OF ARRAY	01116001
					1368 1369	•	EREEM/	AIN R, LV=(0), A=(1)	FREEMAIN FOR ARRAY	01117001 01118001
					1370+	*		2 RELEASE 3 VERSION		01-FREEM
0008F4	4110	1000		00000	1371+		LA	1,0(0,1)	CLEAR HI ORDER BYTE	01-FREEM
0008F8	0A0A				1372+		SVC	10	ISSUE FREEMAIN SVC	01-FREEM
0008FA	47FA	D8DA		008DA	1373 1374	**	В	ATEST	RETURN TO ARRAY TEST	01119001 01120001
OUUSFA	7/1 U	DODA		JUJUA	1375	*	0	N.E.31	ALTONY TO ARRAIT TEST	01121001
					1376	*	DSA HA	ANDLING		01122001
0000==	101:				1377		LB	D1 CDCA	LOAD DEA ADES	01123001
0008FE 000900		1008		00008		DSAHDL	LR LH	R1,CDSA R2,8(,CDSA)	LOAD DSA ADDR LOAD PBT DISPL	01124001 01125001
000904				00000	1380		L	R3,0(,CDSA)	UPDATE DSA ADDR	01126001
000908	5032	B000		00000	1381		ST	R3,0(R2,PBT)	IN PBT	01127001
00090C				00004			LH	RØ,4(R2,PBT)	LENGTH OF DSA TO RØ	01128001
000910 000914				00004 00010			L LM	CDSA,4(,CDSA) PBT,LAT,16(CDSA)	RESET CDSA POINTER UPDATE PBT AND LAT REGISTERS	01129001 01130001
000314	JODC	AUIU		00010	1385	*	Lin	PBI,LAI,10(CD3A)	OFDATE FOT AND EAT REGISTERS	01130001
					1386			AIN R, LV=(0), A=(1)	FREEMAIN FOR DSA	01132001
					1387+			2 RELEASE 3 VERSION		01-FREEM
000918		1000		00000	1388+ 1389+		LA	1,0(0,1)	CLEAR HI ORDER BYTE	01-FREEM
								10	TCCHE EDEEMATH CVC	Q1 EDEEM
00091C	UAUA						SVC	10	ISSUE FREEMAIN SVC	01-FREEM 01133001
00091C		009C		0009C	1390		L	10 R15,BRRST(R13)	ISSUE FREEMAIN SVC RESTORE RETURN ADDR	01-FREEM 01133001 01134001
	58FD	009C		0009C	1390 1391 1392	*				01133001 01134001 01135001
00091E	58FD	009C		0009C	1390 1391 1392 1393	*	L BR	R15,BRRST(R13) R15	RESTORE RETURN ADDR BRANCH	01133001 01134001 01135001 01136001
00091E	58FD	009C		0009C	1390 1391 1392 1393	* * ******	L BR	R15,BRRST(R13) R15	RESTORE RETURN ADDR	01133001 01134001 01135001 01136001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394	* * ******	L BR *****	R15,BRRST(R13) R15	RESTORE RETURN ADDR BRANCH	01133001 01134001 01135001 01136001 01137001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397	*  *  *  *******  *  *	L BR ******	R15,BRRST(R13) R15 ***********************************	RESTORE RETURN ADDR BRANCH	01133001 01134001 01135001 01136001 01137001 01138001 01139001 01140001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398	*  *  ********  *  *  *  *	L BR ******	R15,BRRST(R13) R15 ***********************************	RESTORE RETURN ADDR BRANCH	01133001 01134001 01135001 01136001 01137001 01138001 01139001 01140001 01141001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397	*  *  *******  *  *  *  *  *  *  *  *	L BR ******	R15,BRRST(R13) R15 ***********************************	RESTORE RETURN ADDR BRANCH	01133001 01134001 01135001 01136001 01137001 01138001 01139001 01140001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401	*  *  *  *  *  *  *  *  *  *  *  *  *	L BR  ******  STANDA  ******	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01141001 01142001 01143001 01144001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402	*  *  *  *  *  *  *  *  *  *  *  *  *	L BR  ******  STANDA  ******  ENTERI STANDA	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01140001 01141001 01142001 01143001 01144001 01145001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401	*  *  *  *  *  *  *  *  *  *  *  *  *	L BR  ******  STANDA  ******  ENTERI STANDA	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01141001 01142001 01143001 01144001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403	*  *******  *  *  *  *  *  *  *  *  *	L BR  ******  STANDA  ******  ENTERE STANDA AN ANCO	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01142001 01143001 01144001 01145001 01145001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406	*  *  *  *  *  *  *  *  *  *  *  *  *	L BR ******* STANDA ******* ENTERE STANDA AN ANC ON ENT LIST,	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01144001 011442001 011442001 01144001 01145001 01146001 01147001 01147001 01148001 01149001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406	*  *******  *  **  *  *  *  *  *  *  *	L BR ******* STANDA ******* ENTERE STANDA AN ANC ON ENT LIST, STANDA	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01140001 01141001 01142001 01143001 01145001 01147001 01147001 01148001 01149001 01149001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406	*  *******  *  **  **  **  *  *  *  *	L BR ******* STANDA ******* ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01144001 011442001 011442001 01144001 01145001 01146001 01147001 01147001 01148001 01149001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1398 1400 1401 1402 1403 1404 1405 1406 1407 1408	*  *  *  *  *  *  *  *  *  *  *  *  *	L BR  ******  STANDA  *******  ENTERESTANDA AN ANCON ENTIST, STANDA THE RC CALL I GENERA	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01140001 01142001 01144001 01145001 01145001 01149001 01149001 01149001 01150001 01152001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411	*  *******  *  **  **  **  **  *  *  *	STANDA STANDA AN ANC ON ENT LIST, STANDA THE RC CALL 1 GENERA REPEAT	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01149001 01141001 01142001 01144001 01145001 01147001 01147001 01149001 01150001 01151001 01152001 01153001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1411	*  *******  *  **  **  **  **  **  **	STANDA  ******  ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC CALL GENERA REPEAT PARAME	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01138001 01149001 01144001 011442001 01144001 01145001 01145001 01145001 01145001 01150001 01152001 01153001 01155001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1397 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411	*  *******  *  **  **  **  **  **  **	STANDA  ******  ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC CALL GENERA REPEAT PARAME	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01149001 01141001 01142001 01144001 01145001 01147001 01147001 01149001 01150001 01151001 01152001 01153001
00091E	58FD	009C		0009C	1390 1391 1392 1393 1394 1395 1396 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1412 1413 1414 1415	* * * * * * * * * * * * * * * * * * * *	STANDA  ******  ENTERIS STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAMI STOREL DS	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01141001 01142001 011442001 011442001 011445001 01147001 01147001 01149001 01150001 01151001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01156001 01157001
00091E 000922	58FD	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416	*  *******  *  *  *  *  *  *  *  *  *	STANDA  ******  ENTERIS STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAMI STOREL DS	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01141001 01142001 01144001 01145001 01145001 01145001 01145001 01150001 01150001 01155001 01155001 01155001 01155001 01155001 01157001 01157001 01157001
00091E 000922	58FD	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1412 1413 1414 1415 1416 1417	*  *******  *  **  **  **  *  *  *  *	STANDA  ******  ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAME STOREE  DS EQU	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 01144001 01145001 01145001 01145001 01145001 01151001 01152001 01153001 01155001 01155001 01157001 01157001 01157001 01157001 01157001 01157001 01157001 01157001 01157001
00091E 000922	58FD	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416	*  *  *  *  *  *  *  *  *  *  *  *  *	STANDA  ******  ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAME STOREE  DS EQU	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01141001 01142001 01144001 01145001 01145001 01145001 01145001 01150001 01150001 01155001 01155001 01155001 01155001 01155001 01157001 01157001 01157001
00091E 000922 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1412 1413 1414 1415 1416 1417 1418	*  *  *  *  *  *  *  *  *  *  *  *  *	ENTERESTANDA AN ANCON ENTERESTANDA THE RECALL TO GENERAL TO PARAMESTORED DS EQU	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01141001 01142001 01142001 01145001 01145001 01145001 01145001 01150001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01156001 01159001 01150001 01150001 01150001 01150001 01150001 01150001 01150001
00091E 000922	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1411 1412 1413 1414 1415 1416 1417 1418 1418 1419 1421	*  *******  *  *  *  *  *  *  *  *  *	STANDA  ******  ENTERISTANDA AN ANC ON ENT LIST, STANDA THE RC CALL IT PARAME STOREL  DS EQU TEST IS	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 011443001 01145001 01145001 01145001 01145001 01151001 01152001 01153001 01155001 01157001 01157001 01157001 01157001 01157001 01159001 01157001 01153001 01153001 01154001 01153001 01154001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001
00091E 000922 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1405 1404 1405 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1421 1422	*  *  *  *  *  *  *  *  *  *  *  *  *	ENTERESTANDA AN ANCON ENTLIST, STANDA THE RC CALL I GENERAT PARAMESTORED DS EQU TEST F	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 01144001 01144001 01145001 01145001 01145001 0115001 01151001 01152001 01153001 01155001 01155001 01157001 01158001 01159001 01159001 01160001 01160001 01160001 01161001 01162001 01163001
00091E 000922 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1411 1412 1413 1414 1415 1416 1417 1418 1418 1419 1421	*  ******  *  *****  *  *  *  *  *  *	ENTERESTANDA AN ANCON ENTLIST, STANDA THE RC CALL I GENERAT PARAMESTORED DS EQU TEST F	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 011443001 01145001 01145001 01145001 01145001 01151001 01152001 01153001 01155001 01157001 01157001 01157001 01157001 01157001 01159001 01157001 01153001 01153001 01154001 01153001 01154001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001 01153001
00091E 000922 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1411 1412 1413 1414 1415 1416 1417 1418 1417 1418 1419 1420 1421 1422 1423 1424 1425	* *******  * * * * * * * * * * * * * *	ENTERISTANDA AN ANCON ENTERIST, STANDA THE RC CALL I GENERAL TO BE EQU TEST IF	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01141001 01142001 01144001 01145001 01145001 01145001 01150001 01150001 01155001 01155001 01155001 01155001 01155001 01155001 01157001 01156001 0115901 01156001 01160001 01161001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01166001 01166001 01166001 01166001 01166001 01166001
00091E 000922 000924 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1399 1400 1401 1405 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1416 1417 1418 1419 1421 1422 1423 1425 1425 1426	* *******  * * * * * * * * * * * * * *	L BR  ******  STANDA  *******  ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAME STOREE  DS EQU TEST F  LTR BPR GET DY LR	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 01144001 01145001 01145001 01145001 01145001 0115001 01152001 01153001 01155001 01155001 01155001 01155001 01155001 01157001 01158001 01160001 01160001 01160001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001
00091E 000922 000924 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427	* *******  * * * * * * * * * * * * * *	ENTERESTANDA AN ANCON ENTERESTANDA THE ROCALL ISTANDA THE ROCALL ISTANDA THE ROCALL ISTANDA THE ROPEARAME STORED BE EQU TEST ISTANDA TEST ISTANDA THE ROCALL ISTANDA THE ROPEARAME STORED BE EQU TEST ISTANDA THE ROPEARAME BE EXCLUSIVE BE EXCL	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01136001 01137001 01139001 01144001 01142001 01144001 01145001 01146001 01145001 01145001 01150001 01151001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01156001 01156001 01166001 01166001 01166001 01166001 01166001 01167001 01167001 01168001 01167001 01168001 01167001
00091E 000922 000924 000924	58FD 07FF	009C	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1399 1400 1401 1405 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1416 1417 1418 1419 1421 1422 1423 1425 1425 1426	* * * * * * * * * * * * * * * * * * *	ENTERESTANDA AN ANCON ENTERESTANDA THE ROCALL ISTANDA THE ROCALL ISTANDA THE ROCALL ISTANDA THE ROPEARAME STORED BE EQU TEST ISTANDA TEST ISTANDA THE ROCALL ISTANDA THE ROPEARAME STORED BE EQU TEST ISTANDA THE ROPEARAME BE EXCLUSIVE BE EXCL	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 01144001 01145001 01145001 01145001 01145001 0115001 01152001 01153001 01155001 01155001 01155001 01155001 01155001 01157001 01158001 01160001 01160001 01160001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001 01166001
00091E 000922 000924 000924 000926 000928	58FD 07FF	D934	00924	0009C	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1411 1412 1413 1414 1415 1416 1417 1418 1416 1417 1418 1419 1421 1422 1423 1424 1425 1426 1427 1429 1430+	* * * * * * * * * * * * * * * * * * *	L BR  ******  STANDA  *******  ENTERE STANDA AN ANC ON ENT LIST, STANDA THE RC CALL 1 GENERA REPEAT PARAME STORED  DS EQU  TEST F  LTR BPR  GET DY LR  GETMAI OS/VSC CNOP BAL	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 01144001 01144001 01145001 01145001 01145001 01150001 01150001 01155001 01155001 01157001
00091E 000922 000924 000924 000926 000928	58FD 07FF 1288 0728 182F 0700 4510 00000	D934 1948	00924	00934	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1405 1406 1407 1408 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428+ 1429+ 1430+ 1431+	*  *******  *  *  **  *  *  *  *  *  *	ENTERESTANDA AN ANCON ENTILIST, STANDA THE ROCALL I GENERA REPEAT PARAMESTORED BE EQU TEST E LTR. GET DO LR. GETMAI OS/VS2 CNOP BAL DC	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 011442001 011443001 01145001 01147001 01145001 01150001 01155001 01156001 01166001 01166001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001
00091E 000922 000924 00092A 00092B 00092B 000930 000930	1288 0728 182F 0700 00000 5800	D934 1948	00924		1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1423 1424 1425 1428 1429 1430 1431 1431 1431 1431 1431 1431 1431	* * * * * * * * * * * * * * * * * * *	L BR  ******  STANDA  ******  ENTERIS STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAMI STOREL  DS EQU  TEST I LTR BPR  GET DY LR  GETMAI OS/VSZ CNOP BAL DC L	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01141001 01142001 01142001 01143001 01145001 01145001 01145001 01150001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01156001 01160001 01160001 01160001 01163001 01166001 01166001 01166001 01166001 01166001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001
00091E 000922 000924 000924 000926 000928	1288 0728 182F 0700 00000 5800	D934 1948	00924	00934	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1405 1406 1407 1408 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428+ 1429+ 1430+ 1431+	* * * * * * * * * * * * * * * * * * *	ENTERESTANDA AN ANCON ENTILIST, STANDA THE ROCALL I GENERA REPEAT PARAMESTORED BE EQU TEST E LTR. GET DO LR. GETMAI OS/VS2 CNOP BAL DC	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 011442001 011443001 01145001 01147001 01145001 01150001 01155001 01156001 01166001 01166001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001 01165001
00091E 000922 000924 000924 000926 000928 000938 000938	1288 0728 182F 0700 4510 00000 5800 0A0A 18F2	D934 1048 1000		00934 00000	1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1405 1406 1407 1408 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1423 1424 1423 1424 1425 1428 1426 1427 1428 1429 1431 1432+ 1432+ 1433+ 1432+ 1433+ 1433+ 1433+ 1435	* * * * * * * * * * * * * * * * * * *	ENTERESTANDA AN ANCON ENTILIST, STANDA THE ROCALL I GENERA REPEAT PARAMESTORED BE EQU TEST E LTR BPR GET DY LR GETMAI OS/VS2 CNOP BAL DC L SVC LR	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 011442001 011442001 01145001 01145001 01145001 01150001 01150001 01155001 01156001 01166001 01167001 01165001 01166001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001 01167001
00091E 000922 000924 000924 000926 000926 000930 000934 000938	1288 0728 182F 0700 0404 18F2 D203	D934 048 1000 1000 DB44		00934 00000 00B44	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1423 1424 1425 1428 1429 1430 1431 1432 1433 1434 1435 1436	* * * * * * * * * * * * * * * * * * *	L BR  ******  STANDA  ******  ENTERIS STANDA AN ANC ON ENT LIST, STANDA THE RC CALL I GENERA REPEAT PARAMI STOREL  DS EQU  TEST I LTR BPR  GET DY LR GETMAI OS/VSZ CNOP BAL DC L SVC LR MVC	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01141001 01142001 01142001 01147001 01145001 01147001 01150001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01156001 01156001 01160001 01160001 01160001 01163001 01164001 01165001 01165001 01165001 01165001 01165001 01165001 01166001 01166001 01166001 01166001 01166001 01167001
00091E 000922 000924 000924 000926 000928 000938 000938	1288 0728 182F 0700 4510 08000 0800 0800 0800 18F2 D203 5010	D934 048 1000 1000 DB44		00934 00000	1390 1391 1392 1393 1394 1395 1396 1397 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1423 1424 1425 1428 1429 1430 1431 1432 1433 1434 1435 1436	* * * * * * * * * * * * * * * * * * *	ENTERESTANDA AN ANCON ENTILIST, STANDA THE ROCALL I GENERA REPEAT PARAMESTORED BE EQU TEST E LTR BPR GET DY LR GETMAI OS/VS2 CNOP BAL DC L SVC LR	R15,BRRST(R13) R15  **********************************	RESTORE RETURN ADDR BRANCH  ***********************************	01133001 01134001 01135001 01135001 01137001 01138001 01139001 01144001 011442001 011443001 01145001 01145001 01145001 01150001 01150001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01155001 01156001 01166001 01167001

Loc	Objec	t Cod	le	Addr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08	/17 13.21
			R:5	00000		1439		USING	SPDA, R5		01176001
000948		501C			0001C			ST	R8,PRID		01177001
00094C						1441		LR	R4, LAT	R4 IS NOW LAT POINTER	01178001
00094E 000950						1442 1443		LR LR	R0, R8 R2, R0		01179001 01180001
000952		000C			0000C	1444		SRL	R2,12		01181001
000956	5400	DE48			00E48	1445		N	R0,=F'3'	NUMBER OF FORMAL PARAMETERS	01182001
00095A					00962	1446		BNZ	*+8	ZERO MEANS ONE PARAMETER	01183001
00095E 000962					00001 00006	1447 1448		LA CH	R0,1	COMPARE NUMBER OF ACTUAL PARAM	01184001 01185001
000966					00220	1449		BNE	R0,6(,R15) ERROR21	COMPARE NUMBER OF ACTUAL PARAM	01186001
						1450	*				01187001
						1451		INITI	ALIZE FOR CREATING PA	ARAMETER LIST	01188001
000064	1110	F020			00020	1452	*		D1 DADLICT		01189001
00096A 00096E					00020 00030	1453 1454		LA LA	R1, PARLIST R3, PARAMS		01190001 01191001
000972				00000	00030	1455		MVI	0(R1),0		01192001
000976			1000	00001		1456		MVC	1(11,R1),0(R1)	RESET PARAMETER LIST	01193001
00097C 000980					00B49		SPDECL02		R2, FPTYPA		01194001
000980			F005	00B48	00B48 00005	1458 1459		STC XC	R2, FPTYP FPTYP, 5 (R15)	COMPARE WITH ACTUAL PAR CHAR	01195001 01196001
00098A			. 003	00B48	00003	1460		TM	FPTYP,X'07'	CONTACT NETT ACTORE TAX CHAR	01197001
00098E					009B2	1461		BZ	SPDECL15	IDENTICAL TYPES	01198001
000992	471D	021C			0021C		4	ВО	PARERR(R13)	NOT COMPATIBLE TYPES	01199001
						1463 1464		TVPES	ARE NOT IDENTICAL BU	IT MAY RE COMPATTRIE	01200001 01201001
						1465			ARE NOT IDENTICAL DO	THAT BE COM ATTBEE	01202001
000996				00B49		1466		TM	FPTYPA,X'08'	TEST FOR VALUE OR NAME	01203001
00099A				00040	0021C			BO	PARERR(R13)	CALL BY NAME AND NOT SAME TYPE	01204001
00099E 0009A2				00B48	0021C	1468 1469		TM BNO	FPTYP,X'03' PARERR(R13)	TEST IF REAL-INTEGER COMPATIBLE	01205001 01206001
0009A2				00005	0021L	1479		TM	5(R15), X'03'	TEST ACTUAL PARAMETER	01206001
0009AA	47BD	021C			0021C	1471		BNM	PARERR(R13)	IF NOT REAL OR INTEGER	01208001
0009AE	9680	1000		00000		1472	*	OI	0(R1),X'80'	SET TYPE CONVERSION FLAG	01209001
						1473 1474		ACTIV	ATE THUNK TO GET ADDR	R OF ACTUAL PARAMETER	01210001 01211001
						1475		ACTIV	ATE MONK TO GET ADDIT	OF ACTORE PARAMETER	01212001
0009B2					00004		SPDECL15		R15,R4,SPSAVE		01213001
0009B6			F000	00B40		1477		MVC	SPTHAD(4),0(R15)	THUNK ADDR TO FULLWORD LOCATION	01214001
0009BC 0009C0					000C8 00008	1478 1479		L LA	R3, RASPT(R13) R3, 8(,R3)	NEXT ENTRY IN RAS	01215001 01216001
0009C4					000D0	1480		C	R3, RASPB(R13)	NEXT ENTRY IN NAS	01217001
0009C8					0025C	1481		BNL	RASOVERF(R13)	IF RAS FULL	01218001
0009CC					000C8	1482		ST	R3, RASPT(R13)	DCA DOTATED TO DAG	01219001
0009D0 0009D4					00000 00010	1483 1484		ST LM	CDSA,0(,R3) PBT,LAT,16(CDSA)	DSA POINTER TO RAS	01220001 01221001
0009D8					009DE	1485		LA	R2, SPDECL17-8		01222001
0009DC					00004	1486		ST	R2,4(R3)	ADDR USED BY CAP2	01223001
0009E0		DB40			00B40	1487 1488		L BR	R15,SPTHAD R15	ADDR OF THUNK BRANCH TO THUNK	01224001 01225001
0009E4	0/FF					1489	*	DK	KID	BRANCH TO THUNK	01225001
						1490		RETUR	N HERE VIA CAP2		01227001
						1491		R8 CO	NTAINS ADDR OF ACTUAL	PARAM	01228001
0009E6	5850	DR44			00B44	1492 1493	SPDECL17	1	R5,SPDAP	RESTORE SPDA POINTER	01229001 01230001
0009EA					00004		Si DECELI	LM	R15,R4,SPSAVE	RESTORE REGISTERS	01231001
0009EE					00098			С	R8, ASTLOC(R13)		01232001
0009F2			0000	00000	009FE 00000	1496		BNE MVC	SPDECL19	SAVE PARAM VALUE IN SPDA	01233001 01234001
0009FC		3000	8000	00000	00000	1498		LR	0(8,R3),0(R8) R8,R3	SAVE PARAM VALUE IN SPDA	01234001
0009FE		1000			00000		SPDECL19		R8,0(,R1)	COMBINE FLAGS AND PARAM ADDR	01236001
000A02					00000	1500		ST	R8,0(,R1)	STORE PARAM ADDR IN PARLIST	01237001
000A06 000A0A				0001C	00A2A	1501		TM BNZ	PRID,X'03' SPDECL01	I/O PROCEDURE ? NO, BRANCH	01238001 01239001
ADAGGG	4//0	DAZA			UUAZA	1502	*	DINZ	21 DECEMENT	NO, DIMNET	01239001
						1504	*	I/O P	ROCEDURE		01241001
000	0.5.5.	F61-		000:-		1505	*		DDTD 2 WISSI	CVCACT >	01242001
000A0E 000A12				0001E	00A2A	1506 1507		TM BZ	PRID+2,X'02' SPDECL01	SYSACT ? NO, BRANCH	01243001 01244001
000A12					00E68			CH	R0,=H'1'	TEST IF THIRD PARAM	01244001
000A1A	4770	DA2A			00A2A			BNE	SPDECL01	BR IF NO	01246001
000A1E				00004		1510		TM	4(R15),X'08'	ASSIGNMENT POSSIBLE ?	01247001
000A22 000A26				00000	00A2A	1511 1512		BZ OI	SPDECL01 0(R1),X'40'	YES, BRANCH SET NO ASSIGNMENT FLAG	01248001 01249001
JUUAZO	2040	1000		00000		1512	*	01	O(NI/)A HU	SET NO ASSEGNMENT FLAG	01249001
000A2A					00004	1514	SPDECL01		R1,4(,R1)	STEP PARLIST POINTER	01251001
000A2E					80000			LA	R3,8(,R3)	STEP PARAMETER POINTER	01252001
000A32 000A36					00008 00004			LA SRL	R15,8(,R15) R2,4	STEP ACTUAL PARAMETER POINTER	01253001 01254001
000A36					0097C			BCT	RØ, SPDECLØ2	BRANCH IF MORE PARAMETERS	01255001
						1519					01256001
						1520		PARAM	ETER LIST COMPLETE -	ACTIVATE THE PROCEDURE	01257001
000A3E	SOFO	5001			00004	1521 1522	*	ST	R15,SPSAVE	SAVE RETURN ADDR	01258001 01259001
000A3E					00004			LA	R1, PARLIST	SAVE REPORT ADDR	01260001
000A46	9180	501F		0001F		1524		TM	PRID+3,X'80'	ABS/SIGN/LENGTH/ENTIER ?	01261001
000A4A					00A68			BO TC	SPDECL03	YES, BRANCH	01262001
000A4E 000A52					0001F 00E4C	1526 1527		IC N	R2, PRID+3 R2,=X'000000FC'	GET DISPLACEMENT IN LAT	01263001 01264001
000A52					00000	1528		L	R15,0(R2,R4)	LOAD ADDR OF PROCEDURE	01265001
000A5A	9103	501C		0001C		1529		TM	PRID,X'03'	I/O PROCEDURE ?	01266001
000A5E	4770	DAC6			00AC6		*	BNZ	SPDECL04	NO, BRANCH	01267001
						1531 1532		I/O P	ROCEDURE EXIT		01268001 01269001
						1533		,			01270001
000A62	05EF					1534		BALR	R14,R15		01271001

FSA IHIFSA, RUNTIME FIXED STORAGE AREA, ALGOL F LIB Active USINGS: SPDA,R5 IHIFSARA,R13 PAGE 18 Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 000A64 47F0 DB1A 00B1A 1535 B SPDECL18 1536 \* 000A68 9150 501F 0001F 1537 SPDECL03 TM PRID+3,X'50' 000A6C 47B0 DAC6 00AC6 1538 RNM SPDECL04 01272001 01273001 01274001

иииды	47B0	DACE		0001F	00AC6		SPDECT03	BNM	SPDECL04	BR IF ABS OR ENTIER FUNCTION	01274001
000A70				0001F	00/100	1539		TM	PRID+3, X'20'	5K 11 7B5 6K 2K12K 16K6126K	01276001
000A74	4780	DA92			00A92			BZ	SPDECL05	BR IF SIGN FUNCTION	01277001
						1541		LENGT	LEUNGTTON		01278001
						1542 1543		LENGII	H FUNCTION		01279001 01280001
000A78	5811	0000			00000	1544		L	R1,0(R1)		01281001
000A7C			1000	0009C		1545		MVC	HW(2,R13),0(R1)		01282001
000A82		009C			0009C			LH	R0, HW(R13)	LENGTH OF ENTIRE STRING FIELD	01283001
000A86 000A88						1547 1548		BCTR BCTR	R0,0	REDUCE BY TWO TO GET ACTUAL STRING LENGTH	01284001 01285001
000A88		0090			00090			ST	R0,0 R0,FCTVALST(R13)	ACTUAL STRING LENGTH	01286001
000A8E					00B16			В	SPDECL13		01287001
						1551					01288001
						1552		SIGN	FUNCTION		01289001
000A92	5820	1000			00000	1553 1554	SPDECL05	L	R2,0(,R1)	LOAD PARAMETER ADDR	01290001 01291001
000A96					00000	1555	5. 520205	SR	R0, R0	INITIALIZE OUTPUT VALUE	01292001
000A98				00000		1556		TM	0(R1),X'80'	TYPE CONVERSION ?	01293001
000A9C					00AAC			BO	SPDECL06	YES, BRANCH	01294001
000AA0 000AA4					002E2 002EA			EX EX	0,LINSTR 0,LTRINSTR	VALUE TO FPR0 TEST SIGN	01295001 01296001
000AA8					00AB0			В	SPDECL07	1231 3141	01297001
						1561					01298001
000AAC							SPDECL06		R0,B'1111',0(R2)	VALUE TO RØ	01299001
000AB0 000AB4					00ABE 00001		SPDECL07	BZ LA	SPDECL08 R0,1	TEST SIGN FUNCTION VALUE=1	01300001 01301001
000AB4					00001 00ABE			BP	SPDECL08	TONCTION VALUE-I	01302001
000ABC						1566		LCR	R0,R0	FUNCTION VALUE=-1	01303001
000ABE							SPDECL08		RO, FCTVALST(,R13)		01304001
000AC2	47F0	DB16			00B16		*	В	SPDECL13		01305001
						1569 1570		МАТНЕ	MATICAL FUNCTIONS (INCL	UDING ABS, ENTIER)	01306001 01307001
						1571					01307001
000AC6					00000		SPDECL04		R2,0(,R1)		01309001
000ACA				00000	00450	1573		TM BZ	0(R1),X'80'	TYPE CONVERSION ?	01310001
000ACE 000AD2					000E8	1574		L L	SPDECL09 R14,0(,R2)	LOAD PARAMETER VALUE	01311001 01312001
000AD2					00120			BAL	R8, CNVIRD(R13)	EOAD TANALETER VALUE	01312001
000ADA	4400	D2E6			002E6	1577		EX	0,STINSTR		01314001
			D098	00000	00098			MVC	0(4,R1),ASTLOC(R13)	CHANGE PARAMETER ADDR	01315001
000AE4	4/F0	DAEC			00AEC	15/9 1580	*	В	SPDECL10		01316001 01317001
000AE8	4400	D2E2			002E2		SPDECL09	EX	0,LINSTR		01317001
000AEC				0001F			SPDECL10		PRID+3,X'80'	ABS ?	01319001
000AF0	4770	DAFC			00AFC			BNE	SPDECL11	NO, BRANCH	01320001
						1584 1585					01321001
											01222001
								ABS FI	UNCTION		01322001 01323001
000AF4	4400	D2EE			002EE	1586		ABS FI	UNCTION  O,LPRINSTR	ABS VALUE TO FPR0	01322001 01323001 01324001
000AF4 000AF8					002EE 00B12	1586 1587 1588	*			ABS VALUE TO FPR0	01323001 01324001 01325001
000AF8	47F0	DB12		22245		1586 1587 1588 1589	*	EX B	0,LPRINSTR SPDECL14		01323001 01324001 01325001 01326001
000AF8 000AFC	47F0 95F0	DB12 501F		0001F	00B12	1586 1587 1588 1589 1590	*	EX B	0,LPRINSTR SPDECL14 PRID+3,X'F0'	ENTIER ?	01323001 01324001 01325001 01326001 01327001
000AF8	47F0 95F0	DB12 501F		0001F		1586 1587 1588 1589 1590	*  * SPDECL11	EX B	0,LPRINSTR SPDECL14		01323001 01324001 01325001 01326001
000AF8 000AFC	47F0 95F0	DB12 501F		0001F	00B12	1586 1587 1588 1589 1590 1591	* SPDECL11 *	EX B CLI BNE	0,LPRINSTR SPDECL14 PRID+3,X'F0'	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001
000AF8 000AFC 000B00	47F0 95F0 4770	DB12 501F DB10		0001F	00B12 00B10	1586 1587 1588 1589 1590 1591 1592 1593 1594	* * SPDECL11 * * *	EX B CLI BNE ENTIE	0,LPRINSTR SPDECL14 PRID+3,X'F0' SPDECL12 R FUNCTION	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01330001 01331001
000AF8 000AFC 000B00 000B04	47F0 95F0 4770 458D	DB12 501F DB10 0140		0001F	00B12 00B10 00140	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595	* * SPDECL11 * * *	EX B CLI BNE ENTIE	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13)	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01330001 01331001 01332001
000AF8 000AFC 000B00	47F0 95F0 4770 458D 50ED	DB12 501F DB10 0140 0090		0001F	00B12 00B10	1586 1587 1588 1599 1590 1591 1592 1593 1594 1595 1596	* * * * * * * * * * *	EX B CLI BNE ENTIE	0,LPRINSTR SPDECL14 PRID+3,X'F0' SPDECL12 R FUNCTION	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01330001 01331001
000AF8 000AFC 000B00 000B04 000B08	47F0 95F0 4770 458D 50ED	DB12 501F DB10 0140 0090		0001F	00B12 00B10 00140 00090	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598	* * SPDECL11 * * *	EX B CLI BNE ENTIER BAL ST B	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01331001 01332001 01333001 01334001 01335001
000AF8 000AFC 000B00 000B04 000B08	47F0 95F0 4770 458D 50ED	DB12 501F DB10 0140 0090		0001F	00B12 00B10 00140 00090	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599	* * SPDECL11 * * * *	EX B CLI BNE ENTIER BAL ST B	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13)	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01331001 01332001 01333001 01335001 01335001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0	DB12 501F DB10 0140 0090		0001F	00B12 00B10 00140 00090	1586 1587 1588 1599 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600	* * SPDECL11  * * * * *	EX B CLI BNE ENTIEL BAL ST B ALL O	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS	ENTIER ? NO, BRANCH	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01331001 01332001 01334001 01335001 01336001 01337001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0	DB12 501F DB10 0140 0090 DB16		0001F	00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601	*  * SPDECL11  * * * * SPDECL12	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O' BALR	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS R14,R15	ENTIER ?	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01331001 01332001 01334001 01335001 01335001 01337001 01337001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0 05EF 4400	DB12 501F DB10 0140 0090 DB16		0001F	00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1591 1592 1593 1594 1595 1596 1596 1599 1600 1601 1602	* * SPDECL11  * * * * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS	ENTIER ? NO, BRANCH	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01331001 01332001 01334001 01335001 01336001 01337001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0 05EF 4400	DB12 501F DB10 0140 0090 DB16		0001F	00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1590 1591 1592 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603	* SPDECL11  * * * * SPDECL12 SPDECL14 SPDECL14 SPDECL13 *	EX B CLI BNE ENTIE BAL ST B ALL O BALR EX L	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)	ENTIER ? NO, BRANCH  CALL SUBROUTINE	01323001 01324001 01325001 01326001 01327001 01329001 01339001 01334001 01335001 01336001 01337001 01338001 01339001 01334001 0134001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0 05EF 4400	DB12 501F DB10 0140 0090 DB16		0001F	00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605	* SPDECL11  * * * SPDECL12 SPDECL12 SPDECL14 SPDECL13 *	EX B CLI BNE ENTIE BAL ST B ALL O BALR EX L	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR	ENTIER ? NO, BRANCH  CALL SUBROUTINE	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01330001 01334001 01335001 01336001 01337001 01338001 01339001 01340001 01341001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0 05EF 4400 588D	DB12 501F DB10 0140 0090 DB16		0001F	00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1590 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605	* SPDECL11  * * * SPDECL12 SPDECL12 SPDECL14 SPDECL13 * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOD	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT	ENTIER ? NO, BRANCH  CALL SUBROUTINE	01323001 01324001 01325001 01327001 01327001 01328001 01339001 01332001 01332001 01334001 01335001 01337001 01338001 01339001 01341001 01341001
000AF8 000AFC 000B00 000B04 000B08 000B0C	47F0 95F0 4770 458D 50ED 47F0 05EF 4400 588D	DB12 501F DB10 0140 0090 DB16  D2E6 0098			00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1590 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605	* SPDECL11  * * * SPDECL12 SPDECL12 SPDECL14 SPDECL13 *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOD	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)	ENTIER ? NO, BRANCH  CALL SUBROUTINE	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01330001 01334001 01335001 01336001 01337001 01338001 01339001 01340001 01341001
000AF8 000AFC 000B00 000B04 000B0C 000B10 000B12 000B16	47F0 95F0 4770 458D 50ED 47F0 05EF 4400 588D	DB12 501F DB10 0140 0090 DB16  D2E6 0098	1000		00B12 00B10 00140 00090 00B16	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1600 1601 1602 1603 1604 1605 1606 1606 1607	*  * SPDECL11  * * * * SPDECL12 SPDECL14 SPDECL14 SPDECL13 * * SPDECL18	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOI	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE	01323001 01324001 01325001 01327001 01328001 01329001 01339001 01332001 01334001 01335001 01336001 01337001 01338001 01339001 0134001 01344001 01344001 01344001 01344001
000AF8 000AFC 000B00 000B04 000B08 000B0C 000B10 000B16 000B1A 000B1A	47F0 95F0 4770 458D 50ED 47F0 05EF 4400 588D	DB12 501F DB10 0140 0090 DB16  D2E6 0098	1000		00B12 00B10 00140 00090 00B16	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1600 1601 1602 1604 1605 1606 1607 1608 1609 1609 1609 1609 1609 1609 1609 1609	*  * SPDECL11  * * * * SPDECL12 SPDECL14 SPDECL14 SPDECL13 * * SPDECL18	EX B CLI BNE ENTIEL BAL ST B ALL O' BALR EX L COMMODI LR MVC L	O,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 O,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER	01323001 01324001 01325001 01327001 01328001 01329001 01332001 01334001 01335001 01335001 01336001 01337001 01338001 01334001 0134001 01341001 01342001 01345001 01345001
000AF8 000AFC 000B00 000B04 000B08 000B0C 000B10 000B16 000B1A 000B1A	47F0 95F0 4770 458D 50ED 47F0 05EF 4400 588D	DB12 501F DB10 0140 0090 DB16  D2E6 0098	1000		00B12 00B10 00140 00090 00B16	1586 1587 1588 1599 1591 1592 1593 1594 1595 1596 1597 1598 1600 1601 1602 1603 1604 1606 1607 1608 1609 1609 1600 1601	*  * SPDECL11  * * * * * SPDECL12 SPDECL14 SPDECL13 * * SPDECL18	EX B  CLI BNE ENTIEL  BAL ST B  ALL O' BALR EX L  COMMODILE  LR MVC L  FREEMA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01332001 01334001 01335001 01335001 01336001 01337001 01339001 0134001 01342001 01342001 01343001 01344001 01345001 01347001 01347001
000AF8 000AFC 000B00 000B04 000B08 000B0C 000B10 000B16 000B1A 000B1A	47F0 95F0 4770 458D 47F0 05EF 4400 588D 1815 D203 5820	DB12 501F DB10 0140 0090 DB16  D2E6 0098	1000		00B12 00B10 00140 00090 00B16	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1600 1601 1602 1604 1605 1606 1607 1608 1609 1609 1609 1609 1609 1609 1609 1609	*  * SPDECL11  * * * * * SPDECL12 SPDECL14 SPDECL13 * * SPDECL18 * * * * * * * * * * * * * * * * * * *	EX B  CLI BNE ENTIEL  BAL ST B  ALL O' BALR EX L  COMMODILE  LR MVC L  FREEMA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13) N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)	01323001 01324001 01325001 01327001 01328001 01329001 01332001 01334001 01335001 01335001 01336001 01337001 01338001 01334001 0134001 01341001 01342001 01345001 01345001
000AF8 000AFC 000B00 000B04 000B08 000B10 000B12 000B1A 000B1C 000B22	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700	DB12 501F DB10 0140 0090 DB16  D2E6 0098  DB44 5004	1000		00B12 00B10 00140 00090 00B16	1586 1587 1588 1590 1591 1592 1593 1594 1595 1596 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1611 1612 1613	*  * SPDECL11  * * * * SPDECL12 SPDECL14 SPDECL13 * * SPDECL18  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIE  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM. OS/VS:	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13) N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)	01323001 01324001 01325001 01327001 01327001 01329001 01339001 01332001 01333001 01334001 01335001 01336001 01337001 01338001 0134001 01344001 01344001 01344001 01345001 01348001 01348001
000AF8 000AFC 000B00 000B04 000B08 000B10 000B12 000B16 000B16 000B22	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 00000	DB12 501F DB10 0140 0090 DB16  D2E6 0098  DB44 5004	1000		00B12 00B10 00140 00090 00B16 002E6 00098	1586 1587 1588 1590 1591 1592 1593 1594 1595 1596 1597 1598 1690 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615	*  * SPDECL11  * * * * SPDECL12 SPDECL14 SPDECL13 * * SPDECL18  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM, OS/VS: CNOP B DC	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 +** A(SPDALG)	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH	01323001 01324001 01325001 01326001 01327001 01328001 01339001 0133001 01332001 01333001 01334001 01335001 01336001 01338001 01339001 0134001 01342001 01342001 01343001 01345001 01347001 01347001 01347001 01347001 01547001 01547001
000AF8 000AFC 000B00 000B04 000B08 000B0C 000B16 000B16 000B16 000B26 000B28 000B26 000B28	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 000005800	DB12 501F DB10 0140 0090 DB16  D2E6 0098  DB44 5004  DB30 0048 DB2C	1000		00B12 00B10 00140 00090 00B16 002E6 00098 00004	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1600 1601 1602 1603 1604 1605 1606 1611 1611 1611 1611 1611 1611	*  * SPDECL11  * * * * SPDECL12 SPDECL14 SPDECL13 * * SPDECL18  * ++++++++++++++++++++++++++++++++++	EX B  CLI BNE ENTIEL ST B  ALL O' BALR EX L  COMMODI LR MVC L  FREEM, OS/VS: CNOP B DC L	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH LOAD SP AND LV	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01331001 01332001 01335001 01335001 01337001 01337001 01337001 01337001 0134001 01342001 01343001 01344001 01345001 01345001 01345001 01347001 01348001 01348001 01348001
000AF8 000AFC 000B00 000B04 000B08 000B0C 000B12 000B1A 000B1C 000B22	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 00000 4110	DB12 501F DB10 0140 0090 DB16  D2E6 0098  DB44 5004  DB30 0048 DB2C	1000		00B12 00B10 00140 00090 00B16 002E6 00098	1586 1587 1588 1599 1591 1592 1593 1594 1595 1596 1597 1600 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1616 1616 1616 1617	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIE  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM OS/VS: CNOP B DC L LA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13) N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1)	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01339001 01334001 01335001 01335001 01336001 01334001 01344001 01344001 01344001 01344001 01347001 01347001 01347001 01347001 01347001 0157666666666666666666666666666666666666
000AF8 000AFC 000B00 000B04 000B08 000B0C 000B16 000B16 000B16 000B26 000B28 000B26 000B28	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 00000 4110	DB12 501F DB10 0140 0090 DB16  D2E6 0098  DB44 5004  DB30 0048 DB2C	1000		00B12 00B10 00140 00090 00B16 002E6 00098 00004	1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1600 1601 1602 1603 1604 1605 1606 1611 1611 1611 1611 1611 1611	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE ENTIEL ST B  ALL O' BALR EX L  COMMODI LR MVC L  FREEM, OS/VS: CNOP B DC L	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4	ENTIER ? NO, BRANCH  CALL SUBROUTINE ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH LOAD SP AND LV	01323001 01324001 01325001 01326001 01326001 01329001 01339001 01331001 01332001 01335001 01335001 01336001 01337001 01337001 01338001 0134001 01342001 01343001 01344001 01345001 01345001 01345001 01347001 01348001 01348001 01348001 01348001
000AF8 000B06 000B04 000B08 000B0C 000B10 000B16 000B16 000B28 000B26 000B28 000B30 000B3A	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 0000 5800 4110 0040A 98BC	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000	1000		00B12 00B10 00140 00090 00B16 002E6 00098 00004	1586 1587 1588 1599 1599 1591 1592 1593 1594 1595 1596 1691 1602 1603 1604 1605 1606 1607 1611 1612 1613 1614 1615 1616 1617 1618 1616 1618 1618 1618 1618	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIE  BAL ST B  ALL O'  BALR EX L  COMMODI  LR MVC L  FREEM OS/VS: CNOP B DC L LA SVC LM	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA)	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC	01323001 01324001 01325001 01326001 01326001 01329001 01339001 01333001 01334001 01335001 01335001 01336001 01337001 0134001 01342001 01342001 01343001 01344001 01345001 01347001 01347001 01347001 01348001 01-FREEM 01-FREEM 01-FREEM 01-FREEM 01-FREEM
000AF8 000AFC 000B00 000B04 000B08 000B10 000B12 000B16 000B16 000B28 000B28 000B28 000B30 000B34 000B38	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 0000 5800 4110 0040A 98BC	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1599 1591 1592 1593 1594 1595 1596 1597 1600 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1617 1618 1617 1618 1619 1619	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIEL  BAL  ST B  ALL O'  BALR  EX L  COMMOI  LR  MVC L  FREEM  OS/VS: CNOP  B  DC  L  LA  SVC	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE	01323001 01324001 01325001 01326001 01326001 01327001 01329001 01339001 01334001 01335001 01334001 01334001 01344001 01344001 01344001 01344001 01344001 01347001 01348001 01347001 01348001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001 01547001
000AF8 000B06 000B04 000B08 000B0C 000B10 000B16 000B16 000B28 000B26 000B28 000B30 000B3A	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 0000 5800 4110 0040A 98BC	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1590 1591 1592 1593 1594 1595 1596 1597 1600 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1617 1618 1619 1619 1620 1620 1621 1622	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM OS/VS: CNOP B DC L LA SVC  LM BR	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC	01323001 01324001 01325001 01325001 01327001 01328001 01329001 01339001 01334001 01335001 01338001 01334001 01334001 01344001 01344001 01344001 01348001 01348001 0156601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 0157601 0157601 0157601
000AF8 000B06 000B04 000B08 000B0C 000B10 000B16 000B16 000B28 000B26 000B28 000B30 000B3A	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 0000 5800 4110 0040A 98BC	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1590 1591 1592 1593 1594 1595 1596 1690 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1616 1617 1618 1619 1620 1621 1622 1623	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIE  BAL ST B  ALL O'  BALR EX L  COMMODI  LR MVC L  FREEM OS/VS: CNOP B DC L LA SVC LM	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01339001 01333001 01334001 01335001 01336001 01338001 01338001 0134001 01344001 01342001 01344001 01347001 01347001 01347001 01347001 01547001 01547001 01547001 01578EM 01-FREEM 01-FR
000AF8 000B06 000B04 000B08 000B0C 000B10 000B16 000B16 000B28 000B26 000B28 000B30 000B3A	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 0000 5800 4110 0040A 98BC	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1590 1591 1592 1593 1594 1595 1596 1597 1600 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1617 1618 1619 1619 1620 1620 1621 1622	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE ENTIEL  BAL ST B  ALL O' BALR EX L  COMMODI  LR MVC L  FREEM, OS/VS: CNOP B  DC L  LA SVC  LM BR  DROP	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC	01323001 01324001 01325001 01325001 01327001 01328001 01329001 01339001 01334001 01335001 01338001 01334001 01334001 01344001 01344001 01344001 01348001 01348001 0156601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 01576601 0157601 0157601 0157601
000AF8 000AFC 000B00 000B04 000B10 000B12 000B16 000B22 000B26 000B28 000B28 000B34 000B3A 000B3A	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 47F0 00000 54110 040A 98BC 07F2	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB30 DB30 0048 DB30 DB30 0048 DB30 DB30 DB30 DB30 DB30 DB30 DB30 DB30	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1599 1591 1592 1593 1594 1595 1596 1697 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1616 1617 1618 1619 1622 1623 1624 1623 1624 1625 1626 1621 1622 1623 1624 1625 1626 1627 1628 1628 1628 1628 1628 1629 1621 1622 1623 1624 1625 1626 1626 1627 1628 1628 1628 1628 1629 1629 1629 1629 1629 1629 1629 1629	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM OS/VS: CNOP B DC L LA SVC  LM BR  DROP  CONSTA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13) N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2  R5  ANTS AND WORK AREAS	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC  RETURN TO CALLING PROGRAM	01323001 01324001 01325001 01326001 01327001 01328001 01329001 01339001 01334001 01335001 01336001 01334001 01344001 01344001 01344001 01344001 01348001 01348001 01546001 0156001
000AF8 000AFC 000B00  000B04 000B08 000B10 000B12 000B16  000B1A 000B22  000B30 000B34 000B38 000B3A	47F0 47F0 458D 50ED 47F0 05EF 4400 588D 0700 47F0 00000 47F0 00000 04000 04000 07F2	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000 A010	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1590 1591 1592 1593 1594 1595 1596 1690 1601 1602 1603 1604 1605 1606 1611 1612 1613 1614 1615 1616 1617 1618 1619 1622 1623 1624 1625 1624 1625 1626 1627	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM, OS/VS. CNOP B  DC L  LA SVC  LM BR  DROP  CONSTA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2 R5  ANTS AND WORK AREAS F'0'	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC  RETURN TO CALLING PROGRAM  TEMP STORAGE FOR THUNK ADDR	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01339001 01333001 01334001 01335001 01338001 01334001 01344001 01344001 01344001 01345001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001
000AF8 000AFC 000B00 000B04 000B10 000B12 000B16 000B26 000B28 000B28 000B3A 000B3A 000B3A	47F0 458D 50ED 47F0 05EF 4400 588D 1815 D203 5820 0700 4410 0000 4410 0000 007F2	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000 A010	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1599 1590 1591 1592 1593 1594 1595 1596 1601 1602 1603 1604 1607 1608 1609 1610 1611 1612- 1613- 1614- 1615- 1616- 1617- 1618- 1621 1622 1623 1624 1622 1623 1624 1625 1625 1626 1627 1628	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE ENTIEL BAL ST B  ALL O' BALR EX L  COMMODI LR MVC L  FREEM, OS/VS: CNOP B DC L LA SVC L LM BR  DROP CONSTA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2  R5  ANTS AND WORK AREAS F'0' F'0'	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC  RETURN TO CALLING PROGRAM  TEMP STORAGE FOR THUNK ADDR POINTER TO CURRENT DYNAMIC ARE	01323001 01324001 01325001 01326001 01326001 01327001 01328001 01339001 01333001 01334001 01335001 01335001 0134001 01342001 01344001 01342001 01344001 01347001 01347001 01347001 01547001 01547001 01547001 0155001 0155001 01350001 01350001 01350001 01350001 01355001 01355001 01355001
000AF8 000AFC 000B00  000B04 000B08 000B10 000B12 000B16  000B1A 000B22  000B30 000B34 000B38 000B3A	47F0 4770 458D 50ED 47F0 05EF 4400 588D 1815 52203 5820 0700 4170 0800 4110 0800 4110 0800 4110 0800 080	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000 A010	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1599 1590 1591 1592 1593 1594 1595 1596 1601 1602 1603 1604 1605 1606 1607 1611 1612 1613 1614 1615 1616 1617 1618 1616 1617 1618 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1620 1621 1622 1623 1624 1625 1626 1627 1628 1628 1629 1629 1629 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1629 1629 1629 1629 1629 1629 1629	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE  ENTIEL  BAL ST B  ALL O'  BALR EX L  COMMOI  LR MVC L  FREEM, OS/VS. CNOP B  DC L  LA SVC  LM BR  DROP  CONSTA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 *+8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2 R5  ANTS AND WORK AREAS F'0'	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC  RETURN TO CALLING PROGRAM  TEMP STORAGE FOR THUNK ADDR	01323001 01324001 01325001 01326001 01327001 01328001 01339001 01339001 01333001 01334001 01335001 01338001 01334001 01344001 01344001 01344001 01345001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001 01347001
000AF8 000AFC 000B00 000B04 000B10 000B12 000B16 000B22 000B26 000B28 000B26 000B3A 000B3A 000B3E	47F0 4770 458D 50ED 47F0 05EF 4400 588D 1815 52203 5820 0700 4170 0800 4110 0800 4110 0800 4110 0800 080	DB12 501F DB10 0140 0090 DB16 D2E6 0098 DB44 5004 DB30 0048 DB2C 1000 A010	1000		00B12 00B10 00140 00090 00B16 002E6 00098 000004	1586 1587 1588 1599 1590 1591 1592 1593 1594 1595 1596 1601 1602 1603 1604 1605 1606 1607 1611 1612 1613 1614 1615 1616 1617 1618 1616 1617 1618 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1620 1621 1622 1623 1624 1625 1626 1627 1628 1628 1629 1629 1629 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1629 1629 1629 1629 1629 1629 1629	*  * * * * * * * * * * * * * * * * * *	EX B  CLI BNE ENTIEL  BAL ST B  ALL O' BALR EX L  COMMODI  LR MVC L  FREEM, OS/VS: CNOP B  DC L  LA SVC  LM BR  DROP  CONSTA	0,LPRINSTR SPDECL14  PRID+3,X'F0' SPDECL12  R FUNCTION  R8,ENTIER(R13) R14,FCTVALST(R13) SPDECL13  THER FUNCTIONS  R14,R15 0,STINSTR R8,ASTLOC(R13)  N EXIT  R1,R5 SPDAP(4),0(R1) R2,SPSAVE  AIN R,A=(1),LV=SPDALG 2 RELEASE 3 VERSION 0,4 ++8 A(SPDALG) 0,*-4 1,0(0,1) 10  PBT,LAT,16(CDSA) R2  R5  ANTS AND WORK AREAS F'0' F'0' X'00'	ENTIER ? NO, BRANCH  CALL SUBROUTINE  ADDR OF FUNCTION VALUE  RESTORE PREV DA POINTER LOAD RETURN ADDR (PREV R15)  10/25/74  BRANCH AROUND LENGTH LENGTH LOAD SP AND LV CLEAR HI ORDER BYTE ISSUE FREEMAIN SVC  RETURN TO CALLING PROGRAM  TEMP STORAGE FOR THUNK ADDR POINTER TO CURRENT DYNAMIC ARE TYPE OF FORMAL PARAMETER	01323001 01324001 01325001 01326001 01326001 01329001 01339001 01333001 01334001 01335001 01334001 01334001 01344001 01344001 01344001 01344001 01345001 01345001 0137001 01345001 01345001 01345001 01345001 01345001 01345001 01345001 01345001 01345001 01345001 01345001 0135001 0135001 0135001 0135001 0135001 0135001 01355001 01355001 01355001 01355001 01355001

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X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                     1631 *
                                                                                                                      01361001
                                     1632 *
                                                   DYNAMIC STORAGE AREA
                                                                                                                      01362001
                                     1633 *
                                                                                                                      01363001
000000
                       00000 00048
                                    1634 SPDA
                                                   DSECT
                                                                                                                      01364001
000000
                                     1635
                                                                                   LINK TO LOWER DA
                                                                                                                      01365001
                                                    DS
                                                                                   REGS R15, R0, R1, R2, R3, R4
PROCEDURE IDENTIFICATION
000004
                                     1636 SPSAVE
                                                          6F
                                                                                                                      01366001
00001C
                                     1637 PRID
                                                    DS
                                                                                                                      01367001
000020
                                     1638 PARLIST
                                                   DS
                                                          3F
                                                                                   PARAMETER LIST
                                                                                                                      01368001
                                     1639 PARAMS
                                                                                   PARAMETER VALUES
000030
                                                   DS
                                                          3D
                                                                                                                      01369001
                                                                                                                      01370001
                       00048
                                     1640 SPDALG
                                                   EOU
                                                          *-SPDA
                                     1641
                                                                                                                      01371001
000B4A
                       00000 00E6E 1642 IHIFSARA CSECT
                                                                                                                      01372001
                                     1643
                                                                                                                       01373001
                                     1644 *******************************
                                                                                                                      01374001
                                     1645
                                                                                                                      01375001
                                     1646
                                                    CALL SWITCH ELEMENT SUBROUTINE
                                                                                                                      01376001
                                     1647
                                                                                                                       01377001
                                              *************************
                                     1648
                                                                                                                      01378001
                                     1649
                                                                                                                      01379001
                                                                                                                      01380001
                                     1650
                                                    THIS ROUTINE IS AN INTERMEDIATE LINK BETWEEN A SWITCH
                                     1651
                                                   DESIGNATOR AND A SWITCH LIST
                                                                                                                      01381001
                                     1652
                                                                                                                      01382001
                                     1653
                                                    IT SEARCHES THE DSA CHAIN FOR THE DSA OF THE SWITCH LIST
                                                                                                                      01383001
                                                    AND BRANCHES TO THE CALLED SWITCH LIST ENTRY CALLING SEQUENCE - (ENTRY VIA BRLIST)
                                     1654
                                                                                                                      01384001
                                                                                                                      01385001
                                     1655
                                                    ADDR OF SWITCH LIST IN R8, ADDR OF DSA FOR
                                                                                                                      01386001
                                     1656
                                     1657
                                                    BLOCK IN WHICH SWITCH IS DECLARED IN REG GDSA AND THE
                                                                                                                      01387001
                                                    SWITCH ELEMENT NUMBER IN R15
                                     1658
                                                                                                                      01388001
                                     1659
                                                                                                                      01389001
                                     1660
                                                                                                                      01390001
                                     1661
                                                    BAL
                                                          R14, CSWE1(R13)
                                                                                                                      01391001
                                                                                   RETURN VIA CSWE2 WITH BRANCH
                                                                                                                      01392001
                                     1662
                                     1663
                                                                                    ADDR IN R8 AND ADDR OF
                                                                                                                      01393001
                                     1664 *
                                                                                   DSA IN GDSA
                                                                                                                      01394001
                                     1665 *
                                                                                                                      01395001
                                                                                   FLEMENT NUMBER POSTTTVE ?
000B4A 12FF
                                     1666 CSWF1A
                                                   I TR
                                                          R15.R15
                                                                                                                      01396001
000B4C 47DD 0254
                                                          SWDMERR(R13)
                                                                                   NO, DIMENSION ERROR
                             00254
                                                                                                                      01397001
                                                    BNH
                                    1667
000B50 49F0 8002
                             00002
                                                    СН
                                                          R15,2(,R8)
                                                                                   COMPARE NO WITH SWITCH LIST NO
                                                                                                                      01398001
                                     1668
                                                                                                                       01399001
000B54 472D 0254
                                                          SWDMERR (R13)
                             00254
                                     1669
                                                                                   DIMENSION ERROR
000B58 89F0 0002
                             00002
                                     1670
                                                    SLL
                                                          R15.2
                                                                                                                      01400001
000B5C 583D 00C8
                             000C8
                                    1671
                                                          R3, RASPT(R13)
                                                                                   RAS POINTER FROM TOP
                                                                                                                      01401001
                                                                                   RESERVE ONE ENTRY IN RAS
000B60 4133 0008
                             00008
                                    1672 CSWEI1
                                                   LA
                                                          R3.8(R3)
                                                                                                                      01402001
000B64 593D 00D0
                                                                                   STACK OVERFLOW ?
                             000D0
                                                          R3, RASPB(R13)
                                                                                                                      01403001
                                     1673
000B68 47BD 025C
                             0025C
                                     1674
                                                    BNL
                                                          RASOVERF(R13)
                                                                                                                      01404001
000B6C 50A0 3000
                                                          CDSA,0(,R3)
                                                                                   STORE CDSA IN RAS
                                                                                                                      01405001
                             00000
                                     1675
                                                          R14,4(,R3)
R14,R14
                                                                                   SAVE RETURN ADDR IN STACK
NOT CALLING BLOCK INDICATION
                                                                                                                      01406001
01407001
000B70 50E0 3004
                             00004
                                     1676
                                                    ST
000R74 1RFF
                                     1677
                                                    SR
000B76 19A9
                                                    CR
                                                          CDSA, GDSA
                                                                                                                      01408001
                                     1678
                                                                                   SWITCH BLOCK REACHED ?
000B78 4770 DB86
                             00B86
                                    1679
                                                    BNE
                                                          CSWEI2
                                                                                                                      01409001
000B7C 503D 00C8
                             000C8
                                     1680
                                                    ST
                                                          R3, RASPT(R13)
                                                                                   SAVE RAS TOP POINTER
                                                                                                                      01410001
000B80 58FF 8000
                             00000
                                     1681
                                                          R15,0(R15,R8)
                                                                                   ADDR OF SWITCH ELEMENT
                                                                                                                      01411001
000B84 07FF
                                     1682
                                                    BR
                                                          R15
                                                                                                                      01412001
                                     1683 *
                                                                                                                      01413001
000B86 4810 A008
                             00008
                                    1684 CSWEI2
                                                          R1,8(,CDSA)
                                                                                   PROGRAM BLOCK DISPL TO REG
                                                                                                                      01414001
                                                    LH
000B8A 5820 A000
                             00000
                                     1685
                                                          R2,0(,CDSA)
                                                                                   LAST GENERATION DSA POINTER IS
                                                                                                                      01415001
000B8E 5021 B000
                             00000
                                                          R2,0(R1,PBT)
                                                                                   STORED IN PROGRAM BLOCK TABLE
                                                                                                                      01416001
                                     1686
                                                    ST
000B92 58A0 A004
                             00004
                                     1687
                                                          CDSA,4(,CDSA)
                                                                                   LOAD DYNAMICALLY ENCLOSING DSA
                                                                                                                      01417001
99896 98BC A919
                             99919
                                     1688
                                                    I M
                                                          PBT, LAT, 16(CDSA)
                                                                                   PBT AND LAT CAN BE DIFFERENT
                                                                                                                      01418001
                                                                                                                      01419001
000B9A 47F0 DB60
                             00B60
                                     1689
                                                          CSWEI1
                                                                                   CONTINUE
                                                    В
                                     1690
                                                                                                                      01420001
                                     1691
                                                    THIS ROUTINE HANDLES THE TRANSFER FROM THE SWITCH LIST
                                                                                                                      01421001
                                     1692
                                                    BACK TO THE SWITCH DESIGNATOR
                                                                                                                      01422001
                                     1693
                                                                                                                      01423001
                                                                                                                      01424001
                                                    IT RELOADS CDSA WITH THE ADDR OF THE DSA THAT WAS
                                     1694
                                     1695
                                                    ACTIVE WHEN CSWEU WAS ENTERED
                                                                                                                      01425001
                                                                                                                      01426001
                                     1696
                                     1697
                                                    CALLING SEQUENCE - (ENTRY VIA BRLIST)
                                                                                                                      01427001
                                     1698 *
                                                          CSWE2(R13)
                                                                                                                      01428001
                                                    В
                                                                                                                      01429001
                                     1699
000B9E 583D 00C8
                             000C8
                                    1700 CSWE2A
                                                          R3, RASPT(R13)
                                                                                   RAS POINTER FROM TOP
                                                                                                                      01430001
                                                                                   RETURN ADDR FROM STACK
000BA2 58E0 3004
                             00004
                                     1701 CSWEI3
                                                          R14,4(,R3)
                                                                                                                      01431001
000BA6 4B3D 00AA
                                                    SH
                                                          R3, EIGHT(R13)
                                                                                   RELEASE ONE ENTRY IN RAS
                                                                                                                      01432001
                             000AA
                                     1702
000BAA 503D 00C8
                             000C8
                                    1703
                                                    ST
                                                          R3, RASPT(R13)
                                                                                   SAVE RAS TOP POINTER
                                                                                                                      01433001
                                                                                                                      01434001
000BAE 12EE
                                     1704
                                                    LTR
                                                          R14,R14
                                                                                   RETURN ADDR FOUND ?
                                                                                   YES, RETURN
000BB0 077E
                                                                                                                      01435001
                                     1705
                                                   BNZR
                                                          R14
000BB2 58A3 0000
                                                                                   NEW DSA POINTER FROM RAS
                                                                                                                      01436001
                             00000
                                     1706
                                                          CDSA, 0(R3)
000BB6 4810 A008
                                                          R1,8(,CDSA)
                                                                                   PROGRAM BLOCK DISPL TO REG
                             00008
                                     1707
                                                    LH
                                                                                                                      01437001
000BBA 50A1 B000
                             00000
                                     1708
                                                    ST
                                                          CDSA,0(R1,PBT)
                                                                                   CURRENT DSA POINTER TO PBT
                                                                                                                      01438001
998RF 98RC A010
                                                                                                                      01439001
                             99919
                                     1709
                                                    I M
                                                          PBT, LAT, 16(CDSA)
                                                                                   PBT AND LAT CAN BE DIFFERENT
000BC2 47F0 DBA2
                             00BA2
                                     1710
                                                                                   CONTINUE
                                                                                                                      01440001
                                                   В
                                                          CSWEI3
                                     1711
                                                                                                                      01441001
                                                ********************
                                     1712
                                                                                                                       01443001
                                     1713
                                     1714
                                                    LOAD PRECOMPILED PROCEDURE
                                                                                                                      01444001
                                     1715
                                                                                                                      01445001
                                                      ******************
                                                                                                                      01446001
                                     1716
                                     1717
                                                                                                                       01447001
                                     1718
                                                    ENTERED FROM THE DECLARATION OF A 'CODE' PROCEDURE
                                                                                                                      01448001
                                     1719
                                                                                                                      01449001
                                                   SEARCH THE BOTTOM PART OF RAS FOR THE NAME OF THE PROCEDURE. IF IT IS NOT FOUND, THE PRECOMPILED PROCEDURE
                                                                                                                      01450001
01451001
                                     1720
                                     1721
                                     1722
                                                    WITH THE SAME NAME IS LOADED AND ENTRIES ARE MADE IN
                                                                                                                      01452001
                                                    RAS FOR THE NAME AND FOR THE ENTRY POINT
                                                                                                                      01453001
                                     1723
                                                                                                                      01454001
                                     1724
                                     1725
                                                    THE ENTRY POINT ADDR IS STORED IN THE PROGRAM BLOCK TABLE
                                                                                                                      01455001
                                     1726
                                                                                                                      01456001
```

Active USINGs: IHIFSARA,R13

```
Addr1 Addr2 Stmt Source Statement
                                                                                               X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                                     1727 *
                                                   CALLING SEQUENCE - (ENTRY VIA BRLIST)
                                                                                                                      01457001
                                    1728 *
                                                                                                                      01458001
                                    1729 *
                                                   BAL
                                                          R8, LOADPP (R13)
                                                                                                                      01459001
                                                          CL8(PPNAME)
                                                                                                                      01460001
                                                                                   NAME OF PRECOMPILED PROCEDURE
                                    1730
                                                   DC
                                                                                                                      01461001
                                    1731
                                                   DC
                                                                                   PROG BLOCK NUMBER
                                                                                                                      01462001
                                     1732 *
000BC6 9834 D0CC
                             agacc
                                    1733 LOADPPA
                                                   I M
                                                          R3, R4, RASEND (R13)
                                                                                   RASEND AND RASPB TO REG
                                                                                                                      01463001
000BCA 4120 0008
                             00008
                                    1734
                                                   LA
                                                          R2,8
                                                                                   SET TO 8
                                                                                                                      01464001
                                                                                                                      01465001
000BCE 1934
                                     1735 LOADPP2
                                                   CR
                                                          R3.R4
000BD0 47D0 DC04
                                                         LOADPP1
                                                                                                                      01466001
                             00C04
                                                                                   BRANCH IF STACK EMPTY
                                    1736
                                                   BNH
                                                                                   PROCEDURE ALREADY LOADED ?
000BD4 D507 4000 8000 00000 00000
                                    1737
                                                   CLC
                                                          0(8,R4),0(R8)
                                                                                                                      01467001
000BDA 4140 4008
                             80000
                                    1738
                                                          R4,8(,R4)
                                                                                   STEP TO NEXT PP NAME
                                                                                                                      01468001
                                                   LA
                                                                                   NO, NAME NOT FOUND
000BDE 4770 DBCE
                             00BCE
                                    1739
                                                   BNE
                                                          LOADPP2
                                                                                                                      01469001
                                                                                   RAS POINTER FROM TOP
000BF2 583D 00C8
                                                          R3. RASPT(R13)
                             99908
                                    1740
                                                   1
                                                                                                                      01470001
000BE6 5B4D 00D0
                             000D0
                                    1741
                                                          R4, RASPB(R13)
                                                                                                                      01471001
                                                   S
000BEA 8840 0003
                             00003
                                                                                   NAME FOUND IN ENTRY NR R4
                                                                                                                      01472001
                                    1742
                                                   SRL
                                                          R4,3
                                                                                                                      01473001
000BEE 1B32
                                     1743 LOADPP3
                                                   SR
                                                          R3,R2
000BF0 95FE 3008
                      99998
                                     1744
                                                   CLT
                                                          8(R3), RASLOADM
                                                                                   LOAD PROCEDURE ENTRY ?
                                                                                                                      01474001
                                                                                   NO, CONTINUE SEARCH
LOOP TO FIND RIGHT ENTRY
000BF4 4770 DBEE
                             00BEE
                                    1745
                                                   BNE
                                                          LOADPP3
                                                                                                                      01475001
000BF8 4640 DBEE
                                                          R4, LOADPP3
                                                                                                                      01476001
                             00BEE
                                    1746
                                                   BCT
000BFC 5800 300C
                                                                                   FETCH ADDR OF CONSTANTS
                                                                                                                      01477001
                             0000C
                                    1747
                                                          R0.12(,R3)
000C00 47F0 DC38
                             00C38
                                     1748
                                                   В
                                                          LOADPP4
                                                                                                                      01478001
                                     1749
                                                                                                                      01479001
                                     1750 *
                                                                                                                     01480001
01481001
                                                   PROCEDURE MUST BE LOADED
                                     1751 *
000C04 583D 00C8
                                                          R3, RASPT(R13)
                                                                                                                      01482001
                             000C8
                                    1752 LOADPP1
                                                   L
000C08 584D 00D0
                             000D0
                                    1753
                                                          R4, RASPB(R13)
                                                                                                                      01483001
000C0C 1A32
                                                                                   RESERVE ONE ENTRY FROM TOP
                                                                                                                      01484001
                                     1754
                                                   AR
                                                          R3, R2
000C0E 1B42
                                     1755
                                                          R4, R2
                                                                                   RESERVE ONE ENTRY FROM BOTTOM
                                                                                                                      01485001
                                                   SR
000C10 1934
                                     1756
                                                   CR
                                                          R3.R4
                                                                                   STACK OVERFLOW ?
                                                                                                                      01486001
000C12 47BD 025C
                             0025C
                                    1757
                                                   BNL
                                                          RASOVERF(R13)
                                                                                                                      01487001
000C16 504D 00D0
                             000D0
                                                          R4, RASPB(R13)
                                                                                   STORE UPDATED STACK POINTER
                                                                                                                      01488001
                                    1758
                                                   ST
000C1A 503D 00C8
                             000C8
                                     1759
                                                          R3, RASPT(R13)
                                                                                                                      01489001
000C1E D207 4000 8000 00000 00000
                                    1760
                                                   MVC
                                                          0(8,R4),0(R8)
                                                                                   ENTER NAME IN STACK
                                                                                                                      01490001
000C24 1804
                                     1761
                                                   \mathsf{LR}
                                                          R0, R4
                                                                                   RO -> NAME
                                                                                                                      01491001
                                     1762 *
                                                                                                                      01492001
                                                   LOAD
                                                                                                                      01493001
                                    1763
                                                         EPLOC=(0)
000C26 0700
                                     1764+
                                                   CNOP
                                                                                                                      01-LOAD
                                                         0,4
000C28 1B11
                                                                              SHOW NO DCB PRESENT
                                                                                                                      01-LOAD
                                     1765+
                                                   SR
999024 9498
                                    1766+
                                                   SVC
                                                         8
                                                                                                                     01-L0AD
                                     1767
                                                                                                                      01494001
000C2C 50A0 3000
                                                                                                                      01495001
                             00000
                                    1768
                                                   ST
                                                          CDSA.0(.R3)
                                                                                   SAVE CDSA IN RAS ENTRY
                                                         0(R3), RASLOADM
000C30 92FE 3000
                      00000
                                                                                   INSERT LOAD PROCEDURE FLAG
                                                                                                                      01496001
                                                   MVI
                                     1769
                                                                                   STORE ADDR TO ENTRY CONSTANT
                                                                                                                      01497001
000C34 5000 3004
                             00004
                                    1770
                                                   ST
                                                          R0,4(,R3)
000C38 4830 8008
                             80000
                                    1771 LOADPP4
                                                                                   FETCH PBN CODE PROCEDURE
                                                                                                                      01498001
                                                   LH
                                                          R3,8(,R8)
                                                                                   ADDR OF PRECOMPILED PROCEDURE
CONSTANT TO CODE PROC.PBT ENTRY
000C3C 5003 B000
                             00000
                                    1772
                                                          R0,0(R3,PBT)
                                                                                                                      01499001
                                                   ST
                                                                                                                     01500001
                                     1773
                                                                                   CONSTANT A(PBT), A(LAT), A(ENTRY)
                                                                                                                      01501001
                                     1774
000C40 47F0 800A
                             0000A
                                    1775
                                                   В
                                                          10(,R8)
                                                                                   RETURN TO DECLARATION END
                                                                                                                      01502001
                                     1776
                                                                                                                      01503001
                                                  1777 ***
                                                                                                                     01504001
                                                                                                                      01505001
                                    1778
                                     1779
                                                                                                                      01506001
                                                   TRACE ROUTINE
                                     1780
                                                                                                                      01507001
                                             *********************
                                     1781
                                                                                                                     01508001
                                     1782 *
                                                                                                                      01509001
                                    1783
                                                   EXECUTED WHENEVER THE END OF AN ALGOL STATEMENT IS REACHED
                                                                                                                      01510001
                                     1784
                                                                                                                      01511001
                                                   IF ANY OF THE PARAMETERS TRACE, TRBEG OR TREND WAS
                                                                                                                      01512001
                                    1785
                                     1786
                                                   SPECIFIED. IT CHECKS IF THE SEMICOLON NUMBER IS WITHIN A
                                                                                                                      01513001
                                                   TRACE AREA AND, IF THIS IS THE CASE, STORES IT IN A
                                                                                                                      01514001
                                     1787
                                                   BUFFER FOR OUTPUT ON SYSUT1 WHEN THE BUFFER OVERFLOWS.
                                    1788
                                                                                                                      01515001
                                                   WHEN A DISCONTINUITY IS ENCOUNTERED (TRANSFER INTO A
                                    1789
                                                                                                                      01516001
                                                   TRACE AREA OR BETWEEN THE MAIN PROGRAM AND A PRECOMPILED
                                                                                                                     01517001
                                    1790
                                     1791
                                                   PROCEDURE), THE NAME OF THE ACTIVE MODULE IS ALSO
                                                                                                                      01518001
                                     1792
                                                   STORED IN THE BUFFER
                                                                                                                      01519001
                                    1793
                                                                                                                      01520001
                                                   THE FORMAT OF THE INFORMATION IN THE BUFFER IS -
                                    1794
                                                                                                                      01521001
                                    1795
                                                                                                                      01522001
                                    1796
                                                   DC
                                                         H'LENGTH
                                                                                   POINTER TO NEXT FREE PLACE
                                                                                                                      01523001
                                                                                                                      01524001
                                     1797
                                                   DS
                                                                                   NOT USED
                                     1798
                                                         H'SC'
                                                                                   SEMICOLON NUMBER
                                                                                                                      01525001
                                                   DC
                                    1799
                                                                                                                      01526001
                                                                                                                      01527001
                                    1800
                                                                                   FLAG FOR MODULE NAME
                                                                                                                      01528001
                                     1801
                                                   DC
                                                         H'0'
                                    1802
                                                   DC
                                                          CL4'NAME'
                                                                                   MODULE NAME (FIRST 4 CHAR)
                                                                                                                      01529001
                                     1803
                                                   DC
                                                                                   SEMICOLON NUMBER
                                                                                                                      01530001
                                                          H'SC'
                                     1804
                                                                                                                      01531001
                                                                                                                      01532001
                                    1805
                                     1806
                                                                                                                      01533001
                                                   THE ROUTINE IS ENTERED VIA INSTRUCTIONS IN THE BRANCH
                                                                                                                      01534001
                                    1807
                                                   LIST AT BRLIST. THESE INSTRUCTIONS STORE THE SEMICOLON
                                     1808
                                                                                                                      01535001
                                     1809
                                                   NUMBER AND THEN EXECUTE A BRANCH EITHER TO THIS ROUTINE
                                                                                                                      01536001
                                    1810
                                                   OR, IF TRACE WAS NOT REQUESTED, DIRECTLY BACK TO THE
                                                                                                                      01537001
                                                   ALGOL PROGRAM.
                                                                                                                      01538001
                                     1811
                                                                                                                      01539001
                                     1812
                                     1813
                                                   CALLING SEQUENCE -
                                                                                                                      01540001
                                     1814 *
                                                                                                                      01541001
                                     1815
                                                   BAL
                                                          R15, TRACE (R13)
                                                                                                                     01542001
                                                                                                                     01543001
01544001
                                     1816
                                                   DC
                                                          H'SC
                                                                                   SEMICOLON NUMBER
                                                                                   (RETURN POINT)
                                     1817
                                                   ---
                                     1818
                                                                                                                      01545001
000C44 90EC D054
                             00054
                                                                                   SAVE REGS IN SECOND SAVEAREA
                                                                                                                      01546001
                                    1819 TRACEA
                                                   STM
                                                          14,12,ASAVE+12(R13)
000C48 5830 DE44
                                                          R3,=A(IHIFSARB)
                                                                                                                      01547001
                             00E44
                                    1820
                                                   USING IHIFSARB, R3
                 R:3 00E70
                                    1821
                                                                                                                      01548001
000C4C 181B
                                    1822
                                                   LR
                                                         R1.PBT
                                                                                                                     01549001
```

000D6C 00

1917 TRFLAG

DC

X'00

01634001

Addr1 Addr2 Stmt X390 3.1.04 2012/08/17 13.21 Loc Object Code Source Statement 000C4E 9867 DD64 00D64 1823 R6, R7, TRBEG LOAD TRACE LIMITS 01550001 LM 000C52 988B 3604 01474 1824 LM R8,R11,TRBUF LOAD BUFFER PARAMETERS 01551001 000056 4840 8000 00000 1825 LH R4,0(,R8) LOAD BYTE POINTER
LENGTH OF NORMAL TRACE ITEM 01552001 000C5A 4820 DD56 R2, TRL1 00D56 01553001 1826 LH 1827 01554001 000C5E D503 1004 DD6E 00004 00D6E MAINP OR PRECOMP PROC ? 01555001 CLC 4(4,R1),TRMPNAME 000C64 4780 DC7C 00C7C 1829 BE TRACE10 MAINP 01556001 000C68 9101 D0C2 99902 1830 тм OPTSW(R13), PPTRSW TRACE IN PRECOMP PROC ? 01557001 NO, PP TRACE
PP CALLED FROM TRACE AREA ? 000C6C 4780 DD4C 00D4C 1831 ΒZ TRACE6 01558001 000C70 9103 DD6C 00D6C TRFLAG, X'03' 01559001 1832 TM YES, TRACE REQUIRED 000C74 4740 DCCA 00CCA 1833 ВМ TRACE0 01560001 000C78 47F0 DD4C CONDITIONAL - NO PP TRACE 01561001 00D4C 1834 TRACE6 1835 01562001 999C7C 485D 99C9 aaaca 1836 TRACE10 TH R5. SCRCS (R13) LOAD CURRENT SEMTCOLON NUMBER 01563001 000C80 1976 TEST INTERVAL LIMITS 01564001 R7, R6 1837 CR 000C82 47D0 DC96 00C96 TRACE13 SINGLE INTERVAL 01565001 1838 BNH CHECK SC AGAINST LIMITS 000C86 1956 1839 R5,R6 01566001 CR 999C88 4749 DCC2 00CC2 1840 ΒI TRACE15 OUTSIDE INTERVAL 01567001 000C8C 1957 1841 CR R5, R7 01568001 01569001 000C8E 4720 DCC2 00CC2 ВН TRACE15 OUTSIDE INTERVAL 1842 000C92 47F0 DC9C TRACE16 INSIDE INTERVAL 01570001 00C9C 1843 В 1844 01571001 000C96 1957 1845 TRACE13 CR R5, R7 DOUBLE INTERVAL 01572001 000C98 4720 DCA4 000C9C 9201 DD6D 00CA4 1846 RH TRACE14 01573001 TNSTDE LOWER TNTERVAL 01574001 99D6D 1847 TRACE16 MVT TRELAG1.1 000CA0 47F0 DCAE 00CAE 01575001 1848 TRACE18 В 1849 01576001 01577001 000CA4 1956 1850 TRACE14 CR R5, R6 000CA6 4740 DCC2 1851 TRACE15 **OUTSIDE BOTH INTERVALS** 01578001 00CC2 000CAA 9202 DD6D 99060 1852 MVT TRFLAG1.2 INSIDE HIGHER INTERVAL 01579001 000CAE D500 DD6D DD6C 00D6D 00D6C 1853 TRACE18 CLC TRFLAG1, TRFLAG BORDER BEEN CROSSED ? 01580001 000CB4 4780 DCCA TRACE0 NO, SAME INTERVAL AS BEFORE 01581001 00CCA 1854 BE 000CB8 D200 DD6C DD6D 00D6C 00D6D 1855 MVC TRFLAG, TRFLAG1 01582001 000CBE 47F0 DCD4 1856 TRACE5 01583001 00CD4 В 1857 01584001 TRELAG. 0 NO TRACE THIS TIME 01585001 999CC2 9299 DD6C 99060 1858 TRACE15 MV/T 00D4C 01586001 000CC6 47F0 DD4C TRACE6 1859 В 1860 01587001 000CCA D503 1004 DD5C 00004 00D5C PROGID CHANGED ? 01588001 1861 TRACE0 4(4,R1),TRPGID+2 000CD0 4780 DCDF 00CDE 1862 BF TRACF1 NO. BRANCH 01589001 000CD4 D203 DD5C 1004 00D5C 00004 1863 TRACE5 MVC TRPGID+2(4),4(R1)STORE NEW PROGID 01590001 LENGTH OF ITEM WITH PROGID 01591001 000CDA 4820 DD58 00D58 1864 LH R2.TRL2 000CDE 1802 BUFFER FILLED ? 1865 TRACE1 RØ, R2 01592001 LR 000CE0 1A04 1866 AR R0, R4 01593001 000CE2 190A CR R0, R10 01594001 1867 STILL ROOM, BRANCH IF NO RECORDS WRITTEN 000CE4 4740 DD20 00D20 1868 BL TRACE2 01595001 000CF8 12BB 01596001 1869 I TR R11.R11 000CEA 4780 DCFC BYPASS CHECK 00CFC 01597001 1870 ΒZ TRACE4 1871 01598001 1872 **CHECK TRCHECK** 01599001 1,TRCHECK 02-IHBIN 000CEE 4110 35F0 91469 1873+ LA LOAD PARAMETER REG 1 PICK UP DCB ADDR 000CF2 58E0 1008 00008 1874+ L 14,8(0,1) 01-CHECK LOAD CHECK ROUTINE ADDR 000CF6 58F0 E034 00034 1875+ 15,52(0,14) 01-CHECK 000CFA 05EF 1876+ LINK TO CHECK ROUTINE 01-CHECK BALR 14.15 1877 01600001 1878 TRACE4 WRITE TRCHECK, SF,, (R8), MF=E 01601001 000CFC 4110 35F0 01460 1879+TRACE4 LA MVI 1,TRCHECK LOAD DECB ADDRESS 02-IHBRD 5(1),X'20' R8,12(1,0) 000000 9220 1005 99995 1880+ SET TYPE ETELD 02-THRRD 000D04 5081 000C STORE AREA ADDRESS 0000C 1881+ ST 02-IHBRD 000D08 58F1 0008 00008 1882+ 15,8(1,0) LOAD DCB ADDRESS L 000D0C 58F0 F030 1883+ 15,48(0,15) LOAD RDWR ROUTINE ADDR 00030 02-IHBRD 000D10 05EF 1884+ BALR 14,15 LINK TO RDWR ROUTINE 02-THRRD 1885 01602001 01603001 000D12 1808 LR 1886 R0, R8 000D14 1889 1887 LR R8. R9 SWITCH BUFFERS 01604001 000D16 1890 LR 01605001 1888 R9, R0 000D18 4140 0004 00004 1889 RESET POINTER 01606001 LA R4.4 000D1C 41B0 B001 00001 1890 LA R11,1(,R11) INCR RECORD COUNTER 01607001 1891 \* 01608001 000D20 4920 DD56 00D56 1892 TRACE2 СН R2, TRL1 TEST FOR NEW PROGID 01609001 000D24 4780 DD36 00D36 1893 TRACE3 01610001 BE 01611001 1894 000D28 1818 1895 I R R1.R8 01612001 000D2A 1A14 1896 AR R1.R4 01613001 000D2C D205 1000 DD5A 00000 00D5A 0(6,R1),TRPGID PROGID TO BUFFER 01614001 1897 MVC 000D32 4140 4006 01615001 99996 1898 LA R4.6(,R4) 1899 01616001 000D36 1818 1900 TRACE3 LR R1.R8 01617001 01618001 000D38 1A14 1901 ΔR R1.R4 000D3A D201 1000 D0C0 00000 000C0 0(2,R1),SCRCS(R13) SEMICOLON COUNTER TO BUFFER 01619001 1902 MVC 000D40 4140 4002 00002 01620001 1903 LA R4,2(,R4) 000D44 4040 8000 R4,0(,R8) 00000 1904 STH 01621001 000D48 908B 3604 01474 1905 R8,R11,TRBUF 01622001 STM 000D4C 98EC D054 99954 1906 TRACE6 LM R14, R12, ASAVE+12(R13) 01623001 000D50 47F0 F002 00002 1907 В 2(,R15) RETURN TO ALGOL PROGRAM 01624001 01625001 1908 000D54 0700 1909 CNOP 2.4 01626001 000D56 0002 1910 TRL1 DC H'2' LENGTH OF SEMICOLON FIELD 01627001 000D58 0008 1911 TRL2 DC H'8' LENGTH OF NEW NAME + SEMICOLON 01628001 FLAG FOR PROGID FIRST FOUR BYTES OF PROG NAME 000D5A 0000 1912 TRPGID DC H'0' 01629001 000D5C 00000000 DC 2H'0' 01630001 1913 000D60 FFFF DC X'FFFF' INITIAL VALUE FOR TREND 01631001 1914 000D62 0000 000D64 00000000 1915 TRBEG F'0' BEGINNING OF TRACE AREA 01632001 DC END OF TRACE AREA STATUS INDICATOR 000D68 00000000 **1916 TREND** DC F'0' 01633001

```
IHIFSA, RUNTIME FIXED STORAGE AREA, ALGOL F LIB
 Active USINGs: IHIFSARB,R3 IHIFSARA,R13
                     Addr1 Addr2 Stmt Source Statement
 Loc Object Code
                                  1918 *
                                  1919 *
                                  1920
000D6D 00
                                  1921 TRFLAG1 DC
000D6E 40404040
                                  1922 TRMPNAME DC
                                  1923
                                  1924
                                                DROP R3
```

R:F 00D72

\*\* TXA301I Record 1653 in SYSD

000D76 D207 D0B4 1004 000B4 00004

000D8C D202 1009 2001 00009 00001

000D72 58D0 F0DE

000D7C 4320 D0B7

000D80 5420 F022

000D84 8B20 0002

000D88 4122 F026

000D94 0000000F

000098 00000250

000D9C 00000250

000DA0 00000250

000DA4 00000250

999DA8 99999259

000DAC 00000250

000DB0 00000250

000DB4 00000250

000DB8 0000023C

000DBC 00000244

000DC0 00000250

999DC4 99999259

000DC8 00000240

000DCC 00000250

000DD0 00000250

000DD4 00000248

00000D8 00000000

000DDC 00000000

000DE0 00000000

000DE4 00000000

000DE8 00000000

000DEC 00000000

000DF0 00000000

000DF4 00000000

000DF8 00000000

000DFC 47F0 F026

000E22 90EC D00C

000E26 58C0 F054

000E2A 50D0 C004

000E2E 50C0 D008

000E34 5870 F048

000E38 47F0 7000

000E32 18DC

000E70

000E01 C9C8C9C6E2C1C9D5

000E00 21

000E21 F1

000D92 07FE

000D94

\*\* TXA533W USING range overlaps prior USING at statement

00E50

000B7

99D94

00002

00D98

1925 \*

1927 1928

1929 \*

1931 \*

1932 \*

1935 \*

1937 PIEROUT

1943 PIEROUT2 MVC

1933 1934

1936

1938

1939

1940

1941

1942

1944

1946

1947

1948

1950 \*

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968 1969

1970

1971 \*

1972 \*\*

1973 \*

1975

1976

1977

1978

1979

1980

1981

1982

1985

1986

1983 \*

1984 \*\*

1987 \*

1989 \*

1992 \*

1995+

1996+

1997+

1998+

2000

2001

2002

2003

2004

2005

2006

2007

2008

2009

2010

00E70 0068C 2011 IHIFSARB CSECT

1999 \*

1993 IHIFSAIN SAVE

1994+IHIFSAIN B

1990

1991

99926

0000C

00E50

00004

80000

00E44

00E70

R:F 00DFC

R:7 00E70

1974 ADRLST

1949 PGCMASK

1951 PTFTAR

1945 \*

1930 \*\*\*

X'00

CL4

USING PIEROUT, R15

R2,2

0F'0'

X'0000000F'

A(FRROR33)

A(ERROR33)

A (ERROR33)

A(ERROR33)

A(ERROR33)

A(ERROR33)

A(ERROR33)

A(ERROR33)

A (ERROR28

A(ERROR30)

A(ERROR33)

A (FRROR33

A(ERROR29)

A(ERROR33)

A(ERROR33

A(ERROR31)

A(IHIIORCI)

A(IHIIORCL)

A(IHIIOREV)

A(IHIIORNX)

A(IHIIOROP

A(IHIIOROQ)

A(IHIIOREN)

A(IHIIORGP

A(IHIIORER)

INITIAL ENTRY POINT

USING IHIFSAIN, R15

38(0,15)

14,12,12(13)

FSAA,8(,R13)

R13,FSAA

L R7,=A(IHIFSARB)
USING IHIFSARB,R7

ALGIN

R15

R7

FSAA,=A(IHIFSARA) R13,4(,FSAA)

AL1(33)

DROP R13

ENTRY POINTS IN IHIIOR USED BY I/O ROUTINES

(14,12),, 'IHIFSAIN LEVEL 2.1 &SYSDATE &SYSTIME'

CL32'IHIFSAIN LEVEL 2.1 08/17/12 13.2' IDENTIFIER

IC

SLA

LA

BR

DC

Ĺ

ST

ST

LR

DROP

DROP

DROP R15

N

R13,=A(IHIFSARA)

R2. PGCMASK

R2, PIETAB(R2)

9(3,R1),1(R2)

```
PAGE
                                                     X390 3.1.04 2012/08/17 13.21
                                            00 - OUTSIDE BOTH TRACE AREAS 01635001
                                            01 - INSIDE LOWER AREA
                                                                         01636001
                                              - INSIDE HIGHER AREA
                                                                         01637001
                                          PREVIOUS VALUE OF TRFLAG
                                                                         01638001
                                          NAME OF MAIN PROGRAM
                                                                         01639001
                                                                         01640001
                                                                         01641001
                                                                         01642001
01643001
                                                                         01644001
             PROGRAM INTERRUPT ROUTINE
                                                                         01645001
                                                                         01646001
                                                                         01647001
                                                                         01648001
             USE INTERRUPT CODE TO LOAD ENTRY FROM PIETAB TO PASS
                                                                         01649001
             CONTROL TO FSA ERROR ROUTINE BY UPDATING THE OLD PSW
                                                                         01650001
             AND RETURNING FROM SPIE
                                                                         01651001
                                                                         01652001
                                                                         01653001
                                                                         01654001
                   PGOPSW(8,R13),4(R1)
                                          MOVE BC MODE PSW TO PGOPSW
                                                                         01655001
                   R2, PGOPSW+3(,R13)
                                          LOAD INTERRUPTION CODE
                                                                         01656001
                                          REMOVE IMPRECISE CODES (M/91)
                                                                         01657001
                                          CONVERT INTERRUPT CODE
                                                                         01658001
                                          FOR TABLE LOOKUP
                                                                         01659001
                                          CHANGE RETURN ADDR IN OLD PSW
                                                                         01660001
                                          RETURN FROM SPIE RTN
                                                                         01661001
                                                                         01662001
                                                                         01663001
                                                                         01664001
                                                                         01665001
                                          MASK FOR INTERRUPT CODE
                                                                         01666001
```

- 0C1

- 0C2

- 0C3

- 004

- OC5

- 006

- OC7

- 0C8

- 0CA

- OCB

- OCC

0CE

- ACE

BRANCH AROUND ID

SAVE REGISTERS

IDENTIFIER

LINK SAVE AREAS TOGETHER

TO INITIALIZATION ROUTINE

LENGTH OF IDENTIFIER

MOD/91 ONLY

OPERATION

PRIVILAGE

PROTECTION

ADDRESSING

**SPECIFICATION** 

FIXED PT OVFL

DECIMAL OVFL
DECIMAL DIVIDE

EXPONENT OVFL

FP DIVIDE

FIXED PT DIVIDE - 0C9

EXPONENT UNDERFL - OCD

FP SIGNIFICANCE -

EXECUTE

DATA

01667001

01668001

01669001

01670001

01671001

01672001

01673001 01674001

01675001

01676001

01677001

01678001 01679001

01680001

01681001

01682001

01683001

01684001 01685001

01686001

01688001

01689001

01690001

01691001

01692001

01693001

01694001

01695001

01696001

01697001

01698001

01699001

01700001

01701001

01702001

01703001

01704001

01705001

01706001

01707001

01708001

01709001

01710001

01-SAVE

01-SAVE

01-SAVE

01-SAVE

01-SAVE

01711001

01712001

01713001

01714001

01715001

01716001 01717001 01718001

01719001

01720001

01721001

01722001

000F56 4780 7206

```
Loc Object Code
                                                                                            X390 3.1.04 2012/08/17 13.21
                    Addr1 Addr2 Stmt Source Statement
                                    2012 *
                                    2014 *
                                                                                                                  01726001
                                                  INITIALIZATION ROUTINE
                                    2015
                                                                                                                  01727001
                                    2016
                                    2018 *
                                                                                                                  01730001
                                   2019 *
                                                  THIS IS THE FIRST ROUTINE EXECUTED WHEN AN ALGOL
                                                                                                                  01731001
                                    2020 *
                                                  PROGRAM IS EXECUTED OR CALLED VIA A PROGRAM
                                                                                                                  01732001
                                    2021 *
                                                                                                                  01733001
                                                  PERFORM INITIALIZING FUNCTIONS AND TRANSFER CONTROL TO
                                    2022 *
                                                                                                                  01734001
                                    2023 *
                                                                                                                  01735001
                                                  THE ALGOL OBJECT PROGRAM
                                    2024 *
                                                                                                                  01736001
                                                  USING THIFSARA, R13
                 R:D 00000
                                    2025
                                                                                                                  01737001
                 R:7 00E70
                                                                                                                  01738001
                                    2026
                                                  USING IHIFSARB, R7
                                    2027 *
                                                                                                                  01739001
                                    2028 ALGIN
                                                        PIEROUT, ((1,9),12,15) EXIT FOR RELEVANT PROG CHECKS
                                                                           ALIGN PICA TO FULLWORD BOUNDARY
ADDRESS AND BYPASS THE PICA
999F79
                                    2029+
                                                  CNOP
                                                                                                                  01-SPIE
                                                       1,*+10
                                   2030+ALGIN
000E70 4510 700A
                            00E7A
                                                  BAL
                                                                                                                  01-SPIE
                                                                                                PROGRAM MASKS
                                                        BL1'00001000
000E74 08
                                    2031+
                                                  DC
                                                                                                                  01-SPIE
000E75 000D72
                                                        AL3(PIEROUT)
                                                                           EXIT ROUTINE ADDRESS
                                    2032+
                                                  DC
                                                                                                                  01-SPIE
000E78 7FC9
                                    2033+
                                                  DC
                                                        BL2'0111111111001001'
                                                                                                                 +01-SPIE
                                                                           THE INTERRUPT MASK BYTES 1 AND 2
                                                                                                                  01-SPIE
                                    2034+
000E7A 0A0E
                                                  SVC
                                                                           ISSUE THE SPIE SVC
                                                                                                                  01-SPTE
                                    2035 *
                                                                                                                  01741001
000E7C 5010 D0BC
                            000BC
                                   2036
                                                  ST
                                                       R1, FSAPICA(,R13)
                                                                                                                  01742001
                                    2037 *
                                    2038 *
                                                  GET STORAGE FOR RETURN ADDR STACK
                                                                                                                  01744001
                                    2039 *
                                                  INITIALIZE RAS POINTERS
                                                                                                                  01745001
                                   2040 *
                                                                                                                  01746001
                                    2041
                                                  GETMAIN R.LV=2048
                                                                                                                  01747001
                                    2042+
                                                  OS/VS2 RELEASE 4 VERSION -- 10/21/75
                                                                                                                  01-GETMA
000E80 4100 0800
                            00800
                                   2043+
                                                       0,2048(0,0)
                                                                                          LOAD LENGTH
                                                                                                                  01-GETMA
000E84 4510 7018
                                  2044+
                                                                                          INDICATE GETMAIN
                            00E88
                                                  BAL
                                                       1,*+4
                                                                                                                  01-GETMA
000E88 0A0A
                                    2045+
                                                       10
                                                                                          ISSUE GETMAIN SVC
                                                                                                                  01-GETMA
                                                  SVC
                                    2046 *
                                                                                                                  01748001
                                                        R1, EIGHT(,R13)
                                                                                                                  01749001
000E8A 4B10 D0AA
                            000AA
                                   2047
                                                  SH
                                                        R1, RASPT(,R13)
000E8E 5010 D0C8
                            000C8
                                   2048
                                                                                                                  01750001
                                                  ST
                                                        R1, RASSTART(, R13)
000E92 5010 D0C4
                                   2049
                            000C4
                                                                                                                  01751001
000F96 4110 1808
                            99898
                                   2050
                                                  ΙΔ
                                                        R1,2056(,R1)
                                                                                                                  01752001
000E9A 5010 D0D0
                            000D0
                                   2051
                                                  ST
                                                        R1, RASPB(,R13)
                                                                                                                  01753001
000E9E 5010 D0CC
                                                        R1, RASEND(,R13)
                            000CC
                                   2052
                                                  ST
                                                                                                                  01754001
000EA2 1BAA
                                                                                                                  01755001
                                                        CDSA, CDSA
                                    2053
                                                  SR
000EA4 585D 00AC
                                                        R5, ADSTAB (R13)
                             000AC
                                   2054
                                                                                INITIALIZE DS ENTRIES FOR
                                                                                                                  01756001
000EA8 5820 5000
                                                                                                                  01757001
                            00000
                                   2055
                                                        R2,0(,R5)
                                                                                SPKQ
                                   2056
000EAC 4150 5004
                            00004
                                                        R5,4(,R5)
                                                                                                                  01758001
                                                                                THERE A PUT/GET CONTROL ETLE ?
                                                       R2. R2
                                                                                                                  01759001
000FB0 1222
                                    2057
                                                  I TR
000EB2 4740 7052
                            00EC2
                                                        ALGIN01A
                                   2058
                                                                                                                  01760001
                                                  BM
000EB6 4110 0800
                            00800
                                   2059
                                                        R1,2048
                                                                                                                  01761001
000EBA 5010 2010
                            00010
                                   2060
                                                        R1,16(,R2)
                                                                                INSERT BE LENGTH
                                                                                                                  01762001
000EBE 50A0 2018
                            00018
                                   2061
                                                  ST
                                                        CDSA, 24(, R2)
                                                                                INITIALIZE S, TYP IN PGCF
                                                                                                                  01763001
                                   2062 ALGINO1A LA
                                                                                CLEAR HIGH ORDER BYTE
000EC2 4120 2000
                            00000
                                                        R2,0(,R2)
                                                                                                                  01764001
                                                                                                                  01765001
000EC6 1925
                                   2063 ALGIN01 CR
                                                        R2. R5
000EC8 4780 706A
                             00EDA
                                   2064
                                                  BE
                                                        ALGIN02
                                                                                                                  01766001
000ECC D205 5014 7262 00014 010D2
                                                        20(6,R5),DSINIT
                                   2065
                                                  MVC
                                                                                                                  01767001
000ED2 4150 5024
                                                        R5,36(,R5)
                                                                                                                  01768001
                            00024
                                   2066
000ED6 47F0 7056
                            00EC6
                                   2067
                                                  В
                                                        ALGIN01
                                                                                                                  01769001
                                    2068 *
                                                                                                                  01770001
                            00D5A
                                                        CDSA, TRPGID
                                                                                                                  01771001
000EDA 40A0 DD5A
                                   2069 ALGINO2 STH
                                                                                INITIALIZE TRACE COUNTERS
                                                        CDSA, TRPGID+2
000EDE 50A0 DD5C
                            00D5C
                                   2070
                                                                                                                  01772001
                                                  ST
000EE2 42A0 DD6C
                                                        CDSA, TRFLAG
                                                                                                                  01773001
                            00D6C
                                   2071
                                                  STC
                                                        TRPGID+6,X'FF'
000EE6 92FF DD60
                      99069
                                   2072
                                                  MVT
                                                                                                                  01774001
                                                        TRPGID+7,X'FF'
000EEA 92FF DD61
                      00D61
                                    2073
                                                  MVI
                                                                                                                  01775001
000EEE 40AD 00C0
                            000C0
                                                        CDSA, SCRCS(R13)
                                                                                INITIALIZE SEMICOLON COUNT
                                                                                                                  01776001
                                   2074
                                                  STH
                                                                                RESET NOTE TABLE ADDR
000EF2 50AD 00B0
                            000B0
                                   2075
                                                        CDSA, ANOTTAB (R13)
                                                                                                                  01777001
000EF6 50A0 DB44
                                   2076
                                                                                RESET SPECIAL DECL POINTER
                                                                                                                  01778001
                             00B44
                                                        CDSA, SPDAP
                                   2077
                                                                                                                  01779001
                                    2078 *
                                                  EXECUTION TIME OPTIONS AND SET SWITCHES
                                                                                                                  01780001
                                   2079 *
                                                                                                                  01781001
                                   2080 *
                                                  TEST FOR SHORT/LONG PRECISION
                                                                                                                  01782001
                                    2081 *
                                                                                                                  01783001
000EFA 5820 DE54
                            00E54
                                                                                GET S/L SWITCH
                                                                                                                  01784001
                                   2082
                                                        R2,=A(IHIENTIF)
                                                        OPTSW(1,R13),8(R2)
000EFE D200 D0C2 2008 000C2 00008
                                   2083
                                                  MVC
                                                                               FROM THE OBJECT MODULE
                                                                                                                  01785001
                                                        CNVINST(CNVINSTL), CNVINSTE ASSUME SHORT
000F04 D223 D130 D2FC 00130 002FC
                                   2084
                                                  MVC
                                                                                                                  01786001
000F0A 4120 7268
                            010D8
                                   2085
                                                        R2. SETSHORT
                                                                                                                  01787001
                                                  LA
                                                        OPTSW(R13), SHSW
000F0E 9120 D0C2
                                                  тм
                                                                                                                  01788001
                      000C2
                                    2086
000F12 4710 70B0
                            00F20
                                                                                IF SHORT
                                   2087
                                                  во
                                                        ALGIN4
                                                                                                                  01789001
000F16 D223 D130 D320 00130 00320
                                   2088
                                                  MVC
                                                        CNVINST(CNVINSTL), CNVINSTD MODIFY CONVERT ROUTINE
                                                                                                                  01790001
000F1C 4120 2004
                            99994
                                   2089
                                                  ΙΔ
                                                        R2.4(,R2)
                                                                                                                  01791001
000F20 9835 D2F0
                            002F0
                                   2090 ALGIN4
                                                  LM
                                                        R3, R5, FPINSTAD
                                                                                MODIFY FLOATING POINT
                                                                                                                  01792001
000F24 4402 0000
                            00000
                                                                                                                  01793001
                                   2091 ALGIN4A
                                                        0,0(R2)
                                                                                INSTRUCTIONS
                                                  EX
000F28 8734 70B4
                                                       R3,R4,ALGIN4A
                            00F24
                                   2092
                                                                                                                  01794001
                                    2093 *
                                                                                                                  01795001
                                   2094 *
                                                  CHECK EXECUTION PARAMETERS DUMP AND TRACE
                                                                                                                  01796001
                                    2095 *
                                                                                                                  01797001
                                                        TRACE+7(R13),X'F0'
TRPGID+2(4),TRPGID+1
                                                                                DEACTIVATE BRANCH TO TRACE RT
                                                                                                                  01798001
000F2C 96F0 D107
                      00107
                                   2096 ALGINO
                                                  ОТ
000F30 D203 DD5C DD5B 00D5C 00D5B
                                   2097
                                                                                RESET PROGID FOR TRACE
                                                                                                                  01799001
000F36 D207 DD64 DD5A 00D64 00D5A
                                   2098
                                                        TRBEG(8), TRPGID
                                                                                INITIALIZE TRACE LIMITS
                                                                                                                  01800001
000F3C 5820 D004
                            00004
                                   2099
                                                        R2,4(,R13)
                                                                                                                  01801001
000F40 BF2F 2018
000F44 4780 7206
                                                                                                                  01802001
01803001
                            00018
                                   2100
                                                  TCM
                                                        R2,B'1111',24(R2)
                                                                                R2 -> PARAMETER LIST
                                                                                BRANCH IF NO PARAMETERS
                            01076
                                   2101
                                                        ALGIN1
                                                  ΒZ
                                                        R2,0(,R2)
                                                                                ADDR OF PARAMETER FIELD
000F48 5820 2000
                            00000
                                   2102
                                                                                                                  01804001
000F4C 4120 2000
                            00000
                                   2103
                                                        R2,0(,R2)
                                                                                RESET HIGH ORDER BYTE
                                                                                                                  01805001
000F50 4830 2000
                            00000
                                   2104
                                                  LH
                                                                                                                  01806001
                                                        R3,0(,R2)
                                                                                LENGTH OF PARAMETER FIELD
000F54 1233
                                   2105
                                                  LTR
                                                        R3. R3
                                                                                                                  01807001
                            01076 2106
```

ΒZ

ALGIN1

NO PARAMETERS

Active USINGs: IHIF	SARB, R.	/ IHIF:	SARA, R	113				
Loc Object Code	Addr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08	/17 13.21
000F5A 1A32			2107		AR	R3, R2	END OF PARAMETER FIELD	01809001
000F5C 4150 729A		0110A	2108		LA	R5, LASTPARM	END OF PARAMETER LIST	01810001
000F60 1B66 000F62 956B 2002	00002		2109	FNDCOMMA	SR	R6,R6 2(R2),C','		01811001 01812001
000F66 4770 7108	00002	00F78	2111	INDCOMMA	BNE	FNDPAR		01813001
000F6A 4120 2001		00001	2112		LA	R2,1(,R2)		01814001
000F6E 1923 000F70 4740 70F2		00F62		COMP1	CR BL	R2,R3 FNDCOMMA		01815001 01816001
000F74 47F0 71AA		0101A			В	ALGIN2	WHOLE PARM FIELD SCANNED	01817001
000570 4140 7070		01050	2116			D4 DADMITCT		01818001
000F78 4140 7270 R:4	010E0	010E0	2117	FNDPAK	LA USING	R4, PARMLIST PARMLIST, R4		01819001 01820001
** TXA533W USING rang			ior US		ateme			
** TXA301I Record 182 000F7C 4360 4000	0 in S	YSD.ALGO 010E0			IC	R6, PARMLG	LENGTH OF PARAMETER	01821001
000F80 4460 7146			2120	WATE AIX	EX	R6, COMPINST	COMPARE WITH ENTRY IN LIST	01822001
000F84 4770 7138			2121		BNE	NOTFOUND		01823001
000F88 4112 6001 000F8C 4400 4006		00001 010E6			LA EX	R1,1(R2,R6) 0,PABRANCH		01824001 01825001
000F90 956B 1002	00002			CHKCOMMA		2(R1),C','	CHECK FOR COMMA AFTER PARAM	01826001
000F94 4780 712E		00F9E			BE	SETBIT P1 P2	TE NO COMMA CHECK FOR END OF	01827001
000F98 1913 000F9A 4740 70FA		00F6A	2126 2127		CR BL	R1,R3 STEP1	IF NO COMMA CHECK FOR END OF PARAMETER FIELD	01828001 01829001
000F9E 1821			2128	SETBIT	LR	R2,R1		01830001
000FA0 4400 400A 000FA4 47F0 70FE		010EA 00F6E			EX B	0,PARMSET		01831001
000FA4 47F0 70FE		DOFEE	2130	*	Ь	COMP1		01832001 01833001
000FA8 1945			2132	NOTFOUND	CR	R4, R5	CHECK FOR END OF LIST	01834001
000FAA 4140 400E 000FAE 4740 710C			2133 2134		LA BL	R4, PARLG(,R4) NXTPAR	NEVT ENTRY IN LICT	01835001
000FB2 47FD 0274			2134		В	INVOPT(R13)	NEXT ENTRY IN LIST OPTION NOT FOUND IN LIST	01836001 01837001
			2136					01838001
000FB6 D500 2002 4001	00002	010E1	2137 2138	COMPINST	CLC DROP	2(0,R2),PARM R4		01839001 01840001
			2139	*	DIOF	1/4		01841001
			2140		EVALU	ATE TRBEG OR TREND PARAMI	ETER	01842001
000FBC 4180 DD64		00D64	2141	* TRLIM1	LA	R8, TRBEG		01843001 01844001
000FC0 47F0 7158		00FC8	2143		В	TRLIM2A		01845001
000EC4 4100 PDC0		00000	2144			DO TOFNO		01846001
000FC4 4180 DD68 000FC8 957E 1002	00002	00D68		TRLIM2 TRLIM2A	LA CLI	R8, TREND 2(R1), C'='		01847001 01848001
000FCC 477D 0274	00002	00274	2147		BNE	INVOPT(R13)		01849001
000FD0 4190 1005		00005	2148		LA	R9,5(,R1)	END OF NUMBER FIELD	01850001
000FD4 1BAA 000FD6 4110 1001		00001	2149 2150	TRLIM4	SR LA	R10,R10 R1,1(,R1)	RESET NUMBER ACCUMULATOR STEP TO NEXT DIGIT	01851001 01852001
000FDA 1913			2151		CR	R1, R3		01853001
000FDC 47B0 71A0 000FE0 956B 1002	00002	01010	2152 2153		BNL CLI	TRLIM3	BR IF END OF WHOLE PARAM FIELD	01854001 01855001
000FE4 4780 71A0	00002	01010			BE	2(R1),C',' TRLIM3	BR IF END OF THIS PARAMETER	01856001
000FE8 1919			2155		CR	R1,R9		01857001
000FEA 472D 0274 000FEE 95F0 1002	00002	00274	2156 2157		BH CLI	INVOPT(R13) 2(R1),C'0'	BR IF TOO MANY DIGITS CHECK FOR VALID DIGIT	01858001 01859001
000FF2 474D 0274	00002	00274			BL	INVOPT(R13)	CHECK TON VALID DIGIT	01860001
000FF6 95F9 1002	00002		2159		CLI	2(R1),C'9'		01861001
000FFA 472D 0274 000FFE D100 71A9 1002	01019	00274 00002			BH MVN	INVOPT(R13) TRLDIG+1(1),2(R1)	EXTRACT NEW DIGIT	01862001 01863001
001004 4CA0 DE6A	01015	00E6A			MH	R10,=H'10'	27.11.16. 112.11 22.21.	01864001
001008 4AA0 71A8 00100C 47F0 7166		01018			AH	R10, TRLDIG	ACCUMULATE SUM	01865001
00100C 47F0 7166		00FD6	2164	*	В	TRLIM4		01866001 01867001
001010 50A0 8000		00000		TRLIM3	ST	R10,0(,R8)	STORE AS TRBEG OR TREND	01868001
001014 47F0 712E		00F9E	2167 2168	*	В	SETBIT		01869001 01870001
001018 0000					DC	H'0'	TEMP STORAGE FOR DIGIT	01871001
			2170		DDEC	DE FOR DROCDAM TRACTUS		01872001
			2171 2172		PREPAI	RE FOR PROGRAM TRACING		01873001 01874001
	0101A		2173	ALGIN2	EQU	*		01875001
00101A 9140 D0C2	000C2	01076	2174		TM BZ		TRACE REQUESTED ?	01876001
00101E 4780 7206		01076	2175	*	DZ.	ALGIN1		01877001 01878001
004000 075			2177		OPEN		OPEN SYSUT1 FOR USE BY TRACE	01879001
001022 0700 001024 4510 71BC		0102C	2178+ 2179+		CNOP BAL	0,4 1,*+8	ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR.	
001024 4310 7150		01020	2180+		DC	AL1(135)	OPTION BYTE	01-OPEN
001029 0014A0			2181+		DC	AL3(SYSUT1)	DCB ADDRESS	01-OPEN
00102C 0A13			2182+ 2183		SVC	19	ISSUE OPEN SVC	01-OPEN 01880001
00102E 4130 7630		014A0			LA	R3,SYSUT1		01881001
R:3 001032 9110 3030	00000 00030		2185 2186		USING TM	IHADCB, R3 DCBOFLGS, DCBOFOPN	SYSUT1 OPENED ?	01882001 01883001
001032 9110 3030 001036 4710 71D6	00000	01046			BO	ALGIN3	SISSIT GLENED :	01884001
00103A 94BF D0C2	000C2		2188		NI	DTSW(R13),255-TRSW	TRACE SWITCH OFF	01885001
00103E 4160 0011 001042 47FD 0270		00011 00270			LA B	R6,17 DDERROR(R13)	SET DATASET NUMBER TO 17	01886001 01887001
			2191	*	-	//		01888001
001046 940F D107	00107			ALGIN3	NI	TRACE+7(R13),X'0F'	ACTIVATE BRANCH TO TRACE ROUT	01889001
00104A 4800 303E		0003E	2193		LH DROP	RØ, DCBBLKSI R3	GET BLOCK SIZE FROM DCB	01890001 01891001
00104E 5000 760C		0147C	2195		ST	R0,TRBUFL	STORE AS BUFFER LENGTH	01892001
001052 8B00 0001		00001	2196 2197	*	SLA	R0,1		01893001 01894001
			2198		GETMA:	IN R,LV=(0)	GET TWO BUFFERS FOR SYSUT1	01895001
001056 4540 7454		0105*	2199+			2 RELEASE 4 VERSION 10		01-GETMA
001056 4510 71EA		0105A	ZZUU+	-	DAL	1,*+4	INDICATE GETMAIN	01-GETMA

Loc	Object Code	Addr1	Addr2	Stmt	Source	Stater	ment	X390 3.1.04 2012/08	/17 13.21
00105A	0A0A			2201+ 2202		SVC	10	ISSUE GETMAIN SVC	01-GETMA 01896001
00105C	5010 7604		01474			ST	R1, TRBUF	ADDR OF FIRST BUFFER	01897001
001060	1B00 5000 7610		01480	2204 2205		SR ST	R0, R0 R0, TRCNT	RESET RECORD COUNTER	01898001 01899001
001066	4100 0004		00004	2206		LA	R0,4	SET BYTE POINTER	01900001
	4000 1000 5A10 760C		00000 0147C	2207 2208		STH A	R0,0(,R1) R1,TRBUFL		01901001 01902001
	5010 7608		01478			ST	R1, TRBUFA	ALTERNATE BUFFER	01903001
				2210 2211		TNTTT	ALIZE REGISTERS AND ENTE	R ORIECT MODULE	01904001 01905001
				2212		INTITA	REIZE REGISTERS AND ENTER	N OBJECT MODULE	01906001
001076	1BAA 58F0 DE54		00E54	2213 2214	ALGIN1	SR L	CDSA, CDSA R15,=A(IHIENTIF)		01907001 01908001
	98BC F000		00000	2215		LM	PBT, LAT, 0(R15)		01909001
	5820 0010 5820 2000		00010	2216 2217		L L	R2,16	R2 -> CVT ADDR	01910001
	5820 2004		00000 00004	2217		Ĺ	R2,0(,R2) R2,4(,R2)	R2 -> TCB	01911001 01912001
	5820 2000 5820 200C		00000 0000C	2219 2220		L L	R2,0(,R2) R2,12(,R2)	R2 -> RB ADDR INSERT RB NAME INTO PBTAB	01913001 01914001
	D203 B004 20	08 00004		2221		MVC	4(4,PBT),8(R2)	INSERT RE NAME INTO FETALE	01915001
	D203 DD6E 20 58F0 F008	08 00D6E	00008 00008	2222 2223		MVC L	TRMPNAME,8(R2) R15,8(,R15)		01916001 01917001
0010A0			00000	2224		BR	R15	ENTER ALGOL PROGRAM	01918001
				2225 2226		DCB EX	(IT ROUTINE FOR SYSUT1		01919001 01920001
				2227		DCD L	CIT ROUTINE TOR SISUIT		01921001
001016	R: 4820 103E	1 00000	0003E	2228	SYSUT1X	USING LH	IHADCB,R1 R2,DCBBLKSI		01922001 01923001
0010AA	1222			2230	313011X	LTR	R2, R2	BLKSIZE SPECIFIED ?	01924001
	4770 724A 4120 0800		010BA 00800	2231	DCBEXIT2	BNZ	DCBEXIT1 R2,TRBUFST	YES, BRANCH ELSE USE STANDARD SIZE	01925001 01926001
	4020 103E		0003E		DCDLXI12	STH	R2, DCBBLKSI	EESE OSE STANDARD SIZE	01927001
				2234	* DCBEXIT3	RETURN	d.		01928001 01929001
0010B8					DCBEXIT3		0H		01-RETUR
0010B8	07FE			2237+ 2238		BR	14	RETURN	01-RETUR 01930001
	4920 725E			2239	DCBEXIT1		R2, TRBUFMIN	CHECK BLKSIZE	01931001
	4740 7240 4920 7260		010B0 010D0	2240 2241		BL CH	DCBEXIT2 R2,TRBUFMAX	IF TOO LOW OR TOO HIGH, USE STANDARD SIZE	01932001 01933001
0010C6	4720 7240		010B0	2242		ВН	DCBEXIT2	052 57711571115 5222	01934001
0010CA	47F0 7248		010B8	2243 2244	*	В	DCBEXIT3		01935001 01936001
				2245		DROP	R1		01937001
0010CE	000E			2246 2247	* TRBUFMIN	DC	H'14'	MINIMUM TRACE BUFFER SIZE	01938001 01939001
0010D0				2248	TRBUFMAX		H'32760'	MAXIMUM TRACE BUFFER SIZE	01940001
		00800		2249 2250	* TRBUFST	EOU	2048	STANDARD TRACE BUFFER SIZE	01941001 01942001
				2251	*				01943001
0010D2	000100500200			2252 2253	DSINIT *	DC	X'000100500200'	INITIALIZE DSTAB	01944001 01945001
	9610 3000	00000			SETSHORT		0(R3),SHORTBIT	MODIFY FP INSTR FOR SHORT	01946001
0010DC	94EF 3000	00000		2255 2256	*	NI	0(R3),255-SHORTBIT	OR LONG PR	01947001 01948001
				2257	*	TABLE	FOR DECODING OPTION PARA	AMETERS	01949001
0010E0				2258 2259	PARMLIST	DC	0H'0'		01950001 01951001
0010E0					PARMLG	DC	AL1(3) CL5'DUMP'	(LENGTH - 1) OF KEYWORD	01952001
0010E1	C4E4D4D740			2261 2262		DC	CLS DUMP	OPTION KEYWORD	01953001 01954001
0010E6	47F0 7120		00F90	2263 2264	PABRANCH *	В	CHKCOMMA	EXIT TO EVALUATION ROUTINE	01955001 01956001
0010EA	9680 D0C2	000C2		2265	PARMSET		DTSW(R13),DPSW	SET FLAG BIT	01957001
0010EE	04	0000E		2266 2267	PARLG	EQU DC	*-PARMLG AL1(4)		01958001 01959001
0010EF	E3D9C1C3C5			2268		DC	CL5'TRACE'		01960001
0010F4	47F0 7120		00F90	2269 2270	*	В	CHKCOMMA		01961001 01962001
	9641 D0C2	000C2		2271		OI	DTSW(R13),UCTRSW		01963001
0010FC 0010FD	04 E3D9C2C5C7			2272 2273		DC DC	AL1(4) CL5'TRBEG'		01964001 01965001
	47F0 714C		00FBC	2274		В	TRLIM1		01966001
001106	9640 D0C2	000C2		2275 2276	*	OI	DTSW(R13),TRSW		01967001 01968001
00110A	04	33002		2277	LASTPARM	DC	AL1(4)		01969001
	E3D9C5D5C4 47F0 7154		00FC4	2278 2279		DC B	CL5'TREND' TRLIM2		01970001 01971001
		000		2280	*				01972001
001114	9640 D0C2	000C2		2281 2282	*	OI	DTSW(R13),TRSW		01973001 01974001
				2283	******	*****	********	**********	01975001
				2284 2285		TERMIN	NATION ROUTINE		01976001 01977001
				2286	*			*********	01978001
				2287 2288		*****	<del></del>	<sub>┖ ┖ ┖</sub> ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲ ፲	01979001 01980001
				2289	*			R FROM THE ALGOL PROGRAM	01981001
				2290 2291			PASSING THE FINAL 'END' : NATION) OR FROM THE ERRO		01982001 01983001
				2292	*		NATION).	•	01984001
				2293 2294		IN EIT	THER CASE IT EDITS AND P	RINTS THE TRACE INFORMATION	01985001 01986001
				2295	*	IF AN	, CLOSES ALL DATASETS A	ND RESTORES THE REGISTERS	01987001
				2296	-	A) IHI	. I WENE AT THE TIME UP E	NTRY TO THE ALGOL PROGRAM	01988001

Active USINGs: IHIFSARB, R7 IHIFSARA, R13

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 2297 \* 01989001 2298 \* RETURN IS TO OS OR THE CALLING PROGRAM 01990001 2299 \* THE COMPLETION CODE IS SET TO ZERO (NORMAL) OR 16 01991001 (ABNORMAL TERMINATION) 01992001 2300 2301 \* 01993001 001118 9210 7617 COMPCODE+3,16 ENTRY IN CASE OF ERROR 01487 2302 ALGTRMA 01994001 00111C 47F0 72B4 01124 2303 ALGTRMO 01995001 В 2304 01996001 2305 \* NORMAL ENTRY 01997001 2306 \* 01998001 001120 9200 7617 01487 2307 ALGTRMN MVI COMPCODE+3,0 01999001 001124 18CD 2308 ALGTRM0 PREPARE FOR 02000001 LR FSAA, R13 001126 5850 D0AC 000AC 2309 R5, ADSTAB(, R13) OUTPUT TO SYSPRINT BY MEANS OF I/O ROUTINES 02001001 001124 4150 5028 99928 2310 ΙΔ R5, DSTABLEL+4(,R5) 02002001 SET DSNR TO 1 FOR SYSPRINT 02003001 00112E 4160 0001 00001 2311 R6,1 LA 00000 02004001 2312 USING DSTABLE, R5 R:5 001132 9104 7617 01487 2313 COMPCODE+3, X'04' 02005001 TM 001136 4710 72D4 01144 2314 RΩ ALGTRM00 02006001 00113A 9601 501B 00113E 58F0 DE58 FLAG CLOSE FROM IHIESA 0001B 2315 ΟI DSF+1,DS15 02007001 00E58 02008001 2316 R15.=V(IHIIORCP) CLOSE ALL DATASETS USED L 001142 05EF R14, R15 02009001 2317 BALR OPTSW(R13), TERMSW 001144 9610 D0C2 000C2 2318 ALGTRM00 OI FLAG TERM ROUTINE ENTERED 02010001 001148 9102 D0C2 000C2 2319 TM OPTSW(R13), PRNTERR 02011001 00114C 4780 72EA 0115A 2320 ΒZ ALGTRM16 IF SYSPRINT OK 02012001 2321 02013001 WTO MF=(E,WTOTRM) WRITE END EXEC MESSAGE 2322 02014001 001150 4110 75BC 0142C 2323+ 1,WTOTRM LOAD PARAMETER REG 1 02-IHBIN LA 001154 0A23 01-WT0 2324+ SVC ISSUE SVC 2325 \* 02015001 001156 47F0 74D8 01348 2326 В ALGTRM10 02016001 2327 \* 02017001 00115A 9610 501B 9991B 2328 ALGTRM16 OI DSF+1.DS11 RE-OPEN SYSPRINT FOR 02018001 00115E 9632 501A 0001A 2329 ΟI DSF,DS2+DS3+DS6 TRACE AND TERM OUTPUT 02019001 001162 9104 7617 01487 COMPCODE+3, X'04' 02020001 2330 TM 001166 4710 7304 01174 2331 во ALGTRM1A 02021001 R15,=V(IHIIOROP) R14,R15 00116A 58E0 DESC 00E5C 2332 1 02022001 00116E 05EF 02023001 2333 **BALR** 001170 47F0 7308 01178 2334 В ALGTRM1B 02024001 2335 \* 02025001 001174 9232 5015 99915 2336 ALGTRM1A MVI 5+1.50 02026001 001178 45E0 7504 01374 2337 ALGTRM1B BAL R14, BLANK 02027001 00117C 9610 501A DSF,DS3 0001A 2338 OI 02028001 001180 58F0 DE60 00E60 R15,=V(IHIIORNX) 02029001 2339 R14, R15 001184 05EF 2340 02030001 001186 9140 D0C2 000C2 2341 ALGTRM1 DTSW(R13),TRSW 02031001 TM 00118A 4780 74A6 01316 2342 R7 ALGTRM11 NO TRACE OPTION, BRANCH 02032001 99902 00118F 9104 D0C2 OPTSW(R13), UT1ERR 02033001 2343 TM 001192 4710 7480 012F0 2344 во ALGTRM18 IF SYSUT1 ERROR 02034001 R8, R11, TRBUF 001196 988B 7604 01474 2345 LM LOAD BUFFER PARAMETERS 02035001 00119A 12BB 2346 LTR R11, R11 02036001 00119C 4780 7394 01204 2347 ΒZ ALGTRM2 NO RECORDS WRITTEN, BRANCH 02037001 2348 02038001 2349 **CHECK TRCHECK** CHECK LAST RECORD WRITTEN 02039001 02-IHBIN 0011A0 4110 75F0 01460 2350+ 1,TRCHECK LOAD PARAMETER REG 1 LA 0011A4 58E0 1008 PICK UP DCB ADDR 00008 2351+ 14,8(0,1) 01-CHECK L 2352+ 0011A8 58F0 E034 15,52(0,14) LOAD CHECK ROUTINE ADDR 01-CHECK 00034 0011AC 05EF 2353+ **BALR** 14,15 LINK TO CHECK ROUTINE 01-CHECK 2354 \* 92949991 0011AE 4840 8000 02041001 00000 2355 LH R4,0(,R8) 0011B2 4940 DE6C 00E6C 2356 СН R4,=H'4' 02042001 0011B6 47D0 7374 2357 ALGTRM3 CURRENT BUFFER EMPTY, BRANCH 02043001 011E4 2358 \* 02044001 2359 WRITE TRCHECK, SF,, (R8), MF=E WRITE LAST RECORD 02045001 LOAD DECB ADDRESS 0011BA 4110 75F0 01460 2360+ LA 1.TRCHECK 02-IHBRD 0011BE 9220 1005 00005 2361+ MVI 5(1).X'20' SET TYPE FIELD 02-IHBRD 0011C2 5081 000C 0000C R8,12(1,0) STORE AREA ADDRESS 2362+ ST 02-IHBRD 0011C6 58F1 0008 00008 2363+ 15,8(1,0) LOAD DCB ADDRESS 02-IHBRD L 0011CA 58F0 F030 00030 2364+ 15,48(0,15) LOAD RDWR ROUTINE ADDR 02-IHBRD 0011CE 05EF LINK TO RDWR ROUTINE 02-IHBRD 2365+ BALR 14,15 2366 02046001 2367 **CHECK TRCHECK** 02047001 0011D0 4110 75F0 01460 LOAD PARAMETER REG 1 2368+ 1, TRCHECK 02-IHBIN PICK UP DCB ADDR 0011D4 58E0 1008 99998 2369+ L 14,8(0,1) 01-CHECK LOAD CHECK ROUTINE ADDR 0011D8 58F0 E034 00034 2370+ 15,52(0,14) 01-CHECK LINK TO CHECK ROUTINE 0011DC 05FF BALR 2371+ 14,15 01-CHECK 02048001 2372 0011DE 41B0 B001 00001 2373 LA R11,1(,R11) 02049001 2374 \* 02050001 CLOSE (SYSUT1,REREAD),TYPE=T CLOSE TEMPORARY 2375 ALGTRM3 02051001 0011E2 0700 CNOP ALIGN LIST TO FULLWORD 01-CLOSE 2376+ 0.4 0011E4 4510 737C 1,\*+8 LOAD REG1 W/LIST ADDR 01-CLOSE 011EC 2377+ALGTRM3 BAL AL1(144) 0011E8 90 2378+ DC OPTION BYTE 01-CLOSE 0011E9 0014A0 2379+ DCB ADDRESS 01-CLOSE DC AL3(SYSUT1) 0011EC 0A17 2380+ SVC ISSUE TCLOSE SVC 01-CLOSE 2381 02052001 READ TRCHECK, SF,, (R8), MF=E READ FIRST RECORD 2382 02053001 0011EE 4110 75F0 01460 2383+ LA 1,TRCHECK LOAD DECB ADDRESS 02-IHBRD 0011F2 9280 1005 00005 2384+ MVI 5(1),X'80' SET TYPE FIELD 02-IHBRD 0011F6 5081 000C 0000C 2385+ R8,12(1,0) STORE AREA ADDRESS 02-IHBRD ST 0011FA 58F1 0008 ดดดดล 2386+ L 15,8(1,0) LOAD DCB ADDRESS 02-THRRD 0011FE 58F0 F030 LOAD RDWR ROUTINE ADDR 02-IHBRD 2387+ 15,48(0,15) 00030 001202 05EF 2388+ BALR 14,15 LINK TO RDWR ROUTINE 02054001 2389 \* 2390 \* PRINT TRACE HEADLINES 02055001 2391 \* 02056001 001204 45E0 7534 013A4 2392 ALGTRM2 BAL R14, TRHEAD 02057001

00131A D21D 2000 75C0 00000 01430 2488

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 001208 12BB 2393 ALGTRM4 LTR 02058001 R11,R11 ALGTRM9 00120A 4770 73A4 01214 2394 BNZ IF RECORDS ON SYSUT1 02059001 00120E 1898 2395 LR R9 R8 02060001 001210 47F0 73DE ALGTRM5 0124E 2396 В 02061001 2397 \* 02062001 2398 ALGTRM9 CHECK PREVIOUS READ CHECK TRCHECK 02063001 001214 4110 75F0 91469 2399+ALGTRM9 1,TRCHECK LOAD PARAMETER REG 1 02-IHBIN LA PICK UP DCB ADDR 001218 58E0 1008 99998 2400+ L 14,8(0,1) 01-CHECK LOAD CHECK ROUTINE ADDR 00121C 58F0 E034 00034 2401+ 15,52(0,14) 01-CHECK 001220 05EF LINK TO CHECK ROUTINE 01-CHECK 2402+ BALR 14.15 2403 \* 02064001 001222 9889 7604 01474 2404 LM R8, R9, TRBUF 02065001 001226 1818 2405  $\mathsf{LR}$ R1,R8 SWITCH BUFFERS 02066001 001228 1889 2406 I R R8. R9 02067001 00122A 1891 02068001 2407 LR R9, R1 00122C 9089 7604 R8, R9, TRBUF 02069001 01474 2408 STM 001230 46B0 73C8 01238 2409 R11,ALGTRM6 DECR RECORD COUNTER 02070001 **BCT** 001234 47F0 73DF 0124E 2410 ALGTRM5 NO MORE RECORDS, BRANCH 02071001 В 2411 \* 02072001 TRCHECK, SF,, (R8), MF=E 2412 ALGTRM6 READ 02073001 001238 4110 75F0 2413+ALGTRM6 LOAD DECB ADDRESS 01460 LA 1.TRCHECK 02-IHBRD 5(1),X'80' 00123C 9280 1005 SET TYPE FIELD 2414+ MVI 02-IHBRD STORE AREA ADDRESS 001240 5081 000C 0000C 2415+ ST R8,12(1,0) 02-IHBRD 001244 58F1 0008 80000 2416+ L 15,8(1,0) LOAD DCB ADDRESS 02-IHBRD LOAD RDWR ROUTINE ADDR 02-IHBRD 001248 58F0 F030 99939 2417+ 15,48(0,15) LINK TO RDWR ROUTINE 00124C 05EF BALR 02-IHBRD 2418+ 14,15 2419 \* 02074001 00124E 4840 9000 R4,0(0,R9) 00000 2420 ALGTRM5 LH LOAD BYTE COUNT 02075001 001252 1A49 R4, R9 ADDR OF LAST BYTE PLUS ONE 02076001 2421 AR 001254 4190 9004 99994 2422 LA R9,4(0,R9) R9 IS NOW BYTE POINTER 02077001 001258 5820 5004 00004 2423 R2.R SYSPRINT BYTE POINTER 02078001 00125C 47F0 7468 ALGTRM7 02079001 012D8 2424 В 2425 \* 02080001 001260 D501 9000 DD5A 00000 00D5A 2426 ALGTRM8 0(2,R9),TRPGID NEXT ITEM A PROGID ? 02081001 CLC NO, BRANCH ALGTRM12 001266 4770 7408 01278 2427 BNE 02082001 PROGID(4).2(R9) 00126A D203 761A 9002 0148A 00002 STORE PROGED 2428 MVC 02083001 R9,6(0,R9) 001270 4190 9006 02084001 00006 2429 LA 001274 47F0 7414 01284 2430 ALGTRM15 02085001 В 2431 \* 02086001 001278 4130 2006 99996 2432 ALGTRM12 LA R3,6(,R2) ROOM FOR 02087001 ONE MORE OUTPUT ITEM ? 00127C 5930 5008 00008 2433 C R3,RE 02088001 001280 4740 7448 012B8 2434 RI ALGTRM13 YES, BRANCH 02089001 001284 9610 501A 0001A 2435 ALGTRM15 OI DSF DS3 02090001 00E60 001288 58F0 DE60 2436 R15,=V(IHIIORNX) 02091001 00128C 05EF 02092001 2437 BALR R14, R15 S(2),=H'1' 00128E D501 5014 DE68 00014 00E68 2438 CLC NEW PAGE ? 02093001 NO. BRANCH 02094001 001294 4770 7430 91249 2439 BNF AI GTRM14 001298 45E0 7534 R14, TRHEAD PRINT PAGE HEADINGS 013A4 2440 02095001 BAL 00129C 47F0 7414 01284 2441 В ALGTRM15 02096001 2442 \* 02097001 0012A0 5820 5004 99994 2443 ALGTRM14 L R2.R 02098001 INITIALIZE WITH BLANKS 02099001 0012A4 45E0 7504 01374 2444 BAL R14.BLANK 0(10,R2),PIDFIELD PROGID AT START OF NEW LINE 0012A8 D209 2000 7618 00000 01488 2445 02100001 MVC PROGID(4),PROGID-1 BLANKS TO RPOGID 0012AE D203 761A 7619 0148A 01489 2446 02101001 MVC 0012B4 4120 200A 0000A 2447 R2, PIDLGTH(,R2) 02102001 0012B8 4830 9000 00000 2448 ALGTRM13 LH 02103001 R3,0(,R9) CONVERT SEMICOLON COUNTER 0012BC 4190 9002 0012C0 4E30 7628 9999 2449 LA R9.2(.R9) 02104001 01498 2450 CVD R3. CONVBUE PRINT AREA 02105001 MOVE IN PATTERN 0012C4 D205 2000 75B5 00000 01425 O(L'SCPATTN, R2), SCPATTN 02106001 2451 MVC 0012CA DE05 2000 762D 00000 0149D 2452 ED O(L'SCPATTN,R2),CONVBUF+5 FORMAT SC COUNT 02107001 0012D0 4120 2006 00006 2453 STEP OUTPUT BUFFER POINTER 02108001 R2,6(,R2) 0012D4 5020 5004 00004 2454 ST R2,R 02109001 2455 ALGTRM7 0012D8 1994 CR R9.R4 02110001 0012DA 4740 73F0 NOT END OF SYSUT1 REC, BRANCH 01260 ALGTRM8 02111001 2456 BL 0012DE 12BB 2457 LTR R11.R11 02112001 0012E0 4770 73A4 01214 MORE RECORDS TO READ, BRANCH 02113001 2458 BNZ ALGTRM9 0012E4 9610 501A 0001A 2459 OI DSF,DS3 PRINT LAST LINE 02114001 0012E8 58F0 DE60 00E60 2460 R15,=V(IHIIORNX) 02115001 0012EC 05EF BALR R14.R15 02116001 2461 2462 \* 02117001 2463 \* CLOSE SYSUT1 AND FREE BUFFER AREA 2464 \* 02119001 2465 ALGTRM18 CLOSE (SYSUT1) 02120001 ALIGN LIST TO FULLWORD 01-CLOSE 0012EE 0700 2466+ CNOP 0,4 1,\*+8 01-CLOSE 0012F0 4510 7488 2467+ALGTRM18 BAL 012F8 LOAD REG1 W/LIST ADDR 0012F4 80 AL1(128) OPTION BYTE 01-CLOSE 2468+ DC 0012F5 0014A0 2469+ DC AL3 (SYSUT1) DCB ADDRESS 01-CLOSE 0012F8 0A14 2470+ SVC 20 ISSUE CLOSE SVC 01-CLOSE 2471 02121001 0012FA 9889 7604 01474 2472 LM R8, R9, TRBUF **GET LOWER** 02122001 0012FE 1818 2473 LR BUFFER ADDR 02123001 R1, R8 001300 1989 2474 CR R8,R9 02124001 001302 4740 7498 2475 02125001 01308 001306 1819 2476 LR R1, R9 02126001 001308 5800 7600 0147C RØ. TRBUFL 2477 02127001 00130C 8B00 0001 00001 2478 02128001 SLA R0.1 2479 \* 02129001 2480 FREEMAIN R, LV=(0), A=(1) FREE SYSUT1 BUFFER 02130001 2481+\* OS/VS2 RELEASE 3 VERSION --10/25/74 01-FREEM 1.0(0,1) 001310 4110 1000 00000 2482+ CLEAR HT ORDER BYTE 01-FREEM 01-FREEM ISSUE FREEMAIN SVC 001314 0A0A 2483+ SVC 10 2484 02131001 PRINT EXECUTION END MESSAGE 2485 \* 02132001 02133001 2486 \* 001316 5820 5004 99994 2487 ALGTRM11 L R2.R BYTE POINTER 02134001

MVC

0(TML,R2),TRMSG

MOVE TERMINATION MESSAGE

Loc Object Code Addr1	Addr2	Stmt Source	State	ment	X390 3.1.04 2012/08	/17 13.21
-						
001320 4120 201E	0001E		LA	R2,TML(,R2)	UDDATE DVTE DOTATED	02136001
001324 5020 5004	00004		ST	R2,R	UPDATE BYTE POINTER	02137001
001328 4120 0002 00132C 45E0 7504	00002 01374	2491 2492 ALGTRM19	LA RAI	R2,2 R14,BLANK	LOOP COUNTER FOR BLANK LINES	02138001 02139001
001330 9610 501A 0001A		2493	OI	DSF, DS3		02140001
001334 58F0 DE60	00E60	2494	L	R15,=V(IHIIORNX)		02141001
001338 05EF		2495	BALR	R14,R15		02142001
00133A 4620 74BC	0132C		BCT	R2, ALGTRM19	ONE EXTRA BLANK LINE	02143001
00133E 9601 501B 0001B		2497	OI	DSF+1,DS15	FLAG CLOSE FROM IHIFSA	02144001
001342 58F0 DE64	00E64		L	R15,=V(IHIIORCL) R14,R15	CLOSE SYSPRINT	02145001
001346 05EF		2499 2500 *	DALK	K14,K15		02146001 02147001
		2501 *	FINAL	CLEAN-UP		02148001
		2502 *				02149001
001348 581D 00C4	000C4	2503 ALGTRM10	L	R1, RASSTART (R13)	FREE RETURN ADDR STACK	02150001
00134C 4110 1008	00008		LA	R1,8(,R1)		02151001
		2505 *		ATH D 11/ 2040 A (4)		02152001
		2506 2507+*		AIN R,LV=2048,A=(1) 2 RELEASE 3 VERSION :	10/25/74	<b>02153001</b> 01-FREEM
001350 4100 0800	00800		LA	0,2048(0,0)	LOAD LENGTH	01-FREEM
001354 4110 1000		2509+	LA	1,0(0,1)	CLEAR HI ORDER BYTE	01-FREEM
001358 0A0A		2510+	SVC	10	ISSUE FREEMAIN SVC	01-FREEM
		2511 *				02154001
00135A 5820 D0BC	000BC	2512 ALGTRM17	L	R2,FSAPICA(,R13)		02155001
		2513 * 2514	CDTE	MF=(E,(R2))	RESTORE PICA	02156001 02157001
00135E 1812		2515+	LR	1,R2	LOAD PARAMETER REG 1	02-IHBIN
001360 0A0E		2516+	SVC		E THE SPIE SVC	01-SPIE
		2517 *				02158001
001362 58D0 D004		2518 ALGTRMAA		R13,4(,R13)		02159001
001366 58F0 7614	01484		L	R15,COMPCODE	RETURN CODE INTO R15	02160001
		2520 * 2521	RETIID	N (14,12), RC=(15)	TO OS OR THE CALLING PROGRAM	02161001 02162001
00136A 58ED 000C	0000C		L	14,12(13,0)	RESTORE REGISTER 14	01-RETUR
00136E 980C D014	00014		LM	0,12,20(13)	RESTORE THE REGISTERS	01-RETUR
001372 07FE		2524+	BR	14	RETURN	01-RETUR
		2525 *				02163001
		2526 *	ROUTI	NE FOR FILLING A SYSPRIN	T RECORD WITH BLANKS	02164001
001374 9023 752C	0130C	2527 * 2528 BLANK	STM	R2, R3, BLANKS		02165001 02166001
001374 9023 7320	00004		L	R2, R	CURRENT BYTE POINTER	02167001
00137C 5830 5008	00008		Ĺ	R3, RE	RECORD END POINTER	02168001
001380 1923		2531 BLANKA	CR	R2, R3		02169001
001382 47B0 7522	01392		BNL	BLANKB	RECORD END, BRANCH	02170001
001386 9240 2000 00000	00004	2533	MVI	0(R2),C''	INSERT ONE BLANK	02171001
00138A 4120 2001 00138E 47F0 7510	00001 01380		LA B	R2,1(,R2) BLANKA	STEP TO NEXT BYTE LOOP TO PROCESS NEXT CHAR	02172001 02173001
001382 4710 7310	01380	2536 *	ь	BLANKA	LOUP TO PROCESS NEXT CHAR	02173001
001392 5020 5004	00004	2537 BLANKB	ST	R2,R	UPDATED BYTE POINTER	02175001
001396 9823 752C	0139C	2538	LM	R2,R3,BLANKS		02176001
				NZ, NJ, DLANKJ		02170001
00139A 07FE		2539	BR	R14		02177001
		2539 2540 *	BR	R14		02177001 02178001
00139A 07FE		2539 2540 * 2541 BLANKS				02177001 02178001 02179001
		2539 2540 *	BR DC	R14 2F'0'	TPUT HEADING	02177001 02178001
		2539 2540 * 2541 BLANKS 2542 *	BR DC	R14	TPUT HEADING	02177001 02178001 02179001 02180001
00139C 000000000000000000000000000000000000		2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD	BR DC ROUTIN	R14  2F'0'  NE FOR PRINTING TRACE OUT R14,R12,ASAVE+12(R13)	USE SECOND SAVE AREA	02177001 02178001 02179001 02180001 02181001 02182001 02183001
00139C 00000000000000000 0013A4 90EC D054 0013A8 9824 7560	013D0	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546	BR  DC  ROUTIN	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR		02177001 02178001 02179001 02180001 02181001 02182001 02183001 02184001
00139C 00000000000000000 0013A4 90EC D054 0013A8 9824 7560 0013AC 5810 5004	013D0 00004	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1	BR DC ROUTIN	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13)  R2,R4,TRHADR R1,R	USE SECOND SAVE AREA COUNTER FOR HEADLINES	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02184001 02185001
00139C 000000000000000000000000000000000000	013D0 00004 01374	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548	BR DC ROUTIN	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R1,R R14,BLANK	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02184001 02185001 02186001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548	BR DC ROUTIN	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R  R14,BLANK 0,0(R4) DSF,DS3	USE SECOND SAVE AREA COUNTER FOR HEADLINES	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02184001 02185001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000	2539	BR  DC  ROUTIN  STM  LM  L  BAL  EX  OI  L	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX)	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02184001 02185001 02187001 02187001 02188001 02189001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551	BR  DC  ROUTII  STM  LM  L  BAL  EX  OI  L  BALR	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02185001 02186001 02187001 02188001 02189001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553	BR  DC  ROUTII  STM  LM  L  BAL  EX  OI  L  BALR  BALR  BXLE	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02187001 02188001 02189001 02190001 02191001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554	BR  DC  ROUTIN  STM  LM  L  BAL  EX  OI  L  BALR  BALR  BXLE  BAL	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02185001 02185001 02187001 02189001 02189001 02190001 0219001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554	BR  DC  ROUTII  STM  LM  L  BAL  EX  OI  L  BALR  BALR  BXLE	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02187001 02188001 02189001 02190001 02191001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555	BR  DC  ROUTII  STM  LM  L  BAL  EX  OI  L  BALR  BALR  BALR  BALL  LM	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13)	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02189001 02190001 02191001 02192001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR	BR  DC  ROUTII  STM  LM  L  BAL  EX  OI  L  BALR  BALR  BALR  BALL  LM	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13)	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02187001 02189001 02190001 02192001 02193001 02193001 02195001 02195001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2559 *	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BALR BALL BALL BAL LM BR  DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02185001 02185001 02187001 02189001 02190001 0219001 02193001 02194001 02194001 02195001 02195001 02195001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 * 2557 * 2558 TRHADR 2559 * 2560 TRHLIST	BR  DC  ROUTIN  STM  LM  L  BAL  EX  OI  L  BALR  BXLE  BALL  LM  BR  DC  NOP	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02187001 02189001 02199001 02191001 02193001 02195001 02195001 02195001 02195001 02197001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 4 2555 2556 257 * 2558 TRHADR 2550 TRHLIST 2561	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL L M BR DC  NOP NOPR	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02185001 02185001 02187001 02199001 02199001 02192001 02193001 02194001 02195001 02195001 02196001 02196001 02198001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2560 2560 2578 * 2560 2578 * 2560 2578 * 2560 2579 * 2561 2561 2562	BR  DC  ROUTIN  STM  LM  L  BAL  EX  OI  L  BALR  BXLE  BALL  LM  BR  DC  NOP	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02187001 02189001 02199001 02191001 02193001 02195001 02195001 02195001 02195001 02197001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 * 2557 * 2588 TRHADR 2599 * 2560 TRHLIST 2561 2562 2563 2564	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BALE BALL M BR  DC  NOP NOPR MVC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0 0(L'TRHEADA,R1),TRHEADA	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02191001 02192001 02193001 02195001 02195001 02197001 02197001 02197001 02197001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2599 * 2560 TRHLIST 2561 2563 2564 2565 TRHEND	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM BR  DC  NOP NOPR MVC NOP	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0(L'TRHEADA,R1),TRHEADA 0	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE BLANK LINE	02177001 02178001 02179001 02180001 02181001 02182001 02183001 02185001 02186001 02187001 02190001 02199001 02199001 02193001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2560 2561 2562 2563 2564 2565 2563 2564 2565 2566 257 *	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM BR DC  NOP NOPR MVC NOP NOPR MVC NOP MVC NOP NOPR MVC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE BLANK LINE	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02191001 02192001 02193001 02195001 02195001 02197001 02199001 02199001 02199001 02199001 02199001 02201001 02202001 02204001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539   2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546   2547 TRHEAD1 2548   2550   2551   2552   2553   2554   2555   2556   2557 * 2560 TRHLIST 2562   2563   2564   2565 TRHEND 2566 * 2567 TRHEADA	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM BR DC  NOP NOPR MVC NOP NOPR MVC NOP MVC NOP NOPR MVC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE BLANK LINE	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02190001 0219001 02192001 02193001 02194001 02195001 02195001 02196001 02197001 02198001 02196001 02196001 02196001 02202001 02202001 02202001 02204001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2560 2561 2562 2563 2564 2565 2563 2564 2565 2566 257 *	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM DC  NOP NOPR MVC NOP NOPR MVC DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  FIRST HEADLINE	02177001 02178001 02179001 02189001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02191001 02192001 02193001 02195001 02195001 02197001 02199001 02199001 02199001 02199001 02199001 02201001 02202001 02204001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 * 2556 TRHEADR 2559 * 2560 TRHLIST 2562 2563 2564 TRHEAD 2566 * 2567 TRHEADA 2566 * 2567 TRHEADA 2568 *	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM DC  NOP NOPR MVC NOP NOPR MVC DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE BLANK LINE	02177001 02178001 02178001 02189001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02199001 02193001 02194001 02195001 02195001 02196001 02199001 02199001 02199001 02199001 02199001 02202001 02203001 02203001 02205001 02205001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2560 2563 2564 2565 TRHEAD 2566 * 2567 TRHEADA 2568 * 2567 TRHEADA 2568 * 2569 TRHEADA 2568 * 2567 TRHEADA 2568 * 2567 TRHEADB 2571 SCPATTN	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM DC NOP NOPR MVC NOP NOPR MVC DC DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE C'MODULE SEMICOLON IN	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  FIRST HEADLINE	02177001 02178001 02178001 02182001 02181001 02183001 02184001 02185001 02185001 02186001 02187001 02199001 02191001 02193001 02194001 02195001 02195001 02196001 02196001 02196001 02196001 02206001 02204001 02205001 02206001 02206001 02206001 02206001 02206001 02206001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 * 2556 TRHEADR 2559 * 2560 TRHLIST 2561 2562 2563 2564 TRHEADA 2568 * 2567 TRHEADA 2568 * 2569 TRHEADB 2570 * 2571 SCPATTN 2572 *	BR  DC  ROUTIL  STM LM L BAL EX OI L BALR BXLE BAL LM BR  DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0 (L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE C'MODULE SEMICOLON IN X'40202020202020'	USE SECOND SAVE AREA COUNTER FOR HEADLINES INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE	02177001 02178001 02178001 02189001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02199001 02193001 02194001 02195001 02196001 02197001 02196001 02196001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02195001 02205001 02205001 02205001 02205001 02206001 02207001 02208001 02208001 02208001 02208001 02208001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2569 TRHLIST 2561 2562 2563 2564 2565 TRHEADA 2566 * 2567 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADB 2570 * 2571 SCPATTN 2573 WTOTRM	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BALL LM BR  DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  WTO	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN  X'402020202020'  'END OF ALGOL PROGRAM EST	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  FIRST HEADLINE  NUMBERS' SECOND HEADLINE	02177001 02178001 02178001 02182001 02182001 02183001 02185001 02185001 02185001 02186001 02187001 02199001 02199001 02193001 02194001 02195001 02195001 02196001 02196001 02196001 02200001 022020001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 257 * 2558 TRHADR 2562 2563 2564 2565 TRHEND 2566 * 2567 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADA 2569 TRHEADA 2568 * 2569 TRHEADA 2570 * 2571 SCPATTN 2572 * 2573 WIOTRM 2574+WTOTRM	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  WTO DS	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN X'402020202020'  'END OF ALGOL PROGRAM ES	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L	02177001 02178001 02178001 02182001 02181001 02183001 02185001 02185001 02185001 02186001 02187001 02199001 02199001 02199001 02193001 02194001 02195001 02196001 02196001 02196001 022020001 022020001 02205001 02205001 02207001 02208001 02207001 02208001 02209001 02209001 02209001 02209001 02209001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2569 TRHLIST 2561 2562 2563 2564 2565 TRHEADA 2566 * 2567 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADB 2570 * 2571 SCPATTN 2573 WTOTRM	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BALL LM BR  DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  WTO	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN X'402020202020'  'END OF ALGOL PROGRAM ES	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L T LENGTH	02177001 02178001 02178001 02182001 02182001 02183001 02185001 02185001 02185001 02186001 02187001 02199001 02199001 02193001 02194001 02195001 02195001 02196001 02196001 02196001 02200001 022020001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2557 * 2558 TRHADR 2560 2561 2562 2563 2564 2565 TRHLIST 2562 2563 2564 2565 TRHEADA 2566 * 2567 TRHEADA 2568 * 2567 TRHEADA 2568 * 2567 TRHEADA 2568 * 2571 SCPATTN 2572 * 2573 WITOTRM 2574+WTOTRM 2574+WTOTRM 2575+	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM BR  DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  WTO DS DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADB,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN  X'402020202020'  'END OF ALGOL PROGRAM EX OF  AL2(34) EXX E'100000000000000000000' MCS C'END OF ALGOL PROGRAM IN	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION'	02177001 02178001 02178001 02182001 02181001 02183001 02185001 02185001 02185001 02186001 02187001 02199001 02191001 02193001 02193001 02194001 02195001 02196001 02196001 02204001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001 02205001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2562 2563 2564 2565 TRHEAD 2566 * 2567 TRHEADA 2568 * 2569 TRHEADB 2570 * 2571 SCPATTN 2572 * 2573 WIOTRM 2574+WTOTRM 2575+ 2577+ 2578+	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BALE BALE BAL DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  DC  DC  DC  DC  DC  DC  D	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADB,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN  X'402020202020'  'END OF ALGOL PROGRAM ET  OF  AL2(34) B'10000000000000000' DESC  C'END OF ALGOL PROGRAM ET  OF  OF  C'END OF  C'END OF  OF  OF  OF  OF  OF  OF  OF  OF  OF	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION' CRIPTOR CODES	02177001 02178001 02178001 02180001 02181001 02183001 02185001 02185001 02186001 02187001 02199001 02199001 02199001 02193001 02195001 02195001 02195001 02195001 02195001 02195001 02200001 02200001 02204001 02205001 02205001 02205001 02205001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 0219001 0219001 0219001 0219001 0219001 0219001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 257 * 2558 TRHADR 2560 2560 TRHLIST 2561 2562 2563 2564 2567 TRHEADA 2568 * 2567 TRHEADA 2568 * 2569 TRHEADB 2570 * 2571 SCPATTN 2572 * 2573 WIOTRM 2575+ 2576+ 2577+ 2576+ 2577+ 2578+ 2578+ 2579+	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BALL LM BR  DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  DC  DC  DC  DC  DC  DC  D	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADB,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN  X'402020202020'  'END OF ALGOL PROGRAM EX OF  AL2(34) EXX E'100000000000000000000' MCS C'END OF ALGOL PROGRAM IN	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION' CRIPTOR CODES	02177001 02178001 02178001 02180001 02181001 02183001 02185001 02185001 02185001 02186001 02187001 02193001 02194001 02195001 02196001 02196001 022000001 022000001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539   2540 * 2541 BLANKS   2542 * 2543 * 2544 * 2545 TRHEAD   2546   2547 TRHEAD1   2548   2550   2551   2552   2553   2554   2555   2556   2557 * 2560 TRHLIST   2562   2563   2564   2567 TRHEADA   2568 * 2567 TRHEADB   2568 * 2569 TRHEADB   2570 * 2571 SCPATTN   2572 * 2573 WIOTRM   2575+   2576+   2577+   2578+   2579+   2579+   2580 *	BR  DC  ROUTIL  STM LM L BAL EX OI L BALR BXLE BAL LM BR  DC  NOP NOPR MVC  DC  DC  DC  DC  DC  DC  DC  DC  DC	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST) 0 0 0(L'TRHEADA,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADA C' ALGOL PROGRAM TRACE C'MODULE SEMICOLON IN X'402020202020'  'END OF ALGOL PROGRAM ES OF AL2(34) B'100000000000000000' MCS C'END OF ALGOL PROGRAM IN B'0000001000000000' ROS C'END OF ALGOL PROGRAM IN B'0000001000000000' ROS B'0000000000000000' ROS	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION' CRIPTOR CODES	02177001 02178001 02178001 02180001 02181001 02182001 02183001 02185001 02186001 02187001 02190001 02193001 02194001 02195001 02196001 02197001 02200001 02200001 02205001 02205001 02205001 02207001 02205001 02207001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 * 2556 TRHADR 2559 * 2560 TRHLIST 2561 2562 2563 2564 2565 TRHEADA 2568 * 2567 TRHEADA 2568 * 2569 TRHEADA 2568 * 2569 TRHEADB 2570 * 2571 SCPATTN 2572 * 2573 WTOTRM 2574+WTOTRM 2575+ 2576+ 2577+ 2578+ 2579+ 2578+ 2579+ 2580 * 2581 TRMSG	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BALE BALE BAL DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  DC  DC  DC  DC  DC  DC  D	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0(L'TRHEADB,R1),TRHEADA 0 0(L'TRHEADB,R1),TRHEADB C' ALGOL PROGRAM TRACE  C'MODULE SEMICOLON IN  X'402020202020'  'END OF ALGOL PROGRAM ET  OF  AL2(34) B'10000000000000000' DESC  C'END OF ALGOL PROGRAM ET  OF  OF  C'END OF  C'END OF  OF  OF  OF  OF  OF  OF  OF  OF  OF	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION' CRIPTOR CODES	02177001 02178001 02178001 02180001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02193001 02194001 02195001 02195001 02200001 02200001 02200001 02200001 02200001 02200001 02200001 02200001 02200001 02201001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539   2540 * 2541 BLANKS   2542 * 2543 * 2544 * 2545 TRHEAD   2546   2547 TRHEAD1   2548   2550   2551   2552   2553   2554   2555   2556   2557 * 2560 TRHLIST   2562   2563   2564   2567 TRHEADA   2568 * 2567 TRHEADB   2568 * 2569 TRHEADB   2570 * 2571 SCPATTN   2572 * 2573 WIOTRM   2575+   2576+   2577+   2578+   2579+   2579+   2580 *	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BALL LM BR  DC  NOP NOPR MVC DC  DC  DC  DC  DC  DC  DC  DC  DC  D	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0 (L'TRHEADA,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 C'ALGOL PROGRAM TRACE C'MODULE SEMICOLON IN X'402020202020' 'END OF ALGOL PROGRAM EN 0F AL2(34) TEXT 8'1000000000000000000' MCS C'END OF ALGOL PROGRAM IN B'000000100000000' ROUT WTOTRM+4	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE  FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION' CRIPTOR CODES	02177001 02178001 02178001 02180001 02181001 02182001 02183001 02185001 02186001 02187001 02190001 02193001 02194001 02195001 02196001 02197001 02200001 02200001 02205001 02205001 02205001 02207001 02205001 02207001
00139C 000000000000000000000000000000000000	013D0 00004 01374 00000 00E60 013AC 01374 00054	2539 2540 * 2541 BLANKS 2542 * 2543 * 2544 * 2545 TRHEAD 2546 2547 TRHEAD1 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 * 2558 TRHADR 2562 2563 2564 2567 TRHEADA 2566 * 2567 TRHEADA 2566 * 2567 TRHEADA 2569 TRHEADA 2569 TRHEADA 2569 TRHEADB 2570 * 2571 SCPATTN 2572 * 2573 WTOTRM 2574+WTOTRM 2575+ 2576+ 2577+ 2578+ 2579+ 2580 * 2581 TRMSG 2582 TML	BR  DC  ROUTII  STM LM L BAL EX OI L BALR BXLE BAL LM BR DC  NOP NOPR MVC NOP NOPR MVC DC  DC  DC  DC  DC  DC  DC  DC  DC  D	R14  2F'0'  NE FOR PRINTING TRACE OUT  R14,R12,ASAVE+12(R13) R2,R4,TRHADR R1,R R14,BLANK 0,0(R4) DSF,DS3 R15,=V(IHIIORNX) R14,R15 R4,R2,TRHEAD1 R14,BLANK R14,R12,ASAVE+12(R13) R14  A(6,TRHEND,TRHLIST)  0 0 (L'TRHEADA,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 (L'TRHEADB,R1),TRHEADA 0 0 C'ALGOL PROGRAM TRACE C'MODULE SEMICOLON IN X'402020202020' 'END OF ALGOL PROGRAM EN 0F AL2(34) TEXT 8'1000000000000000000' MCS C'END OF ALGOL PROGRAM IN B'000000100000000' ROUT WTOTRM+4	USE SECOND SAVE AREA COUNTER FOR HEADLINES  INITIALIZE WITH BLANKS MOVE TEXT, OR NOP  BLANK LINE AFTER HEADING  BLANK LINE  BLANK LINE  ' FIRST HEADLINE  NUMBERS' SECOND HEADLINE FORMAT SEMICOLON COUNT VALUE  XECUTION', ROUTCDE=11, DESC=7, MF=L  T LENGTH FLAGS EXECUTION' CRIPTOR CODES TING CODES	02177001 02178001 02178001 02180001 02181001 02182001 02183001 02185001 02185001 02186001 02187001 02199001 02193001 02194001 02195001 02196001 02196001 02200001 02200001 02204001 02205001 02205001 02206001 02206001 02207001 02208001 02208001 02209001 02208001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02209001 02211001 01-WTO

0014F8 850010A6

2676 EXLUT1

DC

X'85',AL3(SYSUT1X)

02252001

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 2585 \* 02217001 001452 9604 D0C2 000C2 2586 ENDUT1 OI OPTSW(R13),UT1ERR SYSUT1 ERROR SWITCH ON 02218001 001456 4160 0011 00011 2587 LA R6,17 ERROR32 DUMMY DS NUMBER FOR SYSUT1 02219001 00145A 47F0 D24C В 02220001 0024C 2588 2589 02221001 2590 PARAMETER LIST USED BY BOTH READ AND WRITE MACROS FOR 02222001 2591 \* SYSUT1 02223001 2592 02224001 WRITE TRCHECK, SF, SYSUT1, MF=L 2593 02225001 00145E 0000 001460 00000000 2594+TRCHECK DC F'0' EVENT CONTROL BLOCK 02-IHBRD 001464 00 2595+ X'00' TYPE FIELD 02-IHBRD DC 001465 20 2596+ DC X'20' TYPE FIELD 02-IHBRD AL2(0) A(SYSUT1) 001466 0000 2597+ DC I FNGTH 02-THRRD 001468 000014A0 2598+ DC DCB ADDRESS 02-IHBRD 00146C 00000000 2599+ AREA ADDRESS 02-IHBRD DC A(0) 001470 000000000 2600+ DC A(0) RECORD POINTER WORD 2601 02226001 2602 \* PARAMETERS FOR TRACE BUFFER 02227001 2603 02228001 001474 00000000 2604 TRBUF ADDR OF CURRENT BUFFER 02229001 DC F'0' ADDR OF ALTERNATE BUFFER 001478 00000000 2605 TRBUFA DC F'0' 02230001 00147C 00000000 2606 TRBUFL DC F'0' LENGTH OF BUFFER 02231001 001480 00000000 **2607 TRCNT** DC F'0' RECORD COUNTER 02232001 2608 02233001 2609 THE BYTE POINTER IS CONTAINED IN THE FIRST TWO BYTES OF 02234001 2610 THE RECORD AND SERVES AS RECORD LENGTH FIELD 02235001 02236001 2611 \* 001484 00000000 2612 COMPCODE DC F'a' COMPLETION CODE (0 OR 16) 02237001 2613 02238001 WORK STORAGE FOR EDITING THE TRACE LISTING 2614 02239001 02240001 2615 001488 4040 2616 PIDFIELD DC CL2' ' 02241001 00148A 40404040 2617 PROGID CL4' ' 02242001 DC MODULE NAME CL4' ' 00148E 40404040 2618 DC 02243001 2619 PIDLGTH EOU \*-PTDFTFID AAAAA 02244001 001492 0000000000000 001498 00000000000000000 2620 CONVBUF DC D'0' FOR CONVERTING SEMICOLON NUMBER 02245001 02246001 2621 \* 2622 \* DCB FOR SYSUT1 02247001 2623 \* 02248001 DSORG=PS.MACRF=(R.W).DDNAME=SYSUT1.RECFM=F. 2624 SYSUT1 DCB X02249001 EODAD=ENDUT1, EXLST=EXLUT1, SYNAD=ENDUT1 02250001 2626+\* DATA CONTROL BLOCK 01-DCB 2627+ 01-DCB 0F'0' 0014A0 2628+SYSUT1 ORIGIN ON WORD BOUNDARY 01-DCB DC 2630+\* DIRECT ACCESS DEVICE INTERFACE 01-DCB 0014A0 00000000000000000 BL16'0 FDAD.DVTBL 01-DCB 2632+ DC 0014B0 00000000 KEYLE, DEVT, TRBAL DC 2633 +A(0)01-DCB COMMON ACCESS METHOD INTERFACE 2635+\* 01-DCB 0014B4 00 2637+ DC AL1(0) RHENO 01-DCB 0014B5 000001 2638+ DC AL3(1) AL2(0) BUFCB 01-DCB 0014B8 0000 BUFL 01-DCB 2639+ DC 0014BA 4000 2640+ DC BL2'01000000000000000' **DSORG** 0014BC 00000001 2641+ DC A(1) IOBAD 01-DCB FOUNDATION EXTENSION 2643+\* 01-DCB 0014C0 00 2645+ DC BL1'00000000' BFTEK, BFLN, HIARCHY 01-DCB 0014C1 001452 2646+ DC AL3(ENDUT1) FODAD 01-DCB 0014C4 80 2647+ DC BL1'10000000' RECEM 01-DCB 0014C5 0014F8 2648+ DC AL3(EXLUT1) **EXLST** 01-DCB 2650+ FOUNDATION BLOCK 01-DCB 0014C8 E2E8E2E4E3F14040 2652+ DC CL8'SYSUT1' DDNAME 01-DCB 0014D0 02 2653+ DC BL1'00000010' **OFLGS** 01-DCB IFLG 0014D1 00 2654+ DC BL1 '000000000 01-DCB 0014D2 2020 BL2'0010000000100000' DC MACR 2655+ 01-DCB 2657+\* BSAM-BPAM-QSAM INTERFACE 01-DCB 0014D4 00 BI 1 '000000000' RFR1 01-DCB 2659+ DC 0014D5 000001 DC AL3(1) CHECK, GERR, PERR 2660+ 01-DCB 0014D8 00001452 DC A(ENDUT1) SYNAD 01-DCB 2661+ CIND1, CIND2 0014DC 0000 2662+ DC H'0' 0014DE 0000 2663+ DC AL2(0) BLKSIZE 01-DCB 0014E0 00000000 2664+ DC F'0' WCPO, WCPL, OFFSR, OFFSW 01-DCB A(1) IOBA 0014E4 00000001 2665+ DC 01-DCB AL1(0) DC 0014E8 00 2666+ NCP 01-DCB 0014E9 000001 2667+ DC AL3(1) EOBR, EOBAD 01-DCB 2669+\* BSAM-BPAM INTERFACE 01-DCB 0014EC 00000001 DC A(1) EOBW 01-DCB 2671+ 0014F0 0000 DC н'о' DIRCT 01-DCB 2672+ AL2(0) 01-DCB 0014F2 0000 2673+ DC **LRECL** 0014F4 00000001 2674+ CNTRL, NOTE, POINT DC A(1) 2675 02251001

000E6C 0004

3297

=H'4'

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt
                                             Source Statement
                                      2677 *
                                                                                                                          02253001
                                      2678 *
                                                     LTORG
                                                                                                                          02254001
                                                                                                                         02255001
02256001
                                      2679
                                      2680
                                                     DATASET TABLE ENTRY
                                                                                                                          02257001
                                      2681
                                      2682
                                                                                                                          02258001
                                      2683
                                                     DSTABLE DSECT=YES
                                                                                                                          02259001
                                     2684+DSTABLE
000000
                       00000 00024
                                                     DSECT
                                                                                                                         01-DSTAB
                                                                                                                         01-DSTAB
                                      2685+*
                                      2686+ADCB
000000 00000000
                                                           F'0
                                                                                      -> DCB
                                                                                                                         01-DSTAB
                                                     DC
000004 00000000
                                                                                      CHARACTER POINTER
                                      2687+R
                                                     DC
                                                            F'0'
                                                                                                                          01-DSTAB
0000008 000000000
                                      2688+RE
                                                     DC
                                                            F'0'
                                                                                                                          01-DSTAB
00000C 00000000
                                      2689+NBB
                                                     DC
                                                            F'0'
                                                                                                                         01-DSTAB
999919 99999999
                                      2690+BB
                                                     DC
                                                            F'0'
                                                                                                                         01-DSTAR
                                                           H'1'
000014 0001
                                      2691+5
                                                     DC
                                                                                      RECORD POINTER
                                                                                                                         01-DSTAB
000016 0050
                                      2692+P
                                                     DC
                                                            H'80
                                                                                      RECORD LENGTH
                                                                                                                         01-DSTAB
                                                                                      NUMBER OF BLANK DELIM CHARS
                                                                                                                          01-DSTAB
000018 02
                                      2693+K
                                                     DC
                                                            X'02'
000019 00
                                      2694+0
                                                     DC
                                                            X'00
                                                                                      NO OF RECORDS PER SECTION
                                                                                                                         01-DSTAB
                                      2695+DSF
                                                           H'00
                                                                                      DATASET FLAGS
00001A 0000
                                                     DC
                                                                                                                         01-DSTAB
                                      2696+*
                                                                                                                         01-DSTAB
                                      2697+*
                                                     DATASET FLAGS - DSF
                                                                                                                         01-DSTAB
                                      2698+
                                                                                                                          01-DSTAB
                       00080
                                      2699+DS0
                                                     EQU
                                                           X'80'
                                                                                      DATASET OPEN
                                                                                                                          01-DSTAB
                                                           X'40'
X'20'
                       00040
                                      2700+DS1
                                                     EQU
                                                                                                                         01-DSTAB
                       99929
                                      2701+DS2
                                                                                      LAST T/O OUTPUT
                                                                                                                         01-DSTAR
                                                     EOU
                       00010
                                      2702+DS3
                                                                                                                         01-DSTAB
                                                     EQU
                                                           X'10
                                                                                                                          01-DSTAB
                       00008
                                      2703+DS4
                                                     EQU
                                                           X'08'
                       00004
                                      2704+DS5
                                                     EQU
                                                            X'04'
                                                                                                                          01-DSTAB
                       00002
                                      2705+DS6
                                                           X'02'
                                                                                      OPEN FOR OUTPUT
                                                                                                                          01-DSTAB
                                                     EQU
                       00001
                                      2706+DS7
                                                     EQU
                                                           X'01
                                                                                      END OF FILE
                                                                                                                         01-DSTAB
                                      2707+
                                                                                                                         01-DSTAB
                                      2708+*
                                                     DATASET FLAGS - DSF+1
                                                                                                                          01-DSTAB
                                      2709+*
                                                                                                                          01-DSTAB
                       00080
                                      2710+DS8
                                                     EQU
                                                            X'80'
                                                                                      END OF DATA
                                                                                                                         01-DSTAB
                       00040
                                      2711+DS9
                                                     EQU
                                                            X'40'
                                                                                                                         01-DSTAB
                                                           X'20
                                                                                      OPENED BY SYSACT 12
                       99929
                                      2712+DS10
                                                                                                                         01-DSTAR
                                                     EOU
                                                                                      INDICATE IHIERR-ROUT
                       00010
                                      2713+DS11
                                                           X'10'
                                                                                                                         01-DSTAB
                                                     EQU
                       00008
                                      2714+DSEOD
                                                     EQU
                                                            X'08'
                                                                                                                          01-DSTAB
                       00004
                                      2715+DSIOERR
                                                     EQU
                                                            X'04'
                                                                                                                          01-DSTAB
                                                                                      I/O ERROR
                                                                                      DATASET OPENED
                       99992
                                      2716+DS14
                                                     EOU
                                                           X'02
                                                                                                                         01-DSTAR
                                                                                      CLOSE FROM IHIERR
                       00001
                                      2717+DS15
                                                     EQU
                                                           X'01
                                                                                                                         01-DSTAB
                                      2718+*
                                                                                                                         01-DSTAB
00001C 00000000
                                      2719+NOTEADR
                                                            F'0'
                                                                                                                          01-DSTAB
                                                     DC
                                                                                      LRECL+ TWO ARB
                                                                                                                          01-DSTAB
000020 0000
                                      2720+BL
                                                     DC
                                                            H'0'
000022 0000
                                      2721+
                                                     DC
                                                           H'0'
                                                                                                                          01-DSTAB
                                      2722+
                                                                                                                          01-DSTAB
                       99924
                                                           *-DSTABLE
                                                                                      I'DSTABLE ENTRY
                                      2723+DSTABLEL EOU
                                                                                                                         01-DSTAR
                                                                                                                          01-DSTAB
                                      2724+
                                                                                                                          02260001
                                      2725 *
                                      2726
                                                     PRINT NOGEN
                                                                                                                          02261001
                                      2727 *
                                                                                                                          02262001
                                                     DCBD DSORG=(BS), DEVD=(DA, TA)
                                                                                                                          02263001
                                      2728
                                                                                                                          02264001
                                      3261
                                                                                                                          02265001
                                      3262
                                                     PRINT GEN
                                                                                                                          02266001
                                      3263
                                      3264 *
                                                     REGISTER EQUATES
                                                                                                                          02267001
                                      3265
                                                                                                                          02268001
                                                     TE7REGS
                                      3266
                                                                                                                          02269001
                       00000
                                      3267+R0
                                                     EQU
                                                                                                                         01-IEZRE
                                                           0
                       00001
                                      3268+R1
                                                     EQU
                                                                                                                          01-IEZRE
                        00002
                                      3269+R2
                                                     EQU
                                                                                                                          01-IEZRE
                       00003
                                      3270+R3
                                                     EQU
                                                            3
                                                                                                                         01-IEZRE
                                      3271+R4
                       00004
                                                     EQU
                                                           4
5
                                                                                                                         01-IEZRE
                       00005
                                      3272+R5
                                                     EOU
                                                                                                                         01-IEZRE
                       00006
                                      3273+R6
                                                     EQU
                                                            6
7
                                                                                                                          01-IEZRE
                        00007
                                      3274+R7
                                                     EQU
                                                                                                                          01-IEZRE
                       00008
                                      3275+R8
                                                     EQU
                                                            8
                                                                                                                         01-IEZRE
                       9999
                                      3276+R9
                                                     EQU
                                                            9
                                                                                                                         01-IEZRE
                                      3277+R10
                                                           10
                       0000A
                                                     EOU
                                                                                                                         01-IEZRE
                       0000B
                                      3278+R11
                                                     EQU
                                                                                                                         01-IEZRE
                                                           11
                                      3279+R12
                                                            12
                                                                                                                          01-IEZRE
                       0000C
                                                     EQU
                       0000D
                                      3280+R13
                                                     EQU
                                                            13
                                                                                                                          01-IEZRE
                       AAAAF
                                      3281+R14
                                                     EOU
                                                           14
                                                                                                                          01-IEZRE
                                                                                                                         01-IEZRE
                       0000F
                                      3282+R15
                                                     EQU
                                                           15
                                                                                                                          02270001
                                      3283
                                      3284
                                                     FND
                                                                                                                         02271001
000E3C 00000000
000E40 000001D0
                                      3285
                                                            =A(IHIFSAER+4)
000F44 00000F70
                                                           =A(IHIFSARB)
=F'3'
                                      3286
000E48 00000003
                                      3287
000E4C 000000FC
                                      3288
                                                            =X'000000FC
000E50 00000000
                                                            =A(IHIFSARA)
                                      3289
000E54 00000000
                                      3290
                                                            =A(IHIENTIF)
000E58 00000000
                                      3291
                                                            =V(IHIIORCP)
000E5C 00000000
                                                           =V(IHIIOROP)
                                      3292
000E60 00000000
                                                            =V(IHIIORNX)
                                      3293
000E64 00000000
                                      3294
                                                            =V(IHIIORCL)
000E68 0001
                                      3295
                                                            =H<sup>1</sup>1'
000E6A 000A
                                      3296
                                                            =H'10'
```

Symbol Lengt	th V	alue	Id	Type Asm	Program	Defn	Refer	ences				X390	3.1.04	2012	/08/17	13.21
=A(IHIENTIF)																
=A(IHIFSAER+4)	4 000	00E54	00000001	АА		3290	2082	2214								
=A(IHIFSARA)	4 000	00E40	00000001	A A		3285	609									
	4 000	00E50	00000001	АА		3289	1937	2000								
=A(IHIFSARB)	4 000	00E44	00000001	АА		3286	636	643	648	1820	2004					
=F'3' =H'1'			00000001 00000001			3287 3295	1445 1508	2438								
=H'10'	2 000	00E6A	00000001	нн		3296	2162	2.50								
=H'4' =V(IHIIORCL)	2 000	100E6C	00000001	нн		3297	2356									
=V(IHIIORCP)	4 000	00E64	00000001	VV		3294	2498									
=V(IHIIORNX)	4 000	00E58	00000001	VV		3291	2316									
=V(IHIIOROP)	4 000	00E60	00000001	VV		3293	2339	2436	2460	2494	2551					
=X'000000FC'	4 000	00E5C	00000001	VV		3292	2332									
			00000001				1527									
ADRLST ADRSAVE			00000001 00000001			1974 1242	530 1060M	1170								
ADSTAB	1 000			U		319	494	2054	2309							
ALGIN			0000000F			2030	2006B									
ALGIN01 ALGIN01A			0000000F 0000000F			2063 2062	2067B 2058B									
ALGIN02			0000000F			2069	2064B									
ALGIN1			0000000F			2213		2106B	2175B							
ALGIN2 ALGIN3			0000000F 0000000F				2115B 2187B									
ALGIN4			0000000F			2090	2087B									
ALGIN4A			0000000F			2091	2092B									
ALGTRMA ALGTRMAA			0000000F 0000000F			2302 2518	639B 638B	644B								
ALGTRMN			0000000F			2307	649B	0								
ALGTRM0			0000000F			2308	2303B									
ALGTRM00 ALGTRM1A			0000000F 0000000F				2314B 2331B									
ALGTRM1B			0000000F				2334B									
ALGTRM10			0000000F				2326B									
ALGTRM11 ALGTRM12			0000000F 0000000F				2342B 2427B									
ALGTRM13			0000000F				2434B									
ALGTRM14			0000000F				2439B	24410								
ALGTRM15 ALGTRM16			0000000F 0000000F				2430B 2320B	24418								
ALGTRM18			0000000F				2344B									
ALGTRM19			0000000F				2496B									
ALGTRM2 ALGTRM3			0000000F 0000000F			2392	2347B 2357B									
ALGTRM5	4 000	0124E	0000000F	I			2396B	2410B								
ALGTRM6 ALGTRM7			0000000F 0000000F			2413 2455	2409B 2424B									
ALGTRM8			0000000F			2426	2456B									
ALGTRM9			0000000F			2399		2458B								
ANOTTAB ARITST		000B0	00000001	U I		321 962	2075M 932B									
ARTIST			00000001			954	932B 926B									
ASAVE		00048		U		294		1906	2545M	2555						
ASSFLAG ASSFLAG2			00000001 00000001			982 984	934B 970B									
ASTLOC		00098	00000001	U		301		1495	1578	1603						
ATEST			00000001			1361		1374B								
BETABM BLANK		0000C	0000000F	U I		241 2528	864 2337B	896 2444B	2492B	2548B	2554R					
BLANKA	2 000	01380	0000000F	I		2531	2535B	++0	20	_5 +55						
BLANKB			0000000F			2537	2532B	2522								
BLANKS BRLIST			0000000F 00000001			2541 352	2528M 503	<b>2</b> 538								
BRRSAVE	4 000	00810	00000001	FF		1241	1059M	1176								
BRRST CAPI1		0009C	00000001	U I		303 773	304 789B	1316M	1391							
CAPII CAPI3			00000001			802	789B 809B									
CAP1A			00000001			768	506B									
CAP2A CDSA		003B6	00000001	U U		799 213	507B 776	777	778	782M	783	802M	803	806	807	882
CDSA	1 000	AGGGG		U		213	887M		893	907	913	914		1062	1175	1178
							1179	1277M	1302	1335	1337	1338	1342	1362	1364	1365
							1366 1675	1367 1678	1378 1684	1379 1685	1380 1687M	1383M	1384 1706M	1483	1484 1708	1620 1709
							1768	2053M		2069				2075	2076	2213M
CHKCOMMA			000000F			2124		2269B								
CNVBUF1 CNVBUF2			00000001 00000001			480 481	442M 446M	443 447M	448	471M	472	685M	686M	687		
CNVBUF3			00000001			482	455M		460M		690M	691	694M	695		
CNVBUF4			00000001			483	464M		475			·				
CNVCNST1 CNVCNST2			00000001 00000001			484 485	441 463	444 705	447	467	473	474	686			
CNVCNST2 CNVCNST3			00000001			487	465	703								
CNVCNST4			00000001			486	469	2000**								
CNVINST CNVINSTD			00000001 00000001			445 699	2084M 708	2088M 2088								
CNVINSTE	4 000	002FC	00000001	I		685	2084									
CNVINSTL		00024		U		708	2084	2088								
CNVIRD	T 900	00120		U		440	TINOR	1576B								

FSA				Symbol	Cross	кетег	ence							PAGI	32
Symbol	Length Val	lue Id	Type Asm	Program	Defn	Refere	ences				X390 3	3.1.04	2012/	08/17	13.21
•	· ·														
CNVRDI	1 00000	014C	U		459	1113B									
CODEPRM	1 00000		U		242	869									
COMPCODE		1484 0000000F			2612		2307M	2313	2330	2519					
COMPINST		0000000F			2137	2120X 2130B									
COMP1 CONVBUF		0F6E 0000000F 1498 0000000F			2113 2620	2130B 2450M	2452								
CONVEC		00000007 0826 000000001			1249		1084M	1001M	1000	1128	1130	1214			
CSIZCOPY		00000001 000000001			1248	1092M		1150M			1219	1217			
CSIZORIG		0822 00000001			1247		1069M			1217					
CSWEI1		0B60 00000001			1672	1689B									
CSWEI2		0886 00000001			1684	1679B									
CSWEI3	4 00000	9BA2 00000001	I		1701	1710B									
CSWE1A		00000001 00000001			1666	514B									
CSWE2A		9B9E 00000001			1700	515B									
DCBBIT0	1 00000	9080	U		2750	2862	2870	2882	2905		2934	2935	2937	2960	2963
DCDDTT4	4 0000	2040			2754	2983	2987	3002	3039	3094	3118	3157	3161	3174	2027
DCBBIT1	1 00000	0040	U		2751		2871	2884	2906	2907	2916	2932	2934	2936	2937
						2965 3120	2983 3163	2985 3165	2987 3177	3005 3221	3006	3007	3042	3043	3094
DCBBIT2	1 00000	2020	U		2752		2872	2885	2886	2887	2906	2907	2911	2917	2932
DCDDITZ	1 00000	3020	Ü		2732	2933	2938	2967	2988	2989	3010	3011	3012	3046	3047
						3095	3125	3166	3182	3224	3227	3011	3011	50.0	50.7
DCBBIT3	1 00000	9010	U		2753		2885	2887	2888	2906	2919	2939	2970	2988	2991
						3014	3015	3016	3050	3051	3095	3127	3130	3132	3168
						3183	3224	3228							
DCBBIT4	1 00000	8008	U		2754	2873	2920	2940	2971	2993	2998	2999	3019	3020	3054
						3055	3057	3058	3096	3135	3184	3224	3229		
DCBBIT5	1 00000	0004	U		2755	2874	2921	2943	2944	2973	2993	2995	2996	2999	3023
						3025	3026	3027	3061	3062	3063	3064	3096	3137	3140
						3170	3186	3219							
DCBBIT6	1 00000	0002	U		2756	2866	2922	2923	2926	2943	2945	2974	3030	3031	3032
						3033	3067	3068	3069	3070	3097	3143	3188	3230	
DCBBIT7	1 00000	0001	U		2757		2922	2924	2926	2947	2978	3035	3036	3073	3074
DCDD1 ::==		2025 555555			240-	3076	3077	3146	3172	3189	3232				
DCBBLKSI		003E FFFFFFD			3191		2229	2233M							
DCBEXIT1		10BA 0000000F			2239	2231B	22420								
DCBEXIT2 DCBEXIT3		10B0 0000000F			2232	2240B 2243B	2242B								
DCBEATTS		10B8 0000000F 3005 FFFFFFD			2777	2780									
DCBOFLGS		0030 FFFFFFFD			2959	2186									
DCBOFOPN	1 00000		U		2970	2186									
DDERROR	1 00000		Ü		600	2190B									
DIFFLZ		0818 00000001			1243		1132	1149M	1184	1186					
DPSW	1 00000		U		250	2265									
DSAHDL		08FE 00000001			1378	1363B									
DSF		001A FFFFFFE			2695	2315M	2328M	2329M	2338M	2435M	2459M	2493M	2497M	2550M	
DSINIT	6 0000	10D2 0000000F	ХХ		2252	2065									
DSTABLE		0000 FFFFFFE	J		2684	2312U	2723								
DSTABLEL	1 00000		U		2723	2310									
DS11	1 00000		U		2713	2328									
DS15	1 00000		U		2717	2315	2497								
DS2	1 00000		U			2329	2220	2425	2450	2402	2550				
DS3	1 00000		U		2702		2338	2435	2459	2493	2550				
DS6	1 0000		U		2/05		2174	21 00M	226EM	2271M	2276M	2201M	22/1		
DTSW EIGHT	1 00000		U U		331 315		1272				22/011	220111	2341		
ENDUT1		1452 0000000F			2586	2646	2661	1310	1702	2047					
ENTIER	1 00000		Ū		454	1595B	2001								
ENTIER1		0158 00000001			464	457B	692B	702B	706B						
EPILB		0874 00000001			1313	512B									
EPILOGB	1 00000	90EC	U		366	1314									
EPILP	6 00000	085C 00000001	I		1302	511B									
EPIL3		98A0 00000001			1334	513B									
ERROR	1 00000		U		254	611	613								
ERROR21		0220 00000001			576	1449B									
ERROR28		023C 00000001			583	1959									
ERROR29		0240 000000001 0244 00000001			584 585	1963 1960									
ERROR30 ERROR31		0244 00000001 0248 00000001			585 586	1960 1966									
ERROR32		0248 00000001 024C 00000001			587	2588B									
ERROR33		024C 00000001 0250 00000001				1951	1952	1953	1954	1955	1956	1957	1958	1961	1962
	. 55500					1964	1965								
ERROR40	1 00000	926C	U		399	466B	470B								
EXIT		95D4 00000001	I		1013	938B		952B	1006B	1008B	1010B				
EXLUT1		14F8 0000000F	хх		2676	2648									
FCTVALST	1 00000		U		299	302	670M	1302M	1303	1549M	1567M	1596M			
FNDCOMMA		0F62 0000000F			2110	2114B									
FNDPAR		00000000F				2111B									
FPINST		02DA 00000001			664	676									
FPINSTAD		02F0 00000001			676 673	2090									
FPINSTE		00000001			673	676	A A A A	110	AAOM	AEF.	AECM.	160	1C1M	16 JM	161
FPR0	1 00000	0000	U		237	443M 465	444M 467M		448M 474M		456M 685	460 687M	461M 690	463M 691M	464 694
							705M	4/I	<b>→ / 4</b> 11	4/0	000	00/II	שכט	ODIN	074
FPTYP	1 0000	9B48 00000001	хх		1629		1459M	1460	1468						
FPTYPA		9B49 00000001			1630	1457M		<b>1</b> -100	<b>-</b> 700						
FRDSA		9874 00000001			1315		1330B								
FREEDSA	1 00000		U		1314	1282B									
FSAA	1 00000		Ü		222		2001	2002	2003	2308M					
FSAERCOD	1 00000		Ü		334	610M									
FSAERR	1 00000		Ü		392	396	397	398	399	400	401	402	549		
FSAERRL		027C 00000001	I		608	551B	552B	553B		555B	556B	557B	558B	559B	560B
						561B	562B	563B	564B	565B	566B	567B	568B	570B	571B
						575B	576B	577B		579B	580B	581B	582B	583B	584B
						585B	586B	587B	588B	591B	592B	595B	596B	597B	598B
	4	2020					601B	603B	604B						
FSAPICA	1 00000	ои <b>в</b> С	U		327	2036M	2512								

134					5,552		MCT CI								i Au	
Symbol	Length	Value	Id	Type As	m Program	Defn	Refer	ences				X390	3.1.04	2012,	/08/17	13.21
FSAREA	1 6	20000000	00000001	U		289	294	299	301	302	303	306	313	315	319	321
							325	327	329	331	334	341	343	345	347	353
							355	357	360	362	364	366	368	370	372	374
							376	380	382	384	387	389	438U	440	454	459
F4	4 6	300005F4	00000001	т		1017	494 899B	549	569	573	574	590	594	600	602	1416
GDSA		00000000	00000001	Ū		212	1278	1678								
GETMAIN	2 6	00000344	00000001	I		725	525B									
GETMSTO		00000114		U		384	1166B									
HW		3000009C	EEEEEED	U		304	1545M		2010	2011	2001	2056	2005	2100	2112	2200
IHADCB	1 6	00000000	FFFFFFD	J		2733	3215		2010	2844	2891	2930	3085	3100	3113	3209
IHB0001B	4 6	00000298	00000001	V V		618	629	32.2								
IHB0002A			00000001			628	620B									
IHIDSTAB			00000002			264	495									
IHIENTIF IHIERROR			00000003 0000000E			265 618	3290 618									
IHIFSAER			00000001			551	3285									
IHIFSAIN			00000001			1994		1991U								
IHIFSARA			00000001			207			2025U		2206					
IHIFSARB IHIIORCI			0000000F 00000007			2011 266	1974	18210	2005U	20260	3286					
IHIIORCL			00000007			266	1975	3294								
IHIIORCP			0000000C			267	625	3291								
IHIIOREN			0000000A			267	1980									
IHIIORER IHIIOREV			0000000D 00000008			267 266	1982 1976									
IHIIORGP			0000000B			267	1981									
IHIIORNX			00000006			266	627	1977	3293							
IHIIOROP			00000004			266	624	1978	3292							
IHIIOROQ			00000009			267	1979									
INTTST INVOPT		0000056C	00000001	U		972 602	967B 2135B	2147R	2156B	2158B	2160B					
LABEL1			00000001			471	468B	21475	21300	21300	21000					
LASTPARM	1 6	0000110A	0000000F	R A		2277	2108									
LAT	1 6	9000000C		U		215		803M		888	1023M	1384M	1441	1484M	1620M	1688M
LBLTST	4 0	20000510	00000001	I		948	1709M 924B	2215M								
LINSTR			00000001			669		1581X								
LOADPPA	4 6	00000BC6	00000001	I		1733	516B									
LOADPP1			00000001			1752	1736B									
LOADPP2			00000001			1735	1739B	174CD								
LOADPP3 LOADPP4			00000001 00000001			1743 1771	1745B	1746B								
LOOP			00000001			917		1016B								
LPRINSTR			00000001			674	1587X									
LTRINSTR			00000001			671	1559X									
MASKFF NOMAIN		00000000	00000001	X X U		1032 569	995 739B									
NOTFOUND			0000000F			2132	2121B									
NXTPAR	4 6	0000F7C	0000000F	I		2119	2134B									
OERR20	1 6	0000021C		U		573	930B			942B	949B	951B	955B	959B	963B	969B
OERR21	1 0	00000220		U		402		1012B	901B	1027B						
OPTSW		00000220		Ü		332					1126	1830	2083M	2086	2318M	2319
								2586M								
ORI			00000001			999	992M									
PABRANCH PARAMPR			0000000F 00000001			2263 1005	2123X	983B	985B	987B						
PARAMS			FFFFFFF				1454	2020	2020	2075						
PARERR		0000021C		U		574	1462B	1467B	1469B	1471B						
PARLG		3000000E		U			2133									
PARLIST PARM			FFFFFFF 0000000F				1453 2137	1523								
PARMLG			0000000F				2119	2266								
PARMLIST			0000000F				2117									
PARMSET			0000000F				2129X									
PBNENTRY PBT		0000083E	00000001	I U		1275 214	1271B 772	77714	779	780	ТΩЭМ	803M	207	850M	862	880
וטו	1 6			J		214	886				1381					
							1688M				1822					
PGCMASK			00000001			1949		465-								
PGOPSW PHIMOVE		000000B4	00000001	U T		325 914	1938M 915X									
PHIMOVE			0000000F				915X 2445									
PIDLGTH		A0000000		Ü		2619										
PIEROUT			00000001			1937		2032								
PIETAB			00000001				1942									
PIMASK PIMOVE		00000004 0000049C	00000001	U I		243 913	908 910X									
PPTRSW		00000430		Ū			1830									
PRID			FFFFFFF			1637		1501	1506	1524	1526	1529	1537	1539	1582	1590
PRNTERR		00000002	0000000	U			2319	24461								
PROGID PROL			0000000F 00000001			2617 852	2428M 509B	2446M								
PROLOG		000003E8	55555551	Ū			1030B									
PROLOGP	1 6	90000DC		U		357	358									
PROLOG1			00000001			871	865B									
PROLOG2 PROLOG3			00000001 00000001			1022 915	870B 909B									
PROLOGS			00000001			915 845	508B									
PROLPBN		000000A9		Ū		313		852	1029M							
PROLREG		000000A0	00000	U		306	850									
PROTST R			00000001 FFFFFFFE			941 2687	920B	2///2	2/E/M	2/127	2490M	2520	2527M	25/17		
R RASEND		0000000CC		F F U		345		2443 2052M		440/	2470M	Z 3 Z 9	ا۱۱/ د د ∠	<b>4</b> 34/		
RASLOADM		000000E		Ü			1320									

FSA				Symbol	Cross	кетеге	ence							PAGI	34
Symbol	Length Valu	e Id Ty	ype Asm	Program	Defn	Refere	ences				X390 3	3.1.04	2012	08/17	13.21
RASOVERF RASPARMM	1 000002		U U		594 245	775B 1270	892B	1481B	1674B	1757B					
RASPARIM	1 000000 1 000000		U		245 347	774	891	1322	1325M	1480	1673	1741	1753	1758M	2051M
RASPT	1 000000		U		343	769	784M		810M			1269	1280M		1317
						1319M	1478	1482M			1700	1703M			1759M
						2048M									
RASSTART	1 000000		U		341	2049M									
RE RETPROGA		08 FFFFFFFE 28 00000001	F F I		2688 1268	2433 510B	2530								
RETPR1			I		1270	1273B									
RØ	1 000000		Ū		3267	725	871M	880M	881	1323M	1335M	1339M	1349M	1367M	1382M
						1442M		1445M							
						1549	1555M	1562M	1564M	1566M	1567	1747M	1761M	1770	1772
										1888	2193M	2195	2196M	2204M	2205
D4	4 00000				2260	2206M		2477M					·		5.004
R1	1 000000	91	U		3268	551M	552M	553M		555M	556M	557M	558M	559M	560M
						561M 575M	562M 576M	563M 577M	564M 578M	565M 579M	566M 580M	567M 581M	568M 582M	570M 583M	571M 584M
						585M	586M	587M	588M	591M	592M	595M	596M	597M	598M
						599M	601M	603M		608M	609M	610	666	740M	771M
						772M	780	806M	807	881	882	883	884	885	886
						887	907M	916M	990	999		1022M		1028	1061M
						1062	1096M		1105		1140M			1171	1175
						1179	1181	1183	1185				1212	1213M	
						1230M 1340	1345	1275M	1279 1378M	1322M	1437	1324M 1438	1453M	1338M	1456
						1472		1500			1523M				1556
						1572	1573	1578	1607M		1684M		1707M		1822M
						1828	1861	1863	1895M	1896M	1897		1901M	1902	1938
						1943	2036	2047M	2048	2049	2050M	2051	2052	2059M	2060
						2122M		2126	2128	2146			2151	2153	2155
						2157	2159	2161	2203	2207	2208M		2228U	2245D	2405M
D10	1 00000				2277	2407					2547M	2562	2565		
R10 R11	1 000000 1 000000		U U		3277 3278	1867 1824M		2162M			2346M	2272M	2302W	2/A0M	2/57M
R12	1 000000		U		3278	1906M		2555M	1903	234311	234611	23/311	239311	240511	243711
R13	1 000000		U		3280	438U	466	470	504U	520	610	611	613	637	670
						739	769	774	775	784	801	805	810	845	850
						852	855	856	866	868	889	891	892	895	901
						930	935	939	942	949	951	955	959	963	969
						973	1012	1027	1029	1030	1072	1106	1113	1126	1166
						1269	1272	1280	1282	1302	1303	1304	1305	1316	1317
						1318 1480	1319 1481	1322 1482	1325 1495	1391 1545	1462 1546	1467 1549	1469 1567	1471 1576	1478 1578
						1595	1596	1603	1667	1669	1671	1673	1674	1680	1700
						1702	1703	1733	1740	1741	1752	1753	1757	1758	1759
						1819	1830	1836	1902	1906	1937M		1939	1990D	
						2002	2003M	2025U	2036	2047	2048	2049	2051	2052	2054
						2074	2075	2083	2086	2096	2099	2135	2147		2158
						2160	2174	2188	2190	2192	2265	2271	2276	2281	2308
						2309 2586	2318	2319	2341	2343	2503	2512	2518M	2545	2555
R14	1 00000	)F	U		3281	441M	442	472M	473M	477M	769M	770	773M	774	776
K1-4	1 000000	,_	•		3201	784	788	801M		804		810		890M	
						893	894	895			1067				
						1105M	1114	1132M	1139M	1146M	1149	1195M	1198M	1200M	1201
											1277				
											1534M				
											1944B 2492M				
							2552M				243211	249311	243311	23330	2343
R15	1 000000	)F	U		3282	520	521	524B			771	781	804M	808M	811
						872		897B		913	914	929	933	937	941
						945	948	950	954	958	962	968	972	984	986
						1005		1011				1061		1089	
						1098					1138M			1154M	
											1177 1201				
											1391M				
											1488B				
						1528M	1534B	1601B	1666M	1668	1670M	1681M	1682B	1907	1936U
											2223M				
										2437B	2460M	2461B	2494M	2495B	2498M
D2	1 00000	32	ш		3260		2519M			77014	770	70714	700	QE 4M	200
R2	1 000000	<i>7</i> <u></u>	U		3269	667 883	669 886		735 903M		779 905M	787M 906M		854M 915	880 988M
											1178				
											1338				
											1362M				
											1444M				
											1562				
											1755				
											2055M 2091				
											2091				
											2122 2229M				
						2241	2423M	2432	2443M	2445	2447M				2454
						2487M	2488	2489M	2490	2491M	2496M	2451 2512M	2452	2453M	
		_				2487M 2531	2488 2533	2489M 2534M	2490 2537	2491M 2538M	2496M 2546M	2451 2512M 2553	2452 2515	2453M 2528	2529M
R3	1 00000	93	U		3270	2487M 2531 852M	2488 2533 853M	2489M 2534M 854	2490 2537 863M	2491M 2538M 864	2496M 2546M 869	2451 2512M 2553 871	2452 2515 896	2453M 2528 898	2529M 900
R3	1 000000	93	U		3270	2487M 2531 852M 903	2488 2533 853M 908	2489M 2534M 854 990M	2490 2537 863M 992	2491M 2538M 864 994M	2496M 2546M 869 995M	2451 2512M 2553 871 996M	2452 2515 896 997M	2453M 2528 898 999	2529M 900 1022
R3	1 000000	93	U		3270	2487M 2531 852M 903 1024	2488 2533 853M 908 1211M	2489M 2534M 854 990M 1219M	2490 2537 863M 992 1225M	2491M 2538M 864 994M 1226	2496M 2546M 869 995M 1229M	2451 2512M 2553 871 996M 1234	2452 2515 896 997M 1364M	2453M 2528 898 999 1365	2529M 900 1022 1380M
R3	1 000000	93	U		3270	2487M 2531 852M 903 1024 1381	2488 2533 853M 908 1211M 1454M	2489M 2534M 854 990M 1219M 1478M	2490 2537 863M 992 1225M 1479M	2491M 2538M 864 994M 1226 1480	2496M 2546M 869 995M	2451 2512M 2553 871 996M 1234 1483	2452 2515 896 997M 1364M	2453M 2528 898 999 1365 1497	900 1022 1380M 1498
R3	1 000000	93	U		3270	2487M 2531 852M 903 1024 1381 1515M 1703	2488 2533 853M 908 1211M 1454M 1671M 1706	2489M 2534M 854 990M 1219M 1478M 1672M 1733M	2490 2537 863M 992 1225M 1479M 1673 1735	2491M 2538M 864 994M 1226 1480 1675 1740M	2496M 2546M 869 995M 1229M 1482 1676 1743M	2451 2512M 2553 871 996M 1234 1483 1680 1744	2452 2515 896 997M 1364M 1486 1700M 1747	2453M 2528 898 999 1365 1497 1701 1752M	900 1022 1380M 1498 1702M 1754M
R3	1 000000	93	U		3270	2487M 2531 852M 903 1024 1381 1515M 1703 1756	2488 2533 853M 908 1211M 1454M 1671M 1706 1759	2489M 2534M 854 990M 1219M 1478M 1672M 1733M 1768	2490 2537 863M 992 1225M 1479M 1673 1735 1769	2491M 2538M 864 994M 1226 1480 1675 1740M 1770	2496M 2546M 869 995M 1229M 1482 1676 1743M 1771M	2451 2512M 2553 871 996M 1234 1483 1680 1744 1772	2452 2515 896 997M 1364M 1486 1700M 1747 1820M	2453M 2528 898 999 1365 1497 1701 1752M 1821U	900 1022 1380M 1498 1702M 1754M 1924D
R3	1 000000	93	U		3270	2487M 2531 852M 903 1024 1381 1515M 1703 1756	2488 2533 853M 908 1211M 1454M 1671M 1706 1759	2489M 2534M 854 990M 1219M 1478M 1672M 1733M 1768	2490 2537 863M 992 1225M 1479M 1673 1735 1769	2491M 2538M 864 994M 1226 1480 1675 1740M 1770	2496M 2546M 869 995M 1229M 1482 1676 1743M	2451 2512M 2553 871 996M 1234 1483 1680 1744 1772	2452 2515 896 997M 1364M 1486 1700M 1747 1820M	2453M 2528 898 999 1365 1497 1701 1752M 1821U	900 1022 1380M 1498 1702M 1754M 1924D

FSA					Symbol	Cross	кетег	ence							PAGI	E 33
Symbol	Length	Value	Id	Type Asm	Program	Defn	Refere	ences				X390 3	1.04	2012/	08/17	13.21
							2194D	2254	2255	2432M	2433	2448M	2450	2528	2530M	2531
R4	1	00000004		U		3271	2538M 872M	879	904M	1016M	1224M	1226	1220	1229	1441M	1.476
114	-	00000004		U		32/1	1494M		1733M			1738M				
							1755M					1825M		1889M		
							1901					2118U		2133M	2138D	2355M
						2272	2356		2421M				2553M	4 40 214	4607	4 60 00
R5	1	00000005		U		32/2	1098M 1836M		1108B 1841			1438M 2054M				
									2108M			2310M		203011	2003	2003
R6	1	00000006		U		3273	1823M							2122	2189M	2311M
							2587M									
R7	1	00000007		U		3274	632U	636M		648M	651D	1823M	1837	1841	1845	2004M
R8	1	00000008		U		3275	2005U 449B	2009D 476B	2026U 477B	688B	699B	741B	785B	866	917	919
ivo.	-	00000000		U		3273	921	923	925	927	931	964	966	982	1009	1014M
							1018B	1028M	1060	1095		1113M		1120	1121	1155
							1160		1170M					1303M		
							1440	1442 1681	1495 1737	1497 1760		1499M 1775		1576M		
							1668 1887M		1900	1904	1771 1905	2142M			1881 2345M	
							2362	2385	2395	2404M		2406M		2415	2472M	
							2474									
R9	1	00000009		U		3276	1887					2404M		2407M		
							2421 2476	2422M	2426	2428	2429M	2448	2449M	2455	2472M	2474
S	2	00000014	FFFFFFF	ЕНН		2691	2336M	2438								
SCPATTN		00000014				2571	2451									
SCRCS	1	000000C0		U		329	520M	1836	1902	2074M						
SETBIT		00000F9E				2128	2125B	2167B								
SETSHORT		000010D8	00000001			2254	2085	2255								
SHORTBIT SHSW		00000010 00000020		U U		246 252	2254 2086	<b>2255</b>								
SIZEARR		00000020	0000000			1245	1119M	1131	1148M	1165	1187	1211				
SIZESMF		00000820				1246	1163M		1182							
SMFFL		00000827				1250		1130M	1196							
SPDA		00000000	FFFFFFF			1634	1439U									
SPDALG SPDAP		00000048 00000B44	aaaaaaa	U 1 F F		1640 1628	1431 623		1437M	1/193	1608M	2076M				
SPDECL		000000044	0000000.	U		1416	855B	1430	143711	1400	10001	207011				
SPDECL01		00000A2A	0000000	1 I		1514		1507B	1509B	1511B						
SPDECL02		0000097C				1457	1518B									
SPDECL03		00000A68					1525B	45305								
SPDECL04 SPDECL05		00000AC6 00000A92				1572 1554	1530B 1540B	1538B								
SPDECL05		00000A32					1557B									
SPDECL07		00000AB0					1560B									
SPDECL08		00000ABE				1567	1563B	1565B								
SPDECL09		00000AE8					1574B									
SPDECL10 SPDECL11		00000AEC 00000AFC				1582	1579B 1583B									
SPDECL12		00000A1C					1591B									
SPDECL13		00000B16					1550B	1568B	1597B							
SPDECL14		00000B12					1588B									
SPDECL15		000009B2					1461B									
SPDECL17 SPDECL18		000009E6 00000B1A				1493 1607	1535B									
SPDECL19		000009FE					1496B									
SPSAVE		00000004					1476M		1522M	1609						
SPTHAD		00000B40					1477M	1487								
STEP1 STINSTR		00000F6A 000002E6					2127B 1577X	1602Y								
STORAGE		00000210				743	732	740								
STRTST		000004FC				937		946B								
SWDMERR		00000254		U			1667B	1669B								
SWTTST		00000514				945	922B	2104	2270	2450	2500					
SYSUT1 SYSUT1X		000014A0 000010A6				2628 2229	2181 2676	Z104	23/9	2409	<b>4378</b>					
TERMAA		000010A0				643	612B									
TERMN		000002D2				648	523B									
TERMSW		00000010		U		253	637									
TML TPRTST		0000001E 0000053C	0000000	U 1 T		2582 958	2488 928B	2489								
TRACE		00000100	0000000	U U			928B 2096M	2192M								
TRACEA		00000100 00000C44	0000000			1819	522B									
TRACE0	6	00000CCA	0000000	1 I			1833B	1854B								
TRACE1		00000CDE				1865	1862B									
TRACE10		00000C7C					1829B									
TRACE13 TRACE14		00000C96 00000CA4					1838B 1846B									
TRACE15		00000CA4					1840B	1842B	1851B							
TRACE16	4	00000C9C	0000000	1 I		1847	1843B									
TRACE18		00000CAE					1848B									
TRACE2		00000D20					1868B									
TRACE3 TRACE4		00000D36 00000CFC					1893B 1870B									
TRACE4		00000CFC					1856B									
TRACE6		00000D4C					1831B	1834B	1859B							
TRBEG		00000D64					1823									
TRBUF		00001474					1824	1905M	2203M	2345	2404	2408M	2472			
TRBUFA TRBUFL		00001478 0000147C					2209M 2195M	2208	2477							
TRBUFMAX		0000147C				2248		0	<u>-</u> /							
TRBUFMIN		000010CE				2247										
TRBUFST		00000800		U		2250										
TRCHECK		00001460					1873	1879	2350	2360	2368	2383	2399	2413		
TRCNT	4	00001480	וטטטטטטטו	FF		200/	2205M									

Symbol	Length	Value	Id	Type Asm	Program	Defn	Referen	ces				X390	3.1.04	2012/08/17	13.21
TREND	4	00000D68	00000001	FF		1916	2145								
TRFLAG		00000D6C				1917	1832 1	853	1855M	1858M	2071M				
TRFLAG1	1	00000D6D	00000001	ХХ		1921	1847M 1								
TRHADR	4	000013D0	0000000F	- A A		2558	2546								
TRHEAD	4	000013A4	0000000F	I		2545	2392B 2	440B							
TRHEADA	21	000013F4	0000000F	СС		2567	2562								
TRHEADB	28	00001409	0000000F	: c c		2569	2565								
TRHEAD1	4	000013AC	0000000F	I		2547	2553B								
TRHEND	6	000013EE	0000000F	I		2565	2558								
TRHLIST	4	000013DC	0000000F	I		2560	2558								
TRLDIG	2	00001018	0000000F	нн		2169	2161M 2	163							
TRLIM1	4	00000FBC	0000000F	I		2142	2274B								
TRLIM2	4	00000FC4	0000000F	I		2145	2279B								
TRLIM2A	4	00000FC8	0000000F	I		2146	2143B								
TRLIM3	4	00001010	0000000F	I		2166	2152B 2	154B							
TRLIM4	4	00000FD6	0000000F	I		2150	2164B								
TRL1	2	00000D56	00000001	. нн		1910	1826 1	892							
TRL2	2	00000D58	00000001	. нн		1911	1864								
TRMPNAME	4	00000D6E	00000001	СС		1922	1828 2	222M							
TRMSG	4	00001430	0000000F	: U		2581	2488 2	582							
TRPGID	2	00000D5A	00000001	. н н		1912	1861 1	863M	1897	2069M	2070M	2072M	1 2073M	2097M 2098	2426
TRSW	1	00000040		U		251	2174 2	188	2276	2281	2341				
TYPTST	4	000004E8	00000001	I		931	956B	960B							
UCTRSW	1	00000041		U		257	2271								
UT1ERR	1	00000004		U		255	2343 2	586							
VALLD	4	000002DA	00000001	I		666	1112X								
VALST	4	000002DE	00000001	I		667	1107X								
VALUCAL	4	0000060C	00000001	I		1058	526B								
VALUC00	4	00000644	00000001	I		1076	1071B 1	073B							
VALUC11		0000065C				1089	1077B								
VALUC12	6	00000668	00000001	I		1092	1068B 1	082B	1085B	1090B					
VALUC14	4	00000684	00000001	I		1099	1216B								
VALUC15	4	0000069C	00000001	I		1112	1101B								
VALUC21	6	000006AA	00000001	I		1119	1094B								
VALUC25	4	000006F6	00000001	I		1145	1134B								
VALUC26	4	00000702	00000001	I		1148	1141B								
VALUC31	2	0000070E	00000001	I		1154	1127B 1	129B							
VALUC32	4	00000730	00000001	I		1163	1159B 1	161B							
VALUC35	4	00000786	00000001	I		1195	1205B								
VALUC36	4	0000079E	00000001	I		1201	1197B 1	199B							
VALUC51	4	000007C6	00000001	I		1216	1220B								
VALUC52	4	000007DA	00000001	I		1221	1235B								
VALUC61	4	000007E2	00000001	I		1224	1215B								
VALUC61A	2	000007E6	00000001	I		1225	1232B								
VALUC62	4	00000800	00000001	I		1234	1227B								
VALUC63	6	00000808	00000001	I		1237	1228X 1	234X							
VTEST	4	000008A0	00000001	I		1335	1321B 1	357B							
WTOTRM	4	0000142C	0000000F	FF		2574	2323 2	581							

X390 3.1.04 2012/08/17 13.21

									,								-	
Register			,	-		-	-		-	,	42674	42024	4 4 2 2 14					/17 13.
0(0)	725		880M															
	1476		1508															
		2523M	1866M	2555M	TOODIA	1000	19001	1998	2045M	2193M	2195	219614	2204M	2205	220011	2207	24//M	24/8M
1(1)		552M			555M	556M	557M	558M	559M	560M	561M	562M	563M	564M	565M	566M	567M	568M
1(1)		571M			577M	578M		580M	581M				585M	586M		588M	591M	592M
	595M			598M	599M	601M	603M	604M	608M			620M	666N	730M		740M	771M	772M
	772N	780	806M	807N		881	882	883	884	885	886	887	907M			990	999	1015M
	1022M		1028		1062N						1147M		1171			1181	1183	1185
	1188	1192	1204	1212	1213M	1217M	1230M	1237	1275M	1279	1322M	1323	1324M	1325	1338M	1339	1340	1345
	1354M	1366M	1371M	1378M	1388M	1430M	1432	1436	1437	1438	1453M	1455	1456	1472	1476	1494M	1499	1500
	1512	1514M	1523M	1544M	1544N	1545	1554	1556	1572	1573	1578	1607M	1608	1617M	1684M	1686N	1707M	1708N
	1765M		1822M									1882N						
			1943									2051						
	2128											2200M						
			2351 2415N															
2(2)	667N		725M		778M			788		880N			902M				906M	
-(-)	915	988M		996								1203M						
	1340M	1342	1344M	1345M	1346M	1347M	1348M	1349	1361M	1362M	1364N	1366N	1367N	1379M	1381N	1382N	1425M	1435
	1443M	1444M	1457	1458	1476	1485M	1486	1494M	1517M	1526M	1527M	1528N	1554M	1562	1572M	1575	1609M	1621B
			1734M									1906M						
	1998		2057M									2091N						
	2110		2113 2432									2488						
			2529M		2533	2534M			2545				240511	2490	245111	245011	231211	2313
3(3)		853M			864	869	871	896	898	900	903	908	990M	992	994M	995M	996M	996N
-(-)		999		1024			1225M						1380M		1454M		1478M	1479M
	1480	1482	1483	1486N	1494M	1497	1498	1515M	1671M	1672M	1672N	1673	1675	1676	1680	1700M	1701	1702M
			1733M										1768	1769			1772N	
			1906M											2184M	2185U	2194D	2254	2255
4/4)			2448M										2555M	4725	4727	47204		47404
4(4)	872M		904M 1755M		1224M										1737 1903M			
			2117M												2546M			
5(5)			1108B															
` ,			2056M									2310M				2555M		
6(6)			1837									2189M						
7(7)		636M	643M	648M	651D	1819	1823M	1837	1841	1845	1906M	1998	2004M	2005U	2009D	2026U	2523M	2545
0/0\	2555M	47CB	477D	COOD	COOR	7/1D	7050	966	017	010	021	022	025	027	021	064	066	002
8(8)	449B	476B	477B 1018B			1095	785B	1113M	917	919 1120	921 1121	923 1155N	925	927 1166M	931 1170M	964 1171	966 1193	982 1213
			1420M			1442		1497		1499M					1668			1760
		1775B		1824M			1886				1904		1906M		2142M			2345M
	2355	2362	2385	2395	2404M			2408	2415	2472M	2473	2474	2523M	2545	2555M			
9(9)	1278	1678	1819	1824M			1905	1906M	1998	2148M	2155	2345M	2395M	2404M	2406	2407M	2408	2420
	2421	2422M		2428	2429M		2449M			2474		2523M		2555M				
10(A)	776	777	778	782M		802M		806N		882		888	893	907N		914		1062 1383M
	1175 1384	1178 1483	1179 1484	1277M 1620	1675	1335 1678	1337 1684	1338 1685	1687M		1706M		1366 1708	1367 1709	1378 1768	1379 1819	1824M	
	1905	1906M		2053M		2069	2070	2071				2149M					2345M	
		2555M																
11(B)	772	777M	779	780	783M	803M	807	850M	863	880	886	888	1023M	1024	1381	1382	1384M	1484M
			1688M					1822	1824M	1869M	1890M	1905	1906M	1998	2215M	2221	2345M	2346M
12(6)			2409M					1 40 414	16204	16004	17004	1010	10064	1000	200014	2001	2002	2002
12(C)			850M 2523M			1384M	1441	148411	162014	TOSSI	170911	1919	19001	1998	200011	2001	2002	2003
13(D)			470N			610N	611	613	637	670N	739N	769N	774N	775N	784N	801N	805N	810N
(- /	845	850			856N							901B						
			963N															
			1304N															
			1545															
			1733 2001															
			2147N															
			2503N															
14(E)	441M	442	472M	473M	477M	630M	769M	770	773M	774	776	784	788	801M	802	804N	805M	810
			890N		893	894						1076			1105M			
			1195M															
			1320															
			2237B 2437M															
15(F)	520		524B					771				811B			897B		913	914
- ( - /	929	933	937	941	945	948	950	954	958	962	968	972	984		1005			
			1061															
			1163															
			1304M															
			1522 1936U															
			2363M															
			2495B								. =							

FSA Dsect Cross Reference PAGE 38

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DSTABLE 00000024 FFFFFFF 2684 4 DSTABLE 1HADCB 00000058 FFFFFFFF 2733 1 DCBD PRIMARY INPUT

PAGE 39

Con Source Members X390 3.1.04 2012/08/17 13.21

1 SYS1.MACLIB

CALL CHECK CLOSE DCBD FREEMAIN GETMAIN IEZREGS IHBINNRA IHBOPLST DCB DELETE IHBRDWRS IHB01 LOAD OPEN READ RETURN SAVE SPIE WRITE WTO

2 SYSD.TOOLS.MACLIB
3 SYSD.ALGOLFRT.ASM
4 SYSD.ALGOLFRT.MACLIB
DSTABLE FSACONV FSAREA
5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390	3.1.04	2012/08/17	7 13.21
438		USING	Ordinary	00000001	00000000	00001000	13	001C8	475	FSAREA, R1	.3			
504		USING	Ordinary	00000001	00000000	00001000	13	00E68	1897	IHIFSARA,	R13			
632		USING	Ordinary	0000000F	00000E70	00001000	7	004F2	649	IHIFSARB,	R7			
651		DROP	•				7			R7				
1439		USING	Ordinary	FFFFFFF	00000000	00001000	5	00030	1609	SPDA, R5				
1623		DROP	•				5			R5				
1821		USING	Ordinary	0000000F	00000E70	00001000	3	00604	1905	IHIFSARB,	R3			
1924		DROP	-				3			R3				
1936		USING	Ordinary	00000001	00000D72	00001000	15	000DE	1942	PIEROUT,R	15			
1946		DROP	-				15			R15				
1990		DROP					13			R13				
1991		USING	Ordinary	00000001	00000DFC	00001000	15	00054	2004	IHIFSAIN,	R15			
2005		USING	Ordinary	0000000F	00000E70	00001000	7	00000	2006	IHIFSARB,	R7			
2008		DROP					15			R15				
2009		DROP					7			R7				
2025		USING	Ordinary	00000001	00000000	00001000	13	00E6C	2588	IHIFSARA,	R13			
2026		USING	Ordinary	0000000F	00000E70	00001000	7	00630	2565	IHIFSARB,	R7			
2118		USING	Ordinary	0000000F	000010E0	00001000	4	0000A	2137	PARMLIST,	R4			
2138		DROP					4			R4				
2185		USING	Ordinary	FFFFFFD	00000000	00001000	3	0003E	2193	IHADCB,R3	;			
2194		DROP					3			R3				
2228		USING	Ordinary	FFFFFFD	00000000	00001000	1	0003E	2233	IHADCB, R1				
2245		DROP	-				1			R1				
2312		USING	Ordinary	FFFFFFE	00000000	00001000	5	0001B	2550	DSTABLE,R	15			

```
The following statements were flagged -
```

SYSD.ALGOLFRT.ASM(IHIFSA) 1936(1653), 2118(1820)

2 statements flagged in this assembly, 4 was the highest severity code.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIFSA PROCSTEP: X390

Primary input: lines 1 to 2271 of SYSD.ALGOLFRT.ASM(IHIFSA)

SYSLIB library records read: 6933

SYSUT1 work file size: 289928 bytes

SYSUT2 work file size: 623479 bytes

SYSUT3 work file size: 181680 bytes

SYSLIN file records written: 110

TXA000I Return code 4, elapsed time 2.83 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIFSARA 000000 152
IHIFSARA 0000C3 17
IHIFSARA 000E6E 2
IHIFSARB 0014FC 4

## IHIGPR LEVEL V2.M01

```
(c) Copyright 1995-2010 Tachyon Software LLC
```

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch, NoDbcs, NoPestop, Thread, NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIGPR)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00134
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

Addr1 Addr2 Stmt

Source Statement

Loc Object Code

X390 3.1.04 2012/08/17 13.21

```
00002001
                                        3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00003001
                                        4
                                                                                                                        00004001
                                        5
                                                    STATUS - LEVEL 2.1
                                                                                                                        00005001
                                        6
                                                                                                                        00006001
                                                    FUNCTION/OPERATION
                                                                                                                        00007001
                                        8
                                                                                                                        00008001
                                        9
                                                    ACTION OF PUT
                                                                                                                        00009001
                                                    TRANSFER DATA INDICATED BY A LIST PROCEDURE, WHICH IS THE
                                       10
                                                                                                                        00010001
                                                    SECOND PARAMETER IN PUT, TO AN I/O BUFFER IN BINARY FORM WRITE A RECORD, V-FORM, TO A DASD DATASET WITH A
                                                                                                                        00011001
                                       11
                                       12
                                                                                                                        00012001
                                       13
                                          *
                                                    DDNAME OF SYSUT2. ENTER REPOSITIONING INFORMATION IN
                                                                                                                        00013001
                                       14
                                                    NOTTAB
                                                                                                                        00014001
                                       15
                                                                                                                        00015001
                                                    ACTION OF GET -
                                                                                                                        00016001
                                       16
                                                    RETRIEVE INFORMATION AFTER REPOSITIONING OF DATASET
                                       17
                                                                                                                        00017001
                                                    STORED BY PUT AND ASSIGN DATA TO IDENTIFIER IN LIST
                                       18
                                                                                                                        00018001
                                       19
                                                    PROCEDURE
                                                                                                                        9991 9991
                                       20
                                                                                                                        00020001
                                                                                                                        00021001
                                       21
                                                    ENTRY POINTS -
                                                    IHIGPRPT - FROM GENERATED OBJECT MODULE
                                                                                                                        00022001
                                       22
                                                                DATA PASSED BY NAME
                                       23
                                                                                                                        00023001
                                       24
                                                                    R1, PARMLIST
                                                                                                                        00024001
                                       25
                                                                BALR R14,R15
                                                                                                                        00025001
                                                                                                                        00026001
                                       26
                                                    IHIGPROT - FROM IHIFSA
                                                                                                                        00027001
                                       27
                                       28
                                                                PROCEDURE IS ACTUAL PARAMETER OF LIST DATA
                                                                                                                        00028001
                                                                PASSED BY NAME R15 POINTS TO A THUNK FIELD
                                                                                                                        00029001
                                       29
                                       30
                                                                                                                        00030001
                                       31
                                                    IHIGPRGT - FROM GENERATED OBJECT MODULE
                                                                                                                        00031001
                                       32
                                                                DATA PASSED BY NAME
                                                                                                                        00032001
                                                                     R1, PARMLIST
                                                                                                                        00033001
                                       33
                                       34
                                                                BALR R14,R15
                                                                                                                        00034001
                                       35
                                                                                                                        00035001
                                       36
                                                    IHIGPRIT - FROM IHIFSA
                                                                                                                        00036001
                                                                PROCEDURE IS ACTUAL PARAMETER OF LIST DATA
                                       37
                                                                                                                        00037001
                                                                                                                        00038001
                                       38
                                                                PASSED BY NAME R15 POINTS TO A THUNK FIELD
                                       39
                                                                                                                        00039001
                                       40
                                                    IHIGPRCL - FROM IHIIOR - CLOSE DATASET
                                                                                                                        00040001
                                       41
                                                                NO DATA PASSED
                                                                                                                        00041001
                                       42
                                                                BALR R14, R15
                                                                                                                        00042001
                                       43
                                                                                                                        00043001
                                       44
                                                    INPUT -
                                                                                                                        00044001
                                                    GET READS A RECORD STORED PREVIOUSLY BY PUT, DATA IN
                                                                                                                        00045001
                                       45
                                       46
                                                                                                                        00046001
                                       47
                                                                                                                        00047001
                                                    OUTPUT - STORES DATA IN BINARY FORM
                                                                                                                        00048001
                                       48
                                       49
                                                                                                                        00049001
                                       50
                                                    EXTERNAL ROUTINES -
                                                                                                                        00050001
                                       51
                                                    IHIIOR - CONVERT REAL TO INTEGER - ENTRY NOTTAB - SYNAD
                                                                                                                        00051001
                                       52
                                                                                                                        00052001
                                                    EXITS - NORMAL
                                       53
                                                                                                                        00053001
                                                             FOR ROUTINE PUT AND GET RELOAD REGISTERS AND BR14
                                       54
                                                                                                                        00054001
                                       55
                                                             FOR PROCEDURE OUTPUT AND INPUT SEE BELOW
                                                                                                                        00055001
                                        56
                                                                                                                        00056001
                                       57
                                                             NO.10 DATASET CLOSED
                                                                                                                        00057001
                                       58
                                                             NO.14 BACK WARD REPOSITIONING NOT DEFINED
                                                                                                                        00058001
                                                             NO. 20 ACTUAL AND FORMAL PARAMETER OF DIFFERENT TYPE
                                       59
                                                                                                                        00059001
                                                             NO.21 NUMBER OF PARAMETERS DOES NOT CORRESPOND
                                                                                                                        00060001
                                       60
                                       61
                                                             NO.36 TOO MANY NESTED BLOCKS PROCEDURES AND PARAMETERS
                                                                                                                        00061001
                                                             NO.38 GET/PUT BUFFER OVERFLOW
                                                                                                                        00062001
                                       63
                                                             NO.39 GET/PUT IDENTIFICATION OUT OF RANGE
                                                                                                                        00063001
                                       64
                                                             NO.41 DDCARD INCORRECT OR MISSING
                                                                                                                        00064001
                                                            NO.43 RECURSIVELY TRY OF PUT/GET OR OUTPUT/INPUT
                                                                                                                        00065001
                                       65
                                                    ACTION - BRANCH TO IHIFSA
                                                                                                                        00066001
                                       66
                                       67
                                                              LA R13, IHIFSA
                                                                                                                        00067001
                                       68
                                                              В
                                                                  FSAERR+XX*4(R13) XX ERROR NO
                                                                                                                        00068001
                                       69
                                                                                                                        00069001
                                                                                                                        00070001
                                                    TABLES/WORKAREAS - N/A
                                       70
                                                                                                                        00071001
                                       71
                                                    ATTRIBUTES - SERIALLY REUSABLE
                                       72
                                                                                                                        00072001
                                       73
                                                                                                                        00073001
                                       74 *
                                                    NOTES -
                                                                                                                        00074001
                                                    THE LIST PROCEDURE HAS ONE FORMAL PARAMETER WHICH IS A
                                                                                                                        00075001
                                       75
                                                    PROCEDURE AND WHICH ONLY IS DECLARED AND HAS NO
                                                                                                                        00076001
                                       76
                                                    PROCEDURE BODY IN THE ALGOL PROGRAM, AT ACTUAL POSITION
                                       77
                                                                                                                        00077001
                                                    THIS IS OUTPUT RESP. INPUT ADDR OF PUT/GET FIELD IN
                                                                                                                        00078001
                                       78
                                       79
                                                    DSTAB LOADED TO R5 R6=16 IS KEPT THROUGH THE MODULE IN ORDER TO ADDR THIS FIELD
                                                                                                                        00079001
                                       80 *
                                                                                                                        99989991
                                                                                                                        00081001
                                       81
000000
                                                                                                                        00082001
                       00000 00A5E
                                       82 IHIGPRTN CSECT
                                                                                                                        00083001
                                       84
                                                    ENTRY IHIGPRPT
                                                                                                                        00084001
                                       85
                                                    ENTRY IHIGPROT
                                                                                                                        00085001
                                                    ENTRY IHIGPRGT
                                       86
                                                                                                                        00086001
                                                    ENTRY IHIGPRIT
                                       87
                                                                                                                        00087001
                                       88
                                                    ENTRY IHIGPROP
                                                                                                                        00088001
                                       89
                                                    ENTRY IHIGPRCL
                                                                                                                        00089001
                                       90
                                                                                                                        00090001
                                       91
                                                    FLOATING POINT REGISTER
                                                                                                                        00091001
                                                                                                                        00092001
                                       92
                       00000
                                       93 FPR0
                                                    EOU
                                                                                                                        00093001
                                                                                                                        00094001
                                       94
                                       95 *
                                                    DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                        00095001
                                       96
                                                                                                                        00096001
                                       97
                                                                                     DISPLACEMENT FOR
                                                                                                                        00097001
```

Active USINGs: None							
Loc Object Code	Addr1	Addr2	Stmt Source	State	ment	X390 3.1.04 2012/08	/17 13.21
200 00,000 0000	710012	7100. 2	304.00	50000		7,550 5.110. 2012, 00,	1, 13,111
	00000		98 CI	EQU	0	IHIIORCI	00098001
	00004		99 CL	EQU	4	IHIIORCL	00099001
	00008		100 EV	EQU	8	IHIIOREV	00100001
	0000C 00010		101 NX 102 OP	EQU EQU	12 16	IHIIORNX IHIIOROP	00101001 00102001
	00010		103 OQ	EQU	20	IHIIOROQ	00102001
	00018		104 EN	EQU	24	IHIIOREN	00104001
	0001C		105 GP	EQU	28	IHIIORGP	00105001
	00020		106 ER	EQU	32	IHIIORER	00106001
			107 *				00107001
			108 *	PUT/G	ET FLAGS		00108001
	00000		109 *		WIOO!		00109001
	00080 00040		110 PG0 111 PG1	EQU EQU	X'80' X'40'		00110001 00111001
	00040		112 *	EQU	X 40		00111001
R:F	00000		113	USING	IHIGPRPT, R15		00113001
	00000		114 *	0520	11120 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		00114001
			115 IHIGPRPT	IHIEN	TRY 'IHIGPRPT LEVEL 2.1	SYSDATE &SYSTIME'	00115001
			116+*				01-IHIEN
000000 47F0 F026		00026	117+IHIGPRPT		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NCH AROUND ID	01-IHIEN
000004 21	· F 2		118+	DC		OR (17 (12 12 21)	01-IHIEN
000005 C9C8C9C7D7D9D7	E3		119+ +	DC	CL33'IHIGPRPT LEVEL 2.1	IDENTIFIER	+01-IHIEN 01-IHIEN
			120 *			IDENTITIEN	00116001
000026 50D0 F8C0	(	008C0	121	ST	R13,SAVEPG+4	SAVE REGISTER INTERNALLY	00117001
00002A 41D0 F8BC		008BC	122	LA	R13,SAVEPG		00118001
			123 *				00119001
			124	SAVE	(14,12)		00120001
00002E		00000	125+	DS	0H	CAVE DECISIONS	01-SAVE
00002E 90EC D00C		0000C	126+ 127 *	STM	14,12,12(13)	SAVE REGISTERS	01-SAVE
			127 * 128	DROP	R15		00121001 00122001
000032 187F			129	LR	R7, R15		00123001
R:7	00000		130		IHIGPRPT, R7		00124001
000034 50D0 71C8		001C8	131	ST	R13,SAVEPUT+4		00125001
000038 58C0 78C0		008C0	132	L	R12,SAVEPG+4	ADDR OF FSA	00126001
00003C 41D0 71C4		001C4	133	LA	R13,SAVEPUT	ETDET FUTDY THE DETAIL TO ADDRESS	00127001
000040 585C 00AC		000AC	134	L	R5, ADSTAB (R12)	FIRST ENTRY IN DSTAB IS APGCF	00128001
000044 5850 5000 000048 4160 0010		00000 00010	135 136	L LA	R5,0(,R5) R6,16	ADDR OF PGCF IN R5 SET DSN NUMBER TO 16 FOR SYSUT2	00129001 00130001
R:5		00010	137		PGCF,R5	321 D3N NONDER 10 10 10N 313012	00131001
00004C 9101 78B8	008B8		138	TM	RECPG,X'01'	TEST IF RECURSIVELY	00132001
000050 4710 7A58		00A58	139	во	ERROR43	YES	00133001
000054 9601 78B8	008B8		140	OI	RECPG,X'01'	SET FLAG BIT	00134001
000058 9180 501B	0001B		141	TM	PG, PG0	DATASET OPEN ?	00135001
00005C 4780 70BA		000BA	142				
				BZ	PUT1	DATASET WAS OPEN	00136001
000060 5880 5000		00000	143 *			DATASET WAS OPEN	00137001
000060 5880 5000 R:8		00000	143 * 144	L	R8, ADCB	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING	00137001 00138001
R:8		00000	143 *	L	R8,ADCB IHADCB,R8	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB	00137001
	00000 0001B	00000 00098	143 * 144 145	L USING	R8, ADCB	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING	00137001 00138001 00139001
R:8 000064 9140 501B	00000 0001B		143 * 144 145 146 147 148 *	L USING TM BO	R8,ADCB IHADCB,R8 PG,PG1 PUT2	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET	00137001 00138001 00139001 00140001 00141001 00142001
R:8 000064 9140 501B 000068 4710 7098	00000 0001B	00098	143 * 144 145 146 147 148 * 149	L USING TM BO	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET CHECK THE PREVIOUS WRITE	00137001 00138001 00139001 00140001 00141001 00142001 00143001
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058	00000 0001B	00098 00058	143 * 144 145 146 147 148 * 149 150+	L USING TM BO CHECK LA	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008	00000 0001B	00098 00058 00008	143 * 144 145 146 147 148 * 149 150+ 151+	L USING TM BO CHECK LA L	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB 14,8(0,1)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008 000074 58F0 E034	00000 0001B	00098 00058	143 * 144 145 146 147 148 * 149 150+ 151+	L USING TM BO CHECK LA L	R8, ADCB IHADCB, R8 PG, PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK 01-CHECK
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008	00000 0001B	00098 00058 00008	143 * 144 145 146 147 148 * 149 150+ 151+	L USING TM BO CHECK LA L	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB 14,8(0,1)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF	00000 0001B	00098 00058 00008	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+	L USING TM BO CHECK LA L	R8, ADCB IHADCB, R8 PG, PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK 01-CHECK
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF	00000 0001B	00098 00058 00008 00034	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+	L USING TM BO CHECK LA L L BALR NOTE LR	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE	00137001 00138001 00139001 0014001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 00145001
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF 00007A 1818 00007C 58F0 1054	00000 0001B	00098 00058 00008	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+	L USING TM BO CHECK LA L L BALR NOTE LR L	R8, ADCB IHADCB, R8 PG, PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8 15,84(0,1)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS	00137001 00138001 00139001 00140001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF	00000 0001B	00098 00058 00008 00034	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+	L USING TM BO CHECK LA L L BALR NOTE LR L	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 01-NOTE
R:8 000064 9140 501B 000068 4710 7098  00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000080 05EF	00000 0001B	00098 00058 00008 00034	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR	R8, ADCB IHADCB, R8 PG, PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8 15,84(0,1) 14,15	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS	00137001 00138001 00139001 00140001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 00144001 002-IHBIN 01-OTE 00145001 00145001
R:8 000064 9140 501B 000068 4710 7098 00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF 00007A 1818 00007C 58F0 1054	00000 0001B	00098 00058 00008 00034	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+	L USING TM BO CHECK LA L L BALR NOTE LR L	R8, ADCB IHADCB, R8 PG, PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8 15,84(0,1)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 01-NOTE
R:8 000064 9140 501B 000068 4710 7098  00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000080 05EF	00000 0001B	00098 00098 00008 00034 00054	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR	R8, ADCB IHADCB, R8 PG, PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8 15,84(0,1) 14,15 R5,4(,R5)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS	00137001 00138001 00139001 00140001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 01-GHECK 0144001 00145001 02-IHBIN 01-NOTE 00146001 00147001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058 000074 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000080 05EF  000082 4150 5004 000082 4150 5004 000088 58FC 011C 00008A 58FC 011C 00008B 58FC 011B	00000 0001B	00098 00058 00008 000034 000054 000064 00011C 00018	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 160 161 162 163	L USING TM BO CHECK LA L L BALR NOTE LR L BALR L BALR L BALR L BALR	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8 15,84(0,1) 14,15 R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE	00137001 00138001 00139001 00140001 00141001 00142001 00143001 02-IHBIN 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 01-NOTE 00146001 00147001 00147001 00149001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058  000070 58E0 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000080 05EF  000082 4150 5004  000085 58FC 011C  00008A 58F0 F018  00008B 05EF  000090 4850 7A20	00000 0001B	00098 00098 00008 000034 000054 000004 0011C 000018	143 * 144 145 146 147 148 * 159+ 151+ 152+ 153+ 155 156+ 157+ 158+ 159 * 160 161 162 163 164	L USING TM BO CHECK LA L BALR NOTE LR L BALR LA L L BALR LA L BALR SH	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4'	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE	00137001 00138001 00139001 0014001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 01-GHECK 0144001 00145001 02-IHBIN 01-NOTE 00146001 00147001 00148001 00149001 00151001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058 000074 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000080 05EF  000082 4150 5004 000082 4150 5004 000088 58FC 011C 00008A 58FC 011C 00008B 58FC 011B	00000 0001B	00098 00058 00008 000034 000054 000064 00011C 00018	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 160 161 162 163 164 165	L USING TM BO CHECK LA L L BALR NOTE LR L BALR L BALR L BALR L BALR	R8,ADCB IHADCB,R8 PG,PG1 PUT2 DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15 (R8) 1,R8 15,84(0,1) 14,15 R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE	00137001 00138001 00139001 0014001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 001-NOTE 00146001 00147001 00148001 00149001 00152001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058  000070 5810 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000082 4150 5004  000082 4150 5004  000085 58FC 011C  00008A 58F0 F018  00008E 05EF  000099 4850 7A20  000094 47F0 70C4	00000 0001B	00098 00058 00008 000034 00054 000054 000011 000018 00020	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR L BALR L BALR L BALR L BALR BALR	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB	00137001 00138001 00139001 00140001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 00145001 00147001 00148001 00149001 00152001 00153001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058  000074 58F0 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000082 4150 5004  000082 4150 5004  000084 58FC 011C  00008A 58F0 F018  00008B 05EF  00009A 47F0 70C4  000098 5820 5014	00000 0001B	00098 00098 00008 000034 000054 000018 000018 000024 000024 000024	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2	L USING TM BO CHECK LA L L BALR NOTE LR L BALR LA L L BALR L BALR L L L L BALR L L L L BALR L L L L L L L L L L L L L L L L L L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,10RLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB	00137001 00138001 00139001 0014001 00141001 00142001 00143001 02-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 002-IHBIN 01-NOTE 01-NOTE 01-NOTE 00146001 00147001 00148001 00150001 00150001 00153001 00153001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058  000070 5810 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000082 4150 5004  000082 4150 5004  000085 58FC 011C  00008A 58F0 F018  00008E 05EF  000099 4850 7A20  000094 47F0 70C4	00000 0001B	00098 00058 00008 000034 00054 000054 000011 000018 00020	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR L BALR L BALR L BALR L BALR BALR	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB	00137001 00138001 00139001 00140001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 00145001 00147001 00148001 00149001 00152001 00153001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000080 05EF  000082 4150 5004 000086 58FC 011C 00008A 58F0 F018 00008E 05EF 000094 47F0 70C4  000098 5820 5014 00009C 4120 2001	00000 0001B	00098 00098 00008 000034 000054 000054 00011C 00018 00020 0000C4 00014 00001	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170	L USING TM BO  CHECK LA L BALR NOTE LR L BALR LA L L BALR LA L L L L L L L L L L L L L L L L L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB	00137001 00138001 00139001 00144001 00141001 00142001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 00146001 00147001 00148001 00148001 00150001 00153001 00153001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058  000070 58E0 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000080 05EF  000082 4150 5004  000085 58FC 011C  00008A 58FO F018  00008E 05EF  00009A 58F0 F018  00009B 58F0 7A20  000094 47F0 70C4  000098 5820 5014  00009A 5020 5014	00000 0001B	00098 00098 00008 000034 000054 000054 00011C 00018 00020 0000C4 00014 00001	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR BALR L L L L BALR SH L L L L L L L L L L L L L L L L L L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE	00137001 00138001 00139001 00144001 00144001 00143001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 00145001 00147001 00148001 00149001 00152001 00153001 0015001 0015001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058 000074 58F0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000080 05EF  000082 4150 5004 000086 58FC 011C 00008A 58F0 F018 000098 05EF 000094 47F0 70C4  000098 5820 5014 000094 1818	00000 0001B	00098 00098 00008 000034 000054 000014 00018 00024 00014 00014 000014	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 *	L USING TM BO  CHECK LA L L BALR  NOTE LR L BALR  LA L L L BALR  H B L L BALR  FOINT	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE	00137001 00138001 00139001 00144001 00144001 00143001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 00146001 00147001 00148001 00152001 00153001 00155001 00155001 00155001 00157001 00157001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058  000070 58E0 1008  000074 58F0 E034  000078 05EF  000077 58F0 1054  000070 58F0 1054  000080 05EF  000082 4150 5004  000085 58F0 611C  000085 58F0 101C  000086 58F0 F018  000086 59EF  000098 4550 7A20  000094 47F0 70C4  000098 5820 5014  000090 4120 2001  0000A0 5020 5014  0000A0 5020 5014	00000 0001B	00098 00098 00008 000034 000054 000054 000018 000018 000014 000014 000014	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+	L USING TM BO CHECK LA L L BALR NOTE LR L BALR SH B L LA ST LR POINT LA	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0	00137001 00138001 00149001 00144001 001442001 00143001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 002-IHBIN 01-NOTE 00146001 00147001 00147001 00149001 00152001 00153001 00153001 00155001 00155001 00157001 00158001 00157001 00158001 00157001 00158001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058  000070 58E0 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000082 4150 5004  000082 4150 5004  000085 58FC 011C  00008A 58F0 F018  00008B 05EF  000099 4850 7A20  000094 47F0 70C4  000098 5820 5014  000096 4120 2001  0000A6 4100 5014  0000A6 58F0 1054	00000 0001B	00098 00058 00008 000034 000054 000014 00014 00014 00014 00014 00014	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+	L USING TM BO CHECK LA L BALR NOTE LR L BALR LA L L L L L BALR LA L L BALR LA L L C BALR L C C C C C C C C C C C C C C C C C C	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 0,NOTEADR	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RTN ADDR	00137001 00138001 00149001 00144001 001442001 00143001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 00145001 00147001 00148001 00147001 00152001 00153001 00153001 00155001 00156001 00157001 00158001 00159001 00159001 00159001 00159001 00159001
R:8  000064 9140 501B  000068 4710 7098  00006C 4110 8058  000070 58E0 1008  000074 58F0 E034  000078 05EF  000077 58F0 1054  000070 58F0 1054  000080 05EF  000082 4150 5004  000085 58F0 611C  000085 58F0 101C  000086 58F0 F018  000086 59EF  000098 4550 7A20  000094 47F0 70C4  000098 5820 5014  000090 4120 2001  0000A0 5020 5014  0000A0 5020 5014	00000 0001B	00098 00098 00008 000034 000054 000054 000018 000018 000014 000014 000014	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+	L USING TM BO CHECK LA L L BALR NOTE LR L BALR SH B L LA ST LR POINT LA	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0	00137001 00138001 00149001 00144001 00142001 00143001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 002-IHBIN 01-NOTE 00146001 00147001 00150001 0015001 00153001 00155001 00155001 00155001 00157001 00158001 00157001 00158001 00159001 00159001 00157001 00159001 00157001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058  000070 58E0 1008  000074 58F0 E034  000078 05EF  00007A 1818  00007C 58F0 1054  000082 4150 5004  000082 4150 5004  000085 58FC 011C  00008A 58F0 F018  00008B 05EF  000099 4850 7A20  000094 47F0 70C4  000098 5820 5014  000096 4120 2001  0000A6 4100 5014  0000A6 58F0 1054	00000 0001B	00098 00058 00008 000034 000054 000014 00014 00014 00014 00014 00014	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+	L USING TM BO CHECK LA L BALR NOTE LR L BALR LA L L L L L BALR LA L L BALR LA L L C BALR L C C C C C C C C C C C C C C C C C C	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 0,NOTEADR	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RTN ADDR	00137001 00138001 00149001 00144001 001442001 00143001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 00144001 00145001 00145001 00147001 00148001 00147001 00152001 00153001 00153001 00155001 00156001 00157001 00158001 00159001 00159001 00159001 00159001 00159001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058 000074 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000086 58FC 011C 000082 4150 5004 000086 58FC 011C 00008A 58F0 F018 00008B 05EF 000094 47F0 70C4  000098 5820 5014 000094 4100 5014 0000A6 4100 5014 0000A6 4100 5014 0000A6 45EF 0004	00000 0001B	00098 00058 00008 000034 000054 000014 00014 00014 00014 00014 00014	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 *	L USING TM BO  CHECK LA L L BALR  NOTE LR L BALR  LA L L L BALR  FOINT LA L BAL L BAL L BAL L BAL L BAL L BAL BA	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00137001 00138001 00139001 00144001 001442001 00143001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 02-IHBIN 01-NOTE 00146001 00147001 00148001 00152001 00152001 00155001 00155001 00155001 00155001 00158001 00158001 00158001 00158001 00158001 00158001 00159001 0015001 0015001 0015001 0015001 0015001 0015001 0015001 0015001
000064 9140 501B 000068 4710 7098 000068 4710 7098 000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF 000082 4150 5004 000082 4150 5004 000082 58F0 101C 000084 58F0 F018 000085 05EF 000094 47F0 70C4 000098 5820 5014 000096 4120 2001 000004 1818 000064 1100 5014 0000084 58F0 1054 000084 58F0 1054 000084 58F0 1054 000084 45EF 0004 000082 94BF 501B 000086 47F0 70C4	00000 0001B	00098 00058 00008 000034 000054 000014 00018 000024 00014 00014 00014 00014 00004 00004	143 * 144 145 146 147 148 * 149 159+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 *	L USING TM BO  CHECK LA L L BALR  NOTE LR L BALR  LA L L L BALR  FOINT LA L BAL NI	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0) PG,X'BF'	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED	00137001 00138001 00139001 00144001 00144001 00142001 002-IHBIN 01-CHECK 01-CHECK 01-CHECK 01-MOTE 00144001 00145001 00147001 00147001 00147001 00153001 00153001 00153001 00155001 00155001 00155001 00157001 00158001 00157001 00159001 00159001 00159001 00159001 00159001 00159001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000082 4150 5004 000082 4150 5004 000084 58F0 F018 000086 58FC 011C 00008A 58F0 F018 00008B 05EF 000094 47F0 70C4 000098 5820 5014 000094 4780 5014 0000A0 5020 5014 0000A1 1818  0000A6 4100 5014 0000A6 45F0 1054 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4	00000 0001B	00098 00098 00008 000034 000054 000014 00018 000024 00014 00014 00014 00014 00014 000054	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1	L USING TM BO  CHECK LA L L BALR  NOTE LR L BALR  LA L L BALR  FOINT LA L BAL  NI BAL  NI BAL  L L BAL  L L L L L L L L L L L L L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0) PG,X'BF' PUT3  R15,AOPENPG	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00137001 00138001 00139001 0014001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-CHECK 01-MECK 0144001 00145001 00145001 00147001 00148001 00152001 00152001 00152001 00155001 00154001 00158001 00158001 00158001 00158001 0015001
000064 9140 501B 000068 4710 7098 000066 4110 8058 000075 58E0 1008 000074 58F0 E034 000078 05EF 000078 05EF 000078 05EF 000082 4150 5004 000082 4150 5004 000082 85EC 011C 00008A 58F0 F018 00008E 05EF 000094 47F0 70C4 000098 5820 5014 000094 4120 2001 000084 05EF 000004 1818 0000A6 4100 5014 0000A6 45EF 0004 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4	00000 0001B	00098 00098 00058 00008 000034 000054 000018 00011C 00018 0000004 000014 000014 000014 000004 000004 000004	143 * 144 145 146 147 148 * 149 159+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181	L USING TM BO CHECK LA L L BALR NOTE LR L BALR SH B L LA ST LR POINT LA L BALR NI B L BALR NI B L BALR	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  PG,X'BF' PUT3  R15,AOPENPG R14,R15	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED	00137001 00138001 00139001 0014001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-HBIN 01-NOTE 00144001 00145001 00147001 00148001 00151001 00153001 00155001 00157001 00156001 00157001 00159001 00159001 00159001 00160001 00161001 00163001 00163001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000082 4150 5004 000082 4150 5004 000084 58F0 F018 000086 58FC 011C 00008A 58F0 F018 00008B 05EF 000094 47F0 70C4 000098 5820 5014 000094 4780 5014 0000A0 5020 5014 0000A1 1818  0000A6 4100 5014 0000A6 45F0 1054 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4	00000 0001B	00098 00058 00008 000034 000054 000014 00018 000024 00014 00014 00014 00014 00004 00004	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182	L USING TM BO  CHECK LA L L BALR  NOTE LR L BALR  LA L L BALR  FOINT LA L BAL  NI BAL  NI BAL  L L BAL  L L L L L L L L L L L L L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0) PG,X'BF' PUT3  R15,AOPENPG	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED	00137001 00138001 00139001 0014001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-MOTE 00145001 00145001 00145001 0015001 00151001 00152001 00153001 00157001 00157001 00157001 00157001 00157001 0015001 0015001
000064 9140 501B 000068 4710 7098 000066 4110 8058 000075 58E0 1008 000074 58F0 E034 000078 05EF 000078 05EF 000078 05EF 000082 4150 5004 000082 4150 5004 000082 85EC 011C 00008A 58F0 F018 00008E 05EF 000094 47F0 70C4 000098 5820 5014 000094 4120 2001 000084 05EF 000004 1818 0000A6 4100 5014 0000A6 45EF 0004 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4	00000 0001B	00098 00098 00058 00008 000034 000054 000018 00011C 00018 0000004 000014 000014 000014 000004 000004 000004	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182 183 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR LA L L BALR LA L L BALR LA L L BALR L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0) PG,X'BF' PUT3  R15,AOPENPG R14,R15 R8,ADCB	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RIN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RIN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET	00137001 00138001 00139001 00149001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-OHECK 01-OHECK 01014001 00145001 00145001 00145001 00150001 0015001
000064 9140 501B 000068 4710 7098 000066 4110 8058 000075 58E0 1008 000074 58F0 E034 000078 05EF 000078 05EF 000078 05EF 000082 4150 5004 000082 4150 5004 000082 85EC 011C 00008A 58F0 F018 00008E 05EF 000094 47F0 70C4 000098 5820 5014 000094 4120 2001 000084 05EF 000004 1818 0000A6 4100 5014 0000A6 45EF 0004 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4	00000 0001B	00098 00098 00058 00008 000034 000054 000018 00011C 00018 0000004 000014 000014 000014 000004 000004 000004	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182 183 * 184 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR LA L L BALR LA L L BALR LA L L BALR L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  PG,X'BF' PUT3  R15,AOPENPG R14,R15	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RIN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RIN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET	00137001 00138001 00139001 00141001 00141001 00142001 00143001 002-IHBIN 01-CHECK 01-CHECK 00144001 00145001 00145001 00145001 0015001
000064 9140 501B 000068 4710 7098 000066 4110 8058 000075 58E0 1008 000074 58F0 E034 000078 05EF 000078 05EF 000078 05EF 000082 4150 5004 000082 4150 5004 000082 85EC 011C 00008A 58F0 F018 00008E 05EF 000094 47F0 70C4 000098 5820 5014 000094 4120 2001 000084 05EF 000004 1818 0000A6 4100 5014 0000A6 45EF 0004 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4	00000 0001B	00098 00098 00058 00008 000034 000054 000018 00011C 00018 0000004 000014 000014 000014 000004 000004 000004	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182 183 *	L USING TM BO CHECK LA L BALR NOTE LR L BALR LA L L BALR LA L L BALR LA L L BALR L	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R5,84(0,1) 14,4(15,0) PG,X'BF' PUT3  R15,AOPENPG R14,R15 R8,ADCB  ATE IDENTIFICATION NUMBER	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RIN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RIN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET	00137001 00138001 00139001 00149001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-OHECK 01-OHECK 01014001 00145001 00145001 00145001 00150001 0015001
000064 9140 501B 000068 4710 7098 000066 4110 8058 000075 58E0 1008 000074 58F0 E034 000078 05EF 000078 05EF 000082 4150 5004 000082 4150 5004 000086 58FC 011C 00008A 58F0 F018 000094 47F0 70C4 000095 5014 000096 4120 2001 0000A0 5020 5014 0000A1 1818 0000A6 4100 5014 0000A6 4100 5014 0000A6 45EF 0004 0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4 0000BA 58F0 79F0 0000BA 58F0 79F0 0000BB 05EF 0000BB 55EF 0000CO 5880 5000	00000 0001B	00098 00098 00058 00008 000034 000054 000012 00012 00014 000014 00014 00004 00004 00004 000064 000064	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182 183 * 184 * 185 *	L USING TM BO  CHECK LA L L BALR  NOTE LR L BALR  LA L L BALR  SH B L LA ST LR  POINT LA L BALR  NI B L BALR  C EVALUA  EVALUA  TM	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0) PG,X'BF' PUT3  R15,AOPENPG R14,R15 R8,ADCB	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET	00137001 00138001 00139001 00141001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-HECK 01-HECK 0144001 00145001 002-IHBIN 01-NOTE 0147001 00148001 0015001 0015001 0015001 00157001 0015001
000064 9140 501B 000068 4710 7098  000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000082 4150 5004 000085 58FC 011C 00008A 58F0 F018 00008B 05EF 000094 47F0 70C4 000098 5820 5014 000094 47F0 70C4 00008A 58F0 1054 0000A 5000 5014 0000A 5000 5014 0000A 58F0 1054 0000A 58F0 1054 0000A 58F0 1054 0000B 94F 501B 0000B 94F 501B 0000B 94F 501B 0000B 95FF 0000C 5880 5000	00000 0001B	00098 00098 000058 00008 000034 000054 000018 000014 000014 000014 000014 000014 00004 00004 000064 000064 000064	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 157 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182 183 * 184 * 185 * 186 PUT3 187 188	L USING TM BO CHECK LA L L BALR LA L L BALR SH B L LA ST LR POINT LA L BALR L BALR L L EVALU. L I CM BP	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,1ORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R5,84(0,1) 14,4(15,0) PG,X'BF' PUT3  R1,AOPENPG R14,R15 R8,ADCB  ATE IDENTIFICATION NUMBER R1,SAVEPG+24 R2,B'1111',0(R1) PUT4	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDRESS LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET  R FIRST PARAMETER  GET CALLERS R1 CONVERSION IS NECESSARY ? NO CONVERSION	00137001 00138001 00139001 00141001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-CHECK 01-MECK 01-
000064 9140 501B 000068 4710 7098  000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000082 4150 5004 000086 58FC 011C 00008A 58F0 F018 000094 47F0 70C4  000098 5820 5014 000094 47F0 70C4  000098 5820 5014 0000A6 4100 5014 0000A6 4100 5014 0000A6 4100 5014 0000A6 45EF 0004  0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4  0000B2 94BF 501B 0000B6 58F0 79F0 0000B6 58F0 79F0 0000B8 58F0 79F0 0000B8 58F0 78D4 0000C4 5810 78D4 0000C8 BF2F 1000 0000C4 5810 78D4 0000C8 BF2F 1000 0000C4 77E0 70F2 0000D0 9120 C0C2	00000 0001B	00098 00098 00058 00008 000034 000054 000018 000014 000014 000014 000014 000004 000004 000004 0000000000	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 181 182 183 * 184 * 185 * 186 PUT3 187 188 189	L USING TM BO CHECK LA L L BALR NOTE LR L BALR SH B L LA ST LR POINT LA L BALR L BALR L EVALU. L CICM BP TM	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR R2,NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R2,NOTEADR R2,NOTEADR R1,R8  (1),NOTEADR R2,NOTEADR R2,NOTEADR R2,NOTEADR R2,R1,R1	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET  R FIRST PARAMETER  GET CALLERS R1 CONVERSION IS NECESSARY ? NO CONVERSION TO INTEGER NECS	00137001 00138001 00139001 00141001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-GHECK 01014001 00145001 00145001 00145001 00145001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001
R:8  000064 9140 501B  000068 4710 7098  000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000082 4150 5004 000085 58FC 011C 00008A 58F0 F018 00008B 05EF 000094 47F0 70C4  000098 5820 5014 000094 1818  0000A6 4100 5014 0000A6 4100 5014 0000A6 45EF 0004  0000B2 94BF 501B 0000B4 45FF 0004  0000B2 94BF 501B 0000B6 95EF 0000C0 5880 5000	00000 0001B	00098 00098 00058 00008 000034 000054 000018 000004 00014 000014 000014 000014 000004 000000 00000000	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 182 183 * 184 * 185 * 186 PUT3 187 188 189 190	L USING TM BO CHECK LA L L BALR SH B L LA ST LR POINT LA L BALR ST LR EVALU. L EVALU. L EVALU. L EVALU. L ICM BP TM BO	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR 15,84(0,1) 14,4(15,0)  PG,X'BF' PUT3  R1,SAVEPG+24 R2,B'1111',0(R1) PUT4 OPTSW(R12),X'20' PUT31	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET  R FIRST PARAMETER GET CALLERS R1 CONVERSION IS NECESSARY ? NO CONVERSION TO INTEGER NECS SHORT PRECISION	00137001 00138001 00139001 00141001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-MOTE 00145001 00145001 0015001 0015001 0015001 00157001 00157001 0015001
000064 9140 501B 000068 4710 7098  000066 4110 8058 000070 58E0 1008 000074 58F0 E034 000078 05EF  00007A 1818 00007C 58F0 1054 000082 4150 5004 000086 58FC 011C 00008A 58F0 F018 000094 47F0 70C4  000098 5820 5014 000094 47F0 70C4  000098 5820 5014 0000A6 4100 5014 0000A6 4100 5014 0000A6 4100 5014 0000A6 45EF 0004  0000B2 94BF 501B 0000B2 94BF 501B 0000B6 47F0 70C4  0000B2 94BF 501B 0000B6 58F0 79F0 0000B6 58F0 79F0 0000B8 58F0 79F0 0000B8 58F0 78D4 0000C4 5810 78D4 0000C8 BF2F 1000 0000C4 5810 78D4 0000C8 BF2F 1000 0000C4 77E0 70F2 0000D0 9120 C0C2	00000 0001B	00098 00098 00058 00008 000034 000054 000018 000014 000014 000014 000014 000004 000004 000004 0000000000	143 * 144 145 146 147 148 * 149 150+ 151+ 152+ 153+ 154 * 155 156+ 157+ 158+ 159 * 160 161 162 163 164 165 166 * 167 PUT2 168 169 170 171 * 172 173+ 174+ 175+ 176 * 177 178 179 * 180 PUT1 181 181 182 183 * 184 * 185 * 186 PUT3 187 188 189	L USING TM BO CHECK LA L L BALR NOTE LR L BALR SH B L LA ST LR POINT LA L BALR L BALR L EVALU. L CICM BP TM	R8, ADCB IHADCB, R8 PG, PG1 PUT2  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  (R8) 1,R8 15,84(0,1) 14,15  R5,4(,R5) R15,IORLST(R12) R15,EN(,R15) R14,R15 R5,=H'4' PUT3  R2,NOTEADR R2,1(,R2) R2,NOTEADR R1,R8  (1),NOTEADR R2,NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R1,R8  (1),NOTEADR R2,NOTEADR R2,NOTEADR R1,R8  (1),NOTEADR R2,NOTEADR R2,NOTEADR R2,NOTEADR R2,R1,R1	DATASET WAS OPEN LOAD REGISTER FOR ADDRESSING DCB AND DECB TEST LAST PROCEDURE LAST PROCEDURE WAS GET  CHECK THE PREVIOUS WRITE  LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 1 LOAD NOTE RTN ADDRESS LINK TO NOTE ROUTINE  R15 -> IHIIOREN CLEAR NOTTAB  LAST PROCEDURE WAS GET INCREASE NOTEADR BY ONE  REPOSITION DATASET FOR WRITE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE  PG1=0 INDICATE PUT IS EXECUTED  CALL FOR ROUTINE OPEN DATASET  R FIRST PARAMETER  GET CALLERS R1 CONVERSION IS NECESSARY ? NO CONVERSION TO INTEGER NECS	00137001 00138001 00139001 00141001 00141001 00142001 00143001 01-CHECK 01-CHECK 01-CHECK 01-GHECK 01014001 00145001 00145001 00145001 00145001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001 0016001

00257001

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Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                X390 3.1.04 2012/08/17 13.21
                                                                                                                      00177001
                                      193 *
0000E0 7800 2000
                             00000
                                     194 PUT31
                                                          FPR0,0(,R2)
                                                                                                                      00178001
                                                   LE
0000E4 58FC 011C
                             0011C
00000
                                      195 PUT31A
                                                   L
                                                          R15, IORLST(R12)
                                                                                                                      00179001
                                                                                   R15 -> IHIIORCI
                                                                                                                      00180001
0000E8 58FF 0000
                                                          R15.CI(R15)
                                      196
                                                          R14, R15
0000EC 05EF
                                      197
                                                   BALR
                                                                                   CALL CONVERSION ROUTINE
                                                                                                                      00181001
0000EE 47F0 70F6
                             000F6
                                                                                                                      00182001
                                      198
                                                          PUT4A
                                      199 *
                                                                                                                      00183001
0000F2 5800 2000
                             00000
                                      200 PUT4
                                                   ï
                                                          R0,0(,R2)
                                                                                   PARAMETER TO RO
                                                                                                                      00184001
                                                                                                                      00185001
0000F6 1200
                                      201 PUT4A
                                                   LTR
                                                          R0. R0
0000F8 4740 7A52
                                                          ERROR39
                                                                                                                      00186001
                             00A52
                                      202
                                                   BM
0000FC 5900 7A18
                             00A18
                                      203
                                                          R0, TWOP16
                                                                                   TWOP16= 2**16
                                                                                                                      00187001
000100 47B0 7A52
                             00A52
                                                   BNL
                                                          ERROR39
                                                                                                                      00188001
                                      204
                                      205 *
                                                                                   GET/PUT IDENTIFICATION WITHIN
                                                                                                                      00189001
                                      206
                                                                                   RANGE
                                                                                                                      99199991
000104 4000 5018
                             00018
                                                   STH
                                                          RØ,S
                                                                                   STORE IDENTIFICATION IN PGCF
                                                                                                                      00191001
                                      207
                                                                                                                      00192001
                                      208
                                      209
                                                   TEST IF S ALREADY USED AS IDENTIFICATION NUMBER
                                                                                                                      00193001
                                      210
                                                                                                                      00194001
000108 589C 00B0
                             000B0
                                      211
                                                   Ĺ
                                                          R9, ANOTTAB(R12)
                                                                                                                      00195001
                                                                                                                      00196001
00010C 18A9
                                                   LR
                                                          R10.R9
                                      212
00010E 41A0 A008
                                      213 PUTNOT
                                                          R10,8(,R10)
                                                                                                                      00197001
                             00008
                                                   LA
000112 59A0 9000
                                                          R10,0(,R9)
                             00000
                                      214
                                                                                                                      00198001
000116 4780 7132
                             00132
                                      215
                                                   BE
                                                          PUT41
                                                                                   NO ENTRY WITH S FOUND
                                                                                                                      00199001
00011A 1826
                                      216
                                                   LR
                                                          R2,R6
                                                                                                                      00200001
99911C 4929 A999
                             99999
                                                                                                                      00201001
                                      217
                                                   CH
                                                          R2.0(.R10)
000120 4770 710E
                             0010E
                                                          PUTNOT
                                                                                                                      00202001
                                      218
                                                   BNE
000124 D501 5018 A002 00018
                             00002
                                                   CLC
                                                          S(2),2(R10)
                                                                                                                      00203001
                                      219
00012A 4770 710E
                                                          PUTNOT
                                                                                                                      00204001
                             0010E
                                      220
                                                   BNE
00012E 9280 A000
                       00000
                                                          0(R10), X'80'
                                                                                   AN ENTRY FOR S IN NOTTAB
                                                                                                                      00205001
                                      221
                                                   MVI
                                      222 *
                                                                                   INSERT INVALID FLAG
                                                                                                                      00206001
000132 5840 5000
                             0000C
                                      223 PUT41
                                                   Ĺ
                                                          R4.BB
                                                                                                                      00207001
000136 4140 400C
                             0000C
                                                          R4,12(,R4)
                                                                                   INSERT CORRECT CHAR POINTER
                                                                                                                      00208001
                                                   LA
                                      224
00013A 5040 5004
                             00004
                                      225
                                                   ST
                                                          R4.R
                                                                                                                      00209001
00013E 9200 501A
                       0001A
                                      226
                                                   MVI
                                                          TYP,0
                                                                                   CLEAR TYP
                                                                                                                      00210001
                                      227
                                                                                                                      00211001
                                                                                   PLIT'S REGISTER SAVED IN SAVEPLIT
                                      228
                                                   SAVE
                                                          (14.12)
                                                                                                                      00212001
000142
                                      229+
                                                   DS
                                                          0H
                                                                                                                      01-SAVE
000142 90EC D00C
                             0000C
                                      230+
                                                   STM
                                                          14,12,12(13)
                                                                                              SAVE REGISTERS
                                                                                                                      01-SAVE
                                                                                                                      00213001
                                      231 *
000146 58D0 71C8
                             991C8
                                      232
                                                          R13.SAVEPUT+4
                                                                                   RESTORE PROGRAMS REGISTER
                                                                                                                      00214001
00014A 98EC D00C
                             0000C
                                      233
                                                   LM
                                                          R14,R12,12(R13)
                                                                                                                      00215001
                                                                                   ADDR TO LIST
00014E 5880 1004
                             00004
                                      234
                                                   L
                                                          R8,4(,R1)
                                                                                                                      00216001
                                      235 *
                                                                                   PROCEDURE IN R8
                                                                                                                      00217001
                                                   USING IHIGPRPT, R15
                                                                                                                      00218001
                                      236
** TXA531W Prior USING at statement
                                     130 overridden by this USING.
** TXA301T Record
                                    FRT.ASM(IHIGPR)
                                                                                                                      00219001
000152 58D0 F8C0
                             99869
                                     237
                                                          R13.SAVFPG+4
                                                   DROP
                                                                                                                      00220001
                                      238
                                                         R15
000156 0700
                                      239
                                                   CNOP
                                                                                                                      00221001
000158 45FD 00E0
                             000E0
                                      240
                                                   BAL
                                                          R15, PROLOG(R13)
                                                                                                                      00222001
                                      241 *
                                                                                                                      00223001
00015C 000003CA
                                                   DC
                                                                                                                      00224001
                                      242
                                                          A (THUNKOUT)
000160 8880
                                                   DC
                                                          X'8880
                                                                                   TYPE INFORMATION FOR STAND PROC
                                                                                                                      00225001
                                      243
000162 0001
                                      244
                                                   DC
                                                                                                                      00226001
                                                                                                                      00227001
                 R:F 00164
                                                   USING *,R15
                                                                                                                      00228001
                                      246
** TXA533W USING range overlaps prior USING at sta
** TXA301I Record 228 in SYSD.ALGOLFRT.ASM(IHIGPR)
                                                 statement 130
                                                                                                                      00229001
000164 41D0 F060
                             001C4
                                     247
                                                          R13, SAVEPUT
                                      248
                                                   DROP
                                                          R15
                                                                                                                      00230001
000168 98EC D00C
                             0000C
                                                          R14,R12,12(R13)
                                                                                   RELOAD PUT'S REGISTER
                                                                                                                      00231001
                                      249
00016C 5840 5004
                             00004
                                      250
                                                          R4.R
                                                                                   RECORD POINTER TO R4
                                                                                                                      00232001
000170 5B40 500C
                             0000C
                                      251
                                                   S
                                                          R4,BB
                                                                                   R-BB
                                                                                                                      00233001
                                                                                                                      00234001
000174 5830 500C
                             0000C
                                                                                   BUFFER BEGIN
                                                          R3.BB
                                      252
                                                                                                                      00235001
000178 4040 3000
                             00000
                                                   STH
                                                          R4,0(,R3)
                                                                                   BLOCK LENGTH TO BUFFER
00017C 4B40 7A20
                                                   SH
                                                          R4,=H'4'
                                                                                                                      00236001
                             00A20
                                      254
                                                                                   R-BB-4
000180 4130 3004
                             00004
                                      255
                                                   LA
                                                          R3,4(,R3)
                                                                                                                      00237001
000184 4040 3000
                             aaaaa
                                      256
                                                   STH
                                                          R4,0(,R3)
                                                                                   RECORD LENGTH OT RECORD IN BUFF
                                                                                                                      00238001
                                                                                                                      00239001
000188 D201 3004 5018 00004 00018
                                                                                   STORE S IN RECORD
                                      257
                                                   MVC
                                                          4(2,R3),S
00018E D200 3006 501A 00006 0001A
                                                   MVC
                                                          6(1,R3),TYP
                                                                                                                      00240001
                                      258
                                                                                                                      00241001
000194 5830 500C
                             0000C
                                      259
                                                          R3.BB
                                                                                   BUFFER BEGIN
000198 9200 78B8
                       008B8
                                                                                   CLEAR FLAG BIT
                                                                                                                      00242001
                                      260
                                                   MVI
                                                          RECPG.0
                                      261 *
                                                                                                                      00243001
                                                   WRITE DECB, SF, (R8), (R3), MF=E
                                                                                         WRITE BUFFER
                                      262
                                                                                                                      00244001
00019C 4110 8058
                                                                                             LOAD DECB ADDRESS
                             00058
                                      263+
                                                   LA
                                                          1.DECB
                                                                                                                      02-IHBRD
                                                          5(1),X'20'
0001A0 9220 1005
                                                   MVI
                                                                                    SET TYPE FIELD
                                                                                                                      02-IHBRD
                       99995
                                      264+
0001A4 5081 0008
                             80000
                                                                                              STORE DCB ADDRESS
                                                                                                                      02-IHBRD
                                      265+
                                                   ST
                                                          R8,8(1,0)
0001A8 5031 000C
                             0000C
                                      266+
                                                   ST
                                                          R3,12(1,0)
                                                                                              STORE AREA ADDRESS
                                                                                                                      02-IHBRD
0001AC 58F1 0008
                                                                               LOAD DCB ADDRESS
                             99998
                                      267+
                                                   1
                                                          15.8(1.0)
                                                                                                                      02-THRRD
0001B0 58F0 F030
                             00030
                                                          15,48(0,15)
                                                                                              LOAD RDWR ROUTINE ADDR 02-IHBRD
                                      268+
0001B4 05EF
                                                                                              LINK TO RDWR ROUTINE
                                                                                                                      02-IHBRD
                                      269+
                                                   BALR
                                                         14,15
                                      270 *
                                                                                                                      00245001
                                                          R13,SAVEPUT+4
0001B6 58D0 71C8
                             001C8
                                                                                                                      00246001
                                      271
0001BA 98EC D00C
                             0000C
                                     272
                                                   I M
                                                          R14,R12,12(R13)
                                                                                                                      00247001
                                                   USING IHIGPRPT, R15
                 R:F 00000
                                      273
                                                                                                                      00248001
  TXA531W Prior USING at statemen
                                     130 overridden by
                                                         this USING
   TXA301I Record 248 in SYSD.ALGO
                                     FRT.ASM(IHIGPR)
0001BE 58D0 F8C0
                             008C0
                                     274
                                                          R13, SAVEPG+4
                                                                                                                      00249001
0001C2 07FE
                                      275
                                                   BR
                                                          R14
                                                                                                                      00250001
                                      276 *
                                                                                                                      00251001
0001C4 00000000000000000
                                      277 SAVEPUT DC
                                                                                                                      00252001
                                                         18F'0'
                                      278
                                                                                                                      00253001
                                      279
                                                   DROP
                                                                                                                      00254001
                                                                                                                      00255001
                                      280 *
                                      00256001
```

282 \*

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                X390 3.1.04 2012/08/17 13.21
                                      283 *
                                                    IHIGPROT - OUTPUT IS ACTUAL PROCEDURE TO LIST
                                                                                                                       00258001
                                      284 *
                                                    EVALUATED BY THUNKOUT
                                                                                                                       00259001
                                      285 *
                                                                                                                       00260001
                                             *************************************
                                                                                                                       00261001
                                      286
                                      287
                                                                                                                       00262001
                                                    REGISTER CONTENTS ON ENTRY POINT IHIGPROT
                                      288
                                                                                                                       00263001
                                      289 *
                                                                                                                       00264001
                                      290 *
                                                    R13
                                                                                                                       00265001
                                                                                    -> A THUNKFIELD
                                      291
                                                    R15
                                                                                                                       00266001
                                                                                    -> ENTRY POINT
                                                                                                                       00267001
                                      292
                                                                                                                       00268001
                                      293
                                      294 *
                                                    REGISTER CONTENTS ON ENTRY POINT OUTPUTTH OUTPUT BUFFER
                                                                                                                       00269001
                                      295 *
                                                                                                                       00270001
                                                    R15
                                                                                    -> OUTPUTTH
                                      296
                                                                                                                       00271001
                                                                                    -> VALUE TO BE TRANSFERED TO
                                                                                                                       00272001
                                      297
                                                    R8
                                                                                       OTHER GENERAL REG
                                                                                                                       00273001
                                      298
00020C 4700 0700
                                      299
                                                    CNOP 0.8
                                                                                                                       00274001
                 R:8 00210
                                      300
                                                   USING IHIGPROT, R8
                                                                                                                       00275001
** TXA533W USING range overlaps prior USING at statement 130.

** TXA301I Record 275 in SYSD.ALGOLFRT.ASM(IHIGPR)
                                      301 *
                                                                                                                       00276001
                                      302 IHIGPROT IHIENTRY 'IHIGPROT LEVEL 2.1 &SYSDATE &SYSTIME', REG=R8
                                                                                                                       00277001
                                      303+
                                                                                                                       01-IHIEN
000210 47F0 8026
                             00026
                                      304+IHIGPROT B
                                                          38(,R8)
                                                                               BRANCH AROUND ID
                                                                                                                      01-IHIEN
                                                                               LENGTH OF TDENTTETER
000214 21
                                      305+
                                                   DC
                                                          AI 1 (33)
                                                                                                                      01-THTFN
000215 C9C8C9C7D7D9D6E3
                                                          CL33'IHIGPROT LEVEL 2.1 08/17/12 13.21'
                                                   DC
                                                                                                                      +01-IHIEN
                                      306+
                                                                                                                       01-IHIEN
                                      307 *
                                                                                                                       00278001
000236 50D0 86F8
                              00908
                                      308
                                                          R13, SAVEOI+4
                                                                                                                       00279001
                                                    ST
00023A 41D0 86F4
                             99994
                                      309
                                                    LA
                                                          R13.SAVEOI
                                                                                                                       00280001
                                      310 *
                                                                                                                       00281001
                                                    SAVE
                                                          (14.12)
                                                                                                                       00282001
                                      311
00023E
                                      312+
00023E 90EC D00C
                             0000C
                                                    STM
                                                          14,12,12(13)
                                                                                              SAVE REGISTERS
                                                                                                                       01-SAVE
                                      313+
                                      314
                                                                                                                       00283001
000242 50D0 80FC
                                                          R13. SAVOUTP+4
                             аазас
                                                                                                                       00284001
                                      315
                                                    ST
                                                                                                                       00285001
                                                    DROP
                                      316
                                                          R8
000246 1878
                                      317
                                                    LR
                                                          R7. R8
                                                                                    FIXED STORAGE AREA ON ENTRY
                                                                                                                       00286001
                                                          IHIGPROT, R7
                                                                                                                       00287001
                       00210
                                      318
000248 50D0 70FC
                             аазас
                                      319
                                                    ST
                                                          R13.SAVOUTP+4
                                                                                                                       00288001
00024C 58C0 76F8
                             00908
                                      320
                                                    Ĺ
                                                          R12, SAVEOI+4
                                                                                    R12 -> FSA
                                                                                                                       00289001
000250 41D0 70F8
                             00308
                                                                                                                       00290001
                                      321
                                                    LA
                                                          R13. SAVOUTP
000254 585C 00AC
                             000AC
                                                          R5, ADSTAB(R12)
                                                                                                                       00291001
                                      322
                                                    L
000258 5850 5000
                              00000
                                                          R5,0(,R5)
                                                                                    R5 -> PGCF
                                                                                                                       00292001
00025C 4160 0010
                             00010
                                      324
                                                          R6,16
                                                                                    SET DSNR TO 16 FOR SYSUT2
                                                                                                                       00293001
                                                    LA
                                                                                                                      00294001
00295001
                  R:5
                       aaaaa
                                      325
                                                    USING PGCF,R5
                                                                                    FOR DSECT ADDRESSING
000260 9101 7649
                                                                                    TEST IF RECURSIVELY
                                                          RECOT. X'01'
                       008B9
                                      326
                                                    TM
000264 4710 7848
                                                    во
                                                          ERROR43
                                                                                                                       00296001
                             00A58
                                                                                    YES
                                      327
                                                          RECOI,X'01'
000268 9601 76A9
                                                                                    SET FLAG BIT
                       008B9
                                      328
                                                    OI
                                                                                                                       00297001
00026C 9501 F007
                       00007
                                      329
                                                          7(R15), X'01'
                                                                                    TEST NUMBER OF PARAMETER
                                                                                                                       00298001
000270 4770 7830
                             00A40
                                      330
                                                    BNF
                                                          FRROR21
                                                                                                                       00299001
000274 9103 F005
                                                          5(R15), X'03
                                                                                    TEST TYP INFORMATION ABOUT FIRST
                                                                                                                      00300001
                       00005
                                      331
                                                    TM
000278 4780 782A
                                                          ERROR20
                                                                                    PARAMETER
                                                                                                                       00301001
                             00A3A
                                                    ΒZ
                                      332
00027C 9104 F005
                                                          5(R15),X'04'
                       00005
                                      333
                                                    ТМ
                                                                                    TEST IF ARRAY
                                                                                                                       00302001
000280 4710 782A
                                                          ERROR20
                                                                                                                       00303001
                             00A3A
                                                    во
                                                                                    ARRAY
000284 91C0 F005
                       00005
                                      335
                                                    ТМ
                                                          5(R15),X'C0'
                                                                                                                       00304001
000288 4780 7094
                             002A4
                                      336
                                                    ΒZ
                                                          OUTPUT01
                                                                                    NO
                                                                                                                       00305001
                                                          5(R15),X'40'
00028C 9140 F005
                       99995
                                      337
                                                    тм
                                                                                                                       00306001
000290 4780 782A
                                                          ERROR20
                                                    ΒZ
                                                                                    STANDARD PROC IDENTIFIER
                                                                                                                       00307001
                             00A3A
                                      338
000294 91C0 F004
                       00004
                                      339
                                                    TM
                                                          4(R15),X'C0'
                                                                                                                       00308001
000298 4740 7094
                             002A4
                                                    ВМ
                                                          OUTPUT01
                                                                                                                       00309001
                                      340
00029C 4780 7094
                             002A4
                                      341
                                                    B7
                                                          OUTPUT01
                                                                                                                       00310001
0002A0 9201 76AB
                       008BB
                                                          PARTST, X'01'
                                                                                    SET BIT FOR LATER TEST
                                      342
                                                    MVI
                                                                                                                       00311001
                                                          TYP,X'FF'
0002A4 91FF 501A
                                      343 OUTPUT01
                                                                                    TEST TYP FIELD IN PGCF
                                                                                                                       00312001
                       0001A
                                                   TM
                                                                                    NO TYP INFORMATION IN PGCF
0002A8 4780 70B4
                              002C4
                                                    ΒZ
                                                          OUTPUT1
                                                                                                                       00313001
0002AC D200 76AA F005 008BA 00005
                                      345
                                                          TYPC(1),5(R15)
                                                                                    PGCF CONTAIN TYP INFORMATION
                                                                                                                       00314001
                                                    MVC
0002B2 9403 76AA
                       008BA
                                      346
                                                   NI
                                                          TYPC,X'03'
                                                                                                                       00315001
                       0001A 008BA
0002B6 D500 501A 76AA
                                      347
                                                    CLC
                                                          TYP(1), TYPC
                                                                                                                       00316001
                                                          ERROR20
0002BC 4770 782A
                                                                                                                       00317001
                             00A3A
                                      348
                                                   BNE
0002C0 47F0 70BE
                             002CE
                                      349
                                                          OUTPUT2
                                                                                                                       00318001
                                                    В
                                      350 *
                                                                                                                       00319001
0002C4 D200 501A F005 0001A 00005
                                      351 OUTPUT1 MVC
                                                          TYP(1),5(R15)
                                                                                                                       00320001
0002CA 9403 501A
                       0001A
                                      352
                                                    ΝI
                                                          TYP.X'03'
                                                                                                                       00321001
                                                                                                                       00322001
                                      353
0002CE D203 780C F000 00A1C 00000
                                      354 OUTPUT2
                                                          ADRTHUNK(4),0(R15)
                                                                                                                       00323001
                                                   MVC
                                      355
                                                                                                                       00324001
                                                          (14,12)
                                                                                    SAVE OUTPUT'S REGISTER IN
                                                                                                                       00325001
                                      356
                                                    SAVE
999204
                                      357+
                                                    DS
                                                                                                                       01-SAVE
0002D4 90FC D00C
                                                          14,12,12(13)
                                                                                                                       01-SAVE
                             aggac
                                      358+
                                                    STM
                                                                                              SAVE REGISTERS
                                                                                    SAVEOUTP
                                                                                                                       00326001
                                      359
0002D8 58D0 70FC
                             0030C
                                                          R13.SAVOUTP+4
                                                                                    RESTORE CALLING ROUTINES REGS
                                                                                                                       00327001
                                      360
0002DC 98EC D00C
                             0000C
                                      361
                                                          R14,R12,12(R13)
                                                                                                                       00328001
                                      362 *
                                                                                                                       00329001
                                                   *************************************
                                      363 ***
                                                                                                                      00330001
                                      364 *
                                                                                                                       00331001
                                                    LINKING TO ROUTINE CALLING ACTUAL PARAMETER
                                      365
                                                                                                                       00332001
                                      366
                                                                                                                       00333001
                  R:8 00210
                                      367
                                                   USING IHIGPROT, R8
                                                                                                                       00334001
** TXA531W Prior USING at statement
                                      318 overridden by this USING.
** TXA301I Record 334 in SYSD.ALGOL
                                     FRT.ASM(IHIGPR)
0002E0 58D0 86F8
                             00908
                                                                                                                       00335001
                                                          R13, SAVEOI+4
                                      368
                                      369
                                                   CNOP
                                                                                                                       00336001
                                                         2,4
0002E6 D201 80E2 A008 002F2 00008
                                                   MVC
                                                         *+12(2),8(R10)
                                                                                   MOVE PROGRAM BLOCK NUMBER
                                                                                                                       00337001
                                      370
0002EC 45F0 87E4
                             009F4
                                                    BAL
                                                          R15, CAP1GP
                                                                                                                       00338001
                                      371
                                                    DROP R8
                                      372
                                                                                                                       00339001
                  R:F 002F0
                                      373
                                                   USING *,R15
                                                                                                                       00340001
```

Active USINGs: PGCF,R5 IHIGPRTN+X'210',R7 X390 3.1.04 2012/08/17 13.21 Addr1 Addr2 Stmt Source Statement Loc Object Code \*\* TXA533W USING range overlaps prior USING at statement 318 \*\* TXA301I Record 340 in SYSD.ALGOLFRT.ASM(IHIGPR) 374 \* 00341001 0002F0 0000 375 DC H'0' 00342001 00343001 0002F2 0000 376 DC H'0' 0002F4 4700 0000 00000 00344001 377 NOP 0 378 \* 00345001 0002F8 41D0 F018 00308 379 OUTPUTTH LA R13, SAVOUTP 00346001 380 DROP R15 00347001 R14, R7, 12(R13) RESTORE OUTPUT'S REGISTER 00348001 0002FC 98E7 D00C 0000C LM 381 000300 989C D038 00038 382 LM R9, R12, 56(R13) EXCEPT R8 00349001 000304 47F0 7140 00350 OUTPUTAA BRANCH OVER SAVEAREA 00350001 383 В 384 \* 00351001 999398 999999999999999 385 SAVOUTP DC 18F '0 00352001 00353001 386 00354001 387 388 00355001 000350 9101 76AB 008BB 389 OUTPUTAA TM PARTST. X'01' 00356001 000354 4780 7156 00366 390 ΒZ OUTPUT25 00357001 000358 412C 0090 00358001 00090 391 LA R2.FCTVALST(R12) 00035C 1928 00359001 392 CR R2.R8 00035E 4770 782A 00A3A 393 BNE ERROR20 00360001 000362 9200 76AB 008BB 394 MVI PARTST, X'00' 00361001 000366 1B99 395 OUTPUT25 SR R9, R9 00362001 TYP.X'03' 00363001 000368 9103 501A 99914 396 TM 00036C 4740 7168 00378 OUTPUT3 ВМ 00364001 397 000370 4190 9001 00001 398 LA R9,1(,R9) BOOLEAN VALUE 00365001 000374 47F0 7184 00394 OUTPUT5 00366001 399 В 400 \* 00367001 000378 9101 501A 0001A 401 OUTPUT3 TM TYP. X'01' 00368001 00037C 4780 7178 00388 402 ΒZ OUTPUT4 00369001 000380 4190 9004 00004 403 OUTPUT3A LA R9,4(,R9) INTEGER VALUE 00370001 000384 47F0 7184 00394 404 В OUTPUT5 00371001 405 \* 00372001 000C2 000388 9120 C0C2 406 OUTPUT4 TM OPTSW(R12), X'20' REAL VALUE TEST IF LONG/SHORT 00373001 00380 OUTPUT3A 00038C 4710 7170 407 RΩ SHORT 99374991 000390 4190 9008 LONG 00375001 00008 408 R9,8(,R9) LA 00376001 409 000394 5840 5004 00004 410 OUTPUT5 INSERT VALUE TO RECORD BUFFER 00377001 000398 1824 411 I R R2.R4 00378001 00039A 1A29 412 AR R2, R9 00379001 00380001 00039C 5920 5010 00010 413 C R2.BE 0003A0 4720 783C 00381001 00A4C ВН ERROR38 414 00382001 0003A4 0690 415 OUTPUT51 BCTR R9,0 0003A6 4490 7812 00A22 R9, OUTINMOV 00383001 416 EX 00384001 00385001 0003AA 4190 9001 00001 417 LA R9,1(,R9) TNCREASE CHARACTER POINTER R4 R9 0003AF 1A49 418 ΔR 0003B0 5040 5004 00004 00386001 ST R4 R 419 0003B4 9200 76A9 008B9 420 MVI RECOI,X'00' CLEAR FLAG BIT 00387001 0003B8 58D0 70FC 0030C R13, SAVOUTP+4 RESTORE CALLING ROUTINES REGS 00388001 0003BC 98EC D00C 0000C 422 I M R14,R12,12(R13) 00389001 R:8 00210 423 USING IHIGPROT, R8 00390001 \*\* TXA531W Prior USING at statement 318 overridden by this USING D.ALGOLFRT.ASM(IHIGPR) 0003C0 58D0 86F8 00908 424 R13, SAVEOI+4 00391001 DROP 425 00392001 R8 0003C4 47F0 F008 00008 426 В 8(,R15) 00393001 427 \* 00394001 THUNK OUT 00395001 428 429 00396001 430 \* LIST PROCEDURE INVOKE CALL ACTUAL PARAMETER IN IHIFSA 00397001 431 \* AND THIS CALL THUNKOUT, WHICH ASSIGNS OUTPUT AS ACTUAL 00398001 432 \* PROCEDURE TO LIST 00399001 00400001 433 00401001 0000B 434 PBT EQU 11 REGISTER 0000C 435 LAT 00402001 EQU 12 0000D 436 FSB EQU 13 ADDRESS OF FIXED STORAGE AREA 00403001 437 00404001 00405001 438 \* DISPLACEMENT IN FSA 439 00406001 00407001 0003C8 0700 440 **CNOP** 0003CA 05F0 441 THUNKOUT R15,0 00408001 BALR 0003CC 5880 F008 99998 442 R8,8(,R15) 00409001 00410001 0003D0 47FF 000C 0000C 443 В 12(R15) 444 \* 00411001 0003D4 00000210 DC A(IHIGPROT) INFORMATION CHARACTERISE OUTPUT 00412001 445 00413001 446 0003D8 9200 D0A9 447 M\/T PROLPBN(FSB), X'00' 00414001 998C DAAG 00415001 αααΔα 448 STM PBT, LAT, PROLREG(FSB) 0003E0 47F0 D0D8 000D8 449 CAP2(0, FSB) 00416001 00417001 450 451 452 \* 00419001 453 \* IHIGPRGT - GET ROUTINE 00420001 454 00421001 \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* 00422001 455 456 00423001 457 \* REGISTER CONTENTS ON ENTRY POINT IHIGPRGT 00424001 458 00425001

R:F 003E4

459

460

461

462 463 \*

464

R15

R14

R13

USING \*,R15

-> ENTRY POINT

-> SAVE AREA IN FSA

-> PARAMETER LIST

-> RETURN

00426001 00427001

00428001

00429001

00430001

00431001

<sup>\*\*</sup> TXA533W USING range overlaps prior USING at statement 318

X390 3.1.04 2012/08/17 13.21

Loc Object Code Addr1 Addr2 Stmt Source Statement

200 0	bject code	Addi 1	addi Z	Jeme Jource	Jeacei	iiciic	X330 3.1.04 2012/00	/1/ 13.21
** TXA30	1I Record 431	in SYSD	O.ALGOLF	RT.ASM(IHIGP	₹)			00422001
					IHIEN'	TRY 'IHIGPRGT LEVEL	2.1 &SYSDATE &SYSTIME'	00432001 00433001
				467+*		1112011101 22122	212 43135/112 431312112	01-IHIEN
	7F0 F026	e	00026	468+IHIGPRGT	В	38(,R15)	BRANCH AROUND ID	01-IHIEN
0003E8 2				469+	DC	AL1(33)	LENGTH OF IDENTIFIER	01-IHIEN
0003E9 C	9C8C9C7D7D9C7I	=3		470+ +	DC	CL33 IHIGPRGI LEVEL	2.1 08/17/12 13.21' IDENTIFIER	+01-IHIEN 01-IHIEN
				471 *			IDENTIFIER	00434001
00040A 5	0D0 F4DC	e	908C0	472	ST	R13,SAVEPG+4		00435001
00040E 4	1D0 F4D8	6	908BC	473	LA	R13,SAVEPG		00436001
				474 *	C 43 /F	(44.42)		00437001
000412				475 476+	SAVE DS	(14,12) 0H		00438001 01-SAVE
	ØEC DØØC	e	9000C	477+	STM	14,12,12(13)	SAVE REGISTERS	01-SAVE
				478 *		, , ( - /		00439001
				479	DROP	R15		00440001
000416 1		00254		480	LR	R7,R15		00441001
000418 5	R:7 8C0 74DC	003E4	908C0	481 482	L O21MG	IHIGPRGT,R7 R12,SAVEPG+4	ADDR OF FIXED ST AREA	00442001 00443001
	0D0 719C		00580	483	ST	R13, SAVEGET+4	ABOK OF FERENCE	00444001
000420 4		e	9057C	484	LA	R13, SAVEGET		00445001
	85C 00AC		OOOAC	485	L	R5, ADSTAB(R12)	FIRST ENTRY IN DSTAB IS APGCF	00446001
000428 5 00042C 4			90000 90010	486 487	L LA	R5,0(,R5) R6,16	R5 -> PGCF TO SET DSNR TO 16 FOR SYSUT2	00447001 00448001
00042C 4	R:5	00000	90010	488		PGCF, R5	3E1 D3NK 10 10 FOK 313012	00449001
000430 9	101 74D4	008B8		489	TM	RECPG,X'01'	TEST IF RECURSIVELY	00450001
000434 4	710 7674	6	00A58	490	ВО	ERROR43	YES	00451001
	601 74D4	008B8		491	OI	RECPG,X'01'	SET FLAG BIT	00452001
00043C 9	180 501B 780 764A	0001B	00A2E	492 493	TM BZ	PG,PG0 ERROR10	DATASET OPEN ? DATASET NOT OPEN	00453001 00454001
	880 5000		00AZE 00000	494	L L	R8, ADCB	LOAD REGISTER FOR ADDRESSING	00454001
	R:8	00000		495		IHADCB, R8	DCB AND DECB	00456001
	140 501B	0001B		496	TM	PG, PG1	TEST LAST PROCEDURE	00457001
00044C 4	710 709C	e	00480	497 498 *	ВО	GET1	LAST PROCEDURE WAS GET	00458001 00459001
				499	CHECK	DECB	CHECK THE PREVIOUS WRITE	00459001
000450 4	110 8058	e	00058	500+	LA	1,DECB	LOAD PARAMETER REG 1	02-IHBIN
000454 5			8000	501+	L	14,8(0,1)	PICK UP DCB ADDR	01-CHECK
	8F0 E034	e	00034	502+	L	15,52(0,14)	LOAD CHECK ROUTINE ADDR	01-CHECK
00045C 0	5EF			503+ 504 *	BALR	14,15	LINK TO CHECK ROUTINE	01-CHECK 00461001
				505	NOTE	(R8)		00461001
00045E 1	818			506+	LR	1,R8	LOAD PARAMETER REG 1	02-IHBIN
000460 5		6	00054	507+	L	15,84(0,1)	LOAD NOTE RTN ADDRESS	
000464 0	5EF			508+	BALR	14,15	LINK TO NOTE ROUTINE	01-NOTE
000466 5	010 5014	a	00014	509 * 510	ST	R1,NOTEADR	INFORMATION ABOUT THE LAST	00463001 00464001
000.00 3	010 301.			511 *	٥.	,	RECORD WRITTEN TO PGCF TO	00465001
				512 *			HAVE FOR A LATER PUT	00466001
				513 *			WHERE TO CONTINUE DATASET	00467001
00046A 9	640 501B 150 5004	0001B	00004	514 515	OI LA	PG, PG1	PG1=1 INDICATING GET IS EXECUTED	00468001 00469001
	8FC 011C		0011C	516	LA	R5,4(,R5) R15,IORLST(R12)		00470001
000476 5			00018	517	L	R15, EN(R15)	R15 -> IHIIOREN	00471001
00047A 0				518		R14,R15	CLEAR NOTTAB	00472001
00047C 4	B50 763C	e	00A20	519	SH	R5,=H'4'	RESTORE PGCF ADDR	00473001
				520 * 521 *	FVΔLII	ATE THENTTETCATION N	UMBER FIRST PARAMETER	00474001 00475001
				522 *	LVALO	ATE IDENTIFICATION N	ONDER TERST PARAMETER	00476001
	810 74F0		908D4	523 GET1	L	R1,SAVEPG+24	GET CALLERS R1	00477001
	F2F 1000		00000	524	ICM	R2,B'1111',0(R1)	CONVERSION REQUIRED ?	00478001
	720 70CA 120 C0C2	000C2	904AE	525 526	BP TM	GET2 OPTSW(R12),X'20'	NO CONVERSION CONVERSION TO INTEGER NECESSARY?	00479001
	710 70B8		0049C	527	BO	GET11	SHORT PROCSISION	00481001
000494 6			00000	528	LD	FPR0,0(,R2)	LONG	00482001
000498 4	7F0 70BC	e	004A0	529	В	GET11A	PARAMETER TO FPR0	00483001
000406 7	2000 2000		20000	530 *		EDDO O/ DO		00484001
00049C 7 0004A0 5	800 2000 8FC 011C		00000 0011C	531 GET11 532 GET11A	LE L	FPR0,0(,R2) R15,IORLST(R12)		00485001 00486001
	8FF 0000		90000	533	Ĺ	R15,CI(R15)		00487001
0004A8 0	5EF			534	BALR	R14,R15	CALL CONVERSION ROUTINE	00488001
0004AA 4	7F0 70CE	6	004B2	535	В	GET2A		00489001
00011==	800 2000		90000	536 * 537 GET2	L	R0,0(,R2)		00490001 00491001
0004AE 3		۷		537 GET2 538 GET2A	LTR	R0, R0	IDENTIFICATION NUMBERS IN RØ	00491001
	740 766E	e	00A52	539	BM	ERROR39		00493001
	900 7634		00A18	540	C	R0,TWOP16		00494001
	7B0 766E		00A52	541	BNL	ERROR39	CET/DUT IDENT LITTURE DANCE	00495001
	.000 5018 .840 500C		90018 9000C	542 543	STH L	R0,S R4,BB	GET/PUT IDENT WITHIN RANGE	00496001 00497001
	140 400C		9000C	544	LA	R4,12(,R4)	INSERT CORRECT CHARACTER POINTER	
	040 5004		00004	545	ST	R4,R		00499001
				546 *	EVANT	WE NOTTAR TO STURY	ENTRY FOR C	00500001
				547 * 548 *	EXAMI	NE NOTTAB TO FIND AN	ENIKY FUK S	00501001 00502001
0004D0 5	89C 00B0	e	900В0	549 GET12	L	R9, ANOTTAB(R12)	R9 -> NOTTAB	00503001
0004D4 1			-	550	LR	R10,R9	COPY TO R10	00504001
	1A0 A008		80000	551 GET3	LA	R10,8(,R10)	INCR ADDR BY RIGHT	00505001
	9A0 9000		00000	552	C	R10,0(,R9)	COMPARE WITH NXE	00506001
0004DE 4 0004E2 1	.780 7650 .826	e	00A34	553 554	BE LR	ERROR14 R2, R6	NO ENTRY FOR S FIND IN NOTTAB DATASET NUMBER TO R2	00507001 00508001
	920 A000	e	00000	555	CH	R2,0(,R10)	DATASET NUMBER = 16 ?	00509001
0004E8 4	770 70F2	e	004D6	556	BNE	GET3	DATASET NUMBER ¬= 16 LOOP	00510001
	501 5018 A002			557	CLC	S(2),2(R10)	S IS EQUAL IN NOTTABENTRY ?	00511001
0004F2 4	770 70F2	6	004D6	558	BNE	GET3	NO, NEXT ENTRY IN NOTTAB	00512001

Loc Object Code	Addr1 /	Addr2	Stmt	Source	Stater	ment	X390 3.1.04 2012/08,	/17 13.21
			559 *			/>	FOUND AN ENTRY IN NOTTAB FOR S	00513001
0004F6 4100 A004 0004FA 1818	(	00004	560 561		LA LR	R0,4(,R10) R1,R8	ADDR OF NOTE INFORMATION DCB ADDR TO R1	00514001 00515001
			562 *					00516001
0004FC 58F0 1054		00054	563 564+		L	(1),(0) 15,84(0,1)	LOAD POINT RTN ADDR	<b>00517001</b> <b>01-POINT</b>
000500 45EF 0004	(	00004	565+ 566 *		BAL	14,4(15,0)	LINK TO POINT ROUTINE	01-POINT 00518001
000504 5830 500C	(	0000C	567		L	R3,BB		00519001
			568 * 569		READ	DECB, SF, (R8), (R3), MF=E	READ A BLOCK TO BUFFER	00520001 00521001
000508 4110 8058		00058	570+		LA	1,DECB	LOAD DECB ADDRESS	02-IHBRD
00050C 9280 1005 000510 5081 0008	00005 (	80000	571+ 572+		MVI ST	5(1),X'80' R8,8(1,0)	SET TYPE FIELD STORE DCB ADDRESS	02-IHBRD 02-IHBRD
000514 5031 000C 000518 58F1 0008		0000C 00008	573+ 574+		ST L	R3,12(1,0) 15,8(1,0) LOAI	STORE AREA ADDRESS D DCB ADDRESS	02-IHBRD 02-IHBRD
00051C 58F0 F030		00030	575+		L	15,48(0,15)	LOAD RDWR ROUTINE ADDR	02-IHBRD
000520 05EF			576+ 577 *		BALK	14, 15	LINK TO RDWR ROUTINE	02-IHBRD 00522001
000522 4110 8058		00058	578 579+		CHECK LA	DECB 1,DECB	CHECK THIS READ  LOAD PARAMETER REG 1	00523001 02-IHBIN
000526 58E0 1008	(	80000	580+		L	14,8(0,1)	PICK UP DCB ADDR	01-CHECK
00052A 58F0 E034 00052E 05EF	(	00034	581+ 582+		L BALR	15,52(0,14) 14,15	LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE	01-CHECK 01-CHECK
000530 D501 3008 5018	00000	00010	583 * 584		CLC	8(2,R3),S	TEST TRENTTETCATION NUMBER	00524001
000536 4770 7650		00018 00A34	585		BNE	ERROR14	TEST IDENTIFICATION NUMBER	00525001 00526001
00053A D200 501A 300A 000540 4A30 3000		0000A 00000	586 587		MVC AH	TYP(1),10(R3) R3,0(,R3)	TYP INFORMATION TO PGCF BB+BL	00527001 00528001
000544 5030 5008	(	80000	588		ST	R3,RE	EFFECTIVE END OF RECORD CURRENT	00529001
000548 5810 74F0 00054C 58D0 719C		008D4 00580	589 590		L L	R1, SAVEPG+24 R13, SAVEGET+4	RESTORE PROGRAMS REGISTER	00530001 00531001
000550 98EC D00C 000554 5880 1004		0000C 00004	591 592		LM L	R14,R12,12(R13) R8,4(,R1)	ADDR OF LIST PROCEDURE	00532001 00533001
R:F	003E4		593		USING	IHIGPRGT, R15	ADDIT OF ETST PROCEDURE	00534001
** TXA531W Prior USING ** TXA301I Record 534						this USING.		
000558 58D0 F4DC		008C0	594 595	•	Ĺ	R13,SAVEPG+4		00535001
00055C			595 596		DROP CNOP	R15 0,4		00536001 00537001
00055C 45FD 00E0	(	000E0	597 598 *		BAL	R15,PROLOG(R13)		00538001 00539001
000560 00000726			599		DC	A(THUNKIN)	TVD TWEADWATTON FOR STANDARD	00540001
000564 8880			600 601 *		DC	X'8880'	TYP INFORMATION FOR STANDARD PROCEDURE	00541001 00542001
000566 0001			602 603 *		DC	H'1'		00543001 00544001
R:F			604		USING			00545001
** TXA533W USING range ** TXA301I Record 545						nt 481.		
000568 41D0 F354 00056C 98EC D00C		008BC 0000C	605 606		LA LM	R13, SAVEPG R14, R12, 12(R13)		00546001 00547001
R:F	003E4		607		USING	IHIGPRGT, R15		00548001
** TXA531W Prior USING ** TXA301I Record 548						tnis USING.		
000570 58D0 F4DC 000574 9200 F4D4	008B8	008C0	608 609		L MVI	R13,SAVEPG+4 RECPG,X'00'	CLEAR FLAG BIT	00549001 00550001
000578 07FE	00000		610		BR	R14	CEEAN FEAG BIT	00551001
00057A 0000			611 *					00552001
00057C 0000000000000000	0		612 S	AVEGET	DC	18F'0'		
					DDOD	D15		00553001
			614 *		DROP			00554001 00555001
			614 *				***********	00554001 00555001
			614 * 615 * 616 * 617 *	*****	·****	**************************************		00554001 00555001 00556001 00557001 00558001
			614 * 615 * 616 * 617 * 618 * 619 *	*****	***** IHIGPP EVALUA	**************************************	OCEDURE TO LIST	00554001 00555001 00556001 00557001 00558001 00559001 00560001
			614 * 615 * 616 * 617 * 618 * 619 *	*****	***** IHIGPP EVALUA	**************************************		00554001 00555001 00556001 00557001 00558001 00559001 00560001
			614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 *	*****	·*****  IHIGPP EVALUA ·*****	**************************************	OCEDURE TO LIST	00554001 00555001 00556001 00557001 00558001 00559001 00560001 00561001 00562001
			614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 *	******	******  THIGPF EVALUA  ******  REGIST	**************************************	OCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00558001 00559001 00561001 00561001 00563001 00564001 00565001
			614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 *	******	IHIGPF EVALUA ******	**************************************	OCEDURE TO LIST ************************************	00554001 00555001 00556001 00557001 00558001 00558001 00560001 00562001 00563001 00564001
			614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 *	*****	****** IHIGPF EVALUA  ****** REGIST R13 R8 R15	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00556001 00557001 00558001 00559001 00560001 00561001 00563001 00565001 00565001 00567001 00568001
			614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 629 *	******	THIGPF EVALU/ ******* REGIST R13 R8 R15 REGIST	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00558001 00559001 00561001 00561001 00563001 00564001 00565001 00566001 00567001 00569001
			614 * 615 * 616 * 617 * 618 * 619 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 *	******	****** IHIGPF EVALUA  ****** REGIST R13 R8 R15	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00556001 00557001 00558001 00559001 00560001 00562001 00563001 00564001 00565001 00568001 00568001 00568001 00569001 00570001
	0056		614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 625 * 626 * 627 * 628 * 629 * 630 * 631 * 632 *	******	******  IHIGPPEVALUA  ******  REGIST R13 R8 R15 REGIST R15 REGIST R15	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00558001 00559001 00560001 00563001 00563001 00565001 00565001 00568001 00568001 00569001 00570001 00572001 00572001
R:8 °** TXA533W USING range	overl		614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 624 * 625 * 626 * 627 * 628 * 629 * 630 * 631 * 632 * 633 *	********* ****************************	******  IHIGPF EVALUA  ******  REGIST R13 R8 R15 REGIST R15 REGIST R15 R8 USING	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00556001 00557001 00558001 00559001 00560001 00561001 00564001 00564001 00565001 00566001 00567001 00569001 00571001 00572001
	overl		614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 631 * 632 * 631 * 632 * 633 * 07 USII FRT. ASI	********* ****************************	******  IHIGPF EVALUA  ******  REGIST R13 R8 R15 REGIST R15 REGIST R15 R8 USING	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00556001 00557001 00559001 00560001 00561001 00562001 00564001 00564001 00566001 00567001 00568001 00569001 00570001 00571001 00572001 00573001
** TXA533W USING range	overl		614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 629 * 631 * 631 * 631 * 633 * 633 * 634 * 635 II	******* ******* WG at st M(IHIGPR	THIGPPEVALUA  ******  REGIST  R13  R8  R15  REGIST  R15  REGIST  R15  R2  VSING	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00558001 00559001 00560001 00561001 00563001 00565001 00565001 00568001 00569001 00570001 00572001 00573001 00575001
** TXA533W USING range	overla in SYS		614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 629 * 631 * 631 * 632 * 633 * 631 * 635 II 636+*	******* ******* WG at st M(IHIGPR	HIGHER THE PROPERTY OF THE PRO	**************************************	**************************************	00554001 00555001 00555001 00557001 00558001 00559001 00560001 00561001 00563001 00563001 00565001 00567001 00569001 00571001 00572001 00573001 00574001
** TXA533W USING range ** TXA301I Record 574 0005C4 47F0 8026 0005C8 21	overla in SYSI	D.ALGOL	614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 631 * 632 * 631 * 635 * 11 636+* 1636+* 1638+	NG at st M(IHIGPRIT HIGPRIT	THIGPPE EVALUATION TO THE PROPERTY OF THE PROP	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00559001 00560001 00561001 00562001 00564001 00564001 00565001 00567001 00575001 00573001 00575001 00575001 00575001 00575001 001-IHIEN 01-IHIEN
** TXA533W USING range ** TXA301I Record 574 0005C4 47F0 8026	overla in SYSI	D.ALGOL	614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 625 * 624 * 625 * 627 * 628 * 629 * 630 * 631 * 632 * 635 * 1636+ 637+ II 638+ 639+ +	NG at st M(IHIGPRIT HIGPRIT	THIGPE EVALUATION TO THE EVALUATION THE EVALUATION THE EVALUATION TO THE EVALUATION THE EVALUATION THE	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00559001 00560001 00562001 00563001 00564001 00564001 00565001 00567001 00572001 00572001 00573001 00575001 00575001 00575001 00576001 00576001 00576001
** TXA533W USING range ** TXA301I Record 574 0005C4 47F0 8026 0005C8 21	overlain SYSI	D.ALGOL	614 * 615 * 616 * 617 * 618 * 619 * 620 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 630 * 631 * 632 * 635 I 636+* 637+I 638+ 639+	********  *******  NG at st M(IHIGPRIT HIGPRIT	THIGPPE EVALUATION TO THE PROPERTY OF THE PROP	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00556001 00557001 00558001 00559001 00560001 00561001 00562001 00565001 00565001 00569001 00570001 00571001 00572001 00574001 00575001 00576001 00576001 01-IHIEN 01-IHIEN
** TXA533W USING range ** TXA301I Record 574 0005C4 47F0 8026 0005C8 21 0005C9 C9C8C9C7D7D9C9E	overlin SYSI	D.ALGOL	614 * 615 * 616 * 617 * 618 * 619 * 620 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 630 * 631 * 632 * 635 II 636+* 637+II 638+ 639+ 641 642	NG at st M(IHIGPR HIGPRIT HIGPRIT	THIGPE EVALUATION TO THE EVALUATION THE EVALUATION TO THE EVALUATION THE EVALUATION TO THE EVALUATION	TER CONTENTS ON ENTRY POOR THIGPRIT, R8 nt 481.  TRY 'IHIGPRIT LEVEL 2.1 & 38(,R8) BRAI AL1(33) LENC CL33'IHIGPRIT LEVEL 2.1	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00558001 00559001 00560001 00561001 00562001 00563001 00565001 00565001 00569001 00570001 00573001 00574001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001
** TXA533W USING range ** TXA301I Record 574 0005C4 47F0 8026 0005C8 21 0005C9 C9C8C9C7D7D9C9E 0005EA 50D0 8344	overlin SYSI	D.ALGOL	614 * 615 * 616 * 617 * 618 * 619 * 620 * 621 * 622 * 623 * 624 * 625 * 626 * 627 * 628 * 631 * 632 * 631 * 635 * II 636+* II 638+ 639+	********  ******  ******  HIGPRIT  HIGPRIT	REGIST REGIST REGIST REGIST RIS R	**************************************	CCEDURE TO LIST  ***********************************	00554001 00555001 00555001 00557001 00559001 00560001 00561001 00562001 00564001 00564001 00567001 00569001 00579001 00573001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001 00575001

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 Loc Object Code 0005F2 645+ DS 01-SAVE 0005F2 90EC D00C 01-SAVE 0000C 646+ STM 14,12,12(13) SAVE REGISTERS 647 00582001 0005F6 50D0 80B8 0067C 648 ST R13.SAVEIN+4 00583001 00584001 0005FA 1878 649 LR R7, R8 FIXED STORAGE AREA ON ENTRY 00585001 650 **DROP** R8 R:7 005C4 651 USING IHIGPRIT, R7 00586001 0005FC 58C0 7344 9998 652 R12.SAVEOI+4 00587001 000600 41D0 70B4 R13.SAVEIN 00678 653 LA 00588001 000604 585C 00AC 00589001 000AC R5.ADSTAB(R12) 654 L 000608 5850 5000 00000 655 R5,0(,R5) R5 -> PGCF 00590001 00060C 4160 0010 R6,16 DSNR = 16 FOR SYSUT2 00591001 00010 656 LA aaaaa 657 USING PGCF,R5 DSECT ADDRESSABILITY 00592001 000610 9101 72F5 RECOT. X'01' TEST IF RECURSIVELY 008B9 658 TM 00593001 000614 4710 7494 во ERROR43 YES 00594001 00A58 659 000618 9601 72F5 008B9 RECOI,X'01' SET FLAG BIT 00595001 ΟI 660 00061C 9501 F007 TEST NUMBER OF PARAMETERS 00007 CLI 7(R15),X'01' 00596001 661 000620 4770 7470 00A40 662 BNF ERROR21 NUMBER DOES NOT CORRESPOND 00597001 663 BETWEEN DECLARATION AND CALL 00598001 00599001 ASSIGNMENT POSSIBLE ? 000624 9108 F004 00004 TM 4(R15), X'08' 664 000628 4710 7476 00A3A ERROR20 00600001 665 во 00062C D200 72F6 F005 008BA 00005 666 MVC TYPC(1),5(R15) 00601001 000632 9403 72F6 008BA 667 NI TYPC, X'03' 00602001 000636 D500 501A 72F6 0001A 008BA 668 CLC TYP(1), TYPC 00603001 99694991 00063C 4770 7476 **ΘΘΔ3Δ** 669 BNF FRROR20 PGCF 00605001 670 671 \* 00606001 672 00607001 673 \* LINKING TO ROUTINE CALLING ACTUAL PARAMETER 00608001 674 \* 00609001 675 SAVE (14,12)SAVE REGISTER IN SAVEIN 00610001 000640 676+ 01-SAVE 000640 90EC D00C 0000C STM 14,12,12(13) SAVE REGISTERS 01-SAVE 678 \* 00611001 000644 58D0 70B8 0067C 679 R13.SAVEIN+4 00612001 ADRTHUNK(4),0(R15) R14,R12,12(R13) 999648 D293 7458 F999 99A1C 99999 MVC 680 00613001 RESTORE PROGRAMS REGISTER 00614001 00064E 98EC D00C 0000C 681 LM R:8 005C4 USING IHIGPRIT, R8 00615001 682 \*\* TXA531W Prior USING at statement 651 overridden by this USING \*\* TXA301I Record 615 in SYSD.ALGOU FRT.ASM(IHIGPR) 000652 58D0 8344 00908 683 R13, SAVEOI+4 00616001 000656 684 CNOP 2,4 \*+12(2),8(R10) 00617001 000656 D201 809E A008 00662 00008 MVC MOVE PROGRAM BLOCK NUMBER 00618001 685 00065C 45F0 8430 686 R15, CAP1GP 00619001 009F4 DROP 00620001 687 R8 R:F 00660 688 USING \*,R15 00621001 \*\* TXA533W USING range overlaps prior USING at statement 651
\*\* TXA301I Record 621 in SYSD.ALGOLFRT.ASM(IHIGPR) 00622001 H'0' 000660 0000 690 00623001 000662 0000 691 DC H'0' 00624001 000664 4700 0000 00625001 00000 692 NOP 0 00626001 693 000668 41D0 F018 00678 694 INPUTTH LA R13, SAVEIN 00627001 695 DROP R15 00628001 00066C 98E7 D00C 0000C LM R14,R7,12(R13) RESTORE INPUT'S REGISTER EXCEPT 00629001 696 000670 989C D038 00038 697 LM R9, R12, 56(R13) 00630001 BRANCH OVER SAVEAREA 000674 47F0 70FC 99609 698 В TNPLITTAA 00631001 00632001 699 000678 00000000000000000 700 SAVEIN DC 18F'0' 00633001 00634001 702 \* 00635001 703 \* 00636001 00637001 704 INPUTTAA L 0006C0 5830 500C 0000C R3.BB 0006C4 4A30 3000 00000 705 ΑН R3,0(,R3) 00638001 0006C8 5930 5004 00004 00639001 706 R3,R 0006CC 47D0 7488 00A4C 707 BNH ERROR38 BUFFER OVERFLOW 00640001 0006D0 1B99 702 SR R9. R9 00641001 TYP.X'03 00642001 0006D2 9103 501A 0001A TM 709 0006D6 4740 711E 006E2 ВМ INPUT1 00643001 710 0006DA 4190 9001 00644001 00001 LA R9.1(,R9) **BOOLEAN VALUE** 711 0006DE 47F0 713A 006FE INPUT3 00645001 В 713 \* 00646001 TYP.X'01' ТМ 00647001 0006E2 9101 501A 0001A 714 INPUT1 0006E6 4780 712E 006F2 00648001 INPUT2 715 ΒZ 0006EA 4190 9004 00004 716 INPUT1AA LA INTEGER VALUE 00649001 R9.4(,R9) 0006EE 47F0 713A 00650001 006FE В INPUT3 718 \* 00651001 9996F2 9129 C9C2 OPTSW(R12), X'20' REAL VALUE TEST IF LONG/SHORT 00652001 99902 719 TNPUT2 TM 0006F6 4710 7126 006EA INPUT1AA 00653001 720 во **SHORT** 0006FA 4190 9008 LONG 00654001 00008 R9,8(,R9) 721 LA 722 00655001 0006FE 5840 5004 00004 723 INPUT3 00656001 000702 0690 724 INPUT31 BCTR R9.0 00657001 R9, INOUTMOV 000704 4490 7464 00A28 725 EX 00658001 000708 4190 9001 00659001 00001 726 LA R9,1(,R9) 00070C 1A49 727 AR R4, R9 INCREASE CHARACTER POINTER 00660001 00070E 5040 5004 00004 728 ST R4,R 00661001 000712 9200 72F5 008B9 729 RECOI,0 CLEAR FLAG BIT 00662001 MVI R13, SAVEIN+4 R14, R12, 12(R13) 000716 58D0 70B8 9967C 730 00663001 00664001 00071A 98EC D00C 0000C 731 R:8 005C4 USING IHIGPRIT, R8 00665001 732 \*\* TXA531W Prior USING at statement 651 overridden by this USING TXA301I Record 665 in SYSD.ALGOL FRT.ASM(IHIGPR) 00071E 58D0 8344 9998 733 R13, SAVEOI+4 99666991 734 DROP R8 00667001

GPR IHIGPRTN, PUT/GET, ALGOL F LIB
Active USINGs: PGCF,R5 IHIGPRTN+X'5C4',R7 PAGE 10 Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 00008 735 B 8(,R15) 736 \* 00668001 00669001 000722 47F0 F008

	4/10					736 *	D	o(,KI3)		00669001
						737 *	THUNK	IN		00670001
						738 *				00671001
						739 *		PROCEDURE INVOKE CALL ACT		00672001
						740 *		HIS CALL THUNKIN, WHICH	ASSIGN INPUT AS ACTUAL	00673001
						741 *	PROCE	DURE TO LIST		00674001
000726						742 * 743	CNOP	2,4		00675001 00676001
000726	05F0					744 THUNKIN	BALR	R15,0		00676001
000728		F008			80000	745	L	R8,8(,R15)		00678001
00072C	47F0	F00C			0000C	746	В	12(,R15)		00679001
						747 *				00680001
000730	00000	5C4				748	DC	A(IHIGPRIT)	INFORMATION CHARACTERISE OUTPUT	00681001
000734	0000	2010				749 *		PROJECTIVE CO.		00682001
000734 000738				000A9	00010	750 751	MVI STM	PROLPBN(FSB),X'00'		00683001 00684001
00073C					000A0 000D8	752	В	PBT,LAT,PROLREG(FSB) CAP2(,FSB)		00685001
000750	4710	БОБО			00000	753 *		CAI 2(31 30)		00686001
						754 *	OPEN	DATASET SYSUT2		00687001
						755 *				00688001
						756 *		VE MAIN FOR ONE DCB AND (		00689001
						757 *	AND F	OR NOTTAB IF NOT CREATED	BEFORE	00690001
						758 *	CAVE	(14 13) !TUTCDDOD   EVE	2 1 SCVCDATE SCVCTIME!	00691001
000740	17F0	F026			00026	759 IHIGPROP 760+IHIGPROP		38(0,15)	L 2.1 &SYSDATE &SYSTIME'  BRANCH AROUND ID	00692001 01-SAVE
000744		1020			00020	761+	DC	AL1(33)	LENGTH OF IDENTIFIER	01-SAVE
000745		9C7D7	D9D6E	07		762+	DC		08/17/12 13.2' IDENTIFIER	01-SAVE
000765	F1					763+	DC	CL1'1'	IDENTIFIER	01-SAVE
000766	90EC	D00C			0000C	764+	STM	14,12,12(13)	SAVE REGISTERS	01-SAVE
						765 *				00693001
00076A	187F		D . 7	00740		766	LR	R7,R15		00694001
				00740 00000		767 768		IHIGPROP, R7		00695001 00696001
00076C	Sana		K:0	00000	00950	769	ST	IHADCB, R8 R13, SAVEOP+4		00697001
000700					00930 0094C	770	LA	R13, SAVEOP		00698001
000774					00830	771	LA	R2, IHIGPRCL		00699001
000778					0011C	772	L	R9, IORLST(R12)		00700001
00077C					0001C	773	L	R9, GP(, R9)		00701001
000780	5020	9000			00000	774	ST	R2,0(,R9)		00702001
000784	BF2F	C0B0			000B0	775	ICM	R2, B'1111', ANOTTAB(R12)	NOTTAB ALREADY GETMAINED ?	00703001
000788					007AE	776	BP	OPGP1	YES, BRANCH	00704001
00078C	4100	0400			00400	777	LA	R0,1024		00705001
						778 *	CETMA	TN D 11/ (0)	CET AREA FOR NOTTAR	00706001
						779 780+*		<mark>IN R,LV=(0)</mark> 2 RELEASE 4 VERSION 10	GET AREA FOR NOTTAB	00707001
000790	1510	705/			00794	781+	BAL	1,*+4	INDICATE GETMAIN	01-GETMA 01-GETMA
000794		7054			00754	782+	SVC	10	ISSUE GETMAIN SVC	01-GETMA
000754	OHOH					783 *	300		1550E GETTIALIV 5VC	00708001
000796	501C	00B0			000B0	784	ST	R1, ANOTTAB(R12)	SAVE GETMAINED AREA ADDR	00709001
00079A	1821					785	LR	R2,R1	ANOTTAB TO R2	00710001
000700	1001					786	LR	R9, R1	ANOTTAB TO R9	00711001
00079C	1991						1 4	R9,8(,R9)		00712001
00079E	4190				80000	787	LA			00712001
00079E 0007A2	4190 5090	2000			00000	788	ST	R9,0(,R2)	STORE POINTER NXE IN NOTTAB	00713001
00079E 0007A2 0007A6	4190 5090 4190	2000 93F8			00000 003F8	788 789	ST LA	R9,0(,R2) R9,1016(,R9)		00713001 00714001
00079E 0007A2	4190 5090 4190	2000 93F8			00000	788 789 790	ST	R9,0(,R2)	STORE POINTER NXE IN NOTTAB STORE POINTER NXEF IN NOTTAB	00713001 00714001 00715001
00079E 0007A2 0007A6 0007AA	4190 5090 4190 5090	2000 93F8 2004			00000 003F8 00004	788 789 790 791 *	ST LA ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)	STORE POINTER NXEF IN NOTTAB	00713001 00714001 00715001 00716001
00079E 0007A2 0007A6	4190 5090 4190 5090	2000 93F8 2004			00000 003F8	788 789 790	ST LA	R9,0(,R2) R9,1016(,R9)		00713001 00714001 00715001 00716001 00717001
00079E 0007A2 0007A6 0007AA	4190 5090 4190 5090	2000 93F8 2004			00000 003F8 00004	788 789 790 791 * 792 OPGP1	ST LA ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)	STORE POINTER NXEF IN NOTTAB	00713001 00714001 00715001 00716001
00079E 0007A2 0007A6 0007AA	4190 5090 4190 5090	2000 93F8 2004			00000 003F8 00004	788 789 790 791 * 792 OPGP1 793 *	ST LA ST LA GETMA	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL	STORE POINTER NXEF IN NOTTAB GET AREA FOR DCB AND DECB	00713001 00714001 00715001 00716001 00717001 00718001
00079E 0007A2 0007A6 0007AA 0007AE	4190 5090 4190 5090 4100 4510	2000 93F8 2004 006C			00000 003F8 00004	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+	ST LA ST LA GETMA OS/VS BAL	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00716001 00717001 00718001 00719001 01-GETMA 01-GETMA
00079E 0007A2 0007A6 0007AA 0007AE	4190 5090 4190 5090 4100 4510	2000 93F8 2004 006C			00000 003F8 00004 0006C	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+	ST LA ST LA GETMA OS/VS	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 16	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75	00713001 00714001 00715001 00716001 00717001 00718001 00719001 01-GETMA 01-GETMA
00079E 0007A2 0007A6 0007AA 0007AE	4190 5090 4190 5090 4100 4510 0A0A	2000 93F8 2004 006C			00000 003F8 00004 0006C	788 789 790 791 * 792 OPGP1 793 * 794 795+* 797+ 798 *	ST LA ST LA GETMA OS/VS BAL SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00716001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001
00079E 0007A2 0007A6 0007AA 0007AE 0007B2 0007B6	4190 5090 4190 5090 4100 4510 0A0A 5010	2000 93F8 2004 006C			00000 003F8 00004 0006C	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799	ST LA ST LA GETMA OS/VS BAL SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001
00079E 0007A2 0007A6 0007AA 0007AE	4190 5090 4190 5090 4100 4510 0A0A 5010	2000 93F8 2004 006C			00000 003F8 00004 0006C	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799	ST LA ST LA GETMA OS/VS BAL SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00716001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001
00079E 0007A2 0007A6 0007AA 0007AE 0007B2 0007B6	4190 5090 4190 5090 4100 4510 0A0A 5010	2000 93F8 2004 006C			00000 003F8 00004 0006C	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799	ST LA ST LA GETMA OS/VS BAL SVC ST LR	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001
00079E 0007A2 0007A6 0007AA 0007AE 0007B2 0007B6	4190 5090 4190 5090 4100 4510 0A0A 5010	2000 93F8 2004 006C			00000 003F8 00004 0006C	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB R8,R1	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001
00079E 0007A2 0007A6 0007AA 0007AE 0007B2 0007B6	4190 5090 4190 5090 4100 4510 0A0A 5010 1881	2000 93F8 2004 006C 7076	7254	00000	00000 003F8 00004 0006C 007B6	788 789 790 791 * 792 OPGP1 793 * 794 795+ 796+ 797+ 798 * 799 800 801 * 802 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB R8,R1	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC	00713001 00714001 00715001 00715001 00716001 00717001 00719001 01-GETMA 01-GETMA 00720001 00721001 00723001 00724001 00725001 00725001
00079E 0007A2 0007A6 0007AA 0007AE 0007B2 0007B6 0007BC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810	2000 93F8 2004 006C 7076 5000 8000 C11C	7254	00000	00000 003F8 00004 0006C 007B6	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB R8,R1 FER DCBMODEL	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00724001
90079E 9007A2 9007AA 9007AE 9007BE 9007BS 9007BC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810	2000 93F8 2004 006C 7076 5000 8000 C11C 1020	7254	00000	00000 003F8 00004 0006C 007B6 00000	788 789 790 791 * 792 OPGP1 793 * 794 795+ 796+ 797+ 798 * 799 800 801 * 802 * 803 * 805 806	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB R8,R1 FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO	00713001 00714001 00715001 00715001 00716001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00725001 00725001 00725001 00727001 00728001
00079E 0007A2 0007A6 0007AA 0007AE 0007B2 0007B6 0007BC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810	2000 93F8 2004 006C 7076 5000 8000 C11C 1020	7254	00000	00000 003F8 00004 0006C 007B6 00000	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75	00713001 00714001 00715001 00715001 00716001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00725001 00725001 00726001 00725001 00728001 00728001
90079E 9007A2 9007AA 9007AE 9007BE 9007BS 9007BC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810	2000 93F8 2004 006C 7076 5000 8000 C11C 1020	7254	00000	00000 003F8 00004 0006C 007B6 00000	788 789 790 791 * 792 OPGP1 793 * 794 795+* 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 0720001 00721001 00722001 00723001 00724001 00725001 00725001 00727001 00727001 00728001 00729001
90079E 9007AC 9007AA 9007AE 9007BE 9007BC 9007BC 9007BC 9007BC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810	2000 93F8 2004 006C 7076 5000 8000 C11C 1020	7254	00000	00000 003F8 00004 0006C 007B6 00000	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD ((R8),(OUTIN))	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET	00713001 00714001 00715001 00715001 00716001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00725001 00725001 00725001 00725001 00725001 00728001 00728001 00729001 00729001
90079E 9007AE 9007AA 9007AE 9007BE 9007BC 9007BC 9007BC 9007CC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810 5010	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038	7254	<b>00000</b>	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 794 795+ 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 808 808 809 810+	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD ((R8),(OUTIN)) 0,4	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET ALIGN LIST TO FULLWORD	00713001 00714001 00715001 00715001 00716001 00719001 001-GETMA 01-GETMA 00720001 00721001 00722001 00725001 00725001 00725001 00725001 00725001 00725001 00729001 00729001 00730001 00730001
90079E 9007AE 9007AA 9007AE 9007BE 9007BC 9007BC 9007BC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810 5010	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038	7254	00000	00000 003F8 00004 0006C 007B6 00000	788 789 790 791 * 792 OPGP1 793 * 795+ 795+ 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL  0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR.	00713001 00714001 00715001 00715001 00716001 00719001 00719001 01-GETMA 00720001 00721001 00722001 00725001 00725001 00727001 00727001 00727001 00727001 00727001 0072901 00730001 00730001 00730001 0070701
90079E 9007AE 9007AA 9007AE 9007BE 9007BC 9007BC 9007BC 9007CC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000	2000 93F8 2004 006C 7076 5000 8000 6011C 11020 8038	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 794 795+ 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 808 808 809 810+	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD ((R8),(OUTIN)) 0,4	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET ALIGN LIST TO FULLWORD	00713001 00714001 00715001 00715001 00716001 00719001 00719001 01-GETMA 00720001 00721001 00722001 00725001 00725001 00727001 00727001 00727001 00727001 00727001 0072901 00730001 00730001 00730001 0070701
90079E 9007AC 9007AA 9007AE 9007BE 9007BC 9007BC 9007BC 9007CC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810 60000 5081	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD ((R8),(OUTIN)) 0,4 1,*+8 A(0)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR.	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00724001 00725001 00725001 00728001 00728001 00730001 00730001 00731001 007-OPEN 01-OPEN
90079E 9007AC 9007AA 9007AE 9007BE 9007BC 9007BC 9007BC 9007CC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038	7254		00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST	00713001 00714001 00715001 00715001 00716001 00717001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00725001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 9000 0000 1000	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 815+ 816 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL  0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC	00713001 00714001 00715001 00715001 00716001 00719001 00719001 01-GETMA 00720001 00721001 00721001 00722001 00725001 00725001 00726001 00727001 00727001 00727001 00727001 0072901 0072901 0072901 00707001 00707001 00707001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030	7254		00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ?	00713001 00714001 00715001 00715001 00718001 00719001 001-GETMA 01-GETMA 01-GETMA 00720001 00723001 00724001 00725001 00725001 00725001 00726001 00727001 00728001 0072901 00705001 00705001 00705001 00705001 00705001 00705001 00705001
90079E 9007AC 9007AA 9007AE 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810 90000 5081 9287 0A13 9110 4710	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 808 * 809 810+ 811+ 815+ 816 * 817 818	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH	00713001 00714001 00715001 00715001 00717001 00718001 00719001 01-GETMA 01-GETMA 01-GETMA 00720001 00721001 00724001 00725001 00725001 00726001 00728001 00728001 00730001 00730001 0079001 0079001 0079001 0079001 0079001 0079001 0073001
90079E 9007A2 9007AA 9007AA 9007AB 9007B2 9007BC 9007BC 9007CC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 5810 5010 4510 00006 5081 9287 0A13 9110 4710 18BC	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038 007D8	788 789 790 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 808 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817 818 819	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4  10  R1,ADCB R8,R1  FER DCBMODEL  0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) 88,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ?	00713001 00714001 00715001 00715001 00715001 00719001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00725001 00725001 00725001 00729001 00729001 00730001 00730001 0070PEN 01-OPEN
90079E 9007AC 9007AA 9007AE 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 5810 5010 4510 00006 5081 9287 0A13 9110 4710 18BC	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000	7254	00000	00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038	788 789 790 791 * 792 OPGP1 793 * 795+ 795+ 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 815+ 816 * 817 818 819 820	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH	00713001 00714001 00715001 00715001 00715001 00719001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00725001 00727001 00728001 00729001 00739001 00739001 0079001 0079001 0079001 0079001 0079001 0079001 00730001 00730001 00730001 00730001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 18BC 47FC	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030 7080	7254	00000	00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038 0007D8 0007D8	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817 818 819 820 821 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR BO LR	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED	00713001 00714001 00715001 00715001 00718001 00719001 001-GETMA 01-GETMA 01-GETMA 00720001 00723001 00724001 00725001 00725001 00725001 00726001 00727001 00728001 0072901 00798001 00798001 00798001 00798001 00798001 00798001 00798001 00798001 00798001 00731001 00731001 00731001 00731001 00737001
90079E 9007A2 9007AA 9007AA 9007AB 9007B2 9007BC 9007BC 9007CC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 18BC 47FC	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030 7080	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038 007D8	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 815+ 816 * 817 818 819 820 821 * 822 OPGP2	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4  10  R1,ADCB R8,R1  FER DCBMODEL  0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) 88,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH	00713001 00714001 00715001 00715001 00718001 00719001 001-GETMA 01-GETMA 01-GETMA 01-GETMA 00720001 00724001 00725001 00725001 00725001 00725001 00726001 00727001 00728001 00730001 00730001 00730001 0073001 0073001 00737001 0073001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 18BC 47FC	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030 7080	7254	00000	00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038 0007D8 0007D8	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817 818 819 820 821 * 822 OPGP2 823 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR B	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12) R0,BE	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH	00713001 00714001 00715001 00715001 00715001 00719001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00725001 00725001 00725001 00725001 00726001 00726001 00796001 00796001 00796001 00796001 00796001 00797001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 18DC 47FC	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030 7080	7254	00000	00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038 0007D8 0007D8	788 789 790 791 * 792 OPGP1 793 * 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 815+ 816 * 817 818 819 820 821 * 822 OPGP2	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR B	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH GET AREA FOR RECORD BUFFER	00713001 00714001 00715001 00715001 00718001 00719001 001-GETMA 01-GETMA 01-GETMA 01-GETMA 00720001 00724001 00725001 00725001 00725001 00725001 00726001 00727001 00728001 00730001 00730001 00730001 0073001 0073001 00737001 0073001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 18DC 47FC 5800	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030 7080 0270 5010	7254	00000	00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038 0007D8 0007D8	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 805 806 807 808 * 809 810+ 811+ 812+ 813+ 815+ 816 * 817 818 819 820 821 * 822 OPGP2 823 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR B	R9,0(,R2) R9,1016(,R9) R9,4(,R2) R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12) R0,BE IN R,LV=(0)	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH GET AREA FOR RECORD BUFFER	00713001 00714001 00715001 00715001 00715001 00717001 00718001 01-GETMA 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00725001 00725001 00727001 00728001 00739001 00731001 00731001 00731001 00730001 00730001 00731001 00731001 00737001 00737001 00738001 00737001 00738001 00737001 00737001 00737001 00737001 00737001
90079E 9007AC 9007AA 9007AB 9007BC 9007BC 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5810 00000 5081 9287 0A13 9110 4710 18DC 47FC 5800	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 8030 7080 0270 5010	7254	00000	00000 003F8 00004 0006C 0007B6 00000 00994 0011C 00020 00038 0007D8 0007D8 0007F0 00270 00010	788 789 790 791 792 792 792 794 794 795+* 796+ 797+ 798 80 801 802 803 804 805 806 807 808 807 808 809 810+ 811+ 812+ 813+ 814+ 815+ 816 817 818 819 820 821 822 0PGP2 823 824 825+*	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR BO LR B	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12) R0,BE  IN R,LV=(0) 2 RELEASE 4 VERSION 10	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIORR  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REGI W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH GET AREA FOR RECORD BUFFER 2/21/75	00713001 00714001 00715001 00715001 00718001 00719001 001-GETMA 01-GETMA 01-GETMA 00720001 00723001 00724001 00725001 00725001 00726001 00727001 00728001 00730001 0079001 0079001 0079001 0079001 0079001 0079001 0079001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001 00730001
90079E 9007AE 9007AA 9007AB 9007BE 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00006 5081 9287 0413 9110 4710 4710 4710 4710 4710 4710 4710 4	2000 93F8 2004 006C 7076 5000 8000 C11C 1020 8038 7098 8000 1000 1000 5010 7088	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038 007D8 0007D8 0007F0 00010	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817 818 819 820 821 * 822 OPGP2 823 * 824 825+* 827+ 828 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR B L GETMA OS/VS BAL SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4  10  R1,ADCB R8,R1  FER DCBMODEL  0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) 88,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12) R0,BE  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH GET AREA FOR RECORD BUFFER 2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00715001 00715001 00719001 00719001 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00725001 00725001 00727001 00728001 00729001 00729001 00731001 00701001
90079E 9007A6 9007A6 9007A6 9007B6 9007B6 9007B6 9007B6 9007B6 9007C0 9007C0 9007C0 9007C0 9007C0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0 9007E0 9007F0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 47FC 5800 4510 0A0A 5010	2000 93F8 2004 006C 7076 5000 8000 1020 8038 7098 8000 1000 0270 5010 70B8	7254	00000	90909 903F8 90904 9096C  907B6 90994 9011C 90029 907D8 9097D8 90000	788 789 790 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817 818 820 821 * 822 OPGP2 823 * 824 825+* 826+ 827+ 828* 829	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR B L GETMA OS/VS	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10  R1,ADCB R8,R1  FER DCBMODEL 0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) R8,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12) R0,BE  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10 R1,BB	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHIORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH  GET AREA FOR RECORD BUFFER 2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC	00713001 00714001 00715001 00715001 00718001 00719001 001-GETMA 01-GETMA 01-GETMA 00720001 00723001 00725001 00725001 00725001 00726001 00728001 00729001 00798001 00798001 00798001 00798001 00798001 00798001 00798001 00731001 01-OPEN 01-O
90079E 9007AE 9007AA 9007AB 9007BE 9007BC 9007BC 9007BC 9007CC 9007CC 9007CC 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007D0 9007E0 9007E0 9007E0 9007E0	4190 5090 4190 5090 4100 4510 0A0A 5010 1881 D257 5810 5010 4510 00000 5081 9287 0A13 9110 4710 47FC 5800 4510 0A0A 5010	2000 93F8 2004 006C 7076 5000 8000 1020 8038 7098 8000 1000 0270 5010 70B8	7254	00000	00000 003F8 00004 0006C 007B6 00000 00994 0011C 00020 00038 007D8 0007D8 0007F0 00010	788 789 790 791 * 792 OPGP1 793 * 794 795+* 796+ 797+ 798 * 799 800 801 * 802 * 803 * 804 805 806 807 808 * 809 810+ 811+ 812+ 813+ 814+ 815+ 816 * 817 818 819 820 821 * 822 OPGP2 823 * 824 825+* 827+ 828 *	ST LA ST LA GETMA OS/VS BAL SVC ST LR TRANS MVC L L ST OPEN CNOP BAL DC ST MVI SVC TM BO LR B L GETMA OS/VS BAL SVC	R9,0(,R2) R9,1016(,R9) R9,4(,R2)  R0,DCBAREAL  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4  10  R1,ADCB R8,R1  FER DCBMODEL  0(DCBMODLN,R8),DCBMODEL R1,IORLST(,R12) R1,ER(,R1) R1,DCBSYNAD  ((R8),(OUTIN)) 0,4 1,*+8 A(0) 88,0(1,0) 0(1),135 19  DCBOFLGS,DCBOFOPN OPGP2 R13,R12 FSAERR+41*4(R12) R0,BE  IN R,LV=(0) 2 RELEASE 4 VERSION 10 1,*+4 10	STORE POINTER NXEF IN NOTTAB  GET AREA FOR DCB AND DECB  2/21/75  INDICATE GETMAIN ISSUE GETMAIN SVC  INSERT SYNAD ADDR TO IHITORER  OPEN DATASET  ALIGN LIST TO FULLWORD LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. STORE INTO LIST MOVE IN OPTION BYTE ISSUE OPEN SVC  OPEN SUCCESSFUL ? YES, BRANCH OPEN FAILED  BE=BUFFER LENGTH GET AREA FOR RECORD BUFFER 2/21/75  INDICATE GETMAIN	00713001 00714001 00715001 00715001 00715001 00717001 00719001 01-GETMA 01-GETMA 01-GETMA 00720001 00721001 00722001 00723001 00725001 00725001 00727001 00728001 00727001 00728001 00731001 00731001 00731001 01-OPEN

Active USINGs: IHADCB,R8 IHIGPRTN+X'740',R7 PGCF,R5

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X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
000802 5010 5010
                             00010
                                      831
                                                                                     BE DEFINE BUFFER END
                                                                                                                       00744001
000806 9680 501B
                       0001B
                                      832
                                                    ΟI
                                                          PG, PG0
                                                                                     PG0=1 DATASET OPEN
                                                                                                                       00745001
00080A 58D0 7210
                             00950
                                      833
                                                          R13, SAVEOP+4
                                                                                                                       00746001
                                                    L
                                      834 *
                                                                                                                       00747001
                                      835
                                                    RETURN (14,12)
                                                                                                                       00748001
00080E 98EC D00C
                              0000C
                                      836+
                                                          14,12,12(13)
                                                                                              RESTORE THE REGISTERS
                                                    BR
000812 07FF
                                      837+
                                                          1/
                                                                                              RETURN
                                                                                                                       01-RETUR
                                      838
                                                                                                                       00749001
                                      839 *
                                                    OPEN EXIT ROUTINE
                                                                                                                       00750001
                                                                                                                       00751001
                                      840
000814 4820 803E
                             0003E
                                      841 IHIGPRDX LH
                                                          R2, DCBBLKSI
                                                                                   DCBBLKSI = 0 ?
                                                                                                                       00752001
000818 1222
                                      842
                                                          R2, R2
                                                                                                                       00753001
                                                    LTR
                             99826
00081A 4780 70E6
                                      843
                                                    ΒZ
                                                          EXIT1
                                                                                    BLKSIZE = 0
                                                                                                                       00754001
                                                                                    BLKSIZE NOT ZERO
00081F 5020 5010
                             99919
                                      844
                                                    ST
                                                          R2.BF
                                                                                                                       00755001
                                                                                                                       00756001
000822 47F0 70EE
                             0082E
                                      845
                                                    В
                                                          EXIT1+8
                                                                                                                       00757001
                                      846
000826 5820 5010
                              00010
                                      847 EXIT1
                                                          R2.BE
                                                                                    BE=2048 TO BLKSIZE
                                                                                                                       00758001
00082A 4020 803E
                             0003E
                                      848
                                                    STH
                                                          R2.DCBBLKSI
                                                                                                                       00759001
                                      849 *
                                                                                                                       00760001
                                      850
                                                    RETURN
                                                                                                                       00761001
00082E 07FE
                                      851+
                                                    BR
                                                          14
                                                                                              RETURN
                                                                                                                       01-RETUR
                                                                                                                       00762001
                                      852
                                      853 *
                                                    CLOSE DATASET SYSUT2
                                                                                                                       00763001
                                      854 *
                                                                                                                       00764001
                                                    RELEASE DCB, DECB AND I/O BUFFER
                                      855
                                                                                                                       00765001
                                                                                                                       00766001
                                      856
                                                    CALLED FROM IHGIOR - CLOSEPE
                                      857
                                                                                                                       00767001
                                                          (14,12),, 'IHIGPRCL LEVEL 2.1 &SYSDATE &SYSTIME'
                                      858 IHIGPRCL SAVE
                                                                                                                       00768001
000830 47F0 F026
                             00026
                                      859+IHIGPRCL B
                                                                                              BRANCH AROUND ID
                                                          38(0,15)
                                                                                                                       01-SAVE
000834 21
                                      860+
                                                    DC
                                                          AI 1 (33)
                                                                                              LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
000835 C9C8C9C7D7D9C3D3
                                      861+
                                                    DC
                                                          CL32'IHIGPRCL LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                       01-SAVE
                                                          CL1'1'
                                                                                              IDENTIFIER
                                                                                                                       01-SAVE
000855 F1
                                      862+
                                                    DC
000856 90EC D00C
                             0000C
                                      863+
                                                    STM
                                                          14,12,12(13)
                                                                                              SAVE REGISTERS
                                      864 *
                                                                                                                       00769001
00085A 187F
                                      865
                                                    LR
                                                          R7, R15
                                                                                                                       00770001
                                                    USTNG THTGPRCL . R7
                 R:7 00830
                                      866
                                                                                                                       00771001
00085C 50D0 7120
                             00950
                                                          R13, SAVEOP+4
                                                                                                                       00772001
                                      867
                                                    ST
000860 41D0 711C
                             0094C
                                                          R13, SAVEOP
                                                                                                                       00773001
                                      868
                                                    LA
000864 5850 COAC
                              000AC
                                                          R5, ADSTAB(,R12)
                                      869
                                                                                                                       00774001
000868 5850 5000
                             00000
                                      870
                                                          R5,0(,R5)
                                                                                                                       00775001
00086C 4160 0010
                              00010
                                      871
                                                    LA
                                                          R6.16
                                                                                                                       00776001
000870 5880 5000
                             00000
                                      872
                                                    L
                                                          R8, ADCB
                                                                                                                       00777001
                                                                                                                       00778001
                                      873
                                      874
                                                    CLOSE ((R8))
000874
                                      875+
                                                    CNOP
                                                                                              ALIGN LIST TO FULLWORD 01-CLOSE
                                                          0,4
000874 4510 7040
                             0087C
                                      876+
                                                    BAL
                                                         1,*+8
                                                                                              LOAD REG1 W/LIST ADDR
                                                                                                                      01-CLOSE
                                                                                              OPTION AND DCB ADDRESS
999878 99999999
                                      877+
                                                    DC
                                                          A(0)
                                                                                                                      01-CLOSE
00087C 5081 0000
                                                                                              STORE DCB ADDRESS
                             00000
                                                    ST
                                                          R8,0(1,0)
                                      878+
                                                                                                                       01-CLOSE
                                                                                              MOVE IN OPTION BYTE
000880 9280 1000
                       00000
                                      879+
                                                    MVI
                                                          0(1),128
                                                                                                                       01-CLOSE
000884 0A14
                                      880+
                                                    SVC
                                                          20
                                                                                              ISSUE CLOSE SVC
                                      881 *
                                                                                                                       00780001
000886 5810 500C
                                                                                    BUFFER BEGIN ADDR TO R1
                              0000C
                                      882
                                                    L
                                                          R1,BB
                                                                                                                       00781001
00088A 5800 5010
                             00010
                                      883
                                                                                                                       00782001
                                                          RO.BE
00088E 1B01
                                      884
                                                    SR
                                                                                    BUFFER LENGTH TO RO
                                                                                                                       00783001
                                                          RO,R1
                                      885
                                                                                                                       00784001
                                      886 *
                                                    FREEMAIN FOR RECORD BUFFER
                                                                                                                       00785001
                                      887
                                                                                                                       00786001
                                      888
                                                    FREEMAIN R, LV=(0), A=(1)
                                                                                                                       00787001
                                                    OS/VS2 RELEASE 3 VERSION -- 10/25/74
                                      889+
                                                                                                                       01-FREEM
000890 4110 1000
                             00000
                                      890+
                                                          1,0(0,1)
                                                                                              CLEAR HI ORDER BYTE
                                                                                                                       01-FREEM
                                      891+
                                                                                              ISSUE FREEMAIN SVC
000894 0A0A
                                      892
                                                                                                                       00788001
                                      893 *
                                                    FREEMAIN FOR DCB AND DECB
                                                                                                                       00789001
                                                                                                                       00790001
                                      894
                                      895
                                                    FREEMAIN R, LV=DCBAREAL, A=ADCB
                                                                                                                       00791001
                                                    OS/VS2 RELEASE 3 VERSION -- 10/25/74
                                      896+
000896 0700
                                      897+
                                                    CNOP
                                                         0,4
                                                                                                                       01-FREEM
000898 47F0 7070
                             008A0
                                      898+
                                                    R
                                                          *+8
                                                                                              BRANCH AROUND LENGTH
                                                                                                                       01-FREEM
00089C 0000006C
                                                          A(DCBAREAL)
                                      899+
                                                    DC
                                                                                              LENGTH
                                                                                                                       01-FREEM
0008A0 5800 706C
                             0089C
                                      900+
                                                          0.*-4
                                                                                              LOAD SP AND LV
                                                                                                                       01-FREEM
                                                    L
                                                          1,ADCB
                                                                                              LOAD AREA ADDRESS
0008A4 5810 5000
                              00000
                                      901+
                                                                                                                       01-FREEM
0008A8 4110 1000
                              00000
                                                                                              CLEAR HI ORDER BYTE
                                      902+
                                                    LA
                                                          1,0(0,1)
                                                                                                                       01-FREEM
0008AC 0A0A
                                      903+
                                                    SVC
                                                         10
                                                                                              ISSUE FREEMAIN SVC
                                                                                                                       01-FREEM
                                      904
                                                                                                                       00792001
                                                          R13, SAVEOP+4
0008AE 58D0 7120
                             00950
                                                    ī.
                                      905
                                                                                                                       00793001
                                                                                                                       00794001
                                      906
                                                    RETURN (14,12)
                                      907
                                                                                                                       00795001
                                                                                                                       01-RETUR
0008B2 98EC D00C
                             0000C
                                      908+
                                                          14,12,12(13)
                                                                                              RESTORE THE REGISTERS
0008B6 07FF
                                      909+
                                                    BR
                                                          14
                                                                                              RETURN
                                                                                                                       01-RFTUR
                                      910 *
                                                                                                                       00796001
                                      911 RECPG
0008B8 00
                                                          X'00'
                                                                                                                       00797001
                                                    DC
0008B9 00
                                      912 RECOI
                                                    DC
                                                          X'00
                                                                                                                       00798001
                                      913 TYPC
                                                          X'00'
                                                                                                                       00799001
0008BA 00
0008BB 00
                                      914 PARTST
                                                    DC
                                                          X'00'
                                                                                                                       00800001
0008BC 00000000000000000
                                      915 SAVEPG
                                                    DC
                                                          18F'0
                                                                                                                       00801001
                                                          18F'0
                                                                                                                       00802001
000904 00000000000000000
                                      916 SAVEOI
                                                    DC
00094C 000000000000000000
                                      917 SAVEOP
                                                    DC
                                                                                                                       00803001
                                      918
                                                                                                                       00804001
                                      919 DCBMODEL DCB
                                                          DSORG=PS, MACRF=(RP, WP), DDNAME=SYSUT2, RECFM=V, NCP=1,
                                                                                                                      X00805001
                                                          EXLST=ADCBEXIT
                                                                                                                       00806001
                                      921+*
                                                                   DATA CONTROL BLOCK
                                                                                                                       01-DCB
                                                                                                                       01-DCB
                                      922+*
99994
                                      923+DCBMODEL DC
                                                          0F'0'
                                                                                   ORIGIN ON WORD BOUNDARY
                                                                                                                       01-DCB
```

00854001

Active USINGs: IHIGPRTN+X'830',R7 IHADCB,R8 PGCF,R5

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 Loc Object Code 925+\* DIRECT ACCESS DEVICE INTERFACE 01-DCB 000994 00000000000000000 927+ DC BL16'0' FDAD, DVTBL 01-DCB KEYLÉ, DEVT, TRBAL 0009A4 00000000 DC 928+ A(0)01-DCB 930+\* COMMON ACCESS METHOD INTERFACE 01-DCB 0009A8 00 932+ DC AL1(0) BUENO 01-DCB 0009A9 000001 AL3(1) AL2(0) 933+ DC **BUFCB** 01-DCB 0009AC 0000 DC BUEL 01-DCB 934+ 0009AE 4000 935+ DC BL2'01000000000000000' DSORG 01-DCB IOBAD 0009B0 00000001 936+ DC 01-DCB 938+ FOUNDATION EXTENSION 01-DCB 0009B4 00 940+ BL1'00000000' 01-DCB DC BFTEK, BFLN, HIARCHY AL3(1) BL1'01000000' EODAD 0009B5 000001 941+ DC 01-DCB 0009B8 40 942+ DC RECEM 01 - DCB 0009B9 0009EC 943+ DC AL3(ADCBEXIT) **EXLST** 01-DCB FOUNDATION BLOCK 01-DCB 945+ DDNAME 0009BC E2E8E2E4E3F24040 947+ DC CL8'SYSUT2' 01-DCB 0009C4 02 948+ DC BL1'00000010' **OFLGS** 01-DCB BI 1 '000000000' TELG 000905 00 949+ DC 01-DCB BL2'0010010000100100' 0009C6 2424 MACR 950+ DC 01-DCB 952+\* BSAM-BPAM-QSAM INTERFACE 01-DCB 0009C8 00 954+ DC BL1'00000000' RER1 01-DCB 000909 000001 955+ DC AL3(1) CHECK, GERR, PERR 01-DCB 0009CC 00000001 956+ DC SYNAD 01-DCB A(1) 0009D0 0000 957+ DC н'ю' CIND1, CIND2 01-DCB 0009D2 0000 958+ DC AL2(0) BLKSIZE 01-DCB 0009D4 00000000 959+ DC F'0' WCPO, WCPL, OFFSR, OFFSW 01-DCB 0009D8 00000001 DC A(1) TOBA 960+ 01-DCB 0009DC 01 DC NCP 01-DCB 961+ AL1(1) 0009DD 000001 DC AL3(1) EOBR, EOBAD 01-DCB 962+ 964+ BSAM-BPAM INTERFACE 01-DCB 0009E0 00000001 966+ DC A(1) **EOBW** 01-DCB 0009E4 0000 DC H'0 DIRCT 01-DCB 967+ AL2(0) 0009E6 0000 968+ DC LRECL 01-DCB 0009E8 00000001 DC CNTRL, NOTE, POINT 01-DCB 969+ 00058 970 DCBMODLN EQU \*-DCBMODEL L'DCB 00807001 00808001 971 \* 0009EC 0F'0' 00809001 972 DC 0009EC 85 973 ADCBEXIT DC X'85' 00810001 0009ED 000814 974 AL3(IHIGPRDX) 00811001 975 \* 00812001 EXTERNAL ADDRESSES 976 00813001 977 00814001 0009F0 00000740 978 AOPENPG DC A(IHIGPROP) 00815001 00816001 980 \* \* \* \* \* \* \* \* 00817001 981 00818001 982 \* THIS ROUTINE IS USED INSTEAD OF CAP1 IN ESA 00819001 00820001 983 984 00821001 985 \* 00822001 0009F4 0580 986 CAP1GP BALR R8,0 00823001 USING \*,R8 R:8 009F6 987 00824001 \*\* TXA533W USING range overlaps pr or USING at statement 866 \*\* TXA301I Record 824 in SYSD .ASM(IHIGPR) 0009F6 583D 00C8 000C8 988 R3, RASPT(FSB) 00825001 0009FA 4133 0008 00008 989 R3,8(R3) 00826001 LA 0009FE 593D 00D0 000D0 990 R3. RASPB(FSB) 00827001 000A02 47B0 8050 00A46 991 ERROR36 **RASOVERFLOW** 00828001 BNL 000A06 50A0 3000 00000 992 ST R10,0(,R3) 00829001 000A0A 50F0 3004 00004 993 ST R15.4(,R3) 00830001 000A0E 503D 00C8 000C8 994 R3, RASPT(FSB) 00831001 ST 000A12 5880 8026 00A1C 995 R8. ADRTHUNK 00832001 DROP 00833001 996 R8 000A16 07F8 997 BR TO THUNK ROUTINE 00834001 R8 998 00835001 000A18 00010000 999 TWOP16 DC F'65536' 2\*\*16 00836001 000A1C 00000000 1000 ADRTHUNK DC A(0) 00837001 1001 \* 00838001 1002 LTORG 00839001 000A20 000A20 0004 1003 00840001 1004 000A22 D200 4000 8000 00000 00000 1005 OUTINMOV MVC 0(1,R4),0(R8) 00841001 000A28 D200 8000 4000 00000 00000 1006 INOUTMOV MVC 0(1,R8),0(R4) 00842001 DATASET CLOSED 1007 00843001 1008 ERROR10 LR 00844001 000A2E 18DC R13, R12 ADDR OF FSA TO R13 000A30 47FC 01F4 FSAERR+10\*4(R12) 001F4 1009 В 00845001 1010 \* 00846001 000A34 18DC 1011 ERROR14 LR R13, R12 ADDR OF FSA TO R13 00847001 00848001 00849001 1012 \* NO ENTRY IN NOTTAB IE BACK-000A36 47FC 0204 00204 В FSAERR+14\*4(R12) WARD REPOSITIONING NOT DEFINED 1013 1014 00850001 000A3A 18DC 1015 ERROR20 LR ADDR OF FSA TO R13 00851001 R13, R12 1016 DIFFERENT TYPE OR KIND OF 00852001 PARAMETER AT ACTUAL AND FORMAL 000A3C 47FC 021C 0021C 1017 B FSAERR+20\*4(R12) 00853001

1018

GPR IHIGPRTN, PUT/GET, ALGOL F LIB
Active USINGs: IHIGPRTN+X'830',R7 PGCF,R5

Loc	Object Code	Addr1	Addr2	Stmt	Source	Staten	nent	X390 3.1.04 2012/08	/17 13.21
000A40	18DC			1019 E		LR	R13,R12	ADDR OF FSA TO R13 NUMBER OF PARAMETERS DOES NOT	00855001 00856001
000A42	47FC 0220		00220	1021 1022		В	FSAERR+21*4(R12)	CORRESPOND BETWEEN DECLARATION AND CALL	00857001 00858001
000A46	1900			1023		LR	R13,R12	TOO MANY NESTED BLOCKS, PROCS AND PARAMETER CALLS. INTERNAL	00859001 00860001
	47FC 025C		0025C			В	FSAERR+36*4(R12)	(RETURN ADDRESS STACK) OVERFLOW	00861001 00862001
000A4C	18DC 47FC 0264		00264	1027 E		LR B	R13,R12 FSAERR+38*4(R12)	ADDR OF FSA TO R13 GET/PUT BUFFER OVERFLOW	00863001 00864001
000A4E			00204	1029	* ERROR39	LR	, ,	ADDRESS OF FSA TO R13	00865001 00866001
	47FC 0268		00268	1031		В	R13,R12 FSAERR+39*4(R12)	GET/PUT IDENTIFICATION OUT OF RANGE	00867001 00868001
000A34	4/FC 0208		00200	1033		Б	F3AERR+39'4(R12)	KANGE	00869001
000A58			00270	1035 E		LR	R13,R12	RECURSIVELY USE OF PUT/GET	00870001 00871001
	47FC 0278		00278	1036		В	FSAERR+43*4(R12)	OUTPUT/INPUT	00872001 00873001
000000 000000		00000	0001C	1038 F		DSECT DS	Α		00874001 00875001
000004				1040 F		DS DS	A		00876001
000008 00000C				1041 F 1042 E		DS	A A		00877001 00878001
000010				1043 E		DS	A		00879001
000014 000018				1044 N	NOTEADR S	DS DS	A H		00880001 00881001
00001A				1046 1		DS	C		00882001
00001B				1047 F		DS	С		00883001
				1048 * 1049 *		MAP DO	CB		00884001 00885001
				1050 * 1051	*	PRINT	NOGEN		00886001 00887001
				1052 * 1053	*	DCBD	DSORG=BS, DEVD=(DA)		00888001 00889001
				1560 * 1561	*	PRINT	GEN		00890001 00891001
				1562 * 1563 *		MAP DE	ECB		00892001 00893001
				1564	*	DEAD	DECR CE ME_I		00894001
000058	00000000			1565 1566+	DECB	READ DC	DECB, SF, MF=L F'0'	EVENT CONTROL BLOCK	00895001 02-IHBRD
00005C				1567+		DC	X'00'	TYPE FIELD	02-IHBRD
00005D 00005E				1568+ 1569+		DC DC	X'80' AL2(0)	TYPE FIELD LENGTH	02-IHBRD 02-IHBRD
	00000000			1570+		DC	A(0)	DCB ADDRESS	02-IHBRD
000064	00000000			1571+		DC	A(0)	AREA ADDRESS	02-IHBRD
000000	0000000			1572.		DC			
000068	00000000			1572+ 1573 *	*	DC	A(0)	RECORD POINTER WORD	02-IHBRD
000068	00000000	0006C		1573 <sup>3</sup> 1574 [	DCBAREAL				02-IHBRD 00896001 00897001
000068	00000000		00120	1573 * 1574 [ 1575 *	OCBAREAL *		A(0)	RECORD POINTER WORD	02-IHBRD 00896001
	00000000		00120	1573 * 1574 E 1575 * 1576 F 1577	OCBAREAL * FSAAREA	EQU DSECT	A(0)	RECORD POINTER WORD	02-THBRD 00896001 00897001 00898001 00899001 00900001
	00000000		00120	1573 * 1574 E 1575 * 1576 F 1577 1578=*	OCBAREAL * FSAAREA	EQU DSECT COPY	A(0) *-IHADCB FSAREA	RECORD POINTER WORD L'I/O CONTROL BLOCKS	02-IHBRD 00896001 00897001 00898001 00899001 00900001
	00000000		00120	1573 * 1574 E 1575 * 1576 F 1577 1578=* 1579=* 1580=*	DCBAREAL * FSAAREA * *	EQU DSECT COPY COMPON	A(0) *-IHADCB  FSAREA  JENT ID - 360S-LM-532 AL	RECORD POINTER WORD L'I/O CONTROL BLOCKS	02-IHBRD 00896001 00897001 00898001 00899001 00900001 00001001 00002001
	00000000		00120	1573 * 1574 E 1575 * 1576 F 1577 1578=* 1580=* 1581=*	DCBAREAL * FSAAREA * *	EQU DSECT COPY COMPON	A(0) *-IHADCB FSAREA	RECORD POINTER WORD L'I/O CONTROL BLOCKS	02-IHBRD 00896001 00897001 00898001 00899001 00900001 00001001 00002001 00003001 00004001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577 1578=* 1580=* 1581=* 1582=*	DCBAREAL  * FSAAREA  * * * * * *	EQU DSECT COPY COMPON	*-IHADCB  FSAREA  MENT ID - 360S-LM-532 ALG  5 - LEVEL 2.1	RECORD POINTER WORD L'I/O CONTROL BLOCKS	02-IHBRD 00896001 00897001 00898001 00899001 00001001 00002001 00003001 00004001 00005001
	0000000		00120	1573 * 1574 C 1575 * 1576 F 1577 1578= 1589= 1581= 1582= 1583= 1584= 158	DCBAREAL  * FSAAREA  * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS	A(0) *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00001001 00002001 00004001 00005001 00006001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577 1578=* 1580=* 1581=* 1582=* 1583=*	OCBAREAL  * FSAAREA  * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS	*-IHADCB  FSAREA  MENT ID - 360S-LM-532 ALG  5 - LEVEL 2.1	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00001001 00002001 00003001 00004001 00005001
	0000000		00120	1573 ** 1574 C 1575 ** 1576 F 1577 1578 =  1589 =  1581 =  1582 =  1585 =  1585 =  1586 =  1587 =	OCBAREAL  * FSAAREA  * * * * * * * * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS	A(0) *-IHADCB  FSAREA  MENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1 ************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY	02-IHBRD 00896001 00897001 00898001 00898001 00001001 00002001 00003001 00004001 00005001 00007001 00007001 00007001 00009001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577 F 1578 = 1582 = 1582 = 1583 = 1586 = 1586 = 1586 = 1586 = 1588 = 15	DCBAREAL * FSAAREA * * * * * * * * * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS ****** COMMON FSAREA	A(0) *-IHADCB  FSAREA JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1 ************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00902001 00001001 00002001 00005001 00005001 00005001 00006001 00008001 00009001 00010001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577 * 1578 = 1580 = 1582 = 1585 = 1585 = 1585 = 1588 = 15	CCBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA *******	A(0) *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00002001 00003001 00005001 00005001 00007001 00008001 00009001 00010001 00011001 00012001
	0000000		00120	1573 ** 1574 E 1575 ** 1576 F 1577 ** 1578 =  1580 =  1581 =  1582 =  1583 =  1584 =  1585 =  1586 =  1586 =  1587 =  1589 =  1589 =  1599 =  1591 =	OCBAREAL * FSAAREA * * * * * * * * * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA *******	A(0) *-IHADCB  FSAREA  MENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1 ************************************	RECORD POINTER WORD L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00001001 00002001 00005001 00005001 00006001 00007001 00008001 00010001 00011001 00013001 00013001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577 * 1578 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1589 = 1599 = 15	CCBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 AL 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00001001 00002001 00003001 00005001 00005001 00005001 00009001 00010001 00013001 00013001 00013001 00013001 00015001
	0000000		00120	1573 * 1574 E 1575 * 1576 = 1577	CCBAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE ADDRES	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00001001 00002001 00003001 00005001 00005001 00007001 00009001 00010001 00012001 00013001 00014001 00015001 00015001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577 * 1578 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1589 = 1599 = 15	CCBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE ADDRES	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 AL 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00900001 00001001 00002001 00003001 00005001 00005001 00005001 00009001 00010001 00013001 00013001 00013001 00013001 00015001
	0000000		00120	1573 * 1574 E 1575 * 1576 F 1577	CEBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA I MODULE ADDRES SUBROL	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 00896001 00897001 00898001 00898001 00001001 00002001 00003001 00005001 00005001 00005001 00006001 00009001 0001001 00013001 00013001 00015001 00015001 00015001 00015001
	0000000	00000	00120	1573 ** 1574 [ 1575 ** 1576 ** 1577 1578 ** 1580 ** 1581 ** 1582 ** 1583 ** 1584 ** 1588 ** 1588 ** 1589 ** 1590 ** 1591 ** 1593 ** 1594 ** 1595 ** 1596 ** 1597 ** 1598 ** 1598 ** 1599 ** 1591 ** 1593 ** 1594 ** 1595 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 ** 1598 **	CCBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA 1 MODULE ADDRES SUBROU EQU	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALI 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 08896001 00897001 00898001 00990001 00001001 00005001 00005001 00005001 00005001 00005001 00013001 00013001 00015001
000000	0000000	00000	00120	1573 ** 1574 [ 1575 ** 1577   1578   1579   1580   1581   1582   1583   1584   1585   1586   1587   1599   1591   1592   1593   1594   1595   1596   1597   1598   1599   1599   1690	CCBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA I MODULE ADDRES SUBROL EQU SAVE A	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0895601 0089701 0089801 0089901 00001001 00005001 00005001 00005001 00005001 0001500
	0000000	00000	00120	1573 * 1574 E 1575 * 1576 E 1577	CCBAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE ADDRES SUBROU EQU SAVE A DS	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 08896001 00898001 00898001 00900001 00000001 0000000000
000000	0000000	00000	00120	1573 * 1574 E 1575 * 1576 E 1577 E 1588 = 1588 = 1588 = 1588 = 1589 = 1599 = 1599 = 1599 = 1599 = 1599 = 1600 = 1601 = 1602 = 1603 = 1575 = 1603 = 1603 = 1575 = 1603 = 1575 = 1603 = 1603 = 1603 = 1575 = 1603 = 1603 = 1603 = 1575 = 1603 = 1603 = 1575 = 1603 = 1603 = 1603 = 1603 = 1603 = 1575 = 1603 = 16	CCBAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE ADDRES SUBROU EQU SAVE A DS	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 08896001 00899001 00899001 00000001 00000001 0000000000
000000	0000000	00000	90120	1573 * 1574 E 1575 * 1576 E 1577	OCBAREAL * FSAAREA * * * * * * * * * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA I MODULE ADDRES SUBROL EQU SAVE A DS EQU DS	********************  THAT IS IMMEDIATELY ACCES DURING THE EXECUTION  SED BY MEANS OF R13 OR JTINES) BY R12  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0889601 0089701 0089801 0089901 0000201 00005001 00005001 00005001 00005001 00015001001 00015001 00015001 00015001 00015001 00015001 00015001 00015
000000	0000000	00000	99129	1573 * 1574 E 1575 * 1576 E 1577 E 1588 = 1588 = 1588 = 1588 = 1589 = 1599 = 1599 = 1599 = 1599 = 1599 = 1600 = 1601 = 1602 = 1603 = 1575 = 1603 = 1603 = 1575 = 1603 = 1575 = 1603 = 1603 = 1603 = 1575 = 1603 = 1603 = 1603 = 1575 = 1603 = 1603 = 1575 = 1603 = 1603 = 1603 = 1603 = 1603 = 1575 = 1603 = 16	CEBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA I MODULE ADDRES SUBROL EQU SAVE A DS EQU DS	A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALI 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 08896001 00899001 00899001 00000001 00000001 0000000000
000000 000000 000048	0000000	00000		1573 * 1574 E 1575 * 1576 = 1577	CEBAREAL  FSAAREA   *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA *******  DATA T MODULE ADDRES SUBROL EQU DS MISCEL EQU	**-FSAREA  **-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALI  5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 08896001 00899001 00899001 00001001 00001001 00005001
000000	0000000	00000 00000 00048		1573 * 1574 E 1575 * 1576 E 1577	CEBAREAL FSAAREA  * * * * * * * * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE ADDRES SUBROL EQU SAVE A DS EQU DS MISCEL EQU DS	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0889601 0089701 0089801 0009001 000 000 000 000 000 000 000 0
000000 000000 000048	00000000	00000 00000 00048 00090 00098		1573 ** 1574 [ 1575 ** 1577   1578   1577   1578   1581   1582   1583   1585   1586   1587   1588   1589   1591   1592   1593   1594   1595   1596   1606   1607   1608   1608   1608   1609	CCBAREAL FSAAREA  * * * * * * * * * * * * * * * * * *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******* DATA T MODULE ADDRES SUBROU EQU DS EQU DS MISCEL EQU DS EQU DS EQU DS	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0895601 00895601 0089701 0089801 0090001 00001001 000050001 00005001 000050001 000050001 000050001 000050001 000050001 0
000000 000000 000048		00000 00048 00098 00098		1573 * 1574 E 1575 * 1576 * 1577 E 1578 = 1588 = 1588 = 1588 = 1589 = 1599 = 1599 = 1599 = 1600 = 16	CCBAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS *******  COMMON FSAREA *******  DATA T MODULE ADDRES SUBROU EQU DS EQU DS MISCEL EQU DS EQU DC EQU	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0895601 09895601 0989501 0989901 0990001 00001001 000050001 00005001 000050001 000050001 000050001 000050001 000050001 0
000000 000000 000048		00000 00000 00048 00090 00098		1573 ** 1574 [ 1575 ** 1577   1578   1577   1578   1581   1582   1583   1585   1586   1587   1588   1589   1591   1592   1593   1594   1595   1596   1606   1607   1608   1608   1608   1609   1609	CCBAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS *******  COMMON FSAREA *******  DATA T MODULE ADDRES SUBROU EQU DS EQU DS MISCEL EQU DS EQU DC EQU	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0895601 00895601 0089701 0089801 0090001 00001001 000050001 00005001 000050001 000050001 000050001 000050001 000050001 0
000000 000000 000048 000090 000098		00000 00048 00098 00098		1573 ** 1574 [ 1575 ** 1577   1578   1577   1578   1580   1581   1582   1583   1585   1586   1587   1589   1591   1592   1593   1594   1595   1596   1606   1607   1608   1608   1608   1609   1609   1611   1612   1613   1614   1613   1614	CCBAREAL FSAAREA  * * * * * * * * * * * * * * * * * *	EQU DSECT COPY  COMPON STATUS *******  COMMON FSAREA *******  DATA 1 MODULE ADDRES SUBROU EQU DS EQU DS EQU DS EQU DC EQU DC EQU DS EQU	**-FSAREA  **-FSAREA  **********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0899601 00899601 00899001 00901001 00001001 00005001
000000 000000 000048 000090 000098		00000 00000 00048 00090 00098 0009C		1573 ** 1574 [ 1575 ** 1577 [ 1578	PROLREG	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA ******  DATA I MODULE ADDRES SUBROL EQU DS	**-FSAREA  A(0)  *-IHADCB  FSAREA  JENT ID - 360S-LM-532 ALC 5 - LEVEL 2.1  ***********************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0899601 00899601 0089801 00990001 00001001 00005001
000000 000000 000048 000090 000098		00000 00000 00048 00090 00098 0009C		1573 ** 1574 E 1575 ** 1577 E 1578 = 1578 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1589 = 1599 = 1599 = 1599 = 1599 = 1599 = 1600 =	PESAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ******* COMMON FSAREA *******  DATA T MODULE ADDRES SUBROU EQU DS MISCEL EQU DS EQU DC EQU EQU DC EQU EQU DS EQU DS	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0899601 00899601 0089801 00990001 00001001 00005
000000 000000 000048 000090 000098 00009C 0000A0		00000 00000 00048 00090 00098 0009C		1573 ** 1574 [ 1575 ** 1577   1578   1577   1578   1580   1581   1582   1583   1585   1586   1587   1589   1591   1592   1593   1594   1595   1596   1606   1607   1608   1606   1607   1608   1608   1609   1601   1611   1612   1613   1614   1615   1616   1615   1616   1617   1618	PESAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS *******  COMMON FSAREA *******  DATA T MODULE ADDRES SUBROU EQU DS EQU DS EQU DS EQU DC EQU DC EQU DC EQU DS	**-FSAREA  IENT ID - 360S-LM-532 ALI  IENT ID -	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0895601 00895601 0089901 00901001 00001001 00005
000000 000000 000048 000090 000098	00000090	00000 00000 00048 00090 00098 0009C		1573 ** 1574 E 1575 ** 1577 E 1578 = 1578 = 1588 = 1588 = 1588 = 1588 = 1588 = 1588 = 1589 = 1599 = 1599 = 1599 = 1599 = 1599 = 1600 =	PESAREAL  FSAAREA  *  *  *  *  *  *  *  *  *  *  *  *  *	EQU DSECT COPY COMPON STATUS ********  COMMON FSAREA *******  DATA T MODULE ADDRES SUBROU EQU DS EQU DS MISCEL EQU DS EQU DC EQU EQU DC EQU EQU DS HALFWC DS	**************************************	RECORD POINTER WORD  L'I/O CONTROL BLOCKS  GOL F LIBRARY  **********************************	02-IHBRD 0899601 00899601 0089801 00990001 00001001 00005

00000

1716+R0

EQU

01-IEZRE

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 000A9 \*-FSAREA STORAGE FOR CALLED PBN 00044001 1621=PROLPBN EQU 0000A9 00 1622= DC X'00' \*-FSAREA 00045001 000AA 1623=EIGHT EQU CONST FOR REDUCING RAS 00046001 H'8 0000AA 0008 00047001 1624= DC 00048001 1625= 0000AC 00049001 1626= DS AAAAC 1627=ADSTAB EQU \*-FSARFA ADDR OF DSTABLE 00050001 0000AC 1628= DS IN THE OBJECT PROGRAM 00051001 000B0 1629=ANOTTAB EOU \*-FSAREA ADDR OF NOTE TABLE 00052001 0000B0 (INSERTED BY THE OPEN ROUTINE) 00053001 1630= DS 00054001 1631= 000B4 1632=IHIFSAST EQU 00055001 000B4 1633=PGOPSW EQU \*-FSAREA PROGRAM CHECK OLD PSW 00056001 9999B4 1634= DS 2F 99957991 000BC 1635=FSAPICA \*-FSAREA OLD PICA ADDR 00058001 EQU 0000BC 00000000 00059001 1636= F'0 DC 1637=SCRCS 000C0 EQU \*-FSAREA SEMICOLON NUMBER 00060000 ааааса 1638= DS 00061001 000C2 1639=DTSW EOU \*-FSAREA **OPTION SWITCHES** 00062001 000C2 1640=OPTSW DTSW 00063001 EOU 0000C2 00 00064001 1641= X'00 DUMP-80, TRACE-40, SHORT-20 DC ERROR CODE FOR ERROR ROUTINE 000C3 1642=FSAERCOD EQU \*-FSAREA 00065001 0000C3 1643= 00066001 1644= 00067001 RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 1645= 99968991 00069001 1646= 0000C4 1647= 00070001 DS 000C4 1648=IHIFSARS EQU 00071001 000C4 1649=RASSTART ADDR OF FIRST ENTRY IN RAS-8 00072001 \*-FSAREA 0000C4 1650= DS 00073001 000C8 1651=RASP1 EOU \*-FSAREA RAS POINTER FROM TOP 00074001 0000C8 00075001 1652= DS 000CC 1653=RASEND EQU \*-FSAREA ADDR OF LAST ENTRY IN RAS+8 00076001 0000CC 1654= 00077001 DS 000D0 1655=RASPB EQU \*-FSAREA RAS POINTER FROM BOTTOM 00078001 аааара 1656= DS 99979991 1657= 00080001 1658= LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES 00081001 00082001 1659= 999904 1660=BRI TST DS 00083001 000D4 1661=CAP1 EQU \*-FSAREA FIRST PART CAPS 00084001 0000D4 4700 0000 00000 1662= NOP 00085001 000D8 -FSAREA 1663=CAP2 SECOND PART CAPS 00086001 EOU 0000D8 4700 0000 00000 1664= NOP 00087001 000DC 1665=PROLOGP \*-FSAREA PROLOGUE FORMAL PARAMETER ENTRY 00088001 EQU 000DC 1666=PROLOGFP **PROLOGP** 00089001 EQU 9999DC 4799 9999 aaaaa 1667= NOP 9999991 000E0 1668=PROLOG -FSAREA PROLOGUE PROGRAM USUAL ENTRY 00091001 EQU 0000E0 4700 0000 00000 1669= NOP 00092001 000E4 1670=RETPROG EQU \*-FSAREA DISPLACEMENT RETURN PROGRAM 00093001 0000E4 4700 0000 00000 1671= NOP 00094001 EPILOGUE PROGRAM.PROCEDURE ENTRY 000E8 1672=EPILOGP EOU \*-FSAREA 00095001 0000E8 4700 0000 00000 00096001 1673= NOP 000EC 1674=EPILOGB -FSAREA EPILOGE PROGRAM, BETA-BLOCK ENTRY 00097001 EQU 0000EC 4700 0000 00000 NOP 00098001 1675= 000F0 1676=EPILPR3 \*-FSAREA EPILOGUE PROGRAM ENTRY 3 00099001 EQU 1677= 0000F0 4700 0000 00000 NOP 00100001 999F4 1678=CSWF1 FOU \*-FSARFA FTRST PART CSWES 99191991 0000F4 4700 0000 00000 1679= NOP 00102001 000F8 1680=CSWE2 EQU FSAREA SECOND PART CSWES 00103003 0000F8 4700 0000 00000 00104001 1681= NOP 000FC 1682=LOADPF EQU \*-FSARFA LOAD PRECOMPILED PROC ROUTINE 00105001 0000FC 4700 0000 00000 1683= NOP 00106001 1684=TRACE \*-FSAREA 00107001 00100 EOU 000100 D200 0000 0000 00000 MVC 0(0),0 00108001 00000 1685= 000106 4700 0000 00109001 00000 1686= NOP 00010A 4700 0000 00000 1687= NOP 00110001 0010E 1688=TERMNTE EOU \*-FSARFA NORMAL TERMINATION EXIT 00111001 00010E 4700 0000 00000 1689= NOP 0 00112001 00112 \*-FSAREA 00113001 1690=BCR EQU 000112 0700 VARIABLE CONDITIONAL BRANCH 0011400 1691= **BCR** 00115001 1692=GETMSTO \*-FSAREA 00114 EQU 000114 4700 0000 00000 1693= NOP a 00116001 1694= 00117001 1695=VALUCALL \*-FSAREA 00118 EOU 00118001 000118 4700 0000 NOP 00119001 00000 1696= 0011C 1697=IORLST \*-FSAREA 00120001 EQU 00011C 4700 0000 00000 1698= NOP 0 00121001 1699= 99122991 001CC 1700=FSAERR DISPL FOR ERROR LIST EQU X'1CC' 00123001 00124001 1701= 1702= DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125003 00126001 1703= 0020C 1704=OUTOFB EQU FSAFRR+4\*16 00127001 00218 1705=NUMBIND EOU FSAERR+4\*19 00128001 1706=ARRAYBD FSAERR+4\*15 00208 EOU 00129001 0026C 1707=ERROR40 EQU FSAERR+4\*40 00130001 00224 1708=0ERR22 FSAERR+4\*22 00131001 00210 1709=ENDLESL FSAERR+4\*17 00132001 EQU 00133001 00134001 00220 1710=0ERR21 FSAERR+4\*21 EQU 1711= 1712 \* 00901001 REGISTER EQUATES 00902001 1713 \* 00903001 1714 \* 1715 **IEZREGS** 00904001

D-Loc	Object Code	Addr1 Addr2	Stmt	Source	State	ement	X390 3.1.04 2012/08/17 13	3.21
		00001	1717+R1	1	EQU	1	01-18	F7RF
		00002	1718+R2		EQU	2	01-18	
		00003	1719+R3		EQU	3	01-18	
		00004	1720+R4		EQU	4	01-18	
		00005	1721+R5	5	EQU	5	01-IE	EZRE
		00006	1722+R6	5	EQU	6	01-IE	EZRE
		00007	1723+R7	7	EQU	7	01-IE	EZRE
		00008	1724+R8	3	EQU	8	01-IE	EZRE
		00009	1725+R9	9	EQU	9	01-IE	EZRE
		0000A	1726+R1	10	EQU	10	01-IE	EZRE
		0000B	1727+R1	11	EQU	11	01-IE	EZRE
		0000C	1728+R1	12	EQU	12	01-IE	EZRE
		0000D	1729+R1	13	EQU	13	01-IE	EZRE
		0000E	1730+R1	14	EQU	14	01-IE	EZRE
		0000F	1731+R1	15	EQU	15	01-IE	EZRE
			1732 *				00905	5001
			1733		END		00906	6001

OI II					5,552	C. 033										
Symbol	Length	Value	Id 7	Гуре Asm	Program	Defn	Refer	ences				X390	3.1.04	2012	/08/17	13.21
=H'4'	2	00000A20	00000001	нн		1003	164	254	519							
ADCB		00000A20		A A		1039	144	182	494	799M	872	901				
ADCBEXIT		000009EC		XX		973	943	102		,,,,,,	0, 2	501				
ADRTHUNK	4	00000A1C	00000001	АА		1000	354M	680M	995							
ADSTAB		000000AC		U		1627	134	322	485	654	869					
ANOTTAB		000000B0		U		1629	211	549	775	784M						
AOPENPG BB		000009F0 0000000C		A A A A		978 1042	180 223	251	252	259	543	567	704	920M	882	
BE		000000000		AA		1042	413	822	830	831M	844M	847	883	02311	002	
BRRST		00000010 0000009C		Ü		1611	1612	022	030	03111	04411	047	003			
CAP1GP		000009F4	00000001	I		986	371B	686B								
CAP2		000000D8		U		1663	449B	752B								
CI		00000000		U		98	196	533								
DCBAREAL DCBBIT0		0000006C		U		1574	792	899	1101	1204	1221	1222	1224	1226	1250	1262
DCBBIIA	1	00000080		U		1075	1161 1282	1169 1286	1181 1301	1204 1338	1231 1393	1233 1417	1234 1456	1236 1460	1259 1473	1262
DCBBIT1	1	00000040		U		1076	1162	1170	1183	1205	1206	1215	1231	1233	1235	1236
							1264	1282	1284	1286	1304	1305	1306	1341	1342	1393
							1419	1462	1464	1476	1520					
DCBBIT2	1	00000020		U		1077	1163	1171	1184	1185	1186	1205	1206	1210	1216	1231
							1232	1237	1266	1287	1288	1309	1310	1311	1345	1346
DCBBIT3	1	00000010		U		1078	1394 1164	1424 1184	1465 1186	1481 1187	1523 1205	1526 1218	1238	1269	1287	1290
Debbilo	-	00000010		Ü		1070	1313	1314	1315	1349	1350	1394	1426	1429	1431	1467
							1482	1523	1527							
DCBBIT4	1	00000008		U		1079	1172	1219	1239	1270	1292	1297	1298	1318	1319	1353
	_						1354	1356	1357	1395	1434	1483	1523	1528		
DCBBIT5	1	00000004		U		1080	1173 1324	1220 1325	1242 1326	1243 1360	1272 1361	1292 1362	1294 1363	1295 1395	1298 1436	1322 1439
							1469	1485	1518	1300	1301	1302	1303	1393	1430	1439
DCBBIT6	1	00000002		U		1081		1221	1222	1225	1242	1244	1273	1329	1330	1331
							1332	1366	1367	1368	1369	1396	1442	1487	1529	
DCBBIT7	1	00000001		U		1082	1166	1221	1223	1225	1246	1277	1334	1335	1372	1373
	_						1375	1376	1445	1471	1488	1531				
DCBBLKSI DCBFDAD		0000003E 00000005		H H C C		1490 1102	841 1105	848M								
DCBFDAD		000000994		FF		923	804	970								
DCBMODLN		00000058	0000001	U .		970	804	370								
DCBOFLGS		00000030	FFFFFFE	ВВ		1258	817									
DCBOFOPN		00000010		U		1269	817									
DCBSYNAD		00000038		A A		1450	807M									
DECB		00000058	FFFFFFE	FF		1566	150	263	500	570	579					
DTSW EN		000000C2 00000018		U U		1639 104	1640 162	517								
ER		00000010		Ü		106	806	317								
ERROR10	2	00000A2E	00000001	I		1008	493B									
ERROR14		00000A34		I		1011	553B	585B								
ERROR20		00000A3A		I		1015	332B	334B	338B	348B	393B	665B	669B			
ERROR21 ERROR36		00000A40 00000A46		I I		1019 1024	330B 991B	662B								
ERROR38		00000A4C		I		1027	414B	707B								
ERROR39		00000A52		I		1030	202B	204B	539B	541B						
ERROR43		00000A58		I		1035	139B	327B	490B	659B						
EXIT1		00000826	00000001	I		847		845B								
FCTVALST		00000090		U		1607		1610	F20M	F 24 M						
FPRØ FSAERR		00000000 00001CC		U U		93 1700		194M 1009R			1021R	1025B	1028B	1032R	1036B	1704
. 37.2	_	00000100		Ü		2,00	1705	1706	1707		1709		10202	10325	10505	270.
FSAREA	1	00000000	FFFFFFD	U		1597	1602	1607	1609	1610	1611	1614	1621	1623	1627	1629
							1633	1635	1637	1639	1642		1651	1653	1655	1661
							1663	1665	1668	1670	1672		1676	1678	1680	1682
FSB	1	000000D		U		436	1684 447	1688 448	1690 449	1692 750	1695 751	1697 752	988	990	994	
GET1		00000000	00000001	I		523	497B	440	442	750	731	732	200	550	224	
GET11			00000001			531	527B									
GET11A			00000001			532	529B									
GET2		000004AE		I		537	525B									
GET2A			00000001 00000001			538 551	535B	EEOD								
GET3 GP		000004D6	10000001	U		105	556B 773	558B								
IHADCB			FFFFFFE			1058	145U	495U	768U	1143	1190	1255	1384	1399	1412	1508
							1514	1541	1574							
IHIGPRCL			00000001			859	89	771	866U							
IHIGPRDX		00000814		I		841	974 86	40111	EOZII	60711						
IHIGPRGT IHIGPRIT			00000001 00000001			468 637	86 87	481U 633U			732U	748				
IHIGPROP		00000740		Ī		760	88	767U	978	0020	7320	740				
IHIGPROT			00000001	I		304	85	300U		367U	423U	445				
IHIGPRPT			00000001			117	84	113U	130U	236U	273U					
INOUTMOV		00000A28		I		1006	725X									
INPUTTAA		000006C0		I		704 714	698B									
INPUT1 INPUT1AA			00000001 00000001			714 716	710B 720B									
INPUT2		000000EA		I		719	715B									
INPUT3			00000001	I		723	712B	717B								
IORLST		0000011C		U		1697	161	195	516	532	772	805				
LAT		0000000C		U		435	448	751 160M	177	F40**						
NOTEADR OPGP1		00000014 000007AE	FFFFFFF 00000001	A A I		1044 792	167 776B	169M	173	510M						
OPGP1			00000001			822	818B									
OPTSW		00000710		Ū		1640	189	406	526	719						
OUTINMOV		00000A22		I		1005	416X									
OUTPUTAA		00000350		I		389	383B	2405	2445							
OUTPUT01 OUTPUT1		000002A4 000002C4	00000001	I I		343 351	336B 344B	340B	341B							
OUTPUT1		000002C4		I		351	344B 349B									
OUTPUT25			00000001			395	390B									

<b>U</b>				2,552											
Symbol	Length Valu	e Id	Type Asm	Program	Defn	Refer	ences				X390 3	3.1.04	2012,	/08/17	13.21
OUTPUT3	1 000003	78 00000001	I		401	397B									
OUTPUT3A		30 00000001			403	407B									
OUTPUT4		88 00000001			406	402B									
OUTPUT5		94 00000001			410	399B	404B								
PARTST		3B 00000001	ХХ		914	342M	389	394M							
PBT	1 000000		U		434	448	751								
PG		1B FFFFFFF			1047	141	146	177M	492	496	514M	832M			
PGCF		00 FFFFFFF			1038	1370	3250	488U	657U						
PG0 PG1	1 000000 1 000000		U U		110 111	141 146	492 496	832 514							
PROLOG	1 000000		U		1668	240B	597B	314							
PROLOGP	1 000000		Ü		1665	1666	337.5								
PROLPBN	1 000000		U		1621	447M	750M								
PROLREG	1 000000		U		1614	448M	751M								
PUTNOT		DE 00000001			213	218B	220B								
PUT1		BA 00000001			180	142B									
PUT2 PUT3		98 00000001 C4 00000001			167 186	147B 165B	178B								
PUT31		E0 00000001			194	190B	1700								
PUT31A		E4 00000001			195	192B									
PUT4	4 000000	F2 00000001	I		200	188B									
PUT4A		F6 00000001			201	198B									
PUT41		32 00000001			223	215B	250	440	44014	F 4 F 14	706	700	72011		
R		04 FFFFFFF Na	A A U		1040	225M 990	250	410	419M	545M	706	723	728M		
RASPB RASPT	1 000000 1 000000		U		1655 1651	988	994M								
RE		08 FFFFFFF			1041	588M	JJ <del>4</del> 11								
RECOI		39 00000001			912	326	328M	420M	658	660M	729M				
RECPG	1 000008	38 00000001	ХХ		911	138	140M	260M	489	491M	609M				
RØ	1 000000	90	U		1716	200M	201M	203	207	537M	538M	540	542	560M	777M
						792M	822M		884M						
R1	1 000000	91	U		1717	170M	186M		234	510	523M	524	561M	589M	592
						784 831	785 882M	786 884	799	800	805M	806M	807	829	830M
R10	1 000000	24	U		1726	212M	213M		217	219	221	370	550M	551M	552
KIO	1 000000		U		1720	555	557	560	685	992	221	370	33011	33111	332
R12	1 000000	ЭС	U		1728	132M	134	161	189	195	211	233M	249M	272M	320M
						322	361M	382M	391	406	422M	482M	485	516	526
						532	549	591M	606M	652M	654	681M		719	731M
						772	775	784	805	819	820	869	1008	1009	1011
						1013	1015	1017	1019	1021	1024	1025	1027	1028	1030
R13	1 000000	an.	U		1729	1032 121	1035 122M	1036 131	1 2 2 M	232M	233	237M	240	247M	249
KIS	1 000000	טט	U		1/29	271M	272	274M	133M 308	309M	315	319	321M	360M	361
						368M	379M		382	421M	422	424M	472	473M	483
						484M	590M		594M	597	605M	606	608M	641	642M
						648	653M		681	683M	694M	696	697	730M	731
						733M	769	770M	819M	833M	867	868M	905M	1008M	1011M
D1.4	1 000000	<b>.</b> .			1720			1024M				2750	2614	2014	4224
R14	1 000000	ØE.	U		1730	163M 518M	181M 534M		233M 606M	249M 610B	272M 681M	275B 696M	361M 731M	381M	422M
R15	1 000000	a F	U		1731	113U	117	128D	129	161M	162M	163B	180M	181B	195M
	1 000000		Ū		2,32	196M			238D	240M	246U	248D	273U	279D	329
						331	333	335	337	339	345	351	354	371M	373U
						380D	426	441M	442	443	464U	468	479D	480	516M
						517M	518B	532M	533M	534B	593U	595D	597M	604U	607U
						613D	661	664	666	680	686M	688U	695D	735	744M
R2	1 000000	22	U		1718	745 167M	746 168M	766 169	865 187M	993 191	194	200	216M	217	391M
ΝZ	1 000000	<i>52</i>	U		1/10	392	411M	412M	413	524M	528	531	537	554M	555
						771M	774	775M	785M	788	790	841M	842M	844	847M
						848									
R3	1 000000	93	U		1719	252M	253	255M	256	257	258	259M	266	567M	573
						584	586	587M	588	704M	705M	706	988M	989M	990
D/I	1 000000	24	U		1720	992 223M	993 224M	994 225	2504	251M	253	254M	256	410M	111
R4	1 000000	04	U		1/20	418M	419	543M	250M 544M	251M 545	723M	727M	728	1005	411 1006
R5	1 000000	95	U		1721	134M	135M		160M	164M	322M	323M	325U	485M	486M
						488U	515M		654M	655M	657U	869M	870M		
R6	1 000000		U		1722	136M	216	324M	487M	554	656M	871M			
R7	1 000000	97	U		1723	129M	130U		318U	381M	480M	481U	649M	651U	696M
DO.	4 000000	20			1704	766M	7670		866U	100.	22 ***	265	20011	20.4	24.00
R8	1 000000	00	U		1724	144M 317	145U 367U		170 392	182M 423U	234M 425D	265 442M	300U 494M	304 495U	316D 506
						561	572	592M	633U	637	649	650D	682U	687D	732U
						734D	745M		800M	804	813	872M	878	986M	987U
						995M	996D	997B	1005	1006					
R9	1 000000	99	U		1725	211M	212	214	382M	395M	398M	403M	408M	412	415M
						416	417M		549M	550	552	697M	708M	711M	716M
						721M 788	724M 789M		726M	727	772M	773M	774	786M	787M
S	2 000000	18 FFFFFFF	нн		1045	700 207M	789M 219	790 257	542M	557	584				
SAVEGET		7C 00000001			612	483M	484	590	411	,	20 +				
SAVEIN		78 00000001			700	648M	653	679	694	730					
SAVEOI		04 00000001			916	308M	309	320	368	424	641M	642	652	683	733
SAVEDO		4C 00000001			917	769M	770	833	867M	868	905	470.0	470	400	F22
SAVEPG	4 000008	BC 00000001	FF		915	121M 589	122 594	132 605	186 608	237	274	472M	473	482	523
SAVEPUT	4 000001	24 00000001	FF		277	589 131M	594 133	232	608 247	271					
SAVEFUT		00000001 08 00000001			385	315M	319M		360	379	421				
THUNKIN		26 000000001			744	599				-	=				
THUNKOUT		CA 00000001			441	242									
TWOP16		18 00000001			999	203	540	3.45	2.4-	254	353	300	404	F0.5**	
TYP	1 000000	1A FFFFFFF	СС		1046	226M 709	258 714	343	347	351M	352M	396	401	586M	668
TYPC	1 00000	BA 00000001	хх		913	769 345M	714 346M	347	666M	667M	668				
-															

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21 173M 200M 201M 203 207 230 233M 249M 358 361M 381M 422M 0(0)126 313 591M 606M 731M 792M 836M 540 542 560M 646 677 681M 696M 764 777M 822M 863 883M 884M 900M 908M 1(1) 126 150M 156M 170M 174 186M 187 230 233M 234 249M 263M 264 265N 266N 267N 151 381M 500M 506M 561M 272M 313 358 361M 422M 477 501 507 510 523M 524 564 570M 571 572N 573N 574N 579M 580 589M 591M 592 606M 646 677 681M 696M 731M 764 781M 784 785 786 796M 799 800 805M 806M 807 811M 813N 814 826M 829 830M 831 836M 863 876M 878N 879 882M 884 890M 901M 902M 908M 2(2) 126 167M 168M 169 187M 191 194 200 216M 217 230 233M 249M 272M 313 358 361M 381M 391M 392 411M 412M 413 422M 477 524M 528 531 537 554M 555 591M 606M 646 677 681M 841M 696M 731M 764 771M 774 775M 785M 788 790 836M 842M 844 847M 848 863 9081 233M 249M 252M 253 255M 257 258 259M 272M 313 381M 422M 3(3) 126 230 256 266 358 361M 477 591M 606M 704M 567M 573 584 586 587M 588 646 681M 731M 764 836M 863 908M 988M 989M 989N 990 992 993 994 4(4) 126 223M 224M 225 230 233M 249M 250M 251M 253 254M 256 272M 313 358 361M 381M 410M 422M 477 543M 696M 723M 727M 411 418M 419 544M 545 591M 606M 646 677 681M 728 731M 908M 1005 1006 764 836M 863 164M 5(5) 134M 135M 137U 160M 230 233M 249M 272M 322M 323M 325U 358 361M 381M 422M 126 313 477 485M 486M 48811 515M 519M 591M 606M 646 654M 655M 657U 677 681M 696M 731M 764 836M 863 869M 870M 908M 233M 249M 272M 313 324M 358 361M 381M 422M 477 487M 554 591M 606M 6(6) 126 136M 216 230 646 656M 681M 696M 731M 836M 863 871M 908M 677 764 381M 7(7) 126 129M 130U 230 233M 249M 272M 313 317M 318U 358 361M 422M 480M 481U 591M 606M 646 649M 651U 677 681M 696M 731M 764 766M 767U 836M 863 865M 866U 908M 8(8) 126 144M 145U 156 170 182M 230 233M 234M 249M 265 272M 300U 304B 313 316D 317 358 361M 36711 372D 392 422M 42311 425D 442M 477 494M 49511 506 561 572 591M 592M 606M 63311 637B 650D 681M 687D 731M 732U 734D 745M 764 768U 646 649 677 682U 800M 804 813 836M 872M 878 908M 986M 995M 997B 987U 996D 1005 1006 863 249M 9(9) 126 211M 212 214 230 233M 272M 313 358 361M 382M 395M 398M 403M 408M 412 415M 422M 477 549M 591M 697M 708M 417M 418 550 552 606M 646 677 681M 711M 716M 721M 724M 725 726M 727 731M 764 772M 773M 774 786M 787M 788 789M 790 836M 863 908M 10(A) 126 212M 213M 214 217 219 221 230 233M 249M 272M 313 358 361M 370 382M 422M 477 591M 606M 697M 908M 550M 551M 552 555 557 560 646 677 681M 685 731M 764 836M 863 992 230 233M 249M 272M 313 358 361M 382M 422M 448 477 591M 606M 646 677 681M 697M 11(B) 126 731M 751 764 836M 863 908M 391N 12(C) 126 132M 134N 161N 189 195N 211N 230 233M 249M 272M 313 320M 322N 358 361M 382M 406 448 482M 485N 516N 526 532N 549N 591M 606M 646 652M 654N 681M 697M 422M 477 677 731M 751 764 772N 775 784N 805 819 820N 836M 863 869 908M 1008 1009N 1011 1013N 719 1028N 1015 1017N 1019 1021N 1024 1025N 1027 1030 1032N 1035 1036N 121 13(D) 122M 126 131 133M 230 232M 233 237M 240N 247M 249 271M 272 274M 308 309M 313 315 319 321M 358 360M 361 368M 379M 381 382 421M 422 424M 447 448 449B 472 473M 477 483 484M 590M 591 594M 597N 605M 606 608M 641 642M 646 648 653M 677 679M 681 730M 752B 770M 819M 683M 694M 696 697 731 751 764 769 833M 733M 750 836 863 867 868M 905M 908 988N 990N 994N 1008M 1011M 1015M 1019M 1024M 1027M 1030M 1035M 153M 158M 163M 233M 269M 272M 275B 313 358 361M 14(E) 126 151M 152 175M 181M 197M 230 249M 381M 422M 477 501M 502 503M 508M 518M 534M 565M 576M 580M 581 582M 591M 606M 610B 646 677 681M 696M 731M 764 836M 837B 851B 863 908M 909B 195M 15(F) 113U 117B 126 128D 129 152M 153B 157M 158B 161M 162M 163B 174M 175N 180M 181B 196M 196N 197B 230 233M 236U 238D 240M 246U 248D 249M 267M 268M 269B 272M 273U 279D 313 329 335 337 345 351 358 361M 371M 373U 380D 381M 422M 426B 441M 442 443N 46411 468B 477 479D 480 502M 503B 507M 508B 516M 517M 517N 518B 532M 533M 533N 534B 564M 565N 574M 575M 576B 581M 582B 591M 593U 595D 597M 604U 606M 607U 613D 646 661 664 680 745 836M 859B 666 677 681M 686M 688U 695D 696M 731M 735B 744M 746B 760B 764 766 908M 863 865 993

GPR Dsect Cross Reference PAGE 19

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Dsect	Length	Id	Defn	Con	Member
FSAAREA IHADCB PGCF	00000120 0000006C 0000001C	FFFFFFF FFFFFFFF	1576 1058 1038	1	PRIMARY INPUT DCBD PRIMARY INPUT

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Members X390 3.1.04 2012/08/17 13.21 Con Source

1 SYS1.MACLIB

CHECK CLOSE DCB DCBD FREEMAIN GETMAIN IEZREGS IHBINNRA IHBRDWRS IHB01 NOTE CHECK CLOSE
OPEN POINT

2 SYSD.TOOLS.MACLIB
3 SYSD.ALGOLFRT.ASM
4 SYSD.ALGOLFRT.MACLIB
FSAREA IHIENTRY
5 SYS1.AMODGEN READ RETURN SAVE WRITE

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X396	3.1.04	2012/08/17	7 13.21
113		USING	Ordinary	00000001	00000000	00001000	15	008C0	122	IHIGPRPT,	R15			
128		DROP					15			R15				
130		USING	Ordinary	00000001	00000000	00001000		00A58	271	IHIGPRPT,	R7			
137		USING	Ordinary	FFFFFFF	00000000	00001000		0001B	259	PGCF,R5				
145		USING	Ordinary	FFFFFFE	00000000	00001000		00058	263	IHADCB, R8				
236		USING	Ordinary	00000001	00000000	00001000	15	008C0	237	IHIGPRPT,	R15			
238		DROP	•				15			R15				
246		USING	Ordinary	00000001	00000164	00001000	15	00060	247	*,R15				
248		DROP					15			R15				
273		USING	Ordinary	00000001	00000000	00001000	15	008C0	274	IHIGPRPT,	R15			
279		DROP					15			R15				
300		USING	Ordinary	00000001	00000210	00001000	8	006F8	315	IHIGPROT,	R8			
316		DROP					8			R8				
318		USING	Ordinary	00000001	00000210	00001000	7	00848	421	IHIGPROT,	R7			
325		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001A	419	PGCF,R5				
367		USING	Ordinary	00000001	00000210	00001000		007E4	371	IHIGPROT,	R8			
372		DROP					8			R8				
373		USING	Ordinary	00000001	000002F0	00001000		00018	379	*,R15				
380		DROP					15			R15				
423		USING	Ordinary	00000001	00000210	00001000		006F8	424	IHIGPROT,	R8			
425		DROP					8			R8				
464		USING	Ordinary	00000001	000003E4	00001000		004DC	473	*,R15				
479		DROP					15			R15				
481		USING	Ordinary	00000001	000003E4	00001000		00674	590	IHIGPRGT,	R7			
488		USING	Ordinary	FFFFFFF	00000000	00001000		0001B	588	PGCF,R5				
495		USING	Ordinary	FFFFFFE	00000000	00001000		00058	579	IHADCB, R8				
593		USING	Ordinary	00000001	000003E4	00001000		004DC	594	IHIGPRGT,	K15			
595		DROP	Ondinani	00000001	00000560	00001000	15	00254	COF	R15				
604		USING	Ordinary	00000001	00000568	00001000		00354	605	*,R15	D4.F			
607		USING DROP	Ordinary	00000001	000003E4	00001000		004DC	609	IHIGPRGT,	KID			
613 633		USING	Ordinary	00000001	000005C4	00001000	15	00344	648	R15 IHIGPRIT,	DO.			
650		DROP	Orumany	00000001	000003C4	00001000	8	00344	040	R8	NO			
651		USING	Ordinary	00000001	000005C4	00001000		00494	730	IHIGPRIT,	R7			
657		USING	Ordinary	FFFFFFF	00000000	00001000		0001B	901	PGCF,R5	11.7			
682		USING	Ordinary	00000001	00000000 000005C4	00001000		00430	686	IHIGPRIT,	RΩ			
687		DROP	or dinar y	00000001	000003C4	00001000	8	00430	000	R8	NO			
688		USING	Ordinary	00000001	00000660	00001000		00018	694	*,R15				
695		DROP	or almar y	0000001	0000000	00001000	15	00010	034	R15				
732		USING	Ordinary	00000001	000005C4	00001000		00344	733	IHIGPRIT,	R8			
734		DROP	0. 020. )	0000002		00001000	8		, 55	R8				
767		USING	Ordinary	00000001	00000740	00001000		00254	845	IHIGPROP,	R7			
768		USING	Ordinary	FFFFFFE	00000740	00001000		0003E	848	IHADCB, R8				
866		USING	Ordinary	00000001	00000830	00001000		00120	905	IHIGPRCL,				
987		USING	Ordinary	00000001	000009F6	00001000		00050	995	*,R8	•			
996		DROP	,				8		_	R8				

```
The following statements were flagged -
```

```
SYSD.ALGOLFRT.ASM(IHIGPR)
```

236(218), 246(228), 273(248), 300(275), 367(334), 373(340), 423(390), 464(431), 593(534), 604(545), 607(548), 633(574), 682(615), 688(621), 732(665), 987(824)

16 statements flagged in this assembly, 4 was the highest severity code.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIGPR PROCSTEP: X390

Primary input: lines 1 to 906 of SYSD.ALGOLFRT.ASM(IHIGPR)

SYSLIB library records read: 6015 SYSUT1 work file size: 129876 bytes

SYSUT2 work file size: 556768 bytes

SYSUT3 work file size: 72480 bytes

SYSLIN file records written: 53

TXA000I Return code 4, elapsed time 1.96 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIGPRTN 000A5E 2

## IHIIAR LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                       -S2//DDN:SYSUT2
                                                       -S3//DDN:SYSUT3
                                                       -SN//DDN:SYSLIN
                                                       -SL//DDN:SYSLIB
                                                       -ST//DDN:SYSPRINT
                                                       -SH//DDN:SYSPUNCH
                                                       -SA//DDN:SYSADATA
                                                       -SM1
Options for this Assembly
                                                                   Source
                                                                   (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                    (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                   Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                   (default)
NoFO1d
                                                                   (default)
    IDR('X390ASM
                                  3104')
                                                                    (default)
NoINFÒ
                                                                   Command Line
     LAnguage(EN)
                                                                   (default)
     LineCount(101)
                                                                   Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                   Command Line
                                                                   (default)
     Object(Omf)
                                                                   Command Line
     OPtable(Uni,NoList)
                                                                   (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                   Command Line
                                                                   (default)
NoPControl
    PRintctl(Asa)
                                                                   //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                   (default)
NoProFile
                                                                    (default)
                                                                   Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                   (default)
     SiZe(3145728)
                                                                   Command Line
NoSUppress
                                                                   (default)
     SysadatA(//DDN:SYSADATA)
                                                                   Command Line
     SvsLib(//DDN:SYSLIB)
                                                                   Command Line
    SysliN(//DDN:SYSLIN)
                                                                   Command Line
                                                                   (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                   Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                   Command Line
                                                                   (default)
                                                                   Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                   Command Line
     Sysut2(//DDN:SYSUT2)
                                                                   Command Line
     Sysut3(//DDN:SYSUT3)
                                                                   Command Line
NoTerm
                                                                   Command Line
NoTEst
                                                                    (default)
    TypeCheck(Magnitude,Register)
                                                                   (default)
NoUsingLimit
                                                                    (default)
    UsingMap
                                                                   (default)
    Xref(Short)
                                                                   Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                         SYSD.ALGOLFRT.ASM(IHIIAR)
SYSLIB
                          SYS1.MACLIB
                         SYSD. TOOLS. MACLIB
                         SYSD.ALGOLFRT.ASM
                         SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                         SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                         JES2.J0B09284.S00138
SYSUT1
                         SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                                                                                                 X390 3.1.04 2012/08/17 13.21
                      Addr1 Addr2 Stmt
                                           Source Statement
                                                                                                                       00002001
                                        3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                       00003001
                                        4
                                                                                                                       00004001
                                        5
                                                    STATUS - LEVEL 2.1
                                                                                                                       00005001
                                        6
                                                                                                                       00006001
                                                                                                                       00007001
                                                    FUNCTION/OPERATION -
                                          *
                                        8
                                                    ASSIGN NUMBERS TO ARRAY INDICATED BY SECOND ACTUAL
                                                                                                                       00008001
                                        9
                                                    PARAMETER BY CALLING INREAL OR ININTEGER REPEATEDLY
                                                                                                                       00009001
                                       10
                                                                                                                       00010001
                                                                                                                       00011001
                                       11
                                       12
                                                    IHIIARRY - FROM GENERATED OBJECT MODULE
                                                                                                                       00012001
                                       13
                                                                INARRAY LA R1, PARMLIST
                                                                                                                       00013001
                                       14
                                                    IHIIARRT - FROM GENERATED OBJECT MODULE
                                                                                                                       00014001
                                                                INTARRAY BALR R14,R15
                                       15
                                                                                                                       00015001
                                                    DATA PASSED BY NAME
                                                                                                                       00016001
                                       16
                                       17
                                                                                                                       00017001
                                       18
                                                    INPUT - N/A
                                                                                                                       00018001
                                       19
                                                                                                                       00019001
                                                    OUTPUT - N/A
                                       20
                                                                                                                       00020001
                                                                                                                       00021001
                                       21
                                                                                                                       00022001
                                       22
                                                    EXTERNAL ROUTINES -
                                                    IHIIOR - EVALUATE DATA SET NUMBER
                                       23
                                                                                                                       00023001
                                                    IHIIDE - INREAL OR ININTEGER
                                       24
                                                                                                                       00024001
                                       25
                                                                                                                       00025001
                                                    EXTT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                       00026001
                                       26
                                       27
                                                                                                                       00027001
                                       28
                                                    EXIT - ERROR - N/A
                                                                                                                       00028001
                                                                                                                       00029001
                                       29
                                       30
                                                    TABLES/WORK AREAS - N/A
                                                                                                                       00030001
                                       31
                                                                                                                       00031001
                                       32
                                                    R1
                                                                                    -> PARAMETER LIST
                                                                                                                       00032001
                                                                                    TRANSFER DESTADR
                                                                                                                       00033001
                                       33
                                                    R7
                                       34
                                                    R10
                                                                                    TRANSFER FLAGBYTE
                                                                                                                       00034001
                                       35
                                          *
                                                                                    -> FSA
                                                                                                                       00035001
                                                    R12
                                       36
                                                                                                                       00036001
999999
                       99999 999B8
                                       37 THTTARTN CSECT
                                                                                                                       00037001
                                                                                                                       00038001
                                       38
                                                    ENTRY IHIIARRT
                                                                                                                       00039001
                                       39
                                                                                                                       00040001
                                       40
                                       41 *
                                                                                                                       00041001
                                                          (14,12),, 'IHIIARRT LEVEL 2.1 &SYSDATE &SYSTIME'
                                       42 IHIIARRT SAVE
                                                                                                                       00042001
                                                          38(0,15)
000000 47F0 F026
                             00026
                                       43+IHIIARRT B
                                                                                              BRANCH AROUND ID
                                                                                                                       01-SAVE
                                                                                               LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
000004 21
                                                    DC
                                                          AL1(33)
                                       44+
000005 C9C8C9C9C1D9D9E3
                                                          CL32'IHIIARRT LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                       45+
                                                    DC
                                                                                                                       01-SAVE
000025 F1
                                       46+
                                                    DC
                                                          CL1'1'
                                                                                                                       01-SAVE
000026 90EC D00C
                             0000C
                                       47+
                                                    STM
                                                          14,12,12(13)
                                                                                               SAVE REGISTERS
                                                                                                                       01-SAVE
                                                                                                                       00043001
                                       48
                                                    USING IHIIARRT, R15
                  R:F 00000
                                       49
                                                                                                                       00044001
00002A 18CD
                                       50
                                                    LR
                                                          R12,R13
                                                                                    R12 -> FSA
                                                                                                                       00045001
00002C 4190 F03C
                              0003C
                                       51
                                                          R9, IHIIARRY
                                                                                    R9 -> IHGIARRY
                                                                                                                       00046001
                                       52
                                                    DROP
                                                          R15
                                                                                                                       00047001
                  R:9 0003C
                                       53
                                                    USING
                                                          IHIIARRY R9
                                                                                                                       00048001
000030 41D0 D048
                             00048
                                                          R13, ASAVE (, R13)
                                                                                    R13 -> SECOND SAVEAREA IN FSA
                                                                                                                       00049001
                                       54
                                                    LA
000034 41A0 0004
                                                                                    FLAGBYTE INTARRAY
                              00004
                                       55
                                                    LA
                                                                                                                       00050001
000038 47F0 9034
                              00070
                                       56
                                                    В
                                                          INAR1
                                                                                                                       00051001
                                                                                                                       00052001
                                       57 *
                                       58 IHIIARRY SAVE
                                                          (14,12),, 'IHIIARRY LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                       00053001
00003C 47F0 F026
                             99926
                                       59+THTTARRY B
                                                          38(0,15)
                                                                                              BRANCH AROUND ID
                                                                                                                       01-SAVE
                                                                                               LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
000040 21
                                       60+
                                                    DC
                                                          AL1(33)
000041 C9C8C9C9C1D9D9E8
                                       61+
                                                    DC
                                                          CL32'IHIIARRY LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                       01-SAVE
                                                                                               IDENTIFIER
                                                                                                                       01-SAVE
000061 F1
                                       62+
000062 90EC D00C
                             aaaac
                                       63+
                                                    STM
                                                          14,12,12(13)
                                                                                               SAVE REGISTERS
                                                                                                                       01-SAVE
                                       64
                                                                                                                       00054001
                                                                                                                       00055001
000066 189F
                                       65
                                                    LR
                                                          R9, R15
000068 18CD
                                                    LR
                                                                                                                       00056001
                                       66
                                                          R12, R13
                                                                                    R12 -> FSA
00006A 41D0 D048
                              00048
                                       67
                                                    LA
                                                          R13, ASAVE (, R13)
                                                                                    R13 -> SECOND SAVEAREA IN FSA
                                                                                                                       00057001
00006E 1BAA
                                       68
                                                    SR
                                                          R10 R10
                                                                                    FLAGBYTE INARRAY
                                                                                                                       00058001
                                       69 *
                                                                                                                       00059001
                                                    EVALUATE DATASET NUMBER
                                                                                                                       00060001
                                       70
                                                                                                                       00061001
                                       71
000070 58F0 9074
                              000B0
                                       72 INAR1
                                                          R15.VIOREV
                                                                                                                       00062001
000074 05EF
                                                                                                                       00063001
                                       73
                                                    BALR R14, R15
                                       74
                                                                                                                       00064001
                                                    EVALUATE DEST ADDRS
                                                                                                                       00065001
                                       75
                                                                                                                       00066001
                                       76
                                                          R1,4(,R1)
R8,12(,R1)
000076 5810 1004
                              00004
                                       77
                                                                                    R1 -> SECOND PARAMETER
                                                                                                                       00067001
00007A 5880 100C
                                       78
                                                                                    R8 -> DESTEND+1
                                                                                                                       00068001
                              0000C
00007E 5870 1008
                              00008
                                       79
                                                          R7,8(,R1)
                                                                                    R7 -> STARTDEST
                                                                                                                       00069001
                                                                                                                       99979991
                                       80
                                                    CALL ROUTINE INREAL - ININTEGER
                                                                                                                       00071001
                                       81
                                                                                                                       00072001
                                       82
                                                          R15, VIDEAI
000082 58F0 9078
                              000B4
                                       83 INAR2
                                                                                    R15 -> IHIIDEAI
                                                                                                                       00073001
000086 05EF
                                                                                    CALL IHIIDEAI
                                                                                                                       00074001
                                       84
                                                    BALR
                                                          R14,R15
000088 12AA
                                       85
                                                    LTR
                                                          R10.R10
                                                                                                                       00075001
00008A 4720 9062
                             0009E
                                       86
                                                    BP
                                                          INAR3
                                                                                                                       00076001
00008E 9120 C0C2
                                                          OPTSW(R12), X'20'
                                                                                    LONG OR SHORT PREC ?
                                                                                                                       00077001
                       000C2
                                       87
                                                    TM
000092 4710 9062
                              0009E
                                       88
                                                    во
                                                          INAR3
                                                                                                                       00078001
000096 4170 7008
                              00008
                                       89
                                                    LA
                                                          R7,8(,R7)
                                                                                    INCREASE DEST ADDR INARRAY
                                                                                                                       00079001
00009A 47F0 9066
                             000A2
                                       90
                                                    В
                                                          INAR3A
                                                                                                                       00080001
                                       91
                                                                                                                       00081001
                                       92 INAR3
00009E 4170 7004
                             00004
                                                                                                                       00082001
                                                    LA
                                                          R7,4(,R7)
                                                                                    INCREASE DEST ADDR INTARRAY
0000A2 1978
                                       93 INAR3A
                                                    CR
                                                          R7, R8
                                                                                                                       00083001
0000A4 4740 9046
                              00082
                                                          INAR2
                                                                                                                       00084001
                                       94
                                                    BL
0000A8 18DC
                                       95
                                                          R13,R12
                                                                                                                       00085001
                                                    LR
                                       96
                                                                                                                       00086001
```

97

**RETURN (14,12)** 

RESTORE REGS AND RETURN

00087001

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt
                                           Source Statement
0000AA 98EC D00C
                             0000C
                                       98+
                                                   LM
                                                          14,12,12(13)
                                                                                              RESTORE THE REGISTERS
                                                                                                                     01-RETUR
0000AE 07FE
                                       99+
                                                   BR
                                                                                                                      01-RETUR
                                                          14
                                      100
                                                                                                                      00088001
                                                   EXTERNAL ADDRS
                                                                                                                      00089001
                                      101
                                      102
                                                                                                                      00090001
0000ВО 00000000
                                      103 VIOREV
                                                          V(IHIIOREV)
                                                                                                                      00091001
0000B4 00000000
                                      104 VIDEAI
                                                   DC
                                                          V(IHIIDEAI)
                                                                                                                      00092001
                                      105
                                                                                                                      00093001
                                                   DSECT
000000
                       00000 00120
                                     106 FAS
                                                                                                                      00094001
                                      107
                                                                                                                      00095001
                                      108
                                                   COPY FSAREA
                                                                                                                      00096001
                                      109=
                                     110=
                                                   COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                      00002001
                                     111=
                                                                                                                      99993991
                                                   STATUS - LEVEL 2.1
                                                                                                                      00004001
                                     112=
                                                                                                                      00005001
                                      113=
                                                   *********************
                                      114=
                                                                                                                      00006003
                                      115=
                                                                                                                      00007001
                                     116=
                                                   COMMON DATA AREA
                                                                                                                      00008001
                                                                                                                      00009001
                                      117=
                                      118=
                                                   FSAREA
                                                                                                                      00010001
                                     119=
                                                                                                                      00011001
                                      120=*
                                                   ************
                                                                                                                      00012001
                                      121=
                                                                                                                      00013001
                                                   DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL
                                                                                                                      99914991
                                      122=
                                                   MODULES DURING THE EXECUTION
                                                                                                                      00015001
                                      123=
                                      124=*
                                                                                                                      00016001
                                                   ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY
                                                                                                                      00017001
                                      125=
                                      126=*
                                                   SUBROUTINES) BY R12
                                                                                                                      00018001
                                      127=
                                                                                                                      00019001
                       00000
                                      128=FSAREA
                                                   EOU
                                                                                                                      00020001
                                                                                                                      00021001
                                      129=
                                      130=*
                                                   SAVE AREAS
                                                                                                                      00022001
                                     131=
                                                                                                                      00023001
000000
                                      132=
                                                   DS
                                                                                   STANDARD SAVE AREA
                                                                                                                      00024001
                                                                                   ALTERNATE SAVE AREA LISED BY
                                                          *-FSARFA
                                                                                                                      00025001
                       99948
                                      133=ASAVE
                                                   FOU
                                                                                                                      00026001
000048
                                                                                   CERTAIN SUBROUTINES
                                      134=
                                                          18F
                                                   DS
                                      135=
                                                                                                                      00027001
                                                   MISCELLANEOUS WORK AREAS AND CONSTANTS
                                                                                                                      00028001
                                      136=
                                      137=*
                                                                                                                      00029001
                       00090
                                      138=FCTVALST
                                                   EOU
                                                          *-FSAREA
                                                                                   TEMPORARY STORAGE FOR
                                                                                                                      00030001
000090
                                      139=
                                                   DS
                                                          D
                                                                                   FUNCTION VALUES
                                                                                                                      00031001
                       00098
                                      140=ASTLOC
                                                          *-FSAREA
                                                                                   DISPL FOR ADDR OF STAND LOCTN
                                                                                                                      00032001
                                                   EOU
                                                                                                                      00033001
000098 00000090
                                      141=
                                                   DC
                                                          A(FSAREA+FCTVALST)
                       0009C
                                      142=BRRST
                                                          *-FSAREA
                                                                                   TEMPORARY SAVE REG BRR
                                                                                                                      00034001
                                                   EQU
                       0009C
                                      143=HW
                                                   EQU
                                                          BRRST
                                                                                   TEMPORARY HALFWORD STORAGE
                                                                                                                      00035001
999990
                                                                                                                      00036001
                                      144=
                                                   DS
                                      145=PROLREG
                                                          *-FSAREA
                                                                                   STORAGE FOR PBT AND LAT WHEN
                       000A0
                                                                                                                      00037001
                                                   EQU
                                                                                   A PROCEDURE IS FORMAL PARAM
                                                                                                                      00038001
0000A0
                                      146=
                                                   DS
                                      147=*
                                                                                                                      00039001
                                      148=*
                                                   HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE
                                                                                                                      00040001
                                                                                                                      00041001
                                      149=
0000A8
                                                                                                                      00042001
                                      150=
                                                   DS
                                                          0H
                                                                                                                      00043001
0000A8 00
                                                   DC
                                                          X'00'
                                      151=
                                                          *-FSAREA
                                                                                                                      00044001
                       000A9
                                      152=PROLPBN
                                                   EQU
                                                                                   STORAGE FOR CALLED PBN
0000A9 00
                                      153=
                                                          X'00'
                                                                                                                      00045001
                                                   DC
                                                          *-FSAREA
                       000AA
                                      154=EIGHT
                                                   EQU
                                                                                   CONST FOR REDUCING RAS
                                                                                                                      00046001
αρραΔΔ αρρα
                                      155=
                                                   DC
                                                          H'8'
                                                                                                                      99947991
                                                                                                                      00048001
                                      156=
0000AC
                                                   DS
                                                                                                                      00049001
                                      157=
                       000AC
                                      158=ADSTAB
                                                          *-FSAREA
                                                                                   ADDR OF DSTABLE
                                                                                                                      00050001
                                                   EQU
0000AC
                                      159=
                                                   DS
                                                                                   IN THE OBJECT PROGRAM
                                                                                                                      00051001
                       000B0
                                      160=ANOTTAB
                                                   EOU
                                                          *-FSAREA
                                                                                   ADDR OF NOTE TABLE
                                                                                                                      00052001
0000B0
                                                                                   (INSERTED BY THE OPEN ROUTINE)
                                                                                                                      00053001
                                      161=
                                                   DS
                                      162=
                                                                                                                      00054001
                       000B4
                                      163=IHIFSAST EQU
                                                                                                                      00055001
                       000B4
                                      164=PGOPSW
                                                   EQU
                                                          *-FSAREA
                                                                                   PROGRAM CHECK OLD PSW
                                                                                                                      00056001
0000B4
                                      165=
                                                   DS
                                                          2F
                                                                                                                      00057001
                                                          *-FSAREA
                       000BC
                                      166=FSAPICA
                                                                                   OLD PICA ADDR
                                                                                                                      00058001
                                                   EOU
0000BC 00000000
                                      167=
                                                          F'0
                                                                                                                      00059001
                                                   DC
                                                                                                                      00060001
                       000C0
                                      168=SCRCS
                                                   EQU
                                                          *-FSAREA
                                                                                   SEMICOLON NUMBER
0000C0
                                                                                                                      00061001
                                      169=
                                                   DS
                       99902
                                      170=DTSW
                                                   EQU
                                                          *-FSARFA
                                                                                   OPTION SWITCHES
                                                                                                                      00062001
                       000C2
                                      171=OPTSW
                                                   EQU
                                                          DTSW
                                                                                                                      00063001
0000C2 00
                                                                                   DUMP-80, TRACE-40, SHORT-20
                                                                                                                      00064001
                                      172=
                                                   DC
                                                          X'00
                       000C3
                                      173=FSAERCOD EQU
                                                          *-FSAREA
                                                                                   ERROR CODE FOR ERROR ROUTINE
                                                                                                                      00065001
0000C3
                                      174=
                                                                                                                      00066001
                                      175=
                                                                                                                      00067001
                                                   RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER
                                      176=
                                                                                                                      99968991
                                      177=
                                                                                                                      00069001
0000C4
                                                                                                                      00070001
                                      178=
                                                   DS
                                                          0F
                                      179=IHIFSARS EQU
                       000C4
                                                                                                                      00071001
                                      180=RASSTART EQU
                                                                                   ADDR OF FIRST ENTRY IN RAS-8
                                                                                                                      00072001
                       000C4
                                                          *-FSAREA
0000C4
                                      181=
                                                   DS
                                                                                                                      00073001
                       00008
                                      182=RASPT
                                                   EOU
                                                          *-FSAREA
                                                                                   RAS POINTER FROM TOP
                                                                                                                      00074001
                                                                                                                      00075001
0000C8
                                      183=
                                                   DS
                       000CC
                                      184=RASEND
                                                   EQU
                                                          *-FSAREA
                                                                                   ADDR OF LAST ENTRY IN RAS+8
                                                                                                                      00076001
0000CC
                                      185=
                                                   DS
                                                                                                                      00077001
                       000D0
                                      186=RASPB
                                                                                   RAS POINTER FROM BOTTOM
                                                                                                                      00078001
                                                   EQU
                                                          *-FSAREA
0000D0
                                      187=
                                                   DS
                                                                                                                      00079001
                                                                                                                      00080001
                                     188=
                                      189=
                                                   LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES
                                                                                                                      00081001
                                                                                                                      00082001
                                      190=
0000D4
                                      191=BRLIST
                                                                                                                      00083001
                                                   DS
                       99904
                                      192=CAP1
                                                   EOU
                                                          *-FSARFA
                                                                                   FIRST PART CAPS
                                                                                                                      99984991
0000D4 4700 0000
                             00000
                                     193=
                                                   NOP
                                                          0
                                                                                                                      00085001
```

00102001

D-Loc Object Code X390 3.1.04 2012/08/17 13.21 Addr1 Addr2 Stmt Source Statement 000D8 194=CAP2 \*-FSAREA SECOND PART CAPS 00086001 EQU 0000D8 4700 0000 00000 195= NOP 00087001 000DC 196=PROLOGP EOU \*-FSAREA PROLOGUE FORMAL PARAMETER ENTRY 00088001 197=PROLOGFP 000DC PROLOGP 00089001 EOU 0000DC 4700 0000 00000 198= NOP 00090001 000E0 \*-FSAREA PROLOGUE PROGRAM USUAL ENTRY 00091001 199=PROLOG EQU 0000E0 4700 0000 00000 200= NOP 00092001 000E4 201=RETPROG EQU \*-FSAREA DISPLACEMENT RETURN PROGRAM 00093001 0000E4 4700 0000 00000 202= NOP 00094001 000E8 \*-FSAREA EPILOGUE PROGRAM, PROCEDURE ENTRY 203=EPILOGP 00095001 EOU 0000E8 4700 0000 00000 NOP 00096001 204= 000EC 205=EPILOGB \*-FSAREA EPILOGE PROGRAM, BETA-BLOCK ENTRY 00097001 EQU 0000EC 4700 0000 00000 206= NOP 00098001 aaafa 207=FPTI PR3 \*-FSARFA EPTLOGUE PROGRAM ENTRY 3 FOU 9999991 0000F0 4700 0000 00000 00100001 208= NOP 000F4 \*-FSAREA FIRST PART CSWES 00101001 209=CSWE1 EQU 00102001 0000F4 4700 0000 00000 210= NOP 000F8 211=CSWE2 EOU \*-FSARFA SECOND PART CSWES 00103001 0000F8 4700 0000 00000 212= NOP 00104001 000FC \*-FSAREA 213=LOADPF LOAD PRECOMPILED PROC ROUTINE 00105001 EOU 0000FC 4700 0000 00106001 00000 214= NOP 00100 215=TRACE EQU \*-FSAREA 00107001 000100 D200 0000 0000 00000 00000 216= MVC 0(0),0 00108001 000106 4700 0000 00000 217= NOP 00109001 999194 4799 9999 00110001 00000 218= NOP NORMAL TERMINATION EXIT 0010E 219=TERMNTE \*-FSAREA EQU 00111001 00010E 4700 0000 00000 220= NOP 00112001 00112 \*-FSAREA 00113001 221=BCR EQU 000112 0700 VARIABLE CONDITIONAL BRANCH 00114001 222= **BCR** 00114 223=GETMSTO EOU \*-FSAREA 00115001 000114 4700 0000 00000 224= NOP 0 00116001 00117001 225= 00118 226=VALUCALL EQU \*-FSAREA 00118001 000118 4700 0000 00000 227= NOP 00119001 0011C 228=IORLST EQU \*-FSAREA 00120001 000110 4700 0000 aaaaa a 229= NOP 00121001 00122001 230= 001CC 231=FSAERR EQU X'1CC' DISPL FOR ERROR LIST 00123001 00124001 232= 233=\* DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 234= 00126001 235=OUTOFB 0020C EOU FSAERR+4\*16 00127001 00218 236=NUMBIND FSAERR+4\*19 00128001 EOU 237=ARRAYBD FSAERR+4\*15 00129001 00208 EQU 0026C 238=ERROR40 FSAERR+4\*40 00130001 EQU 00224 239=0ERR22 EQU FSAERR+4\*22 00131001 FSAFRR+4\*17 240=FNDLESI 99219 FOU 00132001 241=0ERR21 FSAERR+4\*21 00220 00133001 EQU 242=\* 243 \* 00097001 244 \* REGISTER EQUATES 00098001 245 \* 00099001 **IEZREGS** 246 00100001 00000 247+R0 EQU 01-IEZRE 00001 248+R1 EQU 01-IEZRE 00002 249+R2 01-IEZRE EQU 00003 250+R3 EQU 01-IEZRE 99994 251+R4 FOU 4 01-TF7RF 00005 252+R5 EQU 01-IEZRE 00006 253+R6 EQU 01-IEZRE 00007 254+R7 01-IEZRE EQU 00008 255+R8 EQU 8 01-IEZRE 00009 256+R9 EQU 01-IEZRE 257+R10 0000A 10 01-IEZRE EOU 0000B 258+R11 EQU 01-IEZRE 11 0000C 259+R12 EQU 12 01-IEZRE 0000D 260+R13 EQU 13 01-IEZRE agaar 261+R14 EQU 14 01-IEZRE 15 01-IEZRE 0000F 262+R15 EOU 263 00101001

END

264

		ue Io	ı ıyp	e ASIII	Program	νeτη	References					X390	90 3.1.04 2012/08/17 13			13.21		
ASAVE	1 00000	048	u			133	54	67										
BRRST	1 00000	09C	U			142	143											
DTSW	1 00000	0C2	U			170	171											
FCTVALST	1 00000	090	U			138	141											
FSAERR	1 00000	1CC	U			231	235	236	237	238	239	240	241					
FSAREA	1 00000	000 FFFFF	FFF U			128	133	138	140	141	142	145	152	154	158	160	164	166
							168	170	173	180	182	184	186	192	194	196	199	201
							203	205	207	209	211	213	215	219	221	223	226	228
IHIIARRT	4 00000	00000	001 I			43	39	49U										
IHIIARRY	4 00000	00000 asc	001 I			59	40	51	53U									
IHIIDEAI	1 00000	00000 0000	1003 T			104	104											
IHIIOREV	1 00000	0000 0000	1002 T			103	103											
INAR1	4 00000	070 00000	001 I			72	56B											
INAR2	4 00000	082 00000	001 I			83	94B											
INAR3	4 00000	09E 00006	001 I			92	86B	88B										
INAR3A	2 00000	00000 AA	001 I			93	90B											
OPTSW	1 00000	0C2	U			171	87											
PROLOGP	1 00000	0DC	U			196	197											
R1	1 00000	001	U			248	77M	78	79									
R10	1 00000		U			257	55M											
R12	1 00000	00C	U			259	50M	66M	87	95								
R13	1 00000	00D	U			260	50	54M	66	67M	95M							
R14	1 00000		U			261	73M											
R15	1 00000		U			262	49U	52D		72M	73B	83M	84B					
R7	1 00000		U			254	79M		92M	93								
R8	1 00000		U			255	78M											
R9	1 00000		U			256	51M	530	65M									
VIDEAI		00000		V		104	83											
VIOREV	4 00000	ово 00000	001 V	V		103	72											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

47 63 47 63 47 63 47 63 47 63 47 63 47 63 47 63 47 51M 47 50M 47 50M 47 50 47 63 438 47 98M 1(1) 2(2) 77M 78 79 98M 98M 3(3) 4(4) 5(5) 98M 98M 98M 5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C) 98M 79M 89M 92M 93 98M 78M 93 98M 51M 55M 53U 63 63 65M 98M 68M 85M 98M 63 50M 98M 63 66M 87 95 98M 13(D) 14(E) 15(F) 54M 63 66 67M 84M 98M 99B 95M 98 73M 49U 52D 59B 63 72M 73B 83M 84B 98M 65

 IAR
 Dsect Cross Reference
 PAGE 7

 Dsect Length
 Id
 Defn Con Member
 X390 3.1.04
 2012/08/17 13.21

FAS 00000120 FFFFFFFF 106 PRIMARY INPUT

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  FSAREA
- 5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17 13.21	
49 52		USING DROP	Ordinary	00000001	00000000	00001000	15 (	9003C	51	IHIIARRT,	R15		
53		USING	Ordinary	00000001	0000003C	00001000	9 (	00078	94	IHIIARRY,	R9		

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIIAR PROCSTEP: X390

Primary input: lines 1 to 102 of SYSD.ALGOLFRT.ASM(IHIIAR)

SYSLIB library records read: 295
SYSUT1 work file size: 24261 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8160 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.19 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHIBA LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIIBA)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
```

SYSPRINT

SYSUT1 SYSUT2

SYSUT3

JES2.J0B09284.S00142

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

00018001

```
Loc Object Code
                       Addr1 Addr2 Stmt
                                             Source Statement
                                                                                                  X390 3.1.04 2012/08/17 13.21
                                                                                                                         00002001
                                         2 *
                                         3
                                           *
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
5
                                                                                                                         00004001
00005001
                                           *
                                                     STATUS - LEVEL 2.1
                                                                                                                         00006001
                                         6
                                                     FUNCTION/OPERATION
                                                                                                                         00007001
                                           *
                                         8
                                                     ASSIGN BOOLEAN VALUE TO ARRAY INDICATED BY SECOND ACTUAL
                                                                                                                         00008001
                                        9
                                                     PARAMETER BY CALLING INBOOLEAN REPEATEDLY
                                                                                                                         00009001
                                        10
                                                                                                                         00010001
                                                                                                                         00011001
                                        11
                                                     IHIIBARR - FROM GENERATED OBJECT MODULE
                                                                                                                         00012001
                                        12
                                           *
                                        13
                                                                 LA R1, PARMLIST
                                                                                                                         00013001
                                        14
                                                                 BALR R14,R15
                                                                                                                         00014001
                                                                DATA PASSED BY NAME
                                        15
                                                                                                                         00015001
                                                                                                                         00016001
                                        16
                                                     INPUT - N/A
                                                                                                                         00017001
                                        17
                                        18
                                                                                                                         00018001
                                        19
                                                     OUTPUT - N/A
                                                                                                                         00019001
                                        20
                                                                                                                         00020001
                                                                                                                         00021001
                                        21
                                                     EXTERNAL ROUTINES -
                                                     IHIIOR - EVALUATE DATA SET NUMBER
IHIIBO - INBOOLEAN
                                                                                                                         00022001
                                        22
                                        23
                                                                                                                         00023001
                                        24
                                                                                                                         00024001
                                                                                                                         00025001
00026001
                                        25
                                                     EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                        26
                                                     EXIT - ERROR - N/A
                                                                                                                         00027001
                                        27
                                        28
                                                                                                                         00028001
                                                     TABLES/WORK AREAS - N/A
                                                                                                                         00029001
                                        29
                                        30
                                                                                                                         00030001
999999
                       99999 99964
                                        31 IHIIBARR CSECT
                                                                                                                         00031001
                                        32
                                                                                                                         00032001
                                                                                     -> PARAMETER LIST
                                                                                                                         00033001
                                        33
                                        34
                                                     R12
                                                                                                                         00034001
                                        35 *
                                                                                                                         00035001
                                        36
                                                     SAVE
                                                           (14,12),, 'IHIIBARR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00036001
000000 47F0 F026
                              99926
                                                                                                BRANCH AROUND ID
                                        37+
                                                     В
                                                           38(0.15)
                                                                                                                         01-SAVE
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
000004 21
                                        38+
                                                     DC
                                                           AL1(33)
000005 C9C8C9C9C2C1D9D9
                                        39+
                                                     DC
                                                           CL32'IHIIBARR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
000025 F1
                                        40+
000026 90EC D00C
                              aaaac
                                        41+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         01-SAVE
                                       42
                                                                                                                         00037001
                                                                                                                         00038001
00002A 187F
                                        43
                                                     LR
                                                           R7, R15
                  R:7 00000
                                                     USING IHIIBARR, R7
                                                                                                                         00039001
                                        44
                                                                                                                         00040001
00002C 18CD
                                        45
                                                           R12,R13
                                                                                     R12 -> FSA
                                                     LR
00002E 41D0 D048
                              00048
                                        46
                                                           R13, ASAVE (, R13)
                                                                                     R13 -> SECOND SAVEAREA IN FSA
                                                                                                                         00041001
                                                                                                                         00042001
00043001
                                        47
                                                     EVALUTE DATASET NUMBER
                                        48
                                        49
                                                                                                                         00044001
                                                           R15, VIOREV
                                                                                                                         00045001
000032 58F0 705C
                              0005C
                                        50
000036 05EF
                                        51
                                                     BALR R14, R15
                                                                                                                         00046001
                                        52 *
                                                                                                                         00047001
                                                     EVALUTE DESTINATION ADDR
                                                                                                                         00048001
                                        53
                                                                                                                         00049001
                                        54
                                                                                                                         00050001
000038 5810 1004
                              00004
                                        55
                                                           R1,4(,R1)
00003C 5830 100C
                                                                                     R3 -> DESTEND+1
                                                                                                                         00051001
                              0000C
                                        56
                                                           R3,12(,R1)
000040 5820 1008
                              00008
                                        57
                                                           R2,8(,R1)
                                                                                     R2 -> START DEST
                                                                                                                         00052001
                                        58
                                                                                                                         00053001
                                                     CALL FOR ROUTINE INBOOLEAN
                                        59
                                                                                                                         00054001
                                                                                                                         00055001
                                        60
000044 58F0 7060
                              00060
                                       61 INBARRY1 L
                                                           R15, VIBOAR
                                                                                                                         00056001
000048 05EF
                                                     BALR
                                                           R14,R15
                                                                                                                         00057001
                                        62
00004A 4120 2001
                              00001
                                        63
                                                     LA
                                                           R2,1(,R2)
                                                                                     INCR ADEST
                                                                                                                         00058001
00004E 1923
                                        64
                                                     CR
                                                           R2.R3
                                                                                                                         00059001
                                                                                                                         00060001
000050 4740 7044
                                                           INBARRY1
                              00044
                                                                                     MORE VALUE TO BE READ
                                        65
                                                     BL
000054 18DC
                                        66
                                                     LR
                                                           R13,R12
                                                                                                                         00061001
                                        67 *
                                                                                                                         00062001
                                        68
                                                     RETURN (14,12)
                                                                                                                         00063001
000056 98EC D00C
                              0000C
                                        69+
                                                     I M
                                                           14,12,12(13)
                                                                                                RESTORE THE REGISTERS
                                                                                                                         01-RETUR
01-RETUR
00005A 07FE
                                                                                                RETURN
                                        70+
                                                     BR
                                                           14
                                        71 ;
                                                                                                                         00064001
                                                                                                                         00065001
                                        72
                                                     EXTERNAL ADDRS
                                        73
                                                                                                                         00066001
                                                                                                                         00067001
00068001
00005C 00000000
                                        74 VTOREV
                                                     DC
                                                           V(THTTOREV)
                                                                                     EVALUATE DATASET NUMBER
                                                           V(IHIIBOAR)
000060 00000000
                                        75 VIBOAR
                                                     DC
                                                                                     INBOOLEAN
                                                                                                                         00069001
                                        76
000000
                       00000 00120
                                        77 FAS
                                                     DSECT
                                                                                                                         00070001
                                        78
                                                                                                                         00071001
                                        79
                                                     COPY FSAREA
                                                                                                                         00072001
                                        80=
                                                                                                                         99991991
                                        81=
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00002001
                                                                                                                         00003001
                                       82=
                                                                                                                         00004001
                                        83=
                                                     STATUS - LEVEL 2.1
                                        84=*
                                                                                                                         00005001
                                        85=*
                                                                                                                         00006001
                                        86=*
                                                                                                                         00007001
                                                                                                                         00008001
                                        87=
                                                     COMMON DATA AREA
                                                                                                                         00009001
                                        88=*
                                        89=*
                                                     FSAREA
                                                                                                                         00010001
                                        90=*
                                                                                                                         00011001
                                                                                                                         00012001
00013001
                                        91=*
                                        92=
                                        93=*
                                                     DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL
                                                                                                                         00014001
                                        94=*
                                                     MODULES DURING THE EXECUTION
                                                                                                                         00015001
                                        95=
                                                                                                                         00016001
                                        96=
                                                     ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY
                                                                                                                         00017001
```

97=

SUBROUTINES) BY R12

D-Loc Object Code	Addr1 Addr2	Stmt Source	Statement	X390 3.1.04 2012/08,	/17 13.2
	00000	98=* 99=FSAREA	EQU *		0001900
		100=* 101=*	SAVE AREAS		0002100
		102=*			0002300
000000	00048	103= 104=ASAVE	DS 18F EQU *-FSAREA	STANDARD SAVE AREA ALTERNATE SAVE AREA USED BY	0002400
000048		105=	DS 18F	CERTAIN SUBROUTINES	0002600
		106=* 107=*	MISCELLANEOUS W	WORK AREAS AND CONSTANTS	0002700
	00090	108=* 109=FCTVALST	EQU *-FSAREA	TEMPORARY STORAGE FOR	0002900
000090		110=	DS D	FUNCTION VALUES	0003100
000098 00000090	00098	111=ASTLOC 112=	EQU *-FSAREA DC A(FSAREA+	DISPL FOR ADDR OF STAND LOCTN -FCTVALST)	0003200
	0009C	113=BRRST	EQU *-FSAREA	TEMPORARY SAVE REG BRR	0003400
0009C	0009C	114=HW 115=	EQU BRRST DS F	TEMPORARY HALFWORD STORAGE	000350
000A0	000A0	116=PROLREG 117=	EQU *-FSAREA DS 2A	STORAGE FOR PBT AND LAT WHEN A PROCEDURE IS FORMAL PARAM	000370 000380
00040		118=*	D3 ZA	A PROCEDURE 13 TORMAL PARAM	000390
		119=* 120=*	HALFWORD CONTAI	INING PBN OF CALLED BLOCK IN SECOND BYTE	000400 000410
000A8		121=	DS 0H		000420
000A8 00	000A9	122= 123=PROLPBN	DC X'00' EQU *-FSAREA	STORAGE FOR CALLED PBN	000430 000440
000A9 00	00044	124=	DC X'00'	CONCT. FOR REPUICING PAG	000450
000AA 0008	000AA	125=EIGHT 126=	EQU *-FSAREA DC H'8'	CONST FOR REDUCING RAS	000460 000470
20010		127=*	DS 0F		000480
000AC	000AC	128= 129=ADSTAB	DS 0F EQU *-FSAREA	ADDR OF DSTABLE	000490 000500
000AC	000B0	130= 131=ANOTTAB	DS A EQU *-FSAREA	IN THE OBJECT PROGRAM ADDR OF NOTE TABLE	000510 000520
900B0	00000	132=	DS A	(INSERTED BY THE OPEN ROUTINE)	000530
	000B4	133=* 134=IHIFSAST	EOU *		000540
	000B4	135=PGOPSW	EQU *-FSAREA	PROGRAM CHECK OLD PSW	000560
000B4	000BC	136= 137=FSAPICA	DS 2F EQU *-FSAREA	OLD PICA ADDR	000576 000586
000BC 00000000	00000	138=	DC F'0'	CENTCOLON NUMBER	000596
000C0	000C0	139=SCRCS 140=	EQU *-FSAREA DS H	SEMICOLON NUMBER	000600
	000C2 000C2	141=DTSW 142=OPTSW	EQU *-FSAREA EQU DTSW	OPTION SWITCHES	000626 000636
000C2 00		143=	DC X'00'	DUMP-80, TRACE-40, SHORT-20	000640
000C3	000C3	144=FSAERCOD 145=	EQU *-FSAREA DS C	ERROR CODE FOR ERROR ROUTINE	000650 000660
		146=*			000670
		147=* 148=*	RETURN ADDRESS	STACK POINTERS DO NOT CHANGE ORDER	000680
000C4	000C4	149= 150=IHIFSARS	DS 0F		000700
	000C4 000C4	151=RASSTART	EQU *-FSAREA	ADDR OF FIRST ENTRY IN RAS-8	000710
000C4	000C8	152= 153=RASPT	DS F EQU *-FSAREA	RAS POINTER FROM TOP	000730 000740
000C8		154=	DS F		000750
000CC	000CC	155=RASEND 156=	EQU *-FSAREA DS F	ADDR OF LAST ENTRY IN RAS+8	000760 000770
00000	000D0	157=RASPB	EQU *-FSAREA DS F	RAS POINTER FROM BOTTOM	000780
000D0		158= 159=*	DS F		000790 000800
		160=* 161=*	LIST OF BRANCH	INSTRUCTIONS TO COMMONLY USED SUBROUTINES	000810
000D4		162=BRLIST	DS ØF		000830
000D4 4700 0000	000D4 00000	163=CAP1 164=	EQU *-FSAREA NOP 0	FIRST PART CAPS	000840 000850
20000 4700 0000	000D8	165=CAP2	EQU *-FSAREA	SECOND PART CAPS	000860
000D8 4700 0000	00000 000DC	166= 167=PROLOGP	NOP 0 EQU *-FSAREA	PROLOGUE FORMAL PARAMETER ENTRY	000870 000880
000DC 4700 0000	000DC 00000	168=PROLOGFP 169=	EQU PROLOGP NOP 0		000890 000900
	000E0	170=PROLOG	EQU *-FSAREA	PROLOGUE PROGRAM USUAL ENTRY	000910
000E0 4700 0000	00000 000E4	171= 172=RETPROG	NOP 0 EQU *-FSAREA	DISPLACEMENT RETURN PROGRAM	000920 000930
000E4 4700 0000	00000	173=	NOP 0		000940
000E8 4700 0000	000E8 00000	174=EPILOGP 175=	EQU *-FSAREA NOP 0	EPILOGUE PROGRAM, PROCEDURE ENTRY	000950 000960
	000EC	176=EPILOGB	EQU *-FSAREA	EPILOGE PROGRAM, BETA-BLOCK ENTRY	000970
000EC 4700 0000	00000 000F0	177= 178=EPILPR3	NOP 0 EQU *-FSAREA	EPILOGUE PROGRAM ENTRY 3	000980
000F0 4700 0000	00000 000F4	179= 180=CSWE1	NOP 0 EQU *-FSAREA	FIRST PART CSWES	001000 001010
000F4 4700 0000	00000	181=	NOP 0		001020
000F8 4700 0000	000F8 00000	182=CSWE2 183=	EQU *-FSAREA NOP 0	SECOND PART CSWES	001030 001040
	000FC	184=LOADPP	EQU *-FSAREA	LOAD PRECOMPILED PROC ROUTINE	001050
000FC 4700 0000	00000 00100	185= 186=TRACE	NOP 0 EQU *-FSAREA		001060 001070
00100 D200 0000 000	00000 00000	187=	MVC 0(0),0		001080
00106 4700 0000 0010A 4700 0000	00000 00000	188= 189=	NOP 0		001090
	0010E	190=TERMNTE	EQU *-FSAREA	NORMAL TERMINATION EXIT	001110
0010E 4700 0000	00000	191=	NOP 0		001120
00101 4700 0000	00112	192=BCR	EQU *-FSAREA		001130

D-Loc Object Code	Addr1 Addr2	Stmt Source	State	ment				X390	3.1.04	2012/08/17 13.21
	00114	194=GETMSTO	EQU	*-FSAREA						00115001
000114 4700 0000	00000	195=	NOP	0						00116001
		196=*								00117001
	00118	197=VALUCALL	EQU	*-FSAREA						00118001
000118 4700 0000	00000	198=	NOP	0						00119001
	0011C	199=IORLST	EQU	*-FSAREA						00120001
00011C 4700 0000	00000	200=	NOP	0						00121001
		201=*								00122001
	001CC	202=FSAERR	EQU	X'1CC'		DISPL	FOR I	ERROR	LIST	00123001
		203=*								00124001
		204=*	DISPL	ACEMENTS FOR	CERTAIN	ERROR EXITS	S IN I	-SA		00125001
	0020C	205=*	FOLL	FCAEDD: 4*1C						00126001 00127001
	00218	206=OUTOFB 207=NUMBIND	EQU EQU	FSAERR+4*16 FSAERR+4*19						00128001
	00218	208=ARRAYBD	EQU	FSAERR+4*15						00129001
	0026C	209=ERROR40	EQU	FSAERR+4*40						00130001
	00224	210=0ERR22	EQU	FSAERR+4*22						00130001
	00210	211=ENDLESL	EQU	FSAERR+4*17						00132001
	00220	212=0ERR21	EQU	FSAERR+4*21						00133001
		213=*								00134001
		214 *								00073001
		215 *	REGIS	TER EQUATES						00074001
		216 *								00075001
		217	IEZRE							00076001
	00000	218+R0	EQU	0						01-IEZRE
	00001	219+R1	EQU	1						01-IEZRE
	00002	220+R2	EQU	2						01-IEZRE
	00003	221+R3	EQU	3						01-IEZRE
	00004	222+R4	EQU	4						01-IEZRE
	00005 00006	223+R5 224+R6	EQU EQU	5 6						01-IEZRE 01-IEZRE
	00007	225+R7	EQU	7						01-IEZRE
	00007	226+R8	EQU	8						01-IEZRE
	00009	227+R9	EQU	9						01-IEZRE
	0000A	228+R10	EQU	10						01-IEZRE
	0000B	229+R11	EQU	11						01-IEZRE
	0000C	230+R12	EQU	12						01-IEZRE
	0000D	231+R13	EQU	13						01-IEZRE
	0000E	232+R14	EQU	14						01-IEZRE
	0000F	233+R15	EQU	15						01-IEZRE
		234 *								00077001
		235	END							00078001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	s				X390	3.1.	04 2	012/0	8/17	13.21
ASAVE	1	00000048		U		104	46											
BRRST	1	0000009C		U		113	114											
DTSW		000000C2		U		141	142											
FCTVALST	1	00000090		U		109	112											
FSAERR	1	000001CC		U		202	206	207	208	209	210	211	212					
FSAREA	1	00000000	FFFFFFF	: U		99	104	109	111	112	113	116	123	125	129	131	135	137
							139	141	144	151	153	155	157	163	165	167	170	172
							174	176	178	180	182	184	186	190	192	194	197	199
IHIIBARR	1	00000000	00000001	. J		31	44U											
IHIIBOAR	1	00000000	00000003	; Т		75	75											
IHIIOREV	1	00000000	00000002	! T		74	74											
INBARRY1	4	00000044	00000001	. I		61	65B											
PROLOGP	1	00000DC		U		167	168											
R1	1	00000001		U		219	55M	56	57									
R12	1	0000000C		U		230	45M	66										
R13	1	000000D		U		231	45	46M	66M									
R14	1	0000000E		U		232	51M	62M										
R15	1	000000F		U		233	43	50M	51B	61M	62B							
R2	1	00000002		U		220	57M	63M	64									
R3	1	00000003		U		221	56M	64										
R7	1	00000007		U		225	43M	44U										
VIBOAR	4	00000060	00000001	. V V		75	61											
VIOREV	4	0000005C	00000001	. V V		74	50											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

0(0) 41 69M 1(1) 41 55M 56 57 69M 2(2) 41 57M 63M 64 69M 3(3) 41 56M 64 69M 4(4) 41 69M 5(5) 41 69M 6(6) 41 69M 7(7) 41 43M 44U 69M 8(8) 41 69M 9(9) 41 69M 10(A) 41 69M 11(B) 41 69M 12(C) 41 45M 66 69M 13(D) 41 45 46M 66M 69 14(E) 41 51M 62M 69M 70B 15(F) 37B 41 43 50M 51B 61M 62B 69M 
 IBA
 Dsect Cross Reference
 PAGE 7

 Dsect
 Length
 Id
 Defn
 Con
 Member
 X390 3.1.04
 2012/08/17 13.21

FAS 00000120 FFFFFFFF 77 PRIMARY INPUT

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  FSAREA

5 SYS1.AMODGEN

IBA USING Map PAGE 9
Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

44 USING Ordinary 00000001 00000000 00001000 7 00060 65 IHIIBARR,R7

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIIBA PROCSTEP: X390

Primary input: lines 1 to 78 of SYSD.ALGOLFRT.ASM(IHIIBA)

SYSLIB library records read: 295
SYSUT1 work file size: 21100 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 6240 bytes
SYSLIN file records written: 5

TXA000I Return code 0, elapsed time 0.18 seconds.

## IHIIBO LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIIBO)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00146
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

```
Loc Object Code
                                                                                                    X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt
                                             Source Statement
                                                                                                                           00002001
                                         3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00003001
                                         4
                                                                                                                           00004001
00005001
                                         5
                                                      STATUS - LEVEL 2.1
                                         6
                                                                                                                           00006001
                                                      FUNCTION/OPERATION
                                                                                                                           00007001
                                            *
                                                      SCAN IMPUT BUFFER UNTIL A BOOLEAN VALUE IS FOUND TRANSFER IF 'TRUE' 1 IF 'FALSE' 0 TO BOOLEAN IDENTIFIER,
                                         8
                                                                                                                           00008001
                                         9
                                                                                                                           00009001
                                                      THE SECOND PARAMETER
                                        10
                                                                                                                           00010001
                                                                                                                           00011001
                                        11
                                        12
                                                      ENTRY POINTS -
                                                                                                                           00012001
                                        13
                                            *
                                                      IHIIBOOL - FROM GENERATED OBJECT MODULE
                                                                                                                           00013001
                                        14
                                                                      R1, PARMLIST
                                                                                                                           00014001
                                                                 BALR R14,R15
DATA PASSED BY NAME
                                        15
                                                                                                                           00015001
                                                                                                                           00016001
                                        16
                                                      IHIIBOAR - FROM ARRAY MODULE IHIIBA
                                                                                                                           00017001
                                        17
                                                                       R2, A(DESTINATION)
                                        18
                                                                                                                           00018001
                                        19
                                                                  BALR R14, R15
                                                                                                                           9991 9991
                                                                 DATA PASSED BY NAME
                                        20
                                                                                                                           00020001
                                                                                                                           00021001
                                        21
                                                      INPUT - N/A
                                                                                                                           00022001
                                        22
                                        23
                                                                                                                           00023001
                                        24
                                                      OUTPUT - N/A
                                                                                                                           00024001
                                        25
                                                                                                                           00025001
                                                      EXTERNAL ROUTINES -
                                                                                                                           00026001
                                        26
                                                      IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                           00027001
                                        27
                                        28
                                                               OPEN DATA SET
                                                                                                                           00028001
                                                               CHANGE TO NEXT INPUT RECORD
                                                                                                                           00029001
                                        29
                                        30
                                                                                                                           00030001
                                        31
                                                      EXITS - NORMAL - RELOAD REGISTERS AND EXIT VIA R14
                                                                                                                           00031001
                                        32
                                                                                                                           00032001
                                                      EXITS - ERROR - INPUT REQUEST BEYOND END OF DATASET
                                                                                                                           00033001
                                        33
                                         34
                                                                       BRANCH TO IHIFSA
                                                                                                                           00034001
                                        35
                                                                               R13, IHIFSA
                                                                                                                           00035001
                                        36
                                                                       В
                                                                               FSAERR+XX*4(R13) XX ERROR NO 5
                                                                                                                           00036001
                                        37
                                                                                                                           00037001
                                                                                                                           00038001
                                                      TABLES/WORK AREAS - N/A
                                        38
                                        39
                                                                                                                           00039001
000000
                        00000 00282
                                        40 IHIIBOOL CSECT
                                                                                                                           00040001
                                        41
                                                                                                                           00041001
                                        42
                                                      ENTRY IHIIBOAR
                                                                                                                           00042001
                  R:5 00000
                                        43
                                                      USING DSTABLE, R5
                                                                                                                           00043001
                                        44
                                                                                                                           00044001
                                                                                                                           00045001
                                        45
                                                                                       -> DSTABLE ENTRY
                                        46
                                                      R6
                                                                                       = DATASET NUMBER
                                                                                                                           00046001
                                        47
                                                                                                                           00047001
                                                      DISPLACEMENTS IN ADRIST IN THIESA
                                                                                                                           00048001
                                        48
                                        49
                                                                                                                           00049001
                        00000
                                        50 CI
                                                                           DISPLACEMENT FOR - IHIIORCI
                                                                                                                           00050001
                        00004
                                        51 CL
                                                      EQU
                                                            4
                                                                                                 IHIIORCL
                                                                                                                           00051001
                        99998
                                        52 EV
                                                      EOU
                                                            8
                                                                                                 IHIIOREV
                                                                                                                           00052001
                        0000C
                                        53 NX
                                                      EQU
                                                            12
                                                                                                 IHIIORNX
                                                                                                                           00053001
                        00010
                                        54 OP
                                                      EOU
                                                                                                 IHIIOROP
                                                                                                                           00054001
                                                            16
                        00014
                                        55 OQ
                                                                                                 IHIIOROQ
                                                                                                                           00055001
                                                      EQU
                                                            20
                                        56
                                                                                                                           00056001
                                        57
                                                      SAVE
                                                            (14,12),, 'IHIIBOOL LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                           00057001
                                                                                                 BRANCH AROUND ID
LENGTH OF IDENTIFIER
000000 47F0 F026
                              00026
                                        58+
                                                      В
                                                            38(0,15)
                                                                                                                           01-SAVE
000004 21
                                        59+
                                                      DC
                                                            AI 1 (33)
                                                                                                                           01-SAVE
000005 C9C8C9C9C2D6D6D3
                                                            CL32'IHIIBOOL LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                           01-SAVE
                                        60+
                                                      DC
000025 F1
                                        61+
                                                      DC
                                                            CL1'1'
                                                                                                  IDENTIFIER
                                                                                                                           01-SAVE
000026 90EC D00C
                              0000C
                                                            14,12,12(13)
                                                                                                  SAVE REGISTERS
                                                                                                                           01-SAVE
                                        62+
                                                      STM
                                        63
                                                                                                                           00058001
                  R:F 00000
                                        64
                                                      USING IHIIBOOL, R15
                                                                                                                           00059001
00002A 4170 F08E
                              0008E
                                                                                                                           00060001
                                        65
                                                            R7. COMMON
                                                      LA
                                        66
                                                      DROP
                                                            R15
                                                                                                                           00061001
                  R:7 0008E
                                        67
                                                      USING COMMON, R7
                                                                                                                           00062001
00002E 18CD
                                        68
                                                      LR
                                                            R12,R13
                                                                                       R12 -> FSA
                                                                                                                           00063001
000030 50D0 71AE
                               0023C
                                        69
                                                      ST
                                                            R13, SAVEAREA+4
                                                                                       CHAIN SAVE AREAS
                                                                                                                           00064001
00065001
000034 41D0 71AA
                              00238
                                        70
                                                      LA
                                                            R13. SAVEAREA
000038 50D0 C008
                               00008
                                        71
                                                      ST
                                                            R13,8(,R12)
                                                                                                                           00066001
                                        72
                                                                                                                           00067001
                                        73
                                                      EVALUATE DATA SET NUMBER
                                                                                                                           00068001
                                        74
                                                                                                                           00069001
00003C 58F0 C11C
                               0011C
                                                            R15, IORLST(,R12)
                                                                                                                           00070001
                                        75
                                                      Ĺ
000040 58F0 F008
                                                                                                                           00071001
                              00008
                                        76
                                                            R15, EV(, R15)
000044 05EF
                                        77
                                                            R14,R15
                                                                                                                           00072001
                                                      BALR
000046 47F0 7000
                               0008E
                                        78
                                                            INBOOL1
                                                                                                                           00073001
                                        79 *
                                                                                                                           00074001
                                                                                                                           00075001
                                        80
                                                      DROP
                                                            R7
                                        81 *
                                                                                                                           00076001
                                        82 IHIIBOAR SAVE
                                                            (14,12),, 'IHIIBOAR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                           00077001
00004A 47F0 F026
                               00026
                                        83+IHIIBOAR B
                                                                                                 BRANCH AROUND ID
00004E 21
                                                                                                  LENGTH OF IDENTIFIER
                                                                                                                           01-SAVE
                                        84+
                                                      DC
00004F C9C8C9C9C2D6C1D9
                                        85+
                                                      DC
                                                            CL32'IHIIBOAR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                           01-SAVE
                                                            CL1'1'
                                                                                                  IDENTIFIER
                                                                                                                           01-SAVE
00006F F1
                                        86+
                                                      DC
                                                                                                  SAVE REGISTERS
                                                                                                                           01-SAVE
000070 90EC D00C
                              0000C
                                        87+
                                                      STM
                                                            14,12,12(13)
                                        88
                                                                                                                           00078001
                  R:F 0004A
                                        89
                                                      USING IHIIBOAR, R15
                                                                                                                           00079001
000074 4170 F044
                              0008E
                                        90
                                                      LA
                                                            R7, COMMON
                                                                                                                           00080001
                                        91
92
                                                                                                                           00081001
00082001
                                                      DROP
                                                            R15
                  R:7 0008E
                                                      USING COMMON, R7
000078 18CD
                                        93
                                                      LR
                                                            R12,R13
                                                                                       R12 -> FSA
                                                                                                                           00083001
00007A 50D0 71AE
                                                            R13, SAVEAREA+4
                                                                                                                           00084001
                               0023C
                                        94
                                                      ST
                                                                                       CHAIN SAVE AREAS
00007E 41D0 71AA
                              00238
                                        95
                                                            R13, SAVEAREA
                                                                                                                           00085001
999982 59D9 C998
                              99998
                                        96
                                                      ST
                                                            R13,8(,R12)
                                                                                                                           00086001
000086 5020 719A
                              00228
                                        97
                                                      ST
                                                            R2, ADEST
                                                                                       STORE DESTINATION ADDR
                                                                                                                           00087001
```

Addr1 Addr2 Stmt X390 3.1.04 2012/08/17 13.21 Loc Object Code Source Statement 00008A 47F0 7008 00096 INBOOLOP 00088001 98 В 99 \* 00089001 0008E 100 COMMON EQU COMMON CODE POINT 00090001 00008E 5810 1004 00004 101 INBOOL1 R1.4(,R1) 00091001 000092 5010 719A 00228 102 R1, ADEST 00092001 0001B 000096 94DF 501B 103 INBOOLOP NI DSF+1,255-DS10 SET DS10 = 000093001 Q,X'FF' 00009A 91FF 5019 99919 104 тм DATASET SECTIONED ? 00094001 00009E 4770 7180 0020E 105 BNZ ERROR2 INCOMPATIBLE ACTION ON DATASET 00095001 DATASET NUMBER 1? 0000A2 4960 71F2 00280 106 CH R6.=H'1 00096001 0000A6 4780 7180 0020E ERROR2 INCOMPATIBLE ACTION ON DATASET 00097001 107 BE 0000AA 9180 501A 0001A 108 TM DSF,DS0 DATASET OPEN ? 00098001 YES, BRANCH 0000AE 4710 7036 000C4 INBOOL2 00099001 109 во 0000B2 94FD 501A 0001A 110 ΝI DSF, 255-DS6 NO, SET DS6 TO 0 00100001 9911C R15, IORLST(,R12) 0000B6 58F0 C11C 111 т 99191991 0000BA 58F0 F010 R15, OP(, R15) 00102001 00010 112 L 0000BE 05EF CALL OPEN ROUTINE 00103001 R14 R15 113 **BALR** INBOOL3 0000C0 47F0 7052 000E0 00104001 114 В 115 \* 00105001 0000C4 9120 501A 0001A 116 INBOOL2 TM DSF DS2 LAST I/O OUTPUT ? 00106001 0000C8 4710 7186 INPUT BEYOND LAST OUTPUT 00107001 00214 во ERROR3 117 0000CC 9102 501A 0001A DSF,DS6 DS OPEN FOR OUTPUT ? 00108001 118 TM 0000D0 4780 7052 000E0 119 ΒZ INBOOL3 NO, BRANCH 00109001 0000D4 9101 501A 0001A 120 ТМ DSF,DS7 EOD REACHED ? 00110001 0000D8 4710 718C 0021A 121 BO ERROR5 YES, BRANCH 00111001 9999DC 47F9 7189 9929F 122 В FRROR2 99112991 00113001 123 0000E0 5880 5004 00004 124 INBOOL3 L R8.R CHARACTER POINTER IN R8 00114001 00115001 0000E4 0680 **BCTR** R8,0 DECR CHARACTER PTR 0000E6 5080 5004 00004 00116001 126 R8,R 0000EA 9200 7192 00220 127 TNB0014 MVT FLAGS.0 CLEAR FLAG BYTE 00117001 MANTISSA BUFFER POINTER 0000EE 41A0 7193 00221 128 INBOOL5 LA R10.MB 00118001 BLANK COUNTER CLEARED 0000F2 1B99 00119001 129 SR R9. R9 0000F4 9101 501A 0001A 130 TM DSF, DS7 INPUT REQ BEYOND END OF DATA ? 00120001 0000F8 4710 718C 0021A ERROR5 YES, BRANCH 00121001 131 во 0000FC 5830 5008 00008 132 INBOOL6 R3, RE 00122001 000100 0630 **BCTR** 133 R3.0 00123001 000102 5880 5004 00004 00124001 134 R8,R 000106 1983 135 CR R8, R3 00125001 000108 4770 708C 0011A 00126001 136 BNE INBOOL7 00010C 58F0 C11C 0011C 137 L R15, IORLST(,R12) RECORD END IS REACHED 00127001 000110 58F0 F00C 0000C 138 Ĺ R15, NX(, R15) 00128001 CALL NEXTREC ROUTINE 00129001 000114 05EF 139 BALR R14.R15 000E0 00130001 000116 47F0 7052 INBOOL3 LOOP BACK 140 В 141 00131001 00011A 4180 8001 00001 142 INBOOL7 INCR R 00132001 LA R8,1(,R8) 00011E 5080 5004 000122 957D 8000 00133001 00134001 00004 143 ST R8,R SAVE R 0(R8),C'''' OLIOTE FOLIND ? 99999 144 CLT 000126 4780 70DA YES, BRANCH 00135001 00168 INBOOL9 145 ΒE 00012A 91FF 7192 00220 146 TM FLAGS X'FF' 00136001 00012E 4780 706E 000FC 147 ΒZ INBOOL6 NO QUOTE READ NEXT CHARACTER 00137001 000132 9540 8000 00000 148 CLI 0(R8),C QUOTE READ ALREADY ? 00138001 000136 4770 7000 CHARACTER IS NOT BLANK 00139001 0014E 149 BNE INBOOL8 00013A 4190 9001 CHARACTER IS BLANK INCR COUNTER 00140001 00001 LA R9.1(,R9) 150 00013E 1B44 SR R4, R4 00141001 151 000140 4340 5018 00018 152 IC R4,K TEST IF BLANK DELIMITERS DENOTE 00142001 000144 1949 CR R4, R9 BY K IS ALREADY FOUND 00143001 153 999EA 000146 4780 705C 154 RF TNROOL 4 NEW SCAN LOOP K DELIMT FOUND 00144001 00014A 4770 706F **ABAFC** 155 BNF TNBOOL 6 K DELIMITERS NOT FOUND 00145001 CLEAR BLANK COUNTER 00146001 00014E 1B99 156 INBOOL8 SR R9, R9 000150 41B0 7198 00226 LA R11,MB+5 END OF BUFFER ADDR 00147001 157 000154 19AB 00148001 158 CR R10, R11 000156 47B0 705C 000EA 159 BNL INBOOL4 NO VALID BOOLEAN VALUE FOUND 00149001 160 NEW SCAN LOOP 00150001 INSERT FOUND CHAR TO BUFFER 00151001 00015A D200 A000 8000 00000 00000 MVC 0(1,R10),0(R8) 161 000160 41A0 A001 162 R10,1(,R10) 00152001 00001 LA INCR R10 000164 47F0 706E INBOOL6 EXAMINE NEXT CHARACTER 00153001 000FC 163 В 164 00154001 000168 1B99 165 INBOOL9 SR R9. R9 00155001 00016A 91FF 7192 FLAGS X'FF' 00156001 00220 166 TM 00016E 4770 70EC 0017A INBOOL10 QUOTE ALREADY FOUND 00157001 167 BNZ FLAGS,X'01' 000172 9601 7192 00220 168 FIRST QUOTE, SET FLAGS 00158001 OI 000176 47F0 706E 000FC INBOOL6 00159001 169 В 170 \* 00160001 00017A 41B0 7197 00161001 00225 171 INBOOL10 LA R11.MB+4 FOUR CHARACTERS READ ? 00017E 19AB R10.R11 00162001 172 CR 000180 4740 7060 000EE TNBOOL 5 00163001 173 ΒI 000184 4720 7110 00164001 0019E 174 ВН INBOOL11 000188 D503 7193 719E 00221 0022C 175 CLC MB(L'KTRUE),KTRUE TRUE ? 00165001 NO, INVALID BOOLEAN VALUE FOUND 00166001 00018F 4770 7060 999FF 176 BNF TNROOL 5 000192 5820 719A R2, ADEST YES, BOOLEAN VALUE TRUE FOUND 00167001 00228 177 L 000196 9201 2000 CHARACTER TO DESTINATION 00168001 00000 178 MVI 0(R2),X'01 00019A 47F0 7122 001B0 179 В INBOOL12 00169001 00170001 180 \* 00019E D504 7193 71A2 00221 00230 181 INBOOL11 CLC MB(L'KFALSE), KFALSE FALSE ? 00171001 NO, INVALID BOOLEAN VALUE FOUND YES, BOOLEAN VALUE FALSE FOUND 0001A4 4770 7060 000EE 182 BNE INBOOL5 00172001 0001A8 5820 719A 00173001 00228 183 R2.ADEST CHARACTER TO DESTINATION 0001AC 9200 2000 00000 184 MVI 0(R2),X'00' 00174001 185 \* 00175001 186 \* RECOGNITION OF THE LAST DELIMITING CHARACTER 00176001 187 00177001 00178001 0001B0 1B99 188 INBOOL12 SR R9, R9 0001B2 1B11 00179001 189 SR R1.R1 0001B4 4180 8001 INCREASE CHARACTER POINTER 00180001 00001 190 INBOOL13 R8,1(,R8) 0001B8 5980 5008 00008 191 00181001 R8, RE 0001BC 47B0 7172 00200 192 BNI TNBOOL NX NEXT RECORD 00182001 0001C0 9540 8000 00000 193 CLI 0(R8),C' 00183001

Loc	Object Code	Addr1 Addr2	Stmt Source	State	ment	X390 3.1.04 2012/08	/17 13.21
0001C4	4770 7152	001E	194	BNE	INBOOL14	CHARACTER IS NOT BLANK	00184001
	4190 9001	00001		LA	R9,1(,R9)	CHARACTER IS BLANK INCREASE R9	
0001CC	1B44 4340 5018	00018	196 3 197	SR IC	R4, R4 R4, K	TEST IF BLANK DELIMITERS DENOTE BY K IS ALREADY FOUND	00186001 00187001
0001CL		00010	198	CR	R4, R9	DI K 13 ALKEADI TOOND	00187001
	4770 7126	001B4		BNE	INBOOL13	NOT K BLANK DELIMITERS READ	00189001
	4110 1001 47F0 7126	00001 001B4		LA B	R1,1(,R1) INBOOL13	K BLANK DELIMITERS READ	00190001 00191001
000100	4710 7120	0010-	202 *	U	INDOOLIS		00192001
0001E0			203 INBOOL14		R1, R1	CHARACTER NOT EQUAL BLANK FOUND	
	4720 715C 4180 8001	001EA 00001		BP LA	INBOOLAA R8,1(,R8)	K OR MORE BLANKS FOUND < K BLANKS FOUND	00194001 00195001
	5980 5008	00008			R8, RE	C R DEAMS TOOKS	00196001
	4780 7172	00200		BE	INBOOLNX	RECORD END REACHED	00197001
	5080 5004 58D0 71AE	00004 00230		ST ( I	R8,R R13,SAVEAREA+4	STORE R TO DSTAB	00198001 00199001
000110	3000 71AL	00250	210 *		KIS JOAN EAREA! T		00200001
000154	0850 0000	0000	211		N (14,12)	RESTORE CALLERS REGS AND RETURN	
0001FA	98EC D00C 07FE	00000	212+ 213+	LM BR	14,12,12(13) 14	RESTORE THE REGISTERS RETURN	01-RETUR 01-RETUR
			214 *				00202001
	58F0 C11C 58F0 F00C	00110 00000		( L L	R15,IORLST(,R12) R15,NX(,R15)	CALL NEXTREC ROUTINE	00203001 00204001
000204		00000	217		R14,R15		00204001
00020A	47F0 7168	001F6		В	INBOOLEX		00206001
00020E	1900		219 * 220 ERROR2	LR	R13,R12		00207001 00208001
	47FD 01D4	001D4		В	FSAERR+2*4(R13)	INCOMP ACTION ON DATASET	00203001
			222 *				00210001
000214	18DC 47FD 01D8	001D8	223 ERROR3 224	LR B	R13,R12 FSAERR+3*4(R13)	INPUT BEYOND LAST OUTPUT	00211001 00212001
000210	4710 0108	00100	225 *	D	I SALKK+3 4 (KIS)	INFOI BETOND LAST COTFOI	00212001
00021A			226 ERROR5	LR	R13,R12	INPUT REQUEST BEYOND END OF	00214001
00021C	47FD 01E0	001E6	) 227 228 *	В	FSAERR+5*4(R13)	DATA SET	00215001 00216001
000220			229 FLAGS	DC	X'00'	FLAG BYTE FOR APOSTROPHE	00217001
000221 000227	404040404040		230 MB	DC	CL6' '	BUFFER	00218001
	00000000		231 ADEST	DC	A(0)	DESTINATION ADDR	00219001
			232 *				00220001
	E3D9E4C5 C6C1D3E2C5		233 KTRUE 234 KFALSE	DC DC	C'TRUE' C'FALSE'	BOOLEAN VALUE TRUE BOOLEAN VALUE FALSE	00221001 00222001
000230	COCIDSLECS		235 *	DC	CTALSL	BOOLLAN VALUE TALSE	00223001
	000000		226 64/5455		405101	50/5 4054	00004004
000238	00000000000000	900	236 SAVEAREA 237 *	I DC	18F'0'	SAVE AREA	00224001 00225001
000280			238	LTORG			00226001
000280	0001		239 240 *		=H'1'		00227001
			2-10				
			241	DSTAB	LE DSECT=YES		00228001
000000		00000 00024	242+DSTABLE				01-DSTAB
	00000000	00000 00024				-> DCB	
000000 000004	00000000	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R	DSECT DC DC	F'0' F'0'	-> DCB CHARACTER POINTER	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008	00000000 00000000	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R 246+RE	DSECT DC DC DC	F'0' F'0' F'0'		01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C	00000000	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R	DSECT DC DC	F'0' F'0'		01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014	00000000 00000000 00000000 00000000 0001	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S	DSECT  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' H'1'	CHARACTER POINTER RECORD POINTER	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016	0000000 0000000 0000000 0000000 0001 0050	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P	DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' H'1' H'80'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S	DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' K'0' X'02' X'00'	CHARACTER POINTER RECORD POINTER	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018	90909090 90909090 90909090 90909090 9091 9050 92	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF	DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' X'02'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00000 00024	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q	DSECT DC	F'0' F'0' F'0' K'0' X'02' X'00'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92		242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 256+*	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92		242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 256+*	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3	DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF X'80' X'40' X'20' X'10'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN	01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF X'80' X'40' X'20' X'10' X'08'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'04'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6	DSECT DC	F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 266+* 266+* 267+*	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01' ET FLAGS - DSF+1	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 268+DS8	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1 X'80'	CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 266+* 266+* 267+*	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01' ET FLAGS - DSF+1	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+D50 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11	DSECT DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'880' X'40' X'10' X'10' X'10' X'10' X'10'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00040 00040 00020 00010 00008	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254** 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSEOD	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'08'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+D50 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'880' X'40' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'04' X'02' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'04' X'02'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000014 000016 000018 000019	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00001 00080 00040 00020 00010 00008 00004	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 267+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSE0D 273+DSIOERR 274+DS14 275+DS15	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'880' X'40' X'20' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000018 000019 00001A	90909090 90909090 90909090 90909090 9091 9050 92	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 266+* 271+DS10 271+DS10 271+DS10 273+DS10ERR 274+DS14	DSECT DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'880' X'40' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'04' X'02' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'04' X'02'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT  I/O ERROR DATASET OPENED	01-DSTAB 01-DSTAB
000000 000004 000001 000010 000013 000013 000013 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+D54 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 266+* 271+DS10 271+DS10 271+DS10 273+DS10ERR 274+DS14 275+DS15 277+NOTEADR 278+BL	DSECT DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'880' X'44' X'20' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' F'0' H'0'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT  I/O ERROR DATASET OPENED	01-DSTAB 01-DSTAB
000000 000004 000008 00000C 000010 000018 000019 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 267+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSE0D 273+DS1OERR 274+DS14 275+DS15 276+* 277+NOTEADR 278+BL 279+	DSECT DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'88' X'40' X'20' X'10' X'08' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' F'0'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT  I/O ERROR DATASET OPENED CLOSE FROM IHIERR	01-DSTAB 01-DSTAB
000000 000004 000001 000010 000013 000013 000013 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+D54 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 266+* 271+DS10 271+DS10 271+DS10 273+DS10ERR 274+DS14 275+DS15 277+NOTEADR 278+BL	DSECT DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'880' X'44' X'20' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' F'0' H'0'	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT  I/O ERROR DATASET OPENED CLOSE FROM IHIERR	01-DSTAB 01-DSTAB
000000 000004 000001 000010 000013 000013 000013 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00002 00001 00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSE0D 273+DS10ERR 274+DS14 275+DS15 277+NOTEADR 278+BL 279+ 280+* 281+DSTABLEL 282+*	DSECT DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'10' X'80' X'40' X'10' X	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR  LRECL+ TWO ARB	01-DSTAB 01-DSTAB
000000 000004 000001 000010 000013 000013 000013 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00002 00001 00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSE0D 273+DSIOERR 274+DS14 275+DS15 276+* 277+NOTEADR 278+BL 279+ 280+* 281+DSTABLEL 282+* 283 *	DSECT DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'880' X'40' X'02' X'10' F'0' H'0' H'0' *-DSTABLE	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR  LRECL+ TWO ARB	01-DSTAB 01-DSTAB
000000 000004 000001 000014 000018 000018 000018 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00001 00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSEOD 273+DS10ERR 274+DS14 275+DS15 276+* 277+NOTEADR 278+BL 279+ 280+* 281+DSTABLEL 282+* 283 *	DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'40' X'20' X'10' ET FLAGS - DSF+1  X'80' X'40' X'20' X'10' F'6' H'0' H'0' H'0' *-DSTABLE	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR  LRECL+ TWO ARB	01-DSTAB 01-DSTAB
000000 000004 000001 000014 000018 000018 000018 00001A	99999999 99999999 9999999 999999 9999 9999	00080 00040 00020 00010 00008 00004 00001 00080 00040 00020 00010 00008 00004 00002 00001	242+DSTABLE 243+* 244+ADCB 245+R 246+RE 247+NBB 248+BB 249+S 250+P 251+K 252+Q 253+DSF 254+* 255+* 256+* 257+DS0 258+DS1 259+DS2 260+DS3 261+DS4 262+DS5 263+DS6 264+DS7 265+* 266+* 267+* 268+DS8 269+DS9 270+DS10 271+DS11 272+DSEOD 273+DS10ERR 274+DS14 275+DS15 276+* 277+NOTEADR 278+BL 279+ 280+* 281+DSTABLEL 282+* 283 * 284 FAS	DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  ET FLAGS - DSF  X'80' X'40' X'20' X'10' X'04' X'02' X'01'  ET FLAGS - DSF+1  X'880' X'40' X'02' X'10' F'0' H'0' H'0' *-DSTABLE	RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR  LRECL+ TWO ARB	01-DSTAB 01-DSTAB

000EC

383=EPILOGB

EQU

\*-FSAREA

EPILOGE PROGRAM, BETA-BLOCK ENTRY 00097001

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 288= COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY 00002001 289= 00003001 290= STATUS - LEVEL 2.1 99994991 291= 00005001 292= 00006001 293= 00007001 294=\* COMMON DATA AREA 00008001 295= 00009001 296= **FSAREA** 00010001 00011001 297= 298= 00012001 299=\* 00013001 300= DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL 00014001 301= MODULES DURING THE EXECUTION 99915991 00016001 302= ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY 303= 00017001 SUBROUTINES) BY R12 304= 00018001 305= 00019001 00000 306=FSAREA EQU 00020001 00021001 307= SAVE AREAS 308= 00022001 309= 00023001 000000 310= DS 18F STANDARD SAVE AREA 00024001 00048 311=ASAVE EQU \*-FSAREA ALTERNATE SAVE AREA USED BY 00025001 999948 312= DS 18F CERTAIN SUBROUTINES 99926991 00027001 313= 314= MISCELLANEOUS WORK AREAS AND CONSTANTS 00028001 00029001 315= 00090 316=FCTVALST \*-FSAREA TEMPORARY STORAGE FOR 00030001 EQU 999999 317= DS **FUNCTION VALUES** 00031001 00098 318=ASTLOC EOU \*-FSAREA DISPL FOR ADDR OF STAND LOCTN 00032001 000098 00000090 A(FSAREA+FCTVALST) 00033001 319= DC 0009C 320=BRRST EOU \*-FSAREA TEMPORARY SAVE REG BRR 00034001 0009C 321=HW EQU BRRST TEMPORARY HALFWORD STORAGE 00035001 00009C 322= DS 00036001 323=PROLREG αααΔα FOU \*-FSARFA STORAGE FOR PRT AND LAT WHEN 99937991 0000A0 A PROCEDURE IS FORMAL PARAM 00038001 324= DS 2A 325= 00039001 HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE 00040001 326= 327=\* 99941991 0000A8 328= DS 00042001 0000A8 00 329= DC X'00 00043001 000A9 330=PROLPBN -FSAREA STORAGE FOR CALLED PBN 00044001 EOU 331= 00045001 0000A9 00 X'00' DC 000AA 332=EIGHT \*-FSAREA CONST FOR REDUCING RAS 00046001 EQU 0000AA 0008 333= DC H'8' 00047001 334= 99948991 0000AC DS 00049001 335= 0F 00050001 000AC 336=ADSTAB EQU \*-FSAREA ADDR OF DSTABLE 0000AC 337= IN THE OBJECT PROGRAM 00051001 000B0 338=ANOTTAB EOU \*-FSARFA ADDR OF NOTE TABLE 00052001 (INSERTED BY THE OPEN ROUTINE) 0000B0 339= DS 00053001 340= 00054001 000B4 341=IHIFSAST EQU 00055001 000B4 342=PGOPSW EQU \*-FSAREA PROGRAM CHECK OLD PSW 00056001 0000B4 343= 00057001 DS 2F 000BC 344=FSAPICA EQU \*-FSAREA OLD PICA ADDR 00058001 ARREC ARRAGARA 345= DC F'0' 99959991 346=SCRCS 00060001 000C0 \*-FSAREA SEMICOLON NUMBER EQU 0000C0 347= DS Н 00061001 000C2 348=DTSW \*-FSAREA OPTION SWITCHES 00062001 EQU 000C2 349=0PTSW EQU DTSW 00063001 DUMP-80, TRACE-40, SHORT-20 ERROR CODE FOR ERROR ROUTINE 0000C2 00 350= DC X'00 00064001 000C3 351=FSAERCOD EOU \*-FSAREA 00065001 0000C3 00066001 352= DS 353=\* 00067001 354= RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 355=\* 00069001 0000C4 DS 00070001 356= 000C4 357=IHIFSARS EQU 00071001 000C4 358=RASSTART EQU \*-FSAREA ADDR OF FIRST ENTRY IN RAS-8 00072001 0000C4 00073001 359= 99908 360=RASPT EQU \*-FSARFA RAS POINTER FROM TOP 00074001 000008 361= DS 00075001 000CC 362=RASEND -FSAREA ADDR OF LAST ENTRY IN RAS+8 EOU 00076001 0000CC 00077001 363= DS 000D0 364=RASPB \*-FSAREA RAS POINTER FROM BOTTOM 00078001 EQU 0000D0 365= DS 00079001 366= 99989991 367= LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES 00081001 00082001 368= 369=BRLIST 0000D4 DS 00083000 370=CAP1 \*-FSAREA FIRST PART CAPS 00084001 000D4 EQU 000004 4700 0000 00000 371= NOP 00085001 \*-FSAREA 000D8 372=CAP2 EOU SECOND PART CAPS 00086001 0000D8 4700 0000 00000 373= NOP 00087001 000DC 374=PROLOGP EQU PROLOGUE FORMAL PARAMETER ENTRY 00088001 000DC 375=PROLOGFP EQU PROLOGP 00089001 0000DC 4700 0000 00000 376= NOP 00090001 000E0 377=PROLOG EOU \*-FSARFA PROLOGUE PROGRAM USUAL ENTRY 00091001 0000E0 4700 0000 00000 00092001 NOP 378= 000E4 379=RETPROG EQU -FSAREA DISPLACEMENT RETURN PROGRAM 00093001 0000E4 4700 0000 00094001 00000 380= NOP 00095001 000E8 \*-FSAREA EPILOGUE PROGRAM, PROCEDURE ENTRY 381=EPILOGP EQU 9999E8 4799 9999 00000 382= NOP 00096001

0000E

0000F

439+R14

440+R15

441

442

EQU 14

**EQU** 15

END

01-IEZRE

00237001

00238001

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 0000EC 4700 0000 00000 384= NOP 00098001 000F0 385=EPILPR3 EQU \*-FSAREA EPILOGUE PROGRAM ENTRY 3 00099001 0000F0 4700 0000 00000 386= NOP 00100001 000F4 -FSAREA FIRST PART CSWES 387=CSWE1 EOU 00101001 0000F4 4700 0000 00102001 00000 388= NOP 000F8 389=CSWE2 \*-FSAREA SECOND PART CSWES 00103001 EQU 0000F8 4700 0000 00000 390= NOP 00104001 LOAD PRECOMPILED PROC ROUTINE 000FC 391=LOADPP EQU \*-FSAREA 00105001 0000FC 4700 0000 00000 392= NOP 00106001 00100 393=TRACE \*-FSAREA 00107001 EOU 000100 D200 0000 0000 00000 00000 394= MVC 0(0),0 00108001 000106 4700 0000 00000 395= NOP 00109001 00010A 4700 0000 00000 396= NOP 00110001 397=TERMNTE \*-FSARFA NORMAL TERMINATION EXIT 9919F FOU 99111991 00010E 4700 0000 00000 0 00112001 398= NOP 00112 399=BCR \*-FSAREA 00113001 EQU 000112 0700 VARIABLE CONDITIONAL BRANCH 00114001 400= BCR 00114 401=GETMSTO EOU \*-FSAREA 00115001 000114 4700 0000 00000 0 402= NOP 00116001 403= 00117001 00118 404=VALUCALL \*-FSAREA 00118001 EOU 000118 4700 0000 NOP 00119001 00000 405= 0011C 406=IORLST EQU \*-FSAREA 00120001 00011C 4700 0000 00000 407= NOP 0 00121001 408= 00122001 001CC 409=FSAERR DISPL FOR ERROR LIST 00123001 EQU X'1CC' 410=\* 00124001 411=\* DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 412=\* 00126001 0020C 413=0UT0FB EQU FSAERR+4\*16 00127001 00218 414=NUMBIND EOU FSAERR+4\*19 00128001 00208 415=ARRAYBD FSAERR+4\*15 00129001 EOU 0026C 416=ERROR40 EQU FSAERR+4\*40 00130001 00224 **417**=0ERR22 EQU FSAERR+4\*22 00131001 00210 418=ENDLESL EQU FSAERR+4\*17 00132001 FSAFRR+4\*21 419=0FRR21 99229 EOU 00133001 00134001 420=\* 421 \* 00233001 422 \* REGISTER EQUATES 00234001 423 \* 00235001 424 **IEZREGS** 00236001 00000 425+R0 EQU 01-IEZRE 00001 426+R1 01-IEZRE EOU 01-IEZRE 00002 427+R2 EQU 00003 428+R3 EQU 01-IEZRE 00004 429+R4 EQU 4 01-IEZRE 99995 430+R5 5 EOU 01-TF7RF 00006 431+R6 01-IEZRE EQU 6 7 01-IEZRE 00007 432+R7 EQU 00008 433+R8 EQU 01-IEZRE 00009 434+R9 EQU 01-IEZRE 435+R10 10 0000A EQU 01-IEZRE 0000B 436+R11 01-IEZRE EOU 11 437+R12 0000C EQU 12 01-IEZRE 0000D 438+R13 EQU 13 01-IEZRE

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	s				X390	3.1.	04 2	012/0	8/17	13.21
=H'1'	2	00000280	00000001	нн		239	106											
ADEST		00000228				231		102M	177	183								
BRRST	1	0000009C		U		320	321											
COMMON	1	0000008E	00000001	LU		100	65	67U	90	92U								
DSF		0000001A				253	103M	108	110M	116	118	120	130					
DSTABLE	1	00000000	FFFFFFF	: ]		242	43U	281										
DS0		00000080		U		257	108											
DS10		00000020		U		270	103											
DS2		00000020		U		259	116											
DS6		00000002		U		263	110	118										
DS7		00000001		U U		264 348	120 349	130										
DTSW ERROR2		000000C2 0000020E	00000001			220		107B	122B									
ERROR3		00000201				223	117B	1075	1220									
ERROR5		0000021A				226	121B	131B										
EV		00000008		U		52	76											
FCTVALST		00000090		U		316	319											
FLAGS	1	00000220	00000001	XX		229	127M	146	166	168M								
FSAERR	1	000001CC		U		409	221B	224B	227B	413	414	415	416	417	418	419		
FSAREA	1	00000000	FFFFFFF	U		306	311	316	318	319	320	323	330	332	336	338	342	344
							346	348	351	358	360		364	370	372	374	377	379
				_			381	383	385	387	389	391	393	397	399	401	404	406
IHIIBOAR		0000004A				83	42	89U										
IHIIBOOL		00000000				40	640											
INBOOLAA		000001EA				206	204B											
INBOOLEX		000001F6				209	218B	2070										
INBOOLNX INBOOLOP		00000200 00000096				215 103	192B 98B	20/6										
INBOOLOF		00000036 00000036				101	78B											
INBOOL1		000000017A				171	167B											
INBOOL11		0000019E				181	174B											
INBOOL12		000001B0				188	179B											
INBOOL13	4	000001B4	00000001	I		190	199B	201B										
INBOOL14	2	000001E0	00000001	I		203	194B											
INBOOL2	4	000000C4	00000001	I		116	109B											
INBOOL3	4	000000E0	00000001	. I		124	114B	119B	140B									
INBOOL4		000000EA				127	154B											
INBOOL5		000000EE				128	173B											
INBOOL6		000000FC					147B	155B	163B	169B								
INBOOL7		0000011A					136B											
INBOOL8 INBOOL9		0000014E				156 165	149B 145B											
IORLST		00000168 0000011C		U		406	75	111	137	215								
K		00000110	FFFFFFF			251	152	197	137	213								
KFALSE		0000030				234	181	10,										
KTRUE		0000022C				233	175											
MB		00000221				230	128	157	171	175	181							
NX	1	0000000C		U		53	138	216										
OP	1	00000010		U		54	112											
PROLOGP		00000DC		U		374	375											
Q		00000019				252	104											
R		00000004				245	124	126M		143M	208M							
RE		00000008	FFFFFFF			246	132	191		2004	2024							
R1		00000001		U U			101M											
R10 R11		0000000A		U		436	128M 157M		171M		1/2							
R12		0000000B 0000000C		U		437		71	75		96	111	137	215	220	223	226	
R13		0000000C		U		438	68	69		71	93	94				220M		223M
	-	0000000		Ū		.50		226M					55		205			
R14	1	000000E		U		439				217M								
R15	1	000000F		U		440	64U	66D	75M	76M	77B	89U	91D	111M	112M	113B	137M	138M
							139B	215M	216M	217B								
R2	1	00000002		U		427	97	177M	178	183M	184							
R3		00000003		U		428		133M										
R4		00000004		U		429		152M	153	196M	197M	198						
R5		00000005		U		430	430											
R6		00000006		U			106	c -11 ·	0.00	0011	0311							
R7		00000007		U		432				90M		1 / 21-	142	1 4 4	140	1.61	1001	101
R8	1	00000008		U		433	124M		126 206		135	142M	143	144	148	101	TARW	TAT
R9	1	00000009		U		434				208 156M	165M	1 2 2 M	195M	192				
SAVEAREA		00000038	00000001			236		70		95		±001/1	ויוככב	170				
	·			•				-		-								

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21 87 212M 1(1) 87 101M 102 189M 200M 203M 212M 2(2) 62 87 97 177M 178 183M 184 212M 87 132M 133M 135 212M 87 151M 152M 153 196M 197M 198 212M 3(3) 4(4) 62 62 5(5) 43U 62 87 212M 6(6) 62 87 106 212M 87 106 212m 65M 67U 80D 87 90M 92U 212M 87 124M 125M 126 134M 135 142M 143 144 148 161 190M 191 193 205M 206 208 212M 87 129M 150M 153 156M 165M 188M 195M 198 212M 87 128M 158 161 162M 172 212M 7(7) 62 8(8) 62 9(9) 10(A) 62 62 11(B) 62 87 157M 158 171M 172 212M 62 68M 71 75 87 93M 96 111 137 212M 215 220 223 226 62 68 69 70M 71 87 93 94 95M 96 209M 212 220M 221N 223M 224N 226M 227N 62 77M 87 113M 139M 212M 213B 217M 58B 62 64U 66D 75M 76M 77B 83B 87 89U 91D 111M 112M 113B 137M 138M 139B 212M 215M 216M 217B 12(C) 13(D) 14(E) 15(F)

BOO Dsect Cross Reference PAGE 9

X390 3.1.04 2012/08/17 13.21

DSTABLE 0000024 FFFFFFF 242 4 DSTABLE FAS 0000120 FFFFFFFE 284 PRIMARY INPUT

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17 1	3.21
43		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001B	208	DSTABLE,R	15		
64		USING	Ordinary	00000001	00000000	00001000	15	0008E	65	IHIIBOOL,	R15		
66		DROP					15			R15			
67		USING	Ordinary	00000001	0000008E	00001000	7	001AE	78	COMMON, R7	,		
80		DROP	•				7			R7			
89		USING	Ordinary	00000001	0000004A	00001000	15	00044	90	IHIIBOAR,	R15		
91		DROP	-				15			R15			
92		USING	Ordinary	00000001	0000008E	00001000	7	001F2	218	COMMON, R7	,		

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIIBO PROCSTEP: X390

Primary input: lines 1 to 238 of SYSD.ALGOLFRT.ASM(IHIIBO)

SYSLIB library records read: 362
SYSUT1 work file size: 41800 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 19040 bytes
SYSLIN file records written: 14

TXA000I Return code 0, elapsed time 0.28 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIIBOOL 000282 6

## IHIIDE LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIIDE)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00150
```

SYSUT1

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                                                                                                 X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt
                                            Source Statement
                                                                                                                        00002001
                                        3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00003001
                                        4
                                                                                                                        00004001
00005001
                                        5
                                                    STATUS - LEVEL 2.1
                                        6
                                                                                                                        00006001
                                                    FUNCTION/OPERATION
                                                                                                                        00007001
                                           *
                                        8
                                                    SCAN INPUT BUFFER UNTIL A VALID NUMBER IS FOUND TRANSFER
                                                                                                                        00008001
                                        9
                                                    TO BINARY AND STORE INTO SECOND PARAMETER
                                                                                                                        00009001
                                       10
                                                                                                                        00010001
                                                                                                                        00011001
                                       11
                                                    IHIIDEIR - FROM - GENERATED OBJECT MODULE - INREAL
                                       12
                                                                                                                        00012001
                                           *
                                       13
                                                    IHIIDEII - FROM - GENERATED OBJECT MODULE - ININTEGER
                                                                                                                        00013001
                                       14
                                                                     R1, PARMLIST
                                                                                                                        00014001
                                                                BALR R14,R15
DATA PASSED BY NAME
                                       15
                                                                                                                        00015001
                                                                                                                        00016001
                                       16
                                                    IHIIDEAI - FROM - ARRAY MODULE IHIIAR
                                       17
                                                                                                                        00017001
                                                                      R7, A(DESTINATION)
                                       18
                                                                                                                        00018001
                                       19
                                                                     R10,FLAG
                                                                                                                        00019001
                                                                BALR R14,R15
                                       20
                                                                                                                        00020001
                                                                                                                        00021001
                                       21
                                                                DATA PASSED BY NAME
                                                                                                                        00022001
                                       22
                                       23
                                                    INPUT - N/A
                                                                                                                        00023001
                                       24
                                                                                                                        00024001
                                       25
                                                    OUTPUT - N/A
                                                                                                                        00025001
                                                                                                                        00026001
                                       26
                                                    EXTERNAL ROUTINES
                                                                                                                        00027001
                                       27
                                       28
                                                    IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                        00028001
                                                              OPEN DATASET
                                                                                                                        00029001
                                       29
                                           *
                                       30
                                                             CHANGE TO NEXT INPUT RECORD
                                                                                                                        00030001
                                       31
                                                            - CONVERT REAL TO INTEGER
                                                                                                                        00031001
                                       32
                                                    IHIFSA - CNVIRD, INTEGER TO REAL IHIPTT - POWER OF TEN TABLE
                                                                                                                        00032001
                                                                                                                        00033001
                                       33
                                        34
                                                                                                                        00034001
                                       35 *
                                                    TABLE/WORK AREAS -
                                                                                                                        00035001
                                       36
                                                    IPTAB - TO EVALUATE CHARACTER FROM INPUT BUFFER WHEN
                                                                                                                        00036001
                                                             SCANNING AND TO BRANCH TO CORRESPONDING SUBPROGRAM
                                       37
                                                                                                                        00037001
                                                             MANTISSA BUFFER FOR INTERMEDIATE STORING OF VALID
                                                                                                                        00038001
                                       38
                                        39
                                                                                                                        00039001
                                       40
                                                                                                                        00040001
                                                    EXITS - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                       41
                                                                                                                        00041001
                                       42
                                                                                                                        00042001
                                                    EXITS - ERROR - INPUT REQUEST BEYOND END OF DATASET NO 5
                                       43
                                                                                                                        00043001
                                       44
                                                                    - EXP PART OF INPUT NUMBER CONSISTS OF
                                                                                                                        00044001
                                                                      MORE THAN 2 DIGITS NO 6
                                                                                                                        00045001
                                       45
                                       46
                                                                      BRANCH TO FSA
                                                                                                                        00046001
                                                                                                                        00047001
00048001
                                       47
                                                                             R13, IHIFSA
                                                                             FSAERR+XX*4(R13) XX CORRESPONDING
                                       48
                                                                                                  ERROR NUMBER
                                                                                                                        00049001
                                       49
                                        50
                                                                                                                        00050001
                                        51
                                                    NOTES
                                                          - LINKING TO IHIIDEAI DEVIATES FROM STANDARD SEE
                                                                                                                        00051001
                                       52 *
                                                    ABOVE
                                                                                                                        00052001
                                                                                                                        00053001
                                       53
000000
                       00000 006D2
                                       54 IHIIDECM CSECT
                                                                                                                        00054001
                                        55
                                                                                                                        00055001
                                        56
                                                    ENTRY IHIIDEIR
                                                                                                                        00056001
                                       57
                                                    ENTRY IHIIDEII
                                                                                                                        00057001
                                       58
                                                    ENTRY IHIIDEAI
                                                                                                                        00058001
                                       59
                                                                                                                        00059001
                                                    REGISTER CONTENTS ON ENTRY POINT IHGIDEAI
                                                                                                                        00060001
                                       60
                                       61
                                                                                                                        00061001
                                                                                     DESTINATION ADDR
                                                                                                                        00062001
                                       62
                                       63
                                                    R10
                                                                                     FLAG BYTE
                                                                                                                        00063001
                                       64
                                                                                                                        00064001
                                                                                                                        00065001
                                                    FLOATING POINT REGISTERS
                                       65
                                                                                                                        00066001
                                       66
                       00000
                                       67 FPR0
                                                                                                                        00067001
                                                    EQU
                                       68
                                                                                                                        00068001
                                       69
                                                    OTHER GENERAL REGISTERS
                                                                                                                        00069001
                                                                                                                        00070001
                                       70
                                       71
                                                                                     -> DSTABLE ENTRY
                                                                                                                        00071001
                                                    R5
                                       72
                                                    R6
                                                                                     DATASET NUMBER
                                                                                                                        00072001
                                       73
                                                                                     BASE REGISTER FOR
                                                                                                                        00073001
                                                    R13
                                           *
                                       74
                                                    R7
                                                                                     -> DESTINATION
                                                                                                                        00074001
                                       75
                                                                                                                        00075001
                                                    R4
                                                                                     CHARACTER POINTER
                                                                                     INTEGER NUMBER
                                                                                                                        00076001
                                                    RØ
                                       76
                                        77
                                                                                     MANTISSA BUFFER POINTER
                                                                                                                        00077001
                                                    R8
                                                    R9
                                                                                     EXPONENT BUFFER POINTER
                                                                                                                        00078001
                                        78
                                       79
                                                    R10
                                                                                     DECIMAL POINT POINTER
                                                                                                                        00079001
                                                                                     EXPONENT LESS ETGHT
                                                                                                                        99989991
                                       80
                                                    R11
                                                                                     -> POWERTEN TABLE LESS EIGHT
                                                                                                                        00081001
                                       81
                                                    R15
                                                                                                                        00082001
                                       82
                  R:5 00000
                                       83
                                                    USING DSTABLE, R5
                                                                                                                        00083001
                                       84 *
                                                                                                                        00084001
                                       85
                                                    DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                        00085001
                                       86
                                                                                                                        00086001
                                       87 CI
                                                                          DISPLACEMENT FOR - IHIIORCI
                       00000
                                                    EOU
                                                                                                                        00087001
                       00004
                                       88 CL
                                                    EQU
                                                           4
                                                                                               IHIIORCL
                                                                                                                        00088001
                       00008
                                       89 EV
                                                    EQU
                                                           8
                                                                                               IHIIOREV
                                                                                                                        00089001
                       0000C
                                       90 NX
                                                    EQU
                                                           12
                                                                                               IHIIORNX
                                                                                                                        00090001
                                       91 OP
92 OQ
                       99919
                                                    EOU
                                                           16
                                                                                               IHIIOROP
                                                                                                                        00091001
                                                                                                                        00092001
                       00014
                                                                                              IHIIOROO
                                                    EQU
                                                           20
                                       93
                                                                                                                        00093001
                                       94 IHIIDEAI SAVE
                                                           (14,12),, 'IHIIDEAI LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                        00094001
000000 47F0 F026
                              00026
                                       95+IHIIDEAI B
                                                                                               BRANCH AROUND ID
                                                           AL1(33)
000004 21
                                       96+
                                                    DC
                                                                                               LENGTH OF IDENTIFIER
                                                                                                                        01-SAVE
000005 C9C8C9C9C4C5C1C9
                                                           CL32'IHIIDEAI LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                       97+
                                                    DC
                                                                                                                        01-SAVE
```

					ole, No		<i>.</i> .	_	<i>-</i>		V200 2 4 04 2042/00	(47.42.24
Lo	c 0	bjec	t Cod	de	Addr1	Addr2	Stmt	Source	State	nent	X390 3.1.04 2012/08	/17 13.21
0000 0000			DOOC			aaaac	98+ 99+		DC STM	CL1'1'	IDENTIFIER	01-SAVE
0000.	26 9	DEC	DOOC			0000C	100 *		SIM	14,12,12(13)	SAVE REGISTERS	01-SAVE 00095001
0000	٥٨ 1	020		R:F	00000		101 102		USING LR	IHIIDEAI, R15 R3, R13	CHAIN SAVE AREAS	00096001 00097001
0000			F688			00688	103		LA	R13, SAVEAREA	CHAIN SAVE AREAS	00097001
00003						00004	104		ST	R3,4(,R13)		00099001
00003 00003						00008 000CC	105 106		ST LA	R13,8(,R3) R3,COMMON		00100001 00101001
					00000		107		DROP			00102001
00003	3C 4	2A0	3496	K:3	000CC	00562	108 109		STC	COMMON, R3 R10, FKT	STORE FLAG BYTE	00103001 00104001
00004	40 4	7F0	300E			000DA	110		В	LADDRA		00105001
							111 * 112		DROP	R3		00106001 00107001
							113 *					00108001
00004	14 4	7F0	F026			00026		HIIDEII		(14,12),, 'IHIIDEII LEVEI 38(0,15)	L 2.1 &SYSDATE &SYSTIME'  BRANCH AROUND ID	<b>00109001</b> 01-SAVE
00004	48 2	1					116+		DC	AL1(33)	LENGTH OF IDENTIFIER	01-SAVE
00004			.9C9C4	1C5C90	<b>C9</b>		117+ 118+		DC DC	CL32'IHIIDEII LEVEL 2.1 CL1'1'	08/17/12 13.2' IDENTIFIER IDENTIFIER	01-SAVE 01-SAVE
0000			D00C			0000C	119+		STM	14,12,12(13)	SAVE REGISTERS	01-SAVE
				R:F	00044		120 * 121		USING	IHIIDEII,R15		00110001 00111001
0000							122		LR	R12,R13		00112001
0000						00688 00004	123 124		LA ST	R13,SAVEAREA R12,4(,R13)	CHAIN SAVE AREAS	00113001 00114001
0000						00008	125		ST	R13,8(,R12)		00115001
0000	7C 4	130	F088			000CC	126 127		LA DROP	R3, COMMON		00116001 00117001
				R:3	000CC		128			COMMON, R3		00118001
00008					00562	000CC	129 130		MVI B	FKT,X'04' COMMON	FLAG BYTE: ININTEGER	00119001 00120001
00000	J	,,,	3000			00000	131 *			COMPON		00121001
							132 133 *		DROP	R3		00122001 00123001
								HIIDEIR	SAVE	(14,12),,'IHIIDEIR LEVE	L 2.1 &SYSDATE &SYSTIME'	00124001
			F026			00026		HIIDEIR		38(0,15)	BRANCH AROUND ID	01-SAVE
00008			9C9C4	1C5C9I	09		136+ 137+		DC DC	AL1(33) CL32'IHIIDEIR LEVEL 2.1	LENGTH OF IDENTIFIER 08/17/12 13.2' IDENTIFIER	01-SAVE 01-SAVE
0000			D006			00000	138+		DC	CL1'1'	IDENTIFIER	01-SAVE
0000	AE 9	DEC	DOOC			0000C	139+ 140 *		STM	14,12,12(13)	SAVE REGISTERS	01-SAVE 00125001
0000	22.4	060		R:F	00088		141			IHIIDEIR, R15		00126001
00001			F600			00688	142 143		LR LA	R12,R13 R13,SAVEAREA	CHAIN SAVE AREAS	00127001 00128001
00001						00004	144		ST	R12,4(,R13)		00129001
00001						00008 000CC	145 146		ST LA	R13,8(,R12) R3,COMMON		00130001 00131001
							147		DROP	R15		00132001
0000	24 9	200	3496	R:3	000CC 00562		148 149		USING MVI	COMMON, R3 FKT, X'00'	FLAG BYTE: INREAL	00133001 00134001
0000						000CC	150		В	COMMON		00135001
							151 * 152 *		EVALUA	ATE DATASET NUMBER (EVDS	N)	00136001 00137001
							153 *				/	00138001
0000						0011C 00008	154 C	OMMON	L L	R15,IORLST(,R12) R15,EV(,R15)		00139001 00140001
00001							156			R14,R15		00141001
00001	26 5	870	1004			00004	157 * 158 L	ADDR	L	R7,4(,R1)	R7 -> DESTINATION ADDR	00142001 00143001
00001	DA 9	4DF	501B		0001B		159 L		NI	DSF+1,255-DS10	SET DS10 = 0	00144001
10000 10000					00019	00506	160 161		TM BNZ	Q,X'FF' ERROR2	DATASET SECTIONED ? YES, INCOMPATIBLE ACTION	00145001 00146001
00001	6 4	960	3604			006D0	162		CH	R6,=H'1'	DATASET NO = 1 ?	00147001
00001 00001					0001A	00506	163 164		BE TM	ERROR2 DSF,DS0	YES, INCOMPATIBLE ACTION DATASET OPEN ?	00148001 00149001
00001	2 4	710	3036		5301A	00102	165		ВО	DSOPEN	YES, BRANCH	00150001
00001 00001						0011C 00010	166 167		L L	R15,IORLST(,R12) R15,OP(,R15)	NO, SETUP FOR OPEN REQUEST	00151001 00152001
00001						00122	168		В	REQOPEN	DCB IS CLOSED, BRANCH TO OPEN IT	00153001
0001	32 a	120	501 A		0001A		169 * 170 D		тм	DSF,DS2	LAST I/O OUTPUT ?	00154001 00155001
0001	a6 4	780	3042		COOTH	0010E	171	LIN	BZ	DSOPENA	NO, BRANCH	00156001
0001	θA 4	7F0	3440			0050C	172 173 *		В	ERROR3	INPUT BEYOND LAST OUTPUT	00157001 00158001
0001					0001A		174 D	SOPENA	TM	DSF,DS6	OPEN FOR OUTPUT ?	00159001
00011 00011					0001A	00128	175 176		BZ TM	SCAN DSF_DS7	NO, BRANCH	00160001 00161001
0001					OUUTA	00512	176		BO	DSF,DS7 ERROR5	END OF DATA REACHED	00161001
00011 00011					0001A	00506	178 179 R	EQOPEN	B NI	ERROR2 DSF, 255-DS6	SET DS6 - 0	00163001 00164001
0001			ΑTU		OUUTA		179 K	LQUPEN		R14, R15	SET DS6 = 0 OPEN DATASET	00165001
00012 00012						00004 00567	181 S	CAN	L LA	R4, R	CHARACTER POINTER	00166001 00167001
0001						00557	183		LA	R8,MB+1 R9,MB+19	MANTISSA BUFFER POINTER EXPONENT BUFFER POINTER	00167001
0001	34 D	213		349A	00567	00566	184	CAN1	MVC	MB+1(L'MB-1),MB	CLEAR BUFFER	00169001
00013 00013			3498		00564		185 S		BCTR MVI	R4,0 SM,C'+'	DECREASE CHARACTER POINTER MANTISSA SIGN INITIALLY PLUS	00170001 00171001
00014	10 9	200	3497		00563		187 S		MVI	F,0	CLEAR FLAG BYTE F	00172001
00014 00014					00565	00001	188 189 S	CAN3	MVI LA	SE,C'+' R4,1(,R4)	EXPONENT SIGN INITIALLY PLUS	00173001 00174001
00014	4C 5	940	5008			80000	190		С	R4, RE	D TO NOT FOUND DECORD SUB/OF	00175001
0001! 0001!					00563	00176	191 192 S	CAN4	BNE TM	SCAN5 F,X'82'	R IS NOT EQUAL RECORD END(RE) RECORD END IS REACHED (R=RE) ?	00176001 00177001
0001	58 4	770	323A			00306	193		BNZ	DELIMIT	A VALID NUMBER HAS BEEN READ	00178001

Loc	0bjec	+ Cod	۵	Addr1	Addr2	S+m+	Source	State	ment	X390 3.1.04 2012/08/	17 13 21
	_			Auui I			30ui ce			X390 3.1.04 2012/08/	
00015C 000160					0011C 0000C	194 195		L L	R15,IORLST(,R12) R15,NX(,R15)	REQUEST NEXT RECORD	00179001 00180001
000164						196		BALR	R14,R15	RECORD CHANGE IS PERFORMED	00181001
000166 00016A				0001A	00004	197 198		L TM	R4, R DSF, DS7	END OF FILE ?	00182001 00183001
00016E				00027	00512	199		ВО	ERROR5		00184001
000172	47F0	306E			0013A	200	*	В	SCAN1	NEXT RECORD IS TO BE SCANNED	00185001
000176	1B22					201 202	SCAN5	SR	R2, R2		00186001 00187001
000178	DDFF	4000	34B9	00000	00585	203		TRT	0(256,R4),IPTAB	EVALUATE NEXT CHARACTER	00188001
00017E 000180		30B1			00180	204 205		SR B	R15,R15 *(R2)	CLEAR BLANK COUNTER (CB)	00189001 00190001
000184					00180 0019C		BRANCH	В	BLANK	+04	00190001
000188					001C2	207		В	OTHERS		00192001
00018C 000190					001CE 0025C	208 209		B B	DIGIT SIGN		00193001 00194001
000194					00298	210		В	DECPT		00195001
000198	47F0	3208			002D4	211 212	*	В	APOSTR		00196001 00197001
00019C	41F0	F001			00001		BLANK	LA	R15,1(,R15)		00197001
0001A0					00001	214		LA	R4,1(,R4)		00199001
0001A4 0001A8					00008 00154	215 216		C BE	R4, RE SCAN4		00200001 00201001
0001AC	9540	4000		00000		217		CLI	0(R4),C''		00202001
0001B0 0001B4		30D0			0019C	218 219		BE SR	BLANK R2, R2	NEXT CHARACTER ALSO BLANK	00203001 00204001
0001B6		5018			00018	220		IC	R2,K		00205001
0001BA 0001BC		2011			00176	221 222		CR BL	R15,R2		00206001
0001BC		SUAA			00176	223		BCTR	SCAN5 R4,0	< K BLANKS, EVAL NEXT CHARACTER K BLANKS READ, DECREASE R	00207001 00208001
0001C2				00563			OTHERS	TM	F,X'82'		00209001
0001C6 0001CA					0013C 00306	225 226		BZ B	SCAN2 DELIMIT	NO VALID NUMBER READ, NEW SCAN A VALID NUMBER AND K BLANKS READ	00210001 00211001
						227	*	_			00212001
0001CE				00563	00220	228 229	DIGIT	TM BO	F,X'08'	EVDONENT DIGIT	00213001
0001D2 0001D6				00563	00228	239		TM	DIGIT1 F,X'40'		00214001 00215001
0001DA		3136			00202	231		BZ	DIGIT2	FIRST MANTISSA DIGIT	00216001
0001DE 0001E0		311C			001E8	232 233		CR BL	R8,R9 DIGIT3	< 19 MANTISSA DIGITS	00217001 00218001
0001E4					001EE	234		В	DIGIT3A		00219001
0001E8	חממם	8000	1000	00000	00000	235	* DIGIT3	MVC	0(1,R8),0(R4)		00220001 00221001
0001EE			4000	00000	00001			LA	R8,1(,R8)		00221001
0001F2				00563	00110	238		TM	F,X'20'	NO DEC DOTNE TO DEAD MENT CHAP	00223001
0001F6 0001FA				00563	00148	239 240		BZ OI	SCAN3 F,X'10'		00224001 00225001
0001FE					00148	241		В	SCAN3		00226001
000202	9550	1000		00000		242	* DIGIT2	CLI	0(R4),C'0'		00227001 00228001
000202				00000	00212	244	DIGITZ	BE	DIGIT2A		00229001
00020A				00563	00150	245		OI B	F,X'CO'	F0, F1 = 1 MANTISSA DIGIT ¬ 0	00230001
00020E	4770	3110			001E8	246 247	*	D	DIGIT3		00231001 00232001
000212				00563			DIGIT2A	OI	F,X'80'		00233001
000216 00021A				00563	00148	249 250		TM BZ	F,X'20' SCAN3		00234001 00235001
00021E	06A0				001.0	251			R10,0	DECR DECIMAL POINT POINTER	00236001
000220 000224				00563	00148	252 253		OI B	F,X'10' SCAN3		00237001 00238001
000224	4/10	3070			00148	254	*	D	SCANS		00238001
000228				00563	00240		DIGIT1	TM	F,X'01'		00240001
00022C 000230					00248 0057B	256 257		BZ LA	DIGIT4 R2,MB+21		00241001 00242001
000234	1992					258		CR	R9, R2		00243001
000236 00023A			4000	99999	00518	259 260	DIGIT5	BNL MVC	ERROR6 0(1,R9),0(R4)	MORE THAN 2 EXP DIGITS WERE READ DIGIT INTO EXPONENT BUFFER	00244001 00245001
000240			.000	00000	00001	261	5101.5	LA	R9,1(,R9)	INCREASE EXPONENT POINTER	00246001
000244	47F0	307C			00148	262 263	*	В	SCAN3		00247001 00248001
000248	9602	3497		00563			DIGIT4	OI	F,X'02'		00248001
00024C				00000	00110	265		CLI	0(R4),C'0'		00250001
000250 000254				00563	00148	266 267		BE OI	SCAN3 F,X'01'		00251001 00252001
000258					0023A	268		В	DIGIT5		00253001
00025C	9108	3497		00563		269 270	* SIGN	TM	F,X'08'		00254001 00255001
000250				00303	00270	271	3101	ВО	SIGN1		00256001
000264 000268				00563	00306	272 273		TM BO	F,X'80'		00257001
00026C					00280	274		В	DELIMIT SIGN2		00258001 00259001
				00===		275					00260001
000270 000274				00563	0028A	276 277	SIGN1	TM BZ	F,X'06' SIGN2A		00261001 00262001
000278	9182	3497		00563		278		TM	F,X'82'		00263001
00027C 000280			4000	DOE CA	00306 00000	279 280	SIGN2	BNZ MVC	DELIMIT SM,0(R4)		00264001 00265001
000286			-+000	00004	00140	281	JIGINZ.	В	SCAN2A		00265001
00000	D200	2400	4000	00555	00000	282		M) (C	CF Q/D4\		00267001
00028A 000290			4000	00565 00563	00000	283 284	SIGN2A	MVC OI	SE,0(R4) F,X'04'	EXPONENT SIGN F5 = 1 EXPONENT SIGN READ	00268001 00269001
000294					00148	285	4	В	SCAN3	EVALUATE NEXT CHARACTER	00270001
000298	9128	3497		00563		286 287	* DECPT	TM	F,X'28'		00271001 00272001
00029C	4780	31FA			002C6	288		BZ	DECPT1	NO DEC POINT OR APOST BEFORE	00273001
0002A0	9182	3497		00563		289		TM	F,X'82'		00274001

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0002A4 0002A8				00563	00306	290 291		BNZ TM	DELIMIT F,X'08'	DEC PT FOLLOWED A VALID NUMBER	00275001 00276001
0002A8				60503	002B8	291		ВО	DECPTA	DEC POINT FOLLOWED APOSTROPHE	00276001
0002B0 0002B4				00564	00148	293 294		MVI B	SM,C'+' SCAN3	MANTISSA SIGN INITIALLY PLUS NEW SCAN	00278001 00279001
0002B8	D200	3498	3499	00564	00565	295 296	* DECPTA	MVC	SM, SE	EXP SIGN IS ASSIGNED TO MANTSIGN	00280001 00281001
0002BE	924E	3499		00565		297		MVI	SE,C'+'	EXPONENT SIGN INITIALLY PLUS	00282001
0002C2 0002C6				00563 00563		298 299	DECPT1	MVI OI	F,0 F,X'20'	CLEAR FLAG BYTE F F2 = 1 DEC POINT WAS READ	00283001 00284001
0002CA		2454			00530	300		LR	R10,R8	STATE OF MANT POINTER INTO R10	00285001
0002CC 0002D0					00530 00148	301 302		ST B	R4, DPI SCAN3	STATE OF CHAR POINTER INTO DPI NEXT CHARACTER	00286001 00287001
000204	0100	2407		00563		303		T.44	E VIOOI		00288001
0002D4 0002D8				00563	002E4	305	APOSTR	TM BO	F,X'08' APOSTRA	AN APOSTROPHE WAS ALREADY READ	00289001 00290001
0002DC 0002E0				00563	002FA	306 307		TM BNM	F,X'30'	A MALTO NUMBER MAS READ	00291001 00292001
0002E0				00563	UUZFA		APOSTRA	TM	APOSTR1 F,X'82'	A VALID NUMBER WAS READ APOSTROPHE FOLLOWED DEC POINT	00293001
0002E8 0002EC			2400	00564	00306	309 310		BNZ MVC	DELIMIT	NUMBER BEFORE DEC POINT IS VALID EXP SIGN IS ASSNED TO MANT SIGN	00294001 00295001
0002FC			3433	00565	00303	311		MVI	SM, SE SE, C'+'	EXPONENT SIGN INITIALLY PLUS	00296001
0002F6 0002FA				00563 00563		312	APOSTR1	MVI OI	F,0 F,X'08'	CLEAR FLAG BYTE F APOSTROPHE WAS READ F4.=1	00297001 00298001
0002FE	5040	3460		00303	0052C	314	AFOSTKI	ST	R4,API	STATE OF CHAR POINTER INTO API	00299001
000302	47F0	307C			00148	315 316	*	В	SCAN3	EVALUATE NEXT CHARACTER	00300001 00301001
000306				00563		317	DELIMIT	TM	F,X'30'		00302001
00030A 00030E					0031A 00530	318 319		BNM L	DELIMIT1 R4,DPI	MANTISSA PART IS VALID CHAR POINTER OF DEC POINT INTO R	00303001
000312	94DF	3497		00563		320		NI	F,X'DF'	F2.=0 NO DEC POINT WAS READ	00305001
000316	47F0	325E			0032A	321 322	*	В	DELIMIT2		00306001 00307001
00031A				00563			DELIMIT1		F,X'0A'		00308001
00031E 000322					0032A 0052C	324 325		BNM L	DELIMIT2 R4,API	CHAR PTR OF APOSTROPHE INTO R	00309001 00310001
000326	94F3	3497		00563		326	DE1 THTTO	NI	F,X'F3'		00311001
00032A 00032E					00008 00340	327	DELIMIT2	BNE	R4,RE DELIMITB		00312001 00313001
000332					0011C 0000C	329 330	DELIMITC	L L	R15, IORLST(,R12)	DECUEST NEXT DECORD	00314001
000336 00033A	05EF				0000C	331		BALR	R15,NX(,R15) R14,R15	RECORD CHANGE IS PERFORMED	00315001 00316001
00033C	47F0	3284			00350	332 333	*	В	DELIMIT3		00317001 00318001
000340					00001	334	DELIMITB		R4,1(,R4)	INCR CHARACTER POINTER	00319001
000344 000348					00008 00332	335 336		C BE	R4,RE DELIMITC		00320001 00321001
00034C	5040	5004			00004	337		ST	R4,R	STORE CHAR POINTER TO DSTABLE	00322001
000350 000354				00563	003D6	338 339	DELIMIT3	IM BNZ	F,X'28' TRREAL	TEST TYPE OF NUMBER REAL TYPE NUMBER	00323001 00324001
000358				00563	00366	340		TM	F,X'40'	NUMBER 7500	00325001
00035C 000360		329A			00366	341 342		BO SR	DELIMITD R0,R0	NUMBER ¬= ZERO	00326001 00327001
000362	47F0	32D8			003A4	343 344	*	В	TRINT1	NUMBER = ZERO	00328001 00329001
000366		34A5			00571	345	DELIMITD		R2,MB+11		00330001
00036A 00036C		330A			003D6	346 347		CR BH	R8,R2 TRREAL	> 10 DIGITS READ, REAL	00331001 00332001
000370	4740	32B2			0037E	348		BL	DELIMITH	< 10 DIGITS READ, INTEGER	00333001
000374 00037A			34AF	00567	0057B 003D6	349 350		CLC BNL	MB+1(10), DMINT TRREAL	10 DIGITS WERE READ NUMBER GREATER (2**31)-1, REAL	00334001 00335001
00037E		349C			00568		DELIMITH		R2, MB+2	NUMBER OF DIGITS DECR BY ONE	00336001
000382 000384		3428			004F4	352 353		SR EX	R8,R2 R8,PACK	PACK NUMBER	00337001 00338001
000388				00564	00398	354		CLI BNE	SM, C'+'	TEST SIGN OF THE NUMBER	00339001 00340001
00038C 000390	960F	34AB		00577		355 356		OI	DELIMITE MB+17,X'0F'		00341001
000394	47F0	32D4			003A0	357 358	*	В	DELIMITF		00342001 00343001
000398				00577		359	DELIMITE		MB+17,X'0D'		00344001
00039C 0003A0				00577	00570	360 361	DELIMITF	NI CVB	MB+17,X'FD' R0,MB+10		00345001 00346001
0003A4				00563	00004	362	TRINT1	LA	R2,4		00347001
0003A8 0003AC				00562	004E6	363 364		CLI BE	FKT,X'04' FIN3	CONVERSION NOT REQ, FKT=INTEGER	00348001 00349001
						365 366		CALL	CONVERSION ROUTINE (LOAD	ED TN ESA)	00350001 00351001
						367			•	,	00352001
0003B0 0003B4		D008			00008	368 369		STM LR	R14,R13,8(R13) R2,R13	ALL REGISTERS INTO SAVEAREA R2 -> SAVE AREA	00353001 00354001
0003B6	4170	C120			00120	370		LA	R7,ACNVIRD(,R12)		00355001
0003BA 0003BC						371 372		LR LR	R14,R0 R13,R12	INTEGER INTO R14 R13 -> FSA	00356001 00357001
0003BE	0587	2000			00000	373		BALR	R8, R7		00358001
0003C0 0003C4		2008			00008	374 375		LM SR	R14,R13,8(R2) R2,R2	NESTURE REUS	00359001 00360001
0003C6	9120	רפרי	R:C	00000 000C2		376 377		USING TM	FSAAREA,R12 OPTSW(R12),X'20'	LONG OR SHORT PRECISION ?	00361001 00362001
0003CA	4780	341A		JUUCZ	004E6	377		BZ		LONG PRECISION STATED	00363001
0003CE 0003D2					00008 004E6	379 380		LA B	R2,8 FIN3		00364001 00365001
						381					00366001
0003D6 0003D8		3497		00563		382 383	TRREAL	SWR TM	FPR0,FPR0 F,X'C0'		00367001 00368001
0003DC	4710	3322			003EE	384		ВО	TRREALA	MANTICCA IC ZEDO	00369001
0003E0	+/40	ンンピる			004B4	385		BM	FIN	MANTISSA IS ZERO	00370001

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000254 1044		386		CD	R10.R10		00371001
0003E4 1BAA	00			SR		MANTICCA TC 1 A	
0003E6 6800 3474		0540 387		LD	FPRO, KFPD1	MANTISSA IS 1.0	00372001
0003EA 47F0 3362	06	042E 388		В	TRREAL1		00373001
000055 0400 0407	00553	389			F VI201		00374001
0003EE 9120 3497	00563		TRREALA		F,X'20'	A DECTUAL LIAC DEAD	00375001
0003F2 4710 332C	96	03F8 391		ВО	TRREALB	A DECIMAL WAS READ	00376001
0003F6 18A8		392		LR	R10,R8	DECPT IS ACCEPTED BEH LAST DIGIT	
0003F8 4120 34A4	06		TRREALB	LA	R2,MB+10		00378001
0003FC 1BA2		394		SR	R10,R2	POS OF DECPT: BEHIND 9. DIGIT	00379001
0003FE F278 349C 3	49B 00568 00	0567 395	TRREAL2	PACK	MB+2(8), MB+1(9)	PACK UPPER 9 DIGITS	00380001
000404 960F 34A3	0056F	396		OI	MB+9,X'0F'		00381001
000408 4F00 349C	96	0568 397		CVB	R0, MB+2	CONVERT UPPER 9 DIGITS TO BINARY	00382001
00040C 5000 3488		0554 398		ST	RØ, MASK+4	MASK FLOATING ZERO WITH EXPON 78	
000410 6A00 3484		0550 399		AD	FPRO, MASK	TRANSFORM NUMBER TO FLOAT TYPE	00384001
000414 1982	00	400		CR	R8, R2	TRANSFORM NOMBER TO FEDAL THE	00385001
000416 47D0 3362		042E 401		BNH	TRREAL1		00386001
00041A 6C00 347C		0548 402		MD	FPR0, TPNINE		00387001
00041E 5BA0 3458	06	0524 403		S	R10,KF9	SHIFT DECPT 9 POSITIONS TO RIGHT	00388001
000422 1B88		404		SR	R8, R8		00389001
000424 F278 349C 3	4A4 00568 00	0570 405		PACK	MB+2(8),MB+10(9)	PACK LOWER 9 DIGITS	00390001
00042A 47F0 3338	96	0404 406		В	TRREAL2+6	REPEAT ACTION FOR LOWER 9 DIGITS	00391001
		407	*				00392001
00042E 954E 3498	00564	408	TRREAL1	CLI	SM, C'+'		00393001
000432 4780 336C		0438 409		BE	TRREAL1A	NUMBER IS POSITIVE	00394001
000436 2300	00	410			FPR0, FPR0	INSERT MINUS	00395001
			TRREAL1A		R0.R0	INSERT MINUS	
000438 1B00	00563						00396001
00043A 9101 3497	00563	412		TM	F,X'01'		00397001
00043E 4780 33A0		046C 413		BZ	TRREAL3	SCALE FACTOR	00398001
000442 940F 34AD	00579	414		NI	MB+19,X'0F'	CLEAR ZONE OF ONE EXPONENT DIGIT	00399001
000446 4300 34AD	06	0579 415		IC	R0, MB+19		00400001
00044A 91FF 34AE	0057A	416		TM	MB+20,X'FF'	2. EXPONENT DIGIT IS TESTED	00401001
00044E 4780 3396	06	0462 417		BZ	TRREAL3A	NO 2. EXPONENT	00402001
000452 4C00 3494	06	0560 418		MH	R0,KH10	FIRST EXPONENT DIGIT MULT BY 10	00403001
000456 1820		419		LR	R2, R0		00404001
000458 940F 34AE	0057A	420		NI	MB+20,X'0F'	CLEAR ZONE OF 2. EXPONENT DIGIT	00405001
000456 4300 34AE		057A 421		IC		CLEAR ZONE OF Z. EXPONENT DIGIT	00405001
	96				R0, MB+20	TOTAL DRELIMINARY EVPONENT	
000460 1A02	00565	422		AR	R0, R2	TOTAL PRELIMINARY EXPONENT	00407001
000462 954E 3499	00565		TRREAL3A		SE,C'+'		00408001
000466 4780 33A0	06	046C 424		BE	TRREAL3	EXPONENT IS POSITIVE	00409001
00046A 1300		425		LCR	R0, R0	INSERT MINUS	00410001
00046C 1AA0		426	TRREAL3	AR	R10,R0	CORR EXP BY DEC POINT POSITION	00411001
00046E 4780 33E8	96	04B4 427		BZ	FIN	CORRECTED EXPONENT IS ZERO	00412001
000472 58F0 3454	06	0520 428		L	R15, VPTTAB	ADDR OF POWERTEN TABLE	00413001
000476 4720 33B2	96	047E 429		BP	TRREAL3B		00414001
00047A 41FF 0080		0080 430		LA	R15,128(R15)	ADDR OF 10**(-1) DIMIN BY EIGHT	00415001
00047E 10AA	•		TRREAL3B			ABS (CORRECTED EXPONENT)	00416001
		771	THILLALDD	I PR			
		122			R10,R10	· · · · · · · · · · · · · · · · · · ·	
000480 1BBB	O.	432		SR	R11,R11	CLEAR REGISTER	00417001
000482 8EA0 0003		0003 433		SR SRDA	R11,R11 R10,3	· · · · · · · · · · · · · · · · · · ·	00417001 00418001
000482 8EA0 0003 000486 8BA0 0003	06	0003 433 0003 434		SR SRDA SLA	R11,R11 R10,3 R10,3	CLEAR REGISTER	00417001 00418001 00419001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA	06 06	0003 433 0003 434 04A6 435	TRREAL5	SR SRDA SLA BZ	R11,R11 R10,3 R10,3 TRREAL4A	· · · · · · · · · · · · · · · · · · ·	00417001 00418001 00419001 00420001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C	06 06	0003 433 0003 434	TRREAL5	SR SRDA SLA	R11,R11 R10,3 R10,3	CLEAR REGISTER	00417001 00418001 00419001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA	96 96	0003 433 0003 434 04A6 435	TRREAL5	SR SRDA SLA BZ	R11,R11 R10,3 R10,3 TRREAL4A	CLEAR REGISTER	00417001 00418001 00419001 00420001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C	96 96 96	0003 433 0003 434 04A6 435 0528 436	TRREAL5	SR SRDA SLA BZ C BNH	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4	CLEAR REGISTER  CORRECTED EXPONENT LESS 8	00417001 00418001 00419001 00420001 00421001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6	96 96 96 96	0003 433 0003 434 04A6 435 0528 436 04A2 437	TRREAL5	SR SRDA SLA BZ C BNH	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73	00417001 00418001 00419001 00420001 00421001 00422001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C	96 96 96 96 96	0003     433       0003     434       04A6     435       0528     436       04A2     437       0080     438       0528     439	TRREAL5	SR SRDA SLA BZ C BNH MD	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00424001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080	96 96 96 96 96	0003 433 0003 434 04A6 435 0528 436 04A2 437 0080 438 0528 439 048A 440	TRREAL5	SR SRDA SLA BZ C BNH MD S	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00424001 00425001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE	96 96 96 96 96	0003 433 0003 434 04A6 435 0528 436 04A2 437 0080 438 0528 439 048A 440	TRREAL5	SR SRDA SLA BZ C BNH MD S B	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00424001 00425001 00426001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE	96 96 96 96 96	0003 433 0003 434 04A6 435 0528 436 04A2 437 0080 438 0528 439 048A 440 441 0038 442	TRREAL5  * TRREAL4	SR SRDA SLA BZ C BNH MD S B	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00425001 00425001 00427001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A	96 96 96 96 96	0003 433 0003 434 004A6 435 0528 436 004A2 437 0080 438 00528 439 0048A 440 0038 442 001A 443	TRREAL5  * TRREAL4 TRREAL44	SR SRDA SLA BZ C BNH MD S B	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00425001 00425001 00427001 00428001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004AA 12BB	96 96 96 96 96 96	0003 433 0003 434 004A6 435 0528 436 04A2 437 0080 438 0528 439 048A 440 441 0038 442 0001A 443	* TRREAL5  * TRREAL4 TRREAL4A	SR SRDA SLA BZ C BNH MD S B	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00425001 00425001 00427001 00428001 00429001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8	96 96 96 96 96 96	0003 433 0003 434 04A6 435 0528 436 04A2 437 0080 438 0528 439 048A 440 441 0038 442 001A 443 444	* * * * * * * * * * * * * * * * * * *	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION	00417001 00418001 00429001 00422001 00422001 00422001 00423001 00425001 00427001 00427001 00429001 00429001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000	96 96 96 96 96 96	0003 433 0003 434 004A6 435 0528 436 004A2 437 0080 438 0028 439 0048A 440 0038 442 001A 443 444 0484 445	* TRREAL4 TRREAL4	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,R11 FIN FPR0,0(R11,R15) *	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))	00417001 00418001 00429001 00422001 00422001 00423001 00423001 00425001 00425001 00425001 00428001 00428001 00430001 00430001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22	96 96 96 96 96 96 96	0003 433 0003 434 004A6 435 0528 436 004A2 437 0080 438 0528 439 048A 440 001A 443 444 004B4 445 0000 446	* TRREAL4 TRREAL4 FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))  CLEAR R2, TYPE = REAL LONG	00417001 00418001 00429001 0042001 00422001 00423001 00425001 00425001 00425001 00427001 00428001 00429001 00430001 00431001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2	96 96 96 96 96 96 96 96	0003 433 0003 434 004A6 435 0528 436 0528 439 0528 439 0048A 440 441 0038 442 001A 443 0444 0484 445 0464 446	* TRREAL4 TRREAL4 FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR TM	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2 OPTSW(R12),X'20'	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))  CLEAR R2, TYPE = REAL LONG  LONG OR SHORT PRECISION ?	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00424001 00425001 00426001 00428001 00438001 00433001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22	96 96 96 96 96 96 96 96	0003 433 0003 434 004A6 435 0528 436 004A2 437 0080 438 0528 439 048A 440 001A 443 444 004B4 445 0000 446	* TRREAL4 TRREAL4 FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))  CLEAR R2, TYPE = REAL LONG	00417001 00418001 00429001 0042001 00422001 00423001 00425001 00425001 00425001 00427001 00428001 00429001 00430001 00431001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2	96 96 96 96 96 96 96 98 98 98 98 98	0003 433 0003 434 004A6 435 0528 436 0528 439 0528 439 0048A 440 441 0038 442 001A 443 0444 0484 445 0464 446	* TRREAL4 TRREAL4 TRREAL4 FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR TM	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2 OPTSW(R12),X'20'	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))  CLEAR R2, TYPE = REAL LONG  LONG OR SHORT PRECISION ?	00417001 00418001 00419001 00420001 00421001 00422001 00423001 00424001 00425001 00426001 00428001 00438001 00433001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004BA 9120 C0C2	06 06 06 06 06 06 06 06 06 06 06 06 06 0	0003 433 0003 434 004A6 435 0528 436 004A2 437 00880 438 0048A 440 001A 443 4041 004B4 445 0000 446 447 448 0440 449	* TRREAL4 TRREAL4 FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR TM BZ	R11,R11 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED	00417001 00418001 00429001 00420001 00422001 00422001 00423001 00425001 00425001 00427001 00427001 00430001 00433001 00433001 00433001 00433001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004BE 6000 346C	96 96 96 96 96 96 96 96 96 96 96 96 96 9	0003 433 0003 434 004A6 435 0528 436 004A2 437 00880 438 0048A 440 001A 443 4041 004B4 445 0000 446 447 448 0440 449	* TRREAL4 TRREAL4A FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SRL TTM BZ STD	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED	00417001 00418001 00429001 00422001 00422001 00423001 00423001 00425001 00427001 00427001 00430001 00430001 00433001 00433001 00433001 00435001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004BA 4780 3404 0004BB 6000 346C 0004C2 D200 348C 3	96 96 96 96 96 96 96 96 96 96 96 96 96 9	0003 433 0003 434 004A6 435 0528 436 004A2 437 0080 438 0528 439 048A 440 001A 443 444 04B4 445 0000 446 447 448 0440 449 0538 450	* TRREAL4 TRREAL4A FIN	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR MD SR MD SR BZ MD SR MD SR MD SR MD SR MD SR MD MD SR MD	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED EXPONENT TO ROUND	00417001 00418001 00429001 00422001 00422001 00423001 00423001 00425001 00425001 00426001 00427001 00428001 00430001 00433001 00433001 00433001 00435001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004C 1200 348C 3 0004CS 6A00 348C	96 96 96 96 96 96 96 96 96 96 96 96 96 9	0003     433       00403     434       04A6     435       0528     436       04A2     437       0080     438       0528     439       04A4     441       0038     442       001A     443       04B4     445       0000     446       04D0     449       04D3     450       0538     451       0558     452       0008     453	* TRREAL4 TRREAL4 TRREAL4A	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ STD MD SR TM BZ STD MVC AD LA	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))  CLEAR R2, TYPE = REAL LONG  LONG OR SHORT PRECISION ?  LONG PRECISION STATED  SHORT PRECISION STATED  SHORT PRECISION TO SHORT	00417001 00418001 00419001 00421001 00422001 00422001 00423001 00425001 00426001 00428001 00428001 00438001 00433001 00433001 00435001 00436001 00437001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004AC 88B0 001A 0004AA 12BB 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004B6 9120 C0C2 0004B6 6000 346C 0004C2 D200 348C 3 0004C8 6A00 348C 3 0004CC 4120 0008 0004D0 9500 3496	96 96 96 96 96 96 96 96 96 96 96 96 96 9	9003 433 9003 434 904A6 435 9528 436 904A2 437 9080 438 90528 439 9048A 440 4010 443 90484 445 90400 446 447 448 90400 449 90538 450 90538 451 90608 453 454	* TRREAL4 TRREAL4 FIN FIN1	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SRL STD MVC AD LA CLI	R11,R11 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8))  CLEAR R2, TYPE = REAL LONG  LONG OR SHORT PRECISION ?  LONG PRECISION STATED  EXPONENT TO ROUND  LONG PRECISION ROUNDED TO SHORT  TYPE = REALSHORT	00417001 00418001 00419001 0042001 00422001 00422001 00423001 00425001 00427001 00427001 0043001 0043001 0043001 00435001 00435001 00436001 00436001 00438001 00438001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004BO 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004C2 4120 0008 0004D0 9500 3496 0004D4 4780 341A	900000 900 900 900 900 900 900 900 900	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 9028 439 9048A 440 9038 442 9011A 443 444 9080 446 447 448 9040 449 90538 450 90538 451 9058 452 9008 453 9454 9466 455	* TRREAL4 TRREAL4 FIN FIN1	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR BZ MD SR TH BZ STD MVC AD LA CLII BE	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY	00417001 00418001 00419001 0042001 00422001 00422001 00423001 00425001 00427001 00427001 00431001 00431001 00433001 00436001 00436001 00437001 00437001 00438001 00437001 00439001
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000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004B6 9120 C0C2 0004B6 9120 C0C2 0004B6 6000 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004CC 4120 0008 0004D0 9500 3496 0004D4 4780 341A 0004D8 4120 0004 0004D 58F0 C11C	900000 900000 9000000 9000000000000000	0003         433           0003         434           004A6         435           0528         436           04A2         437           0080         438           0528         439           04AA         444           401A         443           444         445           4000         446           449         449           06538         451           06558         452           0608         453           4546         455           0604         456           06011         457	* TRREAL4 TRREAL4A FIN FIN1	SR SRDA SLA BZ C BNH MD S B MD SSRL LTR BZ MD BZ STD MVC AD LA CLI BE LA L	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) * R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY	00417001 00418001 00419001 00420001 00422001 00422001 00423001 00425001 00425001 00425001 00427001 00438001 00439001 00433001 00435001 00435001 00435001 00437001 00438001 00439001 00439001 00439001 00439001 00449001
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000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE  0004A2 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004BA 1822 0004BA 9120 C0C2 0004BA 9120 C0C2 0004BA 4780 3404 0004BC 5000 348C 3 0004CB 6A00 348C 3 0004CB 4120 0008 0004DA 4780 3496 0004DA 4780 3496 0004DA 58F0 C11C 0004E0 58F0 F000	900000 900 900 900 900 900 900 900 900	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 90528 439 9048A 440 4010 443 4044 90484 445 9000 446 447 448 90538 451 90538 451 90538 451 90538 451 9054 456 9011 457 9000 458	* TRREAL4 TRREAL4A FIN FIN1	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL BZ MD SRL BZ MD SRL BZ MD SR MD SR L BZ MD L BL BAL BE L BAL BB L BB L BB L BB L B	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY	00417001 00418001 00419001 0042001 00422001 00423001 00423001 00425001 00427001 00427001 00430001 00430001 00432001 00432001 00433001 00436001 00436001 00436001 00436001 00434001 00443001 00434001 00443001 00443001
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000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A6 8880 001A 0004A6 8880 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 340A 0004B6 6000 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004CC 4120 0008 0004D0 9500 349C 0004CB 4120 0008 0004D0 9500 349C 0004CB 58F0 F000 0004E4 05EF 0004E6 4402 342E 0004EA 58D0 35C0	96 96 96 96 96 96 96 96 96 96 96 96 96 9	9003 433 9003 434 904A6 435 9528 436 904A2 437 90800 438 90528 439 9048A 440 9038 442 901A 443 4044 4047 448 90400 446 90538 450 90538 450 90558 452 9008 453 454 9011C 457 9000 458 459 90464 456 90004 466 9011C 457 90000 458 459 9068C 461 462 463 9000C 464	* TRREAL4 TRREAL4 TRREAL4A FIN FIN1 FIN3 * *	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR BZ MD LLT BE LL L L BAL L L RETURN LM BR	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4 N (14,12) 14,12,12(13)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN	00417001 00418001 00419001 0042001 00422001 00422001 00425001 00425001 00425001 00425001 00430001 00433001 00433001 00433001 00433001 00435001 00435001 00443001 00445001 00445001 00444001 00445001 00445001 00445001 00445001 00445001 00445001 00445001
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000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE  0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004B6 6000 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004C2 4120 0008 0004C4 4120 0008 0004C4 4120 0008 0004C5 58F0 C01C 0004E0 58F0 F000 0004E4 05EF 0004E6 58F0 F000 0004E6 4402 342E 0004EA 58D0 35C0	900000 90000 9000 9000 9000 9000 9000	9003 433 9003 434 904A6 435 9528 436 904A2 437 90800 438 90528 439 9048A 440 9038 442 901A 443 901A 443 901A 443 904B4 445 9090 446 90538 450 90538 450 90558 452 9068 453 9048A 450 9068C 461 462 463 9000 468 9000 469 90000 470	* TRREAL4 TRREAL4 FIN FIN1 FIN3 * PACK STORE	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL BZ MD SRL BZ MD SRL L L BALR L L BALR EX L RETURN LM BR PACK STD	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4 N (14,12) 14,12,12(13) 14 MB+10(8),MB+1(0) FPR0,0(,R7)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS	00417001 00418001 00419001 0042001 00422001 00422001 00425001 00425001 00425001 00425001 00430001 00433001 00433001 00433001 00433001 00433001 00433001 00443001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 000492 47F0 33BE  0004A2 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 348C 0004C2 D200 348C 3 0004C8 6A00 348C 0004CC 4120 0008 0004CB 4180 3496 0004CA 4120 0008 0004CB 4120 0008 0004CB 58F0 F000 0004CB 58F0 F000 0004CB 58F0 F000 0004CB 58F0 C11C 0004E0 58F0 F000 0004E4 05EF 0004E5 58F0 F000 0004E4 05EF 0004E6 4402 342E 0004E7 07FE  0004F4 F270 34A4 3 0004F4 6000 7000 000502 7000 7000	900000 90000 9000 9000 9000 9000 9000	9003 433 9003 434 904A6 435 9528 436 904A2 437 90800 438 9048A 440 9048A 440 9048A 444 90638 442 9001A 443 904B4 445 90000 446 90538 450 90538 450 90538 450 90538 450 9054 456 90004 456 9011C 457 9000 458 904FA 460 9068C 461 9068C 461 9068C 461 9068C 464	* TRREAL5  * TRREAL4 TRREAL4A  FIN  FIN1  FIN3  * PACK STORE  *	SR SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SRL LTR BZ MD CLI BE LA L L BALR EX L RETURN LM BR PACK STD ST STE	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  M1(14,12) 14,12,12(13) 14 MB+10(8),MB+1(0) FPR0,0(,R7) FPR0,0(,R7) FPR0,0(,R7) FPR0,0(,R7) FPR0,0(,R7) FPR0,0(,R7)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS *	00417001 00418001 00419001 0042001 00422001 00422001 00425001 00425001 00427001 0043001 00433001 00434001 00435001 00435001 00435001 00436001 00448001 00446001 00447001 00446001 00447001 00445001 00447001 00445001 00445001 00445001 00445001 00455001 00455001 00455001 00455001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE  0004A2 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004B6 9120 C0C2 0004BA 4780 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004C2 D200 348C 3 0004C8 6A00 348C 0004C4 4780 341A 0004BA 4780 341A 0004BA 4780 341A 0004BA 4780 341A 0004C5 8F0 F000 0004C6 4120 0004 0004C7 58F0 C11C 0004C8 58F0 F000 0004C9 78F0 F000 0004C9 78F0 F000 0004C9 78F0 F000 0004F0 58F0 F000 0004F0 78F0 F000	900000 90000 9000 9000 9000 9000 9000	9003 433 9003 434 904A6 435 9528 436 904A2 437 90800 438 9048A 440 9048A 440 9048A 444 90638 442 9001A 443 904B4 445 90000 446 90538 450 90538 450 90538 450 90538 450 9054 456 90004 456 9011C 457 9000 458 904FA 460 9068C 461 9068C 461 9068C 461 9068C 464	* TRREAL5  * TRREAL4 TRREAL4A  FIN  FIN1  FIN3  * PACK STORE  *	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR SR TM BZ STD MVC AD LA CLI BE LA L L RETURN LM BR PACK STD	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) ** R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  I (14,12) 14,12,12(13) 14  MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS *	00417001 00418001 00419001 0042001 00422001 00422001 00425001 00425001 00425001 00425001 00430001 00433001 00433001 00433001 00433001 00433001 00433001 00443001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001
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000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE  0004A2 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004B6 6A00 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004C4 4120 0008 0004C4 4120 0008 0004C5 4120 0008 0004C6 4120 0008 0004C7 4120 0008 0004C8 58F0 F000 0004C9 58F0 F010 0004C9 58F0 F000 0004C9 7000 0004C9 7000 000506 18DC	900002 900000 9000000 9000000 9000000000	9003 433 9003 434 904A6 435 9528 436 904A2 437 90800 438 90528 439 9048A 440 90638 442 9010A 443 90600 446 90538 450 90558 452 90608 453 90604 456 9011C 457 9000 458 459 9068C 461 462 463 900C 464 9068C 461 462 463 900C 464 9000 469 9000 470 471 472 901D4 473	* TRREAL4 TRREAL4 TRREAL4A  FIN  FIN1  FIN3 * * PACK STORE  * ERROR2 *	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL BZ STD	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A FPR0,128(,R15) R10,KF72 TREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  V (14,12) 14,12,12(13) 14  MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS *	00417001 00418001 00419001 0042001 00422001 00422001 00425001 00425001 00426001 00425001 00430001 00433001 00433001 00435001 00437001 00438001 00443001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00455001 00455001 00455001
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000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A8 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004BE 6000 346C 0004C2 D200 348C 0004C2 D200 348C 0004C2 D200 348C 0004C2 H120 0008 0004BA 4780 3496 0004C4 4780 3496 0004C5 58F0 F000 0004C6 4120 0004 0004C7 0007	900000 900000 900000 900000 900000 900000 900000 900000 9000000	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 9528 439 9048A 440 4014 443 4048 445 9000 446 90538 451 90538 451 90538 451 90538 451 90538 451 9054 456 9064 456 9067 467 9000 458 9068 453 906	* TRREAL5  * TRREAL4 TRREAL4A  FIN  FIN1  FIN3  * PACK STORE  * ERROR2  * ERROR3	SR SRDA SLA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR MD SR LTR BZ MD LLTR BZ MD LLTR BZ MD SR LLTR BZ MD SR LLTR BZ MD SR LLTR BZ MD LL	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A FPR0,128(,R15) R10,KF72 TREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  V (14,12) 14,12,12(13) 14  MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS *	00417001 00418001 00419001 00421001 00422001 00422001 00425001 00425001 00425001 00427001 00435001 00435001 00435001 00436001 00435001 00436001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00445001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 30DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 47F0 33BE  000442 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004AB 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004CC 4120 0008 0004D0 9500 3496 0004D0	900000 900000 900000 900000 900000 900000 900000 900000 9000000	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 9028 439 9048A 440 9038 442 9011A 443 4044 445 9000 446 90538 451 90538 451 9058 452 9008 453 9058 452 9008 456 9060 456 9060 456 9060 456 9060 466 9060 466 9060 467 9000 468 9000 469 9000 470 9000 471 472 901D4 473 474 475 901D8 476	* TRREAL5  * TRREAL4 TRREAL4A  FIN  FIN1  FIN3  * PACK STORE  * ERROR2  * ERROR3  *	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR SR TM BZ STD AD LA CLI BE LA L L BE L L RETURN L R L R L R L R L R L R L R L R L R L	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  I(14,12) 14,12,12(13) 14  MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12)  R13,R12 FSAERR+3*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED SHORT PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS  *   V  INCOMP ACTION ON DATASET  INPUT BEYOND LAST OUTPUT	00417001 00418001 00419001 00421001 00422001 00422001 00425001 00425001 00426001 00433001 00433001 00433001 00433001 00435001 00437001 00445001 00447001 00445001 00447001 00445001 00445001 00445001 00445001 00455001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004BE 6000 346C 0004C2 D200 348C 0004C2 D200 348C 0004C2 D200 348C 0004C2 H120 0008 0004BA 4780 3496 0004C4 4780 3496 0004C5 58F0 F000 0004C6 4120 0004 0004C7 00050C 18DC 00050C 18DC 00050C 18DC 00050C 18DC 00050C 18DC 00050C 18DC	900C2 96 96 96 96 96 96 96 96 96 96 96 96 96	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 90528 439 9048A 440 90638 442 9010A 443 9048A 445 9000 446 90538 450 90538 450 90558 452 9008 453 9058 452 9000 456 9000 456 9000 456 9000 469 9000 469 9000 470 471 472 901D4 473 475 901D8 476	* TRREAL4 TRREAL4 TRREAL4A  FIN  FIN1  FIN3 * * PACK STORE  * ERROR2 * ERROR3 * ERROR5	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR SR TM BZ STD MVC AD LA CLI BE LA L L L BALR EX L L RETURN L LM BR PACK STD ST ST L L R BL L L L L L L L L L L L L L L L	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,BUFF FPR0,BUFF FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,SI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  N (14,12) 14,12,12(13) 14 MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12) R13,R12 FSAERR+3*4(R12) R13,R12 FSAERR+3*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS *   V	00417001 00418001 00419001 0042001 00422001 00422001 00425001 00425001 00426001 00425001 00430001 00433001 00433001 00435001 00435001 00437001 00445001 00447001 00445001 00447001 00445001 00445001 00445001 00445001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00458001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 30DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 47F0 33BE  000442 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004AB 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004CC 4120 0008 0004D0 9500 3496 0004D0	900C2 96 96 96 96 96 96 96 96 96 96 96 96 96	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 9048A 440 90528 439 9048A 440 90638 442 9061A 443 90600 446 90538 450 90538 450 90538 450 90538 450 90558 452 9008 453 454 4664 456 9066C 461 9060C 468 9060C 468 9066C 461 9066C 463 9000C 468 9066C 461 9066C 463 9000C 468	* TRREAL4 TRREAL4 FIN FIN1 FIN1  FIN3 * PACK STORE  * ERROR2 * ERROR3 * ERROR5	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR SR TM BZ STD AD LA CLI BE LA L L BE L L RETURN L R L R L R L R L R L R L R L R L R L	R11,R11 R10,3 R10,3 R10,3 R10,3 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  I(14,12) 14,12,12(13) 14  MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12)  R13,R12 FSAERR+3*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED SHORT PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS  *   V  INCOMP ACTION ON DATASET  INPUT BEYOND LAST OUTPUT	00417001 00418001 00419001 0042001 00422001 00422001 00422001 00425001 00425001 00426001 00427001 00433001 00433001 00433001 00433001 00433001 00434001 00443001 00445001 00445001 00446001 00445001 00445001 00445001 00445001 00455001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE  0004A2 6C0A F038 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004AA 12BB 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004BC 6000 346C 0004C2 D200 348C 3 0004C8 6A00 348C 0004CC 4120 0008 0004D8 4120 0008 0004D8 4120 0008 0004D8 58F0 C11C 0004E0 58F0 C11C 0005E0 C18DC 0005E0 C18DC 0005D1 A7FC 01DA	900C2 96 96 96 96 96 96 96 96 96 96 96 96 96	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 9048A 440 9048A 440 90538 442 9001A 443 904B4 445 9000 446 90538 450 90538 450 90538 450 90538 450 90538 450 90538 450 90538 450 90558 452 9004 456 461 9000 468 9000 469 9000 469 9000 470 901D4 472 901D4 473 474 901D8 476 477 478 901D8 476 477 478 901D8 476 477 478 901D8 476 477 478	* TRREAL4 TRREAL4 FIN FIN1 FIN3 * * PACK STORE * ERROR2 * ERROR3 * ERROR5 *	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SRT BZ MD SRT BZ MD SRT BZ LT BZ MD SRT BZ MD SRT BZ LT BZ MD SRT BZ LT BZ MD SRT BZ LT BZ MD BZ LT BZ MD BZ LT BZ MD BZ LT BZ MD BZ LT	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A R10,KF72 TRREAL4 FPR0,128(,R15) R10,KF72 TRREAL5 FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,CI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4 I(14,12) 14,12,12(13) 14 MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12) R13,R12 FSAERR+3*4(R12) R13,R12 FSAERR+5*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73 MULTIPLY OR DIVIDE BY 10**72 DECREASE CORRECTED EXP BY 72 REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED EXPONENT TO ROUND LONG PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS *   V  INCOMP ACTION ON DATASET  INPUT BEYOND LAST OUTPUT INPUT REQ BEYOND END OF DATASET	00417001 00418001 00419001 00421001 00422001 00422001 00423001 00425001 00425001 00425001 0043001 00433001 00434001 00435001 00435001 00436001 00448001 00448001 00447001 00448001 00447001 00448001 00445001 00445001 0045001 0045001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00455001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001 00459001
000482 8EA0 0003 000486 8BA0 0003 00048A 4780 33DA 00048E 59A0 345C 000492 47D0 33D6 000496 6C00 F080 00049A 5BA0 345C 00049E 47F0 33BE 0004A2 6C0A F038 0004A6 88B0 001A 0004AA 12BB 0004AC 4780 33E8 0004B0 6C0B F000 0004B4 1B22 0004B6 9120 C0C2 0004BA 4780 3404 0004BE 6000 346C 0004C2 D200 348C 0004C2 D200 348C 0004C2 D200 348C 0004C2 H120 0008 0004BA 4780 3496 0004C4 4780 3496 0004C5 58F0 F000 0004C6 4120 0004 0004C7 00050C 18DC 00050C 18DC 00050C 18DC 00050C 18DC 00050C 18DC 00050C 18DC	900C2 96 96 96 96 96 96 96 96 96 96 96 96 96	9003 433 9003 434 904A6 435 9528 436 904A2 437 90880 438 9048A 440 9048A 440 90538 442 9001A 443 904B4 445 9000 446 90538 450 90538 450 90538 450 90538 450 90538 450 90538 450 90538 450 90558 452 9004 456 461 9000 468 9000 469 9000 469 9000 470 901D4 472 901D4 473 474 901D8 476 477 478 901D8 476 477 478 901D8 476 477 478 901D8 476 477 478	* TRREAL4 TRREAL4 FIN FIN1 FIN3 * * PACK STORE * ERROR2 * ERROR3 * ERROR5 *	SR SRDA SRDA SLA BZ C BNH MD S B MD SRL LTR BZ MD SR SR TM BZ STD MVC AD LA CLI BE LA L L L BALR EX L L RETURN L LM BR PACK STD ST ST L L R BL L L L L L L L L L L L L L L L	R11,R11 R10,3 R10,3 R10,3 R10,3 R10,3 R10,4 R10,KF72 TRREAL4A FPR0,128(,R15) R10,KF72 TRREAL5  FPR0,56(R10,R15) R11,26 R11,R11 FIN FPR0,0(R11,R15) R2,R2 OPTSW(R12),X'20' FIN1 FPR0,BUFF ROUND(1),BUFF FPR0,BUFF FPR0,BUFF FPR0,BUFF ROUND(1),BUFF FPR0,ROUND R2,8 FKT,0 FIN3 R2,4 R15,IORLST(,R12) R15,SI(,R15) R14,R15 0,STORE(R2) R13,SAVEAREA+4  N (14,12) 14,12,12(13) 14 MB+10(8),MB+1(0) FPR0,0(,R7) R0,0(,R7) FPR0,0(,R7) R13,R12 FSAERR+2*4(R12) R13,R12 FSAERR+3*4(R12) R13,R12 FSAERR+3*4(R12)	CLEAR REGISTER  CORRECTED EXPONENT LESS 8  CORRECTED EXPONENT LESS 73  MULTIPLY OR DIVIDE BY 10**72  DECREASE CORRECTED EXP BY 72  REPEAT MULT OR DIVISION  OR / 10**(EXP-(ENTIER(EXP/8)*8)) CLEAR R2, TYPE = REAL LONG LONG OR SHORT PRECISION ? LONG PRECISION STATED SHORT PRECISION STATED SHORT PRECISION ROUNDED TO SHORT TYPE = REALSHORT  CONVERSION NOT NECESSARY TYPE = INTEGER  NUMBER CONVERTED TO INTEGER  RESTORE THE REGISTERS RETURN  EXE INSTRUCTIONS  *   V  INCOMP ACTION ON DATASET  INPUT BEYOND LAST OUTPUT	00417001 00418001 00419001 0042001 00422001 00422001 00422001 00425001 00425001 00426001 00427001 00433001 00433001 00433001 00433001 00433001 00434001 00443001 00445001 00445001 00446001 00445001 00445001 00445001 00445001 00455001

				<u>.</u>			/
Loc	Object Code Addr1	Addr2 S	tmt Source	State	ment	X390 3.1.04 2012/08	/17 13.21
00051A	47FC 01E4		482	В	FSAERR+6*4(R12)	MORE TH.2DIGITS	00465001
			483 * 484 *	EVTEDI	NAL ADDRC		00466001
			485 *	EXIER	NAL ADDRS		00467001 00468001
00051E			406 1/07740	20	\/(TUTDTTAD)		00450004
000520	00000000		486 VPTTAB 487 *	DC	V(IHIPTTAB)		00469001 00470001
	00120		488 ACNVIRD	EQU	X'120'		00471001
			489 * 400 *	TNTED	NAL CONSTANTS AND STORAG	-	00472001
			490 * 491 *	INTER	NAL CONSTANTS AND STORAG	E	00473001 00474001
	00000009		492 KF9	DC	F'9'	FOR SHIFT OF DECIMAL POINT	00475001
	00000048 00000000		493 KF72 494 API	DC DC	F'72' A(0)	FOR EXPONENT TREATMENT CHARACTER POINTER OF APOSTROPHE	00476001 00477001
	00000000		495 DPI	DC	A(0)	CHARACTER POINTER OF DEC POINT	00477001
	00000000						
	0000000000000000 41100000000000000		496 BUFF 497 KFPD1	DC DC	D'0' D'1.0'	FOR CONVERSION OF NUMBER	00479001 00480001
	483B9ACA00000000		498 TPNINE	DC	DE9'1'	10**9	00481001
	4E00000000000000		499 MASK	DC	FL8S56'78'	FLOAT 0 WITH EXPONENT 78	00482001
000558	0000000080000000 000A		500 ROUND 501 KH10	DC DC	X'0000000080000000' H'10'	FOR CONVERSION OF NUMBER FOR EXPONENT TREATMENT	00483001 00484001
000562			502 FKT	DC	X'00'	FLAG BYTE	00485001
000563			503 F	DC	X'00' C''	FLAG BYTE	00486001
000564 000565			504 SM 505 SE	DC DC	C' '		00487001 00488001
	0000000000000000		506 MB	DC	XL21'00'	MANTISSA BUFFER	00489001
00057B	F2F1F4F7F4F8F3F6		507 DMINT	DC	C'2147483648'	2**31	00490001
000585	0808080808080808		508 * 509 IPTAB	DC	64X'08'	OTHERS	00491001 00492001
0005C5			510	DC	X'04'	BLANK	00493001
	0808080808080808		511 512	DC	10X'08'	OTHERS DECIMAL POINT	00494001
0005D0 0005D1			512 513	DC DC	X'14' 2X'08'	OTHERS	00495001 00496001
0005D3			514	DC	X'10'	SIGN +	00497001
	0808080808080808		515	DC	17X'08'	OTHERS	00498001
0005E5 0005E6	0808080808080808		516 517	DC DC	X'10' 28X'08'	SIGN - OTHERS	00499001 00500001
000602		!	518	DC	X'18'	APOSTROPHE	00501001
	08080808080808		519	DC	114X'08'	OTHERS	00502001
	0C0C0C0C0C0C0C0C 080808080808		520 521	DC DC	10X'0C' 6X'08'	DIGITS 0 TO 9 OTHERS	00503001 00504001
			522 *				00505001
000685	000000 00000000000000000		523 SAVEAREA	DC	18F'0'		00506001
000000	000000000000000		524 *	DC	101 0		00507001
0006D0			525	LTORG			00508001
0006D0	0001		526 527 *		=H'1'		00509001
			528	DSTAB	LE DSECT=YES		00510001
000000	00000			DSECT			01-DSTAB
999999	00000000		530+* 531+ADCB	DC	F'0'	-> DCB	01-DSTAB 01-DSTAB
	00000000		532+R	DC	F'0'	CHARACTER POINTER	01-DSTAB
	00000000		533+RE	DC	F'0'		01-DSTAB
	00000000 00000000		534+NBB 535+BB	DC DC	F'0' F'0'		01-DSTAB 01-DSTAB
000014			536+5	DC	H'1'	RECORD POINTER	01-DSTAB
000016			537+P	DC	H'80'	RECORD LENGTH	01-DSTAB
000018 000019			538+K 539+Q	DC DC	X'02' X'00'	NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION	01-DSTAB 01-DSTAB
00001A		!	540+DSF	DC	H'00'	DATASET FLAGS	01-DSTAB
			541+* 542+*	DATAC	ET FLAGS - DSF		01-DSTAB 01-DSTAB
			543+*	DATAS	ET FLAGS - DSF		01-DSTAB
	00080	!	544+DS0	EQU	X'80'	DATASET OPEN	01-DSTAB
	00040 00020		545+DS1 546+DS2	_	X'40' X'20'	LAST I/O OUTPUT	01-DSTAB 01-DSTAB
	00010		547+DS3	-	X'10'	EAST 1/O OUTFUT	01-DSTAB
	00008	!	548+DS4	EQU	X'08'		01-DSTAB
	00004 00002		549+DS5 550+DS6		X'04' X'02'	OPEN FOR OUTPUT	01-DSTAB 01-DSTAB
	00001		551+DS7		X'01'	END OF FILE	01-DSTAB
			552+*				01-DSTAB
			553+* 554+*	DATAS	ET FLAGS - DSF+1		01-DSTAB 01-DSTAB
	00080		555+DS8	EQU	X'80'	END OF DATA	01-DSTAB
	00040		556+DS9	-	X'40'	ODENIED DV SVSAST 43	01-DSTAB
	00020 00010		557+DS10 558+DS11	_	X'20' X'10'	OPENED BY SYSACT 12 INDICATE IHIERR-ROUT	01-DSTAB 01-DSTAB
	00008	!	559+DSEOD	EQU	X'08'		01-DSTAB
	00004		560+DSI0ERR	_	X'04'	I/O ERROR	01-DSTAB
	00002 00001		561+DS14 562+DS15	EQU EQU	X'02' X'01'	DATASET OPENED CLOSE FROM IHIERR	01-DSTAB 01-DSTAB
		!	563+*				01-DSTAB
	00000000		564+NOTEADR		F'0'	LDECL+ TWO APP	01-DSTAB
000020 000022			565+BL 566+	DC DC	H'0' H'0'	LRECL+ TWO ARB	01-DSTAB 01-DSTAB
		!	567+*				01-DSTAB
	00024		568+DSTABLEL	EQU	*-DSTABLE	L'DSTABLE ENTRY	01-DSTAB
			569+* 570 *				01-DSTAB 00511001
000000	00000	00120	571 FSAAREA	DSECT			00512001
			572 <b>*</b> 573	COBY	FSAREA		00513001 00514001
			574=*	COFT	JANEA		00001001

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 575= COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY 00002001 576= 00003001 577= STATUS - LEVEL 2.1 99994991 578= 00005001 579= 00006001 580= 00007001 581= COMMON DATA AREA 00008001 582= 00009001 **FSAREA** 583= 00010001 00011001 584= 585= 00012001 586=\* 00013001 587= DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL 00014001 588= MODULES DURING THE EXECUTION 99915991 589= 00016001 ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY 590= 00017001 SUBROUTINES) BY R12 591= 00018001 592= 00019001 00000 593=FSAREA EQU 00020001 594= 00021001 SAVE AREAS 595= 00022001 596= 00023001 000000 597= DS 18F STANDARD SAVE AREA 00024001 00048 598=ASAVE EQU \*-FSAREA ALTERNATE SAVE AREA USED BY 00025001 999948 599= DS 18F CERTAIN SUBROUTINES 99926991 00027001 600= 601= MISCELLANEOUS WORK AREAS AND CONSTANTS 00028001 00029001 602= 00090 603=FCTVALST \*-FSAREA TEMPORARY STORAGE FOR 00030001 EQU 999999 604= DS **FUNCTION VALUES** 00031001 00098 605=ASTLOC EOU \*-FSAREA DISPL FOR ADDR OF STAND LOCTN 00032001 000098 00000090 A(FSAREA+FCTVALST) 00033001 606= DC 0009C 607=BRRST EOU \*-FSAREA TEMPORARY SAVE REG BRR 00034001 0009C 608=HW EQU BRRST TEMPORARY HALFWORD STORAGE 00035001 00009C 609= DS 00036001 610=PROLREG \*-FSARFA αααΔα FOU STORAGE FOR PRT AND LAT WHEN 99937991 0000A0 A PROCEDURE IS FORMAL PARAM 00038001 611= DS 2A 00039001 612= HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE 00040001 613= 614=\* 99941991 0000A8 615= DS 00042001 0000A8 00 616= DC X'00 00043001 000A9 617=PROLPBN -FSAREA STORAGE FOR CALLED PBN 00044001 EOU 00045001 0000A9 00 618= X'00' DC 619=EIGHT 000AA \*-FSAREA CONST FOR REDUCING RAS 00046001 EQU 0000AA 0008 620= DC H'8' 00047001 621= 99948991 0000AC DS 00049001 622= 0F 00050001 000AC 623=ADSTAB EQU \*-FSAREA ADDR OF DSTABLE 0000AC 624= IN THE OBJECT PROGRAM 00051001 000B0 625=ANOTTAB EOU \*-FSARFA ADDR OF NOTE TABLE 00052001 (INSERTED BY THE OPEN ROUTINE) 0000B0 626= DS 00053001 627= 00054001 000B4 628=IHIFSAST EQU 00055001 000B4 629=PGOPSW EQU \*-FSAREA PROGRAM CHECK OLD PSW 00056001 630= 0000B4 00057001 DS 2F 000BC 631=FSAPICA EQU \*-FSAREA OLD PICA ADDR 00058001 арары арарара 632= DC F'0' 00059001 633=SCRCS 00060001 000C0 \*-FSAREA SEMICOLON NUMBER EQU 0000C0 634= DS Н 00061001 000C2 635=DTSW \*-FSAREA OPTION SWITCHES 00062001 EQU 000C2 636=0PTSW EQU DTSW 00063001 DUMP-80, TRACE-40, SHORT-20 ERROR CODE FOR ERROR ROUTINE 0000C2 00 637= DC X'00 00064001 000C3 638=FSAERCOD EOU \*-FSAREA 00065001 0000C3 00066001 639= DS 640=\* 00067001 641= RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 642=\* 00069001 0000C4 00070001 643= DS 000C4 644=IHIFSARS EQU 00071001 000C4 645=RASSTART EQU \*-FSAREA ADDR OF FIRST ENTRY IN RAS-8 00072001 0000C4 00073001 646= 99908 647=RASPT EQU \*-FSARFA RAS POINTER FROM TOP 00074001 000008 648= DS 00075001 000CC 649=RASEND -FSAREA ADDR OF LAST ENTRY IN RAS+8 EOU 00076001 0000CC 00077001 650= DS 000D0 651=RASPB \*-FSAREA RAS POINTER FROM BOTTOM 00078001 EQU 0000D0 652= DS 00079001 653= 99989991 654= LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES 00081001 00082001 655= 656=BRLIST 0000D4 DS 00083000 657=CAP1 \*-FSAREA FIRST PART CAPS 00084001 000D4 EQU 000004 4700 0000 00000 658= NOP 00085001 \*-FSAREA 000D8 659=CAP2 EOU SECOND PART CAPS 00086001 0000D8 4700 0000 00000 660= NOP 00087001 000DC 661=PROLOGP EQU PROLOGUE FORMAL PARAMETER ENTRY 00088001 000DC 662=PROLOGFP EQU PROLOGP 00089001 0000DC 4700 0000 00000 NOP 00090001 663= 000E0 664=PROLOG EOU \*-FSARFA PROLOGUE PROGRAM USUAL ENTRY 00091001 0000E0 4700 0000 00000 NOP 00092001 665= 000E4 666=RETPROG EQU -FSAREA DISPLACEMENT RETURN PROGRAM 00093001 0000E4 4700 0000 00094001 00000 667= NOP 00095001 000E8 \*-FSAREA EPILOGUE PROGRAM, PROCEDURE ENTRY 668=EPILOGP EQU 9999E8 4799 9999 00000 669= NOP 00096001 000EC 670=EPILOGB EQU \*-FSAREA EPILOGE PROGRAM.BETA-BLOCK ENTRY 00097001

D-Loc	Object Cod	le Ad	ddr1	Addr2	Stmt Source	State	ement	X390 3.1.04 2012/0	8/17 13.21
0000EC	4700 0000			00000	671=	NOP	0		00098001
		00	90F0		672=EPILPR3	EQU	*-FSAREA	EPILOGUE PROGRAM ENTRY 3	00099001
0000F0	4700 0000			00000	673=	NOP	0		00100001
000054	4700 0000	00	00F4	00000	674=CSWE1	EQU	*-FSAREA	FIRST PART CSWES	00101001
0000F4	4700 0000	aa	90F8	00000	675= 676=CSWE2	NOP EQU	0 *-FSAREA	SECOND PART CSWES	00102001 00103001
0000F8	4700 0000	00		00000	677=	NOP	0	SECOND LART COWES	00103001
		00	0FC		678=LOADPP	EQU	*-FSAREA	LOAD PRECOMPILED PROC ROUTINE	00105001
0000FC	4700 0000			00000	679=	NOP	0		00106001
			100		680=TRACE	EQU	*-FSAREA		00107001
	D200 0000	0000 00			681=	MVC	0(0),0		00108001
	4700 0000 4700 0000			00000	682=	NOP	0		00109001
MOTON	4700 0000	aa	) 10E	00000	683= 684=TERMNTE	NOP EQU	*-FSAREA	NORMAL TERMINATION EXIT	00110001 00111001
00010E	4700 0000	00		00000	685=	NOP	0	NORTHE TERRITOR EXIT	00111001
		00	112		686=BCR	EQU	*-FSAREA		00113001
000112	0700				687=	BCR	0,0	VARIABLE CONDITIONAL BRANCH	00114001
		00	114		688=GETMSTO	EQU	*-FSAREA		00115001
000114	4700 0000			00000	689=	NOP	0		00116001
		0.0	118		690=*	FOLL	*-FSAREA		00117001
000118	4700 0000	96		00000	691=VALUCALL 692=	NOP	0		00118001 00119001
000110	4700 0000	99	)11C	00000	693=IORLST	EQU	*-FSAREA		00120001
00011C	4700 0000			00000	694=	NOP	0		00121001
					695=*				00122001
		00	O1CC		696=FSAERR	EQU	X'1CC'	DISPL FOR ERROR LIST	00123001
					697=*	DICD		CERTAIN ERROR EVITS IN EGA	00124001
					698=*	DISPI	LACEMENTS FOR	CERTAIN ERROR EXITS IN FSA	00125001
		aa	920C		699=* 700=0UT0FB	EQU	FSAERR+4*16		00126001 00127001
			218		701=NUMBIND	EQU	FSAERR+4*19		00128001
			208		702=ARRAYBD	EQU	FSAERR+4*15		00129001
			926C		703=ERROR40	EQU	FSAERR+4*40		00130001
			224		704=0ERR22	EQU	FSAERR+4*22		00131001
			9210 9220		705=ENDLESL 706=0ERR21	EQU EQU	FSAERR+4*17 FSAERR+4*21		00132001 00133001
		96	0220		700=0ERR21 707=*	EQU	FJAERN+4 ZI		00134001
					708 *				00515001
					709 *	REGIS	STER EQUATES		00516001
					710 *				00517001
					711	IEZRI			00518001
			0000		712+R0	EQU	0		01-IEZRE
			9001 9002		713+R1 714+R2	EQU EQU	1 2		01-IEZRE 01-IEZRE
			0002		714+R2 715+R3	EQU	3		01-IEZRE
			0004		716+R4	EQU	4		01-IEZRE
		00	0005		717+R5	EQU	5		01-IEZRE
			9006		718+R6	EQU	6		01-IEZRE
			0007		719+R7	EQU	7		01-IEZRE
			9008 9009		720+R8 721+R9	EQU EQU	8 9		01-IEZRE 01-IEZRE
			0005 000A		721+R9 722+R10	EQU	10		01-IEZRE
			900B		723+R11	EQU	11		01-IEZRE
			900C		724+R12	EQU	12		01-IEZRE
			000D		725+R13	EQU	13		01-IEZRE
			900E		726+R14	EQU	14		01-IEZRE
		00	900F		727+R15 728 *	EQU	15		01-IEZRE
					728 * 729	END			00519001 00520001
					,	LIND			30320001

102					Jy001	C. 033												
Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	ence	S				X390	3.1.6	94 20	012/08	3/17 :	13.21
	_																	
=H'1'		000006D0	00000001			526	162											
ACNVIRD API		00000120 0000052C	00000001	U A A		488 494	370 314M	325										
APOSTR		0000032C				304	211B	323										
APOSTRA		000002E4				308	305B											
APOSTR1	4	000002FA	00000001	I		313	307B											
BLANK	4	0000019C	00000001	I		213	206B	218B										
BRRST		0000009C		U		607	608											
BUFF		00000538	00000001			496	450M	451										
CI		00000000 000000CC	00000001	U I		87 154	458 106	10011	126	128U	120D	116	1 / 01 1	1 E A D				
DECPT		000000298				287	210B	1000	120	1200	1300	140	1460	1300				
DECPTA		000002B8				296	292B											
DECPT1		000002C6				299	288B											
DELIMIT	4	00000306	00000001	I		317	193B	226B	273B	279B	290B	309B						
DELIMITB		00000340					328B											
DELIMITC		00000332				329	336B											
DELIMITD DELIMITE		00000366 00000398				345 359	341B 355B											
DELIMITE		00000338					357B											
DELIMITH		0000037E					348B											
DELIMIT1		0000031A				323	318B											
DELIMIT2	4	0000032A	00000001	I		327	321B	324B										
DELIMIT3		00000350					332B											
DIGIT		000001CE				228	208B											
DIGIT1 DIGIT2		00000228 00000202				255	229B 231B											
DIGIT2A		00000202					244B											
DIGIT3		000001E8				236	233B	246B										
DIGIT3A		000001EE				237	234B											
DIGIT4	4	00000248	00000001	I		264	256B											
DIGIT5		0000023A				260	268B											
DMINT		0000057B				507	349	210										
DPI DSF		00000530 0000001A				495 540	301M 159M		170	17/	176	170M	100					
DSOPEN		0000001A		Ι		170	165B	104	170	1/4	170	17 511	190					
DSOPENA		0000010E				174												
DSTABLE		00000000				529	83U	568										
DS0	1	00000080		U		544	164											
DS10		00000020		U		557	159											
DS2		00000020		U		546	170	170										
DS6 DS7		00000002 00000001		U U		550 551	174 176	179 198										
DTSW		00000001 000000C2		U		635	636	150										
ERROR2		00000506	00000001			472	161B	163B	178B									
ERROR3		0000050C				475	172B											
ERROR5		00000512				478	177B	199B										
ERROR6		00000518	00000001			481	259B											
EV		00000008	00000001	U		89	155	102	224	220	220	220	240M	2454	240M	240	252M	255
F	1	00000563	00000001	хх		503	187M	192 267M		228 272		238 278	240M 284M	245M		249 291	252M	255 299M
							304	306		312M					326M		340	383
							390	412										
FCTVALST	1	00000090		U		603	606											
FIN		000004B4					385B	427B	445B									
FIN1		000004D0				454		2700	2005	4550								
FIN3 FKT		000004E6 00000562					364B 109M				151							
FPR0		00000362	00000001	V V		67				402M		43.8M	442M	446M	450	452M	468	470
FSAAREA		00000000	FFFFFFE				376U	30711	33311	40211	71011	75011	77211	44011	450	75211	+00	470
FSAERR	1	000001CC		U		696	473B	476B	479B	482B	700	701	702	703	704	705	706	
FSAREA	1	00000000	FFFFFFE	U		593	598				607	610	617	619	623	625	629	631
							633		638		647	649	651	657	659		664	666
TUTTDEAT	4	00000000	00000001	-		0.5				674	676	678	680	684	686	688	691	693
IHIIDEAI IHIIDEII		00000000 00000044				95 115	58 57	101U 121U										
IHIIDEIR		00000044				135	56	1410										
IHIPTTAB		00000000				486												
IORLST		0000011C		U		693		166	194	329	457							
IPTAB		00000585				509												
K		00000018				538												
KFPD1 KF72		00000540 00000528				497	387 436	130										
KF9		00000524				492		433										
KH10		00000524				501												
LADDRA		000000DA					110B											
MASK	8	00000550	00000001	G F		499	398M	399										
MB	21	00000566	00000001	хх		506	182										361	393
NV		00000000				00			397	405M	414M	415	416	420M	421	467M		
NX OP		0000000C 00000010		U U			195 167	230										
OPTSW		00000010 000000C2		U			377	448										
OTHERS		000000C2	00000001				207B											
PACK		000004F4					353X											
PROLOGP		00000DC		U		661												
Q		00000019				539		107	227.									
R RE		00000004 00000008					181 190											
REQOPEN		00000008					168B	213	J _ /	درر								
ROUND		00000122					451M	452										
RØ		00000000		U			342M		371	397M	398	411M	415M	418M	419	421M	422M	425M
						_	426	469										
R1		00000001		U		713		254	200	20	202	20 4	402	42	424	422	434	136
R10	1	000000A		U		122	109 439M		SOUM	386M	392M	394M	403M	426M	431M	433M	434M	436
R11	1	0000000B		U		723	439M 432M		444M	446								
R12		0000000D		Ü			122M				144	145	154	166	194	329	370	372

Symbol	Length Valu	e Id	Type Asm	Program	Defn	Refe	rence	s				X390	3.1.6	94 20	012/08	3/17	13.21
						37611	377	448	457	472	473	475	476	478	479	481	482
R13	1 000000	9D	U		725	102		104				124			143M		145
						368	369	372M	374M	461M	472M	475M	478M	481M			
R14	1 000000	9E	U		726	156M	180M	196M	331M	368	371M	374M	459M				
R15	1 000000	ðF	U		727	101U	107D	121U	127D	141U	147D	154M	155M	156B	166M	167M	180B
											221	329M	330M	331B	428M	430M	438
						442			458M								
R2	1 000000	<b>0</b> 2	U		714	202M									351M		
							374	375M	379M	393M	394	400	419M	422	447M	453M	456M
n 2	1 000000	22	U		715	460	104	105	10CM	10011	1120	1 2 C M	1 2011	1220	1 A C M	1 4011	
R3 R4	1 000000 1 000000		U			102M 181M									223M		242
114	1 000000	04	U		710										334M		337
R5	1 000000	25	U		717	83U		200	203	301	J14	יוכבכ	J2J11	327	JJ-11	555	557
R6	1 000000		Ü			162											
R7	1 000000		Ü		719		370M	373B	468	469	470						
R8	1 000000	<b>28</b>	U		720							352M	353	373M	392	400	404M
R9	1 000000	<b>29</b>	U		721				260								
SAVEAREA	4 000006	88 0000000	LFF		523	103	123	143	461								
SCAN	4 000001	28 00000001	l I		181	175B											
SCAN1		3A 0000000				200B											
SCAN2		3C 00000001				225B											
SCAN2A		40 00000001				281B											
SCAN3		48 00000001				239B	241B	250B	253B	262B	266B	285B	294B	302B	315B		
SCAN4		54 00000001				216B	2225										
SCAN5 SE		76 00000001 65 00000001				191B 188M		200	207M	210	211M	422					
SIGN		5C 00000001				209B	20311	290	29/19	210	21111	423					
SIGN1		70 00000001				271B											
SIGN2		80 00000001 80 00000001				274B											
SIGN2A		BA 00000001				277B											
SM		64 00000000				186M	280M	293M	296M	310M	354	408					
STORE		FA 0000000				460X											
TPNINE	8 000005	48 0000000	LDD		498	402											
TRINT1	4 000003	44 00000000	l I		362	343B											
TRREAL		06 0000000			382	339B	347B	350B									
TRREALA		EE 00000001				384B											
TRREALB		F8 00000001				391B											
TRREAL1		2E 00000001				388B	401B										
TRREAL1A		38 00000001				409B											
TRREAL2		FE 00000001 6C 00000001				406B 413B	424P										
TRREAL3 TRREAL3A		62 00000001 62 00000001				413B 417B	424B										
TRREAL3B		7E 00000001				417B											
TRREAL4		A2 00000001				423B											
TRREAL4A		46 00000001 46 00000001				435B											
TRREAL5		BA 00000001				440B											
VPTTAB		20 0000000				428											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21 119 139 342M 361M 368 371 374M 397M 398 411M 415M 418M 419 421M 422M 425M 426 464M 469 99 119 139 158 203M 368 374M 464M 1(1) 99 119 139 202M 203M 205N 219M 220M 221 257M 258 345M 346 351M 352 362M 368 369M 374M 375M 379M 393M 419M 422 447M 453M 456M 460N 464M 102M 104 105 106M 108U 112D 119 126M 128U 132D 139 146M 148U 368 374M 464M 119 139 181M 185M 189M 190 197M 203 214M 215 217 223M 236 243 260 265 280 283 301 314 319M 3(3) 4(4) 325M 327 334M 335 337 368 374M 464M 5(5) 83U 99 119 139 368 374M 464M 6(6) 99 119 139 162 368 374M 464M 119 139 158M 368 370M 373B 374M 464M 468 469 470 119 139 182M 232 236 237M 300 346 352M 353 368 373M 374M 392 400 404M 464M 119 139 183M 232 258 260 261M 368 374M 464M 109 119 139 251M 300M 368 374M 386M 392M 394M 403M 426M 431M 433M 434M 436 439M 442N 464M 7(7) 99 99 8(8) 9(9) 10(A) 119 139 368 374M 432M 433M 443M 444M 446N 464M 99 119 122M 124 125 139 142M 144 145 154 166 194 329 368 370 372 374M 376U 377 448 457 464M 472 473N 475 476N 478 479N 481 482N 12(C) 13(D) 99 102 103M 104 105 119 122 123M 124 125 139 142 143M 144 145 368 369 372M 374M 461M 464 472M 475M 478M 481M 99 119 139 156M 180M 196M 331M 368 371M 374M 459M 464M 465B 95B 99 101U 107D 115B 119 121U 127D 135B 139 141U 147D 154M 155M 156B 166M 167M 180B 194M 195M 196B 204M 213M 221 329M 330M 331B 368 374M 428M 430M 430N 438 442 446 457M 458M 459B 464M 14(E)

IDE Dsect Cross Reference PAGE 13

00000024 FFFFFFFF 529 4 DSTABLE 00000120 FFFFFFFE 571 PRIMARY INPUT DSTABLE FSAAREA

Dsect Length Id Defn Con Member X390 3.1.04 2012/08/17 13.21

X390 3.1.04 2012/08/17 13.21

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3	3.1.04	2012/08/17	13.21
83		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001B	337	DSTABLE,	R5			
101		USING	Ordinary	00000001	00000000	00001000	15	00688	106	IHIIDEAI	,R15			
107		DROP					15			R15				
108		USING	Ordinary	00000001	00000CC	00001000	3	00496	110	COMMON, R	3			
112		DROP	-				3			R3				
121		USING	Ordinary	00000001	00000044	00001000	15	00644	126	IHIIDEII	,R15			
127		DROP					15			R15				
128		USING	Ordinary	00000001	000000CC	00001000	3	00496	130	COMMON, R	3			
132		DROP					3			R3				
141		USING	Ordinary	00000001	00000088	00001000	15	00600	146	IHIIDEIR	,R15			
147		DROP					15			R15				
148		USING	Ordinary	00000001	000000CC	00001000	3	00604	467	COMMON, R	3			
376		USING	Ordinary	FFFFFFE	00000000	00001000	12			FSAAREA,	R12			

X390 3.1.04 2012/08/17 13.21

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIIDE PROCSTEP: X390

Primary input: lines 1 to 520 of SYSD.ALGOLFRT.ASM(IHIIDE)

SYSLIB library records read: 362
SYSUT1 work file size: 71621 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 41600 bytes
SYSLIN file records written: 36

TXA000I Return code 0, elapsed time 0.39 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIIDECM 0006D2 6

## IHIIOR LEVEL V2.M01

```
(c) Copyright 1995-2010 Tachyon Software LLC
```

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIIOR)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00154
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

```
Loc Object Code
                     Addr1 Addr2 Stmt Source Statement
                                                                                                 X390 3.1.04 2012/08/17 13.21
                                                                                                                        00002001
                                       3
                                                   COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00003001
                                       4
                                                                                                                        00004001
00005001
                                       5
                                                   THE CODE HAS BEEN UPDATED -
                                                                                                                        00006001
                                       6
                                                   1. ALL HARDCODED LENGTH CALCULATIONS FOR GETMAINED
                                                                                                                        00007001
                                       8
                                                      AREAS USED FOR DCB, DECB ETC ARE NOW CALCULATED
                                                                                                                        00008001
                                                   2. ALL REFERENCES TO VARIOUS DCB FIELDS UTILIZE THE
                                       9
                                                                                                                        00009001
                                                      MAPPING SYMBOLS PROVIDED BY DCBD
                                                                                                                        00010001
                                      10
                                                   3. ALL REFERENCES TO VARIOUS JFCB FIELDS UTILIZE THE
                                                                                                                        00011001
                                      11
                                                      MAPPING SYMBOLS PROVIDED BY IEFJFCBN
                                      12
                                                                                                                        00012001
                                      13
                                                   4. THE DCBS FOR SYSIN, SYSPRINT AND ALGLIB01 ARE OPENED
                                                                                                                        00013001
                                                      WITH OPEN OPTIONS SUITABLE FOR JES2/3 DATASETS
THIS WILL PREVENT 013-BC ABENDS THAT OCCURRED WITH THE
                                      14
                                                                                                                        00014001
                                      15
                                                                                                                        00015001
                                                      PREVIOUS RELEASE
                                                                                                                        00016001
                                      16
                                                   5. ALL NUMERIC BRANCH CONDITIONS ARE RATIONALIZED TO USE
                                                                                                                        00017001
                                      17
                                                       STANDARD ASSEMBLER MNEMONICS
                                      18
                                                                                                                        00018001
                                                   6. MINOR CODE AND COMMENT CHANGES FOR IMPROVED READABILITY
                                      19
                                                                                                                        00019001
                                      20
                                                                                                                        00020001
                                                                                                                        00021001
                                      21
                                                   FUNCTION/OPERATION -
                                                   THIS MODULE CONTAINS A SET OF SERVICE ROUTINES USED BY
                                                                                                                        00022001
                                      22
                                                   OTHER I/O MODULES AS SUBROUTINES
                                      23
                                                                                                                        00023001
                                      24
                                                   THEY PERFORM THE FOLLOWING
                                                                                                                        00024001
                                                                                                                        00025001
00026001
                                      25
                                                   OPEN DATASET
                                                   CHANGE TO NEXT RECORD
                                      26
                                                   CLOSE DATASET
                                                                                                                        00027001
                                      27
                                                   CLOSE ALL DATASETS
                                      28
                                                                                                                        00028001
                                                   CLEAR NOTTAB
                                                                                                                        00029001
                                      29
                                      30
                                                   ENTRY NOTTAB
                                                                                                                        00030001
                                      31 *
                                                   EVALUATE DATASET NUMBER
                                                                                                                        00031001
                                      32
                                                   END OF DATA HANDLING SYNCHRONOUS ERROR HANDLING
                                                                                                                        00032001
                                                                                                                        00033001
                                      33
                                      34
                                                   CONVERT REAL TO INTEGER.
                                                                                                                        00034001
                                      35 *
                                                   MORE DETAIL BEFORE EACH ROUTINE
                                                                                                                        00035001
                                      36
                                                                                                                        00036001
                                                   ENTRY POINTS -
                                                                                                                        00037001
                                      37
                                                   IHIIOROP
                                                                                                                        00038001
                                      38
                                      39
                                                   IHIIOROQ
                                                                                                                        00039001
                                      40
                                                   IHIIORNX
                                                                                                                        00040001
                                      41 *
                                                   THTTORCI
                                                                                                                        00041001
                                      42
                                                   IHIIORCP
                                                                                                                        00042001
                                                                                                                        00043001
                                      43
                                                   IHIIORCN
                                      44
                                                   IHIIOREN
                                                                                                                        00044001
                                                                                                                        00045001
                                      45
                                                   IHIIOREV
                                      46
                                                   IHIIORCI
                                                                                                                        00046001
                                                                                                                        00047001
00048001
                                      47
                                                   IHIIORED
                                      48
                                                   THTTORER
                                                   ALL INVOKED BY BALR R14, R15
                                                                                                                        00049001
                                      49
                                                   DIFFERENCE EXPLAINED BEFORE EACH ROUTINE
                                      50
                                                                                                                        00050001
                                      51
                                                                                                                        00051001
                                      52
                                                   INPUT - SEE EACH ROUTINE
                                                                                                                        00052001
                                                                                                                        00053001
                                      53
                                                   OUTPUT - SEE EACH ROUTINE
                                                                                                                        00054001
                                      54
                                                                                                                        00055001
                                      55
                                                   EXTERNAL ROUTINES - IHIGPR - CLOSE DATASET FOR PUT/GET
                                                                                                                        00056001
                                      56
                                      57
                                                                                                                        00057001
                                                   EXITS - NORMAL - ALL ROUTINES EXCEPT END OF DATA AND SYNAD RELOAD REGISTERS AND BR 14
                                      58
                                                                                                                        00058001
                                      59
                                                                                                                        00059001
                                                                   - NO EXPLANATION
                                                                                                                        00060001
                                      60
                                                          - ERROR
                                      61
                                                                          DATASET NUMBER OUT OF RANGE
                                                                                                                        00061001
                                                                          REAL NUMBER TO BE CONVERTED OUT OF
                                                                                                                        00062001
                                      62
                                      63
                                                                          INTEGER RANGE
                                                                                                                        00063001
                                                                          INCOMPATIBLE ACTIONS ON SAME DATASET
                                                                                                                        00064001
                                      64
                                                                          INPUT BEYOND LAST OUTPUT
                                                                                                                        00065001
                                      65
                                                                          OVERFLOW OF NOTTAB
                                                                                                                        00066001
                                      66
                                      67
                                                                          INPUT REQUEST BEYOND END OF DATASET
                                                                                                                        00067001
                                      68
                                                                      7
                                                                          DATA SECTIONED AND NO CTRL CHARACTER
                                                                                                                        00068001
                                      69
                                                                          SPECIFIED
                                                                                                                        00069001
                                                                                                                        00070001
                                                                      32
                                                                          UNRECOVERABLE I/O ERROR
                                      70
                                      71
                                                                          BLOCKSIZE NOT A MULTIPLE OF RECORD
                                                                                                                        00071001
                                      72
                                                                          LENGTH
                                                                                                                        00072001
                                      73
                                                                      41
                                                                          DDCARD INCORRECT OR MISSING
                                                                                                                        00073001
                                      74
                                                          - ACTION - BRANCH TO IHGFSA
                                                                                                                        00074001
                                                                                                                        00075001
                                      75
                                                                     LA 13, IHGFSA
                                                                     B FSAERR+XX*4(13) XX ERROR NUMBER
                                                                                                                        00076001
                                      76
                                      77
                                                                                                                        00077001
                                      78
                                                   TABLES/WORK AREAS -
                                                                                                                        00078001
                                                   NOTTAB, FOR STORING OF RECORD IDENTIFICATION USING WHEN REPOSITIONING, IS CREATED DYNAMICALLY WHEN OPEN A DATASET
                                      79
                                                                                                                        00079001
                                                                                                                        99989991
                                      80
                                                   WITH UNBLOCKED RECORD FORMAT SIZE OF 1024 BYTES
                                                                                                                        00081001
                                      81
                                                                                                                        00082001
                                      82
                                      83
                                                   ATTRIBUTES - SERIALLY REUSABLE
                                                                                                                        00083001
                                      84
                                                                                                                        00084001
                                      85
                                                                                                                        00085001
                                                   THE OPERATION OF THIS MODULE DOES NOT DEPEND UPON A
                                      86
                                                                                                                        00086001
                                                   SPECIAL INTERNAL REPRESENTATION OF THE EXTERNAL
                                                                                                                        00087001
                                      87
                                      88
                                                   CHARACTER SET
                                                                                                                        00088001
                                      89
                                                                                                                        00089001
                                      90
                                                   REGISTER USAGE
                                                                                                                        00090001
                                      91
                                                                                                                        00091001
                                      92
                                                       -> RELEVANT ENTRY IN DSTAB
                                                                                                                        00092001
                                      93
                                                   R6
                                                           DATASET NUMBER
                                                                                                                        00093001
                                                           PROGRAM BASE REGISTER
                                                                                                                        00094001
                                      94
                                      95
                                                       -> DCB AND DECB'S
                                                                                                                        00095001
                                                   R8
                                      96
                                                   R12 -> FSA
                                                                                                                        00096001
```

R13 -> SAVE AREA

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                       98 *
                                                                                                                      00098001
                                                   R14 -> RETURN
                                       99 *
                                                   R15 -> ROUTINE
                                                                                                                      00099001
                                      100
                                                                                                                      00100001
000000
                       00000 00D6A
                                      101 IHIIORTN CSECT
                                                                                                                      00101001
                                      102
                                                                                                                      00102001
                                      103
                                                   ENTRY IHIIOROP
                                                                                                                      00103001
                                      104
                                                   ENTRY IHIIOROO
                                                                                                                      00104001
                                      105
                                                   ENTRY IHIIORNX
                                                                                                                      00105001
                                      106
                                                   ENTRY IHIIORCL
                                                                                                                      00106001
                                                   ENTRY IHIIORCP
                                                                                                                      00107001
                                      107
                                      108
                                                   ENTRY IHIIORGP
                                                                                                                      00108001
                                      109
                                                   ENTRY IHIIORCN
                                                                                                                      00109001
                                      110
                                                   ENTRY IHIIOREN
                                                                                                                      00110001
                                      111
                                                   ENTRY THTTOREV
                                                                                                                      00111001
                                                   ENTRY IHIIORED
                                                                                                                      00112001
                                      112
                                                   ENTRY IHIIORCI
                                                                                                                      00113001
                                      113
                                                   ENTRY IHIIORER
                                                                                                                      00114001
                                      115
                                                                                                                      00115001
                                                   DISPLACEMENT IN FSA
                                      116 *
                                                                                                                      00116001
                                                                                                                      00117001
                                      117
                       000AC
                                      118 ADSTAB
                                                   EOU
                                                         X'AC'
                                                                                                                      00118001
                       000B0
                                      119 ANOTTAB
                                                   EQU
                                                         X'B0'
                                                                                                                      00119001
                       000C2
                                      120 OPTSW
                                                   EQU
                                                         X'C2'
                                                                                                                      00120001
                       001CC
                                      121 FSAERR
                                                   EQU
                                                         X'1CC'
                                                                                                                      00121001
                                      122
                                                                                                                      00122001
                                      123
                                                                                                                      00123001
                                      124
                                                                                                                      00124001
                                      125
                                                                                                                      00125001
                                      126 *
                                                                                                                      00126001
                                                   OPEN A DATASET
                                      127 *-
                                                                                                                      00127001
                                      128 *
                                                                                                                      00128001
                                                   FUNCTION/OPERATION
                                                                                                                      00129001
                                      129
                                      130
                                                    RESERVE STORAGE FOR AND COMPLETE A DCB AND TWO I/O BUFFERS
                                                                                                                      00130001
                                      131 *
                                                                                                                      00131001
                                      132
                                                   COMPLETE DSTAB FIELDS IN GENERATED OBJECT MODULE
                                                                                                                      00132001
                                      133
                                                                                                                      00133001
                                                                                                                      00134001
                                                   STAB HAS AN ENTRY AND INDICATOR STATUS FOR EVERY DATASET
                                      134
                                      135
                                                   USED IN THE PROGRAM
                                                                                                                      00135001
                                                                                                                      00136001
                                      136
                                      137
                                                   TNPUT -
                                                                                                                      00137001
                                      138 *
                                                   IF DATASET SHOULD PERFORM ONLY INPUT OR OUTPUT BLOCKED
                                                                                                                      00138001
                                                   RECORD FORMAT IS USED ELSE UNBLOCKED FORMAT - ACCESS
                                      139
                                                                                                                      00139001
                                                   METHOD BSAM.
                                                                                                                      00140001
                                      140
                                                   IN CASE OF INPUT TWO RECORDS OR BLOCKS READ TO I/O
                                      141
                                                                                                                      00141001
                                      142 *
                                                   BUFFERS. BLOCKED RECORD FORMAT IS USED ONLY WHEN
                                                                                                                      00142001
                                      143 *
                                                   BLOCKING FACTOR > 1
                                                                                                                      00143001
                                                                                                                      00144001
                                      144
                                                   OUTPUT - N/A
                                                                                                                      00145001
                                      145
                                      146
                                                                                                                      00146001
                                      147
                                                                                                                      00147001
                                      148 *
                                                   ADDR OF THE DCB IS LOADED IN R8 AND KEPT THROUGH ALL
                                                                                                                      00148001
                                      149
                                                   I/O MODULES
                                                                                                                      00149001
                                                                                                                      00150001
                                      150
                                                   ROUTINE IHIIOROQ IS ENTERED FROM SYSACT 12
                                                                                                                      00151001
                                      151
                                      152
                                                                                                                      00152001
                                      153 IHIIOROQ SAVE
                                                          (14,12),, 'IHIIOROQ LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                      00153001
                                                                                             BRANCH AROUND ID
LENGTH OF IDENTIFIER
000000 47F0 F026
                             00026
                                      154+IHIIOROQ B
                                                          38(0,15)
                                                                                                                      01-SAVE
000004 21
                                      155+
                                                   DC
                                                          AI1(33)
                                                                                                                      01-SAVE
000005 C9C8C9C9D6D9D6D8
                                                          CL32'IHIIOROQ LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                      01-SAVE
                                      156+
                                                   DC
000025 F1
                                                   DC
                                                                                              IDENTIFIER
                                                                                                                      01-SAVE
                                      157+
000026 90EC D00C
                             0000C
                                                         14,12,12(13)
                                                                                              SAVE REGISTERS
                                                                                                                      01-SAVE
                                      158+
                                      159
                                                                                                                      00154001
00002A 184F
                                      160
                                                   LR
                                                          R4.R15
                                                                                                                      00155001
                                                   USING IHIIOROO, R4
                                                                                                                      00156001
                 R:4 00000
                                      161
00002C 4170 40E6
                             000E6
                                      162
                                                          R7, IHIIOROF
                                                                                                                      00157001
                 R:7 000E6
                                                   USING IHIIOROP, R7
                                                                                                                      00158001
** TXA533W USING range overlaps
                                 prior USING at
** TXA301I Record 158
                       in SYSD.ALGOLFRT.ASM(IHIIOR)
000030 50D0 7C0E
                             00CF4
                                                                                                                      00159001
                                     164
                                                   ST
                                                          R13.SAVAR+4
000034 41D0 7C0A
                             00CF0
                                     165
                                                          R13, SAVAR
                                                                                                                      00160001
                                                   LA
                 R:5 00000
                                                   USING DSTABLE, R5
                                                                                   DSN RELEVANT ENTRY IN DSTABLE
                                                                                                                      00161001
                                      166
000038 4960 7C72
                             00D58
                                                                                   DATASET NUMBER 0 OR 1
                                                                                                                      00162001
                                                          R6,=H'1
00003C 47D0 7034
                             0011A
                                     168
                                                   BNH
                                                         OPENAA
                                                                                   YES, BRANCH TO IHIIOROP
                                                                                                                      00163001
                       0001A
                                                          DSF, 255-DS6
000040 94FD 501A
                                      169
                                                   NI
                                                                                                                      00164001
                                                                                                                      00165001
000044 9102 501B
                       0001B
                                                                                   DATASET BEEN OPEN BEFORE ?
                                      170
                                                   TM
                                                          DSF+1.DS14
000048 4710 7034
                             0011A
                                      171
                                                                                                                      00166001
                                                   во
                                                          OPEN00
                                                                                   YES
                                      172 *
                                                                                                                      00167001
                                      173 *
                                                   OPEN DATASET FOR THE FIRST TIME
                                                                                                                      00168001
                                                                                                                      00169001
                                      174
                                                   GETMAIN AREA FOR DCB, DECB AND JFCB
                                                                                                                      00170001
                                      175
                                                   EXAMINE THE DISP PARAMETER IN JFCB IF NEW OPEN THE
                                      176
                                                                                                                      00171001
                                                   DATASET FOR OUTIN ELSE FOR INOUT
                                      177
                                                                                                                      00172001
                                      178 *
                                                                                                                      00173001
                                      179
                                                   GETMAIN R, LV=DCBAREAL
                                                                                                                      00174001
                                                   OS/VS2 RELEASE 4 VERSION -- 10/21/75
                                      180+
                                                                                                                      01-GETMA
                                                                                                                      01-GETMA
00004C
                                      181+
                                                   CNOP 0,4
00004C 4510 4054
                             00054
                                      182+
                                                   BAL
                                                                                              BRANCH AROUND LENGTH
                                                                                                                      01-GETMA
000050 00000120
                                      183+
                                                          A(DCBAREAL)
                                                                                              LENGTH
                                                                                                                      01-GETMA
000054 5800 1000
                             00000
                                      184+
                                                                                              LOAD LENGTH
                                                                                                                      01-GETMA
                                                          0,0(0,1)
000058 0A0A
                                      185+
                                                   SVC
                                                         10
                                                                                              ISSUE GETMAIN SVC
                                                                                                                      Q1-GETMA
                                                                                                                      00175001
                                      186
00005A 5010 5000
                             00000
                                                   ST
                                                          R1,ADCB
                                                                                   SAVE DCB ADDR IN DSTABLE
                                                                                                                      00176001
                                      187
                                                                                                                      00177001
                                      188
                                                   LR
                                                          R8, R1
                  R:8 00000
                                      189
                                                   USING IHADCB, R8
                                                                                                                      00178001
000060 D257 8000 7BA2 00000 00C88
                                     190
                                                         0(DCBMODLN, R8), DCBMODEL MOVE DCBMODEL INTO GETMAIN AREA 00179001
                                      191
                                                                                                                      00180001
```

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 192 \* CONVERT BINARY DATASET NUMBER INTO CHARACTER TO 00181001 193 \* MOVE INTO THE DDNAME 00182001 194 00183001 000066 4E60 7C02 00CE8 **CVD** R6. DWORD 00184001 195 00006A F311 7C02 7C08 00CE8 00CEE 196 UNPK DWORD(2), DWORD+6(2) EXTRACT LAST TWO DIGITS 00185001 000070 96F0 7C03 00CE9 197 ΟI DWORD+1,X'F0' 00186001 000074 D201 802E 7C02 0002E 00CE8 198 MVC DCBDDNAM+6(2), DWORD MOVE IN DCB DDNAME NUMBER 00187001 00007A 4130 8070 99979 199 ΙΔ R3.JFCB 00188001 STCM R3, B'0111', ADCBEXIT+5 00007E BE37 7BFF 00CE5 200 STORE JECH AREA ADDR 00189001 201 \* 00190001 202 RDJFCB ((R8)) 00191001 000082 0700 0,4 ALIGN LIST TO FULLWORD 02-OPEN 203+ CNOP 000084 4510 408C 0008C 204+ BAL 1,\*+8 LOAD REG1 W/LIST ADDR. OPT BYTE AND DCB ADDR. 02-0PEN 999988 99999999 205+ DC A(0) 02-OPEN ST STORE INTO LIST 00008C 5081 0000 00000 206+ R8,0(1,0) 02-OPEN 000090 9280 1000 00000 MOVE IN OPTION BYTE 207+ MVI 02-OPEN 0(1),128 000094 0A40 208+ SVC ISSUE RDJFCB SVC 200 3 00192001 000096 9120 80A4 000A4 210 TM JFCBTSDM, JFCSDS SYSIN/SYSOUT DATASET ? 00193001 00009A 4780 40BE 000BE ΒZ NO. BRANCH 00194001 211 ROQA 212 00195001 213 SUBSYSTEM DATASET 00196001 214 00197001 00009E 9180 80C7 000C7 215 ТМ JFCBIND2, JFCMOD NEW OR MOD DATASET ? 00198001 aaara ROQB YES, MUST BE SYSOUT DCBMACRF,=AL1(DCBMRRD,0) NO POINT OPTION FOR SUBSYS DS 9999A2 4719 49B9 216 RΩ 00199001 0000A6 D201 802A 7C74 0002A 00D5A 00200001 217 MVC 0000AC 47F0 40CA 00201001 000CA 218 В 219 \* 00202001 0000B0 D201 802A 7C76 0002A 00D5C 220 ROQB DCBMACRF, =AL1(0, DCBMRWRT) NO POINT OPTION FOR SUBSYS DS 00203001 MVC 0000B6 9602 501A 0001A 221 ΟI DSF DS6 00204001 0000BA 47F0 40CA 000CA 222 В ROOD 00205001 00206001 223 0000BE 9180 80C7 000C7 224 ROOA TM JFCBIND2, JFCMOD NEW OR MOD DATASET ? 00207001 0000C2 4780 40CA 000CA 225 NO, BRANCH 00208001 ΒZ ROQD 0000C6 9602 501A 0001A 226 ΟI DSF, DS6 00209001 227 ROQD 99979 9999CA 4119 8979 ΙΔ R1. JECB 99219991 228 00211001 229 FREE UP THE JFCB AREA ON THE END OF DCBAREA AS ITS NO 00212001 230 \* 00213001 231 \* 00214001 232 FREEMAIN R,LV=JFCB\_LEN,A=(1) 00215001 OS/VS2 RELEASE 3 VERSION -- 10/25/74 233+ 01-FREEM 01-FREEM 0000CE 0700 CNOP 0.4 234+ 0000D0 47F0 40D8 000D8 235+ В \*+8 BRANCH AROUND LENGTH 01-FREEM 0000D4 000000B0 236+ DC A(JFCB\_LEN) LENGTH 01-FREEM 0,\*-4 LOAD SP AND LV CLEAR HI ORDER BYTE 0000D8 5800 40D4 aaan4 237+ 01-FREEM 1.0(0,1) 9999DC 4119 1999 99999 238+ ΙΔ 01-FRFFM ISSUE FREEMAIN SVC 0000E0 0A0A 239+ SVC 10 01-FREEM 240 00216001 0000E2 47F0 70EE 001D4 241 В OPEN20 00217001 242 \* 00218001 243 IHIIOROP SAVE (14,12),, 'IHIIOROP LEVEL 2.1 &SYSDATE &SYSTIME' 00219001 0000E6 47F0 F026 00026 BRANCH AROUND ID 244+IHIIOROP B 38(0,15) 01-SAVE LENGTH OF IDENTIFIER 0000EA 21 245+ 01-SAVE DC 0000EB C9C8C9C9D6D9D6D7 246+ DC CL32'IHIIOROP LEVEL 2.1 08/17/12 13.2' IDENTIFIER 01-SAVE 00010B F1 247+ CL1'1' IDENTIFIER 01-SAVE DC 00010C 90EC D00C 0000C 248+ STM 14,12,12(13) SAVE REGISTERS 01-SAVE 249 00220001 000110 187F 250 LR R7, R15 00221001 000112 50D0 7C0E 00CF4 ST R13.SAVAR+4 00222001 251 000116 41D0 7C0A R13, SAVAR 00223001 00CF0 00011A 4960 7C72 00D58 253 OPEN00 СН R6.=H'1' 00224001 00011E 4770 704E 00134 254 BNE OPEN01 00225001 255 00226001 256 DATASET NUMBER = 1 00227001 257 \* IF DATASET HAS BEEN OPENED BEFORE (DS14=1) 00228001 258 \* SET DS0 = 1 AND GO BACK. IF NOT OPEN THE DATASET 00229001 259 \* 00230001 000122 9102 501B DSF+1.DS14 PREVIOUSLY OPENED ? 0001B 260 TM 00231001 000126 4780 704E 00134 ΒZ OPEN01 NO, BRANCH 00232001 261 00012A 9680 501A OI DSF DS0 00233001 262 00012E 47F0 7280 00366 00234001 263 OPEN51 264 \* 00235001 GETMAIN FOR DCB AND DECB, NO JFCB 265 00236001 266 00237001 267 OPEN01 GETMAIN R, LV=DCBAREAL-JFCB LEN 00238001 268+\* 000132 0700 269+ CNOP 0,4 01-GETMA BRANCH AROUND LENGTH 000134 4510 7056 9913C 270+OPEN01 BAI 1.\*+8 01-GFTMA 000138 00000070 A(DCBAREAL-JFCB LEN) LENGTH 271+ DC 01-GETMA LOAD LENGTH 00013C 5800 1000 00000 01-GETMA 272+ 0.0(0.1)ISSUE GETMAIN SVC 000140 0A0A SVC 273+ 00239001 274 000142 5010 5000 00000 275 ST R1, ADCB 00240001 000146 1881 276 LR R8.R1 00241001 O(DCBMODLN, R8), DCBMODEL MOVE IN MODEL DCB 000148 D257 8000 7BA2 00000 00C88 277 MVC 00242001 00014E 4960 7C72 00D58 278 СН R6,=H'1' 00243001 000152 4740 708C 00172 279 DSIN 00244001 000156 4780 70B0 00196 280 DSPRINT 00245001 BE 281 \* 00246001 CONVERT BINARY DSNUMBER TO CHAR 00247001 282 00248001 283 DATASET NUMBER TO DDNAME 00015A 4E60 7C02 284 R6, DWORD 00249001 DWORD(2), DWORD+6(2) 00015E F311 7C02 7C08 00CE8 00CEE UNPK EXTRACT LAST TWO DIGITS 00250001 285 000164 96F0 7C03 aace9 286 ОТ DWORD+1 X'F0' 00251001 MOVE IN DCB DDNAME NUMBER 000168 D201 802E 7C02 0002E 00CE8 287 MVC DCBDDNAM+6(2), DWORD 00252001

```
Addr1 Addr2 Stmt Source Statement
                                                                                                 X390 3.1.04 2012/08/17 13.21
  Loc Object Code
00016E 47F0 70E8
                                      288
                                                                                                                        00253001
                              001CE
                                                           OPEN2
                                      289 *
                                                                                                                        00254001
                                                           DCBDDNAM, =CL8'SYSIN
000172 D207 8028 7C62 00028 00D48 000178 D201 8032 7C74 00032 00D5A
                                      290 DSIN
                                                    MV/C
                                                                                                                        00255001
                                                           DCBMACR,=AL1(DCBMRRD,0) NO POINT OPTION FOR SYSIN
                                                    MVC
                                                                                                                        00256001
                                      291
                                      292
                                                                                                                        00257001
                                      293
                                                    OPEN
                                                           ((R8),(INPUT))
                                                                                     INPUT ONLY FOR SYSIN
                                                                                                                        00258001
00017F 0700
                                      294+
                                                    CNOP
                                                           0,4
                                                                                               ALIGN LIST TO FULLWORD 01-OPEN
000180 4510 70A2
                              00188
                                      295+
                                                    BAL
                                                           1,*+8
                                                                                               LOAD REG1 W/LIST ADDR. 01-OPEN
                                                           A(0)
                                                                                               OPT BYTE AND DCB ADDR.
000184 00000000
                                      296+
                                                    DC
                                                                                                                        01-0PEN
                                                                                               STORE INTO LIST
                                                                                                                        01-OPEN
000188 5081 0000
                              00000
                                                           R8.0(1.0)
                                      297+
                                                    ST
                                                                                               MOVE IN OPTION BYTE
00018C 9280 1000
                       00000
                                      298+
                                                    MVI
                                                                                                                        01-0PEN
                                                           0(1),128
000190 0A13
                                      299+
                                                                                               ISSUE OPEN SVC
                                                                                                                        01-OPEN
                                                    SVC
                                                           19
                                      300
                                                                                                                        00259001
000192 47F0 7134
                                                           OPEN300
                              9921A
                                      301
                                                    B
                                                                                                                        00260001
                                                                                                                        00261001
                                      302
                                      303
                                                    IF DS11 = 0 OPEN DATASET SYSPRINT
                                                                                                                        00262001
                                                    IF DS11 = 1 OPEN DATASET ALGLDD01
                                      304
                                                                                                                        00263001
                                      305
                                                                                                                        00264001
000196 9110 501B
                       0001B
                                      306 DSPRINT
                                                    TM
                                                           DSF+1,DS11
                                                                                                                        00265001
                                                                                                                        00266001
00019A 4710 70C6
                              001AC
                                                    во
                                                           DSPR2
                                      307
00019E D201 802E 7C78 0002E 00D5E
                                                           DCBDDNAM+6(2),=CL2'01' LAST 2 CHARS OF DDNAME
                                                                                                                        00267001
                                      308
                                                    MVC
0001A4 9602 501B
                       0001B
                                       309
                                                    ΟI
                                                           DSF+1.DS14
                                                                                                                        00268001
0001A8 47F0 70CC
                              001B2
                                      310
                                                    В
                                                                                                                        00269001
                                      311 *
                                                                                                                        00270001
                                                           DCBDDNAM. =CL8'SYSPRINT'
9991AC D297 8928 7C6A 99928 99D59
                                      312 DSPR2
                                                    MVC
                                                                                                                        00271001
0001B2 D201 8032 7C76 00032 00D5C
                                      313 DSPR2A
                                                           DCBMACR(2),=AL1(0,DCBMRWRT) NO POINT OPT FOR SYSPRINT
                                                                                                                        00272001
                                                    MVC
                                      314
                                                                                                                        00273001
                                                           ((R8),(OUTPUT))
                                                                                   OUTPUT ONLY FOR SUBSYS SYSOUT
                                      315
                                                    OPEN
                                                                                                                        00274001
0001B8
                                                    CNOP
                                                                                                ALIGN LIST TO FULLWORD 01-OPEN
                                      316+
0001B8 4510 70DA
                              001C0
                                      317+
                                                    BAL
                                                           1.*+8
                                                                                               LOAD REG1 W/LIST ADDR. 01-OPEN
                                                                                               OPT BYTE AND DCB ADDR.
0001BC 00000000
                                      318+
                                                    DC
                                                           A(0)
                                                                                                                        01-0PEN
0001C0 5081 0000
                                                    ST
                                                           R8.0(1.0)
                                                                                               STORE INTO LIST
                                                                                                                        01-OPEN
                              00000
                                      319+
0001C4 928F 1000
                       00000
                                       320+
                                                    MVI
                                                           0(1),143
                                                                                               MOVE IN OPTION BYTE
                                                                                                                        01-OPEN
0001C8 0A13
                                                           19
                                                                                               ISSUE OPEN SVC
                                                                                                                        01-OPEN
                                      321+
                                                    SVC
                                      322
                                                                                                                        00275001
0001CA 47F0 7134
                              9921A
                                      323
                                                    B
                                                           OPEN300
                                                                                                                        00276001
                                                                                   SET MACRF=(RP,WP)
                                      324
                                                                                                                        00277001
0001CE D201 8032 7C7A 00032 00D60
                                      325 OPEN2
                                                    MVC
                                                           DCBMACR, =AL1(DCBMRRD+DCBMRPT1, DCBMRWRT+DCBMRPT2)
                                                                                                                        00278001
0001D4 BF2F C0B0
                                                                                                                        00279001
                              000B0
                                      326 OPEN20
                                                    ICM
                                                           R2, B'1111', ANOTTAB (R12)
0001D8 4770 7118
                              001FF
                                      327
                                                    BN7
                                                           OPFN3
                                                                                                                        00280001
                                      328
                                                                                                                        00281001
                                      329
                                                    GETMAIN R, LV=1024
                                                                                    GET AREA FOR NOTE TABLE
                                                                                                                        00282001
                                                    OS/VS2 RELEASE 4 VERSION -- 10/21/75
                                      330+
                                                                                                                        01-GETMA
0001DC 4100 0400
                              00400
                                      331+
                                                           0,1024(0,0)
                                                                                               LOAD LENGTH
0001E0 4510 70FE
                                                                                               INDICATE GETMAIN
                              001E4
                                      332+
                                                    BAL
                                                           1,*+4
                                                                                                                        01-GETMA
                                                    SVC
0001E4 0A0A
                                      333+
                                                           10
                                                                                               ISSUE GETMAIN SVC
                                                                                                                        Q1-GETMA
                                                                                                                        00283001
                                      334
0001E6 501C 00B0
                                                    ST
                                                           R1, ANOTTAB(R12)
                              000B0
                                                                                                                        00284001
                                      335
                                      336
0001EA 1821
                                                    LR
                                                           R2.R1
                                                                                     ANOTTAB TO R2
                                                                                                                        00285001
0001EC 1832
                                       337
                                                    LR
                                                           R3, R2
                                                                                     ANOTTAB TO R3
                                                                                                                        00286001
0001EE 4130 3008
                              99998
                                      338
                                                    ΙΔ
                                                           R3,8(,R3)
                                                                                                                        00287001
                                                                                     STORE POINTER NXE IN NOTTAB
                                                                                                                        00288001
0001F2 5030 2000
                              00000
                                      339
                                                    ST
                                                           R3,0(,R2)
0001F6 4130 33F8
                              003F8
                                                           R3.1016(,R3)
                                                                                                                        00289001
                                      340
                                                    LA
0001FA 5030 2004
                              00004
                                      341
                                                    ST
                                                           R3,4(,R2)
                                                                                     STORE POINTER NEXEF IN NOTTAB
                                                                                                                        00290001
0001FE 9102 501A
                       0001A
                                      342 OPEN3
                                                    тм
                                                           DSF DS6
                                                                                     OUTPUT POSSIBLE ?
                                                                                                                        00291001
                                                                                                                        00292001
000202 4710 7146
                              0022C
                                      343
                                                           OPEN30
                                                    во
                                                                                     YES
                                      344
                                                                                                                        00293001
                                      345
                                                    OPEN
                                                           ((R8),(INOUT))
                                                                                                                        00294001
                                                                                               ALIGN LIST TO FULLWORD 01-OPEN
000206 0700
                                      346+
                                                    CNOP
                                                           0,4
000208 4510 712A
                              00210
                                      347+
                                                    BAL
                                                           1,*+8
                                                                                               LOAD REG1 W/LIST ADDR.
00020C 00000000
                                       348+
                                                           A(0)
                                                                                               OPT BYTE AND DCB ADDR.
                                                                                                                        01-OPEN
                                                    DC
000210 5081 0000
                              00000
                                      349+
                                                    ST
                                                           R8,0(1,0)
                                                                                               STORE INTO LIST
                                                                                                                        01-0PEN
                                                                                               MOVE IN OPTION BYTE
                                                                                                                        01-OPEN
000214 9283 1000
                       00000
                                      350+
                                                    MVI
                                                           0(1),131
                                                                                               ISSUE OPEN SVC
                                                                                                                        01-OPEN
000218 0A13
                                      351+
                                                    SVC
                                                           19
                                      352
                                                                                                                        00295001
00021A 9110 8030
                                      353 OPEN300
                                                    ТМ
                                                           DCBOFLGS, DCBOFOPN
                                                                                     OPEN SUCCESSFUL ?
                                                                                                                        00296001
                       00030
00021E 4710 715C
                              00242
                                      354
                                                    во
                                                           OPEN355
                                                                                     YES, BRANCH
                                                                                                                        00297001
                                                                                     NO, SET DS14 = 0
000222 94FD 501B
                       0001R
                                      355
                                                    NI
                                                           DSF+1,255-DS14
                                                                                                                        00298001
                                                           R13.R12
                                                                                     DDCARD INCORRECT OR MISSING
                                                                                                                        00299001
000226 18DC
                                      356
                                                    LR
000228 47FC 0270
                              00270
                                      357
                                                           FSAERR+41*4(R12)
                                                                                                                        00300001
                                                    В
                                      358 *
                                                                                                                        00301001
                                      359 OPEN30
                                                    OPEN
                                                           ((R8),(OUTIN))
                                                                                                                        00302001
999220
                                      360+
                                                    CNOP
                                                           0,4
                                                                                               ALIGN LIST TO FULLWORD 01-OPEN
00022C 4510 714E
                                                           1.*+8
                                                                                               LOAD REG1 W/LIST ADDR. 01-OPEN
                              00234
                                      361+OPEN30
                                                    BAL
000230 00000000
                                                           A(0)
                                                                                               OPT BYTE AND DCB ADDR.
                                                    DC
                                                                                                                       01-OPEN
                                      362+
000234 5081 0000
                                                    ST
                                                           R8,0(1,0)
                                                                                               STORE INTO LIST
                                                                                                                        01-OPEN
                              00000
                                      363+
000238 9287 1000
                       00000
                                                    MVI
                                                                                               MOVE IN OPTION BYTE
                                                                                                                        01-OPEN
                                       364+
                                                           0(1),135
00023C 0A13
                                      365+
                                                    SVC
                                                           19
                                                                                               ISSUE OPEN SVC
                                                                                                                        01-OPEN
                                                                                                                        00303001
                                      366
00023E 47F0 7134
                                                           OPEN300
                                                                                    CONTINUE
                                                                                                                        00304001
                              0021A
                                      367
                                                    В
                                                                                                                        00305001
                                      368
000242 9111 7C52
                       00D38
                                      369 OPEN355
                                                    TM
                                                           EXERFLAG, X'11'
                                                                                     ERROR IN DCBEXIT ?
                                                                                                                        00306001
000246 4780 71A6
                              0028C
                                      370
                                                                                                                        00307001
                                                           OPEN301
                                      371
                                                                                                                        00308001
                                                    CLOSE DATASET AND FREEMAIN FOR DCB AND DECB ONLY
                                      372
                                                                                                                        00309001
                                      373
                                                                                                                        00310001
                                      374
                                                    CLOSE ((R8), REREAD)
                                                                                                                        00311001
00024A 0700
                                      375+
                                                    CNOP
                                                         0,4
                                                                                               ALIGN LIST TO FULLWORD 01-CLOSE
00024C 4510 716E
                              00254
                                      376+
                                                    BAL
                                                           1,*+8
                                                                                               LOAD REG1 W/LIST ADDR
                                                                                                                       01-CLOSE
                                                    DC
ST
999229 99999999
                                      377+
                                                           A(0)
                                                                                               OPTION AND DCB ADDRESS
                                                                                                                       01-CLOSE
000254 5081 0000
                                                           R8,0(1,0)
                                                                                               STORE DCB ADDRESS
                              00000
                                      378+
                                                                                                                        01-CLOSE
000258 9290 1000
                       00000
                                      379+
                                                    MVI
                                                                                               MOVE IN OPTION BYTE
                                                                                                                        01-CLOSE
                                                           0(1),144
                                                                                                                        01-CLOSE
00025C 0A14
                                       380+
                                                                                               ISSUE CLOSE SVC
                                                                                                                        00312001
                                      381
                                      382
                                                    FREEMAIN R, LV=DCBAREAL-JFCB LEN, A=ADCB
                                                                                                                        00313001
                                      383+
                                                    OS/VS2 RELEASE 3 VERSION -- 10/25/74
                                                                                                                        01-FREEM
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X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 00025E 0700 384+ CNOP 0,4 01-FREEM 000260 47F0 7182 00268 385+ \*+8 BRANCH AROUND LENGTH 01-FREEM В 000264 00000070 386+ DC A(DCBAREAL-JFCB\_LEN) LENGTH LOAD SP AND LV 01-FREEM 000268 5800 717E 00264 01-FREEM 387+ L 0.\*-4 1,ADCB LOAD AREA ADDRESS 00026C 5810 5000 00000 388+ 01-FREEM 000270 4110 1000 CLEAR HI ORDER BYTE 00000 389+ 1,0(0,1) 01-FREEM SVC 999274 9494 390+ 10 ISSUE FREEMAIN SVC 01\_EREEM 391 00314001 000276 18DC 392 LR R13.R12 00315001 000278 9101 7C52 EXERFLAG, X'01' ERROR 7 IN DCBEXIT ? 00D38 00316001 393 TM CLEAR FLAG 00027C 9200 7C52 00D38 394 MVI EXERFLAG, X'00' 00317001 000280 4780 71A2 00288 OPEN350 00318001 395 ΒZ 000284 47FC 01E8 001E8 396 В FSAERR+7\*4(R12) ERROR 7 00319001 397 \* 00320001 000288 47FC 0260 00260 398 OPEN350 В FSAERR+37\*4(R12) ERROR 37 00321001 399 00322001 00028C 9680 501A 0001A 400 OPEN301 OI DSF,DS0 00323001 000290 4960 7C72 00058 101 СН R6.=H'1' DATASET NUMBER = 0 OR 1 00324001 OPEN301A 000294 47D0 71B6 0029C 402 **BNH** 00325001 00326001 000298 9602 5023 00023 403 OI BL+3, DS14 00029C 4800 5020 00020 404 OPEN301A LH 00327001 RO, BL 0002A0 1A00 405 AR R0. R0 DOUBLE BUFFER LENGTH 00328001 406 \* 00329001 407 GETMAIN R, LV=(0) GET AREA FOR TWO BUFFERS 00330001 OS/VS2 RELEASE 4 VERSION -- 10/21/75 408+ 01-GFTMA 1,\*+4 INDICATE GETMAIN 01-GETMA 0002A2 4510 71C0 002A6 409+ BAL 0002A6 0A0A 410+ SVC ISSUE GETMAIN SVC 00331001 411 0002A8 5010 5010 **BUFFER BEGIN** 00332001 00010 412 R1,BB 0002AC 1821 413 LR R2,R1 00333001 0002AE 4A10 5020 00020 414 AΗ R1,BL 00334001 0002B2 5010 500C ST R1.NBB ALTERNATE BUFFER BEGIN 00335001 0000C 415 0002B6 9102 501A 0001A TM DSF DS6 00336001 0002BA 4710 7262 00348 00337001 417 во OPEN4 0002BE 9608 501B 0001B 418 OPEN31 OI DSF+1,DSEOD SET MARK FOR END OF DATA 00338001 00058 000202 4140 8058 419 ΙΔ R4. DFCB 00339001 0002C6 5830 4008 00340001 R3,8(,R4) 00008 420 L 0002CA 1938 CR 00341001 421 R3. R8 0002CC 4770 71F8 00342001 002DE 422 BNE OPEN311 423 00343001 424 CHECK DECB 00344001 0002D0 4110 8058 00058 425+ LA 1.DECB LOAD PARAMETER REG 1 02-IHBIN 0002D4 58E0 1008 00008 PICK UP DCB ADDR 14,8(0,1) 01-CHECK 426+ L LOAD CHECK ROUTINE ADDR 0002D8 58F0 E034 00034 427+ 15,52(0,14) 01-CHECK 0002DC 05EF 428+ LINK TO CHECK ROUTINE 01-CHECK BALR 429 00345001 430 OPEN311 DECB, SF, (R8), (R2), MF=E READ FIRST BLOCK READ 00346001 0002DE 4110 8058 00058 431+OPEN311 LOAD DECB ADDRESS LA 1,DECB 02-IHBRD 0002E2 9280 1005 5(1),X'80' SET TYPE FIELD 00005 432+ MVI 02-IHBRD 0002E6 5081 0008 00008 433+ ST R8,8(1,0) STORE DCB ADDRESS 02-IHBRD 0002EA 5021 000C 0000C 434+ ST R2,12(1,0) STORE AREA ADDRESS 02-IHBRD LOAD DCB ADDRESS 0002EE 58F1 0008 00008 435+ L 15,8(1,0) 02-IHBRD LOAD RDWR ROUTINE ADDR 02-IHBRD 0002F2 58F0 F030 15,48(0,15) 00030 436+ LINK TO RDWR ROUTINE 0002F6 05EF 437+ BALR 02-IHBRD 14.15 438 \* 00347001 439 CHECK DECB 00348001 1,DECB 0002F8 4110 8058 00058 440+ LA LOAD PARAMETER REG 1 02-IHBIN PICK UP DCB ADDR 0002FC 58F0 1008 99998 441+ 1 14.8(0.1) 01-CHECK LOAD CHECK ROUTINE ADDR 000300 58F0 E034 00034 442+ 15,52(0,14) 01-CHECK 000304 05EF 443+ BALR LINK TO CHECK ROUTINE 00349001 444 000306 94F7 501B 9991B 445 NT DSF+1,255-DSEOD RESET 00350001 0003E 00030A 4810 803E 446 LH 1.DCBBLKSI 00351001 00030E 5840 8044 00044 447 R4.DCBIOBA 00352001 000312 4B14 0016 00016 448 SH 1,22(R4) 00353001 000316 4010 5020 449 00354001 00020 1,BL 450 00355001 451 NOTE (R8) 00356001 00031A 1818 LOAD PARAMETER REG 1 452+ LR 1.R8 02-IHBIN 00031C 58F0 1054 00054 15,84(0,1) LOAD NOTE RTN ADDRESS 01-NOTE 453+ LINK TO NOTE ROUTINE 000320 05EF 454+ BALR 14,15 00357001 455 000322 5010 5010 9991C 456 ST R1. NOTEADR 00358001 00359001 000326 5830 500C 0000C 457 OPEN41 L R3.NBB 00360001 458 DECB, SF, (R8), (R3), MF=E READ SECOND BLOCK 459 READ 00361001 00032A 4110 8058 00058 460+ LA 1, DECB LOAD DECB ADDRESS 5(1),X'80' 00032E 9280 1005 99995 461+ MVI SET TYPE ETELD 02-IHBRD 000332 5081 0008 STORE DCB ADDRESS 99998 462+ ST R8,8(1,0) 02-THRRD 000336 5031 000C 0000C STORE AREA ADDRESS 02-IHBRD 463+ ST R3,12(1,0) 00033A 58F1 0008 00008 464+ LOAD DCB ADDRESS 02-IHBRD 15,8(1,0) L LOAD RDWR ROUTINE ADDR 00033E 58F0 F030 00030 465+ 15,48(0,15) 02-IHBRD 000342 05EF LINK TO RDWR ROUTINE 02-IHBRD 466+ **BALR** 467 00362001 000344 47F0 7274 OPEN5 0035A 468 В 00363001 469 \* 00364001 0001B 000348 9140 501B 470 OPEN4 ТМ DSF+1,DS9 00365001 00034C 4780 7274 0035A 471 ΒZ OPEN5 00366001 000350 D200 2000 7C82 00000 00D68 472 0(1,R2),=C'1' INSERT FIRST CONTROL CHAR 00367001 MVC LA ST 000356 4120 2001 99991 473 R2,1(,R2) PROVIDE SPACE FOR CONTROL CHAR 00368001 00035A 5020 5004 474 OPEN5 00369001 00004 R2,R 00035E 4A20 5016 00016 475 ΑН R2,P 00370001 000362 5020 5008 00371001 00008 476 R2, RE 000366 58D0 7C0E 00CF4 477 OPEN51 R13, SAVAR+4 00372001 478 00373001 479 **RETURN (14,12)** 00374001

X390 3.1.04 2012/08/17 13.21 Addr1 Addr2 Stmt Source Statement Loc Object Code 00036A 98EC D00C 0000C 480+ LM 14,12,12(13) RESTORE THE REGISTERS 01-RETUR 00036E 07FE 481+ BR 14 01-RETUR 482 00375001 00376001 483 484 DCB OPEN EXIT ROUTINE 00377001 485 \*-486 \* 00379001 000370 9110 501B 0001B 487 IHIIORDX TM DSF+1.DS11 00380001 000374 4780 7332 00418 EXIT3 488 ΒZ 00381001 00382001 489 490 EXIT ROUTINE FOR PRINTING ERROR MESSAGE 00383001 491 \* 00384001 000378 D200 5019 7C83 00019 00D69 492 MV/C Q(1),=X'32' RECORD IS SECTIONED Q=50 00385001 RECORD LENGTH P=90 00037F D201 5016 7C7C 00016 00D62 493 MVC P(2),=X'005A' 00386001 INSERT RECORD FORMAT=FBA 00387001 494 495 DCBRECFM, DCBRECF+DCBRECBR+DCBRECCA 00388001 000384 9294 8024 00024 MVI 000388 9640 501B 0001B 496 OI DSF+1,DS9 INSERT FLAG REC CONT CONTR CHAR 00389001 99938C 4849 5916 99916 197 LH R4. P 00390001 R4.1(.R4) P+1 TO LRECL 000390 4140 4001 00001 498 LA 00391001 00392001 000394 4040 8052 00052 499 STH R4. DCBLRECL 500 00393001 501 EXAMINE DCB BLKSIZE 00394001 502 00395001 000398 4830 803E 0003E 503 LH R3.DCBBLKSI LOAD DCBBLKSI INTO R3 00396001 00039C 1B22 00397001 504 SR R2.R2 00039E 1D24 505 DR R2, R4 00398001 0003A0 1233 506 LTR R3 R3 00399001 0003A2 4780 72C4 003AA BLKSI < LRECL OR BLKSI = 0 00400001 507 **EXITA** 0003A6 4630 72D6 003BC R3, EXITB 00401001 508 **BCT** 0003AA 4040 803E 0003E 509 FXTTA STH R4.DCBBLKSI 00402001 0003AE 9640 501A 0001A 510 OI DSF,DS1 BL(2),DCBBLKSI 00403001 0003B2 D201 5020 803E 00020 0003E 511 EXITC 00404001 MVC 0003B8 47F0 73CC 004B2 512 RETEX 00405001 513 \* 00406001 0003BC 4133 0001 0003C0 4C30 8052 00001 514 EXITB LA R3,1(R3) 00407001 R3. DCBI RECL 00408001 00052 515 MH 0003C4 4030 803E 00409001 STH R3, DCBBLKSI 0003E 516 0003C8 94BF 501A 0001A NI DSF, 255-DS1 00410001 517 0003CC 47F0 72CC 003B2 00411001 518 519 \* 00412001 520 \* ALGOL USER'S EXIT ROUTINE 00413001 521 \* 00414001 0003D0 91FF 8024 00024 522 EXIT0 DCBRECFM, X'FF' RECFM PROVIDED ? 00415001 TM 0003D4 4780 730A 00416001 003F0 523 ΒZ RECFM = 0 0003D8 9184 8024 00024 ТМ DCBRECFM, DCBRECF+DCBRECCA RECFM = FBA OR FBA ? 00417001 524 00418001 00419001 0003DC 4710 732A 00410 525 BO EXIT4 0003F0 91FF 5019 RECORDS PER SECTION PROVIDED ? 99919 O.X'FF 526 TM 0003E4 4780 73CC 004B2 RETEX 00420001 ΒZ NO, BRANCH 527 0003E8 9601 7C52 EXERFLAG, X'01' DATASET SPLIT INTO SECTIONS 00421001 00D38 528 OI 0003EC 47F0 73CC 004B2 529 В RETEX AND NO CTL CHARACTER ERROR NO 7 00422001 530 \* 00423001 0003F0 9680 8024 ΟI DCBRECFM, DCBRECF SET RECFM = F 00424001 00024 531 EXIT1 0003F4 9140 501A 00425001 0001A TM DSF DS1 532 0003F8 4710 731A 00426001 00400 533 во EXIT12 00024 DCBRECFM, DCBRECBR 00427001 0003FC 9610 8024 534 OI SET RECFM = BLOCKED 000400 9140 501B 535 EXIT12 ТМ DSF+1,DS9 00428001 0001B 000404 4780 73CC 004B2 536 ΒZ RFTFX 00429001 DCBRECFM, DCBRECCA SET RECEM = ASA CNTI 000408 9604 8024 99924 537 OT 00430001 00040C 47F0 73CC 00431001 004B2 538 RETEX В 539 \* 00432001 000410 9640 501B 540 EXIT4 OI DSF+1,DS9 00433001 0001B 000414 47F0 73CC 004B2 541 В RETEX 00434001 542 \* 00435001 00436001 EXAMINE LRECL 543 544 00437001 000418 9640 501A 99914 545 EXIT3 OI DSF,DS1 00438001 00041C 91FF 5019 00019 546 TM Q,X'FF' 00439001 000420 4780 7342 00428 547 ΒZ EXIT3A 00440001 00441001 000424 9640 501B 0001B DSF+1.DS9 548 OI 000428 4840 8052 00052 549 EXIT3A R4, DCBLRECL 00442001 LH 00443001 00042C 1244 550 LTR R4, R4 00042E 4780 736A 00450 EXIT2 00444001 551 ΒZ 000432 9140 501B 9991B 552 тм DSF+1.DS9 00445001 00446001 000436 4710 7350 00442 DS9=1 RECORDS CONTAIN CNTL CHAR 553 BO EXIT5 00043A 4040 5016 00447001 00016 LRECL TO P 554 STH R4.P 00043E 47F0 738A 00470 555 00448001 В **FXTT6** 556 \* 00449001 000442 0640 557 EXIT5 RCTR R4.0 00450001 000444 4040 5016 99916 IRECL-1 TO P 00451001 558 STH R4.P 000448 4140 4001 00001 00452001 559 R4,1(,R4) LA 00044C 47F0 738A 00470 00453001 560 EXIT6 В 00454001 561 DSF+1,DS9 000450 9140 501B 562 EXIT2 ТМ 00455001 0001B 99464 000454 4710 737E 563 во EXIT7 DS9 = 100456001 000458 4840 5016 00016 00457001 564 LH R4,P 00045C 4040 8052 R4, DCBLRECL 00458001 00052 565 STH P TO LRECL 000460 47F0 738A 00470 566 В EXIT6 00459001 567 \* 00460001 000464 4840 5016 00016 568 EXIT7 LH 00461001 R4,1(,R4) 00462001 00463001 000468 4140 4001 00001 569 ΙΔ P+1 TO LRECL 00046C 4040 8052 00052 570 STH R4, DCBLRECL 571 00464001 572 \* EXAMINE BLKSIZE 00465001 573 00466001 000470 4820 803E 0003F 574 EXIT6 IΗ R2.DCBBLKSI 00467001 000474 1222 575 LTR R2,R2 BLKSIZE = 0 ? 00468001

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Loc Object Code	Addr1 Addr	2 Stmt	Source	Staten	ment	X390 3.1.04 2012/08	/17 13.21
000476 4780 73C0	004A			BZ	EXIT8	YES, BRANCH	00469001
00047A 4940 803E	0003			CH	R4, DCBBLKSI	DCBBLKSI = DCBLRECL ?	00470001
00047E 4780 73B6 000482 4830 803E	0049 0003			BE LH	EXIT61A R3,DCBBLKSI	YES, BRANCH	00471001 00472001
000482 4830 803L	0003	580		SR	R2, R2		00472001
000488 1D24		581		DR	R2, R4		00474001
00048A 1222		582			R2, R2		00475001
00048C 4780 73B2	0049			BZ	EXIT61		00476001
000490 9610 7C52 000494 47F0 73CC	00D38 004E	584 52 585		OI B	EXERFLAG, X'10' RETEX	BLOCKSIZE NOT A MULTIPLE OF LOGICAL RECORD LENGTH ERR NO.37	00477001 00478001
000434 47F0 73CC	0046	586 *		D	RETEX	LOGICAL RECORD LENGTH ERR NO.37	00478001
000498 94BF 501A	0001A	587 EX		NI	DSF, 255-DS1	0 TO DS1 UNBLOCKED FORMAT NESC	00480001
00049C D201 5020 803E	00020 0003	E 588 EX	XIT61A	MVC	BL(2),DCBBLKSI	BLKSI TO BL	00481001
0004A2 47F0 72EA	0030			В	EXIT0		00482001
000446 4040 9035	0003	590 *		CTU	D4 DCDDI VCT		00483001
0004A6 4040 803E 0004AA 4040 5020	0003 0002			STH STH	R4,DCBBLKSI R4,BL		00484001 00485001
0004AE 47F0 72EA	003E			В	EXITO		00486001
		594 *					00487001
		595 RE		RETURN			00488001
0004B2 0004B2 07FE		596+RE 597+		DS BR	0H 14	RETURN	01-RETUR 01-RETUR
0004BZ 07FE		598 *	1	DN	14	RETORN	00489001
		600 *			C - CHANGE TO NEXT RECO		00491001
		601 *- 602 *					
		603 *		INPUT	=		00493001 00494001
		604 *			SE OF AN IN-MODULE CALLI	NG NEXTREC, LAST I/O	00495001
		605 *			TION IS CHECKED FOR COMP		00496001
		606 *	l	RECORE	) IS READ TO THE OTHER I	/O BUFFER	00497001
		607 * 608 *		OUTPUT	r _		00498001 00499001
		609 *			SE OF AN OUT-MODULE CALL	ING NEXTREC, LAST I/O	00500001
		610 *			TION IS CHECKED FOR COMP		00501001
		611 *	I	RECORE	O IS WRITTEN TO THE DATA	SET	00502001
		612 * 613 *					00503001 00504001
			HIIORNX	SAVE	(14,12), 'IHIIORNX LEVE	L 2.1 &SYSDATE &SYSTIME'	00505001
0004B4 47F0 F026	0002		HIIORNX		38(0,15)	BRANCH AROUND ID	01-SAVE
0004B8 21		616+			AL1(33)	LENGTH OF IDENTIFIER	01-SAVE
0004B9 C9C8C9C9D6D9D5 0004D9 F1	E7	617+			CL32'IHIIORNX LEVEL 2.1 CL1'1'	08/17/12 13.2' IDENTIFIER	01-SAVE
0004DA 90EC D00C	0000	618+ C 619+			14,12,12(13)	IDENTIFIER SAVE REGISTERS	01-SAVE 01-SAVE
000.5% 5020 5000	0000	620 *		J	1,,11,11(13)	3,102 112023 12113	00506001
0004DE 187F		621		LR	R7, R15		00507001
	004B4	622		USTNG	TUTTODNY D7		
** TVACABLE HOTHO					IHIIORNX, R7		00508001
** TXA533W USING rang  ** TXA301T Record 508		prior USIN	NG at st	atemer			00208001
** TXA533W USING rang ** TXA301I Record 508 0004E0 50D0 7840		prior USIN .GOLFRT.ASM	NG at st M(IHIIOR	atemer			00509001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C	in SYSD.AL 00CF 00CF	prior USIN GOLFRT.ASM 4 623 0 624	NG at st M(IHIIOR	atemer ) ST LA	nt 161. R13,SAVAR+4 R13,SAVAR		00509001 00510001
** TXA301I Record 508 0004E0 50D0 7840	in SYSD.AL	prior USIN GOLFRT.ASM 4 623 0 624 0 625	NG at st M(IHIIOR	atemer ) ST	nt 161. R13,SAVAR+4		00509001 00510001 00511001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C	in SYSD.AL 00CF 00CF	prior USIN GOLFRT.ASM 4 623 0 624 0 625 626 *	NG at st M(IHIIOR	atemer ) ST LA L	R13,SAVAR+4 R13,SAVAR R8,ADCB		00509001 00510001 00511001 00512001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C	in SYSD.AL 00CF 00CF	prior USIN GOLFRT.ASM 4 623 0 624 0 625	NG at st M(IHIIOR	atemer ) ST LA L	nt 161. R13,SAVAR+4 R13,SAVAR		00509001 00510001 00511001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A	in SYSD.AL 00CF 00CF 000C	prior USIN GOLFRT.ASN 4 623 60 624 10 625 626 * 627 * 628 * 629	NG at st M(IHIIOR	atemer ) ST LA L FLOW C	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6		00509001 00510001 00511001 00512001 00513001 00514001 00515001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A 0004F0 4780 7188	in SYSD. AL 00CF 00CF 000CF 00	prior USIN GOLFRT.ASM 44 623 0 624 00 625 626 * 627 * 628 * 629 6C 630	NG at st M(IHIIOR :	atemer ) ST LA L FLOW C TM BZ	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6 NXIN1		00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A	in SYSD.AL 00CF 00CF 000C	prior USIN GOLFRT.ASM 44 623 00 624 00 625 626 * 627 * 628 * 629 00 630 E 631	NG at st M(IHIIOR :	atemer ) ST LA L FLOW C	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6		00509001 00510001 00511001 00511001 00512001 00513001 00514001 00515001 00516001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A 0004F0 4780 7188	in SYSD. AL 00CF 00CF 000CF 00	prior USIN GOLFRT.ASM 44 623 0 624 00 625 626 * 627 * 628 * 629 6C 630	NG at st. M(IHIIOR	atemer ) ST LA L  FLOW C TM BZ BO	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6 NXIN1 NXUT1	READ AND SHOULD BE WRITTEN	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A 0004F0 4780 7188	in SYSD. AL 00CF 00CF 000CF 00	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 632 * 633 *	NG at st.	atemer ) ST LA L  FLOW C TM BZ BO	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6 NXIN1 NXUT1	READ AND SHOULD BE WRITTEN	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00518001 00518001 00519001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A 0004F0 4780 7188	in SYSD. AL 00CF 00CF 000CF 00	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 633 * 633 * 635 *	NG at st.	atemer ) ST LA L FLOW C TM BZ BO DS6=0 BACK	R13,SAVAR+4 R13,SAVAR+8 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6 NXIN1 NXUT1 DS2=1 CURRENT BLOCK WAS	READ AND SHOULD BE WRITTEN	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00517001 00518001 00519001 00520001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A	in SYSD.AL 00CF 00CF 0006 0001A 0063 0051	prior USIN GOLFRT.ASN 4 623 60 624 60 625 626 * 627 * 628 * 629 62 630 631 632 * 633 * 634 * 635 *	NG at st.	atemer ) ST LA L FLOW C TM BZ BO DS6=0 BACK CHECK	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6 NXIN1 NXUT1 DS2=1 CURRENT BLOCK WAS		00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00517001 00519001 00520001 00521001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000 0004EC 9122 501A 0004F0 4780 7188	in SYSD. AL 00CF 00CF 000CF 00	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 62 630 .E 631 632 * 633 * 634 * 635 *	NG at st.	atemer ) ST LA L FLOW C TM BZ BO DS6=0 BACK	R13,SAVAR+4 R13,SAVAR+8 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN DSF,DS2+DS6 NXIN1 NXUT1 DS2=1 CURRENT BLOCK WAS	LOAD PARAMETER REG 1 PICK UP DCB ADDR	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00517001 00518001 00519001 00520001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034	in SYSD.AL 00CF 00CF 000C 000C 0001A 0063 0051	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 632 * 633 * 634 * 635 * 636 8 637+ 8 638+ 4 639+	NG at st.	atemer ) ST LA L  FLOW C  TM BZ BO  DS6=0 BACK  CHECK LA L L	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14)	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00516001 00518001 00519001 00520001 00521001 00521001 00521001 00521001 00518001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008	in SYSD.AL 00CF 00CF 000C 000C 000C 000C 000C	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 633 * 634 * 635 * 636 8 637+ 8 638+ 4 639+ 640+	NG at st.	atemer ) ST LA L FLOW C TM BZ BO DS6=0 BACK CHECK LA L	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14)	LOAD PARAMETER REG 1 PICK UP DCB ADDR	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00517001 00518001 00520001 00522001 00521001 00521001 00521001 00517001 0050001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 60 624 00 625 626 * 627 * 628 * 629 0C 630 E 631 632 * 633 * 635 * 636 8 637+ 8 638+ 44 639+ 640+ 641 *	NG at st.	atemer ) ST LA L  FLOW (  TM BZ BO  DS6=0 BACK  CHECK LA L L BALR	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB  CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00517001 00519001 00520001 0052001 0052001 0052001 0052001 0052001 0052001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 60 624 00 625 626 * 627 * 628 * 629 0C 630 E 631 632 * 633 * 635 * 636 8 637+ 8 638+ 44 639+ 640+ 641 *	NG at st.	atemer ) ST LA L  FLOW C  TM BZ BO  DS6=0 BACK  CHECK LA L L	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14)	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00516001 00517001 00518001 00520001 00522001 00521001 00521001 00521001 00517001 0050001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF 000506 D201 5020 803E	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 632 * 633 * 635 * 636 8 637+ 8 639+ 640+ 641 * 642 643 644 *	NG at st.	atemer ) ) ST LA L  FFLOW ( FFLOW C  FF	R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00516001 00517001 00518001 00520001 00521001 00522001 01-CHECK 01-CHECK 01-CHECK 01-CHECK 010523001 00525001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 632 * 633 * 635 * 636 * 637+ 8 638+ 4 649+ 640+ 641 * 642 643 644 * 645	NG at st.	atemer ) ST LA L  TM BZ BO  DS6=0 BACK  CHECK LA L L BBALR  MVC LR POINT	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8 (1),NOTEADR	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00515001 00517001 00519001 00520001 00521001 00522001 00523001 00523001 00524001 00524001 00524001 00525001 00525001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 IC 630 IE 631 632 * 633 * 634 * 635 * 636 8 637+ 18 638+ 44 639+ 640+ 641 * 642 643 644 * 645 CC 646+	NG at st.	atemer ) ST LA L  FLOW (  FFLOW (  FFLOW C  FFLO	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00517001 00520001 00520001 00521001 00522001 00523001 00523001 00523001 00525001 00525001 00525001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 628 * 629 10 630 10 631 632 * 633 * 634 * 635 * 636 * 636 * 637+ 8 638+ 14 639+ 640 * 641 * 18 644 * 18 644 * 18 645 * 18 644 * 18 645 * 18 645 * 18 647 *	NG at st.	atemer ) ST LA L  TM BZ BO  DS6=0 BACK  CHECK LA L L BBALR  MVC LR POINT	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8 (1),NOTEADR	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00515001 00517001 00519001 00520001 00521001 00522001 00523001 00523001 00524001 00524001 00524001 00525001 00525001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 0 631 632 * 633 * 635 * 636 8 637+ 8 638+ 4 639+ 640+ 641 * 642 643 644 * 645 644 * 645 646 * 646 * 647 * 646 * 647 * 647 * 648 * 648 * 648 * 649 * 649 * 640 * 641 * 642 * 643 * 644 * 644 * 645 * 646 * 647 * 647 * 648 * 648 * 648 * 648 * 649 * 649 * 640 * 641 * 642 * 643 * 644 * 645 * 646 * 647 * 647 * 648 * 648 * 648 * 649 * 649 * 640 * 641 * 642 * 643 * 644 * 645 * 646 * 647 * 647 * 648 * 648 * 648 * 649 * 649 * 640 * 640 * 641 * 642 * 643 * 644 * 645 * 646 * 647 * 647 * 647 * 648 * 648 * 648 * 648 * 649 * 649 * 640 * 640 * 640 * 641 * 642 * 643 * 644 * 645 * 646 * 647 * 647 * 648 * 648 * 648 * 649 * 640 * 640 * 641 * 642 * 643 * 644 * 645 * 646 * 647 * 647 * 648 * 64	NG at st.	atemer ) ) ST LA L  FFLOW (  FFLOW (  FFLOW C  F	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8 (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR	00509001 00510001 00511001 00512001 00513001 00514001 00515001 00515001 00517001 00518001 00520001 00522001 00-218BIN 01-CHECK 01-CHECK 01-CHECK 00523001 00525001 00525001 00525001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 636 635 636 637 + 188 638 + 4 639 + 640 + 641 * 645 642 643 644 * 645 646 647 + 14 648 649 * 650	NG at st.	atemer ) ST LA L  FLOW ( FLOW ( FLOW C  TM BZ BO  DS6=0 BACK  CHECK LA L L BBALR  MVC LR  POINT LA L	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1)	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00517001 00520001 00520001 00522001 00522001 00523001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004	in SYSD.AL	prior USIN GOLFRT. ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 * 636 8 637+ 18 638+ 640+ 641 * 18 642 643 644 645 646 645 646 647+ 14 648+ 649 * 650 651 *	NG at st.	atemer ) ST LA L  FLOW ( FLOW ( FLOW C  FLOW C  TM BZ BO  DS6=0 BACK  CHECK LA L L L BALR  MVC LR  POINT LA L BALL OI	THE 161.  R13,SAVAR+4 R13,SAVAR R8,ADCB  CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00514001 00515001 00515001 00518001 00519001 00520001 00522001 00522001 00523001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 636 635 636 637 + 188 638 + 4 639 + 640 + 641 * 645 642 643 644 * 645 646 647 + 14 648 649 * 650	NG at st.	atemer ) ST LA L  FLOW ( FLOW ( FLOW C  FLOW C  TM BZ BO  DS6=0 BACK  CHECK LA L L L BALR  MVC LR  POINT LA L BALL OI	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8 (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00517001 00520001 00520001 00522001 00522001 00523001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004	in SYSD.AL	prior USIN GOLFRT. ASN 4 623 626 8 627 8 628 8 629 629 626 630 630 631 632 8 633 8 634 8 635 8 636 8 637 8 638 634 8 638 644 8 645 645 645 645 645 652 8	NG at st.	atemer ) ST LA L  FLOW ( FLOW ( FLOW C  FLOW C  TM BZ BO  DS6=0 BACK  CHECK LA L L L BALR  MVC LR  POINT LA L BALL OI	THE 161.  R13,SAVAR+4 R13,SAVAR R8,ADCB  CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00515001 00515001 00515001 00518001 00518001 00520001 00521001 00522001 00522001 00523001 00525001 00525001 00525001 00525001 00527001 00527001 00525001 00525001 00525001 00525001 00525001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004 00051A 9602 501A	in SYSD.AL	prior USIN GOLFRT. ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 * 636 * 636 * 637 + 18 638 + 18 638 + 18 638 + 18 639 + 640 + 641 * 18 642 * 642 * 643 * 644 * 645 * 644 * 645 * 646 * 647 + 647 + 647 + 648 + 649 * 650 * 651 * 652 * 653 * 654 * 655 * 654 * 655 * 656 * 656 * 657 * 658 * 658 * 658 * 658 * 659 * 650 * 650 * 651 * 652 * 653 * 654 * 655 * 655 * 655 * 656 * 657 * 658 * 658 * 658 * 658 * 658 * 658 * 658 * 659 * 650 * 650 * 651 * 652 * 653 * 654 * 655 * 655 * 655 * 656 * 657 * 658	NG at st. M(IHIIOR ::	atemer ) ST LA L  FFLOW ( FFLOW ( FFLOW C  FFLOW	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8 (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE  DRIANGE RESERVE	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00515001 00515001 00515001 00518001 00520001 00521001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00533001 00533001 00533001 00533001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004 00051A 9602 501A	in SYSD.AL	Prior USIN GOLFRT. ASN 4 623 624 627 628 626 627 628 629 629 629 629 629 629 629 629 629 629	NG at st. M(IHIIOR ::	atemer ) ST LA L  FLOW (  FFLOW (  FFLO	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00515001 00515001 00515001 00515001 00518001 00521001 00522001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00530001 00530001 00530001 00531001 00533001 00533001 00533001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004 00051A 9602 501A	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 0 625 626 * 627 * 628 * 629 0 630 E 631 632 * 633 * 634 * 635 * 636 8 637+ 8 638+ 4 639+ 640+ 641 * E 642 643 644 * 645 C 646+ 4 647+ 14 648+ 650 651 * 652 * 653 * 654 N) 18 655 656 * 657 *	NG at st. M(IHIIOR ::	atemer ) ST LA L  FLOW (  FFLOW (  FFLO	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE  DSF,DS1	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00512001 00513001 00513001 00515001 00515001 00515001 00518001 00520001 00521001 00522001 00522001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004 00051A 9602 501A	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 * 636 637 + 18 638 + 640 + 641 * 649 + 641 * 647 + 14 648 + 649 * 650 * 651 * 652 * 653 * 654 NX 18 655 656 * 655 * 65	NG at st. M(IHIIOR	atemer ) ST LA L  FLOW (  FFLOW (  FFLO	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00515001 00515001 00515001 00515001 00518001 00521001 00522001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00530001 00530001 00530001 00531001 00533001 00533001 00533001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004  00051A 9602 501A  00051E 9140 501A 000522 4780 7154	in SYSD.AL	Prior USIN GOLFRT. ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 630 10 631 632 * 633 * 634 * 635 * 636 8 10 637 + 10 641 10 641 11 641 12 643 13 644 * 14 649 * 15 644 15 654 NX 16 655 * 17 658 * 18 655 * 18 656 * 18	NG at st. M(IHIIOR ::	atemer )  ST LA L  FLOW (  FLO	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2 E BUFFERS R2,BB R4,NBB	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00512001 00513001 00513001 00515001 00515001 00515001 00518001 00520001 00521001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00530001 00530001 00530001 00530001 00535001 00534001 00535001 00535001 00535001 00535001 00535001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 000500 58F0 E034 000504 05EF 000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004 00051A 9602 501A  00051E 9140 501A 000522 4780 7154	in SYSD.AL	Prior USIN GOLFRT. ASN 4 623 626 8 627 8 628 8 629 628 8 629 626 630 630 630 8 634 8 635 8 636 8 637 8 638 644 8 645 645 645 645 652 8 653 8 655 8 656 8 657 8 656 8 8 657 8 656 8 8 657 8 656 8 8 657 8 656 8 8 657 8 656 8 8 657 8 656 8 8 8 655 8 8 8 655 8 656 8 657 8 656 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 655 8 8 8 8	NG at st. M(IHIIOR:	atemer ) ST LA L  FLOW ( TM BZ B0  DS6=0 BACK  CHECK LA L L BALR  MVC LR  POINT L BAL  OI  DS6=1 TM BZ  CHANGE L L L L L L L L L L L L L L L L L L L	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2 E BUFFERS R2,BB R4,NBB R4,BB	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00515001 00515001 00515001 00515001 00520001 00520001 00522001 00522001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00535001 00535001 00535001 00537001 00537001 00538001 00537001 00538001 00538001 00538001 00538001 00538001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 00051A 9602 501A  00051E 9140 501A 00051E 9140 501A 000522 4780 7154	in SYSD.AL	Prior USIN GOLFRT. ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 * 636 637 + 18 639 + 640 + 641 * 18 642 643 644 * 645 10 651 * 650 * 655 * 656 * 657 * 658 * 10 659 N2 10 660 10 661 10 662	NG at st. M(IHIIOR:	atemer ) ST LA L  FLOW (  FLOW	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,34(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2 EBUFFERS R2,BB R4,NBB R4,BB R2,NBB	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00515001 00520001 00520001 0052001 0052001 0052001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001
** TXA301I Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 000500 58F0 E034 000504 05EF 000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004 00051A 9602 501A  00051E 9140 501A 000522 4780 7154	in SYSD.AL	prior USIN GOLFRT.ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 630 11 632 * 633 * 634 * 636 637+ 18 638+ 44 639+ 640+ 641 * 641 647+ 641 647+ 641 648+ 649 * 650 * 651 * 652 * 653 * 654 * 655 * 655 * 656 * 657 * 658 * 666 * 667 * 668 * 669 N) 10 660 10 662	NG at st. M(IHIIOR	atemer ) ST LA L  FLOW ( TM BZ B0  DS6=0 BACK  CHECK LA L L BALR  MVC LR  POINT L BAL  OI  DS6=1 TM BZ  CHANGE L L L L L L L L L L L L L L L L L L L	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2 E BUFFERS R2,BB R4,NBB R4,BB	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00515001 00515001 00515001 00515001 00520001 00520001 00522001 00522001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00535001 00535001 00535001 00537001 00537001 00538001 00537001 00538001 00538001 00538001 00538001 00538001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004  00051A 9602 501A  00051E 9140 501A 000522 4780 7154  000526 5820 5010 000527 5040 500C 000536 5040 5004 000538 5040 5004 000538 5040 5008	in SYSD.AL  00CF 00CF 00CF 00CF 00CF 00CF 00CF 00	Prior USIN GOLFRT. ASN 4 623 62 626 8 627 8 628 8 629 629 629 629 629 629 629 629 629 629	NG at st. M(IHIIOR:	atemer ) ST LA L  FLOW (  TM BZ BO  DS6=0 BACK  CHECK LA L L BAL  OI  DS6=1 TM BZ  CHANGE L L L ST ST ST AAH ST	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2 E BUFFERS R2,BB R4,NBB R4,BB R2,NBB R4,R R4,P R4,RE	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00513001 00513001 00513001 00515001 00515001 00515001 00515001 00520001 00522001 00522001 00522001 00522001 00525001 00525001 00525001 00525001 00526001 00527001 00525001 00527001 0053001 0053001 0053001 0053001 00537001 0053001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00537001 00534001 00537001 00534001 00534001 00534001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004  00051A 9602 501A  00051E 9140 501A 000522 4780 7154  000526 5820 5010 000527 5040 5000 000536 5040 5004 000531 5040 5004 000531 5040 5008 000542 94EF 501A	in SYSD.AL	Prior USIN GOLFRT. ASN 4 623 0 624 10 625 626 * 627 * 628 * 629 10 631 632 * 633 * 634 * 635 * 636 637 + 18 639 + 640 + 641 * 645 10 647 + 14 647 + 647 + 14 648 + 649 * 650 * 655 *	NG at st. M(IHIIOR:	atemer ) ST LA L  FLOW (  FLOW	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,384(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LAC DSF,DS1 NXUT2 EBUFFERS R2,BB R4,NBB R4,R R4,P R4,R R4,P R4,R R4,P R4,RE DSF,255-DS3	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00515001 00520001 00520001 0052001 0052001 0052001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00536001 00537001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004E6 5880 5000  0004E7 9122 501A 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 0004FC 58E0 1008 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004  000516 45EF 0004  000516 9140 501A 000516 9140 501A 000522 4780 7154  000526 5820 5010 000527 5040 5010 000532 5020 500C 000532 5020 500C 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5004 000532 5040 5008 000542 94EF 501A 000546 5840 8060	in SYSD.AL  00CF 00CF 00CF 00CF 00CF 00CF 00CF 00	Prior USIN GOLFRT. ASN 4 623 62 626 * 627 * 628 * 629 629 62 630 8 631 632 * 633 * 634 * 635 636 637 + 88 638 + 44 649 + 641 * 642 643 644 647 + 647 649 650 651 * 652 * 653 * 654 N) 8 655 656 * 657 8 * 658 8 664 664 664 664 664 664 664 664 664	XUT1  XUT3	atemer ) ST LA L  FLOW (  FLOW (  FLOW C  FLOW	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,84(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LACE DSF,DS1 NXUT2 EBUFFERS R2,BB R4,NBB R4,RB R4,P R4,P R4,P R4,RE DSF,255-DS3 R4,DECB+8	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00515001 00515001 00520001 00520001 00522001 00523001 00525001 00525001 00525001 00525001 00525001 00526001 00525001 00525001 00526001 00530001 00530001 00531001 00531001 00535001 00535001 00535001 00535001 00535001 00535001 00535001 00535001 00535001 00535001 00535001 00535001
** TXA3011 Record 508 0004E0 50D0 7840 0004E4 41D0 783C 0004E8 5880 5000  0004EC 9122 501A 0004F0 4780 7188 0004F0 4780 7188 0004F4 4710 706A  0004F8 4110 8058 000500 58F0 E034 000504 05EF  000506 D201 5020 803E 00050C 1818  00050E 4100 501C 000512 58F0 1054 000516 45EF 0004  00051A 9602 501A  00051E 9140 501A 000522 4780 7154  000526 5820 5010 000527 5040 5000 000536 5040 5004 000531 5040 5004 000531 5040 5008 000542 94EF 501A	in SYSD.AL	Prior USIN GOLFRT. ASN 4 623 62 626 * 627 * 628 * 629 629 62 630	NG at st. M(IHIIOR:	atemer ) ST LA L  FLOW (  FLOW	R13,SAVAR+4 R13,SAVAR+4 R13,SAVAR R8,ADCB CHAR PROGRAM BEGIN  DSF,DS2+DS6 NXIN1 NXUT1  DS2=1 CURRENT BLOCK WAS  DECB 1,DECB 14,8(0,1) 15,52(0,14) 14,15  BL(2),DCBBLKSI R1,R8  (1),NOTEADR 0,NOTEADR 15,384(0,1) 14,4(15,0)  DSF,DS6  DS2=1 WRITE BLOCK IF LAC DSF,DS1 NXUT2 EBUFFERS R2,BB R4,NBB R4,R R4,P R4,R R4,P R4,R R4,P R4,RE DSF,255-DS3	LOAD PARAMETER REG 1 PICK UP DCB ADDR LOAD CHECK ROUTINE ADDR LINK TO CHECK ROUTINE  LOAD PARAMETER REG 0 LOAD POINT RTN ADDR LINK TO POINT ROUTINE	00509001 00510001 00511001 00512001 00513001 00515001 00515001 00515001 00515001 00520001 00520001 0052001 0052001 0052001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00525001 00536001 00537001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001 00530001

Loc Object Code

Addr1 Addr2 Stmt Source Statement

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670 \* 00549001 671 **CHECK DECB** 00550001 000550 4110 8058 00058 672+ LA 1,DECB LOAD PARAMETER REG 1 02-IHBIN PICK UP DCB ADDR 000554 58E0 1008 00008 14.8(0.1) 01-CHECK 673+ 674+ LOAD CHECK ROUTINE ADDR 000558 58F0 E034 00034 15,52(0,14) 01-CHECK LINK TO CHECK ROUTINE 00055C 05EF 675+ 676 \* 00551001 677 NXUT41 WRITE DECB, SF, (R8), (R2), MF=E 00552001 LOAD DECB ADDRESS 00055E 4110 8058 00058 1,DECB 5(1),X'20' 678+NXUT41 LA 02-IHBRD 000562 9220 1005 SET TYPE FIELD 00005 MVI 02-IHBRD 679+ STORE DCB ADDRESS 000566 5081 0008 00008 680+ ST R8,8(1,0) 02-IHBRD 00056A 5021 000C ST R2,12(1,0) STORE AREA ADDRESS 02-IHBRD 0000C 681+ 00056E 58F1 0008 00008 682+ L 15,8(1,0) LOAD DCB ADDRESS 02-IHBRD LOAD RDWR ROUTINE ADDR 02-IHBRD 15,48(0,15) 000572 58F0 F030 00030 683+ 000576 05EF LINK TO RDWR ROUTINE 02-IHBRD 684+ BALR 14,15 685 \* 00553001 686 \* CLEAR NOTTAB IF BACKWARD REPOSITIONING HAS OCCURED 00554001 687 \* 00555001 000578 9104 501A 688 NXUT5 DSF DS5 0001A TM 00556001 00057C 4780 70D6 0058A NXUT6 00557001 ΒZ 689 000580 58F0 7888 00D3C R15, VIORCN R15 -> IHIIORCN 00558001 690 CALL IHIIORCN 000584 05EF 691 R14,R15 00559001 000586 94FB 501A 0001A 692 NI DSF, 255-DS5 00560001 693 \* 00561001 694 \* INSERT NOTTAB ENTRY IF REQUESTED 00562001 695 \* 00563001 00058A 9108 501A 0001A 696 NXUT6 DSF DS4 00564001 00058E 4780 7102 005B6 00565001 697 ΒZ NXUT7 698 \* 00566001 699 CHECK DECB 00567001 000592 4110 8058 00058 700+ LA 1,DECB 14,8(0,1) LOAD PARAMETER REG 1 02-IHBIN 000596 58E0 1008 00008 PICK UP DCB ADDR 01-CHECK 701+ L 00059A 58F0 E034 00034 702+ 15,52(0,14) LOAD CHECK ROUTINE ADDR 01-CHECK 00059E 05EF 703+ BALR LINK TO CHECK ROUTINE 01-CHECK 704 00568001 705 NOTE (R8) 00569001 LOAD PARAMETER REG 1 0005A0 1818 706+ 02-IHBIN LR 1,R8 0005A2 58F0 1054 00054 707+ 15,84(0,1) LOAD NOTE RTN ADDRESS 01-NOTE 0005A6 05EF LINK TO NOTE ROUTINE 01-NOTE 708+ **BALR** 709 00570001 0005A8 5010 501C 0001C 710 ST R1.NOTEADR 00571001 0005AC 58F0 788C R15, VIOREN R15 -> IHIIOREN 00572001 00D40 711 0005B0 05EF BAI R 00573001 R14.R15 CALL IHIIOREN 712 00574001 0005B2 94F7 501A 713 DSF, 255-DS4 714 \* 00575001 715 \* INSERT CONTROL CHARACTER IF SECTIONED 00576001 716 \* 00577001 0005B6 9140 501B 717 NXUT7 DSF+1,DS9 00578001 TM 0001B 0005BA 4780 713A 005EE 718  $\mathsf{BZ}$ NXRET 00579001 0005BE 5840 5004 00004 719 R4,R 00580001 0005C2 D500 5015 5019 00015 00019 720 CLC S+1(1),Q 00581001 0005C8 4740 7126 00582001 005DA 721 BL NXUT8 0005CC 1B22 R2.R2 00583001 722 SR 0005CE 4020 5014 00014 723 STH R2,S 00584001 0005D2 92F1 4000 00585001 00000 724 MVI 0(R4),C'1' 0005D6 47F0 712A 005DE 725 NXUT9 00586001 В 726 \* 00587001 0(R4),C'' 0005DA 9240 4000 727 NXIIT8 99999 MVT 00588001 0005DE 4144 0001 00001 00589001 728 NXUT9 LA R4,1(R4) 0005E2 5040 5004 00004 729 ST R4,R 00590001 0005E6 4A40 5016 00591001 00016 730 ΑH R4,P 0005EA 5040 5008 00008 731 ST R4.RE 00592001 732 \* 00593001 INCREASE RECORD POINTER AND RETURN 00594001 733 734 00595001 0005EE 5820 5014 00014 735 NXRET 00596001 R2,S 0005F2 8820 0010 00010 736 SRL R2,16 00597001 0005F6 4122 0001 00001 737 LA R2,1(R2) 00598001 0005FA 4020 5014 00599001 00014 738 STH R2.S 0005FE 58D0 7840 00CF4 739 R13, SAVAR+4 00600001 L 740 \* 00601001 **RETURN (14,12)** 00602001 741 000602 98FC D00C aaaac 742+ ΙM 14,12,12(13) RESTORE THE REGISTERS 01-RETUR 01-RETUR 000606 07FE 743+ BR 14 RETURN 744 \* 00603001 745 \* 00604001 746 \* CHECK IF LAST RECORD IND IF NOTTAB ENTRY REQUIRED 00605001 747 \* 00606001 000608 5820 5010 99919 R2.BB 99697991 748 NXIIT2 т 00060C 4A20 5020 00020 00608001 749 ΑH R2,BL 000610 5920 5008 00008 R2, RE 00609001 750 C 00610001 000614 4780 7072 00526 751 BE NXUT3 000618 5840 5008 80000 R4, RE 00611001 752 00061C 5040 5004 99994 753 ST R4.R 00612001 000620 4A40 5016 00016 754 AΗ R4.P 00613001 000624 5040 5008 00614001 00008 755 ST R4.RE 00615001 000628 9108 501A 0001A 756 ТМ DSF DS4 00062C 4780 7102 005B6 757 ΒZ NXUT7 00616001 000630 94FD 501A 0001A 758 NI DSF, 255-DS6 00617001 000634 5820 5010 99919 759 R2 RR 00618001 000638 47F0 7092 00619001 00546 760 В NXUT4 761 \* 00620001 762 \* DS6=0 DS2=0 CHECK IF NOTTAB ENTRY REQUIRED 00621001 763 \* STORE ADDR OF LAST BLOCK IN NOTEADR AND READ NEXT 00622001 764 BL OCK 00623001 765 00624001

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  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
00063C 9108 501A
                                       766 NXIN1
                                                           DSF,DS4
                       0001A
                                                     TM
                                                                                                                         00625001
000640 4780 719E
                              00652
                                       767
                                                     ΒZ
                                                           NXIN2
                                                                                                                         00626001
000644 5810 5010
                              0001C
                                       768
                                                     L
                                                           R1, NOTEADR
                                                                                                                         00627001
000648 58F0 788C
                              00D40
                                                           R15.VIOREN
                                                                                                                         00628001
                                       769
                                                           R14,R15
00064C 05EF
                                       770
                                                     BALR
                                                                                                                         00629001
00064E 94F7 501A
                       0001A
                                                           DSF, 255-DS4
                                                                                                                         00630001
                                       771
                                                     NI
000652 9140 501A
                       9991A
                                       772 NXIN2
                                                     тм
                                                           DSF DS1
                                                                                                                         00631001
000656 4780 7224
                              006D8
                                      773
                                                     ΒZ
                                                           NXTN5
                                                                                                                         00632001
                                       774 *
                                                                                                                         00633001
                                       775 NXIN3
                                                     CHECK DECB
                                                                                                                         00634001
00065A 4110 8058
                              00058
                                       776+NXIN3
                                                           1,DECB
                                                                                                LOAD PARAMETER REG 1
                                                                                                                         02-IHBIN
                                                     LA
00065E 58E0 1008
                              80000
                                                           14,8(0,1)
                                                                                      PICK UP DCB ADDR
                                                                                                                         01-CHECK
                                       777+
                                                     L
000662 58F0 E034
                              00034
                                       778+
                                                           15,52(0,14)
                                                                                      LOAD CHECK ROUTINE ADDR
                                                                                                                         01-CHECK
                                                     BAI R
                                                                                      LINK TO CHECK ROUTINE
000666 05FF
                                       779+
                                                          14.15
                                                                                                                         01-CHECK
                                       780
                                                                                                                         00635001
                                                                                                                         00636001
000668 9101 501A
                       0001A
                                       781
                                                     TM
                                                           DSF, DS7
00066C 4780 71CA
                              0067E
                                                     ΒZ
                                                           NXIN7
                                                                                                                         00637001
                                       782
000670 9602 501A
                       99911
                                       783
                                                     ОТ
                                                           DSF,DS6
                                                                                                                         00638001
000674 D201 5020 803E 00020 0003E
                                       784
                                                     MVC
                                                           BL(2), DCBBLKSI
                                                                                                                         00639001
                                                                                                                         00640001
00067A 47F0 7204
                              006B8
                                       785
                                                     В
                                                           NXIN6
                                                                                                                         00641001
                                       786
00067E 4810 803E
                              0003E
                                       787 NXIN7
                                                     LH
                                                           1.DCBBLKSI
                                                                                                                         00642001
000682 5840 8044
                              00044
                                       788
                                                           R4, DCBIOBA
                                                                                                                         00643001
                                                           1,22(R4)
000686 4B14 0016
                              00016
                                       789
                                                     SH
                                                                                                                         00644001
                                                                                                                         00645001
000684 4010 5020
                              99929
                                       790
                                                     STH
                                                           1.BI
                                                                                                                         00646001
                                       791
                                       792
                                                     NOTE
                                                           (R8)
                                                                                                                         00647001
                                                                                                LOAD PARAMETER REG 1
00068E 1818
                                       793+
                                                     \mathsf{LR}
000690 58F0 1054
                              00054
                                       794+
                                                           15,84(0,1)
                                                                                                LOAD NOTE RTN ADDRESS 01-NOTE
000694 05EF
                                       795+
                                                     BALR
                                                           14,15
                                                                                                LINK TO NOTE ROUTINE
                                                                                                                         01-NOTE
                                       796
                                                                                                                         00648001
000696 5010 501C
                              0001C
                                       797
                                                           R1.NOTEADR
                                                                                                                         00649001
00069A 5820 5010
                              00010
                                       798
                                                                                                                         00650001
                                       799 *
                                                                                                                         00651001
                                       ลดด
                                                     READ
                                                           DECB, SF, (R8), (R2), MF=E
                                                                                                                         00652001
                                                           1,DECB
00069F 4110 8058
                                                                                                LOAD DECR ADDRESS
                              00058
                                       801+
                                                     ΙΔ
                                                                                                                         02-THRRD
                                                           5(1),X'80'
0006A2 9280 1005
                                                                                                                         02-IHBRD
                       00005
                                                                                      SET TYPE FIELD
                                       802+
                                                     MVI
0006A6 5081 0008
                              00008
                                       803+
                                                     ST
                                                           R8,8(1,0)
                                                                                                STORE DCB ADDRESS
                                                                                                                         02-IHBRD
0006AA 5021 000C
                                                           R2,12(1,0)
                                                                                                STORE AREA ADDRESS
                                                                                                                         02-IHBRD
                              0000C
                                       804+
0006AF 58F1 0008
                              99998
                                       805+
                                                     т
                                                           15,8(1,0)
                                                                                 LOAD DCB ADDRESS
                                                                                                                         02-THBRD
                                                                                                LOAD RDWR ROUTINE ADDR 02-IHBRD
0006B2 58F0 F030
                              00030
                                       806+
                                                           15,48(0,15)
0006B6 05EF
                                       807+
                                                     BALR
                                                          14,15
                                                                                                LINK TO RDWR ROUTINE
                                                                                                                         02-IHBRD
                                       808
                                                                                                                         00653001
                                                     CHANGE BUFFERS
                                                                                                                         00654001
                                       809 *
                                       810 *
                                                                                                                         00655001
                                                                                                                         00656001
00657001
0006B8 5820 5010
                              00010
                                       811 NXIN6
                                                           R2.BB
0006BC 5840 500C
                              aggac
                                       812
                                                     ī
                                                           R4. NRR
0006C0 5040 5010
                              00010
                                                     ST
                                                           R4 BB
                                                                                                                         00658001
                                       813
0006C4 5040 5004
                              00004
                                       814
                                                     ST
                                                           R4,R
                                                                                                                         00659001
0006C8 4A40 5016
                              00016
                                       815
                                                     ΑН
                                                           R4,P
                                                                                                                         00660001
0006CC 5040 5008
                              00008
                                       816
                                                     ST
                                                           R4.RE
                                                                                                                         00661001
0006D0 5020 500C
                              0000C
                                       817
                                                     ST
                                                           R2.NBB
                                                                                                                         00662001
0006D4 47F0 713A
                              005EE
                                       818
                                                           NXRET
                                                                                                                         00663001
                                                     В
                                       819
                                                                                                                         00664001
                                                     BLOCKED FORMAT
                                       820
                                                                                                                         00665001
                                       821 *
                                                                                                                         00666001
0006D8 5820 5010
                              00010
                                       822 NXIN5
                                                           R2.BB
                                                                                                                         00667001
9996DC 4A29 5929
                              99929
                                       823
                                                     ΔН
                                                           R2.BL
                                                                                                                         99668991
0006E0 5920 5008
                              00008
                                                                                                                         00669001
                                       824
                                                           R2, RE
0006E4 4780 71A6
                              0065A
                                       825
                                                     BE
                                                           NXIN3
                                                                                                                         00670001
0006E8 5840 5008
                              00008
                                                                                                                         00671001
                                       826
                                                           R4, RE
0006EC 5040 5004
                              00004
                                       827
                                                     ST
                                                           R4.R
                                                                                                                         00672001
0006F0 4A40 5016
                              00016
                                       828
                                                     AΗ
                                                           R4.P
                                                                                                                         00673001
                                                                                                                         00674001
0006F4 5040 5008
                              00008
                                       829
                                                     ST
                                                           R4, RE
0006F8 47F0 713A
                              005EE
                                       830
                                                                                                                         00675001
                                                           NXRET
                                                                                                                         00676001
                                       831 *
                                       832 *
                                                                                                                         00677001
                                       833 *
                                                     CLOSE DATASET
                                                                                                                         00678001
                                                                                                                         00679001
                                       834
                                       835
                                                                                                                         00680001
                                       836
                                                                                                                         00681001
                                                     CLOSE A DATASET, RELEASE STORAGE FOR I/O BUFFERS AND DCB CALL FOR ROUTINE CLEAR NOTTAB
                                                                                                                         00682001
                                       837
                                       838 *
                                                                                                                         00683001
                                                                                                                         00684001
                                       839
                                                                                                                         00685001
                                                     OUTPUT -
                                       840
                                       841 *
                                                     IN CASE OF OUTPUT WRITE LAST BLOCK TO DATASET
                                                                                                                         00686001
                                       842 *
                                                                                                                         00687001
                                       843 IHIIORCL SAVE
                                                           (14,12),, 'IHIIORCL LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00688001
0006FC 47F0 F026
                                                           38(0,15)
                                                                                                BRANCH AROUND ID
                              99926
                                       844+THTTORCL B
                                                                                                                         01-SAVE
                                                                                                LENGTH OF IDENTIFIER
000700 21
                                       845+
                                                                                                                         01-SAVE
                                                     DC
                                                           AL1(33)
000701 C9C8C9C9D6D9C3D3
                                                           CL32'IHIIORCL LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
                                       846+
                                                     DC
000721 F1
                                       847+
                                                     DC
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
000722 90EC D00C
                              0000C
                                       848+
                                                                                                SAVE REGISTERS
                                                                                                                         01-SΔVF
                                                           14,12,12(13)
                                       849
                                                                                                                         00689001
000726 187F
                                       850
                                                     LR
                                                           R7.R15
                                                                                                                         00690001
                  R:7 006FC
                                                     USING IHIIORCL, R7
                                                                                                                         00691001
                                       851
** TXA533W USING range overlaps prior USING at
                                                   statement 161.
** TXA301I Record 691
                       in SYSD.ALGOLFRT.ASM(IHIIOR)
000728 50D0 75F8
                              00CF4
                                      852
                                                           R13, SAVAR+4
                                                                                     SAVE REGISTER
                                                                                                                         00692001
                                                     ST
                                      853
854
                                                                                                                         00693001
00694001
00072C 41D0 75F4
                              00CF0
                                                           R13.SAVAR
000730 5880 5000
                              00000
                                                     L
                                                           R8, ADCB
                                       855 *
                                                                                                                         00695001
                                       856 *
                                                     DATASET 1 IS TO BE CLOSED ONLY IF DS15=1
                                                                                                                         00696001
                                       857 *
                                                                                                                         00697001
                                       858 *
                                                     IF DS15 = 0 FILL CURRENT BLOCK WITH BLANKS AND BRANCH
                                                                                                                         00698001
```

TO ROUTINE IHIIORNX TO WRITE THE BLOCK AND RETURN

00699001

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                      860 *
                                                                                                                        00700001
000734 4960 765C
                             00058
                                      861
                                                    СН
                                                           R6,=H'1'
                                                                                                                        00701001
000738 4770 7084
                             00780
                                      862
                                                    RNF
                                                           CLOSE01
                                                                                                                        00702001
00703001
00073C 9101 501B
                       0001B
                                                    TM
                                                           DSF+1.DS15
                                      863
000740 4710 7084
                                                           CLOSE01
                                                                                                                        00704001
                              00780
                                      864
                                                    во
000744 9622 501A
                       0001A
                                                           DSF,DS2+DS6
                                                                                                                        00705001
                                       865
                                                    OI
000748 947F 501A
                       9991A
                                      866
                                                    ΝI
                                                           DSF . 255-DS0
                                                                                    SET DS0=0
                                                                                                                        00706001
00074C 4820 5020
                              00020
                                      867
                                                    LH
                                                           R2.BL
                                                                                                                        00707001
000750 5A20 5010
                              00010
                                      868
                                                    Α
                                                           R2.BB
                                                                                                                        00708001
000754 5830 5004
                                                                                                                        00709001
                              00004
                                      869
                                                           R3.R
000758 5020 5004
                              00004
                                      870
                                                           R2,R
                                                                                                                        00710001
00075C 1B23
                                                    SR
                                                           R2, R3
                                                                                                                        00711001
                                      871
00075E 4780 7072
                             0076E
                                      872
                                                    ΒZ
                                                           CLOSE02
                                                                                                                        00712001
000762 9240 3000
                       99999
                                      873 CLOSE03
                                                           0(R3),C'
                                                    MV/T
                                                                                                                        00713001
000766 4133 0001
                              00001
                                                                                                                        00714001
                                      874
                                                           R3,1(R3)
                                                    LA
00076A 4620 7066
                              00762
                                                           R2, CLOSE03
                                                                                                                        00715001
                                      875
                                                    вст
00076E 9400 5014
                       00014
                                      876 CLOSE02
                                                           S,X'00'
                                                                                                                        00716001
                                                    NI
000772 D200 5015 5019 00015 00019
                                      877
                                                    MVC
                                                           S+1(1).0
                                                                                                                        00717001
                                                                                     R15 -> IHIIORNX
000778 5870 7648
                              00D44
                                      878
                                                    L
                                                           R7, VIORNX
                                                                                                                        00718001
00077C 47F0 700E
                                                                                                                        00719001
                             0000E
                                      879
                                                                                     CALL IHIIORNX
                                                    В
                                                           14(,R7)
                                      880
                                                                                                                        00720001
000780 9101 501A
                       0001A
                                      881 CLOSE01
                                                                                                                        00721001
000784 4710 712C
                             00828
                                      882
                                                    во
                                                           CLOSE1
                                                                                     END OF DATA REACHED
                                                                                                                        00722001
                                                                                    I/O ERROR ?
YES, GO CLOSE DCB
000788 9104 501B
                       0001B
                                      883
                                                    ТМ
                                                           DSF+1,DSIOERR
                                                                                                                        00723001
00078C 4710 712C
                             00828
                                                                                                                        00724001
                                      884
                                                    RΩ
                                                           CLOSE1
000790 4140 8058
                                                           R4, DECB
                                                                                     TEST IF READ OR WRITE BEFORE
                                                                                                                        00725001
                              00058
                                      885
                                                    LA
000794 5820 4008
                              80000
                                      886
                                                           R2,8(,R4)
                                                                                     PICK UP DCB ADDR
                                                                                                                        00726001
                                                    L
000798 1928
                                                                                                                        00727001
                                      887
                                                    CR
                                                           R2, R8
                                      888
00079A 4770 70B4
                              007B0
                                                    BNE
                                                           CLOSE2
                                                                                                                        00728001
                                                                                     SET DS8=1 FOR END OF DATA
00079E 9680 501B
                       9991B
                                      889
                                                    ΟI
                                                           DSF+1.DS8
                                                                                                                        00729001
                                      890 *
                                                                                                                        00730001
                                      891 CLOSE0
                                                    CHECK DECB
                                                                                     LAST I/O FINISHED
                                                                                                                        00731001
0007A2 4110 8058
                              00058
                                      892+CLOSE0
                                                    LA
                                                           1,DECB
                                                                                               LOAD PARAMETER REG 1
0007A6 58E0 1008
                             00008
                                      893+
                                                           14,8(0,1)
                                                                                      PICK UP DCB ADDR
                                                                                                                        01-CHECK
                                                    L
0007AA 58F0 E034
                             00034
                                      894+
                                                           15,52(0,14)
                                                                                      LOAD CHECK ROUTINE ADDR
                                                                                                                        01-CHECK
0007AF 05FF
                                                    BALR
                                                                                      LINK TO CHECK ROUTINE
                                      895+
                                                          14.15
                                                                                                                        01-CHECK
                                      896 *
                                                                                                                        00732001
0007B0 9120 501A
                       0001A
                                      897 CLOSE2
                                                    тм
                                                           DSF DS2
                                                                                     LAST I/O OUTPUT ?
                                                                                                                        00733001
0007B4 4780 712C
                             00828
                                                           CLOSE1
                                                                                                                        00734001
                                      898
                                                    ΒZ
0007B8 9102 501A
                       99914
                                      899
                                                    тм
                                                           DSF DS6
                                                                                     BLOCK BEEN READ ?
                                                                                                                        00735001
                              007D2
0007BC 4710 70D6
                                      900
                                                    BO
                                                           WRITE2
                                                                                                                        00736001
                                                                                                                        00737001
0007C0 1818
                                      901
                                                    LR
                                                           R1.R8
                                                                                     OUTPUT OCCUR WRITE BACK RECORD
                                                                                                                        00738001
                                      902
                                      903
                                                    POINT
                                                          (1), NOTEADR
                                                                                                                        00739001
0007C2 4100 501C
                             0001C
                                      904+
                                                           0,NOTEADR
                                                                                              LOAD PARAMETER REG 0
                                                                                                                        02-IHBIN
                                                    LA
                                                                                     LOAD POINT RTN ADDR
LINK TO POINT ROUTINE
0007C6 58F0 1054
                              00054
                                      905+
                                                           15,84(0,1)
                                                                                                                        01-POINT
                                                                                                                        01-POINT
0007CA 45FF 0004
                                      906+
                             99994
                                                    BΔI
                                                           14.4(15.0)
                                                                                                                        00740001
                                      907
0007CE 47F0 70DE
                              007DA
                                      908
                                                    В
                                                           WRITE1
                                                                                                                        00741001
                                      909 *
                                                                                                                        00742001
                                      910 WRITE2
                                                                                    OUTPUT IN BLOCK
0007D2 9110 501A
                       9991A
                                                    тм
                                                          DSF DS3
                                                                                                                        00743001
                                                                                                                        00744001
0007D6 4780 712C
                              00828
                                      911
                                                    ΒZ
                                                          CLOSE1
                                                                                    NO CLOSE
                                                                                                                        00745001
                                      912
                                      913
                                                    OUTPUT HAS OCCURED, FILL BUFFER WITH BLANKS AND WRITE
                                                                                                                        00746001
                                      914 *
                                                                                                                        00747001
0007DA 4820 5020
                              00020
                                      915 WRITE1
                                                    LH
                                                           R2,BL
                                                                                                                        00748001
0007DE 5830 5004
                              00004
                                      916
                                                           R3,R
                                                                                                                        00749001
0007F2 5B20 5004
                              99994
                                      917
                                                    S
                                                           R2.R
                                                                                                                        00750001
0007E6 5A20 5010
                                                                                                                        00751001
                              00010
                                      918
                                                           R2,BB
                                                    Α
0007EA 4780 70FE
                              007FA
                                      919
                                                    ΒZ
                                                           CLOSE21
                                                                                                                        00752001
0007EE 9240 3000
                       00000
                                      920 CLOSE22
                                                                                                                        00753001
                                                    MVI
                                                           0(R3),C'
0007F2 4130 3001
                              99991
                                      921
                                                    LA
                                                           R3.1(,R3)
                                                                                                                        00754001
                                                                                                                        00755001
0007F6 4620 70F2
                              007EE
                                      922
                                                    BCT
                                                           R2, CLOSE22
                                                                                                                        00756001
                                      923
                                      924
                                                    WRITE BUFFER
                                                                                                                        00757001
                                      925 *
                                                                                                                        00758001
0007FA 5820 5010
                             00010
                                      926 CL0SE21 L
                                                           R2,BB
                                                                                                                        00759001
                                      927
                                                                                                                        00760001
                                      928 CLOSE211 WRITE DECB, SF, (R8), (R2), MF=E
                                                                                                                        00761001
0007FE 4110 8058
                             00058
                                      929+CL0SE211 LA
                                                                                               LOAD DECB ADDRESS
                                                                                                                        02-IHBRD
                                                           1,DECB
                                                           5(1),X'20'
000802 9220 1005
                       00005
                                      930+
                                                                                      SET TYPE FIELD
                                                                                                                        02-IHBRD
000806 5081 0008
                              80000
                                      931+
                                                    ST
                                                           R8,8(1,0)
                                                                                               STORE DCB ADDRESS
                                                                                                                        02-IHBRD
00080A 5021 000C
                              0000C
                                      932+
                                                    ST
                                                           R2,12(1,0)
                                                                                               STORE AREA ADDRESS
                                                                                                                        02-IHBRD
                                                                                LOAD DCB ADDRESS
00080E 58F1 0008
                              00008
                                      933+
                                                    L
                                                           15,8(1,0)
                                                                                                                        02-IHBRD
                                                                                               LOAD RDWR ROUTINE ADDR 02-IHBRD
000812 58F0 F030
                              00030
                                                           15,48(0,15)
                                      934+
000816 05EF
                                                    BALR 14,15
                                                                                               LINK TO RDWR ROUTINE
                                                                                                                        02-THRRD
                                      935+
                                      936 *
                                                                                                                        00762001
                                      937
                                                    CHECK DECB
                                                                                                                        00763001
000818 4110 8058
                              00058
                                                                                               LOAD PARAMETER REG 1
                                      938+
                                                    LA
                                                           1.DECB
                                                                                                                        02-THRTN
00081C 58E0 1008
                              00008
                                      939+
                                                                                     PICK UP DCB ADDR
                                                                                                                        01-CHECK
                                                           14,8(0,1)
                                                    L
000820 58F0 E034
                                      940+
                                                                                      LOAD CHECK ROUTINE ADDR
                                                                                                                        01-CHECK
                              00034
                                                           15,52(0,14)
                                                                                      LINK TO CHECK ROUTINE
000824 05EF
                                      941+
                                                    BALR 14,15
                                      942 *
                                                                                                                        00764001
                                      943 *
                                                    CLOSE DATASET
                                                                                                                        00765001
                                      944 *
                                                                                                                        00766001
                                      945 CLOSE1
                                                    CLOSE ((R8), REREAD)
                                                                                                                        00767001
000826 0700
                                       946+
                                                    CNOP
                                                          0,4
                                                                                               ALIGN LIST TO FULLWORD
000828 4510 7134
                              00830
                                      947+CL0SE1
                                                    BAL
                                                          1,*+8
                                                                                               LOAD REG1 W/LIST ADDR
                                                                                                                       01-CLOSE
00082C 00000000
                                      948+
                                                    DC
                                                           A(0)
                                                                                               OPTION AND DCB ADDRESS
                                                                                                                        01-CLOSE
                                                                                               STORE DCB ADDRESS MOVE IN OPTION BYTE
000830 5081 0000
                              00000
                                      949+
                                                    ST
                                                           R8,0(1,0)
                                                                                                                        01-CLOSE
000834 9290 1000
                                      950+
                                                    MVI
                       00000
                                                           0(1),144
                                                                                                                        01-CLOSE
000838 0A14
                                      951+
                                                    SVC
                                                           20
                                                                                                ISSUE CLOSE SVC
                                                                                                                        00768001
                                      952 *
00083A 5810 5010
                              00010
                                      953
                                                                                                                        00769001
                                                           R1,BB
00083E 5910 500C
                              aaaac
                                      954
                                                    C
                                                           R1.NBB
                                                                                                                        00770001
000842 4740 714E
                             0084A
                                      955
                                                    BL
                                                           *+8
                                                                                    THE LOWEST ADDR TO R1
                                                                                                                        00771001
```

Active USINGs: IHIIORTN+X'6FC',R7 IHADCB,R8 DSTABLE,R5 IHIIORTN,R4

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
000846 5810 500C
                             0000C
                                      956
                                                          R1,NBB
                                                                                                                       00772001
00084A 4800 5020
                             00020
                                      957
                                                    LH
                                                          RØ, BL
                                                                                    BUFFER LEN TO RØ
                                                                                                                       00773001
00084E 8B00 0001
                             00001
                                      958
                                                    SLA
                                                          R0,1
                                                                                                                       00774001
                                      959
                                                                                                                       00775001
                                      960
                                                    FREEMAIN FOR RECORD BUFFERS
                                                                                                                       00776001
                                                                                                                       00777001
                                      961 *
                                      962
                                                    FREEMAIN R, LV=(0), A=(1)
                                                                                                                       00778001
                                      963+
                                                    OS/VS2 RELEASE 3 VERSION -- 10/25/74
                                                                                                                       01-FREEM
                                                                                              CLEAR HI ORDER BYTE
000852 4110 1000
                             00000
                                      964+
                                                    LA
                                                         1,0(0,1)
                                                                                                                       01-FREEM
                                                                                              ISSUE FREEMAIN SVC
                                                                                                                       01-FREEM
000856 0A0A
                                      965+
                                                         10
                                                                                                                       00779001
                                      966
                                      967 *
                                                    FREEMAIN FOR DCB AND DECB
                                                                                                                       00780001
                                      968 *
                                                                                                                       00781001
                                                    FREEMAIN R.LV=DCBAREAL-JFCB LEN.A=ADCB
                                      969
                                                                                                                       00782001
                                      970+
                                                    OS/VS2 RELEASE 3 VERSION -- 10/25/74
                                                                                                                       01-FREEM
000858
                                                                                                                       01-FREEM
                                      971+
                                                    CNOP
                                                         0,4
                                      972+
000858 47F0 7164
                             00860
                                                                                              BRANCH AROUND LENGTH
                                                                                                                       01-FREEM
00085C 00000070
                                      973+
                                                    DC
                                                          A(DCBAREAL-JFCB_LEN)
                                                                                              LENGTH
                                                                                                                       01-FREEM
                                                                                              LOAD SP AND LV
000860 5800 7160
                             0085C
                                      974+
                                                          0,*-4
                                                                                                                       01-FREEM
                                                    L
                                                                                              LOAD AREA ADDRESS
000864 5810 5000
                             00000
                                      975+
                                                          1.ADCB
                                                                                                                       01-FREEM
                                                    L
000868 4110 1000
                                                                                              CLEAR HI ORDER BYTE
                             00000
                                      976+
                                                    LA
                                                          1.0(0.1)
                                                                                                                       01-FREEM
00086C 0A0A
                                      977+
                                                    SVC
                                                                                               ISSUE FREEMAIN SVC
                                      978
                                                                                                                       00783001
00086E 1B22
                                      979
                                                    SR
                                                          R2.R2
                                                                                                                       00784001
                                                                                                                       00785001
000870 4120 2001
                             99991
                                      980
                                                    ΙΔ
                                                          R2,1(,R2)
000874 4020 5014
                             00014
                                                    STH
                                                                                                                       00786001
                                      981
                                                          R2.S
000878 4120 2001
                              00001
                                      982
                                                          R2,1(,R2)
                                                                                                                       00787001
                                                    LA
00087C D201 5016 7668 00016 00D64
                                                                                                                       00788001
                                      983
                                                    MVC
                                                          P(2),=H'80'
                                                                                     P=80
000882 1226
                                                          R2, R6
                                                                                                                       00789001
                                      984
                                                    LTR
000884 4780 719A
                             99896
                                      985
                                                    B7
                                                          CLOSE3
                                                                                                                       00790001
000888 4620 7194
                             00890
                                      986
                                                    BCT
                                                          R2.CLOSE4
                                                                                                                       00791001
00088C 47F0 719A
                             00896
                                                                                                                       00792001
                                      987
                                                          CLOSE3
                                                    В
                                                                                                                       00793001
000890 58F0 7640
                             00D3C
                                      989 CLOSE4
                                                          R15, VIORCN
                                                                                                                       00794001
                                                    Ĺ
000894 05EF
                                      990
                                                    BALR
                                                          R14,R15
                                                                                     CLEAR NOTTAB FOR DATASET
                                                                                                                       00795001
                                      991 CLOSE3
                                                          DSF,BL+2
999896 D201 501A 5022 9991A 99922
                                                    MVC
                                                                                     RESTORE DATASET FLAGS
                                                                                                                       00796001
00089C 58D0 75F8
                                                                                                                       00797001
                             00CF4
                                      992
                                                          R13, SAVAR+4
                                                    L
                                      993
                                                                                                                       00798001
                                                    RETURN (14,12)
                                      994
                                                                                                                       00799001
0008A0 98FC D00C
                             aaaac
                                      995+
                                                    I M
                                                          14,12,12(13)
                                                                                              RESTORE THE REGISTERS
                                                                                                                       01-RETUR
0008A4 07FE
                                      996+
                                                    BR
                                                          14
                                                                                              RETURN
                                                                                                                       01-RETUR
                                      997 *
                                                                                                                       00800001
                                      998
                                                                                                                       00801001
                                      999
                                                    CLOSE ALL DATASETS
                                                                                                                       00802001
                                     1000 *-
                                                                                                                       00803001
                                     1001 *
                                                                                                                       00804001
                                     1002 *
                                                                                                                       00805001
                                                    FUNCTION/OPERATION -
                                                    CALL ROUTINE CLOSE FOR ALL OPEN DATASETS AND ROUTINE
                                     1003
                                                                                                                       00806001
                                     1004
                                                    CLOSEGP IN IHIGPR MODULE
                                                                                                                       00807001
                                     1005
                                                                                                                       00808001
                                     1006 *
                                                    THIS ROUTINE IS CALLED FROM IHIFSA AND IHIERR. IN BOTH
                                                                                                                       00809001
                                                    CASES R5 CONTAINS THE ADDR OF THE ENTRY IN DSTABLE
                                                                                                                       00810001
                                     1007
                                     1008 *
                                                    FOR DATASET ONE IE DSTABLE+40
                                                                                                                       00811001
                                     1009 *
                                                                                                                       00812001
                                     1010 IHIIORCP SAVE
                                                          (14,12),, 'IHIIORCP LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                       00813001
0008A6 47F0 F026
                             00026
                                     1011+IHIIORCP B
                                                                                              BRANCH AROUND ID
                                                          38(0,15)
                                                                                                                       01-SAVE
0008AA 21
                                     1012+
                                                   DC
                                                          AL1(33)
                                                                                              LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
0008AB C9C8C9C9D6D9C3D7
                                                          CL32'THTTORCP LEVEL 2.1 08/17/12 13.2' TDENTTETER
                                     1013+
                                                    DC
                                                                                                                       01-SAVE
                                                                                              IDENTIFIER
                                                                                                                       01-SAVE
0008CB F1
                                     1014+
                                                    DC
                                                          CL1'1
0008CC 90EC D00C
                             0000C
                                     1015+
                                                         14,12,12(13)
                                                                                              SAVE REGISTERS
                                     1016 *
                                                                                                                       00814001
0008D0 187F
                                     1017
                                                    I R
                                                          R7. R15
                                                                                                                       00815001
                                                   USING IHIIORCP.R7
                                                                                    SAVE REGISTER
                 R:7 008A6
                                     1018
                                                                                                                       00816001
** TXA533W USING range overlaps prior USING at st

** TXA301I Record 816 in SYSD.ALGOLFRT.ASM(IHIIOR)
                                                  statement 161
** TXA301I Record 816 in SYSD
0008D2 50D0 70BA
                             00960
                                    1019
                                                          R13,SAVCLO+4
                                                                                                                       00817001
0008D6 41D0 70B6
                             0095C
                                     1020
                                                          R13,SAVCLO
                                                                                                                       00818001
                                                    LA
0008DA 1B66
                                     1021
                                                    SR
                                                          R6,R6
                                                                                                                       00819001
                                                          R5,=H'40'
                                                                                                                       00820001
0008DC 4B50 74C0
                             00D66
                                                    SH
                                                                                    DSN TO DSTABLE START
                                     1022
                                                          R2,B'1111',0(R5)
0008E0 BF2F 5000
                             00000
                                     1023
                                                                                    TEST APGCF
                                                                                                                       00821001
                                                    ICM
0008E4 4720 7086
                                                                                    PUT/GET ENTRY IN DSTABLE
                             0092C
                                     1024
                                                    ВР
                                                          CLOSEPE4
                                                                                                                       00822001
0008E8 4120 2000
                             00000
                                                                                                                       00823001
                                     1025
                                                    LA
                                                          R2,0(,R2)
0008EC 4150 5004
                             00004
                                     1026
                                                    ΙΔ
                                                          R5,4(,R5)
                                                                                    R5 -> FIRST DSTABLE ENTRY
                                                                                                                       00824001
                                     1027 CLOSEPE2 CR
                                                          R2. R5
                                                                                                                       00825001
0008F0 1925
0008F2 4780 7098
                             0093E
                                                          CLOSEPE3
                                                                                                                       00826001
                                                                                    ALL DATASETS ARE CLOSED
                                     1028
                                                    BE
0008F6 94FD 5023
                                                          BL+3,255-DS6
                                                                                                                       00827001
                       00023
                                     1029
                                                    NI
0008FA 4960 74B2
                             00D58
                                                          R6,=H'1'
                                                                                                                       00828001
                                     1030
                                                    CH
0008FE 4780 707A
                             00920
                                     1031
                                                    RF
                                                          CLOSEPE5
                                                                                                                       00829001
000902 9180 5014
                                                                                                                       00830001
                       99914
                                     1032 CLOSEPE7 TM
                                                          DSF DS0
000906 4780 706E
                             00914
                                                          CLOSEPE1
                                                                                                                       00831001
                                     1033
                                                   ΒZ
                                                                                                                       00832001
                                     1034
                                                    CALL FOR ROUTINE CLOSE
                                     1035
                                                                                                                       00833001
                                     1036 *
                                                                                                                       00834001
00090A 5880 5000
                             99999
                                     1037 CLOSEPE6 L
                                                          R8, ADCB
                                                                                                                       00835001
                                                          R15,ACLOSE
R14,R15
00090E 58F0 70FE
                             009A4
                                     1038
                                                    L
                                                                                                                       00836001
000912 05EF
                                                                                                                       00837001
                                     1039
                                                    BALR
000914 4150 5024
                              00024
                                     1040 CLOSEPE1 LA
                                                          R5, DSTABLEL(, R5)
                                                                                    NEXT ENTRY IN DSTAB
                                                                                                                       00838001
000918 4160 6001
                              00001
                                     1041
                                                          R6,1(,R6)
                                                                                    INCREASE DATASET NUMBER
                                                                                                                       00839001
00091C 47F0 704A
                             008F0
                                     1042
                                                          CLOSEPE2
                                                                                                                       00840001
                                                    В
                                     1043 *
                                                                                                                       00841001
00842001
                                                                                    DATASET OPENED ?
000920 9102 501B
                       0001B
                                     1044 CLOSEPE5 TM
                                                          DSF+1,DS14
000924 4780 705C
                             00902
                                     1045
                                                   ΒZ
                                                          CLOSEPE7
                                                                                                                       00843001
000928 47F0 7064
                                                                                                                       00844001
                                     1046
                                     1047 *
                                                                                                                       00845001
00092C 9180 201B
                       0001B
                                     1048 CLOSEPE4 TM
                                                          27(R2), X'80'
                                                                                    PUT/GET DATASET OPEN ?
                                                                                                                       00846001
000930 4780 7046
                             008EC 1049
                                                   ΒZ
                                                          CLOSEPE2-4
                                                                                    DATASET CLOSED
                                                                                                                       00847001
```

IHIIORTN, LIBRARY I/O SERVICE ROUTINES, ALGOL F LIB Active USINGs: IHIIORTN+X'8A6',R7 IHADCB,R8 DSTABLE,R5 IHIIORTN,R4 Addr1 Addr2 Stmt Source Statement Loc Object Code

```
X390 3.1.04 2012/08/17 13.21
000934 58F0 7102
                             009A8
                                    1050
                                                          R15, IHIIORGP
                                                                                                                      00848001
000938 05EF
                                     1051
                                                    BALR
                                                          R14,R15
                                                                                   CLOSE PUT/GET DATASET
                                                                                                                      00849001
00093A 47F0 7046
                             008EC
                                     1052
                                                   В
                                                          CLOSEPE2-4
                                                                                                                      00850001
                                     1053 *
                                                                                                                      00851001
                                     1054 *
                                                    ALL DATASETS ARE CLOSED
                                                                                                                      00852001
                                     1055 *
                                                                                                                       00853001
00093F 581C 00B0
                             000B0
                                    1056 CLOSEPE3 L
                                                          R1.ANOTTAB(R12)
                                                                                                                      00854001
000942 1211
                                     1057
                                                   LTR
                                                          R1, R1
                                                                                                                      00855001
000944 4780 70AC
                             00952
                                    1058
                                                   ΒZ
                                                          RETCLOSP
                                                                                                                      00856001
                                     1059 *
                                                                                                                      00857001
                                     1060
                                                    FREEMAIN R, LV=1024, A=(1)
                                                                                   FREE NOTTAB
                                                                                                                       00858001
                                     1061+*
                                                    OS/VS2 RELEASE 3 VERSION
000948 4100 0400
                              aa4aa
                                     1062+
                                                    LA
                                                          0,1024(0,0)
                                                                                              LOAD LENGTH
                                                                                                                      01-FREEM
                                                                                              CLEAR HT ORDER BYTE
000940 4110 1000
                             00000
                                     1063+
                                                    ΙΔ
                                                          1,0(0,1)
                                                                                                                      01-FRFFM
000950 0A0A
                                                          10
                                                                                              ISSUE FREEMAIN SVC
                                                                                                                      01-FREEM
                                     1064+
                                                    SVC
                                     1065 *
                                                                                                                      00859001
                                     1066 RETCLOSP L
000952 58D0 70BA
                              00960
                                                          R13.SAVCLO+4
                                                                                                                       00860001
                                     1067
                                                                                                                      00861001
                                     1068
                                                    RETURN (14.12)
                                                                                                                       00862001
                                                                                              RESTORE THE REGISTERS
000956 98EC D00C
                             0000C
                                    1069+
                                                    LM
                                                          14,12,12(13)
                                                                                                                      01-RETUR
                                     1070+
                                                   BR
                                                          14
                                                                                              RETURN
                                                                                                                      01-RETUR
00095A 07FE
                                     1071 *
                                                                                                                       00863001
00095C 00000000000000000
                                     1072 SAVCLO
                                                   DC
                                                          18F'0'
                                                                                                                       00864001
                                     1073 *
                                                                                                                       00865001
                                    1074 *
                                                    EXTERNAL ADDR
                                                                                                                      00866001
                                     1075
                                                                                                                       00867001
0009A4 000006FC
                                     1076 ACLOSE
                                                          A(IHIIORCL)
                                                                                                                       00868001
                                                                                                                       00869001
                                     1077
0009A8 00000000
                                     1078 IHIIORGP DC
                                                                                                                       00870001
                                     1079
                                                                                                                      00871001
                                     1080 *--
                                                                                                                      00872001
                                                   CLEAR NOTTAB
                                                                                                                       00873001
                                     1081
                                     1082 *--
                                                                                                                      00874001
                                     1083 *
                                                                                                                       00875001
                                     1084 *
                                                    FUNCTION/OPERATION
                                                                                                                      00876001
                                     1085 *
                                                    ALL ENTRIES IN NOTTAB FOR RECORDS EQUAL OR GREATER THAN
                                                                                                                      00877001
                                                    ACTUAL RECORD COUNTERS ARE CLEARED BY INSERTING INVALID
                                                                                                                      00878001
                                     1086
                                     1087
                                                                                                                       00879001
                                                                                                                       00880001
                                     1088 *
                                                          (14,12),, 'IHIIORCN LEVEL 2.1 &SYSDATE &SYSTIME'
                                     1089 IHIIORCN SAVE
                                                                                                                      00881001
0009AC 47F0 F026
                             00026
                                    1090+IHIIORCN B
                                                          38(0,15)
                                                                                              BRANCH AROUND ID
                                                                                                                      01-SAVE
                                                                                              LENGTH OF IDENTIFIER
                                                                                                                      01-SAVE
0009B0 21
                                     1091+
                                                   DC
                                                          AL1(33)
0009B1 C9C8C9C9D6D9C3D5
                                                   DC
                                                          CL32'IHIIORCN LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                      01-SAVE
                                     1092+
                                                                                              IDENTIFIER
0009D1 F1
                                     1093+
                                                   DC
                                                          CL1'1'
                                                                                                                      01-SAVE
0009D2 90EC D00C
                             0000C
                                    1094+
                                                          14,12,12(13)
                                                                                              SAVE REGISTERS
                                                                                                                      01-SAVE
                                                    STM
                                     1095 *
                                                                                                                      00882001
                                                                                   DEETNE BASE REGISTER
                                                   I R
                                                          R7. R15
0009D6 187F
                                     1096
                                                                                                                      00883001
                                                   USING IHIIORCN, R7
                                                                                                                      00884001
                 R:7 009AC
                                     1097
** TXA533W USING range overlaps prior USING at statement 161.
                          SYSD.ALGOLFRT.ASM(IHIIOR)
0009D8 589C 00B0
                             000B0
                                    1098
                                                          R9. ANOTTAB(R12)
                                                                                                                      00885001
                                                                                                                      00886001
0009DC 1849
                                     1099
                                                   LR
                                                          R4.R9
0009DE 4140 4008
                             00008
                                                          R4,8(,R4)
                                     1100 CLNOTB1
                                                                                   START ENTRY ADDR TO R4
                                                                                                                      00887001
                                                   LA
0009E2 5940 9000
                                                          R4,0(,R9)
                                                                                                                      00888001
                             00000
                                     1101
0009E6 4780 705A
                                                                                                                       00889001
                             00A06
                                     1102
                                                    ВЕ
                                                          RETCLEAR
                                                                                    NOTTAB CLEARED
0009EA 1826
                                                                                    DATASET NUMBER TO R2
                                                                                                                       00890001
                                     1103
                                                    LR
                                                          R2,R6
0009EC 4920 4000
0009F0 4770 7032
                             aaaaa
                                     1104
                                                    CH
                                                          R2,0(,R4)
                                                                                                                      00891001
                                                                                   CURRENT DSN NOT FOUAL
                             009DF
                                     1105
                                                   BNF
                                                          CLNOTB1
                                                                                                                       00892001
0009F4 D501 5014 4002 00014 00002
                                                          S(2),2(R4)
                                                                                                                      00893001
                                     1106
                                                   CLC
0009FA 4720 7032
                             009DE
                                     1107
                                                   ВН
                                                          CLNOTB1
                                                                                                                       00894001
0009FE 9280 4000
                       00000
                                                          0(R4),X'80'
                                                                                    INSERT INVALID FLAG IN NOTTAB
                                                                                                                       00895001
                                     1108
                                                    MVI
000A02 47F0 7032
                             009DE
                                     1109
                                                   В
                                                          CLNOTB1
                                                                                                                      00896001
                                     1110 *
                                                                                                                       00897001
                                     1111 RETCLEAR RETURN (14,12)
                                                                                                                      00898001
000A06
                                     1112+RETCLEAR DS
                                                          0Н
                                                                                                                       01-RETUR
000A06 98EC D00C
                             0000C 1113+
                                                    LM
                                                          14,12,12(13)
                                                                                              RESTORE THE REGISTERS
                                                                                                                      01-RETUR
000A0A 07FE
                                     1114+
                                                    BR
                                                                                              RETURN
                                                                                                                      01-RETUR
                                                          14
                                     1115 *
                                                                                                                       00899001
                                     1116 *-
                                                                                                                      00900001
                                     1117
                                                   CLEAR NOTTAB
                                                                                                                       00901001
                                     1118 *-
                                                                                                                      00902001
                                                                                                                       00903001
                                     1119
                                     1120 *
                                                    FUNCTION/OPERATION -
                                                                                                                      00904001
                                     1121 *
                                                    AN ENTRY FOR RECORD JUST HANDLED IS MADE IN NOTTAB
                                                                                                                      00905001
                                                                                                                      00906001
                                     1122
                                     1123
                                                   NOTES - ON ENTRY R1 = NOTEADR FROM DSTABLE
                                                                                                                      00907001
                                     1124 *
                                                                                                                       00908001
                                     1125 *
                                                                                                                      00909001
                                                         (14,12),, 'IHIIOREN LEVEL 2.1 &SYSDATE &SYSTIME'
                                     1126 THTTOREN SAVE
                                                                                                                      00910001
000A0C 47F0 F026
                             00026
                                    1127+IHIIOREN B
                                                                                              BRANCH AROUND ID
                                                          38(0,15)
                                                                                                                      01-SAVE
000A10 21
                                                                                              LENGTH OF IDENTIFIER
                                                                                                                      01-SAVE
                                     1128+
                                                          AL1(33)
                                                   DC
000A11 C9C8C9C9D6D9C5D5
                                     1129+
                                                   DC
                                                          CL32'IHIIOREN LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                      01-SAVE
                                                          CL1'1'
                                     1130+
                                                                                              IDENTIFIER
                                                                                                                      01-SAVE
000A31 F1
                                                    DC
000A32 90EC D00C
                             0000C
                                    1131+
                                                   STM
                                                         14,12,12(13)
                                                                                              SAVE REGISTERS
                                                                                                                      01-SAVE
                                     1132 *
                                                                                                                      00911001
000A36 187F
                                     1133
                                                          R7, R15
                                                                                                                      00912001
                  R:7 00A0C
                                    1134
                                                   USING IHIIOREN. R7
                                                                                                                       00913001
** TXA533W USING range overlaps prior USING at statement 161.
** TXA301I Record 913 in SYSD.ALGOLFRT.ASM(IHIIOR)
000A38 589C 00B0
000A3C 1849
                                                                                                                      00914001
00915001
                             000B0
                                    1135
                                                          R9, ANOTTAB(R12)
                                     1136
                                                    LR
                                                          R4, R9
000A3E 4140 4008
                             00008
                                     1137 ENNOTB1 LA
                                                          R4,8(,R4)
                                                                                   START ENTRY ADDR
                                                                                                                       00916001
000A42 5940 9000
                                                          R4,0(,R9)
                                                                                                                       00917001
                             00000
                                    1138
000A46 4770 706C
                             00A78
                                    1139
                                                   BNE
                                                          ENNOTB3
                                                                                                                      00918001
000A4A 5820 9000
                             99999
                                    1140
                                                          R2,0(,R9)
                                                                                   NXE TO R2
                                                                                                                      00919001
                                                                                   INCREASE NXE BY EIGHT
000A4E 4120 2008
                             00008
                                    1141
                                                   LA
                                                          R2,8(,R2)
                                                                                                                      00920001
```

01006001

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
000A52 5020 9000
                              00000 1142
                                                    ST
                                                          R2,0(,R9)
                                                                                                                       00921001
000A56 5920 9004
                              00004 1143
                                                          R2,4(,R9)
                                                                                                                       00922001
000A5A 4780 7078
                             00A84
                                     1144
                                                    RF
                                                          ENNERR4
                                                                                    OVERFLOW NOTTAB
                                                                                                                       00923001
                                     1145 ENNOTB2
                                                                                                                       00924001
000A5E 1826
                                                    LR
                                                          R2.R6
000A60 8B20 0010
                              00010
                                    1146
                                                    SLA
                                                          R2,16
                                                                                                                       00925001
                                                                                    NEW ENTRY DSN AND S TO NOTTAB
000A64 5020 4000
                              00000
                                     1147
                                                          R2,0(,R4)
                                                                                                                       00926001
000A68 D201 4002 5014 00002 00014
                                     1148
                                                    MVC
                                                          2(2,R4),S
                                                                                                                       00927001
000A6E 5010 4004
                             00004
                                     1149
                                                    ST
                                                          R1,4(,R4)
                                                                                    NOTEADR
                                                                                                                       00928001
                                     1150 *
                                                                                                                       00929001
                                                    RETURN (14,12)
                                     1151
                                                                                                                       00930001
000A72 98EC D00C
                             0000C 1152+
                                                                                               RESTORE THE REGISTERS
                                                                                                                       01-RETUR
                                                    LM
                                                          14,12,12(13)
                                     .
1153+
000A76 07FE
                                                                                                                       01-RETUR
                                     1154 *
                                                                                                                       00931001
000A78 9180 4000
000A7C 4710 7052
                                     1155 FNNOTB3
                                                          0(R4),X'80'
                                                                                    NOTTAR ENTRY INVALID ?
                       99999
                                                    TM
                                                                                                                       00932001
                             00A5E 1156
                                                          ENNOTB2
                                                                                                                       00933001
                                                    во
000A80 47F0 7032
                             00A3E
                                     1157
                                                          ENNOTB1
                                                                                                                       00934001
                                                    В
                                     1158 *
                                                                                                                       00935001
000A84 18DC
                                     1159 ENNERR4 LR
                                                          13.R12
                                                                                    OVERFLOW OF RECORD IDENT AREA
                                                                                                                       00936001
000A86 47FC 01DC
                             001DC
                                    1160
                                                    В
                                                          FSAERR+4*4(R12)
                                                                                                                       00937001
                                     1161 *
                                                                                                                       00938001
                                     1162 *
                                                                                                                       00939001
                                     1163
                                                    EVALUATE DATASET NUMBER
                                                                                                                       00940001
                                     1164 *-
                                                                                                                       00941001
                                     1165 *
                                                                                                                       00942001
                                                    FUNCTION/OPERATION -
                                                                                                                       00943001
                                     1166
                                                    ADDR OF DSTABLE IN GENERATED OBJECT MODULE IS PICKED UP
                                                                                                                       00944001
                                     1167
                                                                                                                       00945001
                                     1168
                                     1169 *
                                                                                                                       00946001
                                                    L R4, ADSTAB(R12)
                                     1170 *
                                                    ACTUAL DATASET NUMBER LOADED IN BINARY FORM TO R6,
                                                                                                                       00947001
                                                    ADDR OF ACTUAL ENTRY IN DSTABLE TO R5, THESE REGISTERS
                                     1171 *
                                                                                                                       00948001
                                     1172 *
                                                    ARE KEPT THROUGH ALL I/O MODULES IN ORDER TO ADDR
                                                                                                                       00949001
                                                                                                                       00950001
                                     1173
                                                    POINTERS AND FLAGS IN DSTAB
                                     1174 *
                                                                                                                       00951001
                                     1175 *
                                                    ENTRY POINT -
                                                                                                                       00952001
                                     1176
                                                    DATA IS PASSED VIA NAME
                                                                                                                       00953001
                                                        R1.PARMLIST
                                     1177
                                                    ΙΔ
                                                                                                                       00954001
                                                                                                                       00955001
                                     1178
                                                    BALR R14, R15
                                     1179
                                                                                                                       00956001
                                     1180 *
                                                                                                                       00957001
                                     1181 *
                                                                                                                       00958001
                                     1182 IHIIOREV SAVE (14,12),, 'IHIIOREV LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                       00959001
000A8A 47F0 F026
                             00026 1183+IHIIOREV B
                                                          38(0,15)
                                                                                              BRANCH AROUND ID
                                                                                                                       01-SAVE
                                                                                               LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
000A8E 21
                                     1184+
                                                    DC
                                                          AL1(33)
                                                          CL32'IHIIOREV LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000A8F C9C8C9C9D6D9C5E5
                                     1185+
                                                    DC
                                                                                                                       01-SAVE
000AAF F1
                                     1186+
                                                    DC
                                                          CL1'1'
                                                                                               IDENTIFIER
                                                                                                                       01-SAVE
000AB0 90EC D00C
                             0000C 1187+
                                                    STM
                                                          14,12,12(13)
                                                                                              SAVE REGISTERS
                                                                                                                       01-SAVE
                                     1188 *
                                                                                                                       00960001
000AB4 187F
                                                    LR
                                     1189
                                                          R7, R15
                                                                                                                       00961001
                 R:7 00A8A
                                     1190
                                                    USING IHIIOREV, R7
                                                                                                                       00962001
** TXA533W USING range overlaps prior USING at st

** TXA301I Record 962 in SYSD.ALGOLFRT.ASM(IHIIOR)
                                                  statement 161
000AB6 50D0 726A
                             00CF4 1191
                                                                                                                       00963001
                                                    ST
                                                          R13.SAVAR+4
                                                                                                                       00964001
000ABA 41D0 7266
                             00CF0
                                    1192
                                                    LA
                                                          R13.SAVAR
                                     1193 *
                                                                                                                       00965001
                                     1194 *
                                                    PARAMETER LIST ADDR IN R1
                                                                                                                       00966001
                                     1195 *
                                                                                                                       00967001
000ABE BF5F 1000
                              aaaaa
                                    1196
                                                    TCM
                                                          R5,B'1111',0(R1)
                                                                                                                       00968001
999AC2 4729 795A
                             99AF4
                                    1197
                                                    RP
                                                          DSNTNT
                                                                                                                       00969001
                                                                                    LONG OR SHORT PRECISION ?
                                                                                                                       00970001
000AC6 9120 C0C2
                       000C2
                                     1198
                                                    TM
                                                          OPTSW(R12), X'20'
000ACA 4710 704C
                              00AD6
                                     1199
                                                          EVD1
                                                                                    SHORT
                                                                                                                       00971001
                                                    BO
000ACE 6800 5000
                              00000
                                                          FPR0,0(,R5)
                                                                                    LONG
                                                                                                                       00972001
                                     1200
000AD2 47F0 7050
                             00ADA
                                     1201
                                                    В
                                                          EVD1+4
                                                                                                                       00973001
                                     1202 *
                                                                                                                       00974001
                                                                                                                       00975001
000AD6 7800 5000
                              00000
                                     1203 EVD1
                                                          FPR0.0(.R5)
                                                    LE
                                                                                    SHORT
000ADA 58F0 7092
                                     1204
                                                          R15, VIORCI
                                                                                    R15 -> IHIIORCI
                                                                                                                       00976001
                              00B1C
                                                          R14, R15
000ADE 05EF
                                                                                                                       00977001
                                     1205
                                                                                    CALL IHIIORCI
000AE0 47F0 705E
                              00AE8
                                     1206
                                                          DSNINTA
                                                                                                                       00978001
                                                    В
                                     1207 *
                                                                                                                       00979001
000AE4 5800 5000
                                     1208 DSNINT
                                                          R0,0(,R5)
                                                                                    DATASET NUMBER IN RO
                                                                                                                       00980001
                              00000
000AE8 1850
                                     1209 DSNINTA
                                                                                                                       00981001
                                                    LR
                                                          R5, R0
                                                          RØ, RANGEDSN
000AEA 5400 708E
                                     1210
                                                                                    DATASET NUMBER OUT OF RANGE
                                                                                                                       00982001
000AEE 4740 7086
                                                          EVDERR0
                                                                                                                       00983001
                              00B10
                                     1211
000AF2 1865
                                     1212
                                                    LR
                                                          R6, R5
                                                                                                                       00984001
                                                          RØ, DSTABLEL
                                                                                    L'DSTABLE ENTRY
000AF4 4100 0024
                              00024
                                     1213
                                                    LA
                                                                                                                       00985001
000AF8 1C40
                                                                                                                       00986001
                                     1214
                                                    MR
                                                          R4. R0
000AFA 584C 00AC
                              000AC
                                                          R4, ADSTAB (R12)
                                                                                                                       00987001
                                     1215
000AFE 4155 4004
                                                          R5,4(R5,R4)
                                                                                    ENTRY TO DSTABLE IN R5
                              00004
                                     1216
                                                                                                                       00988001
000B02 58D0 726A
                              00CF4
                                     1217
                                                          R13,SAVAR+4
                                                                                                                       00989001
000B06 98F4 D00C
                              aaaac
                                     1218
                                                    I M
                                                          R14.R4.12(R13)
                                                                                                                       00990001
000B0A 987C D030
                                                                                    KEEP R5 AND R6
                              00030
                                     1219
                                                    LM
                                                          R7, R12, 48(R13)
                                                                                                                       00991001
000B0E 07FE
                                     1220
                                                                                                                       00992001
                                                    BR
                                     1221 *
                                                                                                                       00993001
000B10 18DC
                                     1222 EVDERRØ LR
                                                          R13.R12
                                                                                    DATASET NUMBER OUT OF RANGE
                                                                                                                       00994001
000B12 47FC 01CC
                             001CC 1223
                                                          FSAERR(R12)
                                                                                                                       00995001
                                                    В
                                     1224 *
                                                                                                                       00996001
000B16 0000
000B18 FFFFFFF0
                                     1225 RANGEDSN DC
                                                          F'-16'
                                                                                    SCOPE OUTSIDE RANGE OF DSN
                                                                                                                       00997001
                                     1226 *
                                                                                                                       00998001
000B1C 00000000
                                     1227 VIORCI
                                                                                                                       00999001
                                                   DC
                                                          V(IHIIORCI)
                                                                                    ADDR OF CONVERSION ROUTINE
                                     1228 *
                                                                                                                       01000001
                                                                                                                       01001001
                                     1229
                                     1230
                                                   DCB END OF DATA EXIT
                                                                                                                       01002001
                                     1231 *-
                                     1232 *
                                                                                                                       01004001
                                     1233 *
                                                    FUNCTION/OPERATION - INVOKED VIA CHECK MACRO
                                                                                                                       01005001
```

000C40 060E

1324

**BCTR** 

R0, R14

```
Addr1 Addr2 Stmt Source Statement
                                                                                                X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                                     1235 *
                                                    EXITS - NORMAL - CHECK FROM SYSACT4 OR CLOSE RELOAD
                                                                                                                       01007001
                                     1236 *
                                                                      REGISTERS AND RETURN TO CALLING PROGRAM
                                                                                                                       01008001
                                     1237
                                                                      VTA BR14
                                                                                                                       01009001
                                                          - CHECK FROM NEXTREC - BLOCKED FORMAT SET FLAG DS7 IN
                                                                                                                       01010001
                                     1238
                                                                      DSTABLE AND BRANCH TO END OF NEXTREC
                                     1239
                                                                                                                       01011001
                                     1240
                                                          - UNBLOCKED FORMAT OUTPUT - RETURN TO NEXTREC TO WRITE
                                                                                                                       01012001
                                     1241 *
                                                                      BACK CURRENT RECORD
                                                                                                                       01013001
                                                          - UNBLOCKED FORMAT INPUT - SET FLAG DS7 IN DSTABLE AND
                                     1242 *
                                                                                                                       01014001
                                                                      RETURN TO NEXTREC TO UPDATE PTR IN DSTABLE
                                     1243
                                                                                                                       01015001
                                                                      CHECK FROM OPEN
                                                                                                                       01016001
                                                          - FRROR -
                                     1244
                                     1245
                                                                      INPUT REQUEST BEYOND END OF DATASET
                                                                                                                       01017001
                                     1246 *
                                                                                                                       01018001
                                     1247 *
                                                                                                                       01019001
                                                          (14,12),, 'IHIIORED LEVEL 2.1 &SYSDATE &SYSTIME'
                                     1248 THTTORED SAVE
                                                                                                                       01020001
                                                                                              BRANCH AROUND ID
000B20 47F0 F026
                             00026
                                    1249+IHIIORED B
                                                          38(0,15)
                                                                                                                       01-SAVE
000B24 21
                                     1250+
                                                          AL1(33)
                                                                                               LENGTH OF IDENTIFIER
                                                                                                                       01-SAVE
                                                   DC
                                                          CL32'IHIIORED LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000B25 C9C8C9C9D6D9C5C4
                                     1251+
                                                    DC
                                                                                                                       01-SAVE
000B45 F1
                                     1252+
                                                    DC
                                                          CI1'1'
                                                                                              TDENTTETER
                                                                                                                       01-SAVE
                                                                                              SAVE REGISTERS
000B46 90EC D00C
                             0000C
                                     1253+
                                                    STM
                                                          14,12,12(13)
                                                                                                                       01-SAVE
                                     1254
                                                                                                                       01021001
000B4A 0570
                                     1255
                                                    BALR R7.0
                                                                                                                       01022001
                  R:7 00B4C
                                     1256
                                                   USING *,R7
                                                                                                                       01023001
** TXA533W USING range overlaps prior USING at
                                                 statement 161
** TXA301I Record 1023 in SYSD.ALGOLFRT.ASM(IHIIOR)
000B4C 50D0 7068
                                                          R13, SAVEOD+4
                                                                                                                       01024001
                             00BB4 1257
                                                    ST
000B50 41D0 7064
                             00BB0
                                                                                                                       01025001
                                     1258
                                                          R13, SAVEOD
                                                    LA
000B54 5880 5000
                             00000
                                     1259
                                                          R8 ADCB
                                                                                                                       01026001
000B58 9108 501B
                       0001B
                                                          DSF+1,DSEOD
                                                                                    CHECK FROM OPEN ?
                                                                                                                       01027001
                                     1260
                                                    TM
                                                          END00
000B5C 4780 7020
                             00B6C
                                                                                                                       01028001
                                     1261
000B60 94CD 501A
                       9991A
                                     1262
                                                    NI
                                                          DSF, 255-(DS2+DS3+DS6)
                                                                                   SET FLAGS FOR A CORRECT CLOSE
                                                                                                                       01029001
000B64 18DC
                                     1263
                                                    LR
                                                          R13.R12
                                                                                                                       01030001
000B66 47FC 01E0
                             001E0
                                                          FSAERR+5*4(R12)
                                                                                    INPUT REQUEST BEYOND END
                                                                                                                       01031001
                                     1264
                                                    В
                                     1265 *
                                                                                                                       01032001
                                     1266 END00
                                                    CLOSE ((R8), LEAVE), TYPE=T
                                                                                                                       01033001
000B6A 0700
                                     1267+
                                                    CNOP
                                                          0,4
1,*+8
                                                                                              ALIGN LIST TO FULLWORD 01-CLOSE
000B6C 4510 7028
                                    1268+FND00
                             00B74
                                                                                              LOAD REG1 W/LTST ADDR
                                                    BAI
                                                                                                                      01-CLOSE
                                                                                              OPTION AND DCB ADDRESS
000B70 00000000
                                     1269+
                                                    DC
                                                          A(0)
                                                                                                                       01-CLOSE
000B74 5081 0000
                             00000
                                     1270+
                                                    ST
                                                          R8,0(1,0)
                                                                                               STORE DCB ADDRESS
                                                                                                                       01-CLOSE
000B78 92B0 1000
                                                                                              MOVE IN OPTION BYTE
                       00000
                                     1271+
                                                    MVI
                                                          0(1),176
                                                                                                                       01-CLOSE
000B7C 0A17
                                     1272+
                                                    SVC
                                                          23
                                                                                              ISSUE TCLOSE SVC
                                                                                                                       01-CLOSE
                                     1273 *
                                                                                                                       01034001
                                                          DSF+1,DS8
                                                                                                                       01035001
000B7E 9180 501B
                       0001B
                                     1274
                                                    TM
                                                                                    CHECK FROM CLOSE OR SYSACT4 ?
000B82 4780 7044
                             00B90
                                                          END02
                                                                                                                       01036001
                                     1275
                                                    ΒZ
                                                          R13,SAVEOD+4
000B86 58D0 7068
                              00BB4
                                     1276 END11
                                                                                                                       01037001
000B8A 98EC D00C
                             0000C
                                     1277
                                                    LM
                                                          R14,R12,12(R13)
                                                                                                                       01038001
                                                                                                                       01039001
01040001
000B8E 07FE
                                     1278
                                                    BR
                                                          R14
                                                                                    RETURN TO CALLING SYSACT4 OR
                                     1279
                                                                                    CLOSE ROUTINE
000B90 9120 501A
                                     1280 END02
                                                          DSF,DS2
                                                                                                                       01041001
                                                    ТМ
                       0001A
000B94 4780 7050
                             00B9C
                                    1281
                                                    ΒZ
                                                          END03
                                                                                                                       01042001
000B98 47F0 703A
                             00B86
                                     1282
                                                    В
                                                          END11
                                                                                                                       01043001
                                     1283 *
                                                                                                                       01044001
000B9C 9601 501A
                                                          DSF DS7
                                                                                                                       01045001
                       0001A
                                     1284 END03
                                                    OI
000BA0 92FF 8060
                                                          DECB+8, X'FF'
                                                                                    FLAG DCB ADDR IN DECB
                                                                                                                       01046001
                       00060
                                     1285
                                                    MVI
000BA4 58D0 7068
                              00BB4
                                     1286
                                                          R13, SAVEOD+4
                                                                                    RETURN TO CALLING NEXTREC
                                                                                                                       01047001
                                                    L
000BA8 98EC D00C
                              0000C
                                     1287
                                                    LM
                                                          R14,R12,12(R13)
                                                                                                                       01048001
000BAC 07FE
                                     1288
                                                                                    RETURN TO CALLING NEXTREC
                                                                                                                       01049001
                                                    BR
                                     1289
                                                                                                                       01050001
                                                    TNTERNAL ADDRESSES
                                     1290
                                                                                                                       01051001
                                     1291
                                                                                                                       01052001
000BAE 0000
000BB0 00000000000000000
                                     1292 SAVEOD
                                                          18F'0'
                                                                                                                       01053001
                                                    DC
                                     1293
                                                                                                                       01054001
                                     1294 *--
                                                                                                                       01055001
                                                                                                                       01056001
                                                    CONVERSION TO INTEGER
                                     1295
                                     1296
                                                                                                                       01057001
                                     1297 *
                                                                                                                       01058001
                                     1298 *
                                                    FUNCTION/OPERATION - CONVERT REAL LONG OR SHORT TO INTEGER
                                                                                                                       01059001
                                     1299 *
                                                                                                                       01060001
                                                    NOTES - CALLED BY BALR 14,15
                                                                                                                       01061001
                                     1300
                                     1301
                                                    DATA PASSED BY VALUE IN FPR0
                                                                                                                       01062001
                                     1302
                                                    RESULT IN RØ
                                                                                                                       01063001
                                                                                                                       01064001
                                     1303 *
000BF8 9120 C0C2
                       99902
                                     1304 IHIIORCI TM
                                                          OPTSW(R12), X'20'
                                                                                   LONG OR SHORT PRECISION ?
                                                                                                                       01065001
                 R:F 00BF8
                                                   USING IHIIORCI, R15
                                     1305
                                                                                                                       01066001
** TXA533W USING range overlaps prior USING at statement 125(
** TXA533W USING range overlaps prior USING at statement 161
** TXA301I Record 1066 in SYSD.ALGOLFRT.ASM(IHIIOR)
000BFC 4780 F010
                             00008
                                    1306
                                                    ΒZ
                                                          LONG
                                                                                                                       01067001
999C99 7999 F968
                                                          FPR0. BUFF3
                                                                                                                       01068001
                             99069
                                     1307
                                                    STF
000C04 6800 F068
                             00C60
                                     1308
                                                          FPR0, BUFF3
                                                                                                                       01069001
                                                    LD
                                     1309 *
                                                                                                                       01070001
000C08 6A00 F058
                              00C50
                                     1310 LONG
                                                    AD
                                                          FPR0.CONST2
                                                                                                                       01071001
000C0C 6000 F078
                             00C70
                                                          FPR0, BUFF4
                                                                                                                       01072001
                                     1311
                                                    STD
000C10 7900 F080
                             00C78
                                     1312
                                                    CF
                                                          FPR0.CONST3
                                                                                                                       01073001
000C14 47B0 F04A
                                                          ERROR1
                             00C42
                                     1313
                                                    BNL
                                                                                                                       01074001
000C18 6E00 F050
                                                          FPR0, CONST1
                                                                                                                       01075001
                             00C48
                                     1314
                                                    AW
000C1C 4720 F032
                              00C2A
                                     1315
                                                    ВР
                                                          LABEL
                                                                                                                       01076001
000C20 D507 F078 F070 00C70 00C68
                                     1316
                                                    CLC
                                                          BUFF4(8), CONST4
                                                                                                                       01077001
000C26 4720 F04A
                             00C42
                                     1317
                                                          ERROR1
                                                                                                                       01078001
                                                    BH
                                                          FPRØ,BUFF2
000C2A 6000 F060
                             00C58
                                     1318 LABEL
                                                    STD
                                                                                                                       01079001
000C2E 5800 F064
                                                                                                                       01080001
                             00C5C
                                                          RO, BUFF2+4
                                     1319
000C32 5700 F054
                             00C4C
                                     1320
                                                          RØ, CONST1+4
                                                                                                                       01081001
000C36 6B00 F050
                                                    SD
                                                                                                                       01082001
                             00C48
                                     1321
                                                          FPR0, CONST1
000C3A 6900 F078
                                                    CD
                                                          FPR0, BUFF4
                                                                                                                       01083001
                             00C70
                                     1322
000C3F 07DF
                                     1323
                                                    BNHR
                                                          R14
                                                                                                                       01084001
```

```
Addr1 Addr2 Stmt Source Statement
                                                                                                X390 3.1.04 2012/08/17 13.21
  Loc Object Code
000C42 18DC
                                     1325 ERROR1
                                                    LR
                                                          R13,R12
                                                                                                                       01086001
000C44 47FC 01D0
                             001D0
                                    1326
                                                          FSAERR+1*4(R12)
                                                                                                                       01087001
                                                    В
                                     1327
                                                                                                                       01088001
                                     1328
                                                    INTERNAL CONSTANTS AND STORAGE
                                                                                                                       01089001
                                                                                                                       01090001
                                     1329 *
000C48
                                                          0D'0'
                                                                                                                       01091001
                                     1330
                                                          X'4E00000080000000'
000C48 4F00000080000000
                                     1331 CONST1
                                                    DC
                                                                                                                       01092001
000C50 40800000000000000
                                     1332 CONST2
                                                    DC
                                                          X'408000000000000000
                                                                                                                       01093001
000C58 00000000000000000
                                     1333 BUFF2
                                                          D'0'
                                                    DC
                                                                                                                       01094001
000C60 00000000000000000
                                     1334 BUFF3
                                                          D'0'
                                                                                                                       01095001
                                                    DC
000C68 C8800000000000000
                                     1335 CONST4
                                                    DC
                                                          X'C88000000000000000'
                                                                                                                       01096001
000C70 00000000000000000
                                     1336 BUFF4
                                                    DC
                                                          D'0'
                                                                                                                       01097001
000C78 48800000
                                     1337 CONST3
                                                   DC
                                                          X'48800000'
                                                                                                                       01098001
                                     1338
                                                                                                                       01099001
                                                    DCB SYNAD EXIT
                                                                                                                       01100001
                                     1339
                                     1340
                                                                                                                       01101001
                                                    EXIT - NORMAL - BRANCH ERROR UNRECOVERABLE I/O ERROR
                                     1341
                                                                                                                       01102001
                                     13/12 *
                                                                                                                       01103001
000C7C 187F
                                     1343 IHIIORER LR
                                                          R7.R15
                                                                                                                       01104001
                 R:7 00C7C
                                                   USING IHIIORER, R7
                                                                                                                       01105001
                                     1344
** TXA533W USING range overlaps prior USING at
                                                  statement 1305
** TXA533W USING range overlaps prior USING at statement 161
** TXA301I Record 1105 in SYSD.ALGOLFRT.ASM(IHIIOR)
000C7E 9604 501B
                       0001B
                                     1345
                                                   OI
                                                          DSF+1,DSIOERR
                                                                                    SET MARK FOR CORRECT CLOSE
                                                                                                                       01106001
                                                                                                                       01107001
000C82 18DC
                                     1346
                                                   I R
                                                          R13.R12
000C84 47FC 024C
                             0024C
                                     1347
                                                                                    I/O ERROR
                                                                                                                       01108001
                                                          FSAERR+32*4(R12)
                                                    В
                                     1348 *
                                                                                                                       01109001
                                     1349 *
                                                                                                                       01110001
                                     1350 DCBMODEL DCB
                                                          DSORG=PS, MACRF=(RP, WP), DDNAME=ALGLDD, NCP=1,
                                                                                                                      X01111001
                                                          EODAD=IHIIORED.
                                                                                                                      X01112001
                                                          EXLST=ADCBEXIT.
                                                                                                                      X01113001
                                                          SYNAD=IHIIORER
                                                                                                                       01114001
                                     1352+*
                                                                    DATA CONTROL BLOCK
                                                                                                                       01-DCB
                                     1353+*
                                                                                                                       01-DCB
                                     1354+DCBMODEL DC
                                                          0F'0'
                                                                                    ORIGIN ON WORD BOUNDARY
000C88
                                                                                                                       01-DCB
                                     1356+*
                                                                    DIRECT ACCESS DEVICE INTERFACE
                                                                                                                       01-DCB
000088 00000000000000000
                                     1358+
                                                    DC
                                                          BL16'0'
                                                                                     FDAD, DVTBL
                                                                                                                       01-DCB
                                                                                     KEYLE, DEVT. TRBAL
000098 00000000
                                     1359+
                                                    DC
                                                          A(0)
                                                                                                                       01-DCB
                                                                    COMMON ACCESS METHOD INTERFACE
                                     1361+*
                                                                                                                       01-DCB
000090 00
                                     1363+
                                                    DC
                                                          AL1(0)
                                                                                    RHENO
                                                                                                                       01-DCB
999C9D 999991
                                                    DC
                                                          AL3(1)
AL2(0)
                                     1364+
                                                                                    BUFCB
                                                                                                                       01-DCB
000CA0 0000
                                                    DC
                                                                              BUFL
                                                                                                                       01-DCB
                                     1365+
                                                          BL2'01000000000000000'
000CA2 4000
                                     1366+
                                                    DC
                                                                                               DSORG
                                                                                                                       01-DCB
000CA4 00000001
                                     1367+
                                                    DC
                                                                                     IOBAD
                                                                                                                       01-DCB
                                                                    FOUNDATION EXTENSION
                                                                                                                       01-DCB
                                     1369+*
000CA8 00
                                     1371+
                                                    DC
                                                          BL1'00000000'
                                                                                           BFTEK, BFLN, HIARCHY
                                                                                                                       01-DCB
000CA9 000B20
                                                          AL3(IHIIORED)
                                                                                    EODAD
                                     1372+
                                                    DC
                                                                                                                       01-DCB
000CAC 00
                                     1373+
                                                    DC
                                                          BL1'00000000'
                                                                                    RECFM
                                                                                                                       01-DCB
000CAD 000CE0
                                     1374+
                                                    DC
                                                          AL3(ADCBEXIT)
                                                                                    EXLST
                                                                                                                       01-DCB
                                     1376+*
                                                                    FOUNDATION BLOCK
                                                                                                                       01-DCB
000CB0 C1D3C7D3C4C44040
                                     1378+
                                                    DC
                                                          CL8'ALGLDD'
                                                                                    DDNAME
                                                                                                                       01-DCB
000CB8 02
                                     1379+
                                                    DC
                                                          BL1'00000010'
                                                                                    OFLGS
                                                                                                                       01-DCB
                                                          BL1'000000000'
                                                                                                    IFLG
000CB9 00
                                     1380+
                                                    DC
                                                                                                                       01-DCB
000CBA 2424
                                                          BL2'0010010000100100'
                                                    DC
                                     1381+
                                                                                                                       01-DCB
                                     1383+*
                                                                    BSAM-BPAM-QSAM INTERFACE
                                                                                                                       01-DCB
000CBC 00
                                     1385+
                                                    DC
                                                          BL1'00000000'
                                                                                                                  RER1 01-DCB
000CBD 000001
                                                    DC
                                                          AL3(1)
                                                                                    CHECK, GERR, PERR
                                     1386+
                                                                                                                       01-DCB
000CC0 00000C7C
                                     1387+
                                                    DC
                                                          A(IHIIORER)
                                                                                    SYNAD
                                                                                                                       01-DCB
                                                                                    CIND1, CIND2
000CC4 0000
                                     1388+
                                                    DC
                                                                                                                       01-DCB
000CC6 0000
                                     1389+
                                                    DC
                                                          AL2(0)
                                                                                    BLKSIZE
                                                                                                                       01-DCB
                                                                                    WCPO, WCPL, OFFSR, OFFSW
000CC8 00000000
                                     1390+
                                                    DC
                                                          F'0'
                                                                                                                       01-DCB
                                                          A(1)
AL1(1)
000CCC 00000001
                                     1391+
                                                    DC
                                                                                    IOBA
                                                                                                                       01-DCB
                                                    DC
                                                                                    NCP
000CD0 01
                                     1392+
                                                                                                                       01-DCB
000CD1 000001
                                                    DC
                                                                                    EOBR, EOBAD
                                     1393+
                                                          AL3(1)
                                                                                                                       01-DCB
                                     1395+*
                                                                      BSAM-BPAM INTERFACE
                                                                                                                       01-DCB
000CD4 00000001
                                     1397+
                                                    DC
                                                          A(1)
                                                                                    EOBW
                                                                                                                       01-DCB
000CD8 0000
                                     1398+
                                                          H'0'
                                                                                                                       01-DCB
                                                    DC
                                                                                    DIRCT
000CDA 0000
                                     1399+
                                                    DC
                                                          AL2(0)
                                                                          LRECL
                                                                                                                       01-DCB
000CDC 00000001
                                     1400+
                                                                                    CNTRL, NOTE, POINT
                                                                                                                       01-DCB
                                                          A(1)
                                     1401
                                                                                                                       01115001
                                     1402 DCBMODLN FOU
                                                          *-DCBMODEL
                                                                                    LENGTH OF DCBMODEL FOR MVC
                       00058
                                                                                                                       01116001
                                                                                                                       01117001
                                     1403
000CE0
                                     1404
                                                          0F'0'
                                                                                                                       01118001
000CE0 05
                                     1405 ADCBEXIT DC
                                                          X'05'
                                                                                    DCB OPEN EXIT REQUESTED
                                                                                                                       01119001
000CE1 000370
                                     1406
                                                    DC
                                                          AL3(IHIIORDX)
                                                                                    OPEN EXIT ROUTINE ADDR
                                                                                                                       01120001
                                                                                    JFCB ADDR UPDATED WHEN GETMAINED 01121001
000CE4 87000000
                                     1407
                                                    DC
                                                          X'87',AL3(0)
                                     1408
                                                                                                                       01122001
000CE8 00000000000000000
                                     1409 DWORD
                                                    DC
                                                          D'0'
                                                                                    WORK AREA FOR DSN
                                                                                                                       01123001
000CF0 00000000000000000
                                     1410 SAVAR
                                                          18F'0'
                                                                                                                       01124001
                                                    DC
000D38 00
                                     1411 EXERFLAG DC
                                                          X'00'
                                                                                                                       01125001
                                     1412
                                                                                                                       01126001
```

1413

INTERNAL ADDRS

Addr1 Addr2 Stmt Source Statement

Loc Object Code

PAGE

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```
1414 *
                                                                                                                      01128001
000D39 000000
000D3C 000009AC
                                     1415 VIORCN
                                                   DC
                                                          A(IHIIORCN)
                                                                                                                      01129001
000D40 00000A0C
                                     1416 VIOREN
                                                   DC
                                                          A IHIIOREN
                                                                                                                      01130001
                                     1417 VIORNX
                                                                                                                      01131001
000D44 000004B4
                                                   DC
                                                          A(IHIIORNX)
                                     1418
                                                                                                                      01132001
999D48
                                     1419
                                                    LTORG
                                                                                                                      01133001
000D48 E2E8E2C9D5404040
                                     1420
                                                          =CL8'SYSIN
                                                          =CL8'SYSPRINT'
000D50 E2E8E2D7D9C9D5E3
                                     1421
000D58 0001
                                     1422
                                                          =H'1'
000D5A 2000
                                                          =AL1(DCBMRRD,0)
                                     1423
000D5C 0020
                                     1424
                                                          =AL1(0, DCBMRWRT)
000D5E F0F1
                                     1425
                                                          =CL2'01'
                                                          =AL1(DCBMRRD+DCBMRPT1,DCBMRWRT+DCBMRPT2)
999D69 2424
                                     1426
000D62 005A
                                                          =X'005A
                                     1427
000D64 0050
                                     1428
                                                          =H'80'
000D66 0028
                                     1429
                                                          =H'40'
000D68 F1
                                     1430
                                                          =C'1'
                                                          =X'32
000D69 32
                                     1431
                                     1432
                                                                                                                      01134001
                                     1433 *
                                                    SEE GC28-6615 ALGOL LANGUAGE P82 FOR A DETAILED DESCRIPTION
                                                                                                                      01135001
                                                    OF THE DSTABLE FIELDS MAINTAINED FOR EACH DATASET
                                     1434 *
                                                                                                                      01136001
                                     1435 *
                                                                                                                      01137001
                                     1436
                                                    DSTABLE DSECT=YES
                                                                                                                      01138001
                                    1437+DSTABLE
999999
                       99999 99924
                                                   DSECT
                                                                                                                      01-DSTAB
                                                                                                                      01-DSTAB
                                     1438+*
                                     1439+ADCB
000000 00000000
                                                                                    -> DCB
                                                                                                                      01-DSTAB
000004 00000000
                                     1440+R
                                                          F'0'
                                                                                    CHARACTER POINTER
                                                                                                                      01-DSTAB
                                                    DC
                                                          F'0'
0000008 000000000
                                     1441+RE
                                                    DC
                                                                                                                      01-DSTAB
                                                          F'0'
999990 99999999
                                     1442+NBB
                                                   DC
                                                                                                                      01-DSTAB
000010 000000000
                                     1443+BB
                                                    DC
                                                          F'0'
                                                                                                                      01-DSTAB
                                                          H'1'
000014 0001
                                     1444+S
                                                    DC
                                                                                    RECORD POINTER
                                                                                                                      01-DSTAB
000016 0050
                                     1445+P
                                                    DC
                                                          H'80'
                                                                                    RECORD LENGTH
                                                                                                                      01-DSTAB
000018 02
                                     1446+K
                                                    DC
                                                          X'02'
                                                                                    NUMBER OF BLANK DELIM CHARS
                                                                                                                      01-DSTAB
000019 00
                                     1447+0
                                                    DC
                                                          X'00
                                                                                    NO OF RECORDS PER SECTION
                                                                                                                      01-DSTAB
                                                                                    DATASET FLAGS
999914 9999
                                     1448+DSF
                                                    DC
                                                          H'00
                                                                                                                      01-DSTAR
                                     1449+*
                                                                                                                      01-DSTAB
                                     1450+*
                                                    DATASET FLAGS - DSF
                                                                                                                      01-DSTAB
                                     1451+*
                                                                                                                      01-DSTAB
                       99989
                                     1452+DS0
                                                    EOU
                                                          X'80'
                                                                                   DATASET OPEN
                                                                                                                      01-DSTAR
                       00040
                                     1453+DS1
                                                    EQU
                                                          X'40'
                                                                                                                      01-DSTAB
                       00020
                                     1454+DS2
                                                          X'20'
                                                    EOU
                                                                                    LAST I/O OUTPUT
                                                                                                                      01-DSTAB
                       00010
                                     1455+DS3
                                                    EQU
                                                          X'10'
                                                                                                                      01-DSTAB
                                     1456+DS4
                                                          X'08'
                                                                                                                      01-DSTAB
                       00008
                                                    EQU
                       00004
                                     1457+DS5
                                                    EQU
                                                          X'04'
                                                                                                                      01-DSTAB
                       aaaaa
                                     1458+DS6
                                                    EQU
                                                          X'02'
                                                                                    OPEN FOR OUTPUT
                                                                                                                      01-DSTAB
                                     1459+DS7
                                                          X'01
                       99991
                                                                                    FND OF FTLE
                                                                                                                      01-DSTAR
                                                    EOU
                                     1460+*
                                                                                                                      01-DSTAB
                                     1461+*
                                                                                                                      01-DSTAB
                                                    DATASET FLAGS - DSF+1
                                     1462+*
                                                                                                                      01-DSTAB
                       99989
                                     1463+DS8
                                                    EOU
                                                          X'80'
                                                                                    END OF DATA
                                                                                                                      01-DSTAB
                       00040
                                     1464+DS9
                                                          X'40'
                                                    EQU
                                                                                                                      01-DSTAB
                       00020
                                     1465+DS10
                                                          X'20'
                                                                                    OPENED BY SYSACT 12
                                                    EOU
                                                                                                                      01-DSTAB
                                                          X'10'
                                                                                    INDICATE IHIERR-ROUT
                       00010
                                     1466+DS11
                                                    EQU
                                                                                                                      01-DSTAB
                       00008
                                     1467+DSEOD
                                                    EQU
                                                          X'08'
                                                                                                                      01-DSTAB
                       00004
                                     1468+DSIOERR
                                                    EQU
                                                          X'04'
                                                                                    I/O ERROR
                                                                                                                      01-DSTAB
                                                                                   DATASET OPENED
CLOSE FROM IHIERR
                       00002
                                     1469+DS14
                                                    EQU
                                                          X'02
                                                                                                                      01-DSTAB
                                     1470+DS15
                       99991
                                                    EOU
                                                          X'01
                                                                                                                      01-DSTAR
                                     1471+*
                                                                                                                      01-DSTAB
00001C 00000000
                                     1472+NOTEADR
                                                   DC
                                                          F'0'
000020 0000
                                     1473+BL
                                                          H'0'
                                                                                    LRECL+ TWO ARB
                                                                                                                      01-DSTAB
                                                    DC
000022 0000
                                     1474+
                                                    DC
                                                          H'0'
                                                                                                                      01-DSTAB
                                     1475+
                                                                                                                      01-DSTAB
                       00024
                                     1476+DSTABLEL EQU
                                                          *-DSTABLE
                                                                                    L'DSTABLE ENTRY
                                                                                                                      01-DSTAB
                                     1477+
                                     1478 *
                                                                                                                      01139001
                                     1479 *
                                                    SYMBOLIC NAMES FOR DCB
                                                                                                                      01140001
                                     1480 *
                                                                                                                      01141001
                                                    PRINT NOGEN
                                                                                                                      01142001
                                     1481
                                     1482
                                                                                                                      01143001
                                                                                                                      01144001
                                     1483
                                                    DCBD DSORG=BS, DEVD=DA
                                     1990 *
                                                                                                                      01145001
                                                                                                                      01146001
01147001
                                     1991
                                                    PRINT GEN
                                     1992
                                                    DECB
                                                                                                                      01148001
                                     1993
                                     1994
                                                                                                                      01149001
                                     1995
                                                    READ
                                                         DECB, SF, MF=L
                                                                                                                      01150001
000058 00000000
                                     1996+DECB
                                                    DC
                                                          F'0'
X'00'
                                                                                              EVENT CONTROL BLOCK
                                                                                                                      02-IHBRD
000050 00
                                                    DC
                                                                                                                      02-THBRD
                                     1997+
                                                                                              TYPE FIFID
                                                                                              TYPE FIELD
00005D 80
                                     1998+
                                                    DC
                                                          X'80'
                                                                                                                      02-IHBRD
00005E 0000
                                     1999+
                                                    DC
                                                          AL2(0)
                                                                                              LENGTH
                                                                                                                      02-IHBRD
000060 00000000
                                                                                              DCB ADDRESS
                                     2000+
                                                    DC
                                                          A(0)
                                                                                                                      02-IHBRD
000064 00000000
                                     2001+
                                                    DC
                                                          A(0)
                                                                                              AREA ADDRESS
                                                                                                                      02-IHBRD
000068 00000000
                                     2002+
                                                   DC
                                                          A(0)
                                                                                              RECORD POINTER WORD
                                                                                                                      02-THRRD
                                     2003
                                                                                                                      01151001
000070
                                     2004 JFCB
                                                          22D
                                                                                                                      01152001
                                                    DS
000120
                       00120 00070
                                     2005
                                                    ORG
                                                          JFCB
                                     2006 *
                                                                                                                      01154001
                                     2007
                                                    IEFJFCBN ,
                                                                                   MAP THE JFCB
                                                                                                                      01155001
                                     2008+*%JFCBL1 : ;
                                                                                                                      01-IEFJF
01-IEFJF
                                     2009+*
                                     2010+*/*
                                              ******************
                                                                                                                      01-IEFJF
                                     2011+*/*
                                                                                                                   */ 01-IEFJF
                                                                  JOB FILE CONTROL BLOCK
                                                                                                                   */ 01-IEFJF
                                     2012+*/*
                                                                                                                   */ 01-TFF7F
                                     2013+*/*
                                                                                                          @YA05186*/ 01-IEFJF
                                     2014+*/* OS/VS2 038 PTF
```

D-Loc Object Code Addr1 Addr2 Stmt Source Statement

X390 3.1.04 2012/08/17 13.21

```
2015+*/*
                                                                                                  */ 01-IEFJF
              2016+*/* METHOD OF ACCESS
                                                                                                  */ 01-IEFJF
                             BAL - A DSECT CARD SHOULD PRECEDE MACRO CALL. USING ON INFMJFCB GIVES ADDRESSABILITY FOR ALL SYMBOLS.
                                                                                                  */ 01-IEFJF
*/ 01-IEFJF
              2017+*/*
               2018+*
                              PL/S - DCL JFCBPTR PTR
                                                                                                  */ 01-IEFJF
              2019+*
               2020+*/*
                                                                                                  */ 01-IEFJF
              2021+*/* F.E.'S
                                                                                                  */ 01-IEFJF
                                                                                                  */ 01-IEFJF
*/ 01-IEFJF
              2022+*/*
                              MICROFICHE LISTING - IEFJFCBN
              2023+*/*
                                                                                                  */ 01-IEFJF
              2024+*/*
                         DEVELOPERS
               2025+*/*
                              BAL LISTING - SPECIFY LIST=YES ON MACRO CALL.
                                                                                                  */ 01-IEFJF
               2026+*/*
                              PL/S LISTING - SPECIFY %IHALIST='YES' BEFORE INCLUDE.
                                                                                                  */ 01-IEFJF
                                                                                                  */ 01-IEFJF
*/ 01-IEFJF
              2027+*/*
               2028+*/*
                              FOR INTEGRATION A LISTING SHOULD NOT BE REQUESTED.
                                                                                                  */ 01-IEFJF
              2029+*/*
                                                                                       @YA05186*/ 01-IEFJF
*/ 01-IEFJF
@YA05186*/ 01-IEFJF
@YA05186*/ 01-IEFJF
               2030+*/* CHANGE ACTIVITY = YA05186
               2031+*/*
              2032+*/* A - DECLARED STRUCTURE TO THE JFCAMPTR FIELD. THE
2033+*/* STRUCTURE SHOWS THE PLACEMENT OF THE SVA WITHIN
2034+*/* THE 4 CHARACTER FIELD.
              2034+*/*
                                                                                         @YA05186*/ 01-IEFJF
               2035+*/* **************
                                             2036+*%GOTO JFCBL2; /*
2037+ PUSH PRINT
                                                                                                     01-IEFJF
                                                                                                     01-IEFJF
               2038+
                              PRINT OFF
                                                                                                     01-TEETE
              2627 *
                                                                                                     01156001
000B0
               2628 JFCB_LEN EQU *-JFCB
                                                                                                     01157001
               2629 *
               2630 *
                              CALCULATE TOTAL GETMAINED AREA FOR DCBAREA WITH DECB AND JFCB
                                                                                                     01159001
               2631 *
                                                                                                      01160001
              2632 DCBAREAL EQU *-IHADCB
00120
                                                                                                     01161001
              2633 *
                                                                                                     01162001
              2634 *
                              REGISTER EQUATES
                                                                                                     01163001
               2635 *
                                                                                                     01164001
              2636
                              IEZREGS
                                                                                                     01165001
00000
              2637+R0
                              EQU
                                                                                                     01-IEZRE
99991
               2638+R1
                                                                                                     01-TF7RF
                              FOU
00002
               2639+R2
                                                                                                     01-IEZRE
                              EQU
00003
               2640+R3
                              EQU
                                                                                                     01-IEZRE
00004
               2641+R4
                              EQU
                                     4
                                                                                                     01-IEZRE
99995
              2642+R5
                              EOU
                                     5
                                                                                                     01-TF7RF
00006
              2643+R6
                              EQU
                                     6
7
                                                                                                     01-IEZRE
              2644+R7
00007
                              EOU
                                                                                                     01-IEZRE
00008
               2645+R8
                                     8
                                                                                                     01-IEZRE
                              EOU
00009
               2646+R9
                                                                                                     01-IEZRE
                              EQU
0000A
              2647+R10
                              EQU
                                     10
                                                                                                     01-IEZRE
0000B
              2648+R11
                              EQU
                                     11
                                                                                                     01-IEZRE
              2649+R12
                              EOU
aggac
                                     12
                                                                                                     01-TF7RF
0000D
               2650+R13
                              EQU
                                                                                                     01-IEZRE
                                     13
               2651+R14
                                                                                                     01-IEZRE
0000E
                              EQU
                                     14
0000F
               2652+R15
                              EQU
                                     15
                                                                                                     01-IEZRE
              2653 *
                                                                                                     01166001
              2654 FPR0
00000
                              EQU
                                     0
                                                                                                     01167001
              2655
                                                                                                     01168001
              2656
                              END
                                                                                                     01169001
```

2011				5y501		, iterer	ciicc							. Au	
Symbol Lengt	h Valu	e Id <sup>-</sup>	Type Asm	Program	Defn	Refer	ences				X390	3.1.04	2012/	08/17	13.21
, .			,	J									-	•	
=AL1(DCBMRRD+DC	BMRPT1,DC	BMRWRT+DCBM	RPT2)												
`	1 000000	50 00000001	RÁ		1426	325									
=AL1(DCBMRRD,0)															
` , ,		5A 00000001	R A		1423	217	291								
=AL1(0,DCBMRWRT															
` '		SC 00000001	R A		1424	220	313								
=C'1'		58 00000001			1430	472									
=CL2'01'		SE 00000001			1425	308									
=CL8'SYSIN '															
	8 00000D	48 00000001	СС		1420	290									
=CL8'SYSPRINT'															
	8 00000D	50 00000001	СС		1421	312									
=H'1'		58 00000001			1422	167	253	278	401	861	1030				
=H'40'		56 00000001	нн		1429	1022									
=H'80'		54 00000001			1428	983									
=X'005A'		52 00000001			1427	493									
=X'32'		59 00000001			1431	492									
ACLOSE		44 00000001			1076	1038									
ADCB					1439		275M	388	625	854	975	1037	1259		
ADCBEXIT		E0 00000001			1405		1374								
ADSTAB	1 000000		U		118	1215									
ANOTTAB	1 000000		U		119	326	335M	1056	1098	1135					
ВВ		10 FFFFFFF	FF		1443	412M	659	661M	748	759	798	811	813M	822	868
						918	926	953							
BL	2 000000	20 FFFFFFF	нн		1473	403M		414	449M	511M	588M	592M	642M	749	784M
						790M		867	915	957		1029M			
BUFF2	8 000000	58 00000001	D D		1333	1318M									
BUFF3		50 00000001			1334	1307M									
BUFF4		70 00000001			1336	1311M		1322							
CLNOTB1		DE 00000001	I		1100		1107B								
CLOSEPE1		14 00000001			1040	1033B	110/0	11000							
CLOSEPE2		F0 00000001			1027		1049B	10520							
CLOSEPE3		3E 00000001	I		1056	1042B	10490	10320							
		2C 00000001			1048	1026B									
CLOSEPE4															
CLOSEPE5		20 00000001			1044	1031B									
CLOSEPE6		00000001	I		1037	1046B									
CLOSEPE7		00000001				1045B									
CLOSE01		80 00000001			881	862B	864B								
CLOSE02		SE 00000001			876	872B									
CLOSE03		52 00000001			873	875B									
CLOSE1		28 00000001			947	882B	884B	898B	911B						
CL0SE2		30 00000001			897	888B									
CLOSE21	4 000007	FA 00000001	I		926	919B									
CL0SE22	4 000007	EE 00000001	I		920	922B									
CLOSE3	6 000008	96 00000001	I		991	985B	987B								
CLOSE4	4 000008	90 00000001	I		989	986B									
CONST1	8 000000	48 00000001	ΧХ		1331	1314	1320	1321							
CONST2	8 000000	50 00000001	хх		1332	1310									
CONST3		78 00000001			1337	1312									
CONST4		58 00000001			1335	1316									
DCBAREAL	1 000001		U		2632	183	271	386	973						
DCBBIT0	1 000000		U			1591	1599			1661	1663	1664	1666	1689	1692
						1712				1823	1847			1903	
DCBBIT1	1 000000	10	U		1506	1592		1613			1645		1663		1666
50551.1	_ 000000		Ū		2500	1694	1712	1714			1735	1736			1823
						1849	1892	1894	1906	1950	2,33	2,50			1023
DCBBIT2	1 000000	20	U		1507	1593	1601	1614	1615	1616	1635	1636	1640	1646	1661
DCDDITZ	1 000000	20	U		1307	1662	1667	1696	1717	1718	1739	1740			1776
						1824	1854	1895	1911	1953	1956	1740	1/41	1///	1//0
DCBBIT3	1 000000	10	U		1508	1594	1614	1616	1617	1635	1648	1668	1699	1717	1720
DCDDITT	1 000000	10	U		1300	1743	1744	1745	1779	1780	1824	1856			1897
						1912	1953	1957	1///	1700	1024	1030	1033	1001	1057
DCBBIT4	1 000000	28	U		1509	1602	1649	1669	1700	1722	1727	1728	1748	1749	1783
DCDDITT	1 000000	50	U		1303	1784	1786	1787	1825	1864	1913	1953	1958	1/4/	1703
DCBBIT5	1 000000	24	U		1510	1603	1650	1672	1673	1702	1722	1724		1728	1752
	_ 000000		J			1754	1755	1756	1790	1791	1792	1793		1866	1869
						1899	1915	1948	1,00	1,71	1,72	1,75	1023	1000	1003
DCBBIT6	1 000000	92	U		1511	1595	1651		1655	1672	1674	1703	1759	1760	1761
202210	_ 555666		J		->-1	1762	1796	1797	1798	1799	1826	1872		1959	
DCBBIT7	1 000000	71	U		1512	1596	1651	1653	1655	1676	1707	1764			1803
טכטטדוי/	1 000000	-	U		1312	1805	1806	1875	1901	1918	1961	1/04	1,03	1002	1002
DCBBLKSI	2 000000	BE FFFFFFE	нн		1920	446	503	509M	511	516M		577	579	588	591M
PCDDFK3I	2 000000	/- !!!!FFFE	11 11		1920	642	784	787	711	2101	3/4	3//	313	200	التور
DCBDDNAM	8 000000	28 FFFFFFE	СС		1686	198M	784 287M		300W	21 7M					
DCBDDNAM		28 FFFFFFFE 05 FFFFFFFE	CC		1532	198M 1535	20/14	250M	308M	312M					
		44 FFFFFFFE			1928	447	788								
DCBLOBA			AA					F40	ГСЕМ	F70M					
DCBLRECL DCBMACR		52 FFFFFFFE 32 FFFFFFFE	H H B B		1985 1729	499M 291M	515 313M	549 325M	565M	570M					
								32311							
DCBMACRF		2A FFFFFFFE	ВВ		1818	217M		1/02							
DCBMODEL		88 00000001	FF		1354	190	277	1402							
DCBMDDLN	1 000000		U		1402	190	277								
DCBMRPT1	1 000000		U		1754	1426									
DCBMRPT2	1 000000		U		1791	1426	1.40-								
DCBMRRD	1 000000		U		1740	1423	1426								
DCBMRWRT	1 000000		U		1775	1424	1426								
DCBOFLGS		30 FFFFFFE	B B		1688	353									
DCBOFOPN	1 000000		U		1699	353									
DCBRECBR	1 000000		U		1668	495	534	_							
DCBRECCA	1 000000		U		1673	495	524	537							
DCBRECF	1 000000		U		1664	495	524	531							
DCBRECFM		24 FFFFFFE	ВВ		1660	495M	522	524	531M		537M			_	_
DECB	4 000000	58 FFFFFFE	FF		1996	419	425	431	440	460	637	667	672	678	700
						776	801	885	892	929	938	1285M			
DSEOD	1 000000		U		1467	418	445	1260							
DSF	2 000000	1A FFFFFFF	нн		1448	169M	170	221M	226M	260	262M	306	309M	342	355M
						400M	416	418M	445M	470	487	496M		517M	532
						535	540M	545M	548M	552	562	587M	629	650M	654

IUK					Symbol	Cross	кетеге	ence							PAG	E 20
Symbol	Length	Value	Id	Type As	m Program	Defn	Refere	ences				X390	3.1.04	2012	/08/17	13.21
•	· ·															
							666M	688	692M	696	713M	717	756	758M	766	771M
							772	781	783M		865M	866M	881	883	889M	
							899	910	991M	1032	1044	1260	1262M	1274	1280	1284M
DCTN		0000171	00000001	-		200	1345M									
DSIN DSIOERR		10000172	00000001	I U		290 1468	279B 883	1245								
DSNINT			00000001			1208	1197B	1345								
DSNINTA			00000001			1200	1206B									
DSPRINT			00000001			306	280B									
DSPR2			00000001			312	307B									
DSPR2A	6 0	00001B2	00000001	I		313	310B									
DSTABLE	1 0	0000000	FFFFFFF	J		1437	166U	1476								
DSTABLEL		0000024		U		1476	1040	1213								
DS0		0800000		U		1452	262	400	866	1032						
DS1		0000040		U		1453	510	517	532	545	587	654	772			
DS11		0000010		U		1466	306	487	200	255	400	4044				
DS14		100000002		U U		1469	170	260	309	355	403	1044				
DS15 DS2		100000001 100000020		U		1470 1454	863 629	865	897	1262	1280					
DS3		00000020		U		1455	666	910	1262	1202	1200					
DS4		8000000		Ü		1456	696	713	756	766	771					
DS5		0000004		U		1457	688	692								
DS6	1 0	0000002		U		1458	169	221	226	342	416	629	650	758	783	865
							899	1029	1262							
DS7		0000001		U		1459	781	881	1284							
DS8		0800000		U		1463	889	1274								
DS9		0000040		U		1464	470	496	535	540	548	552	562	717		
DWORD			00000001			1409	195M	196M	197M	198	284M	285M	286M	287		
END00			00000001			1268	1261B									
END02			00000001			1280	1275B									
END03 END11			00000001			1284 1276	1281B 1282B									
ENNERR4 ENNOTB1			00000001 00000001			1159 1137	1144B 1157B									
ENNOTB1			00000001			1145	1157B									
ENNOTB2			00000001			1155	1130B									
ERROR1			00000001			1325	1313B	1317R								
EVDERRØ			00000001			1222	1211B	131/0								
EVD1			00000001			1203	1199B	1201B								
EXERFLAG			00000001			1411	369	393	394M	528M	584M					
EXITA			00000001			509	507B									
EXITB			00000001			514	508B									
EXITC	6 0	00003B2	00000001	I		511	518B									
EXIT0	4 0	00003D0	00000001	I		522	589B	593B								
EXIT1	4 0	00003F0	00000001	I		531	523B									
EXIT12	4 0	0000400	00000001	I		535	533B									
EXIT2	4 0	0000450	00000001	I		562	551B									
EXIT3	4 0	0000418	00000001	I		545	488B									
EXIT3A			00000001			549	547B									
EXIT4			00000001			540	525B									
EXIT5			00000001			557	553B									
EXIT6			00000001			574	555B	560B	566B							
EXIT61			00000001	_		587	583B									
EXII61A			00000001			588	5/8B									
EXIT7 EXIT8			00000001 00000001			568 591	563B 576B									
FPR0		00000440	00000001	U			1200M	1203M	1307	1308M	1310M	1311	1312	1314M	1318	1321M
				Ü		205.	1322	1205	250,	2500	1510		-5	151	1310	1521.
FSAERR	1 0	00001CC		U		121		396B	398B	1160B	1223B	1264B	1326B	1347B		
IHADCB	1 0	0000000	FFFFFFE	J		1488	189U	1573	1620	1685	1814	1829	1842	1938	1944	1971
							2632									
IHIIORCI	4 0	0000BF8	00000001	I		1304	113	1227	1305U							
IHIIORCL			00000001			844	106		1076							
IHIIORCN			00000001			1090		1097U	1415							
IHIIORCP			00000001			1011		1018U								
IHIIORDX			00000001			487	1406	12=1								
IHIIORED			00000001			1249		1372	1410							
IHIIOREN			00000001			1127		1134U								
IHIIORER IHIIOREV			00000001 00000001			1343 1183		1344U 1190U	130/							
IHIIOREV			00000001			1078	108	1050								
IHIIORNX			00000001			615	105		1417							
IHIIORNA			00000001			244	103	162	163U							
IHIIOROQ			00000001			154	103	161U	1000							
JFCB			FFFFFFE			2004	199	227	2005	2628						
JFCB_LEN		000000В0		U		2628	236	271	386	973						
JFCBIND2			FFFFFFE			2203	215	224	-	-						
JFCBTSDM			FFFFFFE			2050	210									
JFCMOD		0800000		U		2206	215	224								
JFCRESRV			FFFFFFE			2490	2515									
JFCSDS		0000020		U		2053	210									
LABEL			00000001				1315B									
LONG			00000001			1310	1306B	c =-								
NBB			FFFFFFF			1442	415M	457	660	662M			954	956		
NOTEADR			FFFFFFF			1472	456M	646	710M	768	797M	904				
NXIN1			00000001			766	630B									
NXIN2			00000001			772	767B									
NXIN3 NXIN5			00000001 00000001			776 822	825B 773B									
NXIN5			00000001			811	773B 785B									
NXING NXIN7			00000001			787	782B									
NXRET			00000001			735	718B	818B	830B							
NXUT1			00000001			654	631B	3200	2200							
NXUT2			00000001			748	655B									
NXUT3			00000001			659	751B									
NXUT4			00000001			667	760B									
NXUT41			00000001			678	669B									

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences				X390 3	3.1.04	2012,	/08/17	13.21
NXUT6	4	0000058A	00000001	I		696	689B									
NXUT7		000005B6				717	697B	757B								
NXUT8	4	000005DA	00000001	I		727	721B									
NXUT9		000005DE				728	725B									
OPEN00		0000011A				253	168B	171B								
OPEN01		00000134				270	254B	261B								
OPEN2 OPEN20		000001CE 000001D4				325 326	288B 241B									
OPEN20		000001D4				342	327B									
OPEN30		0000011 E				361	343B									
OPEN300		0000021A				353	301B	323B	367B							
OPEN301	4	0000028C	00000001	I		400	370B									
OPEN301A		0000029C				404	402B									
OPEN311		000002DE				431	422B									
OPEN350		00000288				398	395B									
OPEN355 OPEN4		00000242 00000348				369 470	354B 417B									
OPEN4 OPEN5		00000348 0000035A				474	468B	471B								
OPEN51		00000366				477	263B	.,								
OPTSW		000000C2		U		120	1198	1304								
P	2	00000016	FFFFFFF	нн		1445	475	493M	497	554M	558M	564	568	664	730	754
							815	828	983M							
Q		00000019				1447	492M	526	546	720	877					
R	4	00000004	FFFFFFF	FF		1440	474M	663M	719	729M	753M	814M	827M	869	870M	916
RANGEDSN	1	00000B18	00000001	FF		1225	917 1210									
RE		00000018				1441	476M	665M	731M	750	752	755M	816M	824	826	829M
RETCLEAR		00000000 00000000				1112	1102B	00511	73111	750	732	75511	01011	024	020	02311
RETCLOSP		00000952				1066	1058B									
RETEX		000004B2				596	512B	527B	529B	536B	538B	541B	585B			
ROQA	4	000000BE	00000001	I		224	211B									
ROQB		000000В0				220	216B									
ROQD		000000CA	00000001			227	218B	222B		OFOM	1 2004	1200	12104	12124	1214	1 2 1 0 14
RØ	1	00000000		U		2637	404M	405M 1324M	957M	958M	1208M	1209	1210M	1213M	1214	1319M
R1	1	00000001		U		2638	187	188	227M	275	276	335	336	412	413	414M
	-	0000001		Ü		2030	415	456	643M		768M	797	901M		954	956M
								1057M		1196						
R12	1	0000000C		U		2649	326	335	356	357	392	396	398	1056	1098	1135
							1159	1160	1198	1215	1219M		1223	1263	1264	1277M
							1287M		1325	1326	1346	1347				
R13	1	000000D		U		2650	164		251		356M		477M		624M	739M
							852 1219	853M		1019		1066M		1192M 1286M	1217M	
							1346M	122211	1237	123011	120311	12/01	12//	120011	1207	132311
R14	1	0000000E		U		2651	691M	712M	770M	990M	1039M	1051M	1205M	1218M	1220B	1277M
							1278B		1288B							
R15	1	0000000F		U		2652	160	250	621	690M	691B	711M	712B	769M	770B	850
							989M		1017		1039B	1050M	1051B	1096	1133	1189
									1305U							
R2	1	00000002		U		2639	326M	336M		339	341	413M		472	473M	474
							475M 662	476 681	504M 722M		574M 735M	575M 736M	580M 737M		582M 748M	659M 749M
							750	759M			811M		822M			867M
							868M		871M		886M	887	915M		918M	
							926M	932	979M		981	982M	984M		1023M	
							1027	1048	1103M	1104	1140M	1141M	1142	1143	1145M	1146M
							1147									
R3	1	00000003		U		2640	199M	200	337M		339	340M	341	420M	421	457M
							463	503M			514M	515M	516	579M	869M	871
R4	1	00000004		U		2641	873 160M	874M 161U			921M 447M	448	497M	498M	499	505
N-	_	00000004		O		2041	509	549M			557M	558	559M		565	568M
							569M	570	577	581	591	592	660M		663	664M
							665	667M	668	719M	724	727	728M	729	730M	731
							752M		754M		788M	789		813	814	815M
							816		827	828M		885M	886		1100M	
							1104 1214M		1108		1137M	1138	1147	1148	1149	1155
R5	1	00000005		U		2642		1215M 1022M		1218M 1026M	1027	1040M	1196M	1200	1203	1208
N.S	_	0000000		O		2042		1212		102011	1027	104011	115011	1200	1203	1200
R6	1	00000006		U		2643	167	195	253	278	284	401	861	984	1021M	1030
							1041M	1103	1145	1212M						
R7	1	00000007		U		2644	162M					850M		878M		
									1097U	1133M	1134U	1189M	1190U	1219M	1255M	1256U
DO.	1	0000000				2645		1344U	100	200	27.CM	277	207	210	240	262
R8	1	00000008		U		2645	188M 378	189U 421	190 433	206 452	276M 462	277 625M	297 643	319 668	349 680	363 706
							793	803	854M		901	931	949		1259M	
R9	1	00000009		U		2646	1098M		1101	1135M		1138	1140	1142	1143	
S		00000014	FFFFFFF	нн		1444	720	723M		738M	876M	877M		1106	1148	
SAVAR	4	00000CF0	00000001	FF		1410		165		252	477	623M	624	739	852M	853
				_				1191M		1217						
SAVCLO		0000095C					1019M		1066	1200						
SAVEOD VIORCI		00000BB0 00000B1C				1292 1227	1257M 1204	1258	1276	1286						
VIORCI		00000BIC				1415	690	989								
VIOREN		00000D3C				1416	711	769								
VIORNX		00000D40				1417	878									
WRITE1	4	000007DA	00000001	I		915	908B									
WRITE2	4	000007D2	00000001	I		910	900B									

1305U 1343

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21 184M 237M 248 272M 331M 387M 404M 405M 480M 619 646M 742M 848 904M 957M 958M 974M 995M 1015 1062M 1069M 1094 1113M 1131 1152M 1187 1208M 1209 1210M 1213M 1214 1218M 1253 1277M 1287M 1319M 1320M 1324M 158 182M 184 204M 206N 207 227M 238M 270M 297N 1(1) 188 248 332M 349N 363N 376M 378N 409M 317M 319N 320 335 336 347M 350 361M 364 379 388M 389M 412 413 414M 415 425M 426 431M 432 433N 434N 435N 440M 441 446M 448M 449 452M 453 456 460M 461 462N 463N 464N 480M 619 637M 638 643M 647 672M 700M 701 776M 793M 682N 706M 707 710 742M 768M 777 787M 789M 790 797 801M 802 794 803N 804N 805N 848 892M 893 901M 905 929M 930 931N 932N 933N 938M 939 947M 949N 950 953M 954 956M 964M 975M 976M 995M 1015 1056M 1057M 1063M 1069M 1094 1113M 1131 1149 1152M 1187 1196 1218M 1253 1268M 1270N 1271 1277M 1287M 413M 326M 336M 341 434 472 473M 474 475M 476 480M 504M 505M 2(2) 158 248 337 339 722M 723 735M 736M 737M 737N 738 575M 580M 581M 582M 619 659M 662 681 742M 748M 749M 750 759M 798M 804 811M 817 822M 823M 824 848 867M 868M 870 871M 875M 886M 887 915M 917M 918M 922M 926M 932 979M 980M 981 982M 984M 986M 995M 1015 1023M 1025M 1027 1048 1069M 1140M 1141M 1143 1145M 1146M 1147 1152M 1187 1218M 1253 1277M 1094 1103M 1104 1113M 1131 1142 1287M 508M 3(3) 338M 480M 158 199M 200 248 337M 339 340M 341 420M 421 457M 463 503M 505M 506M 581M 874M 916M 514M 514N 515M 516 579M 619 742M 848 869M 871 873 874N 920 921M 995M 1187 1069M 1094 1113M 1131 1152M 1218M 1253 1277M 1287M 1015 4(4) 158 160M 161U 248 419M 420 447M 448N 480M 497M 498M 499 505 509 549M 550M 554 557M 660M 667M 558 559M 564M 565 568M 569M 570 577 581 591 592 619 661 663 664M 665 728M 719M 724 727 728N 729 730M 731 742M 752M 753 754M 755 788M 789N 812M 813 668 816 886 815M 826M 827 828M 829 848 885M 995M 1015 1069M 1094 1099M 1100M 1101 1106 1108 1113M 1131 1136M 1137M 1138 1147 1148 1149 1152M 1155 1187 1214M 1215M 1216 1218M 1253 1277M 1287M 5(5) 158 1660 248 480M 619 742M 848 995M 1015 1022M 1023 1026M 1027 1040M 1069M 1094 1113M 1131 1152M 1187 1196M 1200 1203 1208 1209M 1212 1214M 1216M 1216N 1253 1277M 1287M 278 284 401 480M 619 742M 848 995M 1015 1021M 1030 6(6) 167 248 253 861 195 984 1041M 1069M 1094 1103 1113M 1131 1145 1152M 1187 1212M 1253 1277M 1287M 162M 163U 250M 480M 621M 622U 742M 848 850M 851U 878M 879B 995M 1015 1017M 248 619 1018U 1069M 1094 1096M 1097U 1113M 1131 1133M 1134U 1152M 1187 1189M 1190U 1219M 1253 1255M 1256U 1277M 1287M 1343M 1344U 8(8) 188M 189U 190 206 248 276M 277 297 378 433 452 462 480M 158 319 349 363 421 625M 668 680 706 742M 793 803 848 854M 887 901 931 949 995M 1015 1037M 1094 1113M 1131 1152M 1187 1219M 1253 1259M 1270 1277M 1287M 1069M 9(9) 480M 619 742M 848 995M 1015 1069M 1094 1098M 1099 1101 1113M 1131 1135M 1136 1138 158 248 1140 1142 1143 1152M 1187 1219M 1253 1277M 1287M 480M 742M 1069M 1094 10(A) 995M 1015 1113M 1131 1152M 1187 1219M 1253 1277M 1287M 158 248 619 848 248 480M 619 742M 848 995M 1015 1069M 1094 1113M 1131 1152M 1187 1219M 1253 158 1277M 1287M 11(B) 396N 398N 480M 619 742M 848 995M 1015 12(C) 248 326 335N 356 357N 392 1056N 1069M 1094 1098N 1113M 1131 1135N 1152M 1159 1160N 1187 1198 1215N 1219M 1222 1223N 1253 1263 1264N 1277M 1287M 1304 1325 1326N 1346 1347N 13(D) 158 164 165M 248 251 252M 356M 392M 477M 480 619 623 624M 739M 742 848 852 853M 992M 1113 1131 1152 1020M 1066M 1069 1094 1159M 1187 1191 1192M 1217M 1218 1219 995 1015 1019 1222M 1253 1257 1258M 1263M 1276M 1277 1286M 1287 1325M 1346M 640M 480M 481B 597B 14(E) 426M 427 428M 437M 441M 442 443M 454M 466M 619 638M 639 648M 691M 673M 675M 712M 778 674 684M 701M 702 703M 708M 742M 743B 770M 777M 779M 795M 807M 848 893M 894 895M 906M 935M 939M 940 941M 990M 995M 996B 1015 1039M 1051M 1069M 1070B 1205M 1218M 1220B 1253 1277M 1278B 1287M 1288B 1323B 1324B 1094 1113M 1114B 1131 1152M 1153B 1187 436M 15(F) 154B 158 160 244B 248 250 427M 428B 435M 437B 442M 443B 453M 454B 619 639M 640B 647M 648N 674M 675B 682M 683M 690M 691B 707M 708R 711M 712B 742M 769M 770B 778M 779B 794M 795B 805M 806M 807B 844B 848 850 894M 895B 905M 906N 933M 934M 935B 940M 941B 989M 990B 995M 1011B 1015 1017 1038M 1039B 1050M 1051B 1069M 1090B 1094 1096 1113M 1127B 1131 1133 1152M 1183B 1187 1189 1204M 1205B 1218M 1249B 1253 1277M 1287M

IOR Dsect Cross Reference PAGE 23

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00000024 FFFFFFFF 1437 4 DSTABLE 00000120 FFFFFFFE 1488 1 DCBD DSTABLE IHADCB

Length Id Defn Con Member

Dsect

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Members X390 3.1.04 2012/08/17 13.21 Con Source

1 SYS1.MACLIB

CHECK CLOSE DCB DCBD FREEMAIN GETMAIN IEZREGS IHBINNRA IHBRDWRS IHB01 NOTE CHECK
OPEN
2 SYSD.TOOLS.MACLIB
3 SYSD.ALGOLFRT.ASM
4 SYSD.ALGOLFRT.MACLIB
DSTABLE
5 SYS1.AMODGEN POINT RDJFCB READ RETURN SAVE WRITE

IEFJFCBN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.	1.04	2012/08/17	13.21
161		USING	Ordinary	00000001	00000000	00001000	4	000E6	237	IHIIOROQ,	, R4			
163		USING	Ordinary	00000001	000000E6	00001000	7	00C83	593	IHIIOROP,	, R7			
166		USING	Ordinary	FFFFFFF	00000000	00001000	5	00023	1345	DSTABLE, F	R5			
189		USING	Ordinary	FFFFFFE	00000000	00001000	8	000C7	1285	IHADCB, R8	3			
622		USING	Ordinary	00000001	000004B4	00001000	7	0088C	830	IHIIORNX,	, R7			
851		USING	Ordinary	00000001	000006FC	00001000	7	00668	992	IHIIORCL,	, R7			
1018		USING	Ordinary	00000001	000008A6	00001000	7	004C0	1066	IHIIORCP,	, R7			
1097		USING	Ordinary	00000001	000009AC	00001000	7	0005A	1109	IHIIORCN,	, R7			
1134		USING	Ordinary	00000001	00000A0C	00001000	7	00078	1157	IHIIOREN,	, R7			
1190		USING	Ordinary	00000001	00000A8A	00001000	7	0026A	1217	IHIIOREV,	, R7			
1256		USING	Ordinary	00000001	00000B4C	00001000	7	00068	1286	*,R7				
1305		USING	Ordinary	00000001	00000BF8	00001000	15	00080	1322	IHIIORCI,	,R15			
1344		USING	Ordinary	00000001	00000C7C	00001000	7			IHIIORER,	, R7			

The following statements were flagged -

SYSD.ALGOLFRT.ASM(IHIIOR)

163(158), 622(508), 851(691), 1018(816), 1097(884), 1134(913), 1190(962), 1256(1023), 1305(1066), 1344(1105)

10 statements flagged in this assembly, 4 was the highest severity code.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIIOR PROCSTEP: X390

Primary input: lines 1 to 1169 of SYSD.ALGOLFRT.ASM(IHIIOR)

SYSLIB library records read: 6531

SYSUT1 work file size: 175394 bytes

SYSUT2 work file size: 622416 bytes

SYSUT3 work file size: 93520 bytes

SYSLIN file records written: 69

TXA000I Return code 4, elapsed time 2.38 seconds.

## IHIISY LEVEL V2.M01

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIISY)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00158
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

000082 9101 501A

0001A

97

TM

DSF, DS7

END OF DATA BEEN REACHED ?

00092001

```
Loc Object Code
                                                                                                 X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt
                                            Source Statement
                                                                                                                        00002001
                                         3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00003001
                                         4
                                                                                                                        00004001
                                         5
                                                    STATUS - LEVEL 2.1
                                                                                                                        00005001
                                         6
                                                                                                                        00006001
                                                    FUNCTION/OPERATION
                                                                                                                        00007001
                                           *
                                         8
                                                    COMPARE ONE CHARACTER FROM AN INPUT BUFFER WITH AN
                                                                                                                        00008001
                                         9
                                                    INTERNAL STRING AND ASSIGN WHEN CORRESPONDENCE POSITION
                                                                                                                        00009001
                                       10
                                                    NUMBER IN STRING TO THIRD ACTUAL PARAMETER
                                                                                                                        00010001
                                                                                                                        00011001
                                       11
                                                    ENTRY POINT - IHIISYMB - FROM GENERATED OBJECT MODULE
                                       12
                                                                                                                        00012001
                                       13
                                                                       R1, PARMLIST
                                                                                                                        00013001
                                       14
                                                                   BALR R14,R15
                                                                                                                        00014001
                                                                   DATA PASSED BY NAME
                                       15
                                                                                                                        00015001
                                                                                                                        00016001
                                       16
                                                    INPUT - N/A
                                       17
                                                                                                                        00017001
                                       18
                                                                                                                        00018001
                                       19
                                                    OUTPUT - N/A
                                                                                                                        00019001
                                       20
                                                                                                                        00020001
                                                    EXTERNAL ROUTINES -
                                                                                                                        00021001
                                       21
                                                    IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                        00022001
                                       22
                                        23
                                                              OPEN DATASET
                                                                                                                        00023001
                                       24
                                                              CHANGE TO NEXT INPUT RECORD
                                                                                                                        00024001
                                       25
                                                                                                                        00025001
                                                    EXITS - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                        00026001
                                       26
                                                                    - INPUT REQUEST BEYOND END OF DATASET NO 5
                                        27
                                                           - ERROR
                                                                                                                        00027001
                                        28
                                                                       BRANCH TO FSA
                                                                                                                        00028001
                                                                                                                        00029001
                                        29
                                                                            R13, IHIFSA
                                        30
                                                                            FSAERR+XX*4(R13) XX ERROR NUMBER
                                                                                                                        00030001
                                       31
                                                                                                                        00031001
                                       32
                                                    TABLES/WORK AREAS - N/A
                                                                                                                        00032001
                                                                                                                        00033001
                                        33
000000
                       00000 00150
                                        34 IHIISYMB CSECT
                                                                                                                        00034001
                                       35
                                                                                                                        00035001
                                       36
                                                    GENERAL REGISTER USAGE
                                                                                                                        00036001
                                       37
                                                                                                                        00037001
                                                                                                                        00038001
                                       38
                                                                                     -> DSTABLE ENTRY
                                                    R5
                                       39
                                                    R6
                                                                                     DATASET NUMBER
                                                                                                                        00039001
                                       40
                                                                                     -> DESTINATION
                                                                                                                        00040001
                                       41
                                                    R4
                                                                                     -> STRING SYMBOL
                                                                                                                        00041001
                                       42
                                                    R9
                                                                                     -> END OF STRING
                                                                                                                        00042001
                                       43
                                                    R10
                                                                                     CHARACTER POINTER
                                                                                                                        00043001
                                                                                     INCREMENT FOR LOOP
                                       44
                                                                                                                        00044001
                                                    R8
                                                                                                                        00045001
                                       45
                                                                                     -> FSA
                                       46
                                                                                                                        00046001
                                       47
                                                    DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                        00047001
                                                                                                                        00048001
                                       48
                                       49 CI
                                                                                     IHIIORCI
                       00000
                                                                                                                        00049001
                                                    EQU
                       00004
                                       50 CL
                                                    EQU
                                                                                     IHIIORCL
                                                                                                                        00050001
                        00008
                                       51 EV
                                                    EQU
                                                                                     IHIIOREV
                                                                                                                        00051001
                       aggac
                                       52 NX
                                                    EOU
                                                           12
                                                                                     IHIIORNX
                                                                                                                        00052001
                       00010
                                       53 OP
                                                    EOU
                                                           16
                                                                                     IHIIOROP
                                                                                                                        00053001
                       00014
                                        54 00
                                                    EOU
                                                                                     IHIIOROO
                                                                                                                        00054001
                                                           20
                                        55
                                                                                                                        00055001
                                        56
                                                    SAVE
                                                           (14,12),, 'IHIISYMB LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                        00056001
000000 47F0 F026
                              00026
                                       57+
                                                                                               BRANCH AROUND ID
                                                    В
000004 21
                                        58+
                                                    DC
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                        01-SAVE
000005 C9C8C9C9F2F8D4C2
                                                           CL32'THTTSYMB LEVEL 2.1 08/17/12 13.2' TDENTTETER
                                       59+
                                                    DC
                                                                                                                        01-SAVE
                                                                                                IDENTIFIER
                                                                                                                        01-SAVE
000025 F1
                                       60+
                                                    DC
                                                           CL1'1'
000026 90EC D00C
                              0000C
                                       61+
                                                    STM
                                                           14,12,12(13)
                                                                                               SAVE REGISTERS
00002A 187F
                                                           R7, R15
                                                                                                                        00057001
                                       62
                  R:7 00000
                                       63
                                                    USING IHIISYMB, R7
                                                                                                                        00058001
                                                                                     R12 -> FSA
00002C 18CD
                                       64
                                                    LR
                                                           R12,R13
                                                                                                                        00059001
00002E 41D0 7104
                                       65
                                                                                     CHAIN SAVE AREAS
                                                                                                                        00060001
                              00104
                                                           R13. SAVEAREA
                                                    LA
000032 50C0 7108
                              00108
                                       66
                                                    ST
                                                           R12, SAVEAREA+4
                                                                                                                        00061001
000036 50D0 C008
                              00008
                                       67
                                                                                                                        00062001
                                                           R13,8(,R12)
                                       68
                                                                                                                        00063001
                                       69
                                                    EVALUATE DATASET NUMBER (EVDSN)
                                                                                                                        00064001
                                                                                                                        00065001
                                       70
00003A 58F0 C11C
                              0011C
                                                           R15, IORLST(,R12)
                                                                                                                        00066001
                                       71
                                                    L
00003E 58F0 F008
                              00008
                                       72
                                                           R15, EV(, R15)
                                                                                                                        00067001
000042 05EF
                                        73
                                                                                     CALL IHIIOREV
                                                                                                                        00068001
                                                    BALR
                                                           R14, R15
000044 5840 1004
                              99994
                                       74
                                                           R4,4(,R1)
                                                                                     R4 - STRING
                                                                                                                        00069001
                                                    т
                                       75
                                                                                     R3 -> DESTINATION
                                                                                                                        00070001
000048 5830 1008
                              00008
                                                           R3,8(,R1)
00004C 4180 0001
                              00001
                                       76
                                                                                     INCREMENT
                                                                                                                        00071001
                                                    LA
                                                           R8.1
                                       77
                                                                                                                        00072001
                                       78
                                                    TEST IF DATASET IS OPEN
                                                                                                                        00073001
                                       79
                                                                                                                        00074001
                      99999
                                                    USING DSTABLE R5
                                                                                                                        00075001
                  R:5
                                       80
000050 94DF 501B
                                                           DSF+1,255-DS10
                                                                                     SET DS10 = 0
                                                                                                                        00076001
                       0001B
                                                    NI
                                       81
000054 9500 5019
                                                                                     DATASET SECTIONED ?
                                                                                                                        00077001
                       00019
                                       82
                                                    CLI
                                                           0.0
                                                           ERROR2
000058 4770 70F0
                              000F0
                                       83
                                                    BNE
                                                                                     INCOMPATIBLE ACTION
                                                                                                                        00078001
00005C 18A6
                                        84
                                                                                     DATASET NO = 1 ?
                                                                                                                        00079001
                                                    LR
                                                           R10, R6
00005E 46A0 7066
                              00066
                                       85
                                                    BCT
                                                           R10.SYMBBB
                                                                                     NO. BRANCH
                                                                                                                        00080001
                                                                                     INCOMPATIBLE ACTION
000062 47F0 70F0
                              000F0
                                       86
                                                    В
                                                           ERROR2
                                                                                                                        00081001
                                       87
                                                                                                                        00082001
                       0001A
000066 9180 501A
                                       88 SYMBBB
                                                    ТМ
                                                           DSF DS0
                                                                                     DATASET OPEN ?
                                                                                                                        00083001
00006A 4780 708E
                              0008E
                                       89
                                                    ΒZ
                                                           SYMBDD
                                                                                     NO, BRANCH
                                                                                                                        00084001
                                       90
                                                                                     DATASET IS OPEN
                                                                                                                        00085001
00006E 9120 501A
000072 4780 707A
                       0001A
                                       91 SYMBCC
                                                    ТМ
                                                           DSF DS2
                                                                                     LAST I/O OUTPUT ?
                                                                                                                        00086001
                              0007A
                                                                                                                        00087001
                                       92
                                                           SYMBEE
                                                    ΒZ
000076 47F0 70F6
                              000F6
                                       93
                                                           ERROR3
                                                                                     INPUT BEYOND LAST OUTPUT
                                                                                                                        00088001
                                                    В
                                                                                                                        00089001
                                       94
00007A 9102 501A
                                       95 SYMBEE
                                                    ТМ
                                                           DSF,DS6
                                                                                     OPEN FOR OUTPUT OR EOD ?
                                                                                                                        00090001
                       0001A
00007E 4780 709C
                              0009C
                                       96
                                                    B7
                                                           EVSYMB
                                                                                                                        00091001
```

Active USINGs	: DSTABLE, K5	THTTSA	וא, סויוו				
Loc Object Co	ode Addr1	Addr2	Stmt Sour	e State	ement	X390 3.1.04 2012/08	/17 13.21
000086 4710 70F0 00008A 47F0 70F0		000FC 000F0	98 99 100 *	BO B	ERROR5 ERROR2	INPUT RQUEST BEYOND END OF DATA	00093001 00094001 00095001
00008E 94FD 501			101 SYMBDD	NI	DSF,255-DS6	SET DS6 = 0	00096001
000092 58F0 C110 000096 58F0 F010 00009A 05EF		0011C 00010	102 103 104	L L BALR	R15,IORLST(,R12) R15,OP(,R15) R14,R15	R15 -> IHIIOROP CALL IHIIOROP TO OPEN DATASET	00097001 00098001 00099001
00009C 4890 400	a	00000	105 * 106 EVSYMB	LH	R9,0(,R4)	LENGTH OF STRING	00100001 00101001
0000A0 0690	O	00000	107	BCTR		ELNOTH OF STRENG	00102001
0000A2 1A94 0000A4 4140 400	2	00002	108 109	AR LA	R9,R4 R4,2(,R4)	STRING-END LESS 1 -> STRING-SYMBOL	00103001 00104001
0000A8 58A0 5004	4	00004	110	L	R10,R	CHARACTER POINTER	00105001
0000AC D500 A000 0000B2 4780 70C0		00000 000C0	111 SYMBLO	OP CLC BE	0(1,R10),0(R4) TERMINBB		00106001 00107001
0000B6 8748 70A		000AC	113	BXLE	R4,R8,SYMBLOOP		00108001
0000BA 1B44 0000BC 47F0 70C	6	000C6	114 115	SR B	R4,R4 TERMINAA	ZERO INSERTED R4	00109001 00110001
000000 5040 100	4	00004	116 *	n	D4 4/ D1)		00111001
0000C0 5B40 100 0000C4 0640	4	00004	117 TERMIN 118	BCTR	R4,4(,R1) R4,0		00112001 00113001
0000C6 5040 300	0	00000	119 TERMIN 120 *	AA ST	R4,0(,R3)	NUMBER OF SYMBOL INSERTED DESTINATION	00114001 00115001
0000CA 41A0 A00		00001	121 TERMIN	LA	R10,1(,R10)	DESTINATION	00116001
0000CE 59A0 5000 0000D2 47B0 70E		00008 000E2	122 123	C BNL	R10,RE NEXTREC		00117001 00118001
0000D6 50A0 500		00004	124	ST	R10,R		00119001
0000DA 18DC			125 TERMIN 126 *	.C LR	R13,R12		00120001 00121001
0000DC 98EC D00	c	0000C	127 128+	RETUF LM	RN (14,12) 14,12,12(13)	RESTORE CALLERS REGS AND RETURN RESTORE THE REGISTERS	<b>00122001</b> 01-RETUR
0000E0 07FE	C	00000	129+	BR	14,12,12(13)	RETURN	01-RETUR
0000E2 58F0 C11	r	0011C	130 * 131 NEXTRE		R15, IORLST(,R12)		00123001 00124001
0000E6 58F0 F00		0000C	132	L	R15,NX(,R15)	R15 -> IHIIORNX	00125001
0000EA 05EF 0000EC 47F0 70D	A	000DA	133 134	BALR B	R14,R15 TERMINCC	GET NEXT RECORD	00126001 00127001
000050 1000			135 *	LD	D12 D12		00128001
0000F0 18DC 0000F2 47FC 01D	4	001D4	136 ERROR2 137	LR B	R13,R12 FSAERR+2*4(R12)	INCOMPATIBLE ACTION ON DATASET	00129001 00130001
0000F6 18DC			138 * 139 ERROR3	LR	R13,R12		00131001 00132001
0000F8 47FC 01D	8	001D8	140	В	FSAERR+3*4(R12)	INPUT BEYOND LAST OUTPUT	00133001
0000FC 18DC			141 * 142 ERROR5	LR	R13,R12		00134001 00135001
0000FE 47FC 01E	0	001E0	143	В	FSAERR+5*4(R12)	INPUT REQUEST BEYOND END OF DATA	
000102 0000			144 *				00137001
000102 0000 000104 00000000	00000000		145 SAVEAR	EA DC	18F'0'	SAVE AREA	00138001
	00000000			EA DC		SAVE AREA	00138001 00139001
000104 000000000	00000000		145 SAVEAR 146 * 147 148 *	LTOR	5	SAVE AREA	00138001 00139001 00140001 00141001
000104 000000000		00024	145 SAVEAR 146 * 147	LTORO	S BLE DSECT=YES	SAVE AREA	00138001 00139001 00140001
000104 000000000 000150 000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+*	DSTAE DSECT	BLE DSECT=YES		00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB
000104 00000000 000150 000000 000000 00000000 000004 00000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R	DSTAE DSECT	BLE DSECT=YES  F'0' F'0'	SAVE AREA  -> DCB CHARACTER POINTER	00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB 01-DSTAB
000104 000000000 000150 000000 000000 00000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB	DSTAE DSECT	BLE DSECT=YES  F'0'	-> DCB	00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB
000104 00000000 000150 000000 000000 0000000 000004 0000000 000004 0000000 000006 0000000 000006 00000000 000010 00000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB	DSTAE DSECTOR DC DC DC DC DC DC DC	BLE DSECT=YES  F'0' F'0' F'0' F'0'	-> DCB CHARACTER POINTER	00138001 00139001 00140001 00141001 00141001 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000104 00000000 000150 000000 000000 00000000 000004 0000000 000008 00000000 00000C 00000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB	DSTAE DSECTOR DC DC DC DC DC	BLE DSECT=YES  F'0' F'0' F'0' F'0'	-> DCB	00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000010 00000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K	DSTAE DSECTOR DC	F'0' F'0' F'0' F'0' F'0' F'0' K'0' X'02'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS	00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000104 000000000 000150 000000 000000 00000000 00004 0000000 000008 00000000 000000 00000000		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF	DSTAB DSECT DC DC DC DC DC DC DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH	00138001 00139001 00149001 00141001 00142001 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00		00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q	DSTAE  DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION	00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+*	DSTAR DSECT DC	F'0' F'0' F'0' F'0' F'0' Y'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS	00138001 00139001 00140001 00141001 00142001 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00080 00040	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1	LTORG  DSTAB  DSECT  DC  DC  DC  DC  DC  DC  DC  DC  DC	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  SET FLAGS - DSF X'80' X'40'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00080 00040 00020	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2	LTORG  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF X'80' X'40' X'20'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS	00138001 00139001 00149001 0014001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00040 00040 00020 00010 00008	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4	DSTARD DSECTOR DC	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN	00138001 00139001 00140001 00141001 00142001 001-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00080 00040 00020 00010	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3	LTORGE DSTARE DSECTOR DC	F'0' F'0' F'0' F'0' F'0' F'0' F'0' F'0'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN	00138001 00139001 00140001 00140001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00080 00040 00020 00010 00008 00004	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7	LTORG  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	00138001 00139001 00140001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00040 00010 00008 00004 00002	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+*	LTORGE  DSTABLE  DSTABLE  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SLE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00040 00010 00008 00004 00002	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+B 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+*	LTORGE  DSTABLE  DSTABLE  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SEE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT	00138001 00139001 00140001 00141001 00142001 001-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00040 00020 00010 00002 00001	00024	145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9	LTORGE  DSTABLE  DSTABLE  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SEE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'10' X'08' X'04' X'02' X'01' SET FLAGS - DSF+1  X'80' X'40'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA	00138001 00139001 00140001 00140001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00010 00000 00010 00000 00000 00000 00000 00000 00000 0000		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11	LTORGE  DSTAB  DSC DC	SLE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01' SET FLAGS - DSF+1  X'80' X'40' X'10' X'10' X'10' X'10' X'10' X'10' X'10'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00040 00020 00010 00008 00044 00020 00010 00080		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD	LTORGE  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SLE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  SET FLAGS - DSF  X'80' X'20' X'10' X'08' X'02' X'01'  SET FLAGS - DSF+1  X'80' X'40' X'02' X'10' X'08' X'40' X'02' X'10' X'08'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00040 00010 00008 00004 00002 00010 00008 00040 00010 00008		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+8 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD 181+DSIOER 182+DSIOER	LTORGE  DSTABLE  DSTABLE  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SEE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'88' X'02' X'00' H'00' SET FLAGS - DSF  X'880' X'40' X'20' X'10' X'08: X'04' X'20' X'10' X'88' X'44' X'20' X'10' X'88' X'44' X'20' X'10' X'88' X'44' X'02'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED	00138001 00139001 00149001 00141001 00142001 001-DSTAB 01-DSTAB
000104 000000000 000150 000000 00000000 000004 0000000 000008 00000000 000010 00000000 000014 0001 000016 0050 000018 02 000019 00	00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD 181+DSEOD	LTORGE  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SEE DSECT=YES  F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'80' X'40' X'20' X'10' X'08' X'04'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000150  000150  000000  000000  000000  000000  00000	00000 00000 00040 00010 00008 00004 00002 00010 00008 00040 00010 00008		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+P 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD 181+DSIOER 182+DS14 183+DS15 184+* 185+NOTEAD	LTORGE  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SLE DSECT=YES  F'0' F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'02' X'01'  SET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'02' X'01' F'0'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR	00138001 00139001 00140001 00141001 00142001 001-DSTAB 01-DSTAB
000150  000150  000000  000000  000000  000000  00000	00000 00000 00040 00010 00008 00004 00002 00010 00008 00040 00010 00008		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD 181+DSIOER 182+DS14 183+DS15 184+*	LTORGE  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SILE DSECT=YES  F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'40' X'22' X'01'  SET FLAGS - DSF+1  X'80' X'40' X'02' X'01'  X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'02' X'10' X'08' X'04' X'02' X'01'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 00000000 000000 00000000	00000 00000 00040 00020 00010 00008 00044 00020 00010 00008 00004 00002 00001		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD 181+DSIDER 182+DS14 183+DS15 184+* 185+NOTEAD 186+BL 187+ 188+*	LTORGE  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SLE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00'  SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'10' X'08' X'40' X'20' X'10' X'1	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR  LRECL+ TWO ARB	00138001 00139001 00149001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 00000000 000000 00000000	00000 00000 00040 00010 00008 00004 00002 00010 00008 00040 00010 00008		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 156+BB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSEOD 181+DSIOER 182+DS14 183+DS15 184+* 185+NOTEAD 186+BL 187+ 188+* 188+* 188+* 188+* 189+DSTABL 190+*	LTORGE  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SEE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'880' X'40' X'20' X'10' X'08' X'04' X'02' X'01' SET FLAGS - DSF+1  X'80' X'40' X'20' X'10' X'08' X'40' X'20' X'10' X'08' X'04' X'20' X'10' X'08' X'04' X'20' X'10' X'08' X'04' X'02' X'01' F'0' H'0'	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA  OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR	00138001 00139001 00140001 00141001 00141001 00142001 01-DSTAB
000104 000000000 000150 000000 00000000 000004 00000000 000000 00000000	00000 00000 00010 00000 00010 00000 00001 00000 00000 00001 00000 00001 00002 00001		145 SAVEAR 146 * 147 148 * 149 150+DSTABL 151+* 152+ADCB 153+R 154+RE 155+NBB 157+S 158+P 159+K 160+Q 161+DSF 162+* 163+* 164+* 165+DS0 166+DS1 167+DS2 168+DS3 169+DS4 170+DS5 171+DS6 172+DS7 173+* 174+* 175+* 176+DS8 177+DS9 178+DS10 179+DS11 180+DSE0D 181+DSIOER 182+DS14 183+DS15 184+* 185+NOTEAD 186+BL 187+ 188+* 189+DSTABL	LTORGE  DSTAB  DSTAB  DC  DC  DC  DC  DC  DC  DC  DC  DC  D	SILE DSECT=YES  F'0' F'0' F'0' F'0' F'0' H'1' H'80' X'02' X'00' H'00' SET FLAGS - DSF  X'80' X'40' X'20' X'10' X'08' X'04' X'02' X'01' SET FLAGS - DSF+1  X'80' X'04' X'02' X'01' F'0' H'0' H'0' *-DSTABLE	-> DCB CHARACTER POINTER  RECORD POINTER RECORD LENGTH NUMBER OF BLANK DELIM CHARS NO OF RECORDS PER SECTION DATASET FLAGS  DATASET OPEN LAST I/O OUTPUT  OPEN FOR OUTPUT END OF FILE  END OF DATA OPENED BY SYSACT 12 INDICATE IHIERR-ROUT I/O ERROR DATASET OPENED CLOSE FROM IHIERR  LRECL+ TWO ARB	00138001 00139001 00140001 00141001 00142001 001-DSTAB 01-DSTAB

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 193 \* 00145001 194 COPY FSAREA 00146001 195= 00001001 COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY 00002001 196= 197= 00003001 00004001 198= STATUS - LEVEL 2.1 199= 00005001 200= 00006001 201= 00007001 00008001 COMMON DATA AREA 202= 203= 00009001 204=\* FSAREA 00010001 205= 00011001 206= 99912991 00013001 207= DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL 00014001 208= MODULES DURING THE EXECUTION 00015001 209= 210= 00016001 ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY 211= 00017001 SUBROUTINES) BY R12 00018001 212= 213= 00019001 00000 214=FSAREA EOU 00020001 215= 00021001 216= SAVE AREAS 00022001 217= 00023001 00024001 000000 DS STANDARD SAVE AREA 218= 18F ALTERNATE SAVE AREA USED BY 00048 219=ASAVE EQU \*-FSAREA 00025001 000048 18F CERTAIN SUBROUTINES 00026001 220= DS 00027001 221= 222=\* MISCELLANEOUS WORK AREAS AND CONSTANTS 00028001 223= 00029001 00090 224=FCTVALST EQU \*-FSAREA TEMPORARY STORAGE FOR 00030001 000090 225= FUNCTION VALUES 00031001 00098 226=ASTLOC \*-FSAREA DISPL FOR ADDR OF STAND LOCTN 00032001 EQU A(FSAREA+FCTVALST) 000098 00000090 227= DC 00033001 228=BRRST TEMPORARY SAVE REG BRR 99990 FOU \*-FSARFA 99934991 229=HW TEMPORARY HALFWORD STORAGE 00035001 0009C EQU **BRRST** 00009C 230= 00036001 DS 000A0 231=PROLREG \*-FSAREA STORAGE FOR PBT AND LAT WHEN 00037001 EQU аааада 232= DS 2Δ A PROCEDURE IS FORMAL PARAM 00038001 233= 00039001 HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE 234= 00040001 00041001 235= 00042001 0000A8 236= DS 0000A8 00 237= DC X'00' 00043001 000A9 238=PROLPBN EQU \*-FSAREA STORAGE FOR CALLED PBN 00044001 999949 99 00045001 239= DC X'00' 000AA 240=EIGHT \*-FSAREA CONST FOR REDUCING RAS 00046001 EQU 00047001 0000AA 0008 241= DC H'8 242= 00048001 0000AC 243= DS 00049001 0F \*-FSAREA ADDR OF DSTABLE 000AC 244=ADSTAB EQU 00050001 IN THE OBJECT PROGRAM 0000AC 00051001 245= DS 246=ANOTTAB 000B0 \*-FSAREA ADDR OF NOTE TABLE 00052001 EQU 0000В0 247= Α (INSERTED BY THE OPEN ROUTINE) 00053001 DS 248= 00054001 aaar4 249=IHIFSAST EOU 00055001 PROGRAM CHECK OLD PSW 999B4 250=PGOPSW FOU \*-FSARFA 00056001 00057001 0000B4 251= 2F DS 000BC 252=FSAPICA \*-FSAREA OLD PICA ADDR 00058001 EQU 0000BC 00000000 F'0' 00059001 253= 000C0 254=SCRCS EQU \*-FSAREA SEMICOLON NUMBER 00060001 000000 255= DS 00061001 256=DTSW \*-FSAREA OPTION SWITCHES 000C2 00062001 EOU 000C2 257=0PTSW DTSW 00063001 EQU X'00' 0000C2 00 258= DUMP-80, TRACE-40, SHORT-20 00064001 \*-FSAREA 000C3 259=FSAERCOD EQU ERROR CODE FOR ERROR ROUTINE 00065001 0000C3 260= DS 00066001 00067001 261= 262= RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 263=\* 00069001 0000C4 00070001 264= 99904 265=IHIFSARS EQU 00071001 ADDR OF FIRST ENTRY IN RAS-8 000C4 266=RASSTART EQU \*-FSAREA 00072001 0000C4 00073001 267= DS 000C8 268=RASPT RAS POINTER FROM TOP 00074001 EOU \*-FSAREA 0000C8 00075001 269= 000CC 270=RASEND EQU \*-FSAREA ADDR OF LAST ENTRY IN RAS+8 00076001 aggacc 271= DS 99977991 000D0 272=RASPB RAS POINTER FROM BOTTOM 00078001 \*-FSAREA EQU 0000D0 00079001 273= DS 00080001 274= 275=\* LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES 00081001 276=\* 00082001 0000D4 277=BRLIST DS 0 F 00083001 \*-FSAREA FIRST PART CAPS 00084001 000D4 278=CAP1 EOU 0000D4 4700 0000 00000 279= NOP 00085001 000D8 280=CAP2 EQU \*-FSAREA SECOND PART CAPS 00086001 0000D8 4700 0000 00000 281= NOP 00087001 aganc 282=PROLOGP EOU \*-FSARFA PROLOGUE FORMAL PARAMETER ENTRY 00088001 283=PROLOGFP PROLOGP 00089001 000DC EQU 0000DC 4700 0000 00000 284= NOP 00090001 000E0 PROLOGUE PROGRAM USUAL ENTRY 00091001 285=PROLOG EQU \*-FSAREA 0000E0 4700 0000 NOP 00092001 00000 286= 000E4 287=RETPROG EOU \*-FSAREA DISPLACEMENT RETURN PROGRAM 00093001 0000E4 4700 0000 00000 288= NOP 0 00094001

D-Loc	Object Co	ode .	Addr1	Addr2	Stmt Source	State	ement	X390 3.1.04 20	12/08/17 13.21
999958	4700 0000		000E8	00000	289=EPILOGP 290=	EQU NOP	*-FSAREA	EPILOGUE PROGRAM, PROCEDURE	ENTRY 00095001 00096001
	4700 0000		000EC	00000	291=EPILOGB 292=	EQU NOP	*-FSAREA	EPILOGE PROGRAM, BETA-BLOCK	
	4700 0000		000F0	00000	293=EPILPR3 294=	EQU NOP	*-FSAREA	EPILOGUE PROGRAM ENTRY 3	00099001 00100001
			000F4		295=CSWE1	EQU	*-FSAREA	FIRST PART CSWES	00101001
	4700 0000		000F8	00000	296= 297=CSWE2	NOP EQU	0 *-FSAREA	SECOND PART CSWES	00102001 00103001
	4700 0000		000FC	00000	298= 299=LOADPP	NOP EQU	0 *-FSAREA	LOAD PRECOMPILED PROC ROUTIN	
	4700 0000		00100	00000	300= 301=TRACE	NOP EQU	0 *-FSAREA		00106001 00107001
	D200 0000 4700 0000		00000	00000 00000	302= 303=	MVC NOP	0(0),0 0		00108001 00109001
00010A	4700 0000		0010E	00000	304= 305=TERMNTE	NOP EQU	0 *-FSAREA	NORMAL TERMINATION EXIT	00110001 00111001
00010E	4700 0000	)		00000	306=	NOP	0	NONPAC TENTINATION EXIT	00112001
000112	0700		00112		307=BCR 308=	EQU BCR	*-FSAREA 0,0	VARIABLE CONDITIONAL BRANCH	00113001 00114001
000111	4700 0000		00114	00000	309=GETMSTO 310=	EQU NOP	*-FSAREA 0		00115001 00116001
	.,,,,,		00440	00000	311=*		-		00117001
000118	4700 0000		00118	00000	312=VALUCALL 313=	NOP	*-FSAREA 0		00118001 00119001
999110	4700 0000		0011C	00000	314=IORLST 315=	EQU NOP	*-FSAREA 0		00120001 00121001
			00466		316=*		VIACCI	DTCD1	00122001
			001CC		317=FSAERR 318=*	EQU	X'1CC'	DISPL FOR ERROR LIST	00123001 00124001
					319=* 320=*	DISPL	LACEMENTS FOR	CERTAIN ERROR EXITS IN FSA	00125001 00126001
			0020C		321=OUTOFB	EQU	FSAERR+4*16		00127001
			00218		322=NUMBIND	EQU EQU	FSAERR+4*19		00128001
			00208 0026C		323=ARRAYBD 324=ERROR40	EQU	FSAERR+4*15 FSAERR+4*40		00129001 00130001
			00224		325=0ERR22	EQU	FSAERR+4*22		00131001
			00210		326=ENDLESL	EQU	FSAERR+4*17		00132001
			00220		327=0ERR21	EQU	FSAERR+4*21		00133001
					328=*				00134001
					329 *				00147001
					330 *	REGIS	STER EQUATES		00148001
					331 * 332	TEZDI			00149001
			00000		333+R0	IEZRE EQU	0		<b>00150001</b> 01-IEZRE
			00001		334+R1	EQU	1		01-IEZRE
			00002		335+R2	EQU	2		01-IEZRE
			00003		336+R3	EQU	3		01-IEZRE
			00004		337+R4	EQU	4		01-IEZRE
			00005		338+R5	EQU	5		01-IEZRE
			00006		339+R6	EQU	6		01-IEZRE
			00007		340+R7	EQU	7		01-IEZRE
			80000		341+R8	EQU	8		01-IEZRE
			00009		342+R9	EQU	9		01-IEZRE
			0000A		343+R10	EQU	10		01-IEZRE
			0000B		344+R11	EQU	11 12		01-IEZRE
			0000C		345+R12 346+R13	EQU EQU	13		01-IEZRE 01-IEZRE
			0000E		347+R14	EQU	14		01-IEZRE
			0000E		348+R15	EQU	15		01-IEZRE
					349 *	-	-		00151001
					350	END			00152001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	rences	5				X390	3.1.6	94 20	012/08	3/17	13.21
BRRST	1	0000009C		U		228	229											
DSF	2	0000001A	FFFFFFF	нн		161	81M	88	91	95	97	101M						
DSTABLE	1	00000000	FFFFFFF	: ]		150	80U	189										
DS0	1	00000080		U		165	88											
DS10	1	00000020		U		178	81											
DS2	1	00000020		U		167	91											
DS6	1	00000002		U		171	95	101										
DS7	1	00000001		U		172	97											
DTSW	1	000000C2		U		256	257											
ERROR2	2	000000F0	00000001	I		136	83B	86B	99B									
ERROR3	2	000000F6	00000001	I		139	93B											
ERROR5	2	000000FC	00000001	I		142	98B											
EV	1	8000000		U		51	72											
EVSYMB	4	0000009C	00000001	I		106	96B											
FCTVALST	1	00000090		U		224	227											
FSAERR	1	000001CC		U		317	137B	140B	143B	321	322	323	324	325	326	327		
FSAREA	1	00000000	FFFFFFF	U		214	219	224	226	227	228	231	238	240	244	246	250	252
							254	256	259	266	268	270	272	278	280	282	285	287
							289	291	293	295	297	299	301	305	307	309	312	314
IHIISYMB	1	00000000	00000001	L J		34	63U											
IORLST	1	0000011C		U		314	71	102	131									
NEXTREC	4	000000E2	00000001	I		131	123B											
NX	1	0000000C		U		52	132											
OP	1	00000010		U		53	103											
PROLOGP	1	00000DC		U		282	283											
Q	1	00000019	FFFFFFF	XX		160	82											
R	4	00000004	FFFFFFF	FF		153	110	124M										
RE	4	00000008	FFFFFFF	FF		154	122											
R1	1	00000001		U		334	74	75	117									
R10	1	A000000A		U		343	84M	85M	110M	111	121M	122	124					
R12	1	0000000C		U		345	64M	66	67	71	102	125	131	136	137	139	140	142
							143											
R13		000000D		U		346	64			125M	136M	139M	142M					
R14		000000E		U		347		104M										
R15		0000000F		U		348	62		72M	73B	102M	103M	104B	131M	132M	133B		
R3		00000003		U		336	75M											
R4		00000004		U		337		106	108	109M	111	113M	114M	117M	118M	119		
R5		00000005		U		338	80U											
R6		00000006		U		339	84											
R7		00000007		U		340		63U										
R8		8000000		U		341	76M											
R9	1			U		342		107M	108M									
SAVEAREA		00000104				145	65	66M										
SYMBBB		00000066				88	85B											
SYMBDD		0000008E				101	89B											
SYMBEE		0000007A				95	92B											
SYMBLOOP		000000AC				111												
TERMINAA		000000C6				119	115B											
TERMINBB		000000C0				117	112B											
TERMINCC	2	00000DA	נטטטטטטט	I		125	134B											

 $\label{eq:Register} \textit{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ 

X390 3.1.04 2012/08/17 13.21

61 128M 74 75 117 128M 1(1) 2(2) 61 128M 75M 119 128M 74M 106 108 109M 111 113M 114M 117M 118M 119 128M 80U 128M 3(3) 4(4) 61 61 5(5) 61 61 84 128M 61 62M 63U 128M 61 76M 113 128M 61 106M 107M 108M 113 128M 61 84M 85M 110M 111 121M 122 124 128M 6(6) 7(7) 8(8) 9(9) 10(A) 61 128M 61 64M 11(B) 12(C) 13(D) 14(E) 15(F)

ISY Dsect Cross Reference PAGE 8

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Dsect Length Id Defn Con Member 00000024 FFFFFFF 150 00000120 FFFFFFE 192

DSTABLE FAS 4 DSTABLE PRIMARY INPUT

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

ISY USING Map PAGE 10

Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

63 USING Ordinary Ordinary FFFFFFFF 00000000 00001000 7 00108 134 IHIISYMB,R7

80 USING Ordinary FFFFFFFFF 00000000 00001000 5 0001B 124 DSTABLE,R5

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIISY PROCSTEP: X390

Primary input: lines 1 to 152 of SYSD.ALGOLFRT.ASM(IHIISY)

SYSLIB library records read: 362
SYSUT1 work file size: 32008 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 12160 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.23 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHIISYMB 00014C 4

## THILAT LEVEL V2.M01

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                          File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHILAT)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00162
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

0000B4 6A01 F110

00110

97

AD

FPR0, PO2M1-16(R1)

00092001

```
Loc Object Code
                        Addr1 Addr2 Stmt
                                                                                                     X390 3.1.04 2012/08/17 13.21
                                              Source Statement
                                                                                                                             00002001
                                          3
                                                       COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                             00003001
                                          4
                                                                                                                             00004001
00005001
                                          5
                                                       STATUS - LEVEL 2.1
                                                                                                                             00006001
                                          6
                                                       FUNCTION/OPERATION-
                                                                                                                             00007001
                                            *
                                          8
                                                       1. REDUCE THE CASE TO THE 1ST OCTANT BY USING
                                                                                                                             00008001
                                                       ATAN(-X) = -ATAN(X), ATAN(1/X) = PI/2-ATAN(X)

2. REDUCE FURTHER TO THE CASE /X/ LESS THAN TAN(PI/2) BY ATAN(X)=PI/6+ATAN((X*SQRT3-1)/(X+SQRT3)
                                          9
                                                                                                                             00009001
                                         10
                                                                                                                             00010001
                                                                                                                             00011001
                                         11
                                                       3. FOR THE BASIC RANGE (X LESS THAN TAN(PI/12)),
                                         12
                                                                                                                             00012001
                                         13
                                                          USE A FRACTIONAL APPROXIMATION
                                                                                                                             00013001
                                         14
                                                                                                                             00014001
                                                       FNTRY POTNT -
                                         15
                                                                                                                             00015001
                                                       IHILAT - ATAN FUNCTION, LONG
                                                                                                                             00016001
                                         16
                                                                LA R1, PARMLIST
                                                                                                                             00017001
                                         17
                                                                BALR R14,R15
                                         18
                                                                                                                             00018001
                                         19
                                                                DATA PASSED BY NAME
                                                                                                                             00019001
                                                       THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                         20
                                                                                                                             00020001
                                                                                                                             00021001
                                         21
                                                                                                                             00022001
                                         22
                                                       INPUT - N/A
                                         23
                                                                                                                             00023001
                                         24
                                                       OUTPUT - N/A
                                                                                                                             00024001
                                                                                                                             00025001
00026001
                                         25
                                                       EXTERNAL ROUTINES - N/A
                                         26
                                                                                                                             00027001
                                         27
                                         28
                                                       EXIT - NORMAL -
                                                                                                                             00028001
                                                       RETURN VIA R14, RESULT IN FPR0
                                                                                                                             00029001
                                         29
                                         30
                                                                                                                             00030001
                                         31
                                                       EXIT - ERROR - N/A
                                                                                                                             00031001
                                         32
                                                                                                                             00032001
                                                       TABLES/WORKAREAS - N/A
                                                                                                                             00033001
                                         33
                                                                                                                             00034001
000000
                        00000 00158
                                         35 IHILATAN CSECT
                                                                                                                             00035001
                                         36
                                                                                                                             00036001
                                                       ENTRY THILAT
                                         37
                                                                                                                             00037001
                                                                                                                             00038001
                                         38
                        00000
                                         39 FPR0
                                                       EQU
                                                             0
                                                                                        RESULT REGISTER
                                                                                                                             00039001
                                         40 FPR2
                                                                                                                             00040001
                         00002
                                                       EQU
                                                                                        SCRATCH REGISTERS
                        99994
                                         41 FPR4
                                                       FOU
                                                             4
                                                                                                                             99941991
                        00006
                                         42 FPR6
                                                       EQU
                                                             6
                                                                                                                             00042001
                                         43
                                                                                                                             00043001
                                         44 IHILAT
                                                             (14,12), 'IHILATAN LEVEL 2.1 &SYSDATE &SYSTIME'
                                                       SAVE
                                                                                                                             00044001
000000 47F0 F026
                                                                                                   BRANCH AROUND ID
                               00026
                                         45+IHILAT
                                                       В
                                                                                                                             01-SAVE
000004 21
                                         46+
                                                       DC
                                                                                                   LENGTH OF IDENTIFIER
                                                                                                                             01-SAVE
000005 C9C8C9D3C1E3C1D5
                                         47+
                                                       DC
                                                             CL32'IHILATAN LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                             01-SAVE
                                                             CL1'1
                                                                                                                             01-SAVE
000025 F1
                                         48+
                                                       DC
                                                                                                    TDENTTETER
000026 90EC D00C
                                                             14,12,12(13)
                               0000C
                                         49+
                                                       STM
                                                                                                   SAVE REGISTERS
                                                                                                                             01-SAVE
                                                                                                                             00045001
                                         50
                        00000
                                         51
                                                       USING IHILATAN, R15
                                                                                                                             00046001
00002A 5810 1000
                               99999
                                         52
                                                             R1,0(,R1)
                                                                                                                             00047001
                                                       LD
                                                                                        OBTAIN ARGUMENT
                                                                                                                             00048001
00002E 6800 1000
                               00000
                                         53
                                                             FPR0.0(.R1)
000032 7000 F0C8
                                                                                                                             00049001
                                         54
                                                             FPRØ.SIGN
                                                                                        SAVE ARG FOR SIGN CONTROL
                               000C8
                                                       STE
                                                                                        SET SIGN POSITIVE
000036 3000
                                         55
                                                       LPER
                                                             FPRØ, FPRØ
                                                                                                                             00050001
                                                                                                                             00051001
000038 1B11
                                         56
                                                       SR
                                                             R1, R1
                                                                                        R1 FOR DISTINGUISHING CASES
00003A 7900 F140
                               00140
                                         57
                                                       CE
                                                             FPR0,ONE
                                                                                                                             00052001
00003E 4740 F04E
000042 6820 F140
                               0004E
                                         58
                                                       BL
                                                             SKIP1
                                                                                                                             00053001
                                                             FPR2.ONE
                               99149
                                         59
                                                       I D
                                                                                        IF X > 1, TAKE INVERSE
                                                                                                                             00054001
000046 2D20
                                                             FPR2, FPR0
                                                                                                                             00055001
                                         60
                                                       DDR
000048 2802
                                         61
                                                       LDR
                                                             FPR0, FPR2
                                                                                                                             00056001
00004A 4110 0010
                               00010
                                                                                        INCR R1 BY 16
                                                                                                                             00057001
                                                             R1,16
00004E 7900 F150
                               00150
                                         63 SKIP1
                                                       CE
                                                             FPR0.TAN15
                                                                                                                             00058001
000052 47D0 F070
                                                             SKIP2
                               00070
                                         64
                                                       BNH
                                                                                                                             00059001
                                         65
                                                             FPR2, FPR0
                                                                                                                             00060001
000056 2820
                                                       LDR
                                                                                        IF X > TAN(PI/12).
000058 6C00 F0D0
                               000D0
                                         66
                                                       MD
                                                             FPR0, RT3M1
                                                                                       REDUCE X TO (X*SQRT3-1)/(X+SQRT3)
                                                                                                                             00061001
00005C 6B00 F148
                                         67
                                                       SD
                                                             FPR0,HALF
                                                                                                                             00062001
                               00148
000060 6B00 F148
                               00148
                                         68
                                                       SD
                                                             FPRØ, HALF
                                                                                        COMPUTE X*SQRT3-1 AS
                                                                                                                             00063001
000064 2A02
                                         69
                                                       ADR
                                                             FPRØ, FPR2
                                                                                        X*(SQRT3-1)-0.5-0.5+X
                                                                                                                             00064001
00065001
000066 6A20 F0D8
                               000D8
                                                             FPR2,RT3
                                                                                        TO GAIN ACCURACY
                                         70
                                                       AD
00006A 2D02
                                                       DDR
                                                             FPRØ, FPR2
                                                                                                                             00066001
                                         71
00006C 4110 1008
                               00008
                                         72
                                                       LA
                                                             R1,8(,R1)
                                                                                        INCR R1 BY 8
                                                                                                                             00067001
000070 2860
                                         73
                                            SKIP2
                                                       LDR
                                                             FPR6, FPR0
                                                                                        COMPUTE ATAN OF REDUCED
                                                                                                                             00068001
000072 2C00
                                         74
                                                       MDR
                                                             FPR0, FPR0
                                                                                        ARGUMENT BY
                                                                                                                             00069001
                                                                                                                             00070001
000074 2820
                                         75
                                                                                        ATAN(X) = X(1+F*XSQ)
                                                       LDR
                                                             FPR2.FPR0
000076 6A20 F118
                                                                                                                             00071001
                               00118
                                                             FPR2.BETA4
                                         76
                                                       AD
00007A 6840 F110
                                         77
                                                       LD
                                                             FPR4, ALPHA4
                                                                                        F = A1/(B1+XSQ+A2/(B2+XSQ+A3)
                                                                                                                             00072001
                               00110
00007E 2D42
                                         78
                                                       DDR
                                                             FPR4, FPR2
                                                                                              /(B3+XSQ+A4/(B4+XSQ))..)
                                                                                                                             00073001
000080 2A40
                                         79
                                                       ADR
                                                             FPR4, FPR0
                                                                                                                             00074001
                               99198
                                                                                                                             00075001
000082 6A40 F108
                                         80
                                                       ΔD
                                                             FPR4. BFTA3
000086 6820 F100
                                                             FPR2, ALPHA3
                                                                                                                             00076001
                               00100
                                         81
                                                       LD
00008A 2D24
                                                             FPR2, FPR4
                                                                                                                             00077001
                                         82
                                                       DDR
                                                             FPR2, FPR0
00008C 2A20
                                         83
                                                       ADR
                                                                                                                             00078001
00008E 6A20 F0F8
                               000F8
                                         84
                                                             FPR2, BETA2
                                                                                                                             00079001
                                                       AD
000092 6840 F0F0
                               000F0
                                         85
                                                       LD
                                                             FPR4, ALPHA2
                                                                                                                             00080001
                                                             FPR4. FPR2
000096 2D42
                                         86
                                                       DDR
                                                                                                                             00081001
000098 2A40
                                                             FPR4, FPR0
                                                                                                                             00082001
                                         87
                                                       ADR
00009A 6A40 F0E8
                               000E8
                                         88
                                                       AD
                                                             FPR4, BETA1
                                                                                                                             00083001
00009E 6820 F0E0
                               000E0
                                         89
                                                       LD
                                                             FPR2, ALPHA1
                                                                                                                             00084001
0000A2 2D24
                                         90
                                                       DDR
                                                             FPR2, FPR4
                                                                                                                             00085001
0000A4 2C02
0000A6 2C06
                                         91
                                                       MDR
                                                             FPR0, FPR2
                                                                                                                             00086001
                                         92
                                                             FPR0, FPR6
                                                                                                                             00087001
                                                       MDR
0000A8 2A06
                                         93
                                                       ADR
                                                             FPR0, FPR6
                                                                                                                             00088001
0000AA 5910 F154
                               00154
                                                             R1, KF16
                                                                                        DEPENDING ON THE CASE EITHER ADD 00089001
                                         94
0000AE 4740 F0B8
                               000B8
                                         95
                                                             SKIP3
                                                                                        0 OR PI/6 OR SUBTRACT FROM PI/3
                                                                                                                             00090001
                                                       BL
                                                             FPRØ. FPRØ
0000B2 3300
                                         96
                                                       LCFR
                                                                                        OR PI/2. DO LATTER IN 2 STEPS
                                                                                                                             00091001
```

00009

0000A

0000B

0000C

0000D

0000E

agage

137+R9

138+R10

139+R11

140+R12

141+R13

142+R14

143+R15

144

145

EQU 9

EQU 10

EQU 11

EQU

EQU 13

EQU

EQU

END

12

14

15

01-IEZRE

01-IEZRE

01-IEZRE

01-IEZRE

01-IEZRE 01-IEZRE 01-IEZRE

00123001

00124001

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 0000B8 6A01 F130 00130 98 SKIP3 AD FPR0, ZERO(R1) 00093001 0000BC 9180 F0C8 000C8 99 ТМ SIGN, X'80' SIGN NEGATIVE ? 00094001 00095001 00096001 0000C0 4780 F0C6 0000C4 3300 000C6 100 ΒZ SKIP4 YES, ANSWER IS NEGATIVE FPRØ, FPRØ **LCER** 101 RETURN 00097001 0000C6 07FE 102 SKIP4 BR R14 103 00098001 000008 00000000 104 SIGN DC F'0' 00099001 0000CC 00000000 0D'0' 00100001 0000D0 105 DC 00101001 0000D0 40BB67AE8584CAA8 106 RT3M1 X'40BB67AE8584CAA8' SQRT(3)-1 DC 0000D8 411BB67AE8584CAB X'411BB67AE8584CAB' 00102001 107 RT3 DC SQRT(3) 0000E0 C0D5F788DF6CB457 108 ALPHA1 X'C0D5F788DF6CB457' -0.8358083291502266 00103001 0000E8 414D42F041242098 109 BETA1 DC X'414D42F041242098' 4.828842405755528 00104001 0000F0 C1DD6E91F2AD24DF 110 AI PHA2 DC X'C1DD6E91F2AD24DF' -13.839494655565710 00105001 00106001 0000F8 4168C2DCB9C0437F 111 BETA2 DC X'4168C2DCB9C0437F' 6.547573781576119 000100 C1138256FCDD5CB6 112 ALPHA3 DC X'C1138256FCDD5CB6' -1.219321239235610 00107001 000108 41224D09A3EFF7AC X'41224D09A3EFF7AC' 2.143808021908152 00108001 113 BETA3 DC 000110 C0145A9C5C07FB43 114 ΔΙ ΡΗΔ4 DC X'C0145A9C5C07FB43' -0.07950761076788829 00109001 000118 4114451896975D03 X'4114451896975D03' 00110001 115 BETA4 DC 1.266869152304765 000120 40921FB54442D184 00111001 DC X'40921FB54442D184' 90 DEGREES MINUS ONE 116 PO2M1 000128 408C152382D73658 DC X'408C152382D73658' 60 DEGREES MINUS HALF 00112001 117 000130 00000000000000000 118 ZERO 00113001 DC 000138 40860A91C16B9B2D 119 DC X'40860A91C16B9B2D' **30 DEGREES** 00114001 X'41100000000000000' X'40800000000000000' 00115001 00116001 000140 41100000000000000 120 ONE DC 000148 4080000000000000 DC 121 HALF 000150 40449851 122 TAN15 X'40449851' 00117001 DC 000154 00000010 123 KF16 00118001 124 00119001 125 \* REGISTER EQUATES 00120001 126 \* 00121001 127 **IEZREGS** 00122001 00000 128+R0 EOU 01-IEZRE 00001 129+R1 EQU 01-IEZRE 00002 130+R2 EQU 2 01-IEZRE 00003 131+R3 EQU 3 4 01-IEZRE 99994 132+R4 EOU 01-TF7RF 5 00005 133+R5 01-IEZRE EQU 00006 134+R6 EQU 6 01-IEZRE 00007 135+R7 EQU 01-IEZRE 00008 136+R8 EQU 8 01-TF7RF

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences					X390	3.1.0	4 20	12/08	/17 1	3.21
ALPHA1	8	000000E0	00000001	1 X X		108	89											
ALPHA2	8	000000F0	00000001	1 X X		110	85											
ALPHA3	8	00000100	00000001	1 X X		112	81											
ALPHA4	8	00000110	00000001	1 X X		114	77											
BETA1	8	00000E8	00000001	1 X X		109	88											
BETA2	8	000000F8	00000001	1 X X		111	84											
BETA3	8	00000108	00000001	1 X X		113	80											
BETA4	8	00000118	00000001	1 X X		115	76											
FPR0	1	00000000		U		39	53M	54	55M	57	60	61M	63	65	66M	67M	68M	69M
							71M	73	74M	75	79	83	87	91M	92M	93M	96M	97M
							98M	101M										
FPR2	1	00000002		U		40	59M	60M	61	65M	69	70M	71	75M	76M	78	81M	82M
							83M	84M	86	89M	90M	91						
FPR4	1	00000004		U		41	77M	78M	79M	80M	82	85M	86M	87M	88M	90		
FPR6	1	00000006		U		42	73M	92	93									
HALF	8	00000148	00000001	1 X X		121	67	68										
IHILAT	4	00000000	00000001	1 I		45	37											
IHILATAN	1	00000000	00000001	1 J		35	51U											
KF16	4	00000154	00000001	1 F F		123	94											
ONE	8	00000140	00000001	1 X X		120	57	59										
PO2M1	8	00000120	00000001	1 X X		116	97											
RT3	8	000000D8	00000001	1 X X		107	70											
RT3M1	8	000000D0	00000001	1 X X		106	66											
R1	1	00000001		U		129	52M	53	56M	62M	72M	94	97	98				
R14	1	000000E		U		142	102B											
R15	1	0000000F		U		143	510											
SIGN	4	000000C8	00000001	1 F F		104	54M	99										
SKIP1	4	0000004E	00000001	1 I		63	58B											
SKIP2	2	00000070	00000001	1 I		73	64B											
SKIP3	4	000000B8	00000001	1 I		98	95B											
SKIP4	2	000000C6	00000001	1 I		102	100B											
TAN15		00000150				122	63											
ZERO	8	00000130	00000001	1 D D		118	98											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

0(0) 49
1(1) 49 52M 53 56M 62M 72M 94 97N 98N
2(2) 49
3(3) 49
4(4) 49
5(5) 49
6(6) 49
7(7) 49
8(8) 49
9(9) 49
10(A) 49
11(B) 49
12(C) 49
13(D) 49
14(E) 49 102B
15(F) 45B 49 51U

Con Source

1 SYS1.MACLIB

IEZREGS SAVE

Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

USING Ordinary 00000001 00000000 00001000 15 00154 100 IHILATAN,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHILAT PROCSTEP: X390

Primary input: lines 1 to 124 of SYSD.ALGOLFRT.ASM(IHILAT)

SYSLIB library records read: 116 SYSUT1 work file size: 14513 bytes SYSUT2 work file size: 9634 bytes SYSUT3 work file size: 9920 bytes SYSLIN file records written: 9

TXA000I Return code 0, elapsed time 0.13 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHILEX LEVEL V2.M01

```
X390 3.1.04 2012/08/17 13.21
                                                                                  (c) Copyright 1995-2010 Tachyon Software LLC
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                          File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHILEX)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
```

SYS1.AMODGEN

JES2.J0B09284.S00166

SYS12230.T132141.RA000.T1BLD.OBJECT

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSLIN

SYSUT1 SYSUT2

SYSUT3

SYSPRINT

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                        Addr1 Addr2 Stmt Source Statement
                                                                                                                            00002001
                                          3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                            00003001
                                          4
                                                                                                                            00004001
                                          5
                                                      STATUS - LEVEL 2.1
                                                                                                                            00005001
                                          6
                                                                                                                            00006001
                                                                                                                            00007001
                                                      FUNCTION/OPERATION
                                          8
                                            *
                                                      Y = X*LOG2(E) = 4A-B-C/16-D
                                                                                                                            00008001
                                          9
                                                      WHERE A, B, AND C ARE INTEGERS
                                                                                                                            00009001
                                                      B BETWEEN 0 AND 3
                                         10
                                                                                                                            00010001
                                                      C BETWEEN 0 AND 15
                                                                                                                            00011001
                                         11
                                         12
                                                      D IS A FRACTION BETWEEN 0 AND 1/16
                                                                                                                            00012001
                                         13
                                                       THEN
                                                                                                                            00013001
                                         14
                                                      E^{**X} = 2^{**Y} = (16^{**A})(2^{**-B})N2^{**-C/16})(2^{**-D})
                                                                                                                            00014001
                                         15
                                                                                                                            00015001
                                                      ENTRY POINT
                                                                                                                            00016001
                                         16
                                                      IHILEX - EXP FUNCTION, LONG
                                         17
                                                                                                                            00017001
                                         18
                                                                    R1, PARMLIST
                                                                                                                            00018001
                                         19
                                                                BALR R14, R15
                                                                                                                            00019001
                                         20
                                                      DATA PASSED BY NAME
                                                                                                                            00020001
                                                                                                                            00021001
                                         21
                                                      THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                         22
                                                                                                                            00022001
                                         23
                                                      INPUT - N/A
                                                                                                                            00023001
                                         24
                                                                                                                            00024001
                                         25
                                                      OUTPUT - N/A
                                                                                                                            00025001
                                                                                                                            00026001
                                         26
                                                      EXTERNAL ROUTINES - N/A
                                         27
                                                                                                                            00027001
                                         28
                                                                                                                            00028001
                                                                                                                            00029001
                                         29
                                                      EXIT - NORMAL -
                                         30
                                                      RETURN VIA R14, RESULT IN FPR0
                                                                                                                            00030001
                                         31
                                                                                                                            00031001
                                         32
                                                                                                                            00032001
                                                      IF ARGUMENT GREATER THAN 174673 GOTO ERROR ROUTINE VIA
                                                                                                                            00033001
                                         33
                                                      B FSAERR+24*4(R13)
                                                                                                                            00034001
                                         35 *
                                                                                                                            00035001
                                         36 *
                                                      TABLES/WORKAREAS - N/A
                                                                                                                            00036001
                                         37
                                                                                                                            00037001
000000
                                         38 IHILEXPT CSECT
                                                                                                                            00038001
                        00000 001DC
                                                                                                                            00039001
                                                      ENTRY IHILEX
                                         40
                                                                                                                            00040001
                                         41 *
                                                                                                                            00041001
                                         42 FPR0
                        00000
                                                      EOU
                                                                                       RESULT REGISTER
                                                                                                                            00042001
                        00002
                                         43 FPR2
                                                      EQU
                                                                                       SCRATCH REGISTER
                                                                                                                            00043001
                                         44
                                                                                                                            00044001
                                         45 IHILEX
                                                             (14,12),, 'IHILEXPT LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                            00045001
000000 47F0 F026
                               00026
                                         46+IHILEX
                                                                                                  BRANCH AROUND ID
000004 21
000005 C9C8C9D3C5E7D7E3
                                                            ALI(33)

LENGTH OF IDENTIFIER
CL32'IHILEXPT LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                         47+
                                                      DC
                                                                                                                           01-SAVE
                                         48+
                                                      DC
                                                                                                                            01-SAVE
000025 F1
                                                            CL1'1
                                                                                                  IDENTIFIER
                                                                                                                            01-SAVE
                                         49+
                                                      DC
000026 90EC D00C
                               0000C
                                         50+
                                                      STM
                                                            14,12,12(13)
                                                                                                  SAVE REGISTERS
                                         51 *
                                                                                                                            00046001
                  R:F 00000
                                         52
                                                      USING IHILEXPT, R15
                                                                                                                            00047001
00002A 5810 1000
                               00000
                                                            R1,0(,R1)
FPR0,0(,R1)
                                                                                       OBTAIN ARGUMENT
                                         53
                                                                                                                            00048001
00002E 6800 1000
                               00000
                                         54
                                                      LD
                                                                                                                            00049001
000032 7900 F1D4
                               001D4
                                         55
                                                             FPR0, MAX
                                                                                       MAX = 63*L0G16 = 174.67309
                                                                                                                            00050001
                                                      CE
000036 4720 F0FC
                               000FC
                                         56
                                                      ВН
                                                             ERROR
                                                                                       ARG > MAX, ERROR
                                                                                                                            00051001
00003A 7900 F1D8
                               001D8
                                         57
                                                             FPR0,MIN
                                                                                       MIN = -65 * LOG16 = -180.21867
                                                                                                                            00052001
                                                      CE
00003E 47D0 F0F6
                               000F6
                                         58
                                                      RNH
                                                             SMALL
                                                                                       ARG < MIN, GIVE ANS=0
                                                                                                                            00053001
                                                                                       Y = X*LOG2(E) BY ACCURATE DIVIDE
SAVE SIGN OF Y
                                                            FPR0,LOGE2
000042 6D00 F110
                               99119
                                         59
                                                      DD
                                                                                                                           00054001
                                                             FPRØ, SIGN
000046 7000 F108
                               00108
                                         60
                                                      STE
                                                                                                                            00055001
00004A 3820
                                         61
                                                      LER
                                                             FPR2, FPR0
                                                                                       DECOMPOSE Y = (-4A'-B'-C'/16)-D'
                                                                                                                            00056001
00004C 7E20 F1D0
                               001D0
                                                             FPR2, SCALER
                                                                                       BY FORCING CHARACTISTIC OF X'45'
                                         62
                                                      ΑU
                                                                                                                            00057001
000050 7020 F10C
                               0010C
                                         63
                                                      STE
                                                             FPR2, FIELDS
                                                                                        -4A'-B'-C'/16 IN FIELDS,
                                                                                                                            00058001
                                                                                       UNNORMALIZED
000054 2B22
                                         64
                                                      SDR
                                                             FPR2, FPR2
                                                                                                                            00059001
                                                                                       NORMALIZE THIS AND SUBTRACT IT
                                                                                                                            00060001
000056 7A20 F10C
                               0010C
                                         65
                                                             FPR2.FIELDS
                                                      AE
                                                                                       FROM Y TO OBTAIN -D' IN FPR0
00005A 2B02
                                         66
                                                      SDR
                                                             FPRØ, FPR2
                                                                                                                            00061001
00005C 5820 F10C
                               0010C
                                         67
                                                             R2, FIELDS
                                                                                                                            00062001
000060 9180 F108
                        00108
                                         68
                                                      ТМ
                                                             SIGN, X'80
                                                                                       Y NEGATIVE ?
                                                                                                                            00063001
000064 4710 F072
                               00072
                                         69
                                                      во
                                                             READY
                                                                                       YES, BRANCH
Y NON-NEGATIVE.
                                                                                                                            00064001
                                                                                                                            00065001
                                         70
                                                                                       -D = /D'/-1/16
-4A-B-C/16 = -(-4A'-B'-(C'+1)/16)
000068 6B00 F118
                               00118
                                         71
                                                      SD
                                                             FPR0, ONO16
                                                                                                                            00066001
00006C 4120 2001
                               00001
                                         72
                                                      LA
                                                                                                                           00067001
                                                             R2,1(,R2)
000070 1322
                                                      LCR
                                                                                       NOW IN ANY CASE, B, C,
                                                                                                                            00068001
                                         73
                                                             R2, R2
000072 1B33
                                         74 READY
                                                      SR
                                                             R3,R3
                                                                                       AND D ARE POSITIVE
                                                                                                                            00069001
000074 8C20 0004
                               00004
                                                                                                                            00070001
                                         75
                                                      SRDL
                                                            R2.4
                                                                                       C IN HIGH R3
000078 8830 0019
                               00019
                                         76
                                                                                                                            00071001
                                                      SRL
                                                             R3.25
00007C 8C20 0002
                               00002
                                         77
                                                      SRDL
                                                                                       B IN HIGH R3, C IN LOW R3
                                                                                                                            00072001
                                                            R2.2
000080 8920 0018
                                         78
                               00018
                                                      SLL
                                                             R2,24
                                                                                                                            00073001
000084 1302
                                         79
                                                      LCR
                                                             R0,R2
                                                                                       A (IN SCALE B7) IN R0,
                                                                                                                            00074001
                                                                                                                            00075001
000086 1B22
                                         80
                                                      SR
                                                             R2.R2
                                                                                       CHAR MODIFIER
                                                                                       B IN R2, 8*C IN R3
COMPUTE 2**-D BY USE OF
000088 8D20 0002
                               00002
                                                      SLDL
                                                                                                                            00076001
                                                            R2,2
                                         81
                                                            FPR2,FPR0
                                                                                                                            00077001
00008C 2820
                                         82
                                                      LDR
00008E 7C00 F124
                                                                                       CHEBYSHEV INTERPOLATION
                               00124
                                         83
                                                      ME
                                                             FPR0,C6
                                                                                                                            00078001
000092 6A00 F128
                                                                                       POLYNOMIAL OF DEGREE 6
                                                                                                                            00079001
                               00128
                                         84
                                                      AD
                                                             FPR0,C5
000096 2C02
                                         85
                                                      MDR
                                                             FPRØ, FPR2
                                                                                                                            00080001
                               00130
000098 6A00 F130
                                         86
                                                      AD
                                                             FPR0.C4
                                                                                                                            00081001
                                                            FPR0, FPR2
00009C 2C02
                                         87
                                                      MDR
                                                                                                                            00082001
00009E 6A00 F138
                               00138
                                         88
                                                      AD
                                                             FPR0,C3
                                                                                                                            00083001
0000A2 2C02
                                         89
                                                      MDR
                                                             FPR0, FPR2
                                                                                                                            00084001
0000A4 6A00 F140
                               00140
                                         90
                                                      AD
                                                             FPR0,C2
                                                                                                                            00085001
0000A8 2C02
                                         91
                                                      MDR
                                                             FPR0 FPR2
                                                                                                                            00086001
0000AA 6A00 F148
                                                             FPR0,C1
                               00148
                                         92
                                                                                                                            00087001
                                                      AD
0000AE 2C02
                                         93
                                                      MDR
                                                             FPR0, FPR2
                                                                                                                            00088001
0000B0 6A00 F150
                               00150
                                         94
                                                      AD
                                                             FPR0, C0A
                                                                                       ADD C0 = 1. IN 2 STEPS
                                                                                                                            00089001
                                                                                       TO PROTECT LAST DIGIT MULTIPLY 2**(-C/16)
0000B4 6A00 F150
                                         95
                                                      AD
                                                             FPR0,C0A
                                                                                                                            00090001
                               00150
0000B8 1233
                                         96
                                                      I TR
                                                             R3.R3
                                                                                                                            00091001
                                                                                       IN DOING SO, AVOID
0000BA 4780 F0D2
                               000D2
                                         97
                                                      ΒZ
                                                             SKIP2
                                                                                                                            00092001
```

Acci	ve oblido. Inizza ija	13					
Loc	Object Code Addr1	Addr2	Stmt Source	State	ement	X390 3.1.04 2012/08	3/17 13.21
000005	7000 5120	00120	0.0	CE	EDDG ONE	MILL TIPL TOATTON DV 1	00002001
	7900 F120 4740 F0CE	00120	98 99	CE	FPRO, ONE	MULTIPLICATION BY 1	00093001
	6803 F150	000CE 00150	100	BL LD	SKIP1 FPR0,MCONST-8(R3)		00094001 00095001
	47F0 F0D2	00130 000D2	101	В	SKIP2		00095001
			102 *				00097001
0000CE	6C03 F150	00150	103 SKIP1	MD	FPR0,MCONST-8(R3)		00098001
0000D2	1222		104 SKIP2	LTR	R2,R2	MULTIPLY 2**(-B)	00099001
	4780 F0DE	000DE	105	BZ	SKIP3	BY HALVING B TIMES	00100001
0000D8			106 SKIP3A	HDR	FPR0, FPR0		00101001
	4620 F0D8	000D8	107	BCT	R2,SKIP3A		00102001
	6000 F108	00108	108 SKIP3	STD	FPR0,SIGN	ADD A TO CHARACTERISTIC	00103001
	5A00 F108	00108 00108	109 110	A ST	RO, SIGN		00104001
0000EA	5000 F108	00108	111	SDR	R0,SIGN FPR0,FPR0	NORMALIZE ANSWER JUST IN CASE	00105001 00106001
	6A00 F108	00108	112	AD	FPR0,SIGN	NORPHEIZE ANSWER JOST IN CASE	00100001
000020	0.100 . 200	00100	113 *				00108001
			114 EXIT	RETUR	RN (14,12)	RETURN	00109001
0000F0			115+EXIT	DS	<b>ОН</b>		01-RETUR
	98EC D00C	0000C	116+	LM	14,12,12(13)	RESTORE THE REGISTERS	01-RETUR
0000F4	07FE		117+	BR	14	RETURN	01-RETUR
000056	2222		118 *	con	5000 5000	TE V TO MERV LARGE MEGATIVE	00110001
0000F6		000F0	119 SMALL	SDR	FPR0,FPR0	IF X IS VERY LARGE NEGATIVE, GIVE 0 AS ANSWER	00111001
810000	47F0 F0F0	00010	120 121 *	В	EXIT	GIVE 0 AS ANSWER	00112001 00113001
agagec	58DD 0004	00004	122 ERROR	L	R13,4(R13)	RESTORE FSA ADDR	00113001
	47FD 022C	0022C	123	В	FSAERR+24*4(R13)	PARAM GREATER 174.673	00115001
000100	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	00220	124 *	_	. 5/12/11/27	77.001 ONE/11 EN 27.17075	00116001
	001CC		125 FSAERR	EQU	X'1CC'		00117001
			126 *				00118001
	00000000						
000108	0000000000000000		127 SIGN	DC	D'0'		00119001
000110	00100		128 FIELDS	EQU	SIGN+4	LOS 2 (DE) TRUMSATER	00120001
	40B17217F7D1CF79 40100000000000000		129 LOGE2	DC	X'40B17217F7D1CF79'	LOG 2 (BE) TRUNCATED	00121001
	41100000		130 ONO16 131 ONE	DC DC	X'40100000000000000' X'41100000'		00122001 00123001
	3D9E0F1E		132 C6	DC	X'3D9E0F1E'	.1507368551403575E-3	00123001
	3E575D42BB7276D4		133 C5	DC	X'3E575D42BB7276D4'	.1333073417706260E-2	00125001
	3F276553A5F9BC94		134 C4	DC	X'3F276553A5F9BC94'	.9618117095313700E-2	00126001
	3FE35846A61AEE7A		135 C3	DC	X'3FE35846A61AEE7A'	.5550410840231345E-1	00127001
000140	403D7F7BFF0289DE		136 C2	DC	X'403D7F7BFF0289DE'	.2402265069563678	00128001
	40B17217F7D1CC79		137 C1	DC	X'40B17217F7D1CC79'	.6931471805599346	00129001
	4080000000000000		138 C0A	DC	X'40800000000000000'	.5 C0/2	00130001
	40F5257D152486CC		139 MCONST	DC	X'40F5257D152486CC'	2**(-1/16)	00131001
	40EAC0C6E7DD2439		140	DC	X'40EAC0C6E7DD2439'	2**(-2/16)	00132001
	40E0CCDEEC2A94E1		141 142	DC DC	X'40E0CCDEEC2A94E1'	2**(-3/16) 2**(-4/16)	00133001
	40D744FCCAD69D6B 40CE248C151F8481		143	DC	X'40D744FCCAD69D6B' X'40CE248C151F8481'	2**(-4/16)	00134001 00135001
	40C5672A115506DB		144	DC	X'40C5672A115506DB'	2**(-6/16)	00135001
	40BD08A39F580C37		145	DC	X'40BD08A39F580C37'	2**(-7/16)	00137001
	40B504F333F9DE65		146	DC	X'40B504F333F9DE65'	2**(-8/16)	00138001
000198	40AD583EEA42A14B		147	DC	X'40AD583EEA42A14B'	2**(-9/16)	00139001
0001A0	40A5FED6A9B15139		148	DC	X'40A5FED6A9B15139'	2**(-10/16)	00140001
	409EF5326091A112		149	DC	X'409EF5326091A112'	2**(-11/16)	00141001
	409837F0518DB8A9		150	DC	X'409837F0518DB8A9'	2**(-12/16)	00142001
	4091C3D373AB11C3		151	DC	X'4091C3D373AB11C3'	2**(-13/16)	00143001
	408B95C1E3EA8BD7		152	DC	X'408B95C1E3EA8BD7'	2**(-14/16)	00144001
	4085AAC367CC487B 45000000		153 154 SCALER	DC DC	X'4085AAC367CC487B' X'45000000'	2**(-15/16)	00145001 00146001
	42AEAC4E		155 MAX	DC	X'42AEAC4E'	174.6731	00147001
	C2B437DF		156 MIN	DC	X'C2B437DF'	-180.2187	00148001
			157 *				00149001
			158 *	REGIS	STER EQUATES		00150001
			159 *	_			00151001
			160	IEZRE			00152001
	00000		161+R0	EQU	0		01-IEZRE
	00001		162+R1	EQU	1		01-IEZRE
	00002 00003		163+R2 164+R3	EQU EQU	2		01-IEZRE 01-IEZRE
	00004		165+R4	EQU	4		01-IEZRE
	00005		166+R5	EQU	5		01-IEZRE
	00006		167+R6	EQU	6		01-IEZRE
	00007		168+R7	EQU	7		01-IEZRE
	00008		169+R8	EQU	8		01-IEZRE
	00009		170+R9	EQU	9		01-IEZRE
	0000A 0000B		171+R10	EQU	10		01-IEZRE
	0000C		172+R11 173+R12	EQU EQU	11 12		01-IEZRE 01-IEZRE
	0000D		174+R13	EQU	13		01-IEZRE
	0000E		175+R14	EQU	14		01-IEZRE
	0000F		176+R15	EQU	15		01-IEZRE
			177 *				00153001
			178	END			00154001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	rences	5				X390	3.1.0	4 20	12/08	3/17	13.21
C0A	8	00000150	0000000	1 X X		138	94	95										
C1		00000148				137	92											
C2	8	00000140	0000000	1 X X		136	90											
C3	8	00000138	0000000	1 X X		135	88											
C4	8	00000130	0000000	1 X X		134	86											
C5	8	00000128	0000000	1 X X		133	84											
C6	4	00000124	0000000	1 X X		132	83											
ERROR	4	000000FC	0000000	1 I		122	56B											
EXIT	2	000000F0	0000000	1 H H		115	120B											
FIELDS	8	0000010C	0000000	1 U		128	63M	65	67									
FPR0	1	00000000		U		42	54M	55	57	59M	60	61	66M	71M	82	83M	84M	85M
							86M	87M	88M	89M	90M	91M	92M	93M	94M	95M	98	100M
							103M	106M	108	111M	112M	119M						
FPR2		00000002		U		43	61M	62M	63	64M	65M	66	82M	85	87	89	91	93
FSAERR		000001CC		U		125	123B											
IHILEX		00000000				46	40											
IHILEXPT	1	00000000	0000000			38	52U											
LOGE 2		00000110				129	59											
MAX		000001D4				155	55											
MCONST		00000158				139	100	103										
MIN		000001D8				156	57											
ONE		00000120				131	98											
ONO16		00000118				130	71											
READY		00000072	0000000			74	69B											
RØ		00000000		U		161		109M	110									
R1		00000001		U		162	53M											
R13		000000D		U		174	122M	123										
R15		0000000F		U		176	52U											
R2	1	00000002		U		163	67M	72M	73M		77M	78M	79	80M	81M	104M	107M	
R3	1	00000003		U		164	74M	76M	96M	100	103							
SCALER		000001D0				154	62											
SIGN	8	00000108	0000000	1 D D		127	60M	68	108M	109	110M	112	128					
SKIP1		000000CE				103	99B											
SKIP2		000000D2				104	97B	101B										
SKIP3		00000DE				108	105B											
SKIP3A		00000D8				106	107B											
SMALL	2	000000F6	0000000	1 I		119	58B											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

```
Deneral Purpose Register Cross Refi

Los (M=modified, B=branch, U=USING, D=DROP, N=index)

79M 109M 110 116M

50 53M 54 116M

50 67M 72M 73M 75M 77M 78M 79 80M 81M 104M 107M 116M

50 74M 75M 76M 77M 81M 96M 100N 103N 116M

50 116M
   1(1)
   2(2)
   3(3)
4(4)
5(5)
6(6)
7(7)
8(8)
9(9)
10(A)
                           50 116M

50 116M

50 116M

50 116 122M 122N 123N

50 116M 117B

46B 50 52U 116M
11(B)
12(C)
13(D)
14(E)
15(F)
```

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

USING Ordinary 00000001 00000000 00001000 15 001D8 120 IHILEXPT,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHILEX PROCSTEP: X390

Primary input: lines 1 to 154 of SYSD.ALGOLFRT.ASM(IHILEX)

SYSLIB library records read: 161
SYSUT1 work file size: 17974 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 12320 bytes
SYSLIN file records written: 11

TXA000I Return code 0, elapsed time 0.17 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHILEXPT 0001DC 4

## IHILLO LEVEL V2.M01

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHILLO)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00170
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

0000BE 4120 2100

00100

97

LA

R2,256(,R2)

ADD 4\*(BASE CHARAC=64) TO Q+B

00092001

```
Loc Object Code
                        Addr1 Addr2 Stmt Source Statement
                                                                                                     X390 3.1.04 2012/08/17 13.21
                                                                                                                             00002001
                                          3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                             00003001
                                          4
                                                                                                                             00004001
                                          5
                                                      STATUS - LEVEL 2.1
                                                                                                                             00005001
                                          6
                                                                                                                             00006001
                                                                                                                             00007001
                                                       FUNCTION/OPERATION -
                                            *
                                                      WRITE X = (16**P)*(2**-Q)*M
Q BETWEEN 0 AND 3
                                          8
                                                                                                                             00008001
                                          9
                                                                                                                             00009001
                                         10
                                                      AND M BETWEEN 1/2 AND 1
                                                                                                                             00010001
                                                                                                                             00011001
                                                      DEFINE A=1, B=0
                                         11
                                                       IF M IS > SQRT2/2, OTHERWISE A=1/2, B=1
                                         12
                                                                                                                             00012001
                                         13
                                                      WRITE Z = (M-A)/(M+A), THEN
                                                                                                                             00013001
                                         14
                                                      LOG(X) = (4P-Q-B)*LOG(2) + LOG((1+Z)/(1-Z))
                                                                                                                             00014001
                                         15
                                                                                                                             00015001
                                                      ENTRY POINT
                                                                                                                             00016001
                                         16
                                                      IHILLO - LOG FUNCTION, LONG
                                         17
                                                                                                                             00017001
                                         18
                                                                    R1, PARMLIST
                                                                                                                             00018001
                                                                BALR R14, R15
                                         19
                                                                                                                             00019001
                                                                DATA PASSED BY NAME
                                         20
                                                                                                                             00020001
                                                      THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                             00021001
                                         21
                                                                                                                             00022001
                                         22
                                         23
                                                      INPUT - N/A
                                                                                                                             00023001
                                         24
                                                                                                                             00024001
                                         25
                                                      OUTPUT - N/A
                                                                                                                             00025001
                                                                                                                             00026001
                                         26
                                                      EXTERNAL ROUTINES - N/A
                                                                                                                             00027001
                                         27
                                         28
                                                                                                                             00028001
                                                      EXIT - NORMAL - RETURN VIA R14, RESULT IN FPRO
                                                                                                                             00029001
                                         29
                                         30
                                                                                                                             00030001
                                         31
                                                      FXTT - FRROR
                                                                                                                             00031001
                                                      IF ARGUMENT ZERO OR NEGATIVE GOTO ERROR ROUTINE VIA
                                         32
                                                                                                                             00032001
                                                          FSAERR+25*4(R13)
                                                                                                                             00033001
                                         33
                                         34
                                                                                                                             00034001
                                         35 *
                                                      TABLES/WORKAREAS - N/A
                                                                                                                             00035001
                                                                                                                             00036001
                                         36
999999
                        00000 00154
                                         37 THTLLOGM CSECT
                                                                                                                             00037001
                                                                                                                             00038001
                                         38
                                         39
                                                      ENTRY IHILLO
                                                                                                                             00039001
                                         40 *
                                                                                                                             00040001
                        99999
                                         41 FPR0
                                                      FOU
                                                                                        RESULT REGISTER
                                                                                                                             99941991
                        00002
                                         42 FPR2
                                                      EQU
                                                                                        SCRATCH REGISTER
                                                                                                                             00042001
                                         43
                                                                                                                             00043001
                                         44 IHILLO
                                                             (14,12), 'IHILLOGM LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                             00044001
                                                      SAVE
000000 47F0 F026
                                                                                                                             01-SAVE
                               00026
                                         45+IHILLO
                                                      В
                                                                                                  BRANCH AROUND ID
000004 21
                                         46+
                                                                                                   LENGTH OF IDENTIFIER
                                                                                                                             01-SAVE
                                                      DC
000005 C9C8C9D3D3D6C7D4
                                         47+
                                                      DC
                                                             CL32'IHILLOGM LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                             01-SAVE
                                                             CL1'1
000025 F1
                                         48+
                                                      DC
                                                                                                   TDENTTETER
                                                                                                                             01-SAVE
000026 90EC D00C
                                                             14,12,12(13)
                               0000C
                                         49+
                                                      STM
                                                                                                   SAVE REGISTERS
                                                                                                                             01-SAVE
                                                                                                                             00045001
                                         50
                   R:F
                       00000
                                         51
                                                      USING IHILLOGM, R15
                                                                                                                             00046001
00002A 5810 1000
                               99999
                                         52
                                                             R1,0(,R1)
                                                                                        OPTAIN ARGUMENT IN RO.R1
                                                                                                                             00047001
00002E 9801 1000
                               00000
                                         53
                                                      LM
                                                             R0,R1,0(R1)
                                                                                                                             00048001
000032 1220
                                                                                                                             00049001
                                         54
                                                      LTR
                                                             R2.R0
000034 47D0 F0D6
                               000D6
                                         55
                                                      BNP
                                                             ERROR
                                                                                        0 OR NEGATIVE, ERROR
                                                                                                                             00050001
000038 8C20 0018
                               00018
                                         56
                                                      SRDL
                                                             R2,24
                                                                                        CHAR IN LOW R2
                                                                                                                             00051001
00003C 8920 0002
                               00002
                                         57
                                                                                        FIRST DIGIT IN HIGH R3
                                                                                                                             00052001
                                                      SLL
                                                             R2,2
000040 4020 F0EA
                               000EA
                                         58
                                                      STH
                                                             R2, IPART+2
                                                                                        FLOAT 4*CHAR AND SAVE IT
                                                                                                                             00053001
000044 1B22
                                         59
                                                      SR
                                                             R2.R2
                                                                                                                             00054001
000046 8D20 0004
                               00004
                                                                                        FIRST DIGIT IN R2
                                                                                                                             00055001
                                         60
                                                      SLDL
                                                             R2,4
00004A 4322 F0F0
                               000F0
                                         61
                                                             R2, TABLE (R2)
                                                                                        NO OF LEADING ZEROS (=Q) IN R2
                                                                                                                             00056001
                                                      IC
00004E 8D00 2000
                                                      SLDL
                                                                                                                             00057001
                               00000
                                         62
                                                             R0,0(R2)
000052 9001 F0E0
                               000E0
                                         63
                                                      STM
                                                             R0, R1, BUFF
                                                                                                                             00058001
                                                                                        M = FRACTION*2**O IN CELL BUFF
000056 9240 F0E0
                        000E0
                                         64
                                                      MVI
                                                             BUFF, X'40
                                                                                                                             00059001
                               00008
                                                                                                                             00060001
00005A 4110 0008
                                         65
                                                      LA
                                                             R1.8
00005E 6800 F0E0
                               000E0
                                                      LD
                                                             FPR0, BUFF
                                                                                        PICK UP M IN FPR0
                                                                                                                             00061001
                                         66
                                                                                        M > SQRT2/2, R1=8 ?
000062 7900 F150
                                         67
                                                             FPRØ, LIMIT
                                                                                                                             00062001
                               00150
                                                      CE
000066 4720 F070
                               00070
                                         68
                                                      ВН
                                                             READY
                                                                                        YES, BRANCH
                                                                                                                             00063001
                                                                                        M < SQRT2/2, R1=0,
CRANK R2 BY 1, Q+B IN R2
00006A 1B11
                                         69
                                                      SR
                                                             R1,R1
                                                                                                                             00064001
00006C 4120 2001
                               00001
                                                      LA
                                                                                                                             00065001
                                         70
                                                             R2.1(,R2)
                                                                                        Z = (M-A)/(M+A), A = 1 OR 1/2
SUBTRACT A IN 2 STEPS TO PROTECT
000070 2820
                                         71 READY
                                                      LDR
                                                             FPR2, FPR0
                                                                                                                             00066001
000072 6B00 F100
                               00100
                                         72
                                                      SD
                                                             FPRØ HALF
                                                                                                                             00067001
000076 6B01 F0F8
                                         73
                                                      SD
                                                             FPR0, ZERO(R1)
                                                                                        THE LAST DIGIT
                                                                                                                             00068001
                               000F8
00007A 6A21 F100
                               00100
                                         74
                                                      ΔD
                                                             FPR2, HALF (R1)
                                                                                        M+A HAS ONLY 53BITS. NOT SERIOUS
                                                                                                                            00069001
                                         75
                                                                                                                             00070001
00007E 2D02
                                                      DDR
                                                             FPRØ, FPR2
000080 6000 F0E0
                               000E0
                                                             FPRØ, BUFF
                                         76
                                                                                                                             00071001
                                                      STD
000084 2C00
                                         77
                                                      MDR
                                                             FPRØ, FPRØ
                                                                                        COMPUTE LOG((1+Z)/(1-Z))
                                                                                                                             00072001
000086 2820
                                                      LDR
                                                             FPR2, FPR0
                                                                                        BY CHEBYSHEV INTERPOLATION
                                                                                                                             00073001
                                         78
000088 6C20 F110
                               00110
                                         79
                                                      MD
                                                             FPR2,C7
                                                                                        POLYNOMIAL (IN ZSQ) OF DEGREE 7
                                                                                                                             00074001
                                                                                                                             00075001
00008C 6A20 F118
                               00118
                                         80
                                                      ΔD
                                                             FPR2.C6
000090 2C20
                                                             FPR2, FPR0
                                                                                                                             00076001
                                         81
                                                      MDR
                                                                                                                             00077001
000092 6A20 F120
                               00120
                                                             FPR2,C5
                                         82
                                                      AD
000096 2C20
                                         83
                                                      MDR
                                                             FPR2.FPR0
                                                                                                                             00078001
000098 6A20 F128
                               00128
                                                             FPR2,C4
                                                                                                                             00079001
                                         84
                                                      AD
00009C 2C20
                                         85
                                                      MDR
                                                             FPR2.FPR0
                                                                                                                             00080001
00009E 6A20 F130
                               00130
                                         86
                                                      AD
                                                             FPR2.C3
                                                                                                                             00081001
0000A2 2C20
                                         87
                                                      MDR
                                                             FPR2.FPR0
                                                                                                                             00082001
0000A4 6A20 F138
                               00138
                                         88
                                                      AD
                                                             FPR2,C2
                                                                                                                             00083001
0000A8 2C20
                                         89
                                                      MDR
                                                             FPR2, FPR0
                                                                                                                             00084001
0000AA 6A20 F140
                               00140
                                         90
                                                      AD
                                                             FPR2,C1
                                                                                                                             00085001
                                                                                      \begin{array}{lll} F &=& ZSQ*(C1+ZSQ*(C2+\ldots+ZSQ*C7)\ldots) \\ & LOG((1+Z)/(1-Z)) &=& Z*(2+F) \end{array} 
0000AE 2C20
0000B0 6800 F0E0
                                         91
                                                      MDR
                                                             FPR2.FPR0
                                                                                                                            00086001
                               000E0
                                         92
                                                             FPRØ, BUFF
                                                                                                                             00087001
                                                      LD
0000B4 2C20
                                         93
                                                      MDR
                                                             FPR2, FPR0
                                                                                                           = Z+Z+Z*F
                                                                                                                             00088001
0000B6 2A20
                                                             FPR2, FPR0
                                                                                        TO GAIN ACCURACY
                                                                                                                             00089001
                                         94
                                                      ADR
0000B8 2A20
                                         95
                                                      ADR
                                                             FPR2, FPR0
                                                                                                                             00090001
0000BA 6800 F0E8
                               999F8
                                         96
                                                      LD
                                                             FPRØ. TPART
                                                                                        4*CHARACTERISTIC IN FPR0
                                                                                                                             00091001
```

Loc	Object Code	Addr1 Addr	2 Stmt	Source	State	ment		X390 3.1.04 2012/08	/17 13.21
aaaac2	4020 F0EA	000E	A 98		STH	R2, IPART+2	FLOAT TH	IS AND SUB FROM FPR0	00093001
	7B00 F0E8	000E			SE	FPRØ, IPART	TO OBTAIN		00094001
	6C00 F148	00148			MD	FPR0,LOGE2		LOG(2) BASE E	00095001
0000CE		002.	101		ADR	FPR0, FPR2		TO LOG((1+Z)/(1-Z))	00096001
			102	*				· // // //	00097001
			103		RETURI	N (14,12)	RETURN		00098001
0000D0	98EC D00C	0000	104+		LM	14,12,12(13)		RESTORE THE REGISTERS	01-RETUR
0000D4	07FE		105+		BR	14		RETURN	01-RETUR
			106	*					00099001
0000D6	47FD 0230	0023		ERROR	В	FSAERR+25*4(R13)	PARAMETER	R ¬> ZERO	00100001
			108						00101001
	(	001CC		FSAERR	EQU	X'1CC'			00102001
00000	00000000000		110	•					00103001
	00000000000000000000000000000000000000	0	111	DITE	DC	D'0'			00104001
	46000000000000000			IPART	DC	X'46000000000000000'			00104001
OOOOEO	4000000000000000	U	113		DC	X 460000000000000			00105001
0000F0	030302020101010	1		TABLE	DC	X'0303020201010101'	* THESE 4		00100001
	000000000000000000000000000000000000000		115		DC	X'000000000000000000'	CONSTANTS	5	00108001
	4080000000000000		116		DC	X'4080000000000000'	MUST BE		00109001
000108	4110000000000000	0	117		DC	X'411000000000000000'	V TOGETHER		00110001
			118	*					00111001
000110	4025E9B17CA9B97	3	119	C7	DC	X'4025E9B17CA9B973'	.14809712	268990510	00112001
000118	40273337E26DBA7	F	120	C6	DC	X'40273337E26DBA7F'	.15312527	792171731	00113001
	402E8CD32A425C0		121		DC	X'402E8CD32A425C06'		L68880382	00114001
	4038E38A00083F6		122		DC	X'4038E38A00083F6B'	.22222197		00115001
	404924925145021		123		DC	X'4049249251450212'	.28571428		00116001
	4066666665EBAA		124		DC	X'40666666665EBAA3'	.39999999		00117001
	40AAAAAAAAAAAD6		125		DC	X'40AAAAAAAAAAAAAACC'	.66666666		00118001
	40B17217F7D1CF7 40B504F3	В		LOGE2 LIMIT	DC DC	X'40B17217F7D1CF7B' X'40B504F3'	1/SORT 2	E) + 1 IN LAST DGT	00119001 00120001
000130	400304F3		128		DC	X 40B304F3	1/3QK1 2		00120001
			129		REGIS	TER EQUATES			00121001
			130						00123001
			131		IEZRE	GS			00124001
	(	00000	132+	RØ	EQU	0			01-IEZRE
	(	00001	133+	R1	EQU	1			01-IEZRE
	(	00002	134+	R2	EQU	2			01-IEZRE
		00003	135+		EQU	3			01-IEZRE
		00004	136+		EQU	4			01-IEZRE
		00005	137+		EQU	5			01-IEZRE
		00006	138+		EQU	6			01-IEZRE
		00007	139+		EQU	7			01-IEZRE
		00008 00009	140+ 141+		EQU EQU	8			01-IEZRE 01-IEZRE
		00005 0000A	141+		EQU	10			01-IEZRE
		0000A 0000B	143+		EQU	11			01-IEZRE
		0000C	144+		EQU	12			01-IEZRE
		0000D	145+		EQU	13			01-IEZRE
		0000E	146+		EQU	14			01-IEZRE
	(	0000F	147+		EQU	15			01-IEZRE
			148	*					00125001
			149		END				00126001

Symbol	Length	Value	Id	Type As	m Program	Defn	Refer	ences					X390	3.1.0	4 20	12/08	3/17 1	3.21
BUFF	8	000000E0	00000001	DD		111	63M	64M	66	76M	92							
C1	8	00000140	00000001	ХХ		125	90											
C2	8	00000138	00000001	ХХ		124	88											
C3	8	00000130	00000001	ХХ		123	86											
C4	8	00000128	00000001	ХХ		122	84											
C5	8	00000120	00000001	XX		121	82											
C6		00000118				120	80											
C7	8	00000110	00000001	ХХ		119	79											
ERROR	4	000000D6	00000001	I		107	55B											
FPR0	1	00000000		U		41	66M	67	71	72M	73M	75M	76	77M	78	81	83	85
							87	89	91	92M	93	94	95	96M		100M	101M	
FPR2	1	00000002		U		42	71M	74M	75	78M	79M	80M	81M	82M	83M	84M	85M	86M
							87M	88M	89M	90M	91M	93M	94M	95M	101			
FSAERR		000001CC		U		109	107B											
HALF		00000100				116	72	74										
IHILLO		00000000				45	39											
IHILLOGM	_	00000000		-		37	510											
IPART	-	000000E8				112	58M	96	98M	99								
LIMIT		00000150				127	67											
LOGE2		00000148				126	100											
READY		00000070	00000001			71	68B											
RØ		00000000		U		132	53M	54	62M	63								
R1		00000001		U		133	52M	53M	63	65M	69M	73	74					
R13		000000D		U		145	107											
R15		000000F		U		147	510											
R2		00000002		U		134	54M	56M	57M	58	59M	60M	61M	62	/0M	97M	98	
TABLE		000000F0				114	61											
ZERO	8	000000F8	00000001	XX		115	73											

```
Register References (M=modified, B=branch, U=USING, D=DROP, N=index)
```

LLO

```
62M 63 104M
1(1)
2(2)
           49
                         53M 62M 63
                                              65M 69M 73N 74N 104M
                  52M
           49
                  54M
                         56M 57M 58
                                              59M 60M 61M 61N 62 70M 97M 98 104M
 3(3)
4(4)
5(5)
                56M
104M
           49
49
49
49
49
49
49
49
                         60M 104M
                104M
5(5)
6(6)
7(7)
8(8)
9(9)
10(A)
11(B)
12(C)
                 104M
                104M
                104M
104M
104M
                 104M
                104M
13(D)
14(E)
15(F)
          49 104 107N
49 104M 105B
45B 49 51U 104M
```

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

51 USING Ordinary 00000001 00000000 00001000 15 00150 100 IHILLOGM,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHILLO PROCSTEP: X390

Primary input: lines 1 to 126 of SYSD.ALGOLFRT.ASM(IHILLO)

SYSLIB library records read: 161
SYSUT1 work file size: 14842 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 10080 bytes
SYSLIN file records written: 9

TXA000I Return code 0, elapsed time 0.15 seconds.

## IHILOR LEVEL V2.M01

```
X390 3.1.04 2012/08/17 13.21
(c) Copyright 1995-2010 Tachyon Software LLC
```

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHILOR)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00174
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt
                                             Source Statement
                                                                                                                         00002001
                                         2 *
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
                                                                                                                         00004001
00005001
                                                     STATUS - LEVEL 2.1
                                         5
                                                                                                                         00006001
                                         6
                                                     FUNCTION/OPERATION -
                                                                                                                         00007001
                                           *
                                                     CONVERT BINARY ARITHMETIC VALUE, FROM SECOND ACTUAL
                                         8
                                                                                                                         00008001
                                                                                                                         00009001
                                         9
                                                     PARAMETER, TO ZONED DECIMAL FORM AND TRANSFER TO AN
                                                                                                                         00010001
                                        10
                                                     OUTPUT BUFFER
                                                                                                                         00011001
                                        11
                                                                                                                          00012001
                                        12
                                                     ENTRY POINTS
                                           *
                                        13
                                                     IHILOREL - FROM GENERATED OBJECT MODULE
                                                                                                                          00013001
                                        14
                                                                 LA
                                                                     R1, PARMLIST
                                                                                                                         00014001
                                                                BALR R14,R15
DATA PASSED BY NAME
                                                                                                                          00015001
                                        15
                                                                                                                         00016001
                                        16
                                                     IHILORAR - FROM ARRAY MODULE IHIOAR
                                                                                                                         00017001
                                        17
                                                                      R7,DATA
                                                                                                                          00018001
                                        18
                                                                 BALR R14,R15
                                        19
                                                                                                                         9991 9991
                                                                                                                          00020001
                                        20
                                                                                                                         00021001
                                                     INPUT - N/A
                                        21
                                                                                                                         00022001
                                        22
                                                                                                                          00023001
                                        23
                                                     OUTPUT - N/A
                                        24
                                                                                                                         00024001
                                                                                                                         00025001
00026001
                                        25
                                                     EXTERNAL ROUTINES -
                                                     IHIIOR - EVALUATE DATA SET NUMBER
                                        26
                                                              OPEN DATASET
                                                                                                                          00027001
                                        27
                                        28
                                                               CHANGE TO NEXT OUTPUT RECORD
                                                                                                                          00028001
                                        29
                                                     IHIFSA - CNVIRD - CONVERT INTEGER TO REAL LONG
                                                                                                                         00029001
                                           *
                                        30
                                                     IHIPTT - POWER OF TEN TABLE LONG PREC
                                                                                                                          00030001
                                        31
                                                                                                                         00031001
                                        32
                                                     EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                          00032001
                                                                                                                         00033001
                                        33
                                        34
                                                     EXIT - ERROR - TOO LONG RECORD NO 38
                                                                                                                          00034001
                                        35
                                                                     BRANCH TO IHIFSA
                                                                                                                         00035001
                                        36
                                                                           R13, IHIFSA
                                                                                                                         00036001
                                                                           FSAERR+XX*4(R13) XX ERROR NO
                                                                                                                          00037001
                                        37
                                                                     R
                                                                                                                         00038001
                                        38
                                                                                                                          00039001
                                        39
                                                     TABLES/WORK AREAS - N/A
                                                                                                                          00040001
                                        40
999999
                       00000 00330
                                        41 THILOREA CSECT
                                                                                                                         00041001
                                        42
                                                                                                                         00042001
                                                     ENTRY IHILOREL
                                                                                                                         00043001
                                        43
                                                     ENTRY IHILORAR
                                                                                                                          00044001
                                        44
                                                                                                                          00045001
                                        45
                  R:5
                      00000
                                        46
                                                     USING DSTABLE, R5
                                                                                                                         00046001
                                                                                                                         00047001
00048001
                                        47
                                        48 FPRØ
                                                                                 FLOATING POINT NUMBER
                       99999
                                                     FOL
                                                           a
                                                                                                                         00049001
                                        49
                                                                                                                          00050001
                                        50
                                                                                      -> DSTABLE ENTRY
                                        51
                                                     R7
                                                                                      -> SOURCE
                                                                                                                         00051001
                                                                                         CHARACTER POINTER
                                        52
                                                     R4
                                                                                                                         00052001
00053001
                                                                                        BLANK COUNTER
                                        53
                                                     R8
                                                                                         EXPONENT > EIGHT
                                                                                                                         00054001
                                                     R2
                                        54
                                                                                         EXPONENT < EIGHT
                                                                                                                          00055001
                                        55
                                                     R3
                                                                                         DECIMAL EXPONENT
                                                                                                                          00056001
                                        56
                                                     R9
                                        57
                                                     R8
                                                                                         BLANK COUNTER
                                                                                                                          00057001
                                        58
                                                     R15
                                                                                      -> POWER TEN TABLE
                                                                                                                         00058001
                                        59
                                                                                                                         00059001
                                                                                                                         00060001
                                                     DISPLACEMENTS IN ADRLST IN IHIFSA
                                        60
                                        61
                                                                                                                          00061001
                       00000
                                        62 CI
                                                                          DISPLACEMENT FOR - IHIIORCI
                                                                                                                          00062001
                       00004
                                        63 CL
                                                     EQU
                                                           4
                                                                                               IHIIORCL
                                                                                                                         00063001
                       00008
                                                                                               IHIIOREV
                                                                                                                         00064001
                                        64 EV
                                                     EOU
                                                           8
                                                                                                                         00065001
                                        65 NX
                                                                                               IHIIORNX
                       0000C
                                                     EOU
                                                           12
                                                                                                                          00066001
                       00010
                                        66 OP
                                                     EQU
                                                           16
                                                                                               IHIIOROP
                       00014
                                        67 OQ
                                                                                               IHIIOROQ
                                                                                                                          00067001
                                                     EQU
                                        68
                                                                                                                         00068001
                                        69 IHILORAR SAVE
                                                           (14,12),, 'IHILORAR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00069001
000000 47F0 F026
                              00026
                                        70+IHILORAR B
                                                                                                BRANCH AROUND ID
                                                           38(0.15)
                                                                                                                         01-SAVE
                                                                                                 LENGTH OF IDENTIFIER
000004 21
                                        71+
                                                     DC
                                                           AL1(33)
                                                                                                                         01-SAVE
000005 C9C8C9D3D6D9C1D9
                                                           CL32'IHILORAR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
                                        72+
                                                     DC
                                                                                                 IDENTIFIER
000025 F1
                                        73+
                                                     DC
                                                                                                                         01-SAVE
                                                           CL1'1'
000026 90EC D00C
                              aaaac
                                        74+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         01-SAVE
                                                                                                                         00070001
                                        75
                                                     USING IHILORAR, R15
                                                                                                                         00071001
                  R:F 00000
                                        76
00002A 18AD
                                        77
                                                                                      CHAIN SAVE AREAS
                                                                                                                         00072001
                                                     LR
                                                           R10.R13
00002C 41D0 F298
                              00298
                                        78
                                                     LA
                                                           R13, SAVEAREA
                                                                                                                          00073001
000030 50A0 D004
                              00004
                                        79
                                                     ST
                                                           R10,4(,R13)
                                                                                                                         00074001
00075001
000034 50D0 A008
                              99998
                                        80
                                                     ST
                                                           R13.8(, R10)
000038 41A0 F07C
                              0007C
                                                           R10, COMMON
                                                                                                                         00076001
                                        81
                                                     LA
                                                     DROP
                                                                                                                         00077001
                                        82
                                                           R15
                                                     USING COMMON, R10
                                                                                                                          00078001
                  R:A 0007C
                                        83
00003C 47F0 A00E
                              0008A
                                                           SOUFLPA
                                                                                                                          00079001
                                        84
                                        85 *
                                                                                                                         00080001
                                                     DROP
                                                                                                                         00081001
                                        86
                                                           R10
                                                                                                                         00082001
                                        87
                                        88 IHILOREL SAVE
                                                           (14,12),, 'IHILOREL LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                          00083001
000040 47F0 F026
                              00026
                                        89+IHILOREL B
                                                                                                BRANCH AROUND ID
                                                                                                                         01-SAVE
000044 21
                                        90+
                                                     DC
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
                                                           CL32'IHILOREL LEVEL 2.1 08/17/12 13.2' IDENTIFIER CL1'1' IDENTIFIER
000045 C9C8C9D3D6D9C5D3
                                                                                                                         01-SAVE
                                        91+
                                                     DC
                                                     DC
000065 F1
                                        92+
000066 90EC D00C
                              0000C
                                        93+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         00084001
                                        94
                  R:F 00040
                                        95
                                                     USING IHILOREL, R15
                                                                                                                         00085001
00006A 18CD
                                        96
                                                     LR
                                                           R12,R13
                                                                                      R12 -> FSA
                                                                                                                         00086001
00006C 41D0 F258
                              00298
                                        97
                                                     LA
                                                           R13. SAVEAREA
                                                                                                                         00087001
```

X390 3.1.04 2012/08/17 13.21 Loc Object Code Addr1 Addr2 Stmt Source Statement 000070 50C0 D004 00004 98 R12,4(,R13) 00088001 000074 50D0 C008 00008 99 ST R13,8(,R12) 00089001 000078 41A0 F03C 0007C 100 ΙΔ R10, COMMON 00090001 DROP 101 R15 00091001 R:A 0007C 102 USING COMMON, R10 00092001 103 00093001 104 \* EVALUATE DATASET NUMBER (EVDSN) 00094001 105 \* 00095001 00007C 58F0 C11C 0011C 106 COMMON Ĺ R15, IORLST(,R12) 00096001 R15, EV(, R15) 00097001 000080 58F0 F008 00008 107 000084 05EF R14, R15 00098001 108 BALR 000086 5870 1004 00004 109 SOUFLP R7,4(,R1) R7 -> SOURCE 00099001 00008A 9630 501A 0001A 110 SOUFLPA OI DSF,DS2+DS3 DS2, DS3 = 100100001 00008F 94FF 501A 9991A 111 NT DSF . 255-DS7 DS7 = 099191991 00102001 000092 1277 LTR R7, R7 112 000B2 000094 4720 A036 ВР 00103001 113 REAL1 114 00104001 115 CALL CONVERSION ROUTINE (LOADED IN FSA) 00105001 116 00106001 00107001 000098 90ED D008 00008 STM R14.R13.8(R13) SAVE REGS 117 00009C 182D LR R2 -> SAVEAREA 00108001 118 R2, R13 00009E 58E0 7000 00000 119 R14.0(.R7) INTEGER INTO R14 00109001 0000A2 417C 0120 00120 120 LA R7, ACNVIRD(R12) 00110001 0000A6 18DC 121 LR R13, R12 R13 -> FSA 00111001 000008 0587 122 **BAIR** R8. R7 00112001 R14,R13,8(R2) 0000AA 98ED 2008 00008 RESTORE REGS LM 00113001 123 0000AE 47F0 A03A REAL1A NUMBER IN FPRO AFTER CONVERSION 00114001 000B6 124 В 125 00115001 0000B2 6800 7000 00000 126 REAL1 FPR0,0(,R7) NUMBER IN FPR0 00116001 LD 0000B6 9180 501A 0001A 127 REAL1A TM DSF, DS0 DATASET OPEN ? 00117001 0000BA 4710 A050 000CC 128 BO NOCLO YES, BRANCH 00118001 0000BE 9602 501A 0001A ΟI DS6 = 1 OPEN FOR OUTPUT 00119001 129 DSF DS6 0000C2 58F0 C11C 0011C 130 R15, IORLST(,R12) 00120001 0000C6 58F0 F010 00010 R15,OP(,R15) 00121001 131 132 0000CA 05EF BALR R14, R15 00122001 99994 CHARACTER POINTER 0000CC 5840 5004 133 NOCLO т R4.R 00123001 0000D0 4180 4016 00016 R8, 22(, R4) 00124001 134 LA 0000D4 5980 5008 00008 135 BUFFER CAN ACCEPT 22 DIGITS ? 00125001 R8.RE 0000D8 47D0 A094 NONEXREC 00110 136 BNH 00126001 0000DC 5880 5008 00008 137 R8.RE 00127001 0000E0 1B84 138 SR R8.R4 00128001 0000E2 47D0 A076 000F2 139 BNP CALLNXT NO, REQUEST NEW RECORD 00129001 0000E6 9240 4000 0(R4),C' R4,1(,R4) 00000 140 BLANKS MVI BLANK IN BUFFER 00130001 0000EA 4140 4001 00001 141 LA 00131001 0000EE 4680 A06A 000E6 R8, BLANKS 00132001 142 BCT 0000F2 58F0 C11C 0011C 143 CALLNXT R15, IORLST(,R12) 00133001 00134001 agaac 144 R15.NX(,R15) 0000FA 05EF GET NEXT RECORD 00135001 145 **BALR** R14, R15 146 0000FC 5840 5004 00004 R4.R 00136001 000100 4180 4016 00016 147 R8,22(,R4) 00137001 000104 5980 5008 00008 148 R8.RE 00138001 000108 4720 A212 0028E 149 BH ORLERR TOO SHORT RECORD LENGTH 00139001 00010C 9610 501A 0001A OI DSF, DS3 00140001 150 000110 4190 0010 00010 151 NONEXREC LA R9,16 00141001 000114 2200 LTDR FPR0, FPR0 NUMBER IS ZERO ? 00142001 152 000116 4770 A0B0 153 NOT0 NO, BRANCH 00143001 0012C BNZ 0(R4),C'' 00011A 9240 4000 aaaaa 154 MVI NUMBER IS ZERO 00144001 1(21.R4),0(R4) 99911F D214 4991 4999 99991 99999 155 MVC 00145001 000124 92F0 4001 00001 156 MVI 1(R4),C'0 00146001 000128 47F0 A1B6 00232 В TERMIN 00147001 157 00148001 158 \* 00012C 924E 4000 00000 159 NOT0 MVI 0(R4),C'+' ZONE IS INSERTED 00149001 000130 4720 A0BE 0013A 160 BP **EXPLOOP** 00150001 0(R4),C'-' 000134 9260 4000 MVI 00000 00151001 161 000138 2300 FPRØ, FPRØ 00152001 162 **LCDR** 00013A 6000 A27C 163 EXPLOOP 00153001 002F8 STD FPR0, CHAR 00013E 1B33 164 R3, R3 00154001 SR 000140 4330 A27C 000144 9200 A29C 002F8 165 TC R3, CHAR 00155001 00318 00156001 166 MVI SE.0 000148 5B30 A268 002E4 R3, KF78 00157001 167 S 00014C 4720 A0DE 0015A 168 ВР **EXPLOAA** 00158001 000150 4780 A148 EXPONENT = 78 00159001 001C4 169 ΒZ EXP0 000154 9280 A29C 00318 170 MVI SE, X'80 00160001 000158 1333 171 LCR R3.R3 00161001 00015A 4C30 A26C 172 EXPLOAA 002E8 R3, LOG2 MH 00162001 00015E 4A30 A26E 002EA 00163001 173 ΑН R3. ROUND 000162 8830 000E 0000E 174 SRL R3,14 00164001 000166 5930 A268 002E4 175 R3, KF78 00165001 00016A 47D0 A0F6 00172 176 **BNH EXPLORE** 00166001 00016E 5830 A268 EXPONENT = 78 002E4 R3, KF78 00167001 177 00168001 000172 9180 A29C 00318 178 EXPLOBB SE,X'80 TM 000176 58F0 A218 00294 R15, VPTTAB R15 -> POWER TEN TABLE 00169001 179 00017A 4780 A108 **EXPLOCC** 00170001 00184 180 ΒZ 00017E 1B93 181 SR R9. R3 00171001 0018A EXPLODD 000180 47F0 A10E 182 В 00172001 00173001 183 000184 41F0 F080 00080 184 EXPLOCC LA R15,128(,R15) 00174001 000188 1A93 185 AR R9, R3 00175001 00018A 1823 186 EXPLODD LR R2,R3 00176001 00018C 1B33 00018E 8E20 0003 187 SR R3,R3 CLEAR REGISTER 00177001 00003 SRDA 00178001 R2.3 188 000192 8B20 0003 00003 00179001 189 SLA R2,3 000196 4780 A136 001B2 190 TESTEXP1 ΒZ EXP1LS8 00180001 00019A 5920 A264 191 00181001 002E0 R2, KF72 00019F 4740 A132 001AE 192 ΒI FXP1I S8A **EXPONENT NEGATIVE** 00182001 0001A2 6C00 F080 00080 193 MD FPR0,128(,R15) 00183001

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt
                                             Source Statement
0001A6 5B20 A264
                              002E0
                                       194
                                                            R2,KF72
                                                                                                                          00184001
                                                     S
                                       195
                                                     В
                                                            TESTEXP1
                                                                                                                          00185001
0001AA 47F0 A11A
                              00196
                                       196
                                                                                                                          00186001
                              00038
                                       197 EXP1LS8A MD
0001AE 6C02 F038
                                                            FPR0.56(R2.R15)
                                                                                                                          00187001
0001B2 8830 001A
                              0001A
                                       198 EXP1LS8
                                                    SRL
                                                            R3,26
                                                                                      EXPONENT MULTIPLIED EIGHT
                                                                                                                          00188001
                                                                                                                          00189001
0001B6 1233
                                                     LTR
0001B8 4780 A0BE
                              9913A
                                       200
                                                     B7
                                                            EXPLOOP
                                                                                                                          00190001
0001BC 6C03 F000
                              00000
                                       201
                                                     MD
                                                            FPR0,0(R3,R15)
                                                                                                                          00191001
0001C0 47F0 A0BE
                              0013A
                                       202
                                                     В
                                                            EXPLOOP
                                                                                                                          00192001
                                                                                                                          00193001
                                       203
0001C4 6900 A294
                              00310
                                       204 EXP0
                                                     CD
                                                            FPR0, TENP16
                                                                                      NUMBER >= 10**16 ?
                                                                                                                          00194001
0001C8 47B0 A1F8
                                                     BNL
                                                                                      YES, BRANCH
                                                                                                                          00195001
                              00274
                                       205
                                                            DIG17
0001CC 9200 A27C
                       002F8
                                       206 EXP0AA
                                                     MVI
                                                            CHAR, 0
                                                                                                                          00196001
                                                            R2, R3, CHAR
                              002F8
0001D0 9823 A27C
                                       207
                                                     I M
                                                                                                                          00197001
0001D4 5D20 A270
                                                                                                                          00198001
                              002EC
                                       208
                                                            R2, TENP9I
                                                     D
                                                                                                                          00199001
                                       209
                                       210
                                                     TRANSFORM NUMBER TO DECIMAL FORM
                                                                                                                          00200001
                                       211
                                                     EDIT OUTPUT NUMBER IN I/O BUFFER
                                                                                                                          00201001
                                       212
                                                                                                                          00202001
                                                                                                                          00203001
0001D8 4E30 A274
                              002F0
                                                     CVD
                                                            R3.BUFF
                                                                                      OUOTE CONVERTED
                                       213
0001DC F384 4001 A277 00001 002F3
                                                           1(9,R4),BUFF+3(5)
                                                                                                                          00204001
                                       214
                                                     UNPK
                                                            9(R4),X'F0'
0001E2 96F0 4009
                        00009
                                       215
                                                     ΟI
                                                                                                                          00205001
0001E6 4E20 A274
                              002F0
                                       216
                                                     CVD
                                                            R2, BUFF
                                                                                                                          00206001
                                                           10(9,R4),BUFF+3(5)
18(R4),X'F0'
2(R4),C'0'
0001EA F384 400A A277
                       0000A 002F3
                                       217
                                                     UNPK
                                                                                                                          00207001
                                                                                                                          00208001
0001F0 96F0 4012
                        99912
                                       218
                                                     OT
0001F4 95F0 4002
                                                                                                                          00209001
                        00002
                                                                                      LEADING ZERO ?
                                       219
                                                     CLI
0001F8 4770 A188
                              00204
                                       220
                                                     BNE
                                                            TRANSAA
                                                                                                                          00210001
0001FC 0690
                                                                                                                          00211001
                                       221
                                                     BCTR
                                                            R9,0
0001FE D20F 4002 4003 00002 00003
                                                            2(16,R4),3(R4)
                                                                                                                          00212001
                                       222
                                                     MVC
                                                            1(1,R4),2(R4)
2(R4),C'.'
18(R4),C''''
000204 D200 4001 4002 00001 00002
                                       223 TRANSAA
                                                     MVC
                                                                                                                          00213001
00020A 924B 4002
                        00002
                                       224
                                                     MVI
                                                                                      DECIMAL POINT INSERTED
                                                                                                                          00214001
00020E 927D 4012
                                                     MVI
                                                                                      APOSTROPHE INSERTED
                                                                                                                          00215001
                        00012
                                       225
000212 4E90 A274
                              002F0
                                       226 DECEXP
                                                     CVD
                                                            R9, BUFF
                                                                                                                          00216001
000216 F321 4013 A27A 00013 002F6
                                                     UNPK
                                                            19(3,R4),BUFF+6(2)
                                                                                                                          00217001
                                       227
00021C 1299
                                       228
                                                     LTR
                                                            R9 R9
                                                                                                                          00218001
00021F 47B0 A1AF
                                                            DECEXPAA
                              9922A
                                       229
                                                     BNM
                                                                                                                          00219001
000222 9260 4013
                                                            19(R4),C'-'
                                                                                                                          00220001
                       00013
                                                     MVI
                                                                                      EXPONENT SIGN IS NEGATIVE
                                       230
000226 47F0 A1B2
                              0022E
                                       231
                                                     В
                                                            DECEXPBB
                                                                                                                          00221001
                                                                                                                          00222001
                                       232 *
00022A 924F 4013
                        00013
                                       233 DECEXPAA MVT
                                                            19(R4), C'+'
                                                                                                                          00223001
00022E 96F0 4015
                        00015
                                       234 DECEXPBB OI
                                                            21(R4),X'F0'
                                                                                      ZONE INSERTED EXPONENT
                                                                                                                          00224001
                                       235
                                                                                                                          00225001
                                                     TERMINATION ROUTINE INSERT BLANKS
                                                                                                                          00226001
                                       236
                                       237
                                                     IF RECORD END CALL NEXTREC
                                                                                                                          00227001
                                       238 *
                                                                                                                          00228001
                                                                                                                          00229001
00230001
000232 4140 4016
                              00016
                                       239 TERMIN
                                                            R4,22(,R4)
000236 1B88
                                       240
                                                     SR
                                                            R8. R8
                                                                                                                          00231001
000238 4380 5018
                              00018
                                       241
                                                     IC
                                                            R8,K
00023C 5940 5008
                              00008
                                       242 TERMINAA
                                                            R4.RE
                                                                                                                          00232001
000240 4780 A1EA
                              00266
                                       243
                                                            RECEND
                                                                                                                          00233001
                                                            0(R4),C''
000244 9240 4000
                       99999
                                       244
                                                     MVI
                                                                                                                          00234001
                              00001
                                                                                                                          00235001
000248 4140 4001
                                       245
                                                     LA
                                                            R4,1(,R4)
00024C 4680 A1C0
                              0023C
                                                            R8, TERMINAA
                                                                                                                          00236001
                                       246
                                                     BCT
000250 5940 5008
                              00008
                                       247
                                                            R4.RE
                                                                                                                          00237001
                                                     C
000254 4780 A1EA
                                                                                                                          00238001
                              00266
                                       248
                                                     BE
                                                            RECEND
000258 5040 5004
                              00004
                                       249
                                                                                                                          00239001
                                                            R4,R
                                       250 TERMINBB L
00025C 58D0 A220
                              0029C
                                                            R13, SAVEAREA+4
                                                                                                                          00240001
                                       251
                                                                                                                          00241001
                                                     RETURN (14,12)
                                       252
                                                                                                                          00242001
000260 98EC D00C
                              0000C
                                       253+
                                                     LM
                                                            14,12,12(13)
                                                                                                 RESTORE THE REGISTERS
                                                                                                                          01-RETUR
000264 07FE
                                                                                                                          01-RETUR
                                       254+
                                                     BR
                                       255
                                                                                                                          00243001
000266 58F0 C11C
                              0011C
                                       256 RECEND
                                                     Ĺ
                                                            R15, IORLST(,R12)
                                                                                                                          00244001
                                                                                                                          00245001
00026A 58F0 F00C
                              0000C
                                       257
                                                            R15.NX(.R15)
00026E 05EF
                                       258
                                                     BALR
                                                            R14 R15
                                                                                                                          00246001
000270 47F0 A1E0
                              0025C
                                       259
                                                                                                                          00247001
                                                            TERMINBB
                                       260
                                                                                                                          00248001
                                       261
                                                     NUMBER >= 10**16
                                                                                                                          00249001
                                                                                                                          00250001
                                       262
000274 6E00 A284
                              00300
                                       263 DIG17
                                                            FPR0,FIVE
                                                                                                                          00251001
                                                     ΑW
000278 6000 A27C
                              002F8
                                       264
                                                     STD
                                                            FPR0, CHAR
                                                                                                                          00252001
00027C 6900 A28C
                              00308
                                                            FPRØ, TWOP56B
                                                                                                                          00253001
                                       265
                                                     CD
000280 4740 A150
                              001CC
                                       266
                                                     ΒI
                                                            EXP0AA
                                                                                                                          00254001
                                                                                                                          00255001
000284 D211 4001 A29D 00001
                              00319
                                       267
                                                     MVC
                                                            1(18,R4), TWOP56
                                                                                      NUMBER > 16**14
00028A 47F0 A196
                                                            DECEXP
                                                                                                                          00256001
                              00212
                                       268
                                                     В
                                                                                                                          00257001
                                       269
00028E 18DC
                                       270 ORLERR
                                                     LR
                                                                                                                          00258001
                                                            R13,R12
000290 47FC 0264
                              00264
                                       271
                                                     В
                                                            FSAERR+38*4(R12)
                                                                                                                          00259001
                                                                                                                          00260001
                                       272
000294 00000000
                                       273 VPTTAB
                                                     DC
                                                            V(IHIPTTAB)
                                                                                                                          00261001
                                                                                                                          00262001
                                       274
                        00120
                                       275 ACNVIRD EQU
                                                           X'120'
                                                                                                                          00263001
                                       276 *
                                                                                                                          00264001
                                       277 *
                                                     CONSTANTS AND STORAGE
                                                                                                                          00265001
                                       278 *
                                                                                                                          00266001
                                       279 SAVEAREA DC
                                                            18F'0'
                                                                                                                          00267001
000298 00000000000000000
                                       280
                                                                                                                          00268001
0002E0 00000048
                                       281 KF72
                                                            F'72'
                                                                                                                          00269001
0002E4 0000004E
                                       282 KF78
                                                            F'78'
                                                                                                                          00270001
                                                     DC
0002E8 4D10
                                       283 LOG2
                                                     DC
                                                            H'19728
                                                                                                                          00271001
                                                            H'8192
                                                                                                                          00272001
0002EA 2000
                                                     DC
                                       284 ROUND
0002EC 3B9ACA00
                                       285 TENP9I
                                                     DC
                                                            F'1000000000'
                                                                                                                          00273001
0002F0 00000000000000000
                                                            D'0'
                                                                                                                          00274001
                                       286 BUFF
                                                     DC
                                                           D'0'
0002F8 00000000000000000
                                       287 CHAR
                                                     DC
                                                                                                                          00275001
000300 45000000000000005
                                       288 FIVE
                                                     DC
                                                            X'4F0000000000000005'
                                                                                                                          00276001
000308 4F1000000000000000
                                       289 TWOP56B
                                                    DC
                                                            X'4F1000000000000000
                                                                                                                          00277001
```

	ve osinos. Init								
Loc	Object Code	Addr1	Addr2	Stmt Source	State	ment		X390 3.1.04 2012/08	/17 13.21
000310	4E2386F26FC100	90		290 TENP16	DC	DE16'	1'		00278001
000318		-0		291 SE	DC DC	X'00'	005750402702704!!!		00279001
000319	F74BF2F0F5F7F5	F9		292 TWOP56 293 *	DC	C 7.2	205759403792794'''		00280001 00281001
000330				294	LTORG	i			00282001
				295 * 296	DSTAB	LE DSE	ECT=YES		00283001 00284001
000000		00000	00024	297+DSTABLE	DSECT				01-DSTAB
999999	00000000			298+* 299+ADCB	DC	F'0'		-> DCB	01-DSTAB 01-DSTAB
	00000000			300+R	DC	F'0'		CHARACTER POINTER	01-DSTAB
	00000000 00000000			301+RE 302+NBB	DC DC	F'0' F'0'			01-DSTAB 01-DSTAB
	00000000			303+BB	DC	F'0'			01-DSTAB
000014				304+S	DC	H'1'		RECORD POINTER	01-DSTAB
000016 000018				305+P 306+K	DC DC	H'80' X'02'		RECORD LENGTH NUMBER OF BLANK DELIM CHARS	01-DSTAB 01-DSTAB
000019				307+Q	DC	X'00'	ı ı	NO OF RECORDS PER SECTION	01-DSTAB
00001A	0000			308+DSF 309+*	DC	н'00'		DATASET FLAGS	01-DSTAB 01-DSTAB
				310+*	DATAS	ET FLA	AGS - DSF		01-DSTAB
		00080		311+* 312+DS0	EQU	X'80'	ı	DATASET OPEN	01-DSTAB 01-DSTAB
		00040		313+DS1	EQU	X'40'			01-DSTAB
		00020 00010		314+DS2 315+DS3	EQU EQU	X'20' X'10'		LAST I/O OUTPUT	01-DSTAB 01-DSTAB
		00008		316+DS4	EQU	X'08'	1		01-DSTAB
		00004 00002		317+DS5 318+DS6	EQU EQU	X'04' X'02'		OPEN FOR OUTPUT	01-DSTAB 01-DSTAB
		00001		319+DS7	EQU	X'01'		END OF FILE	01-DSTAB
				320+* 321+*	DATAC	ET ELA	AGS - DSF+1		01-DSTAB 01-DSTAB
				321+*	DATAS	ici FLA	105 - D3FTI		01-DSTAB 01-DSTAB
		00080		323+DS8	EQU	X'80'		END OF DATA	01-DSTAB
		00040 00020		324+DS9 325+DS10	EQU EQU	X'40' X'20'		OPENED BY SYSACT 12	01-DSTAB 01-DSTAB
		00010		326+DS11	EQU	X'10'		INDICATE IHIERR-ROUT	01-DSTAB
		00008 00004		327+DSEOD 328+DSIOERR	EQU EQU	X'08' X'04'		I/O ERROR	01-DSTAB 01-DSTAB
		00002		329+DS14	EQU	X'02'		DATASET OPENED	01-DSTAB
		00001		330+DS15 331+*	EQU	X'01'		CLOSE FROM IHIERR	01-DSTAB 01-DSTAB
	00000000			332+NOTEADR	DC	F'0'			01-DSTAB
000020 000022				333+BL 334+	DC DC	Н'0' Н'0'		LRECL+ TWO ARB	01-DSTAB 01-DSTAB
				335+*					01-DSTAB
		00024		336+DSTABLEL 337+*	EQU	*-DST	ABLE	L'DSTABLE ENTRY	01-DSTAB 01-DSTAB
			00400	338 *	DOFFEE				00285001
000000		00000	00120	339 FAS 340 *	DSECT				00286001 00287001
				341 342=*	COPY	FSARE	A		<b>00288001</b> 00001001
				343=*	COMPO	NENT I	ID - 360S-LM-532 ALG	GOL F LIBRARY	00002001
				344=* 345=*	CTATII	IC _ I E	EVEL 2.1		00003001 00004001
				346=*					00005001
				347=******* 348=*	*****	*****	*******	**********	00006001 00007001
				349=*	COMMO	N DATA	A AREA		00008001
				350=* 351=*	FSARE	Δ			00009001 00010001
				352=*					00011001
				353=******* 354=*	*****	*****	********	************	00012001 00013001
				355=*			IS IMMEDIATELY ACCES	SSIBLE TO ALL	00014001
				356=* 357=*	MUDUL	.ES DUF	RING THE EXECUTION		00015001 00016001
				358=*			BY MEANS OF R13 OR	(FOR THE LIBRARY	00017001
				359=* 360=*	SUBRO	OULTNES	5) BY R12		00018001 00019001
		00000		361=FSAREA	EQU	*			00020001
				362=* 363=*	SAVE	AREAS			00021001 00022001
				364=*					00023001
000000		00048		365= 366=ASAVE	DS EQU	18F *-FSA	AREA	STANDARD SAVE AREA ALTERNATE SAVE AREA USED BY	00024001 00025001
000048				367=	DS	18F		CERTAIN SUBROUTINES	00026001
				368=* 369=*	MISCE	LLANEC	OUS WORK AREAS AND (	CONSTANTS	00027001 00028001
		00000		370=*	FOLL	* FC/	ADEA	TEMPODARY STORAGE FOR	00029001
000090		00090		371=FCTVALST 372=	EQU DS	*-FSA D	ANCA	TEMPORARY STORAGE FOR FUNCTION VALUES	00030001 00031001
000000	00000090	00098		373=ASTLOC 374=	EQU DC	*-FSA	AREA AREA+FCTVALST)	DISPL FOR ADDR OF STAND LOCTN	00032001 00033001
000038	00000030	0009C		375=BRRST	EQU	*-FSA		TEMPORARY SAVE REG BRR	00033001
00009C		0009C		376=HW 377=	EQU DS	BRRS1 F	Г	TEMPORARY HALFWORD STORAGE	00035001 00036001
		000A0		378=PROLREG	EQU	*-FSA	AREA	STORAGE FOR PBT AND LAT WHEN	00037001
0000A0				379= 380=*	DS	2A		A PROCEDURE IS FORMAL PARAM	00038001 00039001
				381=*	HALFW	IORD CO	ONTAINING PBN OF CA	LED BLOCK IN SECOND BYTE	00040001
0000A8				382=* 383=	DS	0H			00041001 00042001
0000A8	00	00040		384=	DC	X'00'		STORAGE FOR CALLED DOW	00043001
		000A9		385=PROLPBN	EŲU	*-FSA	ANEA	STORAGE FOR CALLED PBN	00044001

00289001

00290001

00291001

00292001

01-IEZRE

475=

476 477

478 \*

480+R0

481+R1

479

99999

00001

REGISTER EQUATES

**IEZREGS** 

EOU

EOU 1

D-Loc	Object Code	Addr1 Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08/17 13.21
		00002	482+R2	2	EQU	2	01-IEZRE
		00003	483+R3	3	EQU	3	01-IEZRE
		00004	484+R4	4	EQU	4	01-IEZRE
		00005	485+R5	5	EQU	5	01-IEZRE
		00006	486+R6	5	EQU	6	01-IEZRE
		00007	487+R7	7	EQU	7	01-IEZRE
		00008	488+R8	3	EQU	8	01-IEZRE
		00009	489+R9	9	EQU	9	01-IEZRE
		0000A	490+R1	10	EQU	10	01-IEZRE
		0000B	491+R1	11	EQU	11	01-IEZRE
		0000C	492+R1	12	EQU	12	01-IEZRE
		0000D	493+R1	13	EQU	13	01-IEZRE
		0000E	494+R1	14	EQU	14	01-IEZRE
		0000F	495+R1	15	EQU	15	01-IEZRE
			496 *				00293001
			497		END		00294001

					-,													-
Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	ence	s				X390	3.1.6	34 20	012/08	3/17 1	13.21
-,	8			. , ,												,	-,	
ACNVIRD	1	00000120		U		275	120											
BLANKS		000000E6	00000001			140	142B											
BRRST		0000009C		U		375	376											
BUFF		000002F0	00000001			286	213M	214	216M	217	226M	227						
CALLNXT		000000F2		I		143	139B											
CHAR		000002F8				287		165	206M	207	264M							
COMMON		0000007C				106	81			102U								
DECEXP		00000212				226	268B											
DECEXPAA		0000022A				233	229B											
DECEXPBB		0000022E				234	231B											
DIG17		00000274		Ī		263	205B											
DSF		0000001A				308		111M	127	129M	150M							
DSTABLE		00000000		J		297		336			250							
DS0		00000080		Ü			127	550										
DS2		00000000		Ü		314	110											
DS3		00000020		U		315	110	150										
DS6		00000010		U		318	129	130										
DS7				U			111											
DTSW		00000001 000000C2		U		319 403	404											
				U		64	107											
EV		00000008	0000001															
EXPLOAA		0000015A				172	168B											
EXPLOSE		00000172				178	176B											
EXPLOCC		00000184				184	180B											
EXPLODD		0000018A				186	182B											
EXPLOOP		0000013A				163	160B	200B	202B									
EXP0		000001C4				204	169B											
EXP0AA		000001CC		I		206	266B											
EXP1LS8		000001B2				198	190B											
EXP1LS8A		000001AE	00000001			197												
FCTVALST	1	00000090		U		371	374											
FIVE	8	00000300	00000001	хх		288	263											
FPR0	1	00000000		U		48	126M	152M	162M	163	193M	197M	201M	204	263M	264	265	
FSAERR	1	000001CC		U		464	271B	468	469	470	471	472	473	474				
FSAREA	1	00000000	FFFFFFE	U		361	366	371	373	374	375	378	385	387	391	393	397	399
							401	403	406	413	415	417	419	425	427	429	432	434
							436	438	440	442	444	446	448	452	454	456	459	461
IHILORAR	4	00000000	00000001	I		70	44	76U										
IHILOREL	4	00000040	00000001	I		89	43	95U										
IHIPTTAB	1	00000000	00000002	T		273	273											
IORLST	1	0000011C		U		461	106	130	143	256								
K		00000018	FFFFFFF			306	241											
KF72		000002E0				281	191	194										
KF78		000002E4		FF		282	167	175	177									
LOG2		000002E8				283	172											
NOCLO		000000CC				133	128B											
NONEXREC		000000110				151	136B											
NOT0		00000110				159	153B											
NX		0000012C	0000001	Ū		65	144	257										
OP		00000000		Ü		66	131	237										
ORLERR		00000010 0000028E	99999991			270	149B											
PROLOGP		0000020L	0000001	Ū		429	430											
R		00000004	FFFFFFF			300	133	146	249M									
RE		00000008				301				242	247							
REAL1		00000000 000000B2		ī			113B	137	140	2-72	2-77							
REAL1A		000000B2		_			124B											
RECEND		00000000					243B	2488										
ROUND		000002EA				284		2400										
R1		000002LA	00000001	U		481												
R10		00000001 00000000		U		490		79	80	Q1M	6311	860	100M	10211				
R12		0000000A		U		492	96M	98	99						256	270	271	
R13		0000000C		U		493	77	78M		80	96		98			118		123M
11.13	1	20000000		J		+23		270M		00	20	<i>5</i> / ۱۲l	20	23	11/	110	1711	ا*ال عد
R14	1	0000000E		U		101	108M			122M	132M	1/IEM	25 <u>8</u> M					
R14 R15		0000000F		U		494								120M	121M	132B	1/2M	1//M
11.13	1	JUUUUUUF		J		+23				193						1020	ויוכ+ב	T-1-41,1
R2	1	00000002		U		100										208M	216	
R3		00000003		U												208M 181		186
K3	1	00000003		U		483							1/4M	1/5	1//M	191	192	190
5.4						40.4				201			4.47	4-4	455	456	450	
R4	1	00000004		U		484	133M									156		161
									217				223		225	227	230	233
DE	_	0000000				405		239M	242	<b>244</b>	245M	24/	249	267				
R5		00000005		U		485	460	110	110	1 201.	1225	126						
R7		00000007		U			109M											
R8		00000008		U									14/M	148	240M	241M	∠46M	
R9		00000009	0000000	U		489				221M	226	228M						
SAVEAREA		00000298				279	78		250									
SE		00000318					166M	170M	178									
SOUFLPA		0000008A				110	84B											
TENP16		00000310				290												
TENP9I		000002EC				285												
TERMIN		00000232					157B											
TERMINAA		0000023C					246B											
TERMINBB		0000025C					259B											
TESTEXP1		00000196					195B											
TRANSAA		00000204					220B											
TWOP56		00000319				292												
TWOP56B		00000308				289												
VPTTAB	4	00000294	00000001	V V		273	179											

197 201 253M 256M 257M 258B

 $\label{eq:Register} \textit{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ X390 3.1.04 2012/08/17 13.21

93 117 123M 253M 93 109 117 123M 253M 1(1) 2(2) 93 117 118M 123M 186M 188M 189M 191 194M 197N 207M 208M 216 253M 3(3) 93 117 123M 164M 165M 167M 171M 172M 173M 174M 175 177M 181 185 186 187M 188M 198M 199M 201N 207M 208M 213 253M 117 123M 133M 134 138 140 141M 146M 147 154 155 156 159 161 214 215 217 218 219 222 225 227 230 233 234 239M 242 244 245M 247 249 253M 267 93 117 123M 253M 4(4) 5(5) 46U 74 93 117 123M 253M 6(6) 7(7) 8(8) 93 109M 112M 117 119 120M 122B 123M 126 253M 93 117 122M 123M 134M 135 137M 138M 142M 147M 148 240M 241M 246M 253M 74 9(9) 117 123M 151M 181M 185M 221M 226 228M 253M 93 10(A) 77M 79 80 81M 83U 86D 93 100M 102U 117 123M 253M 11(B) 93 117 123M 253M 93 96M 98 99 106 117 120N 121 123M 130 143 253M 256 270 271N
77 78M 79 80 93 96 97M 98 99 117 118 121M 123M 250M 253 270M
93 108M 117 119M 123M 132M 145M 253M 254B 258M
74 76U 82D 89B 93 95U 101D 106M 107M 108B 117 123M 130M 131M 132B 143M 144M 145B 179M 184M 193 74 12(C) 13(D) 14(E)

LOR Dsect Cross Reference PAGE 10

X390 3.1.04 2012/08/17 13.21

Dsect Length Id Defn Con Member

DSTABLE 0000024 FFFFFFF 297 4 DSTABLE FAS 0000120 FFFFFFFE 339 PRIMARY INPUT

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17 13	. 21
46		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001A	249	DSTABLE,R	5		
76		USING	Ordinary	00000001	00000000	00001000	15	00298	81	IHILORAR,	R15		
82		DROP					15			R15			
83		USING	Ordinary	00000001	0000007C	00001000	10	0000E	84	COMMON, R1	0		
86		DROP	-				10			R10			
95		USING	Ordinary	00000001	00000040	00001000	15	00258	100	IHILOREL,	R15		
101		DROP					15			R15			
102		USING	Ordinary	00000001	0000007C	00001000	10	0029D	268	COMMON, R1	0		

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHILOR PROCSTEP: X390

Primary input: lines 1 to 294 of SYSD.ALGOLFRT.ASM(IHILOR)

SYSLIB library records read: 362
SYSUT1 work file size: 46496 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 23520 bytes
SYSLIN file records written: 19

TXA000I Return code 0, elapsed time 0.30 seconds.

## IHILSC LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHILSC)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00178
```

SYSUT1

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                   X390 3.1.04 2012/08/17 13.21
                                                                                                                          00002001
                                         2 *
                                         3
                                           *
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                          00003001
                                         4
                                                                                                                          00004001
00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                         6
                                                                                                                          00006001
                                                     FUNCTION/OPERATION -
                                                                                                                          00007001
                                           *
                                         8
                                                     1. DIVIDE MAGNITUDE OF ARG BY PI/4 TO FIND OCTANT AND
                                                                                                                          00008001
                                         9
                                                        FRACTION
                                                                                                                          00009001
                                                     2. IF COSINE ADD 2 TO OCTANT NUMBER
                                        10
                                                                                                                          00010001
                                                     IF SINE FOR NEGATIVE ARG, ADD 4 TO OCTANT NUMBER
3. COMPUTE SINE OR COSINE OF FRACTION*PI/4 DEPENDING ON
                                                                                                                          00011001
                                        11
                                        12
                                                                                                                          00012001
                                        13
                                           *
                                                        THE OCTANT
                                                                                                                          00013001
                                        14
                                                     4. IF OCTANT NUMBER IS FOR LOWER PLANE MAKE SIGN MINUS
                                                                                                                          00014001
                                        15
                                                                                                                          00015001
                                                     ENTRY POINTS -
                                                                                                                          00016001
                                        16
                                                     IHILSCC - COSINE FUNCTION, LONG
                                                                                                                          00017001
                                        17
                                                     IHILSCS - SINE FUNCTION, LONG
                                        18
                                                                                                                          00018001
                                        19
                                                                ΙΔ
                                                                    R1.PARMLIST
                                                                                                                          00019001
                                                                BALR R14, R15
                                        20
                                                                                                                          00020001
                                                                                                                          00021001
                                        21
                                                                DATA PASSED BY NAME
                                                     THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                          00022001
                                        22
                                        23
                                                                                                                          00023001
                                        24
                                                     INPUT - N/A
                                                                                                                          00024001
                                        25
                                                                                                                          00025001
                                                     OUTPUT - N/A
                                                                                                                          00026001
                                        26
                                                                                                                          00027001
                                        27
                                        28
                                                     EXTERNAL ROUTINES - N/A
                                                                                                                          00028001
                                                                                                                          00029001
                                        29
                                        30
                                           *
                                                     EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                          00030001
                                        31
                                                                                                                          00031001
                                        32
                                                     EXIT - ERROR -
                                                                                                                          00032001
                                                     IF ABS(ARG) ¬< PI*2**50 GOTO ERROR ROUTINE VIA
                                                                                                                          00033001
                                        33
                                        34
                                                                                     FSAERR+27*4(R13)
                                                                                                                          00034001
                                        35 *
                                                                                                                          00035001
                                        36 *
                                                     TABLES/WORKAREAS - N/A
                                                                                                                          00036001
                                        37
                                                                                                                          00037001
000000
                                        38 IHILSCSN CSECT
                                                                                                                          00038001
                        00000 001B0
                                        39
                                                                                                                          00039001
                                        40
                                                     ENTRY IHILSCC
                                                                                                                          00040001
                                        41
                                                     ENTRY IHILSCS
                                                                                                                          99941991
                                        42 *
                                                                                                                          00042001
                                        43 FPR0
                                                                                      RESULT REGISTER
                        00000
                                                     EOU
                                                            0
                                                                                                                          00043001
                                        44 FPR2
                        00002
                                                     EOU
                                                                                      SCRATCH REGISTERS
                                                                                                                          00044001
                        00004
                                        45 FPR4
                                                     EQU
                                                                                                                          00045001
                                                                                                                          00046001
                                        46
                                        47 IHILSCC
                                                     SAVE
                                                            (14,12),, 'IHILSCC LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                          00047001
000000 47F0 F026
                              99926
                                                                                                BRANCH AROUND ID
                                        48+THTLSCC
                                                     В
                                                            38(0.15)
                                                                                                                          01-SAVE
                                                                                                 LENGTH OF IDENTIFIER
000004 21
                                                                                                                          01-SAVE
                                        49+
                                                     DC
                                                            AL1(33)
                                                            CL32'IHILSCC LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000005 C9C8C9D3E2C3C340
                                        50+
                                                     DC
                                                                                                                          01-SAVE
000025 F1
                                        51+
                                                                                                 IDENTIFIER
                                                                                                                          01-SAVE
000026 90EC D00C
                              aaaac
                                        52+
                                                     STM
                                                           14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                          01-SAVE
                                                                                                                          00048001
                                        53
                                                     USING IHILSCC, R15
                                                                                                                          00049001
                  R:F 00000
                                        54
00002A 41A0 F07A
                              0007A
                                        55
                                                            R10, COMMON
                                                                                                                          00050001
                                                     LA
                                        56
                                                     DROP
                                                            R15
                                                                                                                          00051001
                                        57
                                                     USING COMMON, R10
                                                                                                                          00052001
                  R:A 0007A
                                                            R0,2
R1,0(,R1)
00002E 4100 0002
                              99999
                                        58
                                                     LA
                                                                                      OCTANT CRANK OF 2 TO RO
                                                                                                                          00053001
000032 5810 1000
                              99999
                                        59
                                                     т
                                                                                      R1 -> ARGUMENT ADDR
                                                                                                                          00054001
000036 47F0 A000
                                                                                                                          00055001
                              0007A
                                        60
                                                     В
                                                            COMMON
                                        61
                                                                                                                          00056001
                                                     DROP
                                                                                                                          00057001
                                        62
                                                            R10
                                        63 *
                                                                                                                          00058001
                                                            (14,12),, 'IHILSCS LEVEL 2.1 &SYSDATE &SYSTIME'
                                        64 IHILSCS
                                                     SAVE
                                                                                                                          00059001
00003A 47F0 F026
                                                                                                BRANCH AROUND ID
                              00026
                                        65+IHILSCS
                                                            38(0,15)
                                                     В
                                                                                                                          01-SAVE
                                                                                                 LENGTH OF IDENTIFIER
                                                                                                                          01-SAVE
                                                     DC
                                        66+
00003F C9C8C9D3E2C3E240
                                                            CL32'IHILSCS LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                          01-SAVE
                                        67+
                                                     DC
00005F F1
                                        68+
                                                     DC
                                                            CL1'1'
                                                                                                 IDENTIFIER
                                                                                                                          01-SAVE
000060 90EC D00C
                              aaaac
                                        69+
                                                     STM
                                                           14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                          01-SAVE
                                                                                                                          00060001
                                        70
                  R:F 0003A
                                                     USING IHILSCS, R15
                                                                                                                          00061001
                                        71
000064 41A0 F040
                              0007A
                                        72
                                                            R10, COMMON
                                                                                                                          00062001
                                                     LA
                                        73
                                                     DROP
                                                                                                                          00063001
                                                            R15
                  R:A 0007A
                                        74
                                                     USING COMMON, R10
                                                                                                                          00064001
                                                                                                                          00065001
000068 1B00
                                        75
                                                     SR
                                                            R0.R0
00006A 5810 1000
                                                            R1,0(,R1)
                                                                                                                          00066001
                              00000
                                                                                      R1 -> ARGUMENT
                                        76
                                                                                      IF ARG IS +, CRANK OF 0 TO R0
IF ARG IS -, CRANK OF 4 TO R0
00006E 9180 1000
                                        77
                                                     тм
                                                                                                                          00067001
                        00000
                                                            0(R1),X'80'
000072 4780 A000
                              0007A
                                                            COMMON
                                                                                                                          00068001
                                        78
                                                     ΒZ
000076 4100 0004
                               00004
                                        79
                                                     LA
                                                            R0,4
                                                                                                                          00069001
00007A 6800 1000
                                                            FPR0.0(.R1)
                                                                                      PICK UP THE ARGUMENT
                                                                                                                          99979991
                              00000
                                        80 COMMON
                                                     I D
                                                                                      FORCE SIGN OF ARG TO +
00007E 3000
                                                            FPRØ, FPRØ
                                                                                                                          00071001
                                                     LPER
                                        81
000080 7900 A12E
                                                            FPR0,MAX
                                                                                      /X/ >= PI*2**50 ?
                                                                                                                          00072001
                               001A8
                                        82
                                                     CE
000084 47B0 A09C
                                                                                      YES, ERROR
                               00116
                                        83
                                                     BNL
                                                            ERROR
                                                                                                                          00073001
000088 6D00 A11E
                                        84
                                                            FPR0,PIOV4
                                                                                      DIV BY PI/4, SEPARATE INTEGER
                                                                                                                          00074001
                               00198
                                                     DD
00008C 2820
                                        85
                                                     LDR
                                                            FPR2.FPR0
                                                                                      PART AND FRACT PART OF OUOTIENT
                                                                                                                          00075001
                                                            FPR2, SCALER
                                                                                      FORCE CHARACTERISTIC X'4E'
00008E 6E20 A0AE
                               00128
                                        86
                                                     ΑW
                                                                                                                          00076001
000092 6020 A0A6
                                                            FPR2, ARG
                                                                                                                          00077001
                              00120
                                        87
                                                     STD
                                                                                      INTEGER PART UNNORMAL = OCTANT
000096 2B22
                                        88
                                                     SDR
                                                            FPR2, FPR2
                                                                                                                          00078001
000098 6A20 A0A6
                              00120
                                        89
                                                     AD
                                                            FPR2,ARG
                                                                                      INTEGER PART NORMALIZED
                                                                                                                          00079001
00009C 2B02
                                        90
                                                     SDR
                                                            FPR0, FPR2
                                                                                      FRACTION PART TO FPR0
                                                                                                                          00080001
00009E 5E00 A0AA
0000A2 5000 A132
                              00124
                                        91
                                                     AL
ST
                                                            RØ. ARG+4
                                                                                      ADJUST OCTANT NUMBER WITH CRANK
                                                                                                                          00081001
                                                                                                                          00082001
                                        92
                                                            RØ, OCTNT
                                                                                      SAVE IT
                              001AC
0000A6 9101 A135
                        001AF
                                        93
                                                     тм
                                                            OCTNT+3,X'01'
                                                                                      IF ODD OCTANT, TAKE COMPLEMENT
                                                                                                                          00083001
0000AA 4780 A03C
                               000B6
                                                                                      OF FRACT TO OBTAIN MODIFIED ARG
                                                                                                                          00084001
                                        94
                                                     ΒZ
                                                            EVEN
0000AE 6B00 A126
                              001A0
                                        95
                                                     SD
                                                            FPR0, HALF
                                                                                                                          00085001
0000B2 6B00 A126
                              001A0
                                        96
                                                     SD
                                                            FPRØ HALF
                                                                                      SUBTRACT 1 IN 2 STEPS
                                                                                                                          00086001
0000B6 2040
                                        97 EVEN
                                                     LPDR
                                                           FPR4, FPR0
                                                                                                                          00087001
```

Addr1 Addr2 Stmt

Source Statement

Loc Object Code

X390 3.1.04 2012/08/17 13.21

0000B8 1B11 98 R1,R1 R1 = 0 FOR COSINE POLYNOMIAL 00088001 SR OCTNT+3,X'03' 0000BA 9103 A135 001AF 99 TM THIS IS FOR OCTANT 2,3,6, OR 7 00089001 0000BE 4740 A04C 0000C2 4110 0008 000C6 100 BM LABAA IF OCTANT 1,4,5, OR 8, USE SINE POLYNOMIAL. R1 = 8 00090001 00091001 80000 101 LA R1.8 CALC SIN OR COS OF MODIFIED ARG 0000C6 2C00 102 LABAA MDR FPR0, FPR0 00092001 0000C8 2820 FPR2, FPR0 USING PROPER CHEBYSHEV 00093001 103 LDR 0000CA 6C01 A0B6 00130 104 MD FPR0, C7(R1) INTERPOLATION POLYNOMIAL 00094001 0000CE 6A01 A0C6 00140 105 AD FPR0, C6(R1) 00095001 SIN(X)/X POLYN OF DEGREE 6 IN XSQ 00096001 FPR0 FPR2 0000D2 2C02 106 MDR 0000D4 6A01 A0D6 FPR0, C5 (R1) COS(X) POLYN OF DEGREE 7 IN XSQ 00097001 00150 107 AD 0000D8 2C02 108 MDR FPRØ, FPR2 00098001 0000DA 6A01 A0E6 00160 FPR0, C4(R1) 00099001 109 AD 0000DE 2C02 110 MDR FPR0, FPR2 00100001 **ΘΟΘΟΕΘ 6ΔΘ1 ΔΘΕ6** 99179 111 ΔD FPR0. C3(R1) 99191991 00102001 0000E4 2C02 FPRØ, FPR2 MDR 112 0000E6 6A01 A106 FPR0, C2(R1) 00103001 00180 AD 113 00104001 0000EA 2C02 114 MDR FPRØ FPR2 0000EC 6A01 A116 00190 115 ΔD FPR0, C1(R1) 00105001 0000F0 1211 116 LTR R1.R1 00106001 00107001 0000F2 4780 A082 000FC COSF 117 ΒZ 0000F6 2C04 FPR0, FPR4 COMPLETE SIN POLYNOMIAL BY 00108001 118 MDR 0000F8 47F0 A08C 00106 119 В SIGN MULTIPLYING BY X 00109001 120 \* 00110001 0000FC 2C02 121 COSF MDR FPRØ, FPR2 COMPLETE COS POLYNOMIAL 00111001 9999FF 6A99 A126 99149 122 ΔD FPRØ. HAI F (ONE MORE DEGREE) 00112001 000102 6A00 A126 FPR0, HALF ADD 1 IN 2 STEPS 00113001 001A0 AD 123 IF MODIFIED OCTANT IS IN 000106 9104 A135 001AF 124 SIGN ТМ OCTNT+3,X'04' 00114001 00010A 4780 A096 00110 LOWER PLANE, SIGN IS NEGATIVE 00115001 ΒZ SIGNAA 00010E 3100 FPR0, FPR0 00116001 126 LNER 127 00117001 128 SIGNAA **RETURN (14,12)** RESTORE CALLERS REGS AND RETURN 00118001 000110 129+SIGNAA DS 01-RETUR 000110 98EC D00C 0000C 130+ LM 14,12,12(13) RESTORE THE REGISTERS 01-RETUR 000114 07FE 131+ BR RETURN 01-RETUR 132 00119001 000116 47FD 0238 133 FRROR В FSAFRR+27\*4(R13) PARAMETER ac PT\*2\*\*50 00238 00120001 00121001 134 001CC 135 FSAERR EOU X'1CC' 00122001 00123001 136 999114 999999999999 000120 00000000000000000 137 ARG DC D'0' 00124001 138 00125001 000128 4E000000000000000 X'4E00000000000000000 00126001 139 SCALER DC 00127001 140 000130 B66C992E84B6AA37 141 C7 DC X'B66C992E84B6AA37' 00128001 00129001 00130001 000138 3778FCE0E5AD1685 142 DC X'3778FCE0E5AD1685' **S6** 000140 387F731045017594 X'387F731045017594 143 C6 DC 000148 B978C01C6BEF8CB3 X'B978C01C6BEF8CB3' 00131001 S5 144 DC 000150 BA69B47B1E41AEF6 145 C5 DC X'BA69B47B1E41AEF6' 00132001 000158 3B541E0BF684B527 146 X'3B541E0BF684B527' 00133001 000160 3C3C3EA0D06ABC29 147 C4 DC X'3C3C3EA0D06ABC29' 00134001 000168 BD265A599C5CB632 X'BD265A599C5CB632 00135001 148 DC **S**3 00136001 000170 BE155D3C7E3C90F8 149 C3 DC X'BE155D3C7E3C90F8 000178 3EA335E33BAC3FBD 150 DC X'3EA335E33BAC3FBD' **S2** 00137001 000180 3F40F07C206D6AB1 X'3F40F07C206D6AB1' 00138001 151 C2 DC 000188 C014ABBCE625BE41 152 DC X'C014ABBCE625BE41' 00139001 000190 C04EF4F326F91777 153 C1 DC X'C04EF4F326F91777 LAST DGT REDUCED BY 2 00140001 154 PTOV4 X'40C90FDAA22168C2' 000198 40C90FDAA22168C2 DC SA 00141001 0001A0 4080000000000000 155 HALF X'408000000000000000' 00142001 DC 1/2 = C0/2156 00143001 0001A8 4DC90FDA 157 MAX DC X'4DC90FDA' 00144001 0001AC 00000000 158 OCTNT DC F'0' 00145001 159 00146001 REGSITER EQUATES 00147001 160 161 00148001 **IEZREGS** 00149001 162 00000 163+R0 EQU 01-IEZRE 0 00001 164+R1 EOU 01-IEZRE 00002 165+R2 2 EOU 01-IEZRE 00003 166+R3 01-IEZRE EQU 3 00004 167+R4 EQU 01-IEZRE 00005 168+R5 EQU 01-IEZRE 99996 169+R6 EQU 6 7 01-IEZRE 00007 170+R7 EOU 01-IEZRE 00008 171+R8 8 01-IEZRE EOU 00009 172+R9 01-IEZRE EOU 0000A 173+R10 EQU 10 01-IEZRE 0000B 174+R11 EQU 11 01-IEZRE 175+R12 aggac EOU 12 01-TF7RF 176+R13 01-IEZRE 0000D EQU 13 177+R14 01-IEZRE 0000E EQU 14 0000F 178+R15 EQU 15 179 \* 00150001 180 FND 00151001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences	5				X390	3.1.6	94 20	012/0	8/17	13.21
ARG	8	00000120	0000000	L D D		137	87M	89	91									
COMMON	4	0000007A	0000000	l I		80	55	57U	60B	72	74U	78B						
COSF	2	000000FC	0000000	l I		121	117B											
C1	8	00000190	0000000	LXX		153	115											
C2	8	00000180	0000000	LXX		151	113											
C3	8	00000170	0000000	LXX		149	111											
C4	8	00000160	0000000	LXX		147	109											
C5	8	00000150	0000000	LXX		145	107											
C6	8	00000140	0000000	LXX		143	105											
C7	8	00000130	0000000	LXX		141	104											
ERROR	4	00000116	0000000	l I		133	83B											
EVEN	2	000000B6	0000000	l I		97	94B											
FPR0	1	00000000		U		43	80M	81M	82	84M	85	90M	95M	96M	97	102M	103	104M
							105M	106M	107M	108M	109M	110M	111M	112M	113M	114M	115M	118M
							121M											
FPR2	1	00000002		U		44	85M	86M	87	88M	89M	90	103M	106	108	110	112	114
							121											
FPR4	1	00000004		U		45	97M	118										
FSAERR	1	000001CC		U		135	133B											
HALF		000001A0				155	95		122	123								
IHILSCC		00000000				48	40	54U										
IHILSCS	4	0000003A	0000000	l I		65	41	71U										
LABAA		000000C6				102	100B											
MAX		000001A8				157	82											
OCTNT		000001AC				158	92M	93	99	124								
PIOV4		00000198	0000000			154	84											
RØ		00000000		U		163	58M	75M	79M	91M	92							
R1	1	00000001		U		164	59M	76M	77	80	98M	101M	104	105	107	109	111	113
								116M										
R10		000000A		U		173	55M	57U	62D	72M	74U							
R13		000000D		U		176	133											
R15		0000000F		U		178	54U	56D	710	73D								
SCALER		00000128				139	86											
SIGN		00000106				124	119B											
SIGNAA	2	00000110	0000000	LHH		129	125B											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21

0(0) 52 58M 69 75M 79M 91M 92 130M
1(1) 52 59M 69 76M 77 80 98M 101M 104N 105N 107N 109N 111N 113N 115N 116M 130M
2(2) 52 69 130M
3(3) 52 69 130M
4(4) 52 69 130M
5(5) 52 69 130M
6(6) 52 69 130M
7(7) 52 69 130M
8(8) 52 69 130M
9(9) 52 69 130M
10(A) 52 55M 57U 62D 69 72M 74U 130M
11(B) 52 69 130M
12(C) 52 69 130M
13(D) 52 69 130M
13(D) 52 69 130M
14(E) 52 69 130M 131B
15(F) 488 52 54U 56D 65B 69 71U 73D 130M

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17 13.21
54		USING	Ordinary	00000001	00000000	00001000	15	0007A	55	IHILSCC,R	15	
56		DROP					15			R15		
57		USING	Ordinary	00000001	0000007A	00001000	10	00000	60	COMMON, R1	0	
62		DROP					10			R10		
71		USING	Ordinary	00000001	0000003A	00001000	15	00040	72	IHILSCS,R	15	
73		DROP					15			R15		
74		USING	Ordinary	00000001	0000007A	00001000	10	00135	125	COMMON, R1	0	

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHILSC PROCSTEP: X390

Primary input: lines 1 to 151 of SYSD.ALGOLFRT.ASM(IHILSC)

SYSLIB library records read: 161
SYSUT1 work file size: 18015 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 12080 bytes
SYSLIN file records written: 10

TXA000I Return code 0, elapsed time 0.17 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHILSQ LEVEL V2.M01

(c) Copyright 1995-2010 Tachyon Software LLC

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
```

```
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                  -S2//DDN:SYSUT2
                                  -S3//DDN:SYSUT3
                                  -SN//DDN:SYSLIN
                                  -SL//DDN:SYSLIB
-ST//DDN:SYSPRINT
-SH//DDN:SYSPUNCH
                                  -SA//DDN:SYSADATA
                                  -SM1
```

```
Options for this Assembly
                                                                                        Source
                                                                                        (default)
     AControl(ALign,NoLibMac)
NoAData
                                                                                         (default)
     AdataLevel(5)
                                                                                         (default)
NoCompaT
                                                                                         (default)
   DXref
                                                                                         (default)
                                                                                        Command Line
NoEsd
     Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2, HLasm, NoTRunc, NoIndeX)
                                                                                        (default)
NoFO1d
                                                                                        (default)
     IDR('X390ASM
                                            3104')
                                                                                        (default)
NoINFÒ
                                                                                        Command Line
      LAnguage(EN)
                                                                                        (default)
      LineCount(101)
                                                                                        Command Line
     List(121)
                                                                                         (default)
     MsgLevel(0,0)
MXref(Source)
                                                                                        Command Line
                                                                                        (default)
      Object(Omf)
                                                                                        Command Line
     OPtable(Uni,NoList)
                                                                                        (default)
     {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                                        Command Line
                                                                                        (default)
NoPControl
     PRintctl(Asa)
                                                                                        //DDN:SYSPRINT
     ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                                        (default)
NoProFile
                                                                                         (default)
                                                                                        Command Line
NoRLd
     RXref(NoCr,Gr,NoFr)
                                                                                        (default)
      SiZe(3145728)
                                                                                        Command Line
                                                                                        (default)
     SysadatA(//DDN:SYSADATA)
SysLib(//DDN:SYSLIB)
                                                                                        Command Line
                                                                                        Command Line
     SysliN(//DDN:SYSLIN)
                                                                                        Command Line
                                                                                        (default)
NoSysParm
     SysprinT(//DDN:SYSPRINT)
                                                                                        Command Line
     SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
SysterM(1)
                                                                                        Command Line
                                                                                        (default)
                                                                                        Command Line
     Sysut1(//DDN:SYSUT1)
                                                                                        Command Line
      Sysut2(//DDN:SYSUT2)
                                                                                        Command Line
     Sysut3(//DDN:SYSUT3)
                                                                                        Command Line
NoTerm
                                                                                        Command Line
NoTEst
                                                                                         (default)
     TypeCheck(Magnitude,Register)
                                                                                        (default)
```

DDNAMEs	File/Data Set Names
SYSIN	SYSD.ALGOLFRT.ASM(IHILSQ)
SYSLIB	SYS1.MACLIB
	SYSD.TOOLS.MACLIB
	SYSD.ALGOLFRT.ASM
	SYSD.ALGOLFRT.MACLIB
	SYS1.AMODGEN
SYSLIN	SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT	JES2.JOB09284.S00182
SYSUT1	SYS12230.T132141.RA000.T1BLD.SYSUT1
SYSUT2	SYS12230.T132141.RA000.T1BLD.SYSUT2
CVCIIT3	CVC12230 T1321/11 RAGGO T1RID CVCIIT3

(default)

(default)

Command Line

NoUsingLimit

UsingMap

Xref(Short)

```
Loc Object Code
                        Addr1 Addr2 Stmt
                                                                                                     X390 3.1.04 2012/08/17 13.21
                                              Source Statement
                                                                                                                             00002001
                                          3
                                                       COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                             00003001
                                          4
                                                                                                                             00004001
00005001
                                          5
                                                       STATUS - LEVEL 2.1
                                          6
                                                                                                                             00006001
                                                                                                                             00007001
                                                       FUNCTION/OPERATION
                                            *
                                          8
                                                       WRITE X = M*16**(2P-Q), M MANTISSA, Q=0 OR 1
                                                                                                                             00008001
                                                       THEN SQRT(X) = SQRT(M)*(4**-Q)*(16**P)
                                          9
                                                                                                                             00009001
                                         10
                                                                                                                             00010001
                                                                                                                             00011001
                                                       ENTRY POINT
                                         11
                                                       IHILSQ - SQRT FUNCTION, LONG
                                         12
                                                                                                                             00012001
                                         13
                                                                 LÃ
                                                                      R1, PARMLIST
                                                                                                                             00013001
                                         14
                                                                 BALR R14,R15
                                                                                                                             00014001
                                                                DATA PASSED BY NAME
                                         15
                                                                                                                             00015001
                                                       THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                             00016001
                                         16
                                                                                                                             00017001
                                         17
                                         18
                                                       INPUT - N/A
                                                                                                                             00018001
                                         19
                                                                                                                             00019001
                                                       OUTPUT - N/A
                                         20
                                                                                                                             00020001
                                                                                                                             00021001
                                         21
                                                                                                                             00022001
                                         22
                                                       EXTERNAL ROUTINES - N/A
                                         23
                                                                                                                             00023001
                                         24
                                                       EXIT - NORMAL -
                                                                                                                             00024001
                                         25
                                                       RETURN VIA R14, RESULT IN FPR0
                                                                                                                             00025001
                                                                                                                             00026001
                                         26
                                                                                                                             00027001
                                         27
                                                       EXIT - ERROR
                                         28
                                                       IF ARGUMENT NEGATIVE GOTO ERROR ROUTINE VIA
                                                                                                                             00028001
                                                           FSAERR+23*4(R13)
                                                                                                                             00029001
                                         29
                                         30
                                                                                                                             00030001
                                         31 *
                                                       TABLES/WORKAREAS - N/A
                                                                                                                             00031001
                                         32
                                                                                                                             00032001
000000
                        00000 000A6
                                         33 IHILSQRT CSECT
                                                                                                                             00033001
                                         34
                                                                                                                             00034001
                                         35
                                                       ENTRY IHILSQ
                                                                                                                             00035001
                                         36
                                                                                                                             00036001
                                         37 FPRØ
                                                                                        RESULT REGISTER
                        99999
                                                       FOU
                                                             a
                                                                                                                             00037001
                                         38 FPR2
                                                                                                                             00038001
                                                                                        SCRATCH REGISTERS
                        00002
                                                       EQU
                                                             2
                         00004
                                         39
                                            FPR4
                                                       EQU
                                                                                                                             00039001
                                         40
                                                                                                                             00040001
                                         41 THTISO
                                                       SAVE
                                                             (14,12),, 'IHILSQRT LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                             00041001
000000 47F0 F026
                               00026
                                         42+IHILSO
                                                      В
                                                             38(0,15)
                                                                                                   BRANCH AROUND ID
                                                                                                                             01-SAVE
                                                                                                   LENGTH OF IDENTIFIER
000004 21
                                         43+
                                                       DC
                                                             AL1(33)
                                                                                                                             01-SAVE
000005 C9C8C9D3E2D8D9E3
                                                       DC
                                                             CL32'IHILSQRT LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                             01-SAVE
                                         44+
                                         45+
                                                       DC
                                                             CL1'1'
                                                                                                                             01-SAVE
000026 90EC D00C
                               0000C
                                         46+
                                                       STM
                                                             14,12,12(13)
                                                                                                   SAVE REGISTERS
                                                                                                                             01-SAVE
                                         47
                                                                                                                             00042001
                                                       USING IHILSQRT, R15
                                                                                                                             00043001
                   R: F 00000
                                         48
00002A 5810 1000
                               00000
                                         49
                                                                                                                             00044001
                                                             R1,0(,R1)
                                                             FPR0,0(,R1)
00002E 6800 1000
                               00000
                                         50
                                                       LD
                                                                                        OBTAIN ARGUMENT
                                                                                                                             00045001
000032 2240
                                         51
                                                       LTDR
                                                             FPR4, FPR0
                                                                                        ARG = 0 ?
                                                                                                                             00046001
                                                                                        YES, ANS = 0, RETURN
000034 4780 F08E
                               0008E
                                         52
                                                       B7
                                                             FIN
                                                                                                                             00047001
000038 4740 F094
00003C 7000 F098
                                                                                        NEGATIVE ARG, ERROR
CONSTRUCT Y = M*16**P AS FOLLOWS
                                                                                                                             00048001
                               00094
                                         53
                                                       BM
                                                             ERROR
                                                             FPR0, BUFF
                               00098
                                                       STE
                                                                                                                             00049001
                                         54
000040 1B00
                                         55
                                                       SR
                                                                                                                             00050001
                                                             RØ, RØ
000042 4300 F098
                               00098
                                         56
                                                       IC
                                                             R0, BUFF
                                                                                        P+64 = INT PART OF (CHAR+65)/2
                                                                                                                             00051001
000046 4A00 F0A4
                               000A4
                                         57
                                                       ΑН
                                                             RØ, BIAS
                                                                                                                             00052001
                                                                                        P+64 IN R0, R1 IS - IF EVEN CHAR
Y IS READY IN BUFF
00004A 8C00 0001
                               00001
                                         58
                                                       SRDL
                                                             R0.1
                                                                                                                             00053001
                                                             RØ, BUFF
00004F 4200 F098
                               99998
                                         59
                                                       STC
                                                                                                                             00054001
                                                                                        CONSTRUCT (2/9)*16**P IN B
000052 4200 F0A0
                               000A0
                                                                                                                             00055001
                                         60
                                                       STC
                                                             RØ, B
000056 7800 F098
                               00098
                                         61
                                                       LE
                                                             FPR0, BUFF
                                                                                        COMPUTE ((2/9+(8/9)*M)*16**P
                                                                                                                             00056001
00005A 7C00 F09C
                               0009C
                                                       ME
                                                             FPR0,A
                                                                                                                             00057001
                                         62
00005E 7A00 F0A0
                               000A0
                                         63
                                                       ΑE
                                                             FPR0.B
                                                                                                                             00058001
000062 1211
                                         64
                                                       LTR
                                                             R1, R1
                                                                                                                             00059001
                                                                                        EVEN CHAR, 1ST APPROX IS READY ODD CHAR, DIVIDE BY 4 TO OBTAIN
000064 4740 F06C
                               0006C
                                         65
                                                                                                                             00060001
                                                       BM
                                                             OK
                                                             FPRØ, FPRØ
000068 3400
                                         66
                                                       HER
                                                                                                                             00061001
00006A 3400
                                         67
                                                       HER
                                                             FPR0, FPR0
                                                                                        1ST APPROXIMATION
                                                                                                                             00062001
00006C 3824
                                         68 OK
                                                       LER
                                                             FPR2, FPR4
                                                                                        NEWTON RAPHSON ITERATIONS
                                                                                                                             00063001
00006E 3D20
                                         69
                                                       DER
                                                             FPR2.FPR0
                                                                                        Y(N+1) = (Y(N)+ARG/Y(N))/2
2 PASSES IN SHORT FORM
                                                                                                                             00064001
00065001
000070 3A02
                                         70
                                                       AER
                                                             FPRØ, FPR2
000072 3400
                                         71
                                                       HER
                                                             FPRØ, FPRØ
                                                                                                                             00066001
000074 3824
                                         72
                                                       LER
                                                             FPR2.FPR4
                                                                                                                             00067001
000076 3D20
                                         73
                                                       DER
                                                             FPR2, FPR0
                                                                                                                             00068001
                                                                                                                             00069001
00070001
000078 3A02
                                         74
                                                       AER
                                                             FPRØ, FPR2
00007A 3400
                                         75
                                                       HER
                                                             FPRØ, FPRØ
00007C 2824
                                                             FPR2, FPR4
                                                                                        2 PASSES IN LONG FORM
                                                                                                                             00071001
                                         76
                                                       LDR
00007E 2D20
                                         77
                                                       DDR
                                                             FPR2, FPR0
                                                                                                                             00072001
000080 2422
                                         78
                                                       HDR
                                                             FPR2, FPR2
                                                                                                                             00073001
000082 2400
                                         79
                                                       HDR
                                                             FPR0, FPR0
                                                                                                                             00074001
                                         80
                                                                                                                             00075001
000084 2402
                                                       ADR
                                                             FPR0. FPR2
000086 2D40
                                                       DDR
                                                             FPR4, FPR0
                                                                                                                             00076001
                                         81
000088 2F40
                                                             FPR4, FPR0
                                                                                                                             00077001
                                         82
                                                       SWR
00008A 2444
                                         83
                                                       HDR
                                                             FPR4.FPR4
                                                                                                                             00078001
00008C 2A04
                                                             FPR0, FPR4
                                                                                                                             00079001
                                         84
                                                       ADR
                                         85 *
                                                                                                                             00080001
                                         86 FIN
                                                       RETURN (14,12)
                                                                                        RESTORE REGS AND RETURN
                                                                                                                             00081001
00008E
                                         87+FIN
                                                       DS
                                                                                                                             01-RETUR
                                                                                                                             01-RETUR
00008E 98EC D00C
                               0000C
                                         88+
                                                       LM
                                                             14,12,12(13)
                                                                                                    RESTORE THE REGISTERS
000092 07FE
                                         89+
                                                       BR
                                                                                                                             01-RETUR
                                         90 *
                                                                                                                             00082001
                                                                                                                             00083001
00084001
000094 47FD 0228
                               00228
                                         91 ERROR
                                                       В
                                                             FSAERR+23*4(R13)
                                                                                        NEGATIVE PARAMETER
                                         92
                        001CC
                                         93 FSAERR
                                                       EQU
                                                             X'1CC'
                                                                                                                             00085001
                                                                                                                             00086001
                                         94
000098 00000000
                                         95 BUFF
                                                             F'0'
                                                                                                                             00087001
                                                       DC
00009C 40E38E39
                                         96 A
                                                       DC
                                                             X'40F38F39'
                                                                                                                             00088001
0000A0 4038E38E
                                         97 B
                                                       DC
                                                             X'4038E38E
                                                                                                                             00089001
```

00097001

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 Loc Object Code 98 \* 00090001 00091001 00092001 00093001 0000A4 0041 99 BIAS DC H'65' 100 \* 101 \* 102 \* REGISTER EQUATES 00094001 103 **IEZREGS** 00095001 00000 104+R0 01-IEZRE 01-IEZRE EQU 0 1 2 3 4 5 6 7 8 9 10 00001 00002 00003 105+R1 106+R2 107+R3 EQU EQU EQU 01-IEZRE 01-IEZRE 01-IEZRE 01-IEZRE 00004 108+R4 EQU 00005 109+R5 EQU EQU EQU 00006 00007 110+R6 01-IEZRE 111+R7 112+R8 01-IEZRE 01-IEZRE 00008 01-IEZRE 01-IEZRE 00009 113+R9 EQU EQU EQU EQU 0000A 114+R10 0000B 0000C 115+R11 01-IEZRE 116+R12 117+R13 12 13 01-IEZRE 01-IEZRE 0000D 0000E 118+R14 EQU 14 01-IEZRE 0000F 119+R15 EQU 15 00096001 120 \*

END

121

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ences					X390	3.1.0	4 20	12/08	/17 1	3.21
Α	4	0000009C	00000001	хх		96	62											
В	4	000000A0	00000001	XX		97	60M	63										
BIAS	2	000000A4	00000001	. нн		99	57											
BUFF	4	00000098	00000001	L F F		95	54M	56	59M	61								
ERROR	4	00000094	00000001	I		91	53B											
FIN	2	000008E	00000001	. нн		87	52B											
FPR0	1	00000000		U		37	50M	51	54	61M	62M	63M	66M	67M	69	70M	71M	73
							74M	75M	77	79M	80M	81	82	84M				
FPR2	1	00000002		U		38	68M	69M	70	72M	73M	74	76M	77M	78M	80		
FPR4	1	00000004		U		39	51M	68	72	76	81M	82M	83M	84				
FSAERR	1	000001CC		U		93	91B											
IHILSQ	4	00000000	00000001	I		42	35											
IHILSQRT	1	00000000	00000001	J		33	48U											
OK	2 (	0000006C	00000001	I		68	65B											
RØ	1	00000000		U		104	55M	56M	57M	58M	59	60						
R1	1	00000001		U		105	49M	50	64M									
R13	1	0000000D		U		117	91											
R15	1	0000000F		U		119	48U											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

46 46 56M 57M 58M 59 60 88M 50 58M 64M 88M 49M 88M

1(1) 2(2) 3(3) 4(4) 5(5) 88M 88M

88M

88M

88M 88M

46 46 46 46 46 46 46 46 46 5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C) 88M 88M 88M

88M

13(D) 14(E) 15(F) 46 88 91N 46 88M 89B 42B 46 48U 88M

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

48 USING Ordinary 00000001 00000000 00001000 15 000A4 65 IHILSQRT,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHILSQ PROCSTEP: X390

Primary input: lines 1 to 97 of SYSD.ALGOLFRT.ASM(IHILSQ)

SYSLIB library records read: 161
SYSUT1 work file size: 11254 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 7760 bytes
SYSLIN file records written: 5

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHILSQRT 0000A6 2

## IHIOAR LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                       -S2//DDN:SYSUT2
                                                       -S3//DDN:SYSUT3
                                                       -SN//DDN:SYSLIN
                                                       -SL//DDN:SYSLIB
                                                       -ST//DDN:SYSPRINT
                                                       -SH//DDN:SYSPUNCH
                                                       -SA//DDN:SYSADATA
                                                       -SM1
Options for this Assembly
                                                                   Source
                                                                   (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                    (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                   Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                   (default)
NoFO1d
                                                                   (default)
    IDR('X390ASM
                                  3104')
                                                                    (default)
NoINFÒ
                                                                   Command Line
     LAnguage(EN)
                                                                   (default)
     LineCount(101)
                                                                   Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                   Command Line
                                                                   (default)
     Object(Omf)
                                                                   Command Line
     OPtable(Uni,NoList)
                                                                   (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                   Command Line
                                                                   (default)
NoPControl
    PRintctl(Asa)
                                                                   //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                   (default)
NoProFile
                                                                    (default)
                                                                   Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                   (default)
     SiZe(3145728)
                                                                   Command Line
NoSUppress
                                                                   (default)
     SysadatA(//DDN:SYSADATA)
                                                                   Command Line
     SvsLib(//DDN:SYSLIB)
                                                                   Command Line
    SysliN(//DDN:SYSLIN)
                                                                   Command Line
                                                                   (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                   Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                   Command Line
                                                                   (default)
                                                                   Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                   Command Line
     Sysut2(//DDN:SYSUT2)
                                                                   Command Line
     Sysut3(//DDN:SYSUT3)
                                                                   Command Line
NoTerm
                                                                   Command Line
NoTEst
                                                                    (default)
    TypeCheck(Magnitude,Register)
                                                                   (default)
NoUsingLimit
                                                                    (default)
    UsingMap
                                                                   (default)
    Xref(Short)
                                                                   Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                         SYSD.ALGOLFRT.ASM(IHIOAR)
SYSLIB
                          SYS1.MACLIB
                         SYSD. TOOLS. MACLIB
                         SYSD.ALGOLFRT.ASM
                         SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                         SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                         JES2.J0B09284.S00186
                         SYS12230.T132141.RA000.T1BLD.SYSUT1
SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

0000A8 0004

96

=H'4'

```
Loc Object Code
                                                                                                 X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt Source Statement
                                                                                                                        00002001
                                        3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00003001
                                        4
                                                                                                                        00004001
00005001
                                        5
                                                    STATUS - LEVEL 2.1
                                        6
                                                                                                                        00006001
                                                     FUNCTION/OPERATION -
                                                                                                                        00007001
                                           *
                                        8
                                                     TRANSFER NUMBERS FROM ARRAY INDICATED BY SECOND ACTUAL
                                                                                                                        00008001
                                        9
                                                    PARAMETER TO OUTPUT BUFFER BY CALLING OUTREAL LONG OR
                                                                                                                        00009001
                                       10
                                                    SHORT REPEATEDLY
                                                                                                                        00010001
                                                                                                                        00011001
                                       11
                                       12
                                                     ENTRY POINT -
                                                                                                                        00012001
                                       13
                                                    IHIOARRY - FROM GENERATED OBJECT MODULE
                                                                                                                        00013001
                                       14
                                                                    R1, PARMLIST
                                                                                                                        00014001
                                                                BALR R14, R15
                                       15
                                                                                                                        00015001
                                                                DATA PASSED BY NAME
                                                                                                                        00016001
                                       16
                                                                                                                        00017001
                                       17
                                       18
                                                    INPUT - N/A
                                                                                                                        00018001
                                       19
                                                                                                                        00019001
                                                    OUTPUT - N/A
                                       20
                                                                                                                        00020001
                                                                                                                        00021001
                                       21
                                                                                                                        00022001
                                       22
                                                    EXTERNAL ROUTINES -
                                                    IHIIOR - EVALUATE DATA SET NUMBER
                                        23
                                                                                                                        00023001
                                                    IHISOR - OUTREAL SHORT
                                       24
                                                                                                                        00024001
                                       25
                                                    IHILOR - OUTREAL LONG
                                                                                                                        00025001
                                                                                                                        00026001
                                       26
                                                    EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                        00027001
                                        27
                                        28
                                                                                                                        00028001
                                                    EXIT - ERROR - N/A
                                                                                                                        00029001
                                        29
                                        30
                                                                                                                        00030001
                                       31 *
                                                    TABLES/WORK AREAS - N/A
                                                                                                                        00031001
                                       32
                                                                                                                        00032001
000000
                       00000 000AA
                                       33 IHIOARRY CSECT
                                                                                                                        00033001
                                        34
                                                                                                                        00034001
                                       35
                                                           (14,12),, 'IHIOARRY LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                        00035001
000000 47F0 F026
                              00026
                                       36+
                                                                                               BRANCH AROUND ID
                                                                                                                        01-SAVE
                                                    DC
                                                                                               LENGTH OF TDENTTETER
                                                                                                                        01-SAVE
000004 21
                                        37+
                                                           AL1(33)
000005 C9C8C9D6C1D9D9E8
                                                           CL32'IHIOARRY LEVEL 2.1 08/17/12 13.2'
                                                                                                    IDENTIFIER
                                                                                                                        01-SAVE
                                       38+
                                                    DC
000025 F1
                                       39+
                                                    DC
                                                           CL1'1
                                                                                               IDENTIFIER
                                                                                                                        01-SAVE
                                                                                                                        01-SAVF
000026 90EC D00C
                              0000C
                                       40+
                                                    STM
                                                           14,12,12(13)
                                                                                               SAVE REGISTERS
00002A 188F
                                       41
                                                    I R
                                                           R8. R15
                                                                                                                        00036001
                                                    USING IHIOARRY, R8
                  R:8 00000
                                       42
                                                                                                                        00037001
                                                                                                                        00038001
00002C 18CD
                                       43
                                                    LR
                                                           R12, R13
                                                                                      R12 -> FSA
00002E 41D0 C048
                              00048
                                       44
                                                           R13, ASAVE (, R12)
                                                                                      R13 -> SECOND FSA SAVEAREA
                                                                                                                        00039001
                                                    LA
                                                                                                                        00040001
000032 1B33
                                       45
                                       46
                                                                                                                        00041001
                                       47
                                                    EVALUATE DATASET NUMBER
                                                                                                                        00042001
                                                                                                                        00043001
                                       48
000034 58F0 8090
                              00090
                                                           R15, VIOREV
                                                                                     R15 -> IHIIOREV ROUTINE
                                       49
                                                                                                                        00044001
                                                                                     CALL IHIIOREV
000038 05EF
                                       50
                                                          R14,R15
                                                                                                                        00045001
                                        51
                                                                                                                        00046001
                                       52
                                                    EVALUATE SOURCE ADDR
                                                                                                                        00047001
                                                                                                                        00048001
                                       53
                                                           R1,B'1111',4(R1)
00003A BF1F 1004
                              00004
                                                                                                                        00049001
                                                    ICM
                                        54
00003E 47B0 804A
                              0004A
                                        55
                                                    BNM
                                                           OTARY1
                                                                                     >= 0, BRANCH
                                                                                                                        00050001
                                                           R3,=X'80000000'
000042 5630 80A0
                              000A0
                                        56
                                                    0
                                                                                                                        00051001
000046 5410 80A4
                              000A4
                                        57
                                                           R1,=X'00FFFFFF'
                                                                                                                        00052001
00004A 5820 100C
                              0000C
                                        58 OTARY1
                                                    L
                                                           R2,12(,R1)
                                                                                     R2 -> DESTEND+1
                                                                                                                        00053001
00004F 5870 1008
                              99998
                                       59
                                                    т
                                                           R7.8(,R1)
                                                                                     R7 -> STARTDEST
                                                                                                                        00054001
                                                                                                                        00055001
000052 1A73
                                       60
                                                    AR
                                                           R7, R3
000054 1A23
                                       61
                                                    AR
                                                           R2.R3
                                                                                                                        00056001
                                                                                                                        00057001
                                       62
                                       63
                                                    CALL ROUTINE OUREAL LONG OR SHORT
                                                                                                                        00058001
                                       64
                                                                                                                        00059001
                                                                                     SETUP FOR SHORT
                                                                                                                        00060001
000056 4140 0004
                              00004
                                       65
                                                    LA
                                                           R4.4
                                                           OPTSW(R12), X'20'
00005A 9120 C0C2
                       000C2
                                       66
                                                    TM
                                                                                     LONG OR SHORT PRECISION ?
                                                                                                                        00061001
00005E 4710 8066
                              00066
                                        67
                                                    во
                                                           OTARY2
                                                                                     SHORT, BRANCH
                                                                                                                        00062001
000062 4140 0008
                              00008
                                       68
                                                    LA
                                                           R4,8
                                                                                     LONG
                                                                                                                        00063001
000066 58F4 8094
                              00094
                                       69 OTARY2
                                                           R15, ARROUTR (R4)
                                                                                                                        00064001
00065001
00006A 05EF
                                                    BALR
                                                           R14, R15
                                       70
00006C 9120 C0C2
                       000C2
                                                    TM
                                                           OPTSW(R12), X'20'
                                                                                     LONG OR SHORT
                                                                                                                        00066001
                                       71
000070 4710 807E
                              0007E
                                       72
                                                    во
                                                           OTARY3
                                                                                     SHORT
                                                                                                                        00067001
000074 1277
                                       73
                                                                                     LONG
                                                                                                                        00068001
                                                    LTR
                                                           R7, R7
000076 4720 807E
                              9997F
                                       74
                                                    ВP
                                                           OTARY3
                                                                                                                        00069001
00007A 4B70 80A8
                                                                                                                        00070001
                              000A8
                                       75
                                                    SH
                                                           R7,=H'4
                                       76 OTARY3
                                                           R7, R4
00007E 1A74
                                                                                     INCREASE DEST ADDR
                                                                                                                        00071001
                                                    AR
000080 1972
                                       77
                                                           R7, R2
                                                                                                                        00072001
                                                    CR
000082 4740 8066
                              00066
                                       78
                                                           OTÁRY2
                                                                                     DESTEND NOT REACHED
                                                                                                                        00073001
000086 18DC
                                       79
                                                    LR
                                                           R13, R12
                                                                                                                        00074001
                                                                                                                        00075001
                                       80
                                                    RETURN (14,12)
                                                                                                                        00076001
                                       81
000088 98EC D00C
                              0000C
                                                                                               RESTORE THE REGISTERS
                                                           14,12,12(13)
                                       82+
                                                    LM
                                                                                                                        01-RETUR
00008C 07FE
                                       83+
                                       84 *
                                                                                                                        00077001
                                       85
                                                    EXTERNAL ADDRS
                                                                                                                        00078001
                                       86
                                                                                                                        00079001
00008E 0000
000090 00000000
                                       87 VIOREV
                                                    DC
                                                           V(IHIIOREV)
                                                                                                                        00080001
                                       88
                                                                                                                        00081001
000094 00000000
                                       89 ARROUTR
                                                    DC
                                                                                                                        00082001
                                                                                     +00
99998 9999999
                                       90
                                                    DC
                                                           V(IHISORAR)
                                                                                     +04
                                                                                                                        00083001
                                                                                                                        00084001
00009C 00000000
                                       91
                                                    DC
                                                           V(IHILORAR)
                                                                                     +08
                                       92
                                                                                                                        00085001
                                       93
                                                                                                                        00086001
                                                    LTORG
00000A0 80000000
                                       94
                                                           =X'80000000'
0000A4 00FFFFF
                                       95
                                                           =X'00FFFFFF'
```

Loc Object Code	Addr1 Addr2	Stmt Source	State	ement	X390 3.1.04 2012/08	3/17 13.21
000000	00000 00120	97 * 98 FAS	DSECT	г		00087001 00088001
		99 * 100	COPV	FSAREA		00089001 00090001
		101=*				00001001
		102=* 103=*	COMPO	ONENT ID - 360S-LM-532 AL	GOL F LIBRARY	00002001 00003001
		104=*	STATU	JS - LEVEL 2.1		00004001
		105=* 106=*****	*****	*********	**********	00005001
		107=*				00007001
		108=* 109=*	COMMC	ON DATA AREA		00008001 00009001
		110=* 111=*	FSARE	EA		00010001 00011001
			*****	**********	**********	
		113=* 114=*	DATA	THAT IS IMMEDIATELY ACCE	SSIBLE TO ALL	00013001 00014001
		115=*		ES DURING THE EXECUTION		00015001
		116=* 117=*	ADDRE	ESSED BY MEANS OF R13 OR	(FOR THE LIBRARY	00016001 00017001
		118=* 119=*	SUBRO	DUTINES) BY R12		00018001 00019001
	00000	120=FSAREA	EQU	*		00019001
		121=* 122=*	SAVE	AREAS		00021001 00022001
		123=*				00023001
000000	00048	124= 125=ASAVE	DS EQU	18F *-FSAREA	STANDARD SAVE AREA ALTERNATE SAVE AREA USED BY	00024001 00025001
000048		126=	DS	18F	CERTAIN SUBROUTINES	00026001
		127=* 128=*	MISCE	ELLANEOUS WORK AREAS AND	CONSTANTS	00027001 00028001
	00000	129=*	EOU	* ECADEA	TEMPODADY STORAGE FOR	00029001
000090	00090	130=FCTVALST 131=	DS	*-FSAREA D	TEMPORARY STORAGE FOR FUNCTION VALUES	00030001 00031001
000098 00000090	00098	132=ASTLOC 133=	EQU DC	*-FSAREA A(FSAREA+FCTVALST)	DISPL FOR ADDR OF STAND LOCTN	00032001 00033001
000030 00000030	0009C	134=BRRST	EQU	*-FSAREA	TEMPORARY SAVE REG BRR	00034001
00009C	0009C	135=HW 136=	EQU DS	BRRST F	TEMPORARY HALFWORD STORAGE	00035001 00036001
000040	000A0	137=PROLREG	EQU	*-FSAREA	STORAGE FOR PBT AND LAT WHEN	00037001
0000A0		138= 139=*	DS	2A	A PROCEDURE IS FORMAL PARAM	00038001 00039001
		140=* 141=*	HALF	NORD CONTAINING PBN OF CA	ALLED BLOCK IN SECOND BYTE	00040001 00041001
0000A8		142=	DS	0H		00042001
0000A8 00	000A9	143= 144=PROLPBN	DC EQU	X'00' *-FSAREA	STORAGE FOR CALLED PBN	00043001 00044001
0000A9 00		145=	DC	X'00'		00045001
0000AA 0008	000AA	146=EIGHT 147=	EQU DC	*-FSAREA H'8'	CONST FOR REDUCING RAS	00046001 00047001
0000AC		148=* 149=	DS	ØF		00048001 00049001
OOOOAC	000AC	150=ADSTAB	EQU	*-FSAREA	ADDR OF DSTABLE	00049001
0000AC	000B0	151= 152=ANOTTAB	DS EQU	A *-FSAREA	IN THE OBJECT PROGRAM ADDR OF NOTE TABLE	00051001 00052001
0000В0		153=	DS	A	(INSERTED BY THE OPEN ROUTINE)	00053001
	000B4	154=* 155=IHIFSAST	EQU	*		00054001 00055001
000004	000B4	156=PGOPSW	EQU	*-FSAREA	PROGRAM CHECK OLD PSW	00056001
0000B4	000BC	157= 158=FSAPICA	DS EQU	2F *-FSAREA	OLD PICA ADDR	00057001 00058001
0000BC 00000000	000C0	159= 160=SCRCS	DC EQU	F'0' *-FSAREA	SEMICOLON NUMBER	00059001 00060001
0000C0		161=	DS	Н		00061001
	000C2 000C2	162=DTSW 163=OPTSW	EQU EQU	*-FSAREA DTSW	OPTION SWITCHES	00062001 00063001
0000C2 00		164=	DC	X'00'	DUMP-80, TRACE-40, SHORT-20	00064001
0000C3	000C3	165=FSAERCOD 166=	EQU DS	*-FSAREA C	ERROR CODE FOR ERROR ROUTINE	00065001 00066001
		167=* 168=*	RETUR	RN ADDRESS STACK POINTERS	S DO NOT CHANGE OPDER	00067001 00068001
		169=*			DO NOT CHANGE UNDER	00069001
0000C4	000C4	170= 171=IHIFSARS	DS EOU	0F *		00070001 00071001
	000C4	172=RASSTART	EQU	*-FSAREA	ADDR OF FIRST ENTRY IN RAS-8	00072001
0000C4	000C8	173= 174=RASPT	DS EQU	F *-FSAREA	RAS POINTER FROM TOP	00073001 00074001
0000C8		175=	DS	F		00075001
0000CC	000CC	176=RASEND 177=	EQU DS	*-FSAREA F	ADDR OF LAST ENTRY IN RAS+8	00076001 00077001
	000D0	178=RASPB	EQU DS	*-FSAREA F	RAS POINTER FROM BOTTOM	00078001
0000D0		179= 180=*				00079001 00080001
		181=* 182=*	LIST	OF BRANCH INSTRUCTIONS 1	TO COMMONLY USED SUBROUTINES	00081001 00082001
0000D4		183=BRLIST	DS	ØF		00083001
0000D4 4700 0000	000D4 00000	184=CAP1 185=	EQU NOP	*-FSAREA 0	FIRST PART CAPS	00084001 00085001
	000D8	186=CAP2	EQU	*-FSAREA	SECOND PART CAPS	00086001
0000D8 4700 0000	00000 000DC	187= 188=PROLOGP	NOP EQU	0 *-FSAREA	PROLOGUE FORMAL PARAMETER ENTRY	00087001 00088001
0000DC 4700 0000	000DC 00000	189=PROLOGFP 190=	EQU NOP	PROLOGP 0		00089001
	000E0	191=PROLOG	EQU	*-FSAREA	PROLOGUE PROGRAM USUAL ENTRY	00090001 00091001
0000E0 4700 0000	00000	192=	NOP	0		00092001

PAGE

D-Loc	Obje	ct Code	Addr1	Addr2	Stmt	Source	Stat	ement	X390 3.1.04 2012/08/	17 13.21
222254	4700		000E4			RETPROG	EQU	*-FSAREA	DISPLACEMENT RETURN PROGRAM	00093001
0000E4	4/00	0000	000E8	00000	194=	EPILOGP	NOP EQU	0 *-FSAREA	EDITIOGUE DROCEDAM DROCEDURE ENTRY	00094001
0000E8	4700	0000	00000	00000	196=	PILUGP	NOP	0	EPILOGUE PROGRAM, PROCEDURE ENTRY	00095001
			000EC			EPILOGB	EQU	*-FSAREA	EPILOGE PROGRAM, BETA-BLOCK ENTRY	
0000EC	4700	0000		00000	198=		NOP	0		00098001
			000F0			EPILPR3	EQU	*-FSAREA	EPILOGUE PROGRAM ENTRY 3	00099001
0000F0	4700	0000	00054	00000	200=	CUE1	NOP	0 * FCAREA	FIRST DART COURC	00100001
0000F4	4700	9999	000F4	00000	201=	CSWE1	EQU NOP	*-FSAREA 0	FIRST PART CSWES	00101001 00102001
000014	4700	0000	000F8	00000		CSWE2	EQU	*-FSAREA	SECOND PART CSWES	00102001
0000F8	4700	0000		00000	204=		NOP	0		00104001
			000FC			LOADPP	EQU	*-FSAREA	LOAD PRECOMPILED PROC ROUTINE	00105001
0000FC	4700	0000	00400	00000	206=	-DAGE	NOP	0		00106001
000100	Daga	0000 0000	00100	00000	207=	IRACE	EQU	*-FSAREA		00107001
000100		0000 0000	00000	00000	208= 209=		MVC NOP	0(0),0 0		00108001 00109001
00010A				00000	210=		NOP	0		00110001
			0010E			TERMNTE	EQU	*-FSAREA	NORMAL TERMINATION EXIT	00111001
00010E	4700	0000		00000	212=		NOP	0		00112001
			00112		213=	BCR	EQU	*-FSAREA		00113001
000112	0700				214=		BCR	0,0	VARIABLE CONDITIONAL BRANCH	00114001
000114	4700	0000	00114			GETMSTO	EQU	*-FSAREA		00115001
000114	4700	0000		00000	216= 217=	k	NOP	0		00116001 00117001
			00118			/ALUCALL	EQU	*-FSAREA		00117001
000118	4700	0000		00000	219=		NOP	0		00119001
			0011C		220=	IORLST	EQU	*-FSAREA		00120001
00011C	4700	0000		00000	221=		NOP	0		00121001
					222=					00122001
			001CC			SAERR	EQU	X'1CC'	DISPL FOR ERROR LIST	00123001
					224= <sup>3</sup> 225= <sup>3</sup>		DTCD	I ACEMENTS EOD	CERTAIN ERROR EXITS IN FSA	00124001 00125001
					226=		DISF	LACEMENTS TOR	CERTAIN ERROR EXITS IN TSA	00125001
			0020C			OUTOFB	EQU	FSAERR+4*16		00127001
			00218			NUMBIND	EQU	FSAERR+4*19		00128001
			00208			ARRAYBD	EQU	FSAERR+4*15		00129001
			0026C			ERROR40	EQU	FSAERR+4*40		00130001
			00224			DERR22	EQU	FSAERR+4*22		00131001
			00210 00220			ENDLESL DERR21	EQU EQU	FSAERR+4*17 FSAERR+4*21		00132001 00133001
			00220		234=		LQU	I SALIMIT ZI		00134001
					235					00091001
					236		REGI	STER EQUATES		00092001
					237	k				00093001
			00000		238	20	IEZR			00094001
			00000 00001		239+l 240+l		EQU EQU	0 1		01-IEZRE 01-IEZRE
			00001		241+		EQU	2		01-IEZRE
			00003		242+		EQU	3		01-IEZRE
			00004		243+		EQU	4		01-IEZRE
			00005		244+		EQU	5		01-IEZRE
			00006		245+		EQU	6		01-IEZRE
			00007		246+		EQU	7		01-IEZRE
			00008 00009		247+1 248+1		EQU EQU	8 9		01-IEZRE 01-IEZRE
			00003 0000A		249+		EQU	10		01-IEZRE
			0000B		250+		EQU	11		01-IEZRE
			0000C		251+		EQU	12		01-IEZRE
			0000D		252+		EQU	13		01-IEZRE
			0000E		253+		EQU	14		01-IEZRE
			0000F		254+i		EQU	15		01-IEZRE 00095001
					256		END			00095001
					_50		2.10			2023001

Symbol	Length	ı	Value	Id	Тур	e Asm	Program	Defn	Refe	rence	S				X390	3.1.	04 2	012/0	8/17	13.21
=H'4'	1	2 (	8A00000A8	0000000	1 H	Н		96	75											
=X'00FFFF		1 0	000000A4	0000000	1 \	· v		95	57											
=X'800000	aaa'	4 (	000000A4	0000000.	1 /	` ^		93	57											
-X 000000	300	4 (	0A0000A0	0000000	1 )	( X		94	56											
ARROUTR		4 (	00000094	0000000	1 /	AA		89	69											
ASAVE		1 (	00000048		ι	J		125	44											
BRRST		1 (	000009C		ι	J		134	135											
DTSW		1 (	000000C2		ι	J		162	163											
FCTVALST		1 (	0000090		ι	J		130	133											
FSAERR		1 (	000001CC		ι	J		223	227	228	229	230	231	232	233					
FSAREA		1 (	00000000	FFFFFFF	Fι	J		120	125	130	132	133	134	137	144	146	150	152	156	158
									160	162	165	172	174	176	178	184	186	188	191	193
									195	197	199	201	203	205	207	211	213	215	218	220
IHIIOREV		1 (	00000000	0000000	2 -	ī		87	87											
IHILORAR		1 (	00000000	00000004	4	ī		91	91											
IHIOARRY		1 (	00000000	0000000	1 :	l		33	42U											
IHISORAR		1 (	00000000	0000000	3 -	ī		90	90											
OPTSW		1 (	000000C2		ι	J		163	66	71										
OTARY1		4 (	000004A	0000000	1 :			58	55B											
OTARY2		4 (	0000066	0000000	1 :			69	67B	78B										
OTARY3		2 (	0000007E	0000000	1 :			76	72B	74B										
PROLOGP		1 (	00000DC		ι	J		188	189											
R1		1 (	00000001		ι	J		240	54M		58	59								
R12			9000000C		ι	J		251	43M		66	71	79							
R13		1 (	000000D		ι	J		252	43	44M										
R14		1 (	900000E		ι	J		253	50M	70M										
R15		1 (	000000F		ι	J		254	41	49M		69M	70B							
R2		1 (	00000002		ι	J		241	58M	61M	77									
R3		1 (	00000003		ι	J		242	45M	56M	60	61								
R4		1 (	00000004		ι	J		243	65M	68M	69	76								
R7			00000007		l			246	59M		73M	75M	76M	77						
R8			80000008		l			247	41M	42U										
VIOREV		4 (	00000090	0000000	1 ١	/ V		87	49											

 $\label{eq:Register} \textit{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ 

0(0) 82M 1(1) 2(2) 3(3) 4(4) 5(5) 40 54M 57M 58 59 82M 40 40 40 40 40 40 40 40 40 40 58M 61M 77 82M 45M 65M 56M 60 61 68M 69N 76 82M 82M 82M 5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C) 82M 60M 73M 75M 76M 77 82M 59M 41M 42U 82M 82M 82M 82M 44 43M 71 79 82M 13(D) 14(E) 15(F) 40 43 40 50M 36B 40 43 44M 79M 82 50M 70M 82M 83B 41 49M 50B 69M 70B 82M 
 AOR
 Dsect
 Cross Reference
 PAGE
 7

 Dsect
 Length
 Id
 Defn
 Con
 Member
 X390 3.1.04
 2012/08/17 13.21

PRIMARY INPUT

98

00000120 FFFFFFF

FAS

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  FSAREA
- 5 SYS1.AMODGEN

AOR USING Map PAGE 9 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

42 USING Ordinary 00000001 00000000 00001000 8 000A8 78 IHIOARRY,R8

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOAR PROCSTEP: X390

Primary input: lines 1 to 96 of SYSD.ALGOLFRT.ASM(IHIOAR)

SYSLIB library records read: 295
SYSUT1 work file size: 23110 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 7680 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.19 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHIOARRY 0000AA 6

## IHIOBA LEVEL V2.M01

```
(c) Copyright 1995-2010 Tachyon Software LLC
```

```
X390 3.1.04 2012/08/17 13.21
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIOBA)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00190
```

SYSUT1

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                   X390 3.1.04 2012/08/17 13.21
                                                                                                                           00002001
                                         2 *
                                         3
                                           *
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00003001
                                         4
                                                                                                                          00004001
00005001
                                                     STATUS - LEVEL 2.1
                                         5
                                                                                                                           00006001
                                         6
                                                     FUNCTION/OPERATION -
                                                                                                                           00007001
                                                     TRANSFER BOOLEAN VALUES FROM ARRAY DEFINED BY SECOND ACTUAL PARAMETER TO AN OUTPUT BUFFER BY CALLING
                                           *
                                         8
                                                                                                                           00008001
                                         9
                                                                                                                           00009001
                                        10
                                                     OUTBOOLEAN REPEATEDLY
                                                                                                                           00010001
                                                                                                                           00011001
                                        11
                                        12
                                                      ENTRY POINTS -
                                                                                                                           00012001
                                           *
                                        13
                                                     IHIOBARR - FROM GENERATED OBJECT MODULE
                                                                                                                           00013001
                                        14
                                                                 LA
                                                                      R1, PARMLIST
                                                                                                                           00014001
                                                                 BALR R14,R15
                                        15
                                                                                                                           00015001
                                                                 DATA PASSED BY NAME
                                                                                                                           00016001
                                        16
                                                                                                                           00017001
                                        17
                                        18
                                                     INPUT - N/A
                                                                                                                           00018001
                                        19
                                                                                                                           00019001
                                                     OUTPUT - N/A
                                        20
                                                                                                                           00020001
                                                                                                                           00021001
                                        21
                                                     EXTERNAL ROUTINES -
                                                                                                                           00022001
                                        22
                                                     IHIIOR - EVALUATE DATASET NUMBER
                                        23
                                                                                                                           00023001
                                        24
                                           *
                                                                                                                           00024001
                                                                                                                          00025001
00026001
                                        25
                                                     IHIOBO - INBOOLEAN
                                        26
                                                     EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                           00027001
                                        27
                                        28
                                                                                                                           00028001
                                        29
                                                     EXIT - ERROR - N/A
                                                                                                                           00029001
                                        30
                                                                                                                           00030001
                                        31 *
                                                     TABLES/WORK AREAS - N/A
                                                                                                                           00031001
                                        32
                                                                                                                           00032001
000000
                       00000 00064
                                        33 IHIOBARR CSECT
                                                                                                                           00033001
                                        34
                                                                                                                           00034001
                                        35
                                                            (14,12),, 'IHIOBARR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                           00035001
                                                                                                 BRANCH AROUND ID
LENGTH OF IDENTIFIER
000000 47F0 F026
                              00026
                                        36+
                                                                                                                           01-SAVE
                                                     В
                                                                                                                          01-SAVE
                                                     DC
000004 21
                                        37+
                                                            AL1(33)
000005 C9C8C9D6C2C1D9D9
                                                            CL32'IHIOBARR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                           01-SAVE
                                        38+
                                                     DC
000025 F1
                                        39+
                                                     DC
                                                            CL1'1'
                                                                                                 IDENTIFIER
                                                                                                                           01-SAVE
000026 90EC D00C
                               0000C
                                        40+
                                                     STM
                                                            14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                           01-SAVE
00002A 187F
                                        41
                                                     I R
                                                            R7. R15
                                                                                                                           00036001
                                                     USING IHIOBARR, R7
                  R:7 00000
                                        42
                                                                                                                           00037001
                                                                                                                           00038001
00002C 18CD
                                        43
                                                     LR
                                                            R12.R13
                                                                                      R12 -> FSA
00002E 41D0 C048
                              00048
                                        44
                                                            R13, ASAVE (, R12)
                                                                                      R13 -> SECOND FSA SAVEAREA
                                                                                                                           00039001
                                                     LA
                                                                                                                           00040001
                                        45
                                        46
                                                     EVALUATE DATASET NUMBER
                                                                                                                           00041001
                                                                                                                          00042001
00043001
                                        47
                                                                                      R15 -> THTTOREC ROUTINE
000032 58E0 705C
                              9995C
                                                            R15. VTORREC
                                        48
                                                     ī
000036 05EF
                                                                                      CALL IHIIOREC
                                        49
                                                                                                                           00044001
                                                     BALR
                                                            R14, R15
                                                            R1,4(,R1)
                                                                                                                           00045001
000038 5810 1004
                               00004
                                        50
                                                     L
                                                                                      R4 -> SOURCEEND+1
00003C 5840 100C
                               0000C
                                        51
                                                            R4,12(,R1)
                                                                                                                           00046001
000040 5820 1008
                              00008
                                        52
                                                            R2,8(,R1)
                                                                                      R2 -> SOURCE
                                                                                                                           00047001
                                                                                                                           00048001
                                        53
                                                     CALL ROUTINE OUTBOOLEAN
                                                                                                                           00049001
                                        54
                                                                                                                           00050001
                                        55
000044 58F0 7060
                                                                                      R15 -> IHIOBOAR ROUTINE
                                                                                                                           00051001
                               00060
                                        56 OUTBY1
                                                            R15, VOBOAR
000048 05EF
                                        57
                                                     BALR
                                                            R14, R15
                                                                                      CALL IHIOBOAR
                                                                                                                           00052001
00004A 4120 2001
                              00001
                                        58
                                                     LA
                                                            R2,1(,R2)
                                                                                      INCREASE SOURCE ADDR BY ONE
                                                                                                                           00053001
00004F 1924
                                        59
                                                     CR
                                                            R2. R4
                                                                                                                           00054001
000050 4740 7044
                                                                                      LOOP, MORE VALUE TO WRITE
                                                                                                                           00055001
                               00044
                                        60
                                                     BL
                                                            OUTBY1
000054 18DC
                                        61
                                                     \mathsf{LR}
                                                            R13,R12
                                                                                                                           00056001
                                        62 *
                                                                                                                           00057001
                                        63
                                                     RETURN (14,12)
                                                                                      RESTORE REGS AND RETURN
                                                                                                                           00058001
000056 98EC D00C
                                                            14,12,12(13)
                                                                                                 RESTORE THE REGISTERS
                                                                                                                          01-RETUR
                               0000C
                                        64+
                                                     LM
                                                                                                 RETURN
00005A 07FE
                                        65+
                                                     BR
                                                            14
                                        66
                                                                                                                           00059001
                                        67 *
                                                     EXTERNAL ADDRS
                                                                                                                           00060001
                                        68 *
                                                                                                                           00061001
00005C 00000000
                                        69 VIORREC
                                                     DC
                                                            V(IHIIOREV)
                                                                                                                          00062001
00063001
000060 00000000
                                        70 VOBOAR
                                                            V(IHIOBOAR)
                                                     DC
                                        71
                                                                                                                           00064001
                                        72 FAS
000000
                        00000 00120
                                                     DSECT
                                                                                                                           00065001
                                        73
                                                                                                                           00066001
                                        74
                                                     COPY FSAREA
                                                                                                                           00067001
                                        75=
                                                                                                                           00001001
                                        76=
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00002001
                                                                                                                           00003001
                                        77=
                                                     STATUS - LEVEL 2.1
                                                                                                                           00004001
                                        78=*
                                        79=*
                                                                                                                           00005001
                                        80=*
                                                                                                                          99996991
                                        81=
                                                                                                                           00007001
                                                     COMMON DATA AREA
                                                                                                                           00008001
                                        82=
                                                                                                                           00009001
                                        83=
                                        84=*
                                                                                                                           00010001
                                                     FSAREA
                                        85=*
                                                                                                                           00011001
                                        86=*
                                                                                                                           00012001
                                                                                                                           00013001
                                        87=
                                        88=*
                                                     DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL
                                                                                                                           00014001
                                        89=*
                                                     MODULES DURING THE EXECUTION
                                                                                                                           00015001
                                        90=*
                                                                                                                           00016001
                                        91=*
                                                     ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY
                                                                                                                           00017001
                                        92=*
                                                     SUBROUTINES) BY R12
                                                                                                                           00017001
                                        93=*
                                                                                                                           00019001
                        00000
                                        94=FSAREA
                                                                                                                           00020001
                                                     EQU
                                                           *
                                        95=
                                                                                                                           00021001
                                        96=*
                                                     SAVE AREAS
                                                                                                                           00022001
                                        97=
                                                                                                                          00023001
```

D-Loc (	Object Code	Addr1	Addr2	Stmt	Source	State	ment		X390 3.1.04 2012/08	/17 13.21
000000				98=		DS	18F		STANDARD SAVE AREA	00024001
000048		00048		99=AS 100=	SAVE	EQU DS	*-FSAREA 18F		ALTERNATE SAVE AREA USED BY CERTAIN SUBROUTINES	00025001 00026001
				101=*		MTCCE	LLANFOUS	JODE ADEAS AND		00027001
				102=* 103=*		MISCE	LLANEOUS I	NORK AREAS AND	CUNSTANTS	00028001 00029001
000090		00090		104=F0 105=	CTVALST	EQU DS	*-FSAREA		TEMPORARY STORAGE FOR FUNCTION VALUES	00030001 00031001
		00098		106=A	STLOC	EQU	*-FSAREA		DISPL FOR ADDR OF STAND LOCTN	00032001
000098 (	00000090	0009C		107= 108=BF	RRST	DC EQU	*-FSAREA	+FCTVALST)	TEMPORARY SAVE REG BRR	00033001 00034001
00009C		0009C		109=HI 110=	V	EQU DS	BRRST F		TEMPORARY HALFWORD STORAGE	00035001 00036001
		000A0		111=PF	ROLREG	EQU	*-FSAREA		STORAGE FOR PBT AND LAT WHEN	00037001
0000A0				112= 113=*		DS	2A		A PROCEDURE IS FORMAL PARAM	00038001 00039001
				114=* 115=*		HALFW	ORD CONTA	INING PBN OF CA	LLED BLOCK IN SECOND BYTE	00040001 00041001
0000A8				116=		DS	0H			00042001
0000A8 (	00	000A9		117= 118=PF	ROLPBN	DC EQU	X'00' *-FSAREA		STORAGE FOR CALLED PBN	00043001 00044001
0000A9	00			119=		DC	X'00'			00045001
0000AA	0008	000AA		120=EI 121=	LGHI	EQU DC	*-FSAREA H'8'		CONST FOR REDUCING RAS	00046001 00047001
0000AC				122=* 123=		DS	0F			00048001 00049001
		000AC		124=A[	OSTAB	EQU	*-FSAREA		ADDR OF DSTABLE	00050001
0000AC		000B0		125= 126=Al	NOTTAB	DS EQU	A *-FSAREA		IN THE OBJECT PROGRAM ADDR OF NOTE TABLE	00051001 00052001
0000B0				127= 128=*		DS	Α		(INSERTED BY THE OPEN ROUTINE)	00053001 00054001
		000B4		129=I	HIFSAST	EQU	*		DDOCDAM CUTCH CLT	00055001
0000B4		000B4		130=P0 131=	GOPSW	EQU DS	*-FSAREA 2F		PROGRAM CHECK OLD PSW	00056001 00057001
	00000000	000BC			SAPICA	EQU DC	*-FSAREA F'0'		OLD PICA ADDR	00058001 00059001
OOOOBC (	0000000	000C0		134=S	CRCS	EQU	*-FSAREA		SEMICOLON NUMBER	00060001
0000C0		000C2		135= 136=D	ΓSW	DS EQU	H *-FSAREA		OPTION SWITCHES	00061001 00062001
000000	00	000C2		137=OF		EQU	DTSW			00063001
0000C2 (	00	000C3		138= 139=F	SAERCOD	DC EQU	X'00' *-FSAREA		DUMP-80, TRACE-40, SHORT-20 ERROR CODE FOR ERROR ROUTINE	00064001 00065001
0000C3				140= 141=*		DS	С			00066001 00067001
				142=*		RETUR	N ADDRESS	STACK POINTERS	DO NOT CHANGE ORDER	00068001
0000C4				143=* 144=		DS	0F			00069001 00070001
		000C4 000C4			HIFSARS ASSTART	•	* *-FSAREA		ADDR OF FIRST ENTRY IN RAS-8	00071001 00072001
0000C4				147=		DS	F			00073001
0000C8		000C8		148=R/ 149=	ASPT	EQU DS	*-FSAREA F		RAS POINTER FROM TOP	00074001 00075001
0000CC		000CC		150=RA 151=	ASEND	EQU DS	*-FSAREA F		ADDR OF LAST ENTRY IN RAS+8	00076001 00077001
		000D0		152=RA	ASPB	EQU	*-FSAREA		RAS POINTER FROM BOTTOM	00078001
0000D0				153= 154=*		DS	F			00079001 00080001
				155=* 156=*		LIST	OF BRANCH	INSTRUCTIONS TO	O COMMONLY USED SUBROUTINES	00081001 00082001
0000D4				157=BF		DS	0F			00083001
0000D4	4700 0000	000D4	00000	158=C/ 159=	AP1	EQU NOP	*-FSAREA		FIRST PART CAPS	00084001 00085001
000000	4700 0000	000D8	00000	160=C/ 161=	AP2	EQU NOP	*-FSAREA 0		SECOND PART CAPS	00086001 00087001
0000008	4700 0000	000DC	00000	162=PF		EQU	*-FSAREA		PROLOGUE FORMAL PARAMETER ENTRY	00088001
0000DC 4	4700 0000	000DC	00000	163=PF 164=	ROLOGFP	EQU NOP	PROLOGP 0			00089001 00090001
		000E0		165=PF	ROLOG	EQU	*-FSAREA		PROLOGUE PROGRAM USUAL ENTRY	00091001
	4700 0000	000E4	00000		ETPROG	NOP EQU	0 *-FSAREA		DISPLACEMENT RETURN PROGRAM	00092001 00093001
0000E4 4	4700 0000	000E8	00000	168= 169=EF	PILOGP	NOP EQU	0 *-FSAREA		EPILOGUE PROGRAM, PROCEDURE ENTRY	00094001 00095001
0000E8 4	4700 0000		00000	170=		NOP	0			00096001
0000EC 4	4700 0000	000EC	00000	171=EF 172=	TLOOR	EQU NOP	*-FSAREA 0		EPILOGE PROGRAM, BETA-BLOCK ENTRY	00097001
0000F0 4	4700 0000	000F0	00000	173=EF 174=	PILPR3	EQU NOP	*-FSAREA		EPILOGUE PROGRAM ENTRY 3	00099001 00100001
		000F4		175=C	SWE1	EQU	*-FSAREA		FIRST PART CSWES	00101001
4 11000	4700 0000	000F8	00000	176= 177=C	SWE2	NOP EQU	0 *-FSAREA		SECOND PART CSWES	00102001 00103001
0000F8 4	4700 0000	000FC	00000	178= 179=L0	DADPP	NOP EQU	0 *-FSAREA		LOAD PRECOMPILED PROC ROUTINE	00104001 00105001
0000FC 4	4700 0000		00000	180=		NOP	0		20.5 I MECON TEED I NOC NOUTINE	00106001
000100 1	D200 0000 0000	00100 00000	00000	181=TF 182=	KACE	EQU MVC	*-FSAREA 0(0),0			00107001 00108001
000106	4700 0000 4700 0000		00000 00000	183= 184=		NOP NOP	0			00109001 00110001
		0010E		185=TI	ERMNTE	EQU	0 *-FSAREA		NORMAL TERMINATION EXIT	00111001
00010E 4	4700 0000	00112	00000	186= 187=B0	CR	NOP EQU	0 *-FSAREA			00112001 00113001
000112	0700			188=		BCR	0,0		VARIABLE CONDITIONAL BRANCH	00114001
000114	4700 0000	00114	00000	189=GI 190=	ETMSTO	EQU NOP	*-FSAREA 0			00115001 00116001
		00118		191=* 192=V/	ALUCALL	EQU	*-FSAREA			00117001 00118001
000118	4700 0000	0	00000	193=		NOP	0			00119001

D-Loc Object Code	Addr1 Addr2	Stmt Source	State	ement	X390 3.1.04	2012/08/17 13.21
	0011C	194=IORLST	EQU	*-FSAREA		00120001
00011C 4700 0000	00000	195=	NOP	0		00121001
		196=*				00122001
	001CC	197=FSAERR	EQU	X'1CC' DISPL FOR	ERROR LIST	00123001
		198=*				00124001
		199=*	DISPL	ACEMENTS FOR CERTAIN ERROR EXITS IN	I FSA	00125001
		200=*				00126001
	0020C	201=OUTOFB	EQU	FSAERR+4*16		00127001
	00218	202=NUMBIND	EQU	FSAERR+4*19		00128001
	00208	203=ARRAYBD	EQU	FSAERR+4*15		00129001
	0026C	204=ERROR40	EQU	FSAERR+4*40		00130001
	00224	205=0ERR22	EQU	FSAERR+4*22		00131001
	00210 00220	206=ENDLESL 207=0ERR21	EQU EQU	FSAERR+4*17 FSAERR+4*21		00132001 00133001
	00220	207=UERR21 208=*	EQU	FSAERR+4"ZI		00134001
		208=*				00068001
		210 *	PEGTS	STER EQUATES		00069001
		211 *	KLUIJ	STER EQUATES		00070001
		212	IEZRE	-GS		00071001
	00000	213+R0	EQU	0		01-IEZRE
	00001	214+R1	EQU	1		01-IEZRE
	00002	215+R2	EQU	2		01-IEZRE
	00003	216+R3	EQU	3		01-IEZRE
	00004	217+R4	EQU	4		01-IEZRE
	00005	218+R5	EQU	5		01-IEZRE
	00006	219+R6	EQU	6		01-IEZRE
	00007	220+R7	EQU	7		01-IEZRE
	00008	221+R8	EQU	8		01-IEZRE
	00009	222+R9	EQU	9		01-IEZRE
	0000A	223+R10	EQU	10		01-IEZRE
	0000B	224+R11	EQU	11		01-IEZRE
	0000C	225+R12	EQU	12		01-IEZRE
	0000D	226+R13	EQU	13		01-IEZRE
	0000E	227+R14	EQU	14		01-IEZRE
	0000F	228+R15 229 *	EQU	15		01-IEZRE
		229 *	END			00072001
		230	END			00073001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rences	S				X390	3.1.	04 2	012/0	8/17	13.21
ASAVE	1	00000048		U		99	44											
BRRST	1	0000009C		U		108	109											
DTSW	1	000000C2		U		136	137											
FCTVALST	1	00000090		U		104	107											
FSAERR	1	000001CC		U		197	201	202	203	204	205	206	207					
FSAREA	1	00000000	FFFFFFF	U		94	99	104	106	107	108	111	118	120	124	126	130	132
							134	136	139	146	148	150	152	158	160	162	165	167
							169	171	173	175	177	179	181	185	187	189	192	194
IHIIOREV	1	00000000	00000002	T		69	69											
IHIOBARR	1	00000000	00000001	J		33	42U											
IHIOBOAR	1	00000000	00000003	T		70	70											
OUTBY1		00000044	00000001	I		56	60B											
PROLOGP		000000DC		U		162	163											
R1		00000001		U		214	50M		52									
R12		0000000C		U		225	43M	44	61									
R13		000000D		U		226	43	44M	61M									
R14		000000E		U		227	49M	57M										
R15	_	0000000F		U		228	41	48M		56M	57B							
R2		00000002		U		215	52M	58M	59									
R4		00000004		U		217	51M											
R7		00000007		U		220	41M	420										
VIORREC		0000005C				69	48											
VOBOAR	4	00000060	00000001	V V		70	56											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

```
0(0) 40 64M
1(1) 40 50M 51 52 64M
2(2) 40 52M 58M 59 64M
3(3) 40 64M
4(4) 40 51M 59 64M
5(5) 40 64M
7(7) 40 41M 42U 64M
8(8) 40 64M
9(9) 40 64M
10(A) 40 64M
11(B) 40 64M
12(C) 40 43M 44 61 64M
13(D) 40 43 44M 61M 64
14(E) 40 49M 57M 64M 65B
15(F) 36B 40 41 48M 49B 56M 57B 64M
```

 AOB
 Dsect
 Cross Reference
 PAGE
 7

 Dsect
 Length
 Id
 Defn
 Con
 Member
 X390 3.1.04
 2012/08/17 13.21

FAS 00000120 FFFFFFF 72 PRIMARY INPUT

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  FSAREA

5 SYS1.AMODGEN

AOB Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

42 USING Ordinary 00000001 00000000 00001000 7 00060 60 IHIOBARR,R7

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOBA PROCSTEP: X390

Primary input: lines 1 to 73 of SYSD.ALGOLFRT.ASM(IHIOBA)

SYSLIB library records read: 295
SYSUT1 work file size: 20786 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 5840 bytes
SYSLIN file records written: 5

TXA000I Return code 0, elapsed time 0.18 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHIOBARR 000064 4

## IHIOBO LEVEL V2.M01

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```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIOBO)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00194
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                  X390 3.1.04 2012/08/17 13.21
                                                                                                                         00002001
                                         2 *
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
                                                                                                                         00004001
00005001
                                                     STATUS - LEVEL 2.1
                                         5
                                                                                                                         00006001
                                         6
                                                     FUNCTION/OPERATION -
                                                                                                                         00007001
                                           *
                                         8
                                                     TRANSFER BOOLEAN VALUE FROM SECOND PARAMETER TO AN
                                                                                                                         00008001
                                        9
                                                     OUTPUT BUFFER WITH CHARACTER STRING 'TRUE' OR 'FALSE'
                                                                                                                         00009001
                                        10
                                                                                                                         00010001
                                                                                                                         00011001
                                                     ENTRY POINTS
                                        11
                                                     IHIOBOOL - FROM GENERATED OBJECT MODULE
                                        12
                                                                                                                         00012001
                                           *
                                        13
                                                                     R1, PARMLIST
                                                                                                                         00013001
                                        14
                                                                 BALR R14,R15
                                                                                                                         00014001
                                                                DATA PASSED BY NAME
                                        15
                                                                                                                         00015001
                                                     IHIOBOAR - FROM ARRAY MODULE IHIOBA
                                                                                                                         00016001
                                        16
                                                                     R2,DATA
                                                                                                                         00017001
                                        17
                                                                 LA
                                                                 BALR R14,R15
                                        18
                                                                                                                         00018001
                                        19
                                                     DATA PASSED BY NAME
                                                                                                                         9991 9991
                                        20
                                                                                                                         00020001
                                                                                                                         00021001
                                        21
                                                     INPUT - N/A
                                                                                                                         00022001
                                        22
                                        23
                                                     OUTPUT - N/A
                                                                                                                         00023001
                                        24
                                                                                                                         00024001
                                                                                                                         00025001
00026001
                                        25
                                                     EXTERNAL ROUTINES -
                                                     IHIIOR - EVALUATE DATASET NUMBER
                                        26
                                                            - OPEN DATASET
                                                                                                                         00027001
                                        27
                                        28
                                                              CHANGE TO NEXT RECORD
                                                                                                                         00028001
                                                                                                                         00029001
                                        29
                                           *
                                        30
                                                     EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                         00030001
                                        31
                                                                                                                         00031001
                                        32
                                                     EXIT - ERROR - TOO LONG RECORD - NO 38
                                                                                                                         00032001
                                                                     BRANCH TO IHIFSA
                                                                                                                         00033001
                                        33
                                        34
                                                                          R13, IHIFSA
                                                                                                                         00034001
                                        35
                                           *
                                                                          FSAERR+XX*4(R13) XX ERROR NO
                                                                                                                         00035001
                                        36
                                                                                                                         00036001
                                                     TABLES/WORK AREAS - N/A
                                                                                                                         00037001
                                        37
                                                                                                                         00038001
                                        38
000000
                       00000 001C8
                                        39 IHIOBOOL CSECT
                                                                                                                         00039001
                                        40
                                                                                                                         00040001
                                        41
                                                     ENTRY THTOROAR
                                                                                                                         00041001
                                        42 *
                                                                                                                         00042001
                                                     DISPLACEMENTS IN ADRLST IN IHIESA
                                                                                                                         00043001
                                        43
                                        44
                                           *
                                                                                                                         00044001
                                        45 CI
                                                                          DISPLACEMENT FOR - IHIIORCI
                                                                                                                         00045001
                       00000
                       00004
                                        46 CL
                                                     EQU
                                                           4
                                                                                               IHIIORCL
                                                                                                                         00046001
                                                                                               IHIIOREV
                                                                                                                         00047001
00048001
                       aaaas
                                        47 EV
                                                     EQU
                                                           8
                                                           12
                                                                                               THTTORNX
                       aggac
                                        48 NX
                                                     FOU
                       00010
                                        49 OP
                                                                                               IHIIOROP
                                                                                                                         00049001
                                                     EQU
                                                           16
                       00014
                                        50 OQ
                                                     EQU
                                                           20
                                                                                               IHIIOROQ
                                                                                                                         00050001
                                        51
                                                                                                                         00051001
                  R:5 00000
                                        52
                                                     USING DSTABLE, R5
                                                                                     R5 -> DSTABLE ENTRY
                                                                                                                         00052001
                                        53
                                                                                                                         00053001
                                                           (14,12), 'IHIOBOOL LEVEL 2.1 &SYSDATE &SYSTIME'
                                                     SAVE
                                                                                                                         00054001
                                        54
000000 47F0 F026
                              00026
                                        55+
                                                           38(0,15)
                                                                                                BRANCH AROUND ID
                                                     В
                                                                                                                         01-SAVE
000004 21
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
                                        56+
                                                     DC
000005 C9C8C9D6C2D6D6D3
                                        57+
                                                     DC
                                                           CL32'IHIOBOOL LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
000025 F1
                                        58+
                                                     DC
                                                           CL1'1'
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
000026 90EC D00C
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                              aaaac
                                        59+
                                                     STM
                                                                                                                         01-SAVE
                                                                                                                         00055001
                                        60
                  R:F 00000
                                        61
                                                     USING IHIOBOOL, R15
                                                                                                                         00056001
00002A 18CD
                                                                                     CHAIN SAVE AREAS
                                                                                                                         00057001
                                        62
                                                     LR
                                                           R12,R13
00002C 41D0 F180
                              00180
                                        63
                                                     LA
                                                           R13. SAVEAREA
                                                                                                                         00058001
                                                           R12,4(,R13)
R13,8(,R12)
                                                                                                                         00059001
000030 50C0 D004
                              00004
                                        64
                                                     ST
000034 50D0 C008
                                        65
                                                                                                                         00060001
                              00008
                                                     ST
000038 4170 F08E
                              0008E
                                        66
                                                     LA
                                                           R7, COMMON
                                                                                                                         00061001
                                        67
                                                     DROP
                                                                                                                         00062001
                                                          R15
                  R:7 0008E
                                        68
                                                     USING COMMON, R7
                                                                                                                         00063001
                                        69 *
                                                                                                                         00064001
00065001
                                                     EVALUATE DATASET NUMBER
                                        70
                                        71
                                                                                                                         00066001
                                                           R15, IORLST(,R12)
00003C 58F0 C11C
                              0011C
                                        72
                                                                                                                         00067001
000040 58F0 F008
                              00008
                                        73
                                                           R15, EV(, R15)
                                                                                                                         00068001
000044 05FF
                                        74
                                                     BALR
                                                           R14, R15
                                                                                                                         00069001
                                                                                                                         00070001
                              00004
                                        75
000046 5810 1004
                                                           R1.4(.R1
                                                           R1, ASOURCE
                                                                                                                         00071001
00004A 5010 70DE
                              0016C
                                        76
                                                     ST
00004E 47F0 7000
                              0008E
                                        77
                                                           COMMON
                                                                                                                         00072001
                                                     В
                                        78
                                                                                                                         00073001
                                        79
                                                     DROP
                                                           R7
                                                                                                                         00074001
                                       80 *
                                                                                                                         00075001
                                        81 IHIOBOAR SAVE
                                                           (14,12), 'IHIOBOAR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00076001
000052 47F0 F026
                              00026
                                                                                                BRANCH AROUND ID
                                        82+IHIOBOAR B
                                                           38(0,15)
                                                                                                                         01-SAVE
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
000056 21
                                        83+
                                                     DC
000057 C9C8C9D6C2D6C1D9
                                                           CL32'IHIOBOAR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
                                        84+
                                                     DC
000077 F1
                                        85+
                                                     DC
                                                           CI 1 '1'
                                                                                                TDENTTETER
                                                                                                                         01-SAVE
000078 90EC D00C
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         01-SAVE
                              0000C
                                        86+
                                                                                                                         00077001
                                        87
                                                                                                                         00078001
                  R:F 00052
                                        88
                                                     USING IHIOBOAR, R15
00007C 187D
                                        89
                                                     LR
                                                           R7,R13
                                                                                     CHAIN SAVE AREAS
                                                                                                                         00079001
00007E 41D0 F12E
                              00180
                                        90
                                                     LA
                                                           R13, SAVEAREA
                                                                                                                         00080001
                                       91
92
                                                    ST
ST
                                                           R7,4(,R13)
R13,8(,R7)
000082 5070 D004
                              00004
                                                                                                                         00081001
                              00003
                                                                                                                         00082001
000086 50D0 7008
00008A 4170 F03C
                              0008E
                                        93
                                                     LA
                                                           R7, COMMON
                                                                                                                         00083001
                                        94
                                                     DROP
                                                                                                                         00084001
                                                           R15
                  R:7 0008E
                                        95
                                                     USING COMMON, R7
                                                                                                                         00085001
                                        96
                                                                                                                         00086001
00008E 9630 501A
                       0001A
                                        97 COMMON
                                                    OI
                                                           DSF,DS2+DS3
                                                                                     DS2, DS3 SET TO ONE
                                                                                                                         00087001
```

ACCI	ve USINGS. IN	IODOOL+X	۱۱۸ کار	אוכט	MDLE, NO				
Loc	Object Code	Addr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08	3/17 13.21
000092	94FE 501A	0001A		98		NI	DSF, 255-DS7	DS7 IS SET TO 0	00088001
	9180 501A	0001A		99		TM	DSF,DS0	DATASET OPEN ?	00089001
	4710 701E		000AC	100		BO	OTBOOL1	YES, BRANCH	00090001
	9602 501A	0001A	00116	101		OI	DSF,DS6	NO, OPEN DATASET	00091001
	58F0 C11C 58F0 F010		0011C 00010	102 103		L L	R15,IORLST(,R12) R15,OP(,R15)		00092001 00093001
0000AA				104		BALR	R14,R15	CALL DATASET OPEN ROUTINE	00094001
	5840 5008		80000		OTBOOL1	L	R4, RE		00095001
	5830 5004 4130 3007		00004 00007	106 107		L LA	R3, R		00096001 00097001
0000B8			00007	108		CR	R3,7(,R3) R4,R3		00097001
0000BA	47B0 706E		000FC	109		BNL	OTBOOL2	SEVEN CHARACTER FREE IN RECORD	00099001
				110		NOT D	OOM ENOUGH TO STORE BOOK	FAN VALUE IN DECORD	00100001
				111 112			OOM ENOUGH TO STORE BOOL CURRENT RECORD BY BLANKS		00101001 00102001
				113			FOR ROUTINE NEXTREC		00103001
				114	*				00104001
	5830 5004 5840 5008		00004 00008	115 116		L L	R3,R R4,RE		00105001 00106001
0000C2			00008	117		SR	R4, R3		00100001
0000C8	4780 7050		000DE	118		BZ	OTBOOL7		00108001
	9240 3000	00000		119		MVI	0(R3),C''		00109001
0000D0 0000D2				120 121		BCTR BCTR	R4,0 R4,0		00110001 00111001
0000D2				122		LTR	R4, R4		00111001
	4740 7050		000DE	123		BM	OTBOOL7		00113001
	4440 70D6		00164	124	OTDOOL 7	EX	R4, BLANKS		00114001
	58F0 C11C 58F0 F00C		0011C 0000C	125	OTBOOL7	L L	R15, IORLST(,R12) R15,NX(,R15)		00115001 00116001
0000E6				127			R14,R15		00117001
	5830 5004		00004	128		L	R3, R		00118001
	4130 3007 5930 5008		00007 00008	129 130		LA C	R3,7(,R3) R3,RE		00119001 00120001
	4720 70D0		0015E	131		BH	OERROR	TOO SHORT RECORD LENGTH	00121001
	9610 501A	0001A		132		OI	DSF,DS3		00122001
0000FC 000100	5820 70DE		0016C	133 134	OTBOOL2	L SR	R2, ASOURCE R9, R9		00123001 00124001
	4390 2000		00000	135		IC	R9,0(,R2)		00125001
	5830 5004		00004	136		L	R3,R		00126001
00010A	1299 4780 708C		0011A	137 138		LTR BZ	R9, R9 OTBOOL3		00127001 00128001
	D206 3000 70E	E2 00000		139		MVC	0(L'TRUE,R3),TRUE	BOOLEAN VALUE TRUE OR FALSE	00128001
	47F0 7092		00120	140		В	OTBOOL3A	TO RECORD WHICH ONE DEPENDING	00130001
000114	D206 2000 701	-0.0000	00177	141		MVC	O(L'EALCE D2) FALCE	ON VALUE OF COURCE	00131001
	D206 3000 708 4130 3007	19 00000	00007		OTBOOL3 OTBOOL3A		O(L'FALSE,R3),FALSE R3,7(,R3)	ON VALUE OF SOURCE	00132001 00133001
	5030 5004		00004	144		ST	R3,R	UPDATE CHARACTER POINTER	00134001
				145		DOLITT	NE DIADEI		00135001
				146 147		KUUTI	NE BLADEL		00136001 00137001
000128	1B88			148		SR	R8, R8		00138001
	4380 5018		00018	149		IC	R8, K	NUMBER OF DELIMITERS	00139001
	5930 5008 4780 70BC		00008 0014A	150	OTBOOL4	C BE	R3, RE OTBOOL5	RECORD END REACHED	00140001 00141001
	9240 3000	00000	001	152		MVI	0(R3),C''	FILL WITH BLANK	00142001
	4130 3001		00001	153		LA	R3,1(,R3)		00143001
	4680 70A0 5030 5004		0012E 00004	154 155		BCT ST	R8,OTBOOL4 R3,R	UPDATE CHARACTER POINTER	00144001 00145001
	47F0 70C6		00154	156		В	OTBOOL6	OF BATE CHARACTER TOTALER	00146001
				157					00147001
				158 159		CALL	NEXTREC		00148001 00149001
00014A	58F0 C11C		0011C		OTBOOL5	L	R15, IORLST(,R12)		00150001
	58F0 F00C		0000C	161		L	R15,NX(,R15)		00151001
000152	05EF 58D0 70F6		00184	162	OTBOOL6		R14,R15 R13,SAVEAREA+4		00152001 00153001
000154	3800 7056		00184	164		L	KIJ, SAVEAREA+4		00154001
				165			N (14,12)	RESTORE REGS AND RETURN	00155001
000158 00015C	98EC D00C		0000C	166+		LM RP	14,12,12(13) 14	RESTORE THE REGISTERS	
PORTOC	0/1 L			167+ 168		BR	47	RETURN	01-RETUR 00156001
00015E				169	OERROR	LR	R13,R12		00157001
000160	47FC 0264		00264	170 171	*	В	FSAERR+38*4(R12)		00158001 00159001
000164	D200 3001 300	00001	00000		BLANKS	MVC	1(0,R3),0(R3)	EXE INSTRUCTION	00159001
				173			(1) 1/21(1)		00161001
00016A				174	ACOURCE	DC	4(0)		001 ( 2001
0001PC	00000000			174		DC	A(0)		00162001 00163001
	7DE3D9E4C57D4			176	TRUE	DC	C'''TRUE'' '		00164001
000177	7DC6C1D3E2C57	7D			FALSE *	DC	C'''FALSE'''		00165001
00017E	0000			178	*				00166001
	000000000000000000000000000000000000000	9000			SAVEAREA	DC	18F'0'		00167001
000100				180	*	LTORG			00168001
0001C8				181 182	*	LTORG			00169001 00170001
				183		DSTAB	LE MAPPING DSECT		00171001
				184	*	DCT*C	LE DEFET VEC		00172001
000000		00000	00024	185 186+	-DSTABLE	DSTAB DSECT	LE DSECT=YES		<b>00173001</b> 01-DSTAB
				187+	.*				01-DSTAB
	00000000				-ADCB	DC	F'0'	-> DCB	01-DSTAB
	00000000 00000000			189+ 190+		DC DC	F'0' F'0'	CHARACTER POINTER	01-DSTAB 01-DSTAB
	00000000			191+		DC	F'0'		01-DSTAB

D-Loc Object Code	Addr1 Addr2	Stmt Source	State	ement	X390 3.1.04 2012/08/	17 13.21
-		102.00	DC	5101		
000010 00000000		192+BB	DC	F'0'		01-DSTAB
000014 0001		193+S	DC	H'1'		01-DSTAB
000016 0050		194+P	DC	H'80'		01-DSTAB
000018 02		195+K	DC	X'02'		01-DSTAB
000019 00		196+Q	DC	X'00'		01-DSTAB
00001A 0000		197+DSF	DC	H'00'		01-DSTAB 01-DSTAB
		198+* 199+*	DATAG	SET FLAGS - DSF		01-DSTAB
		200+*	DATAS	SET FLAGS - DSF		01-DSTAB
	00000		EOU	V!00!		
	00080	201+DS0	EQU	X'80'		01-DSTAB
	00040 00020	202+DS1 203+DS2	EQU EQU	X'40' X'20'		01-DSTAB 01-DSTAB
	00010	204+DS3	EQU	X'10'		01-DSTAB
	00008	205+DS4	EQU	X'08'		01-DSTAB
	00004	206+DS5	EQU	X'04'		01-DSTAB
	00002	207+DS6	EQU	X'02'		01-DSTAB 01-DSTAB
	00001	208+DS7 209+*	EQU	X'01'		01-DSTAB
		210+*	DATAS	SET FLAGS - DSF+1		01-DSTAB
		211+*	5711710	721 1 27103 331 12		01-DSTAB
	00080	212+DS8	EQU	X'80'		01-DSTAB
	00040	213+DS9	EQU	X'40'		01-DSTAB
	00020	214+DS10	EQU	X'20'		01-DSTAB
	00010	215+DS11	EQU	X'10'		01-DSTAB
	00008	216+DSEOD	EQU	X'08'		01-DSTAB
	00004	217+DSIOERR	EQU	X'04'		01-DSTAB
	00002	218+DS14	EQU	X'02'		01-DSTAB
	00001	219+DS15	EQU	X'01'		01-DSTAB
	-	220+*				01-DSTAB
00001C 00000000		221+NOTEADR	DC	F'0'		01-DSTAB
000020 0000		222+BL	DC	H'0'		01-DSTAB
000022 0000		223+	DC	H'0'		01-DSTAB
		224+*				01-DSTAB
	00024	225+DSTABLEL	EQU	*-DSTABLE	L'DSTABLE ENTRY	01-DSTAB
		226+*				01-DSTAB
		227 *				00174001
000000	00000 00120	228 FAS	DSECT	Г		00175001
		229 *				00176001
		230	COPY	FSAREA		00177001
		231=*				00001001
		232=*	COMPO	ONENT ID - 360S-LN		00002001
		233=*				00003001
		234=*	STATU	JS - LEVEL 2.1		00004001
		235=*				00005001
			*****	******		00006001
		237=*				00007001
		238=*	COMMO	ON DATA AREA		00008001
		239=*				00009001
		240=*	FSARE	:A		00010001
		241=*				00011001
		242=******	*****	· · · · · · · · · · · · · · · · · · ·		00012001
		243=*	DATA	THAT IS IMMEDIATE		00013001
		244=*				00014001
		245=*	MODUL	LES DURING THE EXE		00015001
		246=* 247=*	ADDDE	CCED DV MEANS OF		00016001 00017001
		248=*		OUTINES) BY R12	•	00017001
		249=*	SUBRU	JULINES) BY KIZ		00013001
	00000	250=FSAREA	EQU	*		00013001
	00000	251=*	LQU			00020001
		252=*	SAVE	AREAS		00021001
		253=*	JAVL	AREAS		00022001
000000		254=	DS	18F		00023001
	00048	255=ASAVE	EQU	*-FSAREA		00025001
000048		256=	DS	18F		00026001
		257=*	-			00027001
		258=*	MISCE	ELLANEOUS WORK ARE		00028001
		259=*				00029001
	00090	260=FCTVALST	EQU	*-FSAREA		00030001
000090		261=	DS	D		00031001
	00098	262=ASTLOC	EQU	*-FSAREA	DISPL FOR ADDR OF STAND LOCTN	00032001
000098 00000090		263=	DC	A(FSAREA+FCTVALS	ST <mark>)</mark>	00033001
	0009C	264=BRRST	EQU	*-FSAREA	TEMPORARY SAVE REG BRR	00034001
	0009C	265=HW	EQU	BRRST	TEMPORARY HALFWORD STORAGE	00035001
00009C		266=	DS	F		00036001
	000A0	267=PROLREG	EQU	*-FSAREA		00037001
0000A0		268=	DS	2A		00038001
		269=*				00039001
		270=*	HALF	NUKD CONTAINING PE		00040001
		271=*				00041001
0000A8		272=	DS	0H		00042001
0000A8 00	000:0	273=	DC	X'00'		00043001
	000A9	274=PROLPBN	EQU	*-FSAREA		00044001
000040 00	00044	275=	DC	X'00'		00045001
0000A9 00		276=EIGHT	EQU	*-FSAREA		00046001
	000AA		DC	H'8'		00047001
0000A9 00 0000AA 0008	DODAA	277=				00048001
0000AA 0008	ОООАА	278=*	DC	Q.E.		00040004
		278=* 279=	DS	0F		00049001
0000AA 0008 0000AC	000AC	278=* 279= 280=ADSTAB	EQU	*-FSAREA	ADDR OF DSTABLE	00050001
0000AA 0008	000AC	278=* 279= 280=ADSTAB 281=	EQU DS	*-FSAREA A	ADDR OF DSTABLE IN THE OBJECT PROGRAM	00050001 00051001
0000AA 0008 0000AC 0000AC		278=* 279= 280=ADSTAB 281= 282=ANOTTAB	EQU DS EQU	*-FSAREA A *-FSAREA	ADDR OF DSTABLE IN THE OBJECT PROGRAM ADDR OF NOTE TABLE	00050001 00051001 00052001
0000AA 0008 0000AC	000AC	278=* 279= 280=ADSTAB 281= 282=ANOTTAB 283=	EQU DS	*-FSAREA A	ADDR OF DSTABLE IN THE OBJECT PROGRAM ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)	00050001 00051001 00052001 00053001
0000AA 0008 0000AC 0000AC	000AC 000B0	278=* 279= 280=ADSTAB 281= 282=ANOTTAB 283= 284=*	EQU DS EQU DS	*-FSAREA A *-FSAREA	ADDR OF DSTABLE IN THE OBJECT PROGRAM ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)	00050001 00051001 00052001 00053001 00054001
0000AA 0008 0000AC 0000AC	000AC 000B0 000B4	278=* 279= 280=ADSTAB 281= 282=ANOTTAB 283= 284=* 285=IHIFSAST	EQU DS EQU DS	*-FSAREA A *-FSAREA A	ADDR OF DSTABLE IN THE OBJECT PROGRAM ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)	00050001 00051001 00052001 00053001 00054001 00055001
0000AA 0008 0000AC 0000AC 0000B0	000AC 000B0	278=* 279= 280=ADSTAB 281= 282=ANOTTAB 283= 284=* 285=IHIFSAST 286=PGOPSW	EQU DS EQU DS EQU EQU	*-FSAREA A *-FSAREA A *-FSAREA	ADDR OF DSTABLE IN THE OBJECT PROGRAM ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)  PROGRAM CHECK OLD PSW	00050001 00051001 00052001 00053001 00054001 00055001
0000AA 0008 0000AC 0000AC	000AC 000B0 000B4	278=* 279= 280=ADSTAB 281= 282=ANOTTAB 283= 284=* 285=IHIFSAST	EQU DS EQU DS	*-FSAREA A *-FSAREA A	ADDR OF DSTABLE IN THE OBJECT PROGRAM ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)  PROGRAM CHECK OLD PSW	00050001 00051001 00052001 00053001 00054001 00055001

Activ	e USI	NGs: 1	IHIOB	00L+X	'8E',R7	DSTABLE,R5								
D-Loc	Objec	t Code	e /	Addr1	Addr2	Stmt Source	e Sta	teme	ent			X390 3.1	.04 2012/08	/17 13.21
			,	900BC		288=FSAPICA	EQU	*	*_=<	SAREA		OLD PICA ADDR		00058001
0000BC	00000	000	•	обовс		289=	DC		F'0			OLD FICA ADDR		00059001
000000			(	909C0		290=SCRCS	EQU			SAREA		SEMICOLON NUMBER		00060001
0000C0			(	000C2		291= 292=DTSW	DS EQU		H *-F9	SAREA		OPTION SWITCHES		00061001 00062001
			(	000C2		293=0PTSW	EQU		DTSV					00063001
0000C2	00		(	000C3		294= 295=FSAERCO	DC EQU		X'00 *-F9	SAREA		DUMP-80, TRACE-40, S ERROR CODE FOR ERROR		00064001 00065001
0000C3						296=	DS	C						00066001
						297=* 298=*	RET	URN	ADE	ORESS	STACK POINTERS	DO NOT CHANGE ORDER		00067001 00068001
						299=*								00069001
0000C4			(	000C4		300= 301=IHIFSAR	DS FOU	e *	∂F *					00070001 00071001
				000C4		302=RASSTAR		*	*-FS	SAREA		ADDR OF FIRST ENTRY	IN RAS-8	00072001
0000C4				999C8		303= 304=RASPT	DS EQU		F *_F	SAREA		RAS POINTER FROM TOP		00073001 00074001
0000C8						305=	DS	F	F					00075001
0000CC			(	900CC		306=RASEND 307=	EQU DS	* F		SAREA		ADDR OF LAST ENTRY	IN RAS+8	00076001 00077001
000000			(	900D0		308=RASPB	EQU			SAREA		RAS POINTER FROM BOT	TOM	00078001
0000D0						309= 310=*	DS	F	F					00079001 00080001
						311=*	LIS	T OF	F BF	RANCH	INSTRUCTIONS TO	COMMONLY USED SUBRO	UTINES	00081001
0000D4						312=* 313=BRLIST	DS	a	ðF					00082001 00083001
			(	000D4		314=CAP1	EQU			SAREA		FIRST PART CAPS		00084001
0000D4	4700	0000	(	900D8	00000	315= 316=CAP2	NOP EQU	e *		SAREA		SECOND PART CAPS		00085001 00086001
0000D8	4700	0000			00000	317=	NOP	0	9					00087001
				900DC		318=PROLOGP 319=PROLOGF	EQU EQU			SAREA LOGP		PROLOGUE FORMAL PARA	METER ENTRY	00088001 00089001
0000DC	4700	0000			00000	320=	NOP	0	-					00090001
0000E0	4700	0000	•	900E0	00000	321=PROLOG 322=	EQU NOP	0		SAREA		PROLOGUE PROGRAM USU	AL ENIRY	00091001 00092001
0000E4	1700	0000	(	000E4	00000	323=RETPROG 324=	EQU NOP	*		SAREA		DISPLACEMENT RETURN	PROGRAM	00093001 00094001
			(	900E8		325=EPILOGP	EQU	*	*-FS	SAREA		EPILOGUE PROGRAM, PRO	CEDURE ENTRY	00095001
0000E8	4700	0000	(	900EC	00000	326= 327=EPILOGB	NOP EQU	e *		SAREA		EPILOGE PROGRAM, BETA	-BLOCK ENTRY	00096001 00097001
0000EC	4700	0000	,	000F0	00000	328= 329=EPILPR3	NOP EQU	e *		SAREA		EPILOGUE PROGRAM ENT	DV 2	00098001 00099001
0000F0	4700	0000			00000	330=	NOP	0	9				KT 3	00100001
0000F4	4700	0000	(	000F4	00000	331=CSWE1 332=	EQU NOP	*		SAREA		FIRST PART CSWES		00101001 00102001
0000F8	1700	aaaa	(	900F8	00000	333=CSWE2 334=	EQU NOP	*		SAREA		SECOND PART CSWES		00103001 00104001
			(	000FC		335=LOADPP	EQU			SAREA		LOAD PRECOMPILED PRO	C ROUTINE	00105001
0000FC	4700	0000	(	00100	00000	336= 337=TRACE	NOP EQU	e *	-	SAREA				00106001 00107001
000100			9000	90000		338=	MVC		0(0)	0,0				00108001
000106 00010A					00000 00000	339= 340=	NOP NOP	9						00109001 00110001
0004.05	4700	0000	(	0010E	00000	341=TERMNTE	EQU			SAREA		NORMAL TERMINATION E	XIT	00111001
00010E	4700	0000	(	00112	00000	342= 343=BCR	NOP EQU		∂ *-F9	SAREA				00112001 00113001
000112	0700		,	20114		344=	BCR		0,0	- A D E A		VARIABLE CONDITIONAL	BRANCH	00114001
000114	4700	0000	,	00114	00000	345=GETMSTO 346=	EQU NOP		) 9	SAREA				00115001 00116001
			,	00118		347=* 348=VALUCAL	EOU	*	* E0	SAREA				00117001 00118001
000118	4700	0000	,	00110	00000	349=	NOP	0		DANLA				00119001
00011C	4700	9999	(	0011C	00000	350=IORLST 351=	EQU NOP	*		SAREA				00120001 00121001
220110	., 50	2000			22000	352=*								00122001
			(	001CC		353=FSAERR 354=*	EQU	Х	X'10	CC'		DISPL FOR ERROR LIS	Т	00123001 00124001
						355=*	DIS	PLAC	CEME	ENTS F	OR CERTAIN ERRO	R EXITS IN FSA		00125001
			(	0020C		356=* 357=0UT0FB	EQU	F	FSAF	ERR+4*	16			00126001 00127001
			(	00218		358=NUMBIND	EQU	F	FSAE	ERR+4*	19			00128001
				00208 0026C		359=ARRAYBD 360=ERROR40	EQU EQU			ERR+4* ERR+4*				00129001 00130001
				00200		361=0ERR22	EQU			ERR+4*				00130001
				00210		362=ENDLESL	EQU			ERR+4*				00132001
			(	00220		363=0ERR21 364=*	EQU	F	FSAE	ERR+4*	21			00133001 00134001
						365 *	DEC	TCTF	ED .	-011475	c			00178001
						366 * 367 *	KEG.	1316	EK I	EQUATE	3			00179001 00180001
			,	20000		368 369+P0		REGS						00181001
				00000 00001		369+R0 370+R1	EQU EQU							01-IEZRE 01-IEZRE
				00002		371+R2	EQU							01-IEZRE
				00003 00004		372+R3 373+R4	EQU EQU							01-IEZRE 01-IEZRE
				00004		374+R5	EQU							01-IEZRE
				00006		375+R6	EQU							01-IEZRE
				00007 00008		376+R7 377+R8	EQU EQU							01-IEZRE 01-IEZRE
			(	90009		378+R9	EQU	9	9					01-IEZRE
				0000A 0000B		379+R10 380+R11	EQU EQU		10 11					01-IEZRE 01-IEZRE
			(	9000C		381+R12	EQU	1	12					01-IEZRE
				0000E		382+R13 383+R14	EQU EQU		13 14					01-IEZRE 01-IEZRE
			`				- 20	_	-					

OO IHIOBOOL, OUTBOOLEAN, ALGOL F LIB
Active USINGs: IHIOBOOL+X'8E',R7 DSTABLE,R5

D-Loc Object Code Addr1 Addr2 Stmt Source Statement

PAGE 6

384+R15 385 \* 0000F EQU 15

END 386

01-IEZRE 00182001 00183001

X390 3.1.04 2012/08/17 13.21

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rences	5				X390	3.1.0	ð4 20	012/08	3/17 1	13.21
ASOURCE	4	0000016C	00000001	LAA		174	76M	133										
BLANKS		00000164				172	124X											
BRRST	1	0000009C		U		264	265											
COMMON	4	0000008E	00000001	ΙI		97	66	68U	77B	93	95U							
DSF	2	0000001A	FFFFFFF	нн		197	97M	98M	99	101M	132M							
DSTABLE	1	00000000	FFFFFFF	: <u>၂</u>		186	520	225										
DS0	1	00000080		U		201	99											
DS2	1	00000020		U		203	97											
DS3	1	00000010		U		204	97	132										
DS6	1	00000002		U		207	101											
DS7	1	00000001		U		208	98											
DTSW	1	000000C2		U		292	293											
EV	1	00000008		U		47	73											
FALSE	7	00000177	00000001	LCC		177	142											
FCTVALST	1	00000090		U		260	263											
FSAERR	1	000001CC		U		353	170B	357	358	359	360	361	362	363				
FSAREA	1	00000000	FFFFFFF	U		250	255	260	262	263	264	267	274	276	280	282	286	288
							290	292	295	302	304	306	308	314	316	318	321	323
							325	327	329	331	333	335	337	341	343	345	348	350
IHIOBOAR		00000052				82	41	88U										
IHIOBOOL	1	00000000	00000001	LJ		39	610											
IORLST	1	0000011C		U		350	72	102	125	160								
K		00000018	FFFFFFF	XX		195	149											
NX		000000C		U		48	126	161										
OERROR		0000015E	00000001			169	131B											
OP		00000010		U		49	103											
OTBOOL1		000000AC				105	100B											
OTBOOL2		000000FC				133	109B											
OTBOOL3		0000011A				142	138B											
OTBOOL3A		00000120				143	140B											
OTBOOL4		0000012E				150	154B											
OTBOOL5		0000014A				160	151B											
OTBOOL6		00000154				163	156B											
OTBOOL7		00000DE	00000001			125	118B	123B										
PROLOGP		00000DC		. U		318	319											
R		00000004				189	106	115	128	136	144M	155M						
RE		00000008	++++++			190	105	116	130	150								
R1		00000001		U		370	75M	76	<b>.</b> -	70	100	125	160	1.00	170			
R12		. 0000000C		U		381	62M	64	65	72	102	125	160	169	170	1.004		
R13		. 0000000D		U		382	62	63M		65	89	90M	91	92	163M	169M		
R14		. 0000000E		U U		383 384		104M			740	880	040	1024	102M	1040	1 2 F M	12CM
R15	1	0000000F		U		364	610	67D 160M	72M		74B	880	940	102M	ויוכטו	1046	12514	12011
R2	1	00000002		U		371	133M		TOTM	1026								
R3		00000002		U		371		107M	100	115M	117	110	1 2 O M	129M	120	1 2 C M	120	142
KS	_	. 00000003		U		3/2			150		153M			12311	130	1300	139	142
R4	1	00000004		U		373	143M 105M			152 117M			172 122м	124				
R5		00000004		U		374	520	100	11011	11/11	12011	12111	12211	124				
R7	1			U		374 376	66M	6811	79D	89M	91	92	93M	95U				
R8	_	00000007		U		376 377		149M		ויוכט	ÞΙ	32	ויוכ כ	950				
R9		00000000		U		377		135M										
SAVEAREA		00000000	9999999			179	63	90	163									
TRUE		00000130				176	139	20	100									
	,	55555176	2300000			1,0	100											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.21

86 166M 75M 76 86 166M 1(1) 2(2) 86 133M 135 166M 59 86 106M 107M 108 115M 117 119 128M 129M 130 136M 139 142 143M 144 150 152 153M 155 166M 172 59 86 105M 108 116M 117M 120M 121M 122M 124 166M 52U 59 86 166M 3(3) 4(4) 5(5) 6(6) 86 166M 59 59 59 59 66M 68U 79D 86 89M 91 92 93M 95U 166M 7(7) 8(8) 86 148M 149M 154M 166M 9(9) 10(A) 86 134M 135M 137M 166M 86 166M 59 59 11(B) 86 166M 59 62M 64 65 72 86 102 125 160 166M 169 170N 59 62 63M 64 65 86 89 90M 91 92 163M 166 169M 59 74M 86 104M 127M 162M 166M 167B 55B 59 61U 67D 72M 73M 74B 82B 86 88U 94D 102M 103M 104B 125M 126M 127B 160M 161M 162B 166M 12(C) 13(D)

14(E) 15(F)

BOO Dsect Cross Reference PAGE 9

DSTABLE 0000024 FFFFFFFF 186 4 DSTABLE FAS 0000120 FFFFFFFE 228 PRIMARY INPUT

Dsect Length Id Defn Con Member X390 3.1.04 2012/08/17 13.21

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17	13.21
52		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001A	155	DSTABLE,R	5		
61		USING	Ordinary	00000001	00000000	00001000	15	00180	66	IHIOBOOL,	R15		
67		DROP					15			R15			
68		USING	Ordinary	00000001	0000008E	00001000	7	000DE	77	COMMON, R7			
79		DROP	•				7			R7			
88		USING	Ordinary	00000001	00000052	00001000	15	0012E	93	IHIOBOAR,	R15		
94		DROP	-				15			R15			
95		USING	Ordinary	00000001	0000008E	00001000	7	000F6	163	COMMON, R7			

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOBO PROCSTEP: X390

Primary input: lines 1 to 183 of SYSD.ALGOLFRT.ASM(IHIOBO)

SYSLIB library records read: 362
SYSUT1 work file size: 35266 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 14640 bytes
SYSLIN file records written: 11

TXA000I Return code 0, elapsed time 0.26 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHIOIN LEVEL V2.M01

```
X390 3.1.04 2012/08/17 13.21
                                                                                (c) Copyright 1995-2010 Tachyon Software LLC
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                       -S2//DDN:SYSUT2
                                                       -S3//DDN:SYSUT3
                                                       -SN//DDN:SYSLIN
                                                       -SL//DDN:SYSLIB
                                                       -ST//DDN:SYSPRINT
                                                       -SH//DDN:SYSPUNCH
                                                       -SA//DDN:SYSADATA
                                                       -SM1
Options for this Assembly
                                                                   Source
                                                                   (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                    (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                   Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                   (default)
NoFO1d
                                                                   (default)
    IDR('X390ASM
                                  3104')
                                                                    (default)
NoINFÒ
                                                                   Command Line
     LAnguage(EN)
                                                                   (default)
     LineCount(101)
                                                                   Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                   Command Line
                                                                   (default)
     Object(Omf)
                                                                   Command Line
     OPtable(Uni,NoList)
                                                                   (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                   Command Line
                                                                   (default)
NoPControl
    PRintctl(Asa)
                                                                   //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                   (default)
NoProFile
                                                                    (default)
                                                                   Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                   (default)
     SiZe(3145728)
                                                                   Command Line
NoSUppress
                                                                   (default)
     SysadatA(//DDN:SYSADATA)
                                                                   Command Line
     SvsLib(//DDN:SYSLIB)
                                                                   Command Line
    SysliN(//DDN:SYSLIN)
                                                                   Command Line
                                                                   (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                   Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                   Command Line
                                                                   (default)
                                                                   Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                   Command Line
     Sysut2(//DDN:SYSUT2)
                                                                   Command Line
     Sysut3(//DDN:SYSUT3)
                                                                   Command Line
NoTerm
                                                                   Command Line
NoTEst
                                                                    (default)
    TypeCheck(Magnitude,Register)
                                                                   (default)
NoUsingLimit
                                                                    (default)
    UsingMap
                                                                   (default)
    Xref(Short)
                                                                   Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                         SYSD.ALGOLFRT.ASM(IHIOIN)
SYSLIB
                          SYS1.MACLIB
                         SYSD. TOOLS. MACLIB
                         SYSD.ALGOLFRT.ASM
                         SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                         SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                         JES2.J0B09284.S00198
```

SYSUT1

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt
                                            Source Statement
                                                                                                                         00002001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
                                                                                                                         00004001
00005001
                                                     STATUS - LEVEL 2.1
                                         5
                                                                                                                         00006001
                                         6
                                                     FUNCTION/OPERATION -
                                                                                                                         00007001
                                           *
                                         8
                                                     TRANSFER NUMBER FROM INTEGER INDICATED BY SECOND ACTUAL
                                                                                                                         00008001
                                                                                                                         00009001
                                        9
                                                     PARAMETER TO OUTPUT BUFFER IN ZONED DECIMAL FORM
                                                                                                                         00010001
                                        10
                                                                                                                         00011001
                                        11
                                                     IHIOINTG - FROM GENERATED OBJECT MODULE
                                                                                                                         00012001
                                        12
                                           *
                                        13
                                                                     R1, PARMLIST
                                                                                                                         00013001
                                        14
                                                                 BALR R14,R15
                                                                                                                         00014001
                                                                DATA PASSED BY NAME
                                                                                                                         00015001
                                        15
                                                     IHIOINAR - FROM ARRAY MODULE IHIOTA
                                                                                                                         00016001
                                        16
                                                                     R7,DATA
                                                                                                                         00017001
                                        17
                                                                 LA
                                                                 BALR R14,R15
                                                                                                                         00018001
                                        18
                                        19
                                                                DATA PASSED BY NAME
                                                                                                                         9991 9991
                                                                                                                         00020001
                                        20
                                                                                                                         00021001
                                                     INPUT - N/A
                                        21
                                                                                                                         00022001
                                        22
                                                                                                                         00023001
                                        23
                                                     OUTPUT - N/A
                                        24
                                                                                                                         00024001
                                                                                                                         00025001
00026001
                                        25
                                                     EXTERNAL ROUTINES -
                                        26
                                                     IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                         00027001
                                        27
                                        28
                                                              OPEN DATASET
                                                                                                                         00028001
                                        29
                                                              CHANGE TO NEXT OUTPUT RECORD
                                                                                                                         00029001
                                           *
                                        30
                                                           - CONVERT REAL TO INTEGER
                                                                                                                         00030001
                                                     CNVRI
                                        31
                                                                                                                         00031001
                                        32
                                                     EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                         00032001
                                                                      TOO LONG RECORD
                                                                                            NO 38
                                                                                                                         00033001
                                        33
                                                          - ERROR
                                        34
                                                                      BRANCH TO IHIFSA
                                                                                                                         00034001
                                        35
                                           *
                                                                          R13, IHIFSA
                                                                                                                         00035001
                                        36
                                                                      В
                                                                          FSAERR+XX*4(13) XX ERROR NO
                                                                                                                         00036001
                                                                                                                         00037001
                                        37
                                                                                                                         00038001
                                                     TABLES/WORK AREAS - N/A
                                        38
                                                                                                                         00039001
                                        39
                                        40
                                                     ATTRIBUTES - SERIALLY REUSABLE
                                                                                                                         00040001
                                        41
                                                                                                                         99941991
                                        42
                                                                                                                         00042001
                                                     LINKING TO IHIOINAR DEVIATES FROM STANDARD CHARACTER
                                                                                                                         00043001
                                        43
                                                     DEPENDENCE
                                                                                                                         00044001
                                        44
                                                                                                                         00045001
                                        45
000000
                       00000 001F8
                                        46 IHIOINTE CSECT
                                                                                                                         00046001
                                                                                                                         00047001
00048001
                                        47
                                                     ENTRY THTOTNTG
                                        48
                                                     ENTRY IHIOINAR
                                                                                                                         00049001
                                        49
                                                                                                                         00050001
                                        50
                       00000
                                        51 FPR0
                                                     EQU
                                                                                     FPRO
                                                                                                                         00051001
                                        52
                                                                                                                         00052001
00053001
                                                     USING DSTABLE.R5
                  R:5
                      00000
                                        53
                                                                                                                         00054001
                                        54
                                                                                                                         00055001
                                        55
                                                     DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                         00056001
                                        56
                       00000
                                        57 CI
                                                                                     IHIIORCI
                                                                                                                         00057001
                       00004
                                        58 CL
                                                     EQU
                                                           4
                                                                                     IHIIORCL
                                                                                                                         00058001
                                                                                     THTTOREV
                       99998
                                        59 FV
                                                     FOU
                                                           8
                                                                                                                         00059001
                                        60 NX
                                                                                     IHIIORNX
                                                                                                                         00060001
                       0000C
                                                     EQU
                                                           12
                       00010
                                        61 OP
                                                     EQU
                                                           16
                                                                                     IHIIOROF
                                                                                                                         00061001
                       00014
                                        62 OQ
                                                                                     IHIIOROQ
                                                                                                                         00062001
                                                     EQU
                                        63
                                                                                                                         00063001
                                        64 IHIOINAR SAVE
                                                           (14,12),, 'IHIOINAR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00064001
                                                                                                BRANCH AROUND ID
000000 47F0 F026
                              00026
                                        65+IHIOINAR B
                                                           38(0,15)
                                                                                                                         01-SAVE
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
000004 21
                                                     DC
                                        66+
000005 C9C8C9D6C9D5C1D9
                                        67+
                                                     DC
                                                           CL32'IHIOINAR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
000025 F1
                                        68+
                                                     DC
                                                           CL1'1'
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
000026 90EC D00C
                              0000C
                                        69+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         01-SAVE
                                                                                                                         00065001
                                        70
                  R:F 00000
                                        71
                                                     USING IHIOINAR, R15
                                                                                                                         00066001
                                                                                     CHAIN SAVE AREAS
                                                                                                                         00067001
00002A 18AD
                                        72
                                                     LR
                                                           R10,R13
00002C 41D0 F1B0
                              001B0
                                        73
                                                     LA
                                                           R13, SAVEAREA
                                                                                                                         00068001
000030 50A0 D004
                              00004
                                        74
                                                     ST
                                                           R10,4(,R13)
                                                                                                                         00069001
                                                                                                                         00070001
                                        75
                              00008
000034 50D0 A008
                                                     ST
                                                           R13.8(,R10)
000038 41A0 F07C
                                                           R10, COMMON
                                                                                                                         00071001
                              0007C
                                        76
                                                     LA
                                        77
                                                     DROP
                                                           R15
                                                                                                                         00072001
                      0007C
                                        78
                                                     USING COMMON, R10
                                                                                                                         00073001
                  R:A
00003C 47F0 A00E
                              0008A
                                        79
                                                     В
                                                           SOUINTA
                                                                                                                         00074001
00075001
                                        80
                                                     DROP
                                                           R10
                                                                                                                         00076001
                                        81
                                                                                                                         00077001
                                        82
                                        83 IHIOINTG SAVE
                                                           (14,12),, 'IHIOINTG LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00078001
000040 47F0 F026
                              00026
                                        84+IHIOINTG B
                                                                                                BRANCH AROUND ID
000044 21
                                        85+
                                                    DC
                                                           AI 1 (33)
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
000045 C9C8C9D6C9D5E3C7
                                                     DC
                                                           CL32'IHIOINTG LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                         01-SAVE
                                        86+
                                                           CL1'1
000065 F1
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
                                        87+
                                                     DC
000066 90EC D00C
                              0000C
                                        88+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                        89 *
                                                                                                                         00079001
                  R:F 00040
                                        90
                                                     USING IHIOINTG, R15
                                                                                                                         00080001
                                       91
92
                                                           R12,R13
R13,SAVEAREA
00006A 18CD
                                                     \mathsf{LR}
                                                                                     R12 -> FSA TO FSA REG
                                                                                                                         00081001
00006C 41D0 F170
                              001B0
                                                                                                                         00082001
                                                     LA
000070 50C0 D004
                              00004
                                        93
                                                     ST
                                                           R12,4(,R13)
                                                                                                                         00083001
000074 50D0 C008
                              00008
                                        94
                                                     ST
                                                           R13,8(,R12)
                                                                                                                         00084001
000078 41A0 F03C
                              0007C
                                        95
                                                           R10, COMMON
                                                                                                                         00085001
                                                     LA
                                        96
                                                     DROP
                                                           R15
                                                                                                                         00086001
                  R:A 0007C
                                        97
                                                     USING COMMON, R10
                                                                                                                         00087001
```

Loc	Object Code	Addr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08	/17 13.21
				98					00088001
				99 100		EVALU	ATE DATASET NUMBER (EVDSI	N)	00089001 00090001
00007C	58F0 C11C		0011C		COMMON	L	R15, IORLST(,R12)		00091001
	58F0 F008		00008	102		L	R15,EV(,R15)		00092001
000084	05EF			103 104	*	BALR	R14,R15		00093001 00094001
				105		EVALU	ATE ADDR OF SOURCE		00095001
				106		TEST	IF SOURCE NUMBER IS REAL		00096001
000086	5870 1004		00004	107 108	SOUINT	L	R7,4(,R1)	ADDR OF SOURCE	00097001 00098001
	9630 501A	0001A		109	SOUINTA	OI	DSF,DS2+DS3	DS2, DS3 = 1	00099001
00008E 000092	94FE 501A	0001A		110 111		NI LTR	DSF, 255-DS7 R7, R7	TURN OFF EOF DS7	00100001 00101001
	4720 A03A		000B6	112		BP	INT1		00101001
				113					00103001
				114 115		CALL	CONVERSION ROUTINE		00104001 00105001
000098	7800 7000		00000	116		LE	FPR0,0(,R7)		00106001
	9120 C0C2	000C2	00040	117		TM	OPTSW(R12),X'20'	LONG OR SHORT PRECISION ?	00107001
	4710 A02C 6800 7000		00008 00000	118 119		BO LD	CONVA FPR0,0(,R7)	SHORT PRECISION STATED LONG PRECISION STATED	00108001 00109001
0000A8	58F0 C11C		0011C	120	CONVA	L	R15, IORLST(,R12)		00110001
0000AC 0000B0	58F0 F000		00000	121 122		L	R15,CI(,R15) R14,R15		00111001 00112001
	47F0 A03E		000BA	123		B	DSTEST		00112001
				124			/>		00114001
000086	5800 7000		00000	125 126	INT1 *	L	R0,0(,R7)	NUMBER IN RØ	00115001 00116001
				127		DATAS	ET OPEN ?		00117001
000000	0100 5014	00014		128		T.44	DCE DCO		00118001
	9180 501A 4710 A054	0001A	000D0	130	DSTEST	TM BO	DSF,DS0 NOCLO1	DCB IS OPEN	00119001 00120001
	9602 501A	0001A		131		OI	DSF,DS6	DS6 = 1	00121001
	58F0 C11C 58F0 F010		0011C 00010	132 133		L L	R15, IORLST(,R12)		00122001 00123001
0000CA			00010	134		BALR	R15,OP(,R15) R14,R15	OPEN DATASET	00123001
				135					00125001
				136 137			D ACCEPT 11 DIGITS ? T FILL RECORD WITH BLANK!	S AND CALL NEXTREC	00126001 00127001
				138		2	THE RECORD NETT BETWEEN	THE CALL MEANAGE	00128001
	5820 5004		00004		NOCL01	L	R2, R	CHARACTER POINTER	00129001
	4130 200B 5930 5008		0000B 00008	140 141		LA C	R3,11(,R2) R3,RE		00130001 00131001
	47D0 A098		00114	142		BNH	NONR1	BUFFER CAN ACCEPT 11 DIGITS	00132001
0000E0 0000E4	5890 5008 1802		00008	143 144		L SR	R9, RE R9, R2		00133001 00134001
	47D0 A07A		000F6	145		BNP	GETREC		00134001
	9240 2000	00000			BLANKS	MVI	0(R2),C''	BLANK IN BUFFER	00136001
	4120 2001 4690 A06E		00001 000EA	147 148		LA BCT	R2,1(,R2) R9,BLANKS	INCREASE R	00137001 00138001
	58F0 C11C		0011C		GETREC	L	R15, IORLST(,R12)		00130001
	58F0 F00C		0000C	150		L	R15,NX(,R15)		00140001
0000FE 000100	5820 5004		00004	151 152		BALR L	R14,R15 R2,R		00141001 00142001
000104	4130 200B		0000B	153		LA	R3,11(,R2)		00143001
	5930 5008 4720 A122		00008 0019E	154 155		C BH	R3,RE OINERR	TOO SHORT RECORD LENGTH	00144001
	9610 501A	0001A		156		OI	DSF, DS3	TOO SHOKT RECORD LENGTH	00145001 00146001
				157					00147001
				158 159		TEST	SOURCE NUMBER AND CONVER	T TO DECIMAL	00148001 00149001
000114	1200				NONR1	LTR	R0, R0		00150001
	4780 A102		0017E	161		BZ	OUTINT0	NUMBER IS ZERO	00151001
	4E00 A12C F395 2001 A1	2E 00001	001A8 001AA	162 163		CVD UNPK	R0, BUFF 1(10, R2), BUFF+2(6)		00152001 00153001
	96F0 200A	0000A		164		OI	10(R2),X'F0'	ZONE INSERTED	00154001
000128	95F0 2001	00001		165 166	* LEAD0	CLI	1(R2),C'0'		00155001 00156001
00012C	4770 A0C0	55501	0013C	167		BNE	TERMINØ		00157001
	9240 2000	00000	00001	168		MVI	\ / / / /	LEADING ZERO IS BLANKED	00158001
	4120 2001 47F0 A0AC		00001 00128	169 170		LA B	R2,1(,R2) LEAD0		00159001 00160001
			-	171					00161001
00013C			00144		TERMIN0	LTR BP	R0,R0 POSITIVE		00162001
	4720 A0CE 9260 2000	00000	0014A	173 174		MVI	0(R2),C'-'	- SIGN INSERTED	00163001 00164001
000146	47F0 A0D2		0014E	175		В	TERMIN1		00165001
000141	924E 2000	00000		176 177	* POSITIVE	MVT	0(R2),C'+'	+ SIGN INSERTED	00166001 00167001
		22300		178			- V::=/) = 1		00168001
00014E			00010		TERMIN1		R4, R4	VALUE OF K TH DECICES	00169001
	4340 5018 5930 5008		00018 00008	180 181	TERMIN1A	IC C	R4,K R3,RE	VALUE OF K IN REGISTER	00170001 00171001
000158	4780 A114		00190	182		BE	RECEND	RECORD END IS REACHED	00172001
	9240 3000	00000	00001	183		MVI	0(R3),C''	FILL WITH BLANKS	00173001
	4130 3001 4640 A0D8		00001 00154	184 185		LA BCT	R3,1(,R3) R4,TERMIN1A		00174001 00175001
000168	5930 5008		00008	186		C	R3, RE		00176001
	4780 A114 5030 5004		00190 00004	187 188		BE ST	RECEND R3, R		00177001 00178001
	58D0 A138		001B4		TERMIN1B		R13, SAVEAREA+4		00179001
				190	*	DET	N (14 12)	DECTORE DECC AND DETURN	00180001
000178	98EC D00C		0000C	191 192+	<b>+</b>	RETUR LM	N (14,12) 14,12,12(13)	RESTORE REGS AND RETURN RESTORE THE REGISTERS	00181001 01-RETUR
00017C				193-		BR	14	RETURN	01-RETUR

TE IHIOINTE, OUT INTEGER, ALGOL F LIB
Active USINGs: IHIOINTE+X'7C',R10 DSTABLE,R5 NTE PAGE X390 3.1.04 2012/08/17 13.21 Addr1 Addr2 Stmt Source Statement Loc Object Code 194 \* 00182001 195 \* OUTINTEGER NUMBER IS 0 00183001 196 00184001 00185001 197 OUTINTO 0(R2),C'' 00017E 9240 2000 00000 MVI 1(9,R2),0(R2) 10(R2),C'0' 000182 D208 2001 2000 00001 00000 BLANKS IN BUFFER 00186001 198 MVC 000188 92F0 200A 0000A 0 IN BUFFER 00187001 199 MVI 00018C 47F0 A0D2 0014F 200 В TFRMTN1 00188001 201 \* 00189001 000190 58F0 C11C 202 RECEND R15, IORLST(,R12) 00190001 0011C Ĺ R15,NX(,R15) 00191001 000194 58F0 F00C 0000C 203 000198 05EF 204 BALR R14 R15 00192001 00019A 47F0 A0F8 00174 205 TERMIN1B 00193001 В 206 00194001 RECORD LENGTH < 11 207 00195001 208 00196001 00019E 18DC 00197001 209 OINERR R13,R12 LR 0001A0 47FC 0264 FSAERR+38\*4(R12) 00264 210 00198001 В 211 00199001 0001A4 00000000 0001A8 00000000000000000 00200001 212 BUFF DC D'0' 00201001 213 00202001 0001B0 000000000000000000 214 SAVEAREA DC 18F'0' 215 00203001 0001F8 216 **LTORG** 00204001 00205001 217 DSTABLE DSECT=YES 00206001 218 000000 00000 00024 219+DSTABLE DSECT 01-DSTAB 01-DSTAB 220+\* 000000 00000000 221+ADCB F'0' > DCB 01-DSTAB 000004 000000000 222+R DC F'0' CHARACTER POINTER 01-DSTAB F'0' 000008 00000000 223+RE DC 01-DSTAB F'0' 00000C 00000000 224+NBB DC 01-DSTAB 000010 00000000 225+BB DC F'0' 01-DSTAB 000014 0001 226+5 DC H'1' RECORD POINTER 01-DSTAB 000016 0050 227+P DC H'80 RECORD LENGTH 01-DSTAB X'02' NUMBER OF BLANK DELTM CHARS 01-DSTAR 000018 02 228+K DC NO OF RECORDS PER SECTION 000019 00 X'00 01-DSTAB 229+0 DC 00001A 0000 230+DSF DC H'00 DATASET FLAGS 01-DSTAB 01-DSTAB 231+\* 232+\* DATASET FLAGS - DSF 01-DSTAR 233+\* 01-DSTAB 234+DS0 X'80 00080 EOU DATASET OPEN 01-DSTAB 00040 235+DS1 EQU X'40' 01-DSTAB X'20' 01-DSTAB 00020 236+DS2 EQU LAST I/O OUTPUT 00010 237+DS3 EQU X'10' 01-DSTAB 00008 238+DS4 EQU X'08' 01-DSTAB X'04' 239+DS5 01-DSTAR 99994 FOU X'02' OPEN FOR OUTPUT 00002 240+DS6 01-DSTAB EQU X'01' END OF FILE 01-DSTAB 00001 241+DS7 EQU 242+\* 01-DSTAB 243+\* DATASET FLAGS - DSF+1 01-DSTAB 244+\* 01-DSTAB 00080 245+DS8 END OF DATA X'80 01-DSTAB EOU X'40' 00040 246+DS9 EQU 01-DSTAB 00020 247+DS10 X'20' OPENED BY SYSACT 12 EQU 01-DSTAB 00010 248+DS11 EQU X'10' INDICATE IHIERR-ROUT 01-DSTAB 00008 249+DSEOD EQU X'08 01-DSTAB 250+DSTOFRR 99994 FOU X'04 T/O FRROR 01-DSTAR 00002 251+DS14 X'02 DATASET OPENED 01-DSTAB EQU X'01' 00001 252+DS15 EQU CLOSE FROM IHIERR 01-DSTAB 253+\* 01-DSTAB 00001C 00000000 F'0' 254+NOTEADR DC 01-DSTAB 000020 0000 H'0' LRECL+ TWO ARB 01-DSTAB 255+BL DC 000022 0000 01-DSTAB DC H'0' 256+ 257+\* 01-DSTAB 00024 258+DSTABLEL EQU \*-DSTABLE L'DSTABLE ENTRY 01-DSTAB 259+\* 01-DSTAB 260 \* 00207001 00207001 000000 00000 00120 261 FSAAREA DSECT 262 00209001 263 COPY FSAREA 00210001 264= 00001001 COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY 265= 00002001 00003001 266= 267= STATUS - LEVEL 2.1 00004001 268=\* 00005001 269=\*\* 00006001 270= 00007001 COMMON DATA AREA 00008001 271= 272= 00009001 00010001 273= **FSAREA** 274= 275=\* 00012001 276= 00013001 277= DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL 00014001 MODULES DURING THE EXECUTION 00015001 278= 279= 00016001 280=\* ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY 00017001

281=\*

282=\*

284=

285=\*

286=\*

288=ASAVE

287=

283=FSAREA

00000

00048

999999

SUBROUTINES) BY R12

EQU

DS

EQU

SAVE AREAS

18F

\*-FSAREA

00018001

00019001

00020001

00021001

00022001

00023001

99924991

00025001

STANDARD SAVE AREA

ALTERNATE SAVE AREA USED BY

	Object Code		Addr2		Stater	ment		X390 3.1.04 2012/08	/17 13.21
000048	,			289=	DS	18F		CERTAIN SUBROUTINES	00026001
				290=* 291=*	MTSCEI	LI ANFOLIS I	NORK AREAS AND (	CONSTANTS	00027001 00028001
		00090		292=*			TOTAL AREAS AND C		00029001
000090				293=FCTVALST 294=	DS	*-FSAREA		TEMPORARY STORAGE FOR FUNCTION VALUES	00030001 00031001
000098	00000090	00098		295=ASTLOC 296=	EQU DC	*-FSAREA A(FSAREA	FCTVALST)	DISPL FOR ADDR OF STAND LOCTN	00032001 00033001
		0009C 0009C		297=BRRST 298=HW	EQU EQU	*-FSAREA BRRST		TEMPORARY SAVE REG BRR TEMPORARY HALFWORD STORAGE	00034001 00035001
00009C		000A0		299= 300=PROLREG	DS EQU	F *-FSAREA		STORAGE FOR PBT AND LAT WHEN	00036001 00037001
0000A0		ODOAO		301=	DS	2A		A PROCEDURE IS FORMAL PARAM	00038001
				302=* 303=*	HALFW	ORD CONTAI	INING PBN OF CAL	LED BLOCK IN SECOND BYTE	00039001 00040001
0000A8				304=* 305=	DS	ØН			00041001 00042001
0000A8	00	000A9		306= 307=PROLPBN	DC EQU	X'00' *-FSAREA		STORAGE FOR CALLED PBN	00043001 00044001
0000A9	00	000AA		308= 309=EIGHT	DC EQU	X'00' *-FSAREA		CONST FOR REDUCING RAS	00045001 00046001
0000AA	0008	OOOAA		310=	DC	H'8'		CONST TON REDUCING MAS	00047001
0000AC				311=* 312=	DS	0F			00048001 00049001
0000AC		000AC		313=ADSTAB 314=	EQU DS	*-FSAREA A		ADDR OF DSTABLE IN THE OBJECT PROGRAM	00050001 00051001
0000B0		000B0		315=ANOTTAB 316=	EQU DS	*-FSAREA A		ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)	00052001 00053001
		000B4		317=* 318=IHIFSAST	FOLL	*			00054001 00055001
0000B4		000B4		319=PGOPSW 320=	EQU DS	*-FSAREA 2F		PROGRAM CHECK OLD PSW	00056001 00057001
		000BC		321=FSAPICA	EQU	*-FSAREA		OLD PICA ADDR	00058001
	00000000	000C0		322= 323=SCRCS	DC EQU	F'0' *-FSAREA		SEMICOLON NUMBER	00059001 00060001
0000C0		000C2		324= 325=DTSW	DS EQU	H *-FSAREA		OPTION SWITCHES	00061001 00062001
0000C2	00	000C2		326=OPTSW 327=	EQU DC	DTSW X'00'		DUMP-80, TRACE-40, SHORT-20	00063001 00064001
0000C3		000C3		328=FSAERCOD 329=	EQU DS	*-FSAREA C		ERROR CODE FOR ERROR ROUTINE	00065001 00066001
000000				330=*			CTACK DOINTEDS	DO NOT CHANCE OPPER	00067001
				331=* 332=*			STACK PUINTERS	DO NOT CHANGE ORDER	00068001 00069001
0000C4		000C4		333= 334=IHIFSARS	-	0F *			00070001 00071001
0000C4		000C4		335=RASSTART 336=	EQU DS	*-FSAREA F		ADDR OF FIRST ENTRY IN RAS-8	00072001 00073001
0000C8		000C8		337=RASPT 338=	EQU DS	*-FSAREA F		RAS POINTER FROM TOP	00074001 00075001
0000CC		000CC		339=RASEND 340=	EQU DS	*-FSAREA		ADDR OF LAST ENTRY IN RAS+8	00076001 00077001
		000D0		341=RASPB	EQU	*-FSAREA		RAS POINTER FROM BOTTOM	00078001
0000D0				342= 343=*	DS	r			00079001 00080001
				344=* 345=*	LIST (	OF BRANCH	INSTRUCTIONS TO	COMMONLY USED SUBROUTINES	00081001 00082001
0000D4		000D4		346=BRLIST 347=CAP1	DS EQU	0F *-FSAREA		FIRST PART CAPS	00083001 00084001
0000D4	4700 0000	000D8	00000	348= 349=CAP2	NOP EQU	0 *-FSAREA		SECOND PART CAPS	00085001 00086001
0000D8	4700 0000	000DC	00000	350= 351=PROLOGP	NOP EQU	0 *-FSAREA		PROLOGUE FORMAL PARAMETER ENTRY	00087001 00088001
000000	4700 0000	000DC	00000	352=PROLOGFP 353=	EQU NOP	PROLOGP 0		. MOLOGOE TOWNER PRIMARETEN ENTRY	00089001 00090001
		000E0		354=PROLOG	EQU	*-FSAREA		PROLOGUE PROGRAM USUAL ENTRY	00091001
	4700 0000	000E4	00000	355= 356=RETPROG	NOP EQU	0 *-FSAREA		DISPLACEMENT RETURN PROGRAM	00092001 00093001
0000E4	4700 0000	000E8	00000	357= 358=EPILOGP	NOP EQU	0 *-FSAREA		EPILOGUE PROGRAM, PROCEDURE ENTRY	00094001 00095001
0000E8	4700 0000	000EC	00000	359= 360=EPILOGB	NOP EQU	0 *-FSAREA		EPILOGE PROGRAM, BETA-BLOCK ENTRY	00096001 00097001
0000EC	4700 0000	000F0	00000	361= 362=EPILPR3	NOP EQU	0 *-FSAREA		EPILOGUE PROGRAM ENTRY 3	00098001 00099001
0000F0	4700 0000		00000	363=	NOP	0			00100001
0000F4	4700 0000	000F4	00000	364=CSWE1 365=	EQU NOP	*-FSAREA		FIRST PART CSWES	00101001 00102001
0000F8	4700 0000	000F8	00000	366=CSWE2 367=	NOP	*-FSAREA		SECOND PART CSWES	00103001 00104001
0000FC	4700 0000	000FC	00000	368=LOADPP 369=	EQU NOP	*-FSAREA 0		LOAD PRECOMPILED PROC ROUTINE	00105001 00106001
000100	D200 0000 0000	00100 00000	00000	370=TRACE 371=	EQU MVC	*-FSAREA 0(0),0			00107001 00108001
000106	4700 0000 4700 0000		00000	372= 373=	NOP NOP	0			00103001 00109001 00110001
		0010E		374=TERMNTE	EQU	*-FSAREA		NORMAL TERMINATION EXIT	00111001
	4700 0000	00112	00000	375= 376=BCR	NOP EQU	*-FSAREA			00112001 00113001
000112		00114		377= 378=GETMSTO	BCR EQU	0,0 *-FSAREA		VARIABLE CONDITIONAL BRANCH	00114001 00115001
000114	4700 0000		00000	379= 380=*	NOP	0			00116001 00117001
000118	4700 0000	00118	00000	381=VALUCALL 382=	EQU NOP	*-FSAREA 0			00118001 00119001
		0011C		383=IORLST	EQU	*-FSAREA			00120001
שנדנטטט	4700 0000		00000	384=	NOP	0			00121001

D-Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21

	385=*								00122001
001CC	386=FSAERR	EQU	X'1CC'		DISPL	FOR	ERROR	LIST	00123001
	387=*								00124001
	388=*	DISPL	ACEMENTS FOR	CERTAIN	ERROR EXIT	S IN	FSA		00125001
	389=*								00126001
0020C	390=OUTOFB	EQU	FSAERR+4*16						00127001
00218	391=NUMBIND	EQU	FSAERR+4*19						00128001
00208	392=ARRAYBD	EQU	FSAERR+4*15						00129001
0026C	393=ERROR40	EQU	FSAERR+4*40						00130001
00224	394=0ERR22	EQU	FSAERR+4*22						00131001
00210	395=ENDLESL	EQU	FSAERR+4*17						00132001
00220	396=0ERR21	EQU	FSAERR+4*21						00133001
	397=*								00134001
	398 *								00211001
	399 *	REGIS	STER EQUATES						00212001
	400 *								00213001
	401	IEZRE							00214001
00000	402+R0	EQU	0						01-IEZRE
00001	403+R1	EQU	1						01-IEZRE
00002	404+R2	EQU	2						01-IEZRE
00003	405+R3	EQU	3						01-IEZRE
00004	406+R4	EQU	4						01-IEZRE
00005	407+R5	EQU	5						01-IEZRE
00006	408+R6	EQU	6						01-IEZRE
00007	409+R7	EQU	7						01-IEZRE
00008	410+R8	EQU	8						01-IEZRE
00009	<b>411</b> +R9	EQU	9						01-IEZRE
0000A	412+R10	EQU	10						01-IEZRE
0000B	413+R11	EQU	11						01-IEZRE
0000C	<b>414+</b> R12	EQU	12						01-IEZRE
0000D	<b>415+</b> R13	EQU	13						01-IEZRE
0000E	416+R14	EQU	14						01-IEZRE
0000F	<b>417</b> +R15	EQU	15						01-IEZRE
	418 *								00215001
	419	END							00216001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	s				X390	3.1.0	04 2	012/0	8/17	13.21
BLANKS	4	000000EA	00000001	. I		146	148B											
BRRST	1	0000009C		U		297	298											
BUFF	8	000001A8	00000001	. D D		212	162M	163										
CI	1	00000000		U		57	121											
COMMON	4	0000007C	00000001	. I		101	76	78U	95	97U								
CONVA	4	000000A8	00000001	. I		120	118B											
DSF	2	0000001A	FFFFFFF	нн		230	109M	110M	129	131M	156M							
DSTABLE		00000000				219		258										
DSTEST		000000BA	00000001			129	123B											
DS0		00000080		U			129											
DS2		00000020		U		236	109											
DS3		00000010		U		237		156										
DS6		00000002		U		240												
DS7		00000001		U		241	110											
DTSW		000000C2		U		325	326											
EV		00000008		U		59	102											
FCTVALST		00000090		U		293	296											
FPR0		00000000		U		51		119M	201	202	202	204	205	200				
FSAERR		000001CC		U		386			391	392	393	394	395	396	24.2	245	210	224
FSAREA	1	00000000	FFFFFFE	U		283	288	293	295	296	297	300	307	309	313	315	319	321
							323	325	328	335	337	339	341	347	349	351	354	356
CETREC		00000056	00000001	-		140	358	360	362	364	366	368	370	374	376	378	381	383
GETREC		000000F6				149	145B	7411										
IHIOINAR		00000000				65	49	710										
IHIOINTG		00000040				84	48	90U										
INT1		000000B6	00000001			125	112B	120	122	1.40	202							
IORLST		0000011C		U		383	101	120	132	149	202							
K		00000018				228	180											
LEAD0		00000128				166	170B											
NOCLO1		000000D0				139	130B											
NONR1		00000114		. I U		160		202										
NX		0000000C		-		60		203										
OINERR OP		0000019E 00000010	00000001	. I U		209 61												
		00000010 000000C2		U			117											
OPTSW OUTINT0		000000C2	00000001			326 197	161B											
POSITIVE		0000017E				177	173B											
PROLOGP		0000014A	00000001	. I U		351												
R		00000000				222	139	152	188M									
RE		00000004				223				181	196							
RECEND		00000000				202			134	101	100							
RØ		000000130	00000001	U		402			162	172M								
R1		00000000		U		403	108	1001	102	1/211								
R10		00000001 00000000A		U		412	72M	74	75	76M	78U	81D	95M	97U				
R12		0000000A		U		414	91M	93	94	101	117	120		149	202	209	210	
R13		0000000D		Ü		415	72	73M		75	91	92M		94		209M		
R14		0000000E		Ü		416				151M		2211			10511	20311		
R15		0000000F		Ü		417	710		900			102M	103B	120M	121M	122B	132M	133M
	-			Ü		,				151B								255
R2	1	00000002		U		404	139M		144	146				163	164	166	168	169M
	-	00000002		Ü			174		197	198	199			203	-0.			205
R3	1	00000003		U		405	140M		153M			183	184M	186	188			
R4		00000004		Ü		406		180M				105	20		100			
R5		00000005		Ü		407	53U											
R7		00000007		Ü		409		111M	116	119	125							
R9		00000009		U		411		144M										
SAVEAREA		00000003	00000001	ū		214	73		189									
SOUINTA		000001B0				109	79B											
TERMINO		0000013C				172	167B											
TERMIN1		0000014E				179		200B										
TERMIN1A		00000154				181	185B											
TERMIN1B		00000174				189	205B											

 $\label{eq:Register} \textit{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ X390 3.1.04 2012/08/17 13.21 88 125M 160M 162 172M 192M 88 108 192M 1(1) 88 139M 140 144 146 147M 152M 153 163 164 166 168 169M 174 177 192M 197 198 199 88 140M 141 153M 154 181 183 184M 186 188 192M 88 179M 180M 185M 192M 2(2) 69 69 69 3(3) 4(4) 5(5) 53U 69 88 192M 6(6) 88 192M 88 108M 111M 116 119 125 192M 7(7) 69 8(8) 69 88 192M 9(9) 10(A) 69 69 72M 74 75 76M 78U 81D 88 95M 97U 192M 11(B) 69 88 192M 69 88 91M 93 94 101 117 120 132 149 192M 202 209 210N 69 72 73M 74 75 88 91 92M 93 94 189M 192 209M 69 88 103M 122M 134M 151M 192M 193B 204M 65B 69 71U 77D 84B 88 90U 96D 101M 102M 103B 120M 121M 122B 132M 133M 134B 149M 150M 151B 192M 202M 12(C) 13(D) 14(E) 15(F) 203M 204B

NTE Dsect Cross Reference PAGE 9

X390 3.1.04 2012/08/17 13.21

Dsect Length Id Defn Con Member

00000024 FFFFFFFF 219 4 DSTABLE 00000120 FFFFFFFE 261 PRIMARY INPUT DSTABLE FSAAREA

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17	13.21
53		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001A	188	DSTABLE,R	5		
71		USING	Ordinary	00000001	00000000	00001000	15	001B0	76	IHIOINAR,	R15		
77		DROP	-				15			R15			
78		USING	Ordinary	00000001	0000007C	00001000	10	0000E	79	COMMON, R1	.0		
81		DROP	•				10			R10			
90		USING	Ordinary	00000001	00000040	00001000	15	00170	95	IHIOINTG,	R15		
96		DROP	-				15			R15			
97		USING	Ordinary	00000001	0000007C	00001000	10	00138	205	COMMON, R1	0		

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOIN PROCSTEP: X390

Primary input: lines 1 to 216 of SYSD.ALGOLFRT.ASM(IHIOIN)

SYSLIB library records read: 362
SYSUT1 work file size: 38386 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 17280 bytes
SYSLIN file records written: 11

TXA000I Return code 0, elapsed time 0.26 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## THIOST LEVEL V2.M01

```
X390 3.1.04 2012/08/17 13.21
                                                                                  (c) Copyright 1995-2010 Tachyon Software LLC
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Policy Review (NoVersity Review) and the property of the pro
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIOST)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
```

SYSLIN

SYSUT1 SYSUT2

SYSUT3

SYSPRINT

SYS12230.T132141.RA000.T1BLD.OBJECT

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

JES2.J0B09284.S00202

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                   X390 3.1.04 2012/08/17 13.21
                                                                                                                          00002001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                          00003001
                                         4
                                                                                                                          00004001
00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                                                                                                          00006001
                                         6
                                                     FUNCTION/OPERATION -
                                                                                                                          00007001
                                           *
                                         8
                                                     TRANSFER STRING DEFINED BY SECOND ACTUAL PARAMETER
                                                                                                                          00008001
                                         9
                                                     TO AN OUTPUT BUFFER
                                                                                                                          00009001
                                        10
                                                                                                                          00010001
                                                                                                                          00011001
                                        11
                                                     IHIOSTRG - FROM GENERATED OBJECT MODULE
                                        12
                                                                                                                          00012001
                                        13
                                           *
                                                          R1, PARMLIST
                                                                                                                          00013001
                                        14
                                                     BALR R14,R15
DATA PASSED BY NAME
                                                                                                                          00014001
                                        15
                                                                                                                          00015001
                                                                                                                          00016001
                                        16
                                                     INPUT - N/A
                                                                                                                          00017001
                                        17
                                        18
                                                                                                                          00018001
                                                     OUTPUT - N/A
                                        19
                                                                                                                          00019001
                                        20
                                                                                                                          00020001
                                                                                                                          00021001
                                        21
                                                     EXTERNAL ROUTINES-
                                                     IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                          00022001
                                        22
                                        23
                                                               OPEN DATASET
                                                                                                                          00023001
                                        24
                                                              CHANGE TO NEXT OUTPUT RECORD
                                                                                                                          00024001
                                                                                                                          00025001
00026001
                                        25
                                                     EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14 - ERROR - N/A
                                        26
                                                                                                                          00027001
                                        27
                                        28
                                                                                                                          00028001
                                                     TABLES/WORK AREAS - N/A
                                                                                                                          00029001
                                        29
                                                                                                                          00030001
                                        30
999999
                        00000 00148
                                        31 IHIOSTRG CSECT
                                                                                                                          00031001
                                        32
                                                                                                                          00032001
                                                     DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                          00033001
                                        33
                                        34
                                                                                                                          00034001
                       00000
                                        35 CI
                                                                           DISPLACEMENT FOR - IHIIORCI
                                                                                                                          00035001
                                                                                                IHIIORCL
                        00004
                                        36 CL
                                                     EQU
                                                            4
                                                                                                                          00036001
                        99998
                                                                                                                          00037001
                                        37 FV
                                                     FOU
                                                           8
                                                                                                THTTOREV
                                        38 NX
                                                                                                IHIIORNX
                                                                                                                          00038001
                        0000C
                                                           12
                                                     EQU
                        00010
                                        39 OP
                                                     EQU
                                                                                                IHIIOROP
                                                                                                                          00039001
                                                            16
                                        40 OQ
                                                                                                                          00040001
                        00014
                                                     EQU
                                        41
                                                                                                                          00041001
                                        42
                                                     SAVE
                                                            (14,12),, 'IHIOSTRG LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                          00042001
000000 47F0 F026
                                                                                                 BRANCH AROUND ID
                              00026
                                        43+
                                                     В
                                                            38(0.15)
                                                                                                                          01-SAVE
000004 21
                                                                                                 LENGTH OF IDENTIFIER
                                                                                                                          01-SAVE
                                                     DC
                                        44+
                                                            AL1(33)
000005 C9C8C9D6E2E3D9C7
                                                            CL32'IHIOSTRG LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                          01-SAVE
                                        45+
                                                     DC
000025 F1
                                        46+
                                                     DC
                                                            CL1'1'
                                                                                                 IDENTIFIER
                                                                                                                          01-SAVE
000026 90EC D00C
                              0000C
                                        47+
                                                     STM
                                                            14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                          01-SAVE
                                                                                                                          00043001
00002A 188F
                                                            R8. R15
                                        48
                                                     I R
                                                     USING IHIOSTRG, R8
                                                                                                                          00044001
                  R:8 00000
                                        49
00002C 50D0 80F8
                                                                                                                          00045001
                              000F8
                                        50
                                                     ST
                                                            R13.SAVAR+4
000030 18CD
                                        51
                                                     LR
                                                            R12, R13
                                                                                                                          00046001
000032 41D0 80F4
                              000F4
                                        52
                                                     ΙΔ
                                                            R13. SAVAR
                                                                                                                          00047001
00048001
                  R:5 00000
                                        53
                                                     USING DSTABLE, R5
                                                                                                                          00049001
                                        54
                                                                                                                          00050001
                                        55
                                                     EVALUATE DATASET NUMBER
                                                                                                                          00051001
                                        56
000036 58FC 011C
                              0011C
                                        57
                                                            R15, IORLST(R12)
                                                                                                                          00052001
                                                     Ĺ
00003A 58F0 F008
                              00008
                                        58
                                                            R15, EV(, R15)
                                                                                                                          00053001
                                                     BALR R14.R15
00003F 05FF
                                        59
                                                                                                                          00054001
                                                                                                                          00055001
                                        60
                                        61
                                                     STORE SOURCE ADDR
                                                                                                                          00056001
                                                                                                                          00057001
                                        62
000040 5810 1004
                              99994
                                        63
                                                            R1,4(,R1)
                                                                                                                          00058001
                                                                                      SAVE STRING ADDR
                                                                                                                          00059001
000044 5010 8130
                              0013C
                                        64
                                                     ST
                                                            R1, ASTRING
                                                                                                                          00060001
000048 9630 501A
                        0001A
                                                                                      DS2,DS3=1 OUTPUT
                                        65
                                                     OI
                                                            DSF.DS2+DS3
                                                                                      DS7=0 NO END OF DATA
00004C 94FE 501A
                        0001A
                                        66
                                                     NI
                                                            DSF, 255-DS7
                                                                                                                          00061001
000050 9180 501A
                                        67
                                                     ТМ
                                                            DSF,DS0
                                                                                      DATASET OPEN ?
                                                                                                                          00062001
                        0001A
000054 4710 8066
                              00066
                                        68
                                                     во
                                                            OUTSTR1
                                                                                      YES, BRANCH
                                                                                                                          00063001
000058 9602 501A
                        0001A
                                        69
                                                     ΟI
                                                            DSF,DS6
                                                                                      NO, DATASET IS NOT OPEN
                                                                                                                          00064001
00065001
00005C 58FC 011C
                              0011C
                                                            R15, IORLST(R12)
                                        70
                                                     L
000060 58F0 F010
                              00010
                                                            R15, OP(, R15)
                                                                                                                          00066001
                                        71
                                                                                      CALL FOR ROUTINE OPEN
000064 05EF
                                        72
                                                     BALR
                                                            R14 R15
                                                                                                                          00067001
000066 5820 813C
                              0013C
                                        73 OUTSTR1
                                                            R2, ASTRING
                                                                                                                          00068001
                                                                                      R2 -> STRING
                                                                                      MOVE L'STRING
00006A D201 8140 2000 00140 00000
                                        74
                                                     MVC
                                                            STRLTH, 0(R2)
                                                                                                                          00069001
                                        75
                                                                                                                          00070001
000070 4840 8140
                              00140
                                                     LH
                                                            R4.STRLTH
000074 0640
                                                     BCTR
                                                                                                                          00071001
                                        76
                                                            R4.0
000076 0640
                                        77
                                                     BCTR
                                                            R4,0
                                                                                      REAL STRING LENGTH TO REGISTER
                                                                                                                          00072001
000078 1244
                                        78
                                                            R4, R4
                                                                                      ZERO LENGTH STRING ?
                                                                                                                          00073001
                                                     LTR
                                                                                      YES, BRANCH
00007A 4780 80B8
                              000B8
                                        79
                                                     \mathsf{BZ}
                                                            OUTSTR3
                                                                                                                          00074001
                                                                                                                          00075001
00007F 4120 2002
                              99992
                                        80
                                                     ΙΔ
                                                            R2,2(,R2)
                                                                                      R2 -> STRING
000082 1834
                                        81 OUTSTR4
                                                            R3, R4
                                                                                                                          00076001
                                                     LR
000084 9610 501A
                                                            DSF,DS3
                                                                                                                          00077001
                       0001A
                                                     ΟI
                                        82
                                                                                                                          00078001
000088 5A40 5004
                              00004
                                        83
                                                            R4.R
                                                     Α
00008C 5940 5008
                                                            R4, RE
                                                                                                                          00079001
                              00008
                                        84
000090 4720 80C2
                              000C2
                                        85
                                                     BH
                                                            OUTSTR2
                                                                                      OVERFLOW IN CURRENT RECORD
                                                                                                                          00080001
000094 0630
                                        86
                                                     BCTR
                                                            R3,0
                                                                                                                          00081001
000096 5890 5004
                              00004
                                                                                                                          00082001
                                        87
                                                            R9.R
00009A 4430 80EC
                              000EC
                                        88
                                                     EX
                                                            R3, OUTMOV
                                                                                      CONTENT OF STRING TO BUFFER
                                                                                                                          00083001
00009E 4130 3001
                              00001
                                        89
                                                     LA
                                                            R3,1(,R3)
                                                                                                                          00084001
0000A2 5040 5004
                              00004
                                        90
                                                     ST
                                                            R4,R
                                                                                                                          00085001
0000A6 5940 5008
                              ดดดดล
                                        91
                                                            R4.RE
                                                                                                                          00086001
0000AA 4770 80B8
                              000B8
                                        92
                                                            OUTSTR3
                                                                                                                          00087001
                                                     BNE
0000AE 58FC 011C
                              0011C
                                        93
                                                            R15, IORLST(R12)
                                                                                                                          00088001
                                                     L
                                                            R15,NX(,R15)
0000B2 58F0 F00C
                                                                                                                          00089001
                              0000C
                                        94
0000B6 05EF
                                                            R14,R15
                                                                                      CURRENT RECORD FILLED
                                                                                                                          00090001
                                        95
                                                     BALR
0000B8 58D0 80F8
                              999F8
                                                            R13, SAVAR+4
                                        96 OUTSTR3 L
                                                                                                                          00091001
                                                                                                                          00092001
```

ST IHIOSTRG, LIBRARY I/O SERVICE RTN, OUTSTRING, ALGOL F LIB Active USINGS: DSTABLE,R5 IHIOSTRG,R8 Loc Object Code Addr1 Addr2 Stmt Source Statement

Loc	Object Code	Addr1	Addr2	Stmt Source	State	ment		X390 3.1.04 2012/08	/17 13.21
				98	RETUR	N (14,12)		RETURN TO CALLER	00093001
0000BC 0000C0	98EC D00C 07FE		0000C	99+ 100+	LM BR	14,12,12(13) 14		RESTORE THE REGISTERS RETURN	01-RETUR 01-RETUR
0000C2	5870 5008		00008	101 * 102 OUTSTR2	L	R7, RE		RE-R AVAILIABLE, PLACE IN	00094001 00095001
	5B70 5004 5890 5004		00004 00004	103 104	S L	R7,R R9,R		CURRENT RECORD	00096001 00097001
0000CA			00004	105	BCTR	R7,0			00097001
	4470 80EC 4170 7001		000EC 00001	106 107	EX LA	R7,OUTMOV R7,1(,R7)			00099001 00100001
0000D8	1843		00001	108	LR	R4,R3			00101001
0000DA 0000DC				109 110	SR AR	R4,R7 R2,R7			00102001 00103001
	58FC 011C 58F0 F00C		0011C 0000C	111 112	L L	R15,IORLST(R12) R15,NX(,R15)	)		00104001 00105001
0000E6	05EF		00000	113	BALR	R14,R15			00106001
0000E8	47F0 8082		00082	114 115 *	В	OUTSTR4			00107001 00108001
0000EC	D200 9000 2000	00000	00000	116 OUTMOV 117 *	MVC	0(1,R9),0(R2)		MOVE STRING	00109001 00110001
0000F2 0000F4	0000 00000000000000000	90		118 SAVAR	DC	18F'0'			00111001
00013C	00000000			119 ASTRING	DC	A(0)			00112001
000140	0000			120 STRLTH 121 *	DC	H'0'			00113001 00114001
000148				122 123 *	LTORG				00115001 00116001
				124		LE DSECT=YES			00117001
000000		00000	00024	125+DSTABLE 126+*	DSECT				01-DSTAB 01-DSTAB
	00000000			127+ADCB	DC DC	F'0' F'0'		-> DCB	01-DSTAB
	00000000 00000000			128+R 129+RE	DC	F'0'		CHARACTER POINTER	01-DSTAB 01-DSTAB
	00000000 00000000			130+NBB 131+BB	DC DC	F'0' F'0'			01-DSTAB 01-DSTAB
000014	0001			132+5	DC	H'1'		RECORD POINTER	01-DSTAB
000016 000018				133+P 134+K	DC DC	H'80' X'02'		RECORD LENGTH NUMBER OF BLANK DELIM CHARS	01-DSTAB 01-DSTAB
000019 00001A				135+Q 136+DSF	DC DC	X'00' H'00'		NO OF RECORDS PER SECTION DATASET FLAGS	01-DSTAB 01-DSTAB
00001A	0000			137+*				DATASET TEAGS	01-DSTAB
				138+* 139+*	DATAS	ET FLAGS - DSF			01-DSTAB 01-DSTAB
		00080 00040		140+DS0	EQU	X'80'		DATASET OPEN	01-DSTAB 01-DSTAB
		00020		141+DS1 142+DS2	EQU EQU	X'40' X'20'		LAST I/O OUTPUT	01-DSTAB
		00010 00008		143+DS3 144+DS4	EQU EQU	X'10' X'08'			01-DSTAB 01-DSTAB
		00004		145+DS5	EQU	X'04'		ODEN FOR CUITRUT	01-DSTAB
		00002 00001		146+DS6 147+DS7	EQU EQU	X'02' X'01'		OPEN FOR OUTPUT END OF FILE	01-DSTAB 01-DSTAB
				148+* 149+*	DATAS	ET FLAGS - DSF+1			01-DSTAB 01-DSTAB
				150+*					01-DSTAB
		00080 00040		151+DS8 152+DS9	EQU EQU	X'80' X'40'		END OF DATA	01-DSTAB 01-DSTAB
		00020 00010		153+DS10 154+DS11	EQU EQU	X'20' X'10'		OPENED BY SYSACT 12 INDICATE IHIERR-ROUT	01-DSTAB 01-DSTAB
		00008		155+DSEOD	EQU	X'08'			01-DSTAB
		00004 00002		156+DSI0ERR 157+DS14	EQU EQU	X'04' X'02'		I/O ERROR DATASET OPENED	01-DSTAB 01-DSTAB
		00001		158+DS15 159+*	EQU	X'01'		CLOSE FROM IHIERR	01-DSTAB 01-DSTAB
	00000000			160+NOTEADR		F'0'			01-DSTAB
000020 000022				161+BL 162+	DC DC	H'0' H'0'		LRECL+ TWO ARB	01-DSTAB 01-DSTAB
		00024		163+* 164+DSTABLEL	EOU	*_DCTABLE		L'DSTABLE ENTRY	01-DSTAB 01-DSTAB
		55624		165+*	-50	-DJ I ADEL		E DOTABLE ENTIN	01-DSTAB
000000		00000	00120	166 * 167 FAS	DSECT				00118001 00119001
				168 * 169		FSAREA			00120001 00121001
				170=*					00001001
				171=* 172=*	COMPO	NENT ID - 360S-LN	.M-532 ALG	OL F LIBRARY	00002001 00003001
				173=* 174=*	STATU	S - LEVEL 2.1			00004001 00005001
				175=******	*****	******	******	**********	00006001
				176=* 177=*	СОММО	N DATA AREA			00007001 00008001
				178=* 179=*	FSARE				00009001 00010001
				180=*			anana e e e e e e		00011001
				181=****** 182=*	*****	*******	******	***********	00012001 00013001
				183=*		THAT IS IMMEDIATE		SIBLE TO ALL	00014001
				184=* 185=*		ES DURING THE EXI			00015001 00016001
				186=* 187=*		SSED BY MEANS OF UTINES) BY R12	R13 OR (	FOR THE LIBRARY	00017001 00018001
		00000		188=*		,			00019001
		00000		189=FSAREA 190=*	EQU	*			00020001 00021001
				191=* 192=*	SAVE	AREAS			00022001 00023001
									30023001

D-Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 000000 STANDARD SAVE AREA 193= DS 00024001 00048 194=ASAVE EQU \*-FSAREA ALTERNATE SAVE AREA USED BY 00025001 000048 195= DS 18F **CERTAIN SUBROUTINES** 00026001 196= 00027001 197= MISCELLANEOUS WORK AREAS AND CONSTANTS 00028001 198= 00029001 99999 199=FCTVALST EOU \*-FSARFA TEMPORARY STORAGE FOR 00030001 999999 200= DS D **FUNCTION VALUES** 00031001 00098 201=ASTLOC EQU \*-FSAREA DISPL FOR ADDR OF STAND LOCTN 00032001 000098 00000090 A(FSAREA+FCTVALST) 00033001 202= DC 0009C 203=BRRST EQU \*-FSAREA TEMPORARY SAVE REG BRR 00034001 204=HW BRRST TEMPORARY HALFWORD STORAGE 00035001 0009C EQU 00009C 205= DS 00036001 206=PROLREG \*-FSARFA αααΔα FOU STORAGE FOR PRT AND LAT WHEN 99937991 A PROCEDURE IS FORMAL PARAM 00038001 0000A0 207= 2A DS 208= 00039001 209= HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE 00040001 210= 99941991 0000A8 211= DS 00042001 0000A8 00 DC X'00 00043001 212= 000A9 213=PROLPBN EOU -FSAREA STORAGE FOR CALLED PBN 00044001 0000A9 00 214= DC X'00' 00045001 000AA 215=EIGHT EQL \*-FSAREA CONST FOR REDUCING RAS 00046001 0000AA 0008 216= DC H'8' 00047001 217= 99948991 0000AC DS 00049001 218= 0F 000AC 219=ADSTAB EQU \*-FSAREA ADDR OF DSTABLE 00050001 IN THE OBJECT PROGRAM 00051001 0000AC 220= 000B0 \*-FSAREA ADDR OF NOTE TABLE 00052001 221=ANOTTAB EQU аааава 222= DS (INSERTED BY THE OPEN ROUTINE) 00053001 223= 00054001 000B4 224=IHIFSAST EQU 00055001 000B4 225=PGOPSW EOU \*-FSAREA PROGRAM CHECK OLD PSW 00056001 0000B4 00057001 226= 227=FSAPICA 000BC EQU \*-FSAREA OLD PICA ADDR 00058001 ARROBE ARROBAGA F'A 228= DC 99959991 000C0 229=SCRCS \*-FSAREA SEMICOLON NUMBER 00060001 EQU 0000C0 00061001 230= DS Н 231=DTSW \*-FSAREA 00062001 000C2 EQU **OPTION SWITCHES** 000C2 232=0PTSW EQU DTSW 00063001 0000C2 00 233= DC X'00 DUMP-80, TRACE-40, SHORT-20 00064001 \*-FSAREA 000C3 234=FSAERCOD EOU ERROR CODE FOR ERROR ROUTINE 00065001 0000C3 00066001 235= DS 236= 00067001 237= RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 238= 00069001 999904 239= DS 0F 99979991 000C4 240=IHIFSARS EQU 00071001 000C4 241=RASSTART EQU \*-FSAREA ADDR OF FIRST ENTRY IN RAS-8 00072001 0000C4 242= 00073001 000C8 243=RASPT EOU \*-FSAREA RAS POINTER FROM TOP 00074001 000008 244= DS 00075001 000CC 245=RASEND \*-FSAREA ADDR OF LAST ENTRY IN RAS+8 00076001 EOU 0000CC 00077001 246= DS 247=RASPB 000D0 EQU -FSAREA RAS POINTER FROM BOTTOM 00078001 0000D0 248= 00079001 249= 99989999 250= LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROLITINES 99981991 251= 00082001 0000D4 252=BRLIST DS 00083001 253=CAP1 \*-FSAREA FIRST PART CAPS 00084001 000D4 EQU 0000D4 4700 0000 00000 254= NOP 00085001 0 000D8 255=CAP2 EOU \*-FSAREA SECOND PART CAPS 00086001 0000D8 4700 0000 00087001 00000 256= NOP 000DC 257=PROLOGP FSAREA PROLOGUE FORMAL PARAMETER ENTRY 00088001 EQU 258=PROLOGFP 00089001 000DC EQU PROLOGP 0000DC 4700 0000 00000 259= NOP 00090001 000E0 260=PROLOG EOU \*-FSAREA PROLOGUE PROGRAM USUAL ENTRY 00091001 0000E0 4700 0000 00000 261= NOP 00092001 000E4 -FSAREA DISPLACEMENT RETURN PROGRAM 00093001 262=RETPROG EQU 0000E4 4700 0000 00000 NOP 00094003 263= 000E8 EPILOGUE PROGRAM, PROCEDURE ENTRY 264=EPILOGP EQU \*-FSAREA 00095003 9999E8 4799 9999 00000 265= NOP 00096001 000EC 266=EPILOGB EOU \*-FSAREA EPILOGE PROGRAM.BETA-BLOCK ENTRY 00097001 0000EC 4700 0000 00000 267= NOP a 00098001 268=EPILPR3 EPILOGUE PROGRAM ENTRY 3 00099001 000F0 EOU -FSARFA 0000F0 4700 0000 00000 00100001 269= 000F4 270=CSWE1 EQU \*-FSAREA FIRST PART CSWES 00101001 9999F4 4799 9999 aaaaa 271= NOP 99192991 000F8 -FSAREA 272=CSWE2 SECOND PART CSWES 00103001 EQU 00104001 0000F8 4700 0000 00000 273= NOP 000FC 274=LOADPF EQU -FSAREA LOAD PRECOMPILED PROC ROUTINE 00105003 0000FC 4700 0000 00106001 00000 275= NOP 99199 276=TRACE EQU \*-FSARFA 00107001 000100 D200 0000 0000 00000 00000 277= MVC 0(0),0 00108001 000106 4700 0000 00000 278= NOP 00109001 00010A 4700 0000 00000 279= NOP 00110001 0010E 280=TERMNTE EQU \*-FSAREA NORMAL TERMINATION EXIT 00111001 00010E 4700 0000 00000 NOP 00112001 281= 0 00112 282=BCR EOU \*-FSAREA 00113001 000112 0700 VARIABLE CONDITIONAL BRANCH 00114001 0,0 283= **BCR** 00114 284=GETMSTO -FSAREA 00115001 EQU 00116001 000114 4700 0000 00000 285= 00117001 286= 00118 287=VALUCALL EOU \*-FSARFA 00118001 000118 4700 0000 00000 288= NOP 00119001

00127001

D-Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.21 0011C 289=IORLST EQU \*-FSAREA 00120001 00011C 4700 0000 00000 290= NOP 0 00121001 291=\* 292=FSAERR 00122001 00123001 001CC EQU X'1CC' DISPL FOR ERROR LIST 293=\* 00124001 294=\* DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 295=\* 00126001 296=OUTOFB 297=NUMBIND FSAERR+4\*16 FSAERR+4\*19 0020C EQU 00127001 00218 EQU 00128001 00208 298=ARRAYBD FSAERR+4\*15 00129001 EOU 0026C 299=ERROR40 EQU FSAERR+4\*40 00130001 00224 300=0ERR22 FSAERR+4\*22 00131001 00210 301=ENDLESL 302=OERR21 EQU FSAERR+4\*17 FSAERR+4\*21 00132001 00220 00133001 EQU 00134001 303=\* 304 \* 00122001 305 \* 306 \* REGISTER EQUATES 00123001 00124001 IEZREGS 307 00125001 00000 308+R0 EQU 0 01-IEZRE 00001 EQU 01-IEZRE 309+R1 00002 310+R2 EQU 01-IEZRE 00003 311+R3 EQU 01-IEZRE 4 5 6 7 8 00004 312+R4 EQU 01-IEZRE 313+R5 EQU EQU 99995 01-IEZRE 00006 314+R6 01-IEZRE 00007 315+R7 EQU 01-IEZRE 00008 316+R8 EQU 01-IEZRE 00009 317+R9 EQU 01-IEZRE 10 0000A 318+R10 EQU 01-IEZRE 0000B 319+R11 EQU 11 01-IEZRE 320+R12 EQU 12 01-IEZRE 0000C 0000D 321+R13 EQU 13 0000E 322+R14 EQU 14 01-IEZRE 0000F 323+R15 EQU 15 01-IEZRE 00126001 324 \*

END

325

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	S				X390	3.1.	04 2	012/0	8/17	13.21
ASTRING	4	0000013C	00000001	АА		119	64M	73										
BRRST	1	0000009C		U		203	204											
DSF	2	0000001A	FFFFFFF	нн		136	65M	66M	67	69M	82M							
DSTABLE	1	00000000	FFFFFFF	J		125	53U	164										
DS0	1	00000080		U		140	67											
DS2	1	00000020		U		142	65											
DS3	1	00000010		U		143	65	82										
DS6	1	00000002		U		146	69											
DS7	1	00000001		U		147	66											
DTSW	1	000000C2		U		231	232											
EV	1	00000008		U		37	58											
FCTVALST	1	00000090		U		199	202											
FSAERR	1	000001CC		U		292	296	297	298	299	300	301	302					
FSAREA	1	00000000	FFFFFFE	U		189	194	199	201	202	203	206	213	215	219	221	225	227
							229	231	234	241	243	245	247	253	255	257	260	262
							264	266	268	270	272	274	276	280	282	284	287	289
IHIOSTRG	1	00000000	00000001	J		31	49U											
IORLST	1	0000011C		U		289	57	70	93	111								
NX	1	0000000C		U		38	94	112										
OP	1	00000010		U		39	71											
OUTMOV	6	000000EC	00000001	I		116	88X	106X										
OUTSTR1	4	00000066	00000001	I		73	68B											
OUTSTR2	4	000000C2	00000001	I		102	85B											
OUTSTR3	4	000000B8	00000001	I		96	79B	92B										
OUTSTR4	2	00000082	00000001	I		81	114B											
PROLOGP	1	00000DC		U		257	258											
R	4	00000004	FFFFFFF	FF		128	83	87	90M	103	104							
RE	4	00000008	FFFFFFF	FF		129	84	91	102									
R1	1	00000001		U		309	63M	64										
R12	1	0000000C		U		320	51M	57	70	93	111							
R13	1	000000D		U		321	50	51	52M	96M								
R14	1	000000E		U		322	59M	72M	95M	113M								
R15	1	000000F		U		323	48	57M	58M	59B	70M	71M	72B	93M	94M	95B	111M	112M
							113B											
R2	1	00000002		U		310	73M	74	80M	110M	116							
R3	1	00000003		U		311	81M	86M	88	89M	108							
R4	1	00000004		U		312	75M	76M	77M	78M	81	83M	84	90	91	108M	109M	
R5	1	00000005		U		313	53U											
R7	1	00000007		U		315	102M	103M	105M	106	107M	109	110					
R8	1	00000008		U		316	48M	49U										
R9	1	00000009		U		317	87M	104M	116									
SAVAR	4	000000F4	00000001	FF		118	50M	52	96									
STRLTH	2	00000140	00000001	нн		120	74M	75										

 $\label{eq:Register} \textit{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ 

X390 3.1.04 2012/08/17 13.21

```
1(1)
          47
                 63M
                        64
                              99M
 2(2)
          47
47
47
47
47
47
47
47
47
                 73M
                        74
                               80M 99M 110M 116
 3(3)
4(4)
5(5)
                       86M 88 89M 99M 108
76M 77M 78M 81 83M 84 90 91 99M 108M 109M
                 81M
75M
                 53U
                        99M
 6(6)
7(7)
                 99M
                 99M 102M 103M 105M 106 107M 109 110
8(8)
9(9)
10(A)
                 48M 49U 99M
87M 99M 104M 116
99M
11(B)
12(C)
                 99M
                 51M 57N 70N 93N 99M 111N
          47 50
47 59M
43B 47
                 50 51 52M 96M 99
59M 72M 95M 99M 1008 113M
47 48 57M 58M 59B 70M 71M 72B 93M 94M 95B 99M 111M 112M 113B
13(D)
14(E)
15(F)
```

OST Dsect Cross Reference PAGE 8

X390 3.1.04 2012/08/17 13.21

Dsect Length Id Defn Con Member

DSTABLE FAS 00000024 FFFFFFF 125 00000120 FFFFFFE 167 4 DSTABLE PRIMARY INPUT

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

OST USING Map PAGE 10

Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

49 USING Ordinary Ordinary FFFFFFFF 00000000 00001000 8 00140 114 IHIOSTRG,R8
53 USING Ordinary FFFFFFFF 00000000 00001000 5 0001A 104 DSTABLE,R5

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOST PROCSTEP: X390

Primary input: lines 1 to 127 of SYSD.ALGOLFRT.ASM(IHIOST)

SYSLIB library records read: 362
SYSUT1 work file size: 29420 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 10160 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.23 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIOSTRG 000142 6

## IHIOSY LEVEL V2.M01

```
X390 3.1.04 2012/08/17 13.21
                                                                                  (c) Copyright 1995-2010 Tachyon Software LLC
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIOSY)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
```

SYSLIN

SYSUT1 SYSUT2

SYSUT3

SYSPRINT

SYS12230.T132141.RA000.T1BLD.OBJECT

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

JES2.J0B09284.S00206

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                  X390 3.1.04 2012/08/17 13.21
                                                                                                                         00002001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
                                                                                                                        00004001
00005001
                                                     STATUS - LEVEL 2.1
                                         5
                                                                                                                         00006001
                                         6
                                                     FUNCTION/OPERATION -
                                                                                                                         00007001
                                           *
                                         8
                                                     COMPARE NUMBER ASSIGNED TO THIRD ACTUAL PARAMETER WITH
                                                                                                                         00008001
                                         9
                                                     AN INTERNAL STRING AND TRANSFER CHARACTER IN
                                                                                                                         00009001
                                           *
                                                     CORRESPONDING POSITION TO AN OUTPUT BUFFER
                                                                                                                         00010001
                                       10
                                                                                                                         00011001
                                       11
                                       12
                                                     ENTRY POINT -
                                                                                                                         00012001
                                       13
                                           *
                                                     IHIOSYMB - FROM GENERATED OBJECT MODULE
                                                                                                                         00013001
                                       14
                                                         R1, PARMLIST
                                                                                                                         00014001
                                                     DATA PASSED BY NAME
                                       15
                                                                                                                         00015001
                                                                                                                         00016001
                                       16
                                                     INPUT - N/A
                                                                                                                         00017001
                                       17
                                       18
                                                                                                                         00018001
                                       19
                                                     OUTPUT - N/A
                                                                                                                         00019001
                                       20
                                                                                                                         00020001
                                                                                                                         00021001
                                       21
                                                     EXTERNAL ROUTINES -
                                                     IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                         00022001
                                       22
                                        23
                                                              OPEN DATASET
                                                                                                                         00023001
                                       24
                                                            - CHANGE TO NEXT OUTPUT RECORD
                                                                                                                         00024001
                                                                                                                        00025001
00026001
                                       25
                                                     EXTTS - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                       26
                                                                                                                         00027001
                                       27
                                       28
                                                     EXITS - ERROR
                                                                    - SOURCE DOES NOT MATCH STRING NO 8
                                                                                                                         00028001
                                                                      LA R13, IHIFSA
                                                                                                                         00029001
                                        29
                                                     BRANCH TO FSA
                                        30
                                           *
                                                                       B FSAERR+XX*4(13) XX ERROR NO
                                                                                                                         00030001
                                       31 *
                                                                                                                         00031001
                                       32
                                                     TABLES/WORK AREAS - N/A
                                                                                                                         00032001
                                                                                                                         00033001
                                        33
000000
                       00000 00138
                                        34 IHIOSYMB CSECT
                                                                                                                         00034001
                                       35
                                                                                                                         00035001
                                       36
                                                     R3
                                                                                     -> SOURCE
                                                                                                                         00036001
                                                                                     -> START OF STRING
                                                                                                                         00037001
                                       37
                                                     R4
                                                                                                                         00038001
                                                     R8
                                                                                      = INTEGER NUMBER FROM SOURCE
                                       38
                                        39
                                                     R9
                                                                                      = L'SOURCE STRING
                                                                                                                         00039001
                                       40
                                                                                     -> CHARACTER POINTER
                                                                                                                         00040001
                                                     R10
                                       41 *
                                                                                                                         99941991
                  R:5 00000
                                       42
                                                     USING DSTABLE.R5
                                                                                                                         00042001
                                                                                                                         00043001
                                       43
                                                     DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                         00044001
                                       44
                                                                                                                         00045001
                                       45
                       00000
                                       46 CI
                                                                          DISPLACEMENT FOR - IHIIORCI
                                                                                                                         00046001
                                                     EQU
                                                                                                                        00047001
00048001
                       99994
                                       47 CL
                                                     EQU
                                                           4
                                                                                               IHIIORCL
                       99998
                                                     FOU
                                                                                               THTTOREV
                                       48 FV
                                                           8
                                                                                               IHIIORNX
                                                                                                                         00049001
                       0000C
                                       49 NX
                                                     EQU
                                                           12
                       00010
                                       50 OP
                                                     EQU
                                                           16
                                                                                                                         00050001
                       00014
                                        51 00
                                                     EQU
                                                                                               IHIIOROO
                                                                                                                         00051001
                                       52
                                                                                                                         00052001
                                                           (14,12),, 'IHIOSYMB LEVEL 2.1 &SYSDATE &SYSTIME'
                                       53
                                                     SAVE
                                                                                                                         00053001
000000 47F0 F026
                                                                                               BRANCH AROUND ID
                              00026
                                       54+
                                                     В
                                                           38(0,15)
                                                                                                                         01-SAVE
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                         01-SAVE
000004 21
                                        55+
                                                     DC
                                                           AL1(33)
000005 C9C8C9D6E2E8D4C2
                                                           CL32'IHIOSYMB LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                        56+
                                                     DC
                                                                                                                         01-SAVE
000025 F1
                                       57+
                                                           CL1'1'
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
                                                     DC
000026 90EC D00C
                              0000C
                                       58+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         01-SAVE
                                                                                                                         00054001
                                       59 *
                                                                                                                         00055001
00002A 187F
                                       60
                                                     LR
                                                           R7, R15
                                                     USING IHIOSYMB, R7
                  R:7 00000
                                       61
                                                                                                                         00056001
00002C 50D0 70F4
                              000F4
                                                           R13, SAVEAREA+4
                                                                                     SAVE HIGH SAVEAREA ADDR
                                                                                                                         00057001
                                       62
000030 18CD
                                       63
                                                     I R
                                                           R12.R13
                                                                                     R12 -> FSA
                                                                                                                         00058001
                              000F0
                                                                                                                         00059001
000032 41D0 70F0
                                       64
                                                     LA
                                                           R13, SAVEAREA
                                                                                                                         00060001
                                       65
                                                     EVALUATE DATASET NUMBER (EVDSN)
                                                                                                                         00061001
                                       66
                                        67
                                                                                                                         00062001
000036 58F0 C11C
                              0011C
                                       68
                                                     Ĺ
                                                           R15, IORLST(,R12)
                                                                                                                         00063001
00003A 58F0 F008
                              00008
                                       69
                                                          R15,EV(,R15)
R14,R15
                                                                                                                        00064001
00065001
00003E 05EF
                                                     BALR
                                       70
000040 5840 1004
                              00004
                                                                                     R4 -> STRING
                                                                                                                         00066001
                                       71
                                                           R4,4(,R1)
                                                     L
                                                                                                                         00067001
                                       72
                                       73
                                                     TEST IF DATASET IS OPEN
                                                                                                                         00068001
                                       74
                                                                                                                         00069001
                                                                                                                         00070001
000044 94FE 501A
                       0001A
                                                     ΝI
                                                           DSF . 255-DS7
                                                                                     DS7 = 0
                                       75
000048 9630 501A
                                                                                                                         00071001
                       0001A
                                                           DSF DS2+DS3
                                                                                     DS2, DS3 = 1
                                       76
                                                     OI
00004C 9180 501A
                                                     тм
                                                           DSF, DS0
                                                                                     DATASET OPEN ?
                                                                                                                         00072001
                       0001A
                                       77
                                                                                     YES, BRANCH
000050 4710 7062
                              00062
                                                           SOURCE0
                                                                                                                         00073001
                                       78
                                                     во
000054 9602 501A
                       0001A
                                       79
                                                     OI
                                                           DSF,DS6
                                                                                     DS6 = 1
                                                                                                                         00074001
                                                                                                                         00075001
000058 58F0 C11C
                              99110
                                                           R15, IORLST(.R12)
                                       80
                                                     1
00005C 58F0 F010
                                                           R15,OP(,R15)
                                                                                                                         00076001
                              00010
                                       81
000060 05EF
                                                           R14, R15
                                                                                     OPEN DATASET
                                                                                                                         00077001
                                       82
                                                     BALR
000062 5830 1008
                                       83 SOURCEØ
                                                                                                                         00078001
                              00008
                                                           R3,8(,R1)
000066 1233
                                                           R3, R3
                                                                                     CONVERSION REQUIRED ?
                                                                                                                         00079001
                                       84
                                                     LTR
000068 4720 7090
                              00090
                                       85
                                                     ВP
                                                           EVSOURCE
                                                                                     NO CONVERSION NEEEDED
                                                                                                                         00080001
                                                                                     YES, LONG OR SHORT PREC ? SHORT
00006C 9120 C0C2
                                                     ТМ
                                                           OPTSW(R12), X'20'
                       000C2
                                       86
                                                                                                                         00081001
000070 4710 707C
                              0007C
                                                                                                                         00082001
                                       87
                                                     во
                                                           SOURCE1
000074 6800 3000
                              00000
                                       88
                                                     LD
                                                           0,0(,R3
                                                                                                                         00083001
000078 47F0 7080
                              00080
                                       89
                                                     В
                                                           SOURCE1A
                                                                                                                         00084001
                                       90 *
                                                                                                                         00085001
                                                           0,0(,R3)
R15,IORLST(,R12)
00007C 7800 3000
                              aaaaa
                                       91 SOURCE1 LE
                                                                                                                         00086001
000080 58F0 C11C
                                       92 SOURCE1A L
                                                                                                                         00087001
                              0011C
000084 58F0 F000
                              00000
                                       93
                                                           R15,CI(,R15)
                                                                                                                         00088001
000088 05EF
                                                           R14, R15
                                                                                     REQUEST CONVERSION
                                                                                                                         00089001
                                       94
                                                     BALR
00008A 1880
                                       95
                                                     LR
                                                           R8, R0
                                                                                                                         00090001
00008C 47F0 7094
                              99994
                                       96
                                                     B
                                                           FVSOURAA
                                                                                                                         00091001
                                       97
                                                                                                                         00092001
```

```
X390 3.1.04 2012/08/17 13.21
  Loc Object Code
                       Addr1 Addr2 Stmt
                                            Source Statement
000090 5880 3000
                              00000
                                       98 EVSOURCE L
                                                           R8,0(,R3)
                                                                                     SOURCE INTEGER LOADED
                                                                                                                         00093001
000094 1288
                                       99 EVSOURAA LTR
                                                           R8, R8
                                                                                                                         00094001
                                                                                                                         00095001
00096001
000096 4740 70E8
                              aaafa
                                       100
                                                    BM
                                                           ERR8
                                                                                     INTEGER -VE
CHARACTER POINTER
00009A 58A0 5004
                                                           R10.R
                              00004
                                      101
00009E 4720 70AA
                                                                                                                         00097001
                              000AA
                                       102
                                                     ВР
                                                           EVSOURBB
                                                                                     INTEGER +VE
0000A2 9240 A000
                       00000
                                                           0(R10),C'
                                                                                     INTEGER = ZERO
                                                                                                                         00098001
                                       103
                                                     MVI
0000A6 47F0 70C2
                              99902
                                       104
                                                     В
                                                           TERMIN
                                                                                                                         00099001
                                                                                                                         00100001
                                       105 *
                                                                                     LENGTH OF STRING
0000AA 4890 4000
                              00000
                                      106 EVSOURBB LH
                                                           R9,0(,R4)
                                                                                                                         00101001
                                                                                                                         00102001
0000AE 4180 8001
                                                           R8,1(,R8)
                                                                                     INTEGER INCR BY ONE
                              00001
                                      107
                                                     LA
                                                                                                                         00103001
                                                                                     LENGTH DECR BY ONE
0000B2 0690
                                       108
                                                     BCTR
                                                           R9,0
0000B4 1989
                                                           R8, R9
                                                                                                                         00104001
                                       109
                                                     CR
0000B6 4720 70E8
                              000E8
                                      110
                                                     BH
                                                           ERR8
                                                                                                                         00105001
                                                                                                                         00106001
9999BA 1A84
                                       111
                                                     ΔR
                                                           R8.R4
                                                                                                                         00107001
0000BC D200 A000 8000 00000 00000
                                                           0(1,R10),0(R8)
                                                     MVC
                                      112
0000C2 41A0 A001
                              00001
                                      113 TERMIN
                                                           R10,1(,R10)
                                                                                                                         00108001
                                                     LA
0000C6 59A0 5008
                                                                                                                         00109001
                              00008
                                                           R10, RE
0000CA 47B0 70DA
                              000DA
                                      115
                                                     BNI
                                                           NEXTREC
                                                                                                                         00110001
0000CE 50A0 5004
                              00004
                                      116
                                                     ST
                                                           R10, R
                                                                                                                         00111001
                                                                                                                         00112001
0000D2 18DC
                                       117 TERMINA
                                                           R13, R12
                                                    LR
                                                                                                                         00113001
                                      118
                                      119
                                                     RETURN (14,12)
                                                                                                                         00114001
0000D4 98EC D00C
                              0000C
                                      120+
                                                     LM
                                                           14,12,12(13)
                                                                                                RESTORE THE REGISTERS
                                                                                                                         01-RETUR
0000D8 07FE
                                      121+
                                                     BR
                                                           14
                                                                                                RETURN
                                                                                                                         01-RETUR
                                                                                                                         00115001
                                      122
0000DA 58F0 C11C
                                                           R15, IORLST(,R12)
                              0011C
                                      123 NEXTREC
                                                                                                                         00116001
                                                    L
0000DE 58F0 F00C
                              0000C
                                      124
                                                           R15,NX(,R15)
                                                                                                                         00117001
0000E2 05EF
                                                           R14, R15
                                                                                                                         00118001
                                       125
                                                     BALR
0000E4 47F0 70D2
                              000D2
                                                           TERMINA
                                                                                                                         00119001
                                      126
                                                     В
                                      127 *
                                                                                                                         00120001
0000E8 18DC
                                      128 ERR8
                                                     LR
                                                           R13.R12
                                                                                                                         00121001
0000EA 47FC 01EC
                              001EC
                                                           FSAERR+8*4(R12)
                                                                                     SOURCE DOES NOT MATCH STRING
                                                                                                                         00122001
                                      129
                                                     В
                                       130
                                                                                                                         00123001
0000EE 0000
0000F0 00000000000000000
                                       131 SAVEAREA DC
                                                           18F'0'
                                                                                     MODULE SAVE AREA
                                                                                                                         00124001
                                                                                                                         00125001
                                      132 *
                                                                                                                         00126001
000138
                                                     LTORG
                                      133
                                       134
                                                                                                                         00127001
                                                     DSTABLE DSECT=YES
                                                                                                                         00128001
                                       135
999999
                       99999 99924
                                      136+DSTABLE
                                                    DSECT
                                                                                                                         01-DSTAB
                                      137+*
                                                                                                                         01-DSTAB
000000 00000000
                                      138+ADCB
                                                           F'0
                                                     DC
                                                                                      -> DCB
                                                                                                                         01-DSTAB
000004 00000000
                                                     DC
                                                           F'0'
                                                                                     CHARACTER POINTER
                                                                                                                         01-DSTAB
                                       139+R
                                                           F'0'
0000008 000000000
                                       140+RE
                                                     DC
                                                                                                                         01-DSTAB
000000 00000000
                                       141+NBB
                                                     DC
                                                           F'0'
                                                                                                                         01-DSTAB
                                                           F'0'
000010 00000000
                                       142+BB
                                                     DC
                                                                                                                         01-DSTAB
                                                           H'1'
                                                                                     RECORD POINTER
000014 0001
                                                    DC
                                       143+5
                                                                                                                         01-DSTAR
000016 0050
                                                           H'80
                                                                                     RECORD LENGTH
                                       144+P
                                                     DC
                                                                                                                         01-DSTAB
                                                           X'02'
                                                                                     NUMBER OF BLANK DELIM CHARS
000018 02
                                       145+K
                                                     DC
                                                                                                                         01-DSTAB
000019 00
                                       146+0
                                                     DC
                                                           X'00'
                                                                                     NO OF RECORDS PER SECTION
                                                                                                                         01-DSTAB
00001A 0000
                                       147+DSF
                                                     DC
                                                           H'00'
                                                                                     DATASET FLAGS
                                                                                                                         01-DSTAB
                                      148+*
                                                                                                                         01-DSTAB
                                                     DATASET FLAGS - DSF
                                       149+
                                                                                                                         01-DSTAB
                                       150+*
                                                                                                                         01-DSTAB
                                       151+DS0
                       00080
                                                                                     DATASET OPEN
                                                     EQU
                                                           X'80'
                                                                                                                         01-DSTAB
                       00040
                                       152+DS1
                                                     EQU
                                                           X'40'
                                                                                                                         01-DSTAB
                       00020
                                       153+DS2
                                                     EQU
                                                           X'20'
                                                                                     LAST I/O OUTPUT
                                                                                                                         01-DSTAB
                       99919
                                       154+DS3
                                                     FOU
                                                           X'10
                                                                                                                         01-DSTAR
                       00008
                                       155+DS4
                                                           X'08'
                                                                                                                         01-DSTAB
                                                     EQU
                       00004
                                       156+DS5
                                                     EQU
                                                           X'04'
                                       157+DS6
                                                           X'02'
                                                                                     OPEN FOR OUTPUT
                                                                                                                         01-DSTAB
                        00002
                                                     EQU
                       00001
                                       158+DS7
                                                     EQU
                                                           X'01
                                                                                     END OF FILE
                                                                                                                         01-DSTAB
                                                                                                                         01-DSTAB
                                       159+*
                                       160+*
                                                     DATASET FLAGS - DSF+1
                                                                                                                         01-DSTAB
                                       161+*
                                                                                                                         01-DSTAB
                       00080
                                       162+DS8
                                                     EQU
                                                           X'80'
                                                                                     END OF DATA
                                                                                                                         01-DSTAB
                       00040
                                       163+DS9
                                                     EQU
                                                           X'40'
                                                                                                                         01-DSTAB
                       00020
                                       164+DS10
                                                     EQU
                                                           X'20'
                                                                                     OPENED BY SYSACT 12
                                                                                                                         01-DSTAB
                                                           X'10'
                       00010
                                       165+DS11
                                                                                     INDICATE IHIERR-ROUT
                                                                                                                         01-DSTAB
                                                     EOU
                       00008
                                       166+DSEOD
                                                     EQU
                                                           X'08'
                                                                                                                         01-DSTAB
                                       167+DSIOERR
                                                           X'04'
                       00004
                                                     EQU
                                                                                                                         01-DSTAB
                       00002
                                       168+DS14
                                                           X'02'
                                                                                     DATASET OPENED
                                                                                                                         01-DSTAB
                                                     EQU
                                                                                     CLOSE FROM IHIERR
                       00001
                                       169+DS15
                                                     EQU
                                                           X'01
                                                                                                                         01-DSTAB
                                      170+*
                                                                                                                         01-DSTAB
00001C 00000000
                                       171+NOTEADR
                                                           F'0'
                                                    DC
                                                                                                                         01-DSTAB
000020 0000
                                       172+BL
                                                           H'0'
                                                                                     LRECL+ TWO ARB
                                                                                                                         01-DSTAB
                                                     DC
000022 0000
                                       173+
                                                     DC
                                                           H'0'
                                                                                                                         01-DSTAB
                                      174+
                                                                                                                         01-DSTAB
                                       175+DSTABLEL EOU
                                                           *-DSTABLE
                                                                                     I'DSTABLE ENTRY
                       99924
                                                                                                                         01-DSTAR
                                                                                                                         01-DSTAB
                                       176+*
                                      177 *
                                                                                                                         00129001
                                                                                                                         00130001
000000
                       00000 00120
                                       178 FAS
                                                     DSECT
                                       179
                                                                                                                         00131001
                                      180
                                                     COPY FSAREA
                                                                                                                         00132001
                                      181=
                                                                                                                         00001001
                                                                                                                         00002001
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                       182=
                                       183=
                                                                                                                         00003001
                                       184=*
                                                     STATUS - LEVEL 2.1
                                                                                                                         00004001
                                       185=*
                                                                                                                         00005001
                                       186=*
                                                                                                                         99996991
                                                                                                                         00007001
                                      187=
                                       188=*
                                                     COMMON DATA AREA
                                                                                                                         00008001
                                                                                                                         00009001
                                       189=
                                       190=*
                                                     FSAREA
                                                                                                                         00010001
                                       191=
                                                                                                                         99911991
                                       192=
                                                                                                                         00012001
```

X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 193= 00013001 194= DATA THAT IS IMMEDIATELY ACCESSIBLE TO ALL 00014001 195= MODULES DURING THE EXECUTION 9991 5991 196= 00016001 197= ADDRESSED BY MEANS OF R13 OR (FOR THE LIBRARY 00017001 SUBROUTINES) BY R12 198= 00018001 199= 9991 99999 200=FSAREA EOU 00020001 201= 00021001 SAVE AREAS 202= 00022001 203= 00023001 204= 000000 STANDARD SAVE AREA 00024001 DS 18F 00048 205=ASAVE EQU \*-FSAREA ALTERNATE SAVE AREA USED BY 00025001 CERTAIN SUBROUTINES 999948 206= DS 18F 99926991 207= 00027001 00028001 208= MISCELLANEOUS WORK AREAS AND CONSTANTS 209= 00029003 99999 210=FCTVALST EOU \*-FSARFA TEMPORARY STORAGE FOR 99939991 000090 211= DS **FUNCTION VALUES** 00031001 00098 EOU \*-FSAREA DISPL FOR ADDR OF STAND LOCTN 00032001 212=ASTLOC A(FSAREA+FCTVALST) 000098 00000090 00033001 213= DC 0009C 214=BRRST EQU \*-FSAREA TEMPORARY SAVE REG BRR 00034001 0009C 215=HW EQU BRRST TEMPORARY HALFWORD STORAGE 00035001 00009C 216= 00036001 ааада 217=PROLREG \*-FSARFA STORAGE FOR PRT AND LAT WHEN FOU 99937991 0000A0 A PROCEDURE IS FORMAL PARAM 00038001 218= DS 2A 00039001 219= HALFWORD CONTAINING PBN OF CALLED BLOCK IN SECOND BYTE 00040001 220= 00041001 221= 999948 222= DS 99942991 0000A8 00 223= DC X'00 00043001 \*-FSAREA 000A9 224=PROLPBN STORAGE FOR CALLED PBN 00044001 EOU 0000A9 00 225= X'00' 00045001 000AA 226=EIGHT \*-FSAREA CONST FOR REDUCING RAS 00046001 EQU 0000AA 0008 227= DC H'8' 00047001 228= 99948991 0000AC DS 00049001 229= 0F 000AC 230=ADSTAB EQU -FSAREA ADDR OF DSTABLE 00050001 IN THE OBJECT PROGRAM 00051001 0000AC 231= ааава 232=ANOTTAR EOU \*-FSARFA ADDR OF NOTE TABLE 00052001 0000B0 233= DS Α (INSERTED BY THE OPEN ROUTINE) 00053001 234= 00054001 000B4 235=IHIFSAST EOU 00055001 000B4 236=PGOPSW EQU \*-FSAREA PROGRAM CHECK OLD PSW 00056001 0000B4 00057001 237= DS 2F 000BC 238=FSAPICA EQU \*-FSAREA OLD PICA ADDR 00058001 ARROBE ARROBAGA F'A 239= DC 99959991 000C0 240=SCRCS \*-FSAREA SEMICOLON NUMBER 00060001 EQU 0000C0 241= DS 00061001 \*-FSAREA 000C2 242=DTSW EQL **OPTION SWITCHES** 00062001 000C2 243=0PTSW EQU DTSW 00063001 DUMP-80, TRACE-40, SHORT-20 0000C2 00 244= DC X'00 00064001 000C3 \*-FSAREA ERROR CODE FOR ERROR ROUTINE 245=FSAERCOD EOU 00065001 0000C3 00066001 246= DS 247= 00067001 248=\* RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 249= 99969991 999904 250= DS 0F 99979991 251=IHIFSARS EQU 000C4 00071001 000C4 252=RASSTART -FSAREA ADDR OF FIRST ENTRY IN RAS-8 00072001 EQU 0000C4 00073001 253= 000C8 254=RASPT EQU \*-FSARFA RAS POINTER FROM TOP 00074001 0000C8 255= DS 00075001 000CC 256=RASEND -FSAREA ADDR OF LAST ENTRY IN RAS+8 00076001 EOU 0000CC 00077001 257= DS 000D0 258=RASPB RAS POINTER FROM BOTTOM 00078001 EQU \*-FSAREA 0000D0 259= 00079001 DS 260= 00080001 LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES 261= 00081001 00082001 262= 0000D4 263=BRLIST DS 00083000 \*-FSAREA FIRST PART CAPS 0008400 000D4 264=CAP1 EQU 000004 4700 0000 00000 265= NOP 00085001 000D8 266=CAP2 EOU \*-FSAREA SECOND PART CAPS 00086001 0000D8 4700 0000 00000 267= NOP 00087001 268=PROLOGP \*-FSARFA PROLOGUE FORMAL PARAMETER ENTRY 00088001 000DC EOU 000DC 269=PROLOGFP 00089001 EQU PROLOGE 270= 0000DC 4700 0000 00000 NOP 00090001 aaafa 271=PROLOG FOU \*-FSARFA PROLOGUE PROGRAM LISUAL ENTRY 99991991 0000E0 4700 0000 00000 00092001 272= NOP DISPLACEMENT RETURN PROGRAM 000E4 273=RETPROG \*-FSAREA 00093001 EQU 0000E4 4700 0000 00000 NOP 00094003 274= 000E8 275=EPILOGP EPILOGUE PROGRAM, PROCEDURE ENTRY 00095001 EQU \*-FSAREA 0000E8 4700 0000 00000 276= NOP 00096001 000EC 277=EPILOGB EOU \*-FSAREA EPILOGE PROGRAM, BETA-BLOCK ENTRY 00097001 0000EC 4700 0000 00000 278= NOP 00098001 000F0 279=EPILPR3 EQU FSAREA EPILOGUE PROGRAM ENTRY 3 00099001 0000F0 4700 0000 00000 280= NOP 00100001 000F4 281=CSWE1 \*-FSAREA FIRST PART CSWES 00101001 EQU 0000F4 4700 0000 00000 282= NOP 00102001 000F8 \*-FSAREA SECOND PART CSWES 00103001 283=CSWE2 EQU 0000F8 4700 0000 00000 NOP 00104001 284= LOAD PRECOMPILED PROC ROUTINE 00105001 000FC 285=LOADPF EQU \*-FSAREA 0000FC 4700 0000 NOP 00106001 00000 286= 99199 287=TRACE EOU \*-FSARFA 00107001 000100 D200 0000 0000 00000 00000 288= MVC 0(0),0 00108001

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END

00137001

00138001

Addr1 Addr2 Stmt X390 3.1.04 2012/08/17 13.21 D-Loc Object Code Source Statement 000106 4700 0000 00000 289= NOP 00109001 00010A 4700 0000 00000 290= NOP 00110001 0010E 291=TERMNTE EQU \*-FSAREA NORMAL TERMINATION EXIT 00111001 00010E 4700 0000 00000 0 292= NOP 00112001 00112 293=BCR \*-FSAREA 00113001 EQU 000112 0700 294= BCR VARIABLE CONDITIONAL BRANCH 00114001 295=GETMSTO 00114 EQU \*-FSAREA 00115001 000114 4700 0000 00000 296= NOP 0 00116001 00117001 297= 00118 298=VALUCALL EQU \*-FSAREA 00118001 000118 4700 0000 00000 NOP 00119001 299= 0011C 300=IORLST EQU \*-FSAREA 00120001 00011C 4700 0000 00000 301= NOP 0 00121001 302= 00122001 001CC 303=FSAERR EQU X'1CC' DISPL FOR ERROR LIST 00123001 304=\* 00124001 305=\* DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 306=\* 00126001 0020C 307=OUTOFB FSAERR+4\*16 EQU 00127001 308=NUMBIND FSAERR+4\*19 00128001 00218 EOU 309=ARRAYBD FSAERR+4\*15 00208 00129001 EOU 310=ERROR40 FSAERR+4\*40 00130001 0026C EQU 00224 **311**=0ERR22 EQU FSAERR+4\*22 00131001 00210 312=ENDLESL EQU FSAERR+4\*17 00132001 FSAFRR+4\*21 313=0FRR21 00133001 00220 EOU 00134001 314=\* 315 \* 00133001 316 \* REGISTER EQUATES 00134001 317 \* 00135001 **IEZREGS** 318 00136001 00000 319+R0 EQU 0 01-IEZRE 01-IEZRE 00001 320+R1 EQU 00002 321+R2 EQU 01-IEZRE 00003 322+R3 EQU 3 01-IEZRE 00004 323+R4 EQU 4 5 01-IEZRE 99995 324+R5 01-IEZRE EOU 00006 325+R6 01-IEZRE EQU 00007 326+R7 EQU 01-IEZRE 00008 327+R8 EQU 01-IEZRE 00009 328+R9 EQU 9 01-TF7RF 0000A 329+R10 EQU 10 01-IEZRE 330+R11 0000B EQU 11 01-IEZRE 0000C 331+R12 EQU 12 01-IEZRE 332+R13 EQU 13 01-IEZRE 0000D 0000E 333+R14 EQU 14 01-IEZRE 334+R15 335 \* 0000F EQU 15

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	5				X390	3.1.	04 2	012/0	8/17	13.21
BRRST	1	0000009C		U		214	215											
CI	1	00000000		U		46	93											
DSF	2	0000001A	FFFFFFF	- нн		147	75M	76M	77	79M								
DSTABLE	1	00000000	FFFFFFF	= j		136	42U	175										
DS0	1	00000080		U		151	77											
DS2	1	00000020		U		153	76											
DS3	1	00000010		U		154	76											
DS6	1	00000002		U		157	79											
DS7	1	00000001		U		158	75											
DTSW		000000C2		Ü		242	243											
ERR8	2	000000E8	0000000	l I		128	100B	110B										
EV	1			U		48	69											
EVSOURAA		00000094	0000000			99	96B											
EVSOURBB		000000AA				106	102B											
EVSOURCE		00000090				98	85B											
FCTVALST		00000090		Ū		210	213											
FSAERR		000001CC		Ü		303	129B	307	308	309	310	311	312	313				
FSAREA		00000100	FFFFFFF			200	205	210	212	213	214	217	224	226	230	232	236	238
ISAKEA	_	0000000				200	240	242	245	252	254	256	258	264	266	268	271	273
							275	277	279	281	283	285	287	291	293	295	298	300
IHIOSYMB	1	00000000	aaaaaaaa	l J		34	610	_,,	2,,,	201	203	203	20,	271	200	200	230	300
IORLST		00000000 0000011C	0000000.	U		300	68	80	92	123								
NEXTREC		0000011C	aaaaaaa			123	115B	00	72	123								
NX		000000DA	0000000.	U		49	124											
OP .		00000000		U		50	81											
OPTSW		00000010 000000C2		U		243	86											
PROLOGP		000000C2		U		268	269											
R		00000000				139	101	116M										
RE		00000004				140	114	11011										
RØ		00000000		U		319	95											
R1		00000000		U		320	71	83										
R10		00000001 0000000A		U		329	101M		112	113M	111	116						
				U					80	86	92		122	120	120			
R12 R13		0000000C		U		331 332	63M 62	68 63		117M		11/	123	128	129			
				U		333	70M	82M		125M	12011							
R14		0000000E 0000000F		U		334		68M			ООМ	01M	020	02M	0.2M	048	1221	1 1 2 4 M
R15	1	0000000		U		554	60 125B	ויוסט	ויופס	700	80M	OIM	82B	9214	93M	946	1231	124M
n o	1	0000000		U		222		0.4M	00	01	00							
R3		00000003		U		322	83M		88 111	91	98							
R4		00000004		-		323		106	111									
R5		00000005		U		324	42U	C 111										
R7		00000007		U		326	60M	610	0014	40714	400		440					
R8	1			U		327	95M	98M		107M	109	111M	112					
R9		00000009	0000000	U		328		108M	109									
SAVEAREA	4					131	62M	64										
SOURCE0		00000062				83	78B											
SOURCE1		0000007C				91	87B											
SOURCE1A		00000080				92	89B											
TERMIN		000000C2				113	104B											
TERMINA	2	000000D2	0000000	l I		117	126B											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

X390 3.1.04 2012/08/17 13.21

```
Gen

.ied, B=branch,

.
         1(1)
         2(2)
         3(3)
4(4)
5(5)
         6(6)
7(7)
8(8)
9(9)
10(A)
11(B)
                                                                                                                                         95M 98M 99M 107M 109 111M 112 120M
106M 108M 109 120M
101M 103 112 113M 114 116 120M
                                                                                            58
58
                                                                                       58 63M 68 80 86 92 117 120M 123 128 129N

58 62 63 64M 117M 120 128M

58 70M 82M 94M 120M 121B 125M

54B 58 60 68M 69M 70B 80M 81M 82B 92M 93M 94B 120M 123M 124M 125B
  12(C)
  13(D)
14(E)
15(F)
```

OSY Dsect Cross Reference PAGE 8

X390 3.1.04 2012/08/17 13.21

Dsect Length Id Defn Con Member

DSTABLE 00000024 FFFFFFFF 136 4 DSTABLE

DSTABLE 0000024 FFFFFFFF 136 4 DSTABLE FAS 0000120 FFFFFFFE 178 PRIMARY INPUT

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA

5 SYS1.AMODGEN

OSY USING Map PAGE 10

Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

42 USING Ordinary FFFFFFFF 00000000 00001000 5 0001A 116 DSTABLE,R5
61 USING Ordinary 00000001 00000000 00001000 7 000F4 126 IHIOSYMB,R7

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOSY PROCSTEP: X390

Primary input: lines 1 to 138 of SYSD.ALGOLFRT.ASM(IHIOSY)

SYSLIB library records read: 362
SYSUT1 work file size: 30556 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 11040 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.23 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHIOTA LEVEL V2.M01

Tachyon Legacy Assembler Option Summary PAGE X390 3.1.04 2012/08/17 13.21 (c) Copyright 1995-2010 Tachyon Software LLC TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong TLC011I License expires on 2012/10/17 at 01:00 Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1 -S2//DDN:SYSUT2 -S3//DDN:SYSUT3 -SN//DDN:SYSLIN -SL//DDN:SYSLIB -ST//DDN:SYSPRINT -SH//DDN:SYSPUNCH -SA//DDN:SYSADATA -SM1 Options for this Assembly Source (default) AControl(ALign, NoLibMac) NoAData (default) AdataLevel(5) (default) NoCompaT (default) DXref (default) NoEsd Command Line  $Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco$ 2,HLasm,NoTRunc,NoIndeX) (default) NoFO1d (default) IDR('X390ASM 3104') (default) NoINFÒ Command Line LAnguage(EN) (default) LineCount(101) Command Line List(121) (default) MsgLevel(0,0)
MXref(Source) Command Line (default) Object(Omf) Command Line OPtable(Uni,NoList) (default)  ${\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\$ Command Line (default) NoPControl PRintctl(Asa) //DDN:SYSPRINT ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0) (default) NoProFile (default) Command Line NoRLd RXref(NoCr,Gr,NoFr) (default) SiZe(3145728) Command Line NoSUppress (default) SysadatA(//DDN:SYSADATA) Command Line SvsLib(//DDN:SYSLIB) Command Line SysliN(//DDN:SYSLIN) Command Line (default) NoSysParm SysprinT(//DDN:SYSPRINT) Command Line SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8') Command Line (default) Command Line SysterM(1) Sysut1(//DDN:SYSUT1) Command Line Sysut2(//DDN:SYSUT2) Command Line Sysut3(//DDN:SYSUT3) Command Line NoTerm Command Line NoTEst (default) TypeCheck(Magnitude,Register) (default) NoUsingLimit (default) UsingMap (default) Xref(Short) Command Line

DDNAMEs File/Data Set Names SYSIN SYSD.ALGOLFRT.ASM(IHIOTA) SYSLIB SYS1.MACLIB SYSD. TOOLS. MACLIB SYSD.ALGOLFRT.ASM SYSD.ALGOLFRT.MACLIB SYS1.AMODGEN SYSLIN SYS12230.T132141.RA000.T1BLD.OBJECT SYSPRINT JES2.J0B09284.S00210 SYSUT1 SYS12230.T132141.RA000.T1BLD.SYSUT1 SYSUT2 SYS12230.T132141.RA000.T1BLD.SYSUT2 SYSUT3 SYS12230.T132141.RA000.T1BLD.SYSUT3

00004001

```
Loc Object Code
                                                                                                  X390 3.1.04 2012/08/17 13.21
                       Addr1 Addr2 Stmt Source Statement
                                                                                                                         00002001
                                         2 *
                                         3
                                           *
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                         4
                                                                                                                        00004001
00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                         6
                                                                                                                         00006001
                                                     FUNCTION/OPERATION -
                                                                                                                         00007001
                                           *
                                         8
                                                     TRANSFER NUMBERS FROM ARRAY INDICATED BY SECOND
                                                                                                                         00008001
                                         9
                                                     PARAMETER TO OUTPUT BUFFER BY CALLING OUTINTEGER
                                                                                                                         00009001
                                       10
                                                     REPEATEDLY
                                                                                                                         00010001
                                                                                                                         00011001
                                       11
                                       12
                                                     ENTRY POINT -
                                                                                                                         00012001
                                       13
                                                     IHIOTARR - FROM GENERATED OBJECT MODULE
                                                                                                                         00013001
                                       14
                                                                LA
                                                                    R1, PARMLIST
                                                                                                                         00014001
                                                                BALR R14,R15
                                       15
                                                                                                                         00015001
                                                                DATA PASSED BY NAME
                                                                                                                         00016001
                                       16
                                                                                                                         00017001
                                       17
                                       18
                                                     INPUT - N/A
                                                                                                                         00018001
                                       19
                                                                                                                         00019001
                                                     OUTPUT - N/A
                                       20
                                                                                                                         00020001
                                                                                                                         00021001
                                       21
                                                                                                                         00022001
                                       22
                                                     EXTERNAL ROUTINES -
                                                     IHIIOR - EVALUATE DATASET NUMBER
                                        23
                                                                                                                         00023001
                                                     IHIOIN - OUTINTEGER
                                       24
                                                                                                                         00024001
                                       25
                                                                                                                         00025001
                                                     EXTT - NORMAL - RELOAD REGISTERS RETURN VIA R14
                                                                                                                         00026001
                                       26
                                                                                                                         00027001
                                       27
                                        28
                                                     EXIT - ERROR - N/A
                                                                                                                         00028001
                                                                                                                         00029001
                                        29
                                        30 *
                                                     TABLES/WORK AREAS - N/A
                                                                                                                         00030001
                                       31 *
                                                                                                                         00031001
000000
                       00000 00092
                                       32 IHIOTARR CSECT
                                                                                                                         00032001
                                                                                                                         00033001
                                       33
                                        34
                                                           (14,12), 'IHIOTARR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                         00034001
000000 47F0 F026
                              00026
                                       35+
                                                                                               BRANCH AROUND ID
                                                                                                                         01-SAVE
                                                     В
                                                           38(0,15)
000004 21
                                                           AL1(33) LENGTH OF IDENTIFIER CL32'IHIOTARR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                       36+
                                                     DC
                                                                                                                        01-SAVE
000005 C9C8C9D6F3C1D9D9
                                       37+
                                                     DC
                                                                                                                         01-SAVE
                                                                                                IDENTIFIER
                                                                                                                         01-SAVE
000025 F1
                                       38+
                                                     DC
                                                           CL1'1
000026 90EC D00C
                              0000C
                                        39+
                                                     STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                       40
                                                                                                                         00035001
00002A 188F
                                       41
                                                     I R
                                                           R8. R15
                                                                                                                         00036001
                                                     USING IHIOTARR, R8
                  R:8 00000
                                       42
                                                                                                                         00037001
                                                                                                                         00038001
00002C 18CD
                                       43
                                                     LR
                                                           R12,R13
                                                                                     R12 -> FSA
00002E 41D0 D048
                              00048
                                                           R13, ASAVE (, R13)
                                                                                     R13 -> SECOND FSA SAVEAREA
                                                                                                                         00039001
                                       44
                                                     LA
                                                                                                                         00040001
000032 1B33
                                       45
                                       46
                                                                                                                         00041001
                                       47
                                                     EVALUATE DATASET NUMBER
                                                                                                                         00042001
                                                                                                                         00043001
                                       48
000034 58F0 8080
                              00080
                                                           R15, VIOREV
                                       49
                                                                                                                         00044001
                                                                                                                         00045001
000038 05EF
                                       50
                                                     BALR R14,R15
                                        51
                                                                                                                         00046001
                                       52
                                                     EVALUATE SOURCE ADDR
                                                                                                                         00047001
                                                                                                                         00048001
                                       53
00003A BF1F 1004
                                                                                                                         00049001
                              00004
                                                           R1,B'1111',4(R1)
                                                                                      GET SECOND PARAMETER
                                        54
                                                     ICM
00003E 47B0 804A
                              0004A
                                        55
                                                     BNM
                                                           OUTT1
                                                                                      >= 0, BRANCH
                                                                                                                         00050001
000042 5630 8088
                                                           R3,=X'80000000'
                                                                                      MINUS, INSERT FLAG BYTE
                                                                                                                         00051001
                              00088
                                        56
                                                     0
000046 5410 808C
                              0008C
                                        57
                                                           R1,=X'00FFFFFF'
                                                                                                                         00052001
                                                     N
00004A 5820 100C
                              0000C
                                        58 OUTT1
                                                     L
                                                           R2,12(,R1)
                                                                                      R2 -> DESTEND+1
                                                                                                                         00053001
00004F 5870 1008
                              99998
                                       59
                                                     т
                                                           R7.8(,R1)
                                                                                      R7 -> STARTDEST
                                                                                                                         00054001
                                                                                                                         00055001
000052 1A73
                                       60
                                                     AR
                                                           R7, R3
000054 1A23
                                       61
                                                     AR
                                                           R2.R3
                                                                                                                         00056001
                                                                                                                         00057001
                                       62
                                       63
                                                     CALL ROUTINE OUTINTEGER
                                                                                                                         00058001
                                       64
                                                                                                                         00059001
000056 58F0 8084
                                       65 OUTT2
                                                                                                                         00060001
                              00084
                                                           R15.VOINAR
00005A 05EF
                                                     BALR
                                                                                                                         00061001
                                       66
                                                           R14, R15
00005C 4A70 8090
                              00090
                                        67
                                                     ΑН
                                                           R7, =H'4'
                                                                                                                         00062001
000060 4720 8070
                              00070
                                       68
                                                     ВР
                                                           OUTT2A
                                                                                                                         00063001
000064 9120 C0C2
                       000C2
                                       69
                                                     ТМ
                                                           OPTSW(R12), X'20'
                                                                                                                        00064001
00065001
000068 4710 8070
                              00070
                                       70
                                                     BO
                                                           OUTT2A
00006C 4170 7004
                              00004
                                                           R7,4(,R7)
                                                                                      INCR DEST ADDR
                                                                                                                         00066001
                                       71
                                                     LA
000070 1972
                                                           R7, R2
                                       72 OUTT2A
                                                     CR
                                                                                                                         00067001
000072 4740 8056
                              00056
                                       73
                                                           OUTT2
                                                                                      DESTEND NOT REACHED
                                                                                                                         00068001
                                                     BL
000076 18DC
                                       74
                                                     LR
                                                           R13, R12
                                                                                                                         00069001
                                       75
                                                                                                                         00070001
                                                                                      RESTORE REGS AND RETURN
                                                     RETURN (14,12)
                                                                                                                         00071001
                                       76
000078 98EC D00C
                              0000C
                                       77+
                                                                                               RESTORE THE REGISTERS
                                                     LM
                                                           14,12,12(13)
                                                                                                                        01-RETUR
00007C 07FE
                                       78+
                                                           14
                                                                                                RETURN
                                                     BR
                                       79 *
                                                                                                                         00072001
                                       80 *
                                                     EXTERNAL ADDRS
                                                                                                                         00073001
                                                                                                                         00074001
                                       81
00007E 0000
                                       82 VIOREV
                                                                                                                         00075001
000080 00000000
                                                     DC
                                                           V(IHIIOREV)
                                       83 VOINAR
                                                                                                                         00076001
000084 00000000
                                                           V(IHIOINAR)
                                       84
                                                                                                                         00077001
000088
                                                     LTORG
                                       85
                                                                                                                         00078001
000088 8000000
                                                           =X'80000000'
                                       86
00008C 00FFFFF
                                                           =X'00FFFFFF'
                                       87
                                                           =H'4'
000090 0004
                                       88
                                       89
                                                                                                                         00079001
                                                                                                                        00080001
00081001
000000
                       00000 00120
                                       90 FAS
                                                     DSECT
                                       91
                                       92
                                                     COPY FSAREA
                                                                                                                         00082001
                                       93=
                                       94=
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00002001
                                       95=
                                                                                                                         00003001
```

96=

STATUS - LEVEL 2.1

D-Loc Object Code	Addr1 Addr2	Stmt Source	State	ment		X390 3.1.04 2012/08	/17 13.21
b toe object code	Addi 1 Addi 2	97=*	State	·····Circ		X330 3.1.04 2012,00	00005001
		98=*****	*****	*******	*******	**********	00006001
		99=* 100=*	COMMO	N DATA ARE	Δ		00007001 00008001
		101=*					00009001
		102=* 103=*	FSARE	:A			00010001 00011001
		104=*****	*****	******	*******	**********	
		105=* 106=*	DATA	THAT IS IM	MEDIATELY ACCES	SIBLE TO ALL	00013001 00014001
		107=* 108=*	MODUL	ES DURING	THE EXECUTION		00015001 00016001
		109=*			,	FOR THE LIBRARY	00017001
		110=* 111=*	SUBRU	OUTINES) BY	K12		00018001 00019001
	00000	112=FSAREA 113=*	EQU	*			00020001 00021001
		114=*	SAVE	AREAS			00022001
000000		115=* 116=	DS	18F		STANDARD SAVE AREA	00023001 00024001
000048	00048	117=ASAVE 118=	EQU DS	*-FSAREA 18F		ALTERNATE SAVE AREA USED BY CERTAIN SUBROUTINES	00025001 00026001
		119=*					00027001
		120=* 121=*	MISCE	LLANEOUS W	ORK AREAS AND C	ONSTANTS	00028001 00029001
000090	00090	122=FCTVALST 123=	EQU DS	*-FSAREA D		TEMPORARY STORAGE FOR FUNCTION VALUES	00030001 00031001
	00098	124=ASTLOC	EQU	*-FSAREA		DISPL FOR ADDR OF STAND LOCTN	00032001
000098 00000090	0009C	125= 126=BRRST	DC EQU	A(FSAREA+ *-FSAREA		TEMPORARY SAVE REG BRR	00033001 00034001
00009C	0009C	127=HW 128=	EQU DS	BRRST F		TEMPORARY HALFWORD STORAGE	00035001 00036001
	000A0	129=PROLREG	EQU	*-FSAREA		STORAGE FOR PBT AND LAT WHEN	00037001
0000A0		130= 131=*	DS	2A		A PROCEDURE IS FORMAL PARAM	00038001 00039001
		132=* 133=*	HALFW	IORD CONTAI	NING PBN OF CAL	LED BLOCK IN SECOND BYTE	00040001 00041001
0000A8		134=	DS	<b>ОН</b>			00042001
0000A8 00	000A9	135= 136=PROLPBN	DC EQU	X'00' *-FSAREA		STORAGE FOR CALLED PBN	00043001 00044001
0000A9 00	000AA	137= 138=EIGHT	DC EQU	X'00' *-FSAREA		CONST FOR REDUCING RAS	00045001 00046001
0000AA 0008		139= 140=*	DC	H'8'			00047001
0000AC		141=	DS	0F			00048001 00049001
0000AC	000AC	142=ADSTAB 143=	EQU DS	*-FSAREA A		ADDR OF DSTABLE IN THE OBJECT PROGRAM	00050001 00051001
0000B0	000B0	144=ANOTTAB 145=	EQU DS	*-FSAREA A		ADDR OF NOTE TABLE (INSERTED BY THE OPEN ROUTINE)	00052001 00053001
00000	00004	146=*		4		(2.152.1.12)	00054001
	000B4 000B4	147=IHIFSAST 148=PGOPSW	EQU	*-FSAREA		PROGRAM CHECK OLD PSW	00055001 00056001
0000B4	000BC	149= 150=FSAPICA	DS EQU	2F *-FSAREA		OLD PICA ADDR	00057001 00058001
0000BC 00000000	000C0	151= 152=SCRCS	DC EQU	F'0' *-FSAREA		SEMICOLON NUMBER	00059001 00060001
0000C0		153=	DS	Н			00061001
	000C2 000C2	154=DTSW 155=OPTSW	EQU EQU	*-FSAREA DTSW		OPTION SWITCHES	00062001 00063001
0000C2 00	000C3	156= 157=FSAERCOD	DC FOU	X'00' *-FSAREA		DUMP-80, TRACE-40, SHORT-20 ERROR CODE FOR ERROR ROUTINE	00064001 00065001
0000C3	00003	158=	DS	C		ZAMON CODE FON ZAMON NOOFZAZ	00066001
		159=* 160=*	RETUR	N ADDRESS	STACK POINTERS	DO NOT CHANGE ORDER	00067001 00068001
0000C4		161=* 162=	DS	0F			00069001 00070001
	000C4 000C4	163=IHIFSARS 164=RASSTART	EQU	* *-FSAREA		ADDR OF FIRST ENTRY IN RAS-8	00071001 00072001
0000C4		165=	DS	F			00073001
0000C8	000C8	166=RASPT 167=	EQU DS	*-FSAREA F		RAS POINTER FROM TOP	00074001 00075001
0000CC	000CC	168=RASEND 169=	EQU DS	*-FSAREA F		ADDR OF LAST ENTRY IN RAS+8	00076001 00077001
	000D0	170=RASPB	EQU DS	*-FSAREA		RAS POINTER FROM BOTTOM	00078001
0000D0		171= 172=*		F			00079001
		173=* 174=*	LIST	OF BRANCH	INSTRUCTIONS TO	COMMONLY USED SUBROUTINES	00081001 00082001
0000D4	000D4	175=BRLIST 176=CAP1	DS EQU	0F *-FSAREA		FIRST PART CAPS	00083001 00084001
0000D4 4700 0000	00000	177=	NOP	0			00085001
0000D8 4700 0000	00008 00000	178=CAP2 179=	EQU NOP	*-FSAREA 0		SECOND PART CAPS	00086001 00087001
	000DC 000DC	180=PROLOGP 181=PROLOGFP	EQU EQU	*-FSAREA PROLOGP		PROLOGUE FORMAL PARAMETER ENTRY	00088001 00089001
0000DC 4700 0000	00000 000E0	182= 183=PROLOG	NOP EQU	0 *-FSAREA		PROLOGUE PROGRAM USUAL ENTRY	00090001 00091001
0000E0 4700 0000	00000	184=	NOP	0			00092001
0000E4 4700 0000	000E4 00000	185=RETPROG 186=	EQU NOP	*-FSAREA 0		DISPLACEMENT RETURN PROGRAM	00093001 00094001
0000E8 4700 0000	000E8 00000	187=EPILOGP 188=	EQU NOP	*-FSAREA 0		EPILOGUE PROGRAM, PROCEDURE ENTRY	00095001 00096001
	000EC	189=EPILOGB	EQU	*-FSAREA		EPILOGE PROGRAM, BETA-BLOCK ENTRY	00097001
0000EC 4700 0000	00000 000F0	190= 191=EPILPR3	NOP EQU	0 *-FSAREA		EPILOGUE PROGRAM ENTRY 3	00098001 00099001
0000F0 4700 0000	00000	192=	NOP	0			00100001

PAGE 4

	,							
D-Loc Object Code	Addr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08	3/17 13.21
	000F4		193=0	SWE1	EQU	*-FSAREA	FIRST PART CSWES	00101001
0000F4 4700 0000		00000	194=		NOP	0		00102001
	000F8		195=0	SWE2	EQU	*-FSAREA	SECOND PART CSWES	00103001
0000F8 4700 0000		00000	196=		NOP	0		00104001
	000FC			.OADPP	EQU	*-FSAREA	LOAD PRECOMPILED PROC ROUTINE	00105001
0000FC 4700 0000		00000	198=	DAGE.	NOP	0		00106001
000100 0000 0000 0000	00100	00000	199=T	RACE	EQU	*-FSAREA		00107001
000100 D200 0000 0000 000106 4700 0000		00000	200= 201=		MVC NOP	0(0),0 0		00108001 00109001
00010A 4700 0000		00000	201=		NOP	0		00109001
00010A 4700 0000	0010E	00000		ERMNTE	EQU	*-FSAREA	NORMAL TERMINATION EXIT	00111001
00010E 4700 0000		00000	204=		NOP	0		00112001
	00112		205=B	BCR	EQU	*-FSAREA		00113001
000112 0700			206=		BCR	0,0	VARIABLE CONDITIONAL BRANCH	00114001
	00114			ETMSTO	EQU	*-FSAREA		00115001
000114 4700 0000		00000	208=		NOP	0		00116001
	00110		209=*		FOLL	* ECADEA		00117001
000118 4700 0000	00118	00000	210=V 211=	'ALUCALL	EQU NOP	*-FSAREA 0		00118001 00119001
000118 4700 0000	0011C	00000		ORLST	EQU	*-FSAREA		00119001
00011C 4700 0000		00000	213=	OKLOT	NOP	0		00121001
			214=*					00122001
	001CC		215=F	SAERR	EQU	X'1CC'	DISPL FOR ERROR LIST	00123001
			216=*					00124001
			217=*		DISPL	ACEMENTS FOR	CERTAIN ERROR EXITS IN FSA	00125001
			218=*					00126001
	0020C			UTOFB	EQU	FSAERR+4*16		00127001
	00218			IUMBIND	EQU EQU	FSAERR+4*19		00128001
	00208 0026C			RRAYBD RROR40	EQU	FSAERR+4*15 FSAERR+4*40		00129001 00130001
	00200			ERR22	EQU	FSAERR+4*22		00130001
	00210			NDLESL	EQU	FSAERR+4*17		00132001
	00220		225=0	ERR21	EQU	FSAERR+4*21		00133001
			226=*					00134001
			227 *					00083001
			228 *		REGSI	TER EQUATES		00084001
			229 * 230		TEZDE	cc		00085001
	00000		230 231+R	a	IEZRE EQU	0		00086001 01-IEZRE
	00001		232+R		EQU	1		01-IEZRE
	00002		233+R		EQU	2		01-IEZRE
	00003		234+R	13	EQU	3		01-IEZRE
	00004		235+R		EQU	4		01-IEZRE
	00005		236+₽		EQU	5		01-IEZRE
	00006		237+R		EQU	6		01-IEZRE
	00007		238+8		EQU	7		01-IEZRE
	00008 00009		239+R 240+R		EQU EQU	8 9		01-IEZRE 01-IEZRE
	00003		241+8		EQU	10		01-IEZRE
	0000B		242+8		EQU	11		01-IEZRE
	0000C		243+R		EQU	12		01-IEZRE
	0000D		244+R	13	EQU	13		01-IEZRE
	0000E		245+₽		EQU	14		01-IEZRE
	0000F		246+R		EQU	15		01-IEZRE
			247 *		END			00087001
			248		END			00088001

Symbol	Lengt	h	Value	Id	Ту	oe Asm	Program	Defn	Refe	rence	s				X390	3.1.	04 2	012/0	8/17	13.21
=H'4' =X'00FFFI	ccc'	2	00000090	00000001	. 1	н		88	67											
-X 001111		4	0000008C	99999991	,	( X		87	57											
=X'800000	000'	_	00000000	00000001				07	٠,											
		4	00000088	00000001	. :	( X		86	56											
ASAVE		1	00000048		- (	J		117	44											
BRRST		1	0000009C		- (	J		126	127											
DTSW		1	000000C2		- (	J		154	155											
FCTVALST		1	00000090		- (	J		122	125											
FSAERR		1	000001CC		- (	J		215	219	220	221	222	223	224	225					
FSAREA		1	00000000	FFFFFFF	. (	J		112	117	122	124	125	126	129	136	138	142	144	148	150
									152	154	157	164	166	168	170	176	178	180	183	185
									187	189	191	193	195	197	199	203	205	207	210	212
IHIIOREV		1	00000000	00000002		Γ		82	82											
IHIOINAR		1	00000000	00000003		Γ		83	83											
IHIOTARR		1	00000000	00000001	. :	J		32	42U											
OPTSW		1	000000C2		- (	J		155	69											
OUTT1		4	0000004A	00000001	. :	Γ		58	55B											
OUTT2		4	00000056	00000001	. :	Γ		65	73B											
OUTT2A		2	00000070	00000001	. :	[		72	68B	70B										
PROLOGP		1	00000DC		- (	J		180	181											
R1		1	00000001		- (	J		232	54M	57M	58	59								
R12		1	0000000C		- (	J		243	43M	69	74									
R13		1	000000D		- (	J		244	43	44M	74M	١								
R14		1	000000E		- (	J		245	50M	66M										
R15		1	0000000F		- 1	J		246	41	49M	50E	65M	66B							
R2		1	00000002		- (	J		233	58M	61M	72									
R3		1	00000003		- (	J		234	45M	56M	60	61								
R7		1	00000007		- (	J		238	59M	60M	67M	1 71M	72							
R8			00000008			J		239	41M	420										
VIOREV			00000080			/ V		82	49											
VOINAR		4	00000084	00000001	٠ ،	/ V		83	65											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

0(0) 39 77M
1(1) 39 54M 57M 58 59 77M
2(2) 39 58M 61M 72 77M
3(3) 39 45M 56M 60 61 77M
4(4) 39 77M
5(5) 39 77M
6(6) 39 77M
7(7) 39 59M 60M 67M 71M 72 77M
8(8) 39 41M 42U 77M
9(9) 39 77M
10(A) 39 77M
11(B) 39 77M
12(C) 39 43M 69 74 77M
13(D) 39 43 44M 74M 77
14(E) 39 50M 66M 77M 78B
15(F) 35B 39 41 49M 50B 65M 66B 77M

 ARR
 Dsect
 Cross Reference
 PAGE
 7

 Dsect
 Length
 Id
 Defn
 Con
 Member
 X390 3.1.04
 2012/08/17 13.21

PRIMARY INPUT

90

00000120 FFFFFFF

FAS

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  FSAREA
- 5 SYS1.AMODGEN

ARR USING Map PAGE 9
Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.21

42 USING Ordinary 00000001 00000000 00001000 8 00090 73 IHIOTARR,R8

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIOTA PROCSTEP: X390

Primary input: lines 1 to 88 of SYSD.ALGOLFRT.ASM(IHIOTA)

SYSLIB library records read: 295
SYSUT1 work file size: 22265 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 7040 bytes
SYSLIN file records written: 6

TXA000I Return code 0, elapsed time 0.19 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHIOTARR 000092 6

## IHIPTT LEVEL V2.M01

(c) Copyright 1995-2010 Tachyon Software LLC

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                          File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHIPTT)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00214
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

00068001

```
X390 3.1.04 2012/08/17 13.22
  Loc Object Code
                      Addr1 Addr2 Stmt Source Statement
                                        2 *
                                                                                                                        00002001
                                        3
                                          *
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                        00003001
                                        4
5
                                                                                                                        00004001
00005001
                                                    STATUS - LEVEL 2.1
                                                                                                                        00006001
                                        6
                                                    FUNCTION/OPERATION -
                                                                                                                        00007001
                                          *
                                                    CONSISTS ONLY OF FLOATING POINT CONSTANTS
                                        8
                                                                                                                        00008001
                                                                                                                        00009001
                                        9
                                                    ENTRY POINT - IHIPTTAB -
                                                                                                                        00010001
                                       10
                                                                                                                        00011001
                                                                   USED TO ADDR DESIRED CONSTANT FROM
                                       11
                                                                   INREAL AND OUTREAL LONG
                                                                                                                        00012001
                                       12
                                       13
                                                                                                                        00013001
                                       14
                                                    INPUT - N/A
                                                                                                                        00014001
                                                                                                                        00015001
                                       15
                                                                                                                        00016001
                                                    OUTPUT - N/A
                                       16
                                       17
                                                                                                                        00017001
                                                    EXTERNAL ROUTINES - N/A
                                                                                                                        00018001
                                       18
                                       19
                                                                                                                        00019001
                                                    EXITS - NORMAL - N/A
                                       20
                                                                                                                        00020001
                                                          - ERROR - N/A
                                                                                                                        00021001
                                       21
                                                                                                                        00022001
                                       22
                                                    TABLES/WORK AREAS - N/A
                                                                                                                        00023001
                                       23
                                       24
                                                                                                                        00024001
                                                                                                                        00025001
00026001
                                       25
                                                    NOTES -
                                                    CONSTANT IS ADDRESSED IN FOLLOWING WAY
                                       26
                                                              LA R15, IHIPTTAB
                                                                                                                        00027001
                                       27
                                       28
                                                              MD R1, D2(R2,15)
                                                                                                                        00028001
                                       29
                                                    DATA PASSED BY VALUE
                                                                                                                        00029001
                                       30
                                                                                                                        00030001
000000
                       00000 00108
                                       31 IHIPTTAB CSECT
                                                                                                                        00031001
                                       32
                                                                                                                        00032001
                                                                                                                        00033001
000000 000000000000000000
                                                          D'0'
                                       33
000008 41A00000000000000
                                       34
                                                           DE1'1'
                                                                                                                        00034001
000010 42640000000000000
                                       35
                                                    DC
                                                           DE2'1'
                                                                                                                        00035001
000018 433E8000000000000
                                       36
                                                    DC
                                                           DE3'1'
                                                                                                                        00036001
                                                          DE4'1'
000020 44271000000000000
                                                    DC
                                                                                                                        00037001
                                       37
                                                                                                                        00038001
000028 45186A00000000000
                                       38
                                                          DE5'1'
                                                    DC
000030 45F4240000000000
                                       39
                                                    DC
                                                           DE6'1'
                                                                                                                        00039001
000038 4698968000000000
                                       40
                                                    DC
                                                           DE7'1'
                                                                                                                        00040001
000040 475F5E1000000000
                                       41
                                                    DC
                                                           DF8'1'
                                                                                                                        00041001
000048 4E2386F26FC10000
                                       42
                                                    DC
                                                           DE16'1
                                                                                                                        00042001
000050 54D3C21BCECCEDA1
                                                    DC
                                                                                                                        00043001
                                       43
                                                           DE24'1'
000058 5B4EE2D6D415B85B
                                       44
                                                    DC
                                                           DE32'1
                                                                                                                        00044001
000060 621D6329F1C35CA5
                                       45
                                                    DC
                                                                                                                        00045001
000068 68AF298D050E4396
                                       46
                                                    DC
                                                           DE48'1'
                                                                                                                        00046001
                                                                                                                        00047001
00048001
000070 6F4140C78940F6A2
                                       47
                                                    DC
                                                           DE56'1'
000078 76184F03E93FF9F5
                                       48
                                                    DC
                                                          DF64'1'
000080 7C90E40FBEEA1D3A
                                                                                                                        00049001
                                       49
                                                    DC
                                                          DE72'1
                                                                                                                        00050001
                                       50
000088 40199999999999A
                                       51
                                                    DC
                                                                                                                        00051001
                                                                                                                        00052001
00053001
000090 3F28F5C28F5C28F6
                                       52
                                                    DC
                                                          DE-2'1'
000098 3E4189374BC6A7F0
                                                    DC
                                                          DE-3'1
                                       53
0000A0 3D68DB8BAC710CB3
                                       54
                                                    DC
                                                                                                                        00054001
                                                          DE-4'1
0000A8 3CA7C5AC471B4784
                                       55
                                                                                                                        00055001
                                                    DC
                                                           DE-5'1'
0000B0 3C10C6F7A0B5ED8D
                                                    DC
                                                                                                                        00056001
                                       56
                                                           DE-6'1'
0000B8 3B1AD7F29ABCAF48
                                       57
                                                    DC
                                                           DE-7'1'
                                                                                                                        00057001
                                       58
59
                                                    DC
DC
0000C0 3A2AF31DC4611874
                                                           DE-8'1'
                                                                                                                        00058001
                                                           DE-16'1'
0000C8 33734ACA5E6226E1
                                                                                                                        00059001
                                                                                                                        00060001
0000D0 2D1357C299A88EA7
                                       60
                                                    DC
                                                           DE-24'1
0000D8 2633EC47AB514E65
                                       61
                                                    DC
                                                           DE-32'1'
                                                                                                                        00061001
0000E0 1F8B61313BBABCE3
                                       62
                                                    DC
                                                           DE-40'1'
                                                                                                                        00062001
0000E8 1917624F8A762FD8
                                       63
                                                    DC
                                                           DE-48'1'
                                                                                                                        00063001
0000F0 123EC56164AF81A3
                                                           DE-56'1'
                                                                                                                        00064001
                                       64
                                                    DC
                                                          DE-64'1'
                                                                                                                        00065001
0000F8 0BA87FEA27A539EA
                                                    DC
                                       65
000100 051C45016D841BAA
                                                                                                                        00066001
                                                    DC
                                                          DE-72'1'
                                       66
                                       67
                                                                                                                        00067001
```

68

END

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHIPTT PROCSTEP: X390

Primary input: lines 1 to 68 of SYSD.ALGOLFRT.ASM(IHIPTT)

SYSLIB library records read: 0 SYSUT1 work file size: 5951 bytes SYSUT3 work file size: 5440 bytes SYSLIN file records written: 7

TXA000I Return code 0, elapsed time 0.08 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHISAT LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.22
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                     Source
                                                                     (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                      (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                     Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                     (default)
NoFO1d
                                                                     (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                     Command Line
     LAnguage(EN)
                                                                     (default)
     LineCount(101)
                                                                     Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                     Command Line
                                                                     (default)
     Object(Omf)
                                                                     Command Line
     OPtable(Uni,NoList)
                                                                     (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                     Command Line
                                                                     (default)
NoPControl
    PRintctl(Asa)
                                                                     //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                     (default)
NoProFile
                                                                     (default)
                                                                     Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                     (default)
     SiZe(3145728)
                                                                     Command Line
NoSUppress
                                                                     (default)
     SysadatA(//DDN:SYSADATA)
                                                                     Command Line
     SvsLib(//DDN:SYSLIB)
                                                                     Command Line
    SysliN(//DDN:SYSLIN)
                                                                     Command Line
                                                                     (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                     Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                     Command Line
                                                                     (default)
                                                                     Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                     Command Line
     Sysut2(//DDN:SYSUT2)
                                                                     Command Line
     Sysut3(//DDN:SYSUT3)
                                                                     Command Line
NoTerm
                                                                     Command Line
NoTEst
                                                                      (default)
    TypeCheck(Magnitude,Register)
                                                                     (default)
NoUsingLimit
                                                                      (default)
    UsingMap
                                                                     (default)
    Xref(Short)
                                                                     Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHISAT)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
```

SYSPRINT

SYSUT1

SYSUT2

SYSUT3

JES2.J0B09284.S00218

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

0000AC 41100000

97 ONE

DC

X'41100000

00089001

```
Loc Object Code
                                                                                                     X390 3.1.04 2012/08/17 13.22
                        Addr1 Addr2 Stmt
                                              Source Statement
                                                                                                                             00002001
                                          2 *
                                          3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                             00003001
                                          4
                                                                                                                             00004001
00005001
                                          5
                                                      STATUS - LEVEL 2.1
                                          6
                                                                                                                             00006001
                                                       FUNCTION/OPERATION
                                                                                                                             00007001
                                            *
                                          8
                                                      1. REDUCE THE CASE TO THE 1ST OCTANT BY USING
                                                                                                                             00008001
                                                      ATAN(-X)=-ATAN(X), ATAN(1/X)=PI/2-ATAN(X)

2. REDUCE FURTHER TO THE CASE /X/ LESS THAN TAN(PI/2) BY ATAN(X)=PI/6+ATAN((X*SQRT3-1)/(X+SQRT3)
                                          9
                                                                                                                             00009001
                                         10
                                                                                                                             00010001
                                                                                                                             00011001
                                         11
                                                      3. FOR THE BASIC RANGE (X LESS THAN TAN(PI/12)),
                                         12
                                                                                                                             00012001
                                         13
                                                          USE A FRACTIONAL APPROXIMATION
                                                                                                                             00013001
                                         14
                                                                                                                             00014001
                                                      FNTRY POTNT -
                                         15
                                                                                                                             00015001
                                                      IHISAT - ATAN FUNCTION, SHORT
                                                                                                                             00016001
                                         16
                                                                     R1, PARMLIST
                                                                                                                             00017001
                                         17
                                                                LA
                                                                 BALR R14,R15
                                         18
                                                                                                                             00018001
                                         19
                                                                DATA PASSED BY NAME
                                                                                                                             00019001
                                                      THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                         20
                                                                                                                             00020001
                                                                                                                             00021001
                                         21
                                                                                                                             00022001
                                         22
                                                      INPUT - N/A
                                         23
                                                                                                                             00023001
                                         24
                                                      OUTPUT - N/A
                                                                                                                             00024001
                                         25
                                                                                                                             00025001
                                                      EXTERNAL ROUTINES - N/A
                                                                                                                             00026001
                                         26
                                                                                                                             00027001
                                         27
                                         28
                                                      EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                             00028001
                                                                                                                             00029001
                                         29
                                         30
                                                      EXIT - ERROR - N/A
                                                                                                                             00030001
                                         31
                                                                                                                             00031001
                                         32
                                                      TABLES/WORKAREAS - N/A
                                                                                                                             00032001
                                                                                                                             00033001
                                         33
000000
                        00000 000E0
                                         34 IHISATAN CSECT
                                                                                                                             00034001
                                         35 *
                                                                                                                             00035001
                                         36
                                                      ENTRY IHISAT
                                                                                                                             00036001
                                                                                                                             00037001
                                         37
                        00000
                                         38 FPR0
                                                                                                                             00038001
                                                      EQU
                                                             0
                        00002
                                         39 FPR2
                                                      EQU
                                                                                                                             00039001
                                         40 FPR4
                                                                                                                             00040001
                        00004
                                                      EQU
                        99996
                                         41 FPR6
                                                      EOU
                                                             6
                                                                                                                             00041001
                                         42
                                                                                                                             00042001
                                         43
                                                                                                                             00043001
                                         44 IHISAT
                                                             (14,12), 'IHISATAN LEVEL 2.1 &SYSDATE &SYSTIME'
                                                      SAVE
                                                                                                                             00044001
000000 47F0 F026
                                                                                                                             01-SAVE
                               00026
                                         45+IHISAT
                                                      В
                                                             38(0,15)
                                                                                                   BRANCH AROUND ID
000004 21
                                         46+
                                                      DC
                                                                                                   LENGTH OF IDENTIFIER
                                                                                                                             01-SAVE
000005 C9C8C9E2C1E3C1D5
                                         47+
                                                      DC
                                                             CL32'IHISATAN LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                             01-SAVE
                                                             CL1'2
                                                                                                                             01-SAVE
000025 F2
                                         48+
                                                      DC
                                                                                                    TDENTTETER
000026 90EC D00C
                                                             14,12,12(13)
                               0000C
                                         49+
                                                      STM
                                                                                                   SAVE REGISTERS
                                                                                                                             01-SAVE
                                                                                                                             00045001
                                         50
                   R:F
                        00000
                                         51
                                                      USING IHISATAN, R15
                                                                                                                             00046001
00002A 5810 1000
                               99999
                                         52
                                                             R1,0(,R1)
                                                                                                                             00047001
00002E 7801 0000
                                                                                        OBTAIN ARGUMENT
                                                                                                                             00048001
                               00000
                                         53
                                                      LE
                                                             FPR0.0(R1)
000032 7000 F0A8
                                                                                                                             00049001
                                         54
                                                             FPRØ.SIGN
                                                                                        SAVE ARG FOR SIGN CONTROL
                               000A8
                                                      STE
                                                                                        SET SIGN POSITIVE
000036 3000
                                         55
                                                      LPER
                                                             FPRØ, FPRØ
                                                                                                                             00050001
000038 1B11
                                         56
                                                      SR
                                                             R1, R1
                                                                                        R1 DENOTES THE SECTION TO WHICH
                                                                                                                             00051001
00003A 7900 F0AC
                               000AC
                                         57
                                                      CE
                                                             FPR0,ONE
                                                                                        ANSWER BELONGS. BREAK POINTS ARE
                                                                                                                             00052001
                                                                                      TAN(PI/12), TAN(PI/4), TAN(5PI/12)
ARG > 1, TAKE INVERSE
00003E 47D0 F04E
000042 7800 F0AC
                               0004E
                                         58
                                                      RNH
                                                             REDUC
                                                                                                                             00053001
                                                             FPRØ. ONF
                               AAAAC
                                         59
                                                      1 F
                                                                                                                             00054001
000046 3D00
                                                             FPR0, FPR0
                                                                                                                             00055001
                                         60
                                                      DER
000048 3800
                                         61
                                                      LER
                                                             FPR0, FPR0
                                                                                                                             00056001
00004A 4110 0008
                               00008
                                                                                        SET R1 TO 8
                                                                                                                             00057001
                                                             R1,8
00004E 7900 F0B0
                               000B0
                                         63 REDUC
                                                      CF
                                                             FPR0, TAN15
                                                                                        ARG > TAN(PI/12) ?
                                                                                                                             00058001
                                                                                        NO, BRANCH
000052 47D0 F06C
                               0006C
                                         64
                                                      BNH
                                                             OK
                                                                                                                             00059001
                                         65
                                                             FPR0, FPR0
                                                                                                                             00060001
000056 3800
                                                      LER
                                                                                        REDUCE THE ARG BY USING
000058 7C00 F0B4
                               000B4
                                         66
                                                      ME
                                                             FPR0, RT3M1
                                                                                        ATAN(X) = PI/6+ATAN(Y)
                                                                                                                             00061001
00005C 7B00 F0AC
                                         67
                                                      SE
                                                             FPR0,ONE
                                                                                        WHERE Y = (X*SQRT3-1)/(X+SQRT3)
                                                                                                                             00062001
                               000AC
000060 3A00
                                         68
                                                      AER
                                                             FPRØ, FPRØ
                                                                                                                             00063001
000062 7A00 F0B8
                               000B8
                                         69
                                                      ΔF
                                                             FPR0.RT3
                                                                                        CALC X*SQRT3-1 AS X(SQRT3-1)-1+X
                                                                                                                             00064001
000066 3D00
                                         70
                                                             FPRØ, FPRØ
                                                                                        TO PROTECT SIGNIFICANT DIGITS
                                                                                                                             00065001
                                                      DER
000068 4110 1004
                               00004
                                                             R1,4(,R1)
                                                                                        INCR R1 BY 4
                                                                                                                             00066001
                                         71
                                                      LA
                                                             FPR4, FPR0
                                                                                        NOW MAGNITUDE OF REDUCED ARG IS
00006C 3840
                                         72 OK
                                                      LER
                                                                                                                             00067001
00006E
       3C00
                                         73
                                                             FPRØ, FPRØ
                                                                                        LESS THAN TAN(PI/12)=0.26795
                                                                                                                             00068001
                                                      MER
                                                                                                                             00069001
00070001
000070 3800
                                         74
                                                      LER
                                                             FPRØ, FPRØ
000072 7C00 F0C8
                               000C8
                                                                                        COMPUTE ANGLE BY
                                         75
                                                      ME
                                                             FPR0.C
                                                             FPR6, FPR0
                                                                                                                             00071001
000076 3860
                                                      LER
                                         76
000078
       7A00 F0C0
                               000C0
                                         77
                                                             FPR0,A
                                                                                        ATAN(X)/X = D-C*XSQ+B/(XSQ+A)
                                                                                                                             00072001
                                                      ΑE
00007C 7800 F0C4
                                         78
                                                      LE
                                                             FPR0,B
                                                                                                                             00073001
                               000C4
000080 3D00
                                         79
                                                      DER
                                                             FPR0, FPR0
                                                                                                                             00074001
                                                                                                                             00075001
000082 3B06
                                         80
                                                      SFR
                                                             FPR0. FPR6
000084 7A00 F0CC
                               000CC
                                                             FPR0.D
                                                                                                                             00076001
                                                      ΑE
                                         81
                                                             FPR0, FPR4
                                                                                                                             00077001
000088 3C04
                                                      MER
                                         82
00008A 5910 F0BC
                               000BC
                                         83
                                                             R1,KF8
                                                                                        DEPENDING ON THE SECTION WHICH
                                                                                                                             00078001
                                                                                        ANSWER BELONGS, ADD OR SUBTRACT
REDUCED ANSWER FROM A BASE ANGLE
00008E 4740 F094
                                                             LABAA
                                                                                                                             00079001
                               00094
                                         84
                                                      BL
000092 3300
                                         85
                                                      LCER
                                                             FPR0, FPR0
                                                                                                                             00080001
000094 7A01 F0D0
                                         86 LABAA
                                                             FPR0, ZERO(R1)
                               000D0
                                                      ΑE
                                                                                                                             00081001
000098 9180 F0A8
                                                                                        SIGN OF ANS SHOULD AGREE WITH
                                                                                                                             00082001
                        000A8
                                         87
                                                      TM
                                                             SIGN.X'80
00009C 4780 F0A2
                               000A2
                                         88
                                                      BZ
                                                             LABBB
                                                                                        SIGN OF ARG
                                                                                                                             00083001
0000A0 3300
                                         89
                                                      LCER
                                                             FPR0, FPR0
                                                                                                                             00084001
                                         90
                                                                                                                             00085001
                                         91 LABBB
                                                      RETURN (14,12)
                                                                                        RESTORE REGS AND RETURN
                                                                                                                             00086001
0000A2
                                         92+LABBB
                                                      DS
                                                             0H
                                                                                                                             01-RETUR
                                                                                                                             01-RETUR
0000A2 98EC D00C
                               0000C
                                         93+
                                                      LM
                                                             14,12,12(13)
                                                                                                   RESTORE THE REGISTERS
                                                                                                                             01-RETUR
0000A6 07FE
                                         94+
                                         95 *
                                                                                                                             00087001
00000A8 00000000
                                         96 SIGN
                                                      DC
                                                             F'0'
                                                                                                                             00088001
```

Loc	Object Code	Addr1 Addr2	Stmt	Source	State	ment		X390 3.1.04	2012/08/17 13.22
0000В0	40449851		98	TAN15	DC	X'40449851'		TAN 15 DEGREES	00090001
0000B4	40BB67AF			RT3M1	DC	X'40BB67AF'		SORT3-1	00091001
0000B8	411BB67B		100	RT3	DC	X'411BB67B'		SORT3	00092001
0000BC	00000008			KF8	DC	F'8'			00093001
0000C0	41168A5E		102	Α	DC	X'41168A5E'		1.4087812	00094001
0000C4	408F239C		103	В	DC	X'408F239C'		0.55913709	00095001
0000C8	3FD35F49		104	C	DC	X'3FD35F49'		0.051604543	00096001
0000CC	409A6524		105	D	DC	X'409A6524'		0.60310579	00097001
			106	*					00098001
0000D0	00000000		107	ZERO	DC	F'0'	*		00099001
0000D4	40860A92		108		DC	X'40860A92'		PI/6	00100001
0000D8	411921FB		109		DC	X'411921FB'		PI/2	00101001
0000DC	4110C152		110		DC	X'4110C152'	V	PI/3	00102001
			111	*					00103001
			112		REGIS	TER EQUATES			00104001
			113	*					00105001
			114		IEZRE	GS			00106001
		00000	115	+R0	EQU	0			01-IEZRE
		00001	116-		EQU	1			01-IEZRE
		00002	117		EQU	2			01-IEZRE
		00003	118-		EQU	3			01-IEZRE
		00004	119		EQU	4			01-IEZRE
		00005	120		EQU	5			01-IEZRE
		00006	121		EQU	6			01-IEZRE
		00007	122		EQU	7			01-IEZRE
		00008	123		EQU	8			01-IEZRE
		00009	124		EQU	9			01-IEZRE
		0000A		+R10	EQU	10			01-IEZRE
		0000B		+R11	EQU	11			01-IEZRE
		0000C		+R12	EQU	12			01-IEZRE
		0000D		+R13	EQU	13			01-IEZRE
		0000E		+R14	EQU	14			01-IEZRE
		0000F		+R15	EQU	15			01-IEZRE
			131	*					00107001
			132		END				00108001

Symbol	Length Value	Id	Type Asm	Program	Defn	Refer	ences					X390	3.1.0	4 20	12/08	/17 1	3.22
Α	4 000000C	00000001	LXX		102	77											
В	4 000000C	1 00000001	ı xx		103	78											
С	4 000000C	3 00000001	ı xx		104	75											
D	4 000000C	00000001	LXX		105	81											
FPR0	1 0000000	)	U		38	53M	54	55M	57	59M	60M	61M	63	65M	66M	67M	68M
						69M	70M	72	73M	74M	75M	76	77M	78M	79M	80M	81M
						82M	85M	86M	89M								
FPR4	1 0000000	1	U		40	72M	82										
FPR6	1 0000000	5	U		41	76M	80										
IHISAT	4 0000000	00000001	l I		45	36											
IHISATAN	1 0000000	00000001	l J		34	51U											
KF8	4 000000B	00000001	LFF		101	83											
LABAA	4 0000009	00000001	l I		86	84B											
LABBB	2 000000A	00000001	LHH		92	88B											
OK	2 0000006	00000001	l I		72	64B											
ONE	4 000000A	00000001	LXX		97	57	59	67									
REDUC	4 0000004	00000001	l I		63	58B											
RT3	4 000000B	3 00000001	LXX		100	69											
RT3M1	4 000000B	1 00000001	LXX		99	66											
R1	1 0000000	L	U		116	52M	53	56M	62M	71M	83	86					
R15	1 0000000	:	U		130	51U											
SIGN	4 000000A	3 00000001	LFF		96	54M	87										
TAN15	4 000000B	00000001	LXX		98	63											
ZERO	4 000000D	00000001	LFF		107	86											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

X390 3.1.04 2012/08/17 13.22

0(0)	49	93M							
1(1)	49	52M	53N	56M	62M	71M	83	86N	93M
2(2)	49	93M							
3(3)	49	93M							
4(4)	49	93M							
5(5)	49	93M							
6(6)	49	93M							
7(7)	49	93M							
8(8)	49	93M							
9(9)	49	93M							
10(A)	49	93M							
11(B)	49	93M							
12(C)	49	93M							
13(D)	49	93							
14(E)	49	93M	94B						
15(F)	45B	49	510	93M					

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.22

USING Ordinary 00000001 00000000 00001000 15 000D0 88 IHISATAN,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISAT PROCSTEP: X390

Primary input: lines 1 to 108 of SYSD.ALGOLFRT.ASM(IHISAT)

SYSLIB library records read: 161
SYSUT1 work file size: 12721 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8640 bytes
SYSLIN file records written: 6

TXA000I Return code 0, elapsed time 0.15 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHISEX LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.22
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                     (default)
NoCompaT
                                                                     (default)
   DXref
                                                                     (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                     (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                     (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                     (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHISEX)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00222
```

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

SYSUT1 SYSUT2

SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                    X390 3.1.04 2012/08/17 13.22
                                                                                                                           00002001
                                         3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                            00003001
                                         4
                                                                                                                           00004001
00005001
                                         5
                                                      STATUS - LEVEL 2.1
                                         6
                                                                                                                            00006001
                                                      FUNCTION/OPERATION
                                                                                                                            00007001
                                            *
                                         8
                                                      Y = X*LOG2(E) = 4R-S-T
                                                                                                                            00008001
                                         9
                                                      WHERE R AND S ARE INTEGERS
                                                                                                                           00009001
                                                      T FRACTION AND BOTH S AND T ARE NON NEGATIVE THEN E**X = 2**Y = (16**R)(2**-S)N2**-T)
                                        10
                                                                                                                            00010001
                                                                                                                            00011001
                                        11
                                        12
                                                                                                                            00012001
                                        13
                                            *
                                                      ENTRY POINT -
                                                                                                                            00013001
                                        14
                                                      IHISEX - EXP FUNCTION, SHORT
                                                                                                                            00014001
                                        15
                                                               LA R1, PARMLIST
                                                                                                                            00015001
                                                               BALR R14, R15
                                                                                                                            00016001
                                        16
                                                               DATA PASSED BY NAME
                                        17
                                                                                                                            00017001
                                                      THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                         18
                                                                                                                            00018001
                                        19
                                                                                                                            00019001
                                        20
                                                      INPUT - N/A
                                                                                                                            00020001
                                                                                                                           00021001
                                        21
                                                      OUTPUT - N/A
                                                                                                                            00022001
                                        22
                                         23
                                                                                                                            00023001
                                        24
                                                      EXTERNAL ROUTINES - N/A
                                                                                                                            00024001
                                        25
                                                                                                                            00025001
                                                      EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                           00026001
                                        26
                                         27
                                                                                                                            00027001
                                         28
                                                      EXIT - ERROR - IF ARGUMENT NOT POSITIVE GOTO ERROR
                                                                                                                            00028001
                                                                                                                            00029001
                                         29
                                                                      OUTINE VIA
                                         30
                                                                           FSAERR+25*4(R13)
                                                                                                                            00030001
                                        31
                                                                                                                           00031001
                                         32
                                                      TABLES/WORKAREAS - N/A
                                                                                                                            00032001
                                                                                                                            00033001
                                         33
000000
                        00000 00132
                                         34 IHISEXPT CSECT
                                                                                                                            00034001
                                        35 *
                                                                                                                            00035001
                                        36
                                                      ENTRY IHISEX
                                                                                                                            00036001
                                         37
                                                                                                                            00037001
                        00000
                                        38 FPR0
                                                                                                                           00038001
                                                      EQU
                                                                                       RESULT REGISTER
                                                                                                                            00039001
                                        39
                                                            (14,12),, 'IHISEXPT LEVEL 2.1 &SYSDATE &SYSTIME'
                                        40 IHISEX
                                                                                                                            00040001
                                                                                                 BRANCH AROUND ID
LENGTH OF IDENTIFIER
000000 47F0 F026
                              99926
                                        41+THTSEX
                                                      В
                                                                                                                           01-SAVE
000004 21
                                        42+
                                                      DC
                                                            AL1(33)
                                                                                                                           01-SAVE
                                                            CL32'IHISEXPT LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000005 C9C8C9E2C5E7D7E3
                                        43+
                                                      DC
                                                                                                                           01-SAVE
                                                            CL1'2'
                                                                                                  IDENTIFIER
                                                                                                                           01-SAVE
000025 F2
                                                      DC
                                        44+
000026 90EC D00C
                                                                                                                            01-SAVE
                               0000C
                                        45+
                                                            14,12,12(13)
                                                                                                  SAVE REGISTERS
                                        46 *
                                                                                                                           00041001
                  R:F 00000
                                        47
                                                      USING IHISEXPT, R15
                                                                                                                            00042001
                               99999
000024 5810 1000
                                                                                                                           00043001
                                        48
                                                            R1.0(.R1)
                                                            FPR0,0(,R1)
                               00000
                                                                                       OBTAIN ARGUMENT
00002E 7800 1000
                                        49
                                                                                                                            00044001
                                                      LE
000032 7900 F0FC
                               000FC
                                         50
                                                      CE
                                                            FPR0,MAX
                                                                                       > MAX ?
                                                                                                                            00045001
000036 4720 F0F2
                               000F2
                                         51
                                                      ВН
                                                            ERROR
                                                                                       YES, ERROR
                                                                                                                            00046001
00003A 7900 F100
                               00100
                                        52
                                                      CE
                                                            FPR0.MIN
                                                                                       > MIN ?
                                                                                                                            00047001
                                                                                       YES, ACCEPTABLE
00003E 4720 F048
                                                                                                                           00048001
                               00048
                                        53
                                                      BH
                                                            OK1
000042 3B00
                                                            FPR0, FPR0
                                                                                       VERY SMALL, GIVE 0 AS ANSWER
                                                                                                                            00049001
                                        54
                                                      SER
000044 47F0 F0EC
                               000EC
                                        55
                                                                                                                            00050001
                                                      В
                                                            EXIT
                                         56
                                                                                                                            00051001
000048 5810 1000
                               00000
                                        57 OK1
                                                      Ĺ
                                                            R1,0(,R1)
                                                                                       PICK UP ARGUMENT AGAIN
                                                                                                                            00052001
00004C 8D00 0008
                               00008
                                         58
                                                      SLDL
                                                            R0.8
                                                                                                                            00053001
                                                            RO MASK
                                                                                       =X'0000007F' CHARACTERTSTIC OF X 00054001
000050 5400 F108
                               99198
                                        59
                                                      Ν
000054 4900 F130
                               00130
                                                            RØ, SMALL
                                                                                                                            00055001
                                        60
                                                      СН
                                                                                       R0 > 57 ?
000058 4720 F064
                               00064
                                        61
                                                      ВН
                                                            OK2
                                                                                       YES, BRANCH
                                                                                                                            00056001
00005C 7800 F104
                                                            FPR0, ONE
                                                                                       NO, ABS VALUE OF X < 2**-28
                                                                                                                            00057001
                               00104
                                        62
                                                      LE
                                        63 *
                                                                                       GIVE 1 AS RESULT
                                                                                                                           00058001
000060 47F0 F0EC
                               000EC
                                                      В
                                                            EXIT
                                        64
                                                                                       THIS AVOIDS SHIFT TROUBLE
                                                                                                                            00059001
                                                                                                                            00060001
                                        65
                                        66 OK2
000064 8810 0001
                               00001
                                                      SRL
                                                            R1,1
                                                                                       NORMAL CASE MANTISSA OF X IN R1
                                                                                                                            00061001
000068 8900 0002
                                                                                       B0 -4*CHARACTERISTIC
                                                                                                                            00062001
                               00002
                                        67
                                                      SLL
                                                            R0,2
00006C 1320
                                        68
                                                      LCR
                                                            R2, R0
                                                                                                                            00063001
00006E 5C00 F10C
                               0010C
                                        69
                                                            R0,LOG2E
                                                                                       LOG E BASE 2 IN B1, PROD IN B2
                                                                                                                            00064001
                                                                                                                            00065001
000072 8C00 211F
                                                      SRDL
                                                                                       B33 /R/ IN R0, /S+T/ IN R1
                               0011F
                                        70
                                                            R0.287(R2)
000076 3200
                                                      LTER
                                                            FPRØ FPRØ
                                                                                                                            00066001
                                        71
000078 47D0 F084
                               00084
                                        72
                                                      BNP
                                                            ОКЗ
                                                                                       X NOT POSITIVE, BRANCH
                                                                                                                            00067001
                                                                                       X POSITIVE, -R = -R(R'+1) IN R0
S+T = 4-(S'+T') IN R1
00007C 5700 F110
                               00110
                                         73
                                                            RØ, ALLF
                                                                                                                           00068001
000080 5710 F110
                               00110
                                        74
                                                            R1, ALLF
                                                                                                                            00069001
000084 8900 0018
                                        75 OK3
                                                                                                                            00070001
                               00018
                                                      SLL
                                                            RØ. 24
                                                                                       SAVE -R IN R2 B7, CHAR MODIFIER
000088 1820
                                                            R2. R0
                                                                                                                           00071001
                                        76
                                                      LR
                                                                                       S IN RØ LOW, T IN R1 HIGH
00008A 8D00 0002
                               00002
                                        77
                                                      SLDL
                                                                                                                            00072001
                                                            R0.2
00008E 1830
                                        78
                                                            R3, R0
                                                                                       SAVE S IN R3, FOR SHIFT COUNT
                                                                                                                            00073001
                                                      LR
000090 8810 0004
                               00004
                                        79
                                                      SRL
                                                            R1,4
                                                                                                              (B3)
                                                                                                                            00074001
000094 1861
                                                                                       SAVE T
                                                                                                     TN R6
                                                                                                                           00075001
                                        80
                                                      I R
                                                            R6, R1
                                                                                                              (B3)
000096 1C01
                                                                                       T*T
                                                                                                                            00076001
                                                      MR
                                                            RØ,R1
                                        81
                                                                                                              (B7)
                                                                                                                           00077001
000098 1850
                                                      LR
                                                            R5, R0
                                        82
                                                                                       C*T*T
00009A 5C40 F11C
                               0011C
                                        83
                                                      М
                                                            R4.C
                                                                                                     IN R4
                                                                                                              (B4)
                                                                                                                            00078001
00009E 5A00 F114
                                                            RØ, A
                                                                                                                            00079001
                               00114
                                        84
0000A2 1850
                                        85
                                                      LR
                                                            R5. R0
                                                                                       A+T*T
                                                                                                     IN R5
                                                                                                              (B7)
                                                                                                                           00080001
0000A4 5800 F118
                               00118
                                        86
                                                            RØ.B
                                                                                                                            00081001
0000A8 1D05
                                                                                                                            00082001
                                        87
                                                      DR
                                                            R0, R5
                                                                                       B/(A+T*T)
                                                                                                     IN R1
                                                                                                              (B3)
0000AA 1B16
                                        88
                                                      SR
                                                            R1, R6
                                                                                                                            00083001
0000AC 8810 0001
                               00001
                                        89
                                                      SRL
                                                            R1,1
                                                                                       -T+B/(A+T*T) IN R1
                                                                                                              (B4)
                                                                                                                            00084001
0000B0 5A10 F120
                               00120
                                        90
                                                            R1,D
                                                                                                                           00085001
                                                      Α
0000B4 1A14
                                        91
                                                      AR
                                                            R1,R4
                                                                                       C*T*T+D-T+B/(A+T*T) (B4)
                                                                                                                            00086001
                                                                                                                            00087001
0000B6 1846
                                        92
                                                      LR
                                                            R4, R6
0000B8 8840 0002
                               00002
                                        93
                                                      SRL
                                                            R4,2
                                                                                                                            00088001
0000BC 1D41
                                                                                       2*T/(C*T*T+D-T+B/(A+T*T))
                                                                                                                           00089001
                                                      DR
                                                            R4, R1
                                                                                                                      (B1)
                                                                                       2**(-T) NOW READY IN B1
(2**-S)(2**-T) READY (B1)
0000BE 5A50 F124
                               00124
                                        95
                                                            R5, FXONE
                                                                                                                           00090001
0000C2 8850 3000
                               00000
                                        96
                                                      SRI
                                                            R5.0(R3)
                                                                                                                           00091001
0000C6 5A50 F128
                               00128
                                        97
                                                      Α
                                                            R5, FUDGE
                                                                                       ROUND AND
                                                                                                                           00092001
```

155

END

00131001

X390 3.1.04 2012/08/17 13.22 Loc Object Code Addr1 Addr2 Stmt Source Statement 0000CA 5950 F124 00124 98 R5, FXONE FLOAT THIS NUMBER 00093001 0000CE 4740 F0DA 000DA 99 BL OK4 00094001 00095001 00096001 0000D2 5850 F104 00104 100 L B R5.ONE 0000D6 47F0 F0E2 JOIN 000E2 101 00097001 102 0000DA 8850 0006 00006 103 OK4 SRL 00098001 R5,6 R5, FXONE 0000DE 5650 F124 00124 104 0 BASE CHARACTERISTIC 00099001 ADJUST CHARACTERISTIC WITH -R 00100001 0000E2 1B52 105 JOIN SR R5, R2 R5, BUFF 0000E4 5050 F12C 0012C 00101001 106 ST 00102001 0000E8 7800 F12C 0012C FPR0, BUFF 107 LE 00103001 108 109 EXIT RETURN (14,12) RESTORE REGS AND RETURN 00104001 0000EC 0000EC 98EC D00C 110+EXIT DS 01-RETUR aaaac 14,12,12(13) RESTORE THE REGISTERS 01-RETUR 111+ I M 0000F0 07FE BR RETURN 01-RETUR 112+ 14 00105001 113 0000F2 58D0 D004 00004 114 ERROR RESTORE FSA ADDR 00106001 R13,4(,R13) 0000F6 47FD 022C 0022C 115 В FSAERR+24\*4(R13) PARAM > 174.673 00107001 116 \* 00108001 00109001 001CC 117 FSAERR X'1CC' EOU 00110001 118 0000FA 0000 0000FC 119 DC 0F'0' 00111001 DC DC X'42AEAC4F' 00112001 00113001 0000FC 42AEAC4F 120 MAX 174.673 X'C2B437F0 000100 C2B437F0 121 MTN -180.218000104 41100000 122 ONE DC X'41100000' 00114001 000108 0000007F 123 MASK DC X'0000007F' 00115001 00010C 5C551D95 124 LOG2E DC X'5C551D95' LOG E BASE 2 00116001 B1 000110 FFFFFFF 125 ALLF DC X'FFFFFFFF' 00117001 X'576AE119 000114 576AE119 126 A DC 87.4174972 **B7** 00118001 000118 269F8E6B 127 B DC X'269F8E6B' 617.972269 B11 00119001 00011C B9059003 DC -0.034657359 128 C X'B9059003' 00120001 B-4 000120 B05CFCE3 129 D DC X'B05CFCE3' -9.95459578 В4 00121001 000124 40000000 130 FXONE DC X'40000000' 1. B1 ALSO BASE CHARACTERISTIC 00122001 000128 00000020 131 FUDGE DC X'00000020' 00123001 F'0' 999120 99999999 132 BUFF DC 00124001 000130 0039 00125001 133 SMALL H'57' DC 134 00126001 135 \* REGISTER EQUATES 00127001 136 \* 00128001 137 **IEZREGS** 00129001 00000 138+R0 EOU 0 01-IEZRE 00001 139+R1 EQU 01-IEZRE 00002 140+R2 01-IEZRE EQU 00003 **141+**R3 EQU 3 01-IEZRE 00004 142+R4 EQU 4 5 01-IEZRE EQU 99995 143+R5 01-TF7RF 6 00006 144+R6 01-IEZRE EQU 145+R7 01-IEZRE 00007 EQU 00008 146+R8 EQU 01-IEZRE 00009 147+R9 EOU 9 01-IEZRE 0000A 148+R10 10 EQU 01-IEZRE 0000B 149+R11 EOU 01-IEZRE 11 150+R12 12 01-IEZRE 0000C EQU 0000D 151+R13 EQU 13 01-IEZRE 0000E 152+R14 EQU 14 01-IEZRE 0000F 153+R15 EQU 15 01-TF7RF 00130001 154 \*

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refer	ence	5				X390	3.1.6	94 20	012/08	3/17 1	.3.22
Α	4	00000114	0000000	ιxx		126	84											
ALLF	4	00000110	0000000	LXX		125	73	74										
В	4	00000118	0000000	LXX		127	86											
BUFF	4	0000012C	0000000	L F F		132	106M	107										
C	4	0000011C	0000000	LXX		128	83											
D	4	00000120	0000000	LXX		129	90											
ERROR	4	000000F2	0000000	l I		114	51B											
EXIT		000000EC	0000000	LHH		110	55B	64B										
FPR0		00000000		U		38	49M	50	52	54M	62M	71M	107M					
FSAERR		000001CC		U		117	115B											
FUDGE		00000128				131	97											
FXONE		00000124				130	95	98	104									
IHISEX		00000000				41	36											
IHISEXPT		00000000				34	47U											
JOIN		000000E2				105	101B											
LOG2E		0000010C				124	69											
MASK		00000108				123	59											
MAX		000000FC				120	50											
MIN		00000100				121	52											
OK1		00000048				57	53B											
OK2		00000064				66	61B											
OK3		00000084				75	72B											
OK4		00000DA				103	99B											
ONE		00000104	0000000			122		100										
RØ	1	00000000		U		138	58M	59M	60	67M	68	69M	70M	73M	75M	/6	77M	78
D4		00000004				420	81M	82	84M	85	86M	87M		04	0014	0011	0011	0411
R1	1	00000001		U		139	48M	49	57M	66M	74M	79M	80	81	88M	89M	90M	91M
D12	1	000000D				151	94 114M	115										
R13				U		151		115										
R15		000000F		U		153	47U	70	764	105								
R2 R3		00000002 00000003		U		140 141	68M 78M	70 96	76M	105								
				U			7 8 M	91	0.2M	93M	0.4M							
R4 R5		00000004 00000005		U U		142 143	83M 82M	91 85M	92M 87	93M 95M	94M	07М	08	1 0 0 M	103M	10/M	105M	106
R6		00000000		U		144	80M	88	92	2311	ויוטכ	2/11	20	TOOM	TODIN	10411	TOOL	100
SMALL		00000000	0000000	-		133	60	00	72									
JI'IAL L	2	00000130	0000000.	. пп		133	90											

 $\label{eq:Register} \textbf{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ 

X390 3.1.04 2012/08/17 13.22 59M 60 67M 68 69M 70M 73M 75M 76 77M 78 81M 82 84M 85 86M 87M 111M 49 57M 58M 66M 69M 70M 74M 77M 79M 80 81M 87M 88M 89M 90M 91M 94 111M 1(1) 45 48M 70 76M 105 111M 2(2) 45 68M 78M 96 111M 83M 91 92M 93M 94M 111M 82M 83M 85M 87 94M 95M 96M 97M 98 100M 103M 104M 105M 106 111M 80M 88 92 111M 45 45 45 3(3) 4(4) 5(5) 6(6) 7(7) 45 45 111M 8(8) 45 111M 9(9) 10(A) 45 111M 45 111M 45 111M 45 111M 11(B) 12(C) 45 111 114M 115N 45 111M 112B 41B 45 47U 111M 13(D) 14(E) 15(F)

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.22

USING Ordinary 00000001 00000000 00001000 15 00130 107 IHISEXPT,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISEX PROCSTEP: X390

Primary input: lines 1 to 131 of SYSD.ALGOLFRT.ASM(IHISEX)

SYSLIB library records read: 161
SYSUT1 work file size: 14878 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 10480 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.16 seconds.

## IHISLO LEVEL V2.M01

PAGE X390 3.1.04 2012/08/17 13.22 (c) Copyright 1995-2010 Tachyon Software LLC TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong TLC011I License expires on 2012/10/17 at 01:00 Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1 -S2//DDN:SYSUT2 -S3//DDN:SYSUT3 -SN//DDN:SYSLIN -SL//DDN:SYSLIB -ST//DDN:SYSPRINT -SH//DDN:SYSPUNCH -SA//DDN:SYSADATA -SM1 Options for this Assembly Source (default) AControl(ALign, NoLibMac) NoAData (default) AdataLevel(5) (default) NoCompaT (default) DXref (default) NoEsd Command Line  $Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco$ 2,HLasm,NoTRunc,NoIndeX) (default) NoFO1d (default) IDR('X390ASM 3104') (default) NoINFÒ Command Line LAnguage(EN) (default) LineCount(101) Command Line List(121) (default) MsgLevel(0,0)
MXref(Source) Command Line (default) Object(Omf) Command Line OPtable(Uni,NoList) (default)  ${\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\$ Command Line (default) NoPControl PRintctl(Asa) //DDN:SYSPRINT ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0) (default) NoProFile (default) Command Line NoRLd RXref(NoCr,Gr,NoFr) (default) SiZe(3145728) Command Line NoSUppress (default) SysadatA(//DDN:SYSADATA) Command Line SvsLib(//DDN:SYSLIB) Command Line SysliN(//DDN:SYSLIN) Command Line (default) NoSysParm SysprinT(//DDN:SYSPRINT) Command Line SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8') Command Line (default) Command Line SysterM(1) Sysut1(//DDN:SYSUT1) Command Line Sysut2(//DDN:SYSUT2) Command Line Sysut3(//DDN:SYSUT3) Command Line NoTerm Command Line NoTEst (default) TypeCheck(Magnitude,Register) (default) NoUsingLimit (default) UsingMap (default) Xref(Short) Command Line DDNAMEs File/Data Set Names SYSIN

SYSD.ALGOLFRT.ASM(IHISLO) SYSLIB SYS1.MACLIB SYSD. TOOLS. MACLIB SYSD.ALGOLFRT.ASM SYSD.ALGOLFRT.MACLIB SYS1.AMODGEN SYSLIN SYS12230.T132141.RA000.T1BLD.OBJECT SYSPRINT JES2.J0B09284.S00226 SYS12230.T132141.RA000.T1BLD.SYSUT1 SYSUT1 SYSUT2 SYS12230.T132141.RA000.T1BLD.SYSUT2 SYSUT3 SYS12230.T132141.RA000.T1BLD.SYSUT3

0000B4 00000000

97 ARG

DC

F'0'

00090001

```
Loc Object Code
                       Addr1 Addr2 Stmt
                                                                                                   X390 3.1.04 2012/08/17 13.22
                                             Source Statement
                                                                                                                          00002001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                          00003001
                                         4
                                                                                                                          00004001
00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                         6
                                                                                                                          00006001
                                                                                                                          00007001
                                                     FUNCTION/OPERATION -
                                           *
                                                     WRITE X = M*16**P, M MANTISSA
PICK A BASE VALUE A DEPENDING ON SIZE OF M
                                         8
                                                                                                                          00008001
                                         9
                                                                                                                          00009001
                                                     WRITE Z = (M-A)/(M+A)
THEN LOG(X) = P*LOG(16) + LOG(A) + LOG((1+Z)/(1-Z))
                                        10
                                                                                                                          00010001
                                                                                                                          00011001
                                        11
                                        12
                                                                                                                          00012001
                                        13
                                           *
                                                     ENTRY POINT -
                                                                                                                          00013001
                                        14
                                                     IHISLO - LOG FUNCTION, SHORT
                                                                                                                          00014001
                                        15
                                                               ΙΔ
                                                                   R1, PARMLIST
                                                                                                                          00015001
                                                               BALR R14,R15
                                                                                                                          00016001
                                        16
                                                               DATA PASSED BY NAME
                                                                                                                          00017001
                                        17
                                                     THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                        18
                                                                                                                          00018001
                                        19
                                                                                                                          00019001
                                        20
                                                     INPUT - N/A
                                                                                                                          00020001
                                                                                                                          00021001
                                        21
                                                     OUTPUT - N/A
                                                                                                                          00022001
                                        22
                                        23
                                                                                                                          00023001
                                        24
                                                     EXTERNAL ROUTINES - N/A
                                                                                                                          00024001
                                        25
                                                                                                                          00025001
                                                     EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                          00026001
                                        26
                                                                                                                          00027001
                                        27
                                        28
                                                     EXIT - ERROR - IF ARGUMENT NOT POSITIVE GOTO ERROR
                                                                                                                          00028001
                                                                                                                          00029001
                                        29
                                                                      OUTINE VIA
                                        30
                                                                           FSAERR+25*4(R13)
                                                                                                                          00030001
                                        31
                                                                                                                          00031001
                                        32
                                                     TABLES/WORKAREAS - N/A
                                                                                                                          00032001
                                                                                                                          00033001
                                        33
000000
                        00000 000E4
                                        34 IHISLOGM CSECT
                                                                                                                          00034001
                                        35 *
                                                                                                                          00035001
                                        36
                                                     ENTRY IHISLO
                                                                                                                          00036001
                                        37
                                                                                                                          00037001
                                        38 FPR0
                                                                                      RESULT REGISTER
                                                                                                                          00038001
                       00000
                                                     EQU
                        00002
                                        39 FPR2
                                                     EQU
                                                                                      SCRATCH REGISTER
                                                                                                                          00039001
                                                                                                                          00040001
                                        40
                                        41 THTSLO
                                                     SAVE
                                                            (14,12),, 'IHISLOGM LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                          00041001
000000 47F0 F026
                              00026
                                        42+IHISLO
                                                     В
                                                            38(0,15)
                                                                                                 BRANCH AROUND ID
                                                                                                                          01-SAVE
                                                                                                 LENGTH OF IDENTIFIER
000004 21
                                        43+
                                                     DC
                                                            AL1(33)
                                                                                                                          01-SAVE
000005 C9C8C9E2D3D6C7D4
                                                     DC
                                                            CL32'IHISLOGM LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                          01-SAVE
                                        44+
000025 F2
                                        45+
                                                     DC
                                                            CL1'2'
                                                                                                                          01-SAVE
000026 90EC D00C
                              0000C
                                        46+
                                                     STM
                                                            14,12,12(13)
                                                                                                                          01-SAVE
                                                                                                 SAVE REGISTERS
                                        47
                                                                                                                          00042001
                                                     USTNG THTSLOGM, R15
                                                                                                                          00043001
                  R: F 00000
                                        48
00002A 5810 1000
                              00000
                                        49
                                                                                                                          00044001
                                                            R1,0(,R1)
R0,B'1111',0(R1)
00002E BF0F 1000
                              00000
                                        50
                                                     ICM
                                                                                      OBTAIN ARGUMENT
                                                                                                                          00045001
000032 47D0 F0B0
                              000B0
                                        51
                                                     BNP
                                                            ERROR
                                                                                      ARG Ø OR NEGATIVE, ERROR
                                                                                                                          00046001
000036 8C00 0018
                              00018
                                        52
                                                     SRDL
                                                            R0.24
                                                                                                                          00047001
                                                                                                                          00048001
00003A 8810 0008
                              00008
                                        53
                                                     SRL
                                                            R1.8
                                                                                      STORE MANTISSA M ALONE
00003E 5010 F0B4
                              000B4
                                                            R1.ARG
                                                                                                                          00049001
                                        54
                                                     ST
                                                                                      FLOAT IT
000042 9640 F0B4
                        000B4
                                        55
                                                     OI
                                                            ARG, X'40'
                                                                                                                          00050001
000046 8900 0002
                                                                                      4*CHAR IN RO
                              00002
                                        56
                                                     SLL
                                                            R0,2
                                                                                                                          00051001
00004A 4000 F0BA
                                        57
                                                     STH
                                                            RØ, IPART+2
                                                                                      SAVE THIS IN FLOAT FORM
                                                                                                                          00052001
                              000BA
00004E 1BEE
                                        58
                                                     SR
                                                            R14, R14
                                                                                      SET R14 TO 0,4 OR 8
                                                                                                                          00053001
000050 8810 0015
                              00015
                                        59
                                                     SRI
                                                            R1.21
                                                                                      DEFINE A TO BE 1, 1/4, OR 1/16
                                                                                                                          00054001
                                                                                      IF M IS IN
                                                                                                                          00055001
                                        60
000054 43E1 F0BC
                              000BC
                                        61
                                                     IC
                                                            R14.TABLE(R1)
                                                                                    (1/2,1),(2/8,1/2),OR IN (3/16,1/8)
                                                                                                                          00056001
000058 7800 F0B4
                                                            FPR0,ARG
                                                                                      OBTAIN Z = (M-A)/(M+A)
                                                                                                                          00057001
                              000B4
                                        62
                                                     LE
00005C 3820
                                        63
                                                     LER
                                                            FPR2, FPR0
                                                                                                                          00058001
                              000C4
00005E 7B0E F0C4
                                        64
                                                     SE
                                                            FPR0, ONE (R14)
                                                                                                                          00059001
000062 7A2E F0C4
                                                                                      POSSIBLY ONLY 21 SIGNIF BPTS
                                                                                                                          00060001
                                        65
                                                            FPR2, ONE (R14)
                              000C4
                                                     ΑE
000066 3D02
                                        66
                                                     DER
                                                            FPRØ, FPR2
                                                                                                                          00061001
000068 7000 F0B4
                              000B4
                                        67
                                                     STE
                                                            FPRØ, ARG
                                                                                      Z READY, STORE IT AT ARG
                                                                                                                          00062001
00006C 3C00
                                        68
                                                     MER
                                                            FPRØ, FPRØ
                                                                                      Z**2
                                                                                                                          00063001
00006E 7820 F0D4
                              000D4
                                        69
                                                     LE
                                                            FPR2,C4
                                                                                      COMPUTE LOG((1+Z)/(1-Z)) USING
                                                                                                                          00064001
                                                                                                                          00065001
000072 3C20
                                                            FPR2.FPR0
                                                                                    CHEBYSHEV INTERPOLATION POLYNOMIAL
                                        70
                                                     MER
000074 7A20 F0D8
                              000D8
                                        71
                                                     ΑE
                                                            FPR2,C3
                                                                                                                          00066001
000078 3C20
                                        72
                                                     MER
                                                            FPR2.FPR0
                                                                                                                          00067001
00007A 7A20 F0DC
                              000DC
                                        73
                                                            FPR2,C2
                                                                                                                          00068001
                                                     ΑE
00007E 3C20
                                        74
                                                     MFR
                                                            FPR2, FPR0
                                                                                                                          00069001
000080 7A20 F0E0
                              000E0
                                        75
                                                                                                                          00070001
                                                     ΑE
                                                            FPR2.C1
                                                            FPR2, FPR0
                                                                                                                          00071001
000084 3C20
                                                     MER
                                        76
000086 7800 F0B4
                              000B4
                                        77
                                                            FPR0, ARG
                                                                                                                          00072001
                                                     LE
00008A 3C20
                                        78
                                                     MER
                                                            FPR2, FPR0
                                                                                                                          00073001
00008C 3A20
                                        79
                                                     AER
                                                            FPR2, FPR0
                                                                                                                          00074001
                                                                                                                          00075001
00008F 3A20
                                        80
                                                     ΔFR
                                                            FPR2. FPR0
000090 7800 F0B8
                              000B8
                                                            FPRØ, IPART
                                                                                      4*(P+64)
                                                                                                                          00076001
                                        81
                                                     LE
000094 88E0 0001
                              00001
                                                                                      0,2 OR 4 = -LOG(A) BASE 2
                                                                                                                          00077001
                                        82
                                                     SRL
                                                            R14,1
000098 41E0 E100
                                                            R14,256(,R14)
                              00100
                                        83
                                                     LA
                                                                                      4*64-LOG2(A)
                                                                                                                          00078001
00009C 40E0 F0BA
                              000BA
                                        84
                                                     STH
                                                            R14, IPART+2
                                                                                      STORE THIS AND FLOAT IT
                                                                                                                          00079001
0000A0 7B00 F0B8
                              000B8
                                        85
                                                     SE
                                                            FPR0, IPART
                                                                                      4*P+L0G2(A)
                                                                                                                          00080001
0000A4 7C00 F0D0
                              000D0
                                        86
                                                     ME
                                                            FPR0.LOGE2
                                                                                                                          00081001
0000A8 2A02
                                                                                      NATURAL LOG READY
                                                                                                                          00082001
                                        87
                                                     ADR
                                                            FPRØ, FPR2
                                        88
                                                                                                                          00083001
                                        89
                                                     RETURN (14,12)
                                                                                      RESTORE REGISTERS AND RETURN
                                                                                                                          00084001
0000AA 98EC D00C
                              0000C
                                        90+
                                                                                                 RESTORE THE REGISTERS
                                                                                                                          01-RETUR
                                                     LM
                                                            14,12,12(13)
0000AE 07FE
                                        91+
                                                     RR
                                                                                                 RETURN
                                                                                                                          01-RETUR
                                                                                                                          00085001
                                        92
0000B0 47FD 0230
                              00230
                                        93 ERROR
                                                     В
                                                            FSAERR+25*4(R13)
                                                                                      PARAMETER ZERO OR NEGATIVE
                                                                                                                          00086001
                                                                                                                          00087001
                                        94
                        001CC
                                        95 FSAERR
                                                           X'1CC'
                                                                                                                          00088001
                                                     EQU
                                        96
                                                                                                                          00089001
```

131 \*

**END** 

132

00108001

00109001

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.22 Loc Object Code 0000B8 46000000 98 IPART DC X'46000000' 00091001 99 \* 00092001 X'0804040400000000' 00093001 00094001 0000BC 0804040400000000 100 TABLE DC 101 0000C4 41100000 102 ONE DC X'41100000' 1 FOLLOWING 3 CONSTANTS MUST 00095001 0000C8 40400000 103 DC X'40400000' 1/4 BE CONSECUTIVE 00096001 0000CC 40100000 104 DC X'40100000' 1/16 00097001 105 \* 00098001 00099001 00100001 0000D0 40B17219 106 LOGE2 LOG(2) BASE E + FUDGE 1 DC X'40B17219' 0000D4 4048157B 107 C4 0.28157778 DC X'4048157B' 0000D8 4047973F 108 C3 DC X'4047973F' 0.27965158 00101001 0000DC 40667685 109 C2 DC X'40667685' 0.40024595 00102001 0000E0 40AAAA71 110 C1 DC X'40AAAA71' 0.66666322 00103001 00104001 111 \* 112 \* 00105001 REGISTER EQUATES 113 \* 00106001 **IEZREGS** 00107001 00000 115+R0 EQU 01-IEZRE 00001 01-IEZRE 116+R1 EQU 2 00002 117+R2 01-IEZRE EOU 00003 118+R3 EQU 3 4 5 01-IEZRE 119+R4 01-IEZRE 00004 EQU 00005 120+R5 EQU 01-IEZRE 00006 121+R6 EQU 01-IEZRE 99997 122+R7 EOU 01-IEZRE 00008 123+R8 EQU 8 01-IEZRE 00009 124+R9 EQU 01-IEZRE 0000A 125+R10 EQU 10 01-IEZRE 0000B 126+R11 EQU 11 01-IEZRE 0000C 127+R12 EQU 12 01-IEZRE 0000D 128+R13 EQU 13 01-IEZRE 01-IEZRE 0000E 129+R14 EOU 14 0000F 130+R15 EQU 15

Symbol	Length Val	ie Id	Type Asm	Program	Defn	Refer	ences					X390	3.1.0	4 20	12/08	/17 1	3.22
ARG C1		B4 0000000			97 110	54M 75	55M	62	67M	77							
C2		DC 0000000			109	73 73											
C3		DS 0000000			108	71											
C4		D4 0000000			107	69											
ERROR		BO 0000000			93	51B											
FPRØ	1 00000		U		38	62M	63	64M	66M	67	68M	70	72	74	76	77M	78
1110	1 00000	.00	Ü		50	79	80	81M	85M	86M	87M	, 0	, -	, ,	, 0	,,,,	, 0
FPR2	1 00000	102	U		39	63M	65M	66	69M	70M	71M	72M	73M	74M	75M	76M	78M
11112	1 00000	.02	Ü		33	79M	80M	87	0311	, 011	, 1	, 211	, 511	7-711	, 5, 1	, 011	7 01 1
FSAERR	1 00000	CC	U		95	93B	0011	٥,									
IHISLO		0000000	-		42	36											
IHISLOGM		0000000			34	48U											
IPART		B8 000000			98	57M	81	84M	85								
LOGE 2		D0 000000			106	86											
ONE	4 00000	C4 000000	91 X X		102	64	65										
RØ	1 00000	100	U		115	50M	52M	56M	57								
R1	1 00000	001	Ü		116	49M	50	53M	54	59M	61						
R13	1 00000	10D	U		128	93											
R14	1 00000	00E	U		129	58M	61M	64	65	82M	83M	84					
R15	1 00000	0F	U		130	48U											
TABLE	8 00000	BC 000000	91 X X		100	61											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index)

46 46 52M 56M 57 90M 50 52M 53M 54 59M 61N 90M 1(1) 2(2) 3(3) 4(4) 5(5) 49M 46 46 46 46 46 46 46 46 46 90M 90M 90M 90M 5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C) 90M 90M 90M 90M 90M 90M 90M 13(D) 14(E) 15(F) 46 90 93N 46 58M 61M 64N 65N 82M 83M 84 90M 91B 42B 46 48U 90M

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

OGM USING Map PAGE 7
Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.22

48 USING Ordinary 00000001 00000000 00001000 15 000E0 86 IHISLOGM,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISLO PROCSTEP: X390

Primary input: lines 1 to 109 of SYSD.ALGOLFRT.ASM(IHISLO)

SYSLIB library records read: 161
SYSUT1 work file size: 12623 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8720 bytes
SYSLIN file records written: 7

TXA000I Return code 0, elapsed time 0.15 seconds.

INITOBJ - Uninitialized Areas Page No. 1 Csect Rel Addr(hex) Length(dec) IHISLOGM 0000E4 4

## IHISOR LEVEL V2.M01

(c) Copyright 1995-2010 Tachyon Software LLC

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHISOR)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00230
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt
                                                                                                  X390 3.1.04 2012/08/17 13.22
                                            Source Statement
                                                                                                                        00002001
                                        3
                                                    COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                         00003001
                                        4
                                                                                                                        00004001
00005001
                                        5
                                                    STATUS - LEVEL 2.1
                                                                                                                        00006001
                                        6
                                                    FUNCTION/OPERATION
                                                                                                                         00007001
                                           *
                                        8
                                                    CONVERT BINARY ARITHMETIC VALUE FROM SECOND PARAMETER
                                                                                                                        00008001
                                        9
                                                    TO ZONED DECIMAL FORM AND TRANSFER TO AN OUTPUT BUFFER
                                                                                                                        00009001
                                       10
                                                                                                                        00010001
                                                                                                                        00011001
                                       11
                                                    IHISOREL - FROM GENERATED OBJECT MODULE
                                       12
                                                                                                                         00012001
                                       13
                                                                     R1, PARMLIST
                                                                                                                         00013001
                                       14
                                                                BALR R14,R15
                                                                                                                        00014001
                                                                DATA PASSED BY NAME
                                       15
                                                                                                                        00015001
                                                    IHISORAR - FROM ARRAY MODULE IHIOAR
                                                                                                                        00016001
                                       16
                                                                     R7,DATA
                                                                                                                        00017001
                                       17
                                                                LA
                                                                BALR R14,R15
                                       18
                                                                                                                         00018001
                                       19
                                                                DATA PASSED BY NAME
                                                                                                                        9991 9991
                                       20
                                                                                                                         00020001
                                                                                                                        00021001
                                       21
                                                    INPUT - N/A
                                                                                                                        00022001
                                       22
                                       23
                                                    OUTPUT - N/A
                                                                                                                         00023001
                                       24
                                                                                                                        00024001
                                                                                                                        00025001
00026001
                                       25
                                                    EXTERNAL ROUTINES -
                                                    IHIIOR - EVALUATE DATA SET NUMBER
                                       26
                                                              OPEN DATA SET
                                                                                                                        00027001
                                       27
                                       28
                                                              CHANGE TO NEXT OUTPUT RECORD
                                                                                                                        00028001
                                       29
                                                    IHIFSA - CNVIR - CONVERT INTEGER TO REAL SHORT
                                                                                                                        00029001
                                       30
                                                                                                                         00030001
                                       31
                                                    EXIT - NORMAL - RELOAD REGISTERS AND RETURN VIA R14
                                                                                                                        00031001
                                       32
                                                                                                                        00032001
                                                    EXIT - ERROR - TOO LONG RECORD NO 38
                                                                                                                        00033001
                                       33
                                        34
                                                                     BRANCH TO IHIFSA
                                                                                                                         00034001
                                       35
                                                                        R13, IHIFSA
                                                                                                                        00035001
                                       36
                                                                     B FSAERR+XX*4(R13) XX ERROR NO
                                                                                                                        00036001
                                       37
                                                                                                                        00037001
                                                    TABLES - PTTAB - POWER OF TEN TABLE, SHORT PREC
                                                                                                                        00038001
                                       38
                                        39
                                                                                                                         00039001
                                       40
                                                                                                                         00040001
                                       41
                                                    LINKING TO IHISORAR DEVIATES FROM STANDARD
                                                                                                                        00041001
                                       42
                                                                                                                        00042001
000000
                       00000 00380
                                       43 IHISOREA CSECT
                                                                                                                        00043001
                                                                                                                         00044001
                                       44
                                                                                                                         00045001
                                       45
                                                    ENTRY IHISOREL
                                       46
                                                    ENTRY IHISORAR
                                                                                                                        00046001
                                                                                                                        00047001
00048001
                                       47
                      99999
                                                    USTNG DSTABLE R5
                  R:5
                                       48
                                                                                                                        00049001
                                       49
                       00000
                                       50
                                           FPR0
                                                    EOU
                                                                                     FLOATING-POINT NUMBER
                                                                                                                         00050001
                                        51
                                                                                                                        00051001
                                       52
                                                    R2
                                                                                     EXPONENT > 8
                                                                                                                        00052001
                                                                                                                        00053001
                                       53
                                                    R3
                                                                                     EXPONENT < 8
                                                                                     CHARACTER POINTER
                                       54
                                                    R4
                                                                                                                        00054001
                                                                                                                         00055001
                                        55
                                                    R7
                                                                                     -> SOURCE
                                        56
                                                    R8
                                                                                     BLANK COUNTER
                                                                                                                         00056001
                                       57
                                                                                     DECIMAL EXPONENT
                                                                                                                         00057001
                                                    R9
                                       58
                                                    R10
                                                                                     -> POWER TEN TABLE
                                                                                                                        00058001
                                       59
                                                                                                                        00059001
                                                    DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                        00060001
                                       60
                                       61
                                                                                                                         00061001
                       00000
                                       62 CI
                                                                          DISPLACEMENT FOR - IHIIORCI
                                                                                                                         00062001
                       00004
                                       63 CL
                                                    EQU
                                                           4
                                                                                               IHIIORCL
                                                                                                                        00063001
                       00008
                                       64 EV
                                                    EOU
                                                           8
                                                                                               IHIIOREV
                                                                                                                        00064001
                                       65 NX
                                                                                               IHIIORNX
                                                                                                                        00065001
                       0000C
                                                           12
                                                    EOU
                       00010
                                       66 OP
                                                    EQU
                                                                                               IHIIOROP
                                                                                                                         00066001
                                                           16
                       00014
                                        67 OQ
                                                                                                                         00067001
                                                                                               IHIIOROQ
                                       68
                                                                                                                        00068001
                                       69 IHISORAR SAVE
                                                           (14,12),, 'IHISORAR LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                        00069001
000000 47F0 F026
                              00026
                                                                                               BRANCH AROUND ID
                                       70+IHISORAR B
                                                           38(0.15)
                                                                                                                        01-SAVE
                                                                                                LENGTH OF IDENTIFIER
000004 21
                                       71+
                                                    DC
                                                           AL1(33)
                                                                                                                        01-SAVE
000005 C9C8C9E2D6D9C1D9
                                                           CL32'IHISORAR LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                        01-SAVE
                                       72+
                                                    DC
                                                                                                IDENTIFIER
000025 F2
                                        73+
                                                                                                                        01-SAVE
                                                    DC
000026 90EC D00C
                              aaaac
                                       74+
                                                    STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                        01-SAVE
                                                                                                                        00070001
                                       75
                                                    USING IHISORAR, R15
                  R:F 00000
                                                                                                                        00071001
                                       76
00002A 18BD
                                       77
                                                                                     CHAIN SAVE AREAS
                                                                                                                        00072001
                                                    LR
                                                           R11.R13
00002C 41D0 F338
                              00338
                                        78
                                                    LA
                                                           R13, SAVEAREA
                                                                                                                         00073001
000030 50B0 D004
                              00004
                                       79
                                                    ST
                                                           R11,4(,R13)
                                                                                                                         00074001
                              99998
                                                                                                                        00075001
000034 50D0 B008
                                       80
                                                    ST
                                                           R13.8(,R11)
000038 41B0 F07C
                              0007C
                                                           R11 COMMON
                                                                                                                        00076001
                                       81
                                                    LA
                                                    DROP
                                                                                                                        00077001
                                       82
                                                           R15
                  R:B
                                                    USING COMMON, R11
                                       83
                                                                                                                         00078001
00003C 47F0 B00E
                              0008A
                                                           SOUFLPA
                                                                                                                         00079001
                                       84
                                       85 *
                                                                                                                        00080001
                                       86
                                                    DROP
                                                           R11
                                                                                                                        00081001
                                       87
                                                                                                                        00082001
                                                           (14,12),, 'IHISOREL LEVEL 2.1 &SYSDATE &SYSTIME'
                                       88 IHISOREL SAVE
                                                                                                                         00083001
000040 47F0 F026
                              00026
                                       89+IHISOREL B
                                                                                                BRANCH AROUND ID
000044 21
                                       90+
                                                    DC
                                                                                                LENGTH OF IDENTIFIER
                                                                                                                        01-SAVE
                                                           CL32'IHISOREL LEVEL 2.1 08/17/12 13.2' IDENTIFIER CL1'2' IDENTIFIER
                                                                                                                        01-SAVE
000045 C9C8C9E2D6D9C5D3
                                       91+
                                                    DC
                                                    DC
000065 F2
                                       92+
000066 90EC D00C
                              0000C
                                       93+
                                                    STM
                                                           14,12,12(13)
                                                                                                SAVE REGISTERS
                                                                                                                         00084001
                                       94
                  R:F 00040
                                       95
                                                    USING IHISOREL, R15
                                                                                                                         00085001
00006A 18CD
                                       96
                                                    LR
                                                           R12,R13
                                                                                     R12 -> FSA STORAGE AREA TO FSA
                                                                                                                        00086001
00006C 41D0 F2F8
                              00338
                                       97
                                                    LA
                                                           R13. SAVEAREA
                                                                                                                         00087001
```

X390 3.1.04 2012/08/17 13.22 Loc Object Code Addr1 Addr2 Stmt Source Statement 000070 50C0 D004 00004 98 R12,4(,R13) 00088001 000074 50D0 C008 00008 99 ST R13,8(,R12) 00089001 000078 41B0 F03C 0007C 100 ΙΔ R11, COMMON 00090001 DROP 00091001 101 R15 R:B 0007C 102 USING COMMON, R11 00092001 103 00093001 104 \* EVALUATE DATASET NUMBER (EVDSN) 00094001 105 \* 00095001 00007C 58F0 C11C 0011C 106 COMMON Ĺ R15, IORLST(,R12) 00096001 R15, EV(, R15) 00097001 000080 58F0 F008 00008 107 000084 05EF BALR R14, R15 00098001 108 000086 5870 1004 00004 109 SOUFLP R7,4(,R1) R7 -> SOURCE 00099001 00008A 9630 501A ααα1Δ 110 SOUFLPA OI DSF,DS2+DS3 DS2, DS3 = 100100001 00008F 94FF 501A 9991A 111 NT DSF . 255-DS7 DS7 = 099191991 00102001 000092 1277 LTR R7, R7 112 000B2 00103001 000094 4720 B036 ВР 113 REAL1 114 00104001 115 CALL CONVERSION ROUTINE (LOADED IN FSA) 00105001 116 00106001 00107001 000098 90ED D008 00008 STM R14.R13.8(R13) SAVE REGS 117 R2 -> SAVEAREA 00108001 00009C 182D LR 118 R2, R13 00009E 58E0 7000 00000 119 14.0(.R7) INTEGER INTO R14 00109001 0000A2 417C 0120 00120 120 LA R7, ACNVIRD(R12) 00110001 0000A6 18DC 121 LR R13, R12 R13 -> FSA 00111001 CALL CONVERSION ROUTINE 000008 0587 122 **BAIR** R8. R7 00112001 R14,R13,8(R2) 0000AA 98ED 2008 00008 RESTORE REGS LM 00113001 123 0000AE 47F0 B03A 000B6 REAL1A NUMBER IN FPRØ AFTER CONVERSION 00114001 124 В 125 00115001 0000B2 7800 7000 00000 126 REAL1 FPR0,0(,R7) NUMBER IN FPR0 00116001 0000B6 9180 501A 0001A 127 REAL1A TM DSF DS0 DATASET OPEN ? 00117001 0000BA 4710 B050 000CC 128 BO NOCLO YES, BRANCH DS6 = 1 OPEN FOR OUTPUT 00118001 0000BE 9602 501A 0001A ΟI DSF DS6 00119001 129 0000C2 58F0 C11C 0011C 130 R15, IORLST(,R12) 00120001 0000C6 58F0 F010 00010 131 R15,OP(,R15) 00121001 132 0000CA 05EF BALR R14, R15 CALL OPEN ROUTINE 00122001 9999CC 5849 5994 99994 133 NOCLO т R4.R CHARACTER POINTER 00123001 0000D0 4180 400D 0000D 00124001 R8,13(,R4) 134 LA 0000D4 5980 5008 00008 135 BUFFER CAN ACCEPT 13 DIGITS ? 00125001 R8.RE 0000D8 47D0 B094 NONEXREC 00126001 00110 136 BNH 0000DC 5880 5008 99998 137 R8.RE 00127001 0000E0 1B84 138 SR R8.R4 00128001 NO. REQUEST NEW RECORD 0000E2 47D0 B076 000F2 139 BNP CALLNXT 00129001 0000E6 9240 4000 00000 0(R4),C' R4,1(,R4) BLANK IN BUFFER 140 BLANKS MVI 00130001 00001 0000EA 4140 4001 141 LA 00131001 0000EE 4680 B06A 000E6 R8, BLANKS 00132001 142 BCT 0000F2 58F0 C11C 0011C 143 CALLNXT R15, IORLST(,R12) 00133001 00134001 aggac 144 R15.NX(,R15) 0000FA 05EF R14, R15 GET NEXT RECORD 00135001 145 **BALR** 146 0000FC 5840 5004 00004 R4.R 00136001 000100 4180 400D 0000D 147 R8,13(,R4) 00137001 000104 5980 5008 00008 148 R8.RE 00138001 00139001 000108 4720 B204 00280 149 BH ORSERR TOO SHORT RECORD LENGTH 00010C 9610 501A 0001A DSF DS3 OI 00140001 150 000110 4190 0007 00007 151 NONEXREC LA R9,7 00141001 000114 3200 LTER FPR0, FPR0 NUMBER ZERO ? 00142001 152 000116 4770 B0B0 0012C 153 NOT0 NO, BRANCH 00143001 BNZ 0(R4),C'' 00011A 9240 4000 aaaaa 154 MVI NUMBER IS ZERO 00144001 00011F D20B 4001 4000 99991 99999 155 MVC 1(12,R4),0(R4) 00145001 00146001 000124 92F0 4001 00001 156 MVI 1(R4),C'0 000128 47F0 B1A8 00224 В TERMIN 00147001 157 00148001 158 \* 00012C 924E 4000 00000 159 NOT0 MVI 0(R4),C'+' ZONE IS INSERTED 00149001 000130 4720 B0BE 0013A 160 BP **EXPLOOP** 00150001 0(R4),C'-' 000134 9260 4000 00000 MVI 00151001 161 000138 3300 FPRØ, FPRØ 00152001 162 **LCER** 00013A 7000 B230 002AC 163 EXPLOOP FPR0, CHAR 00153001 00013E 1B33 164 R3, R3 00154001 SR 000140 4330 B230 000144 9200 B22D 002AC 165 TC R3, CHAR 00155001 002A9 00156001 166 MVI SE.0 000148 5B30 B210 0028C R3, KF70 00157001 167 S 00014C 4720 B0DE 0015A 168 ВР **EXPLOAA** 00158001 000150 4780 B14C EXPONENT = 78 00159001 001C8 169 ΒZ EXP0 SE,X'80' 000154 9280 B22D 99249 170 MVI 00160001 000158 1333 171 LCR R3.R3 00161001 00015A 4C30 B214 172 EXPLOAA 00290 R3, LOG2 00162001 MH 00015E 4A30 B216 00292 R3, ROUND 00163001 173 ΑН 000162 8830 000E 0000E 00164001 174 SRL R3,14 000166 5930 B210 0028C 175 R3,KF70 00165001 00166001 00016A 47D0 B0F6 00172 176 **BNH EXPLORE** 00016E 5830 B210 EXPONENT = 70 0028C 177 R3, KF70 00167001 000172 9180 B22D 00168001 002A9 178 EXPLOBB SE, X'80 TM 000176 41A0 B238 R10, PTTAB-4 002B4 LA R10 -> PTTAB-4 00169001 179 00017A 4780 B108 **EXPLOCC** 00170001 00184 180 ΒZ 00017E 1B93 181 SR R9. R3 00171001 000180 47F0 B10E 0018A EXPLODD 182 В 00172001 000184 41A0 A040 183 EXPLOCC 00040 LA R10.64(,R10) 00173001 000188 1A93 184 AR R9. R3 00174001 00018A 1823 185 EXPLODD LR R2, R3 00175001 00018C 1B33 186 SR R3,R3 CLEAR REGISTER 00176001 00018E 8E20 0003 000192 8B20 0003 ааааз 187 SRDA R2,3 00177001 00178001 00003 188 SLA R2,3 000196 4780 B13A 001B6 189 TESTEXP1 BZ EXP1LS8 00179001 00019A 5920 B20C 00288 190 R2, KF72 00180001 00019E 4740 B132 001AE 191 **EXPONENT NEGATIVE** 00181001 BL EXP1LS8A 0001A2 7C00 A040 00040 192 ME FPR0,64(,R10) 00182001 0001A6 5B20 B20C 00288 193 S R2, KF72 00183001

Loc Object Code	Addr1 Addr2	2 Stmt	Source	State	ment	X390 3.1.04 2012/08	/17 13.22
0001AA 47F0 B11A	00196		¥	В	TESTEXP1		00184001
0001AE 8820 0001	00001	195 l 196	EXP1LS8A	SRL	R2,1		00185001 00186001
0001B2 7C02 A01C	00010	197		ME	FPR0,28(R2,R10)		00187001
0001B6 8830 001B 0001BA 1233	0001	3 198 199	EXP1LS8	SRL LTR	R3, 27 R3, R3	EXPONENT MULTIPLIED FOUR	00188001 00189001
0001BC 4780 B0BE	0013			BZ	EXPLOOP		00190001
0001C0 7C03 A000 0001C4 47F0 B0BE	00000 0013			ME B	FPR0,0(R3,R10) EXPLOOP		00191001 00192001
0001C4 47F0 B0BE	00137	203	*	D	EXPLOOP		00192001
0001C8 7900 B218	00294		EXP0	CE	FPR0, TENP7	NUMBER > 10**7 ?	00194001
0001CC 47B0 B1EA 0001D0 9200 B230	00266 002AC		EXP0AA	BNL MVI	DIG8 CHAR,0	YES, BRANCH	00195001 00196001
0001D4 5830 B230	002A			L	R3, CHAR	THE CER CONFERENCE	00197001
0001D8 4E30 B234 0001DC F384 4001 B237	002B0			CVD UNPK	R3,BUFF 1(9,R4),BUFF+3(5)	INTEGER CONVERTED	00198001 00199001
0001E2 96F0 4009	00009	210		OI	9(R4),X'F0'		00200001
0001E6 95F0 4002 0001EA 4770 B17A	00002 001F6	211 5 212		CLI BNE	2(R4),C'0' TRANSAA	LEADING ZERO ?	00201001 00202001
0001EE 0690		213		BCTR	R9,0		00203001
0001F0 D206 4002 4003 0001F6 D200 4001 4002			TRANSAA	MVC MVC	2(7,R4),3(R4) 1(1,R4),2(R4)		00204001 00205001
0001FC 924B 4002	00002	216		MVI	2(R4),C'.'	DECIMAL POINT INSERTED	00206001
000200 927D 4009 000204 4E90 B234	00009 002B6	217 218	DECEXP	MVI CVD	9(R4),C'''' R9,BUFF	APOSTROPHE INSERTED	00207001 00208001
000208 F321 400A B23A			DECEM	UNPK	10(3,R4),BUFF+6(2)		00209001
00020E 1299 000210 47B0 B1A0	00210	220 221		LTR BNM	R9, R9 DECEXPAA		00210001 00211001
000214 9260 400A	0000A	222		MVI	10(R4),C'-'	EXPONENT SIGN IS NEGATIVE	00211001
000218 47F0 B1A4	00226	223 224	*	В	DECEXPBB		00213001 00214001
00021C 924E 400A	0000A		DECEXPAA	MVI	10(R4),C'+'		00214001
000220 96F0 400C 000224 4140 400D	0000C		DECEXPBB TERMIN	OI LA	12(R4),X'F0' R4,13(,R4)	ZONE INSERTED EXPONENT	00216001 00217001
000224 4140 400D	00001	228	TERMIN	SR	R8, R8		00217001
00022A 4380 5018 00022E 5940 5008	00018 00008		TERMINAA	IC	R8,K R4,RE		00219001 00220001
000232 4780 B1DC	00258		TERMINAA	BE	RECEND		00221001
000236 9240 4000 00023A 4140 4001	00000	232 L 233		MVI LA	0(R4),C'' R4,1(,R4)		00222001 00223001
00023E 4680 B1B2	00221			BCT	R8, TERMINAA		00224001
000242 5940 5008 000246 4780 B1DC	00008 00258			C BE	R4, RE RECEND		00225001 00226001
00024A 5040 5004	00004			ST	R4, R		00227001
00024E 58D0 B2C0	00330	238 239	TERMINBB *	L	R13, SAVEAREA+4		00228001 00229001
		240			N (14,12)	RESTORE CALLERS REGS AND RETURN	00230001
000252 98EC D00C 000256 07FE	00000	241- 242-		LM BR	14,12,12(13) 14	RESTORE THE REGISTERS RETURN	01-RETUR 01-RETUR
		243	*				00231001
000258 58F0 C11C 00025C 58F0 F00C	00110 00000		RECEND	L L	R15, IORLST(, R12) R15, NX(, R15)		00232001 00233001
000260 05EF		246		BALR	R14,R15		00234001
000262 47F0 B1D2	00241	247 248	*	В	TERMINBB		00235001 00236001
000266 7E00 B21C	00298	3 249	DIG8	AU	FPRØ, FIVE		00237001
00026A 7000 B230 00026E 7900 B220	002A0			STE CE	FPRØ, CHAR FPRØ, TWOP24B		00238001 00239001
000272 4740 B154	001D			BL	EXP0AA		00240001
000276 D208 4001 B224 00027C 47F0 B188	00204			MVC B	1(9,R4),TWOP24 DECEXP	NUMBER GE 10**7	00241001 00242001
000280 18DC		255		LD	12 013		00243001 00244001
000280 18DC 000282 47FC 0264	00264		ORSERR	LR B	13,R12 FSAERR+38*4(R12)		00245001
	00120	258	* ACNVIRD	EQU	X'120'		00246001 00247001
	JU120	260	*				00248001
		261 262		INTER	NAL CONSTANTS AND STORAGE	E	00249001 00250001
000286 0000							
000288 00000048 00028C 00000046			KF72 KF70	DC DC	F'72' F'70'		00251001 00252001
000290 4D10		265	LOG2	DC	H'19728'		00253001
000292 2000 000294 46989680			ROUND TENP7	DC DC	H'8192' X'46989680'		00254001 00255001
000298 46000005		268	FIVE	DC	X'46000005'		00256001
00029C 47100000 0002A0 F14BF6F7F7F7F2	F2		TWOP24B TWOP24	DC DC	X'47100000' C'1.677722'''		00257001 00258001
0002A9 00		271		DC	X'00'		00259001
0002AA 0000 0002AC 00000000		272	CHAR	DC	E'0'		00260001
0002B0 00000000000000000	90	273	BUFF	DC	D'0'		00261001
		274 275		POWER	OF TEN TABLE SHORT PREC	ISION	00262001 00263001
0002B8 41A00000		276 277		DC	FF1'1'		00264001
0002B8 41A00000 0002BC 42640000		277 278	PTTAB	DC DC	EE1'1' EE2'1'		00265001 00266001
0002C0 433E8000 0002C4 44271000		279 280		DC DC	EE3'1' EE4'1'		00267001
0002C4 44271000 0002C8 45186A00		280 281		DC	EE5'1'		00268001 00269001
0002CC 45F42400 0002D0 46989680		282 283		DC DC	EE6'1' EE7'1'		00270001 00271001
0002D4 475F5E10		284		DC	EE8'1'		00272001
0002D8 4E2386F2 0002DC 54D3C21C		285 286		DC DC	EE16'1' EE24'1'		00273001 00274001
0002E0 5B4EE2D7		287		DC	EE32'1'		00275001

Loc	Object Code	Addr1 A	ddr2	Stmt Source	State	ement		X390 3.1.04 2012/08	3/17 13.22
	621D632A			288	DC	EE40'1'			00276001
	68AF298D			289	DC	EE48'1'			00277001
	6F4140C8			290	DC	EE56'1'			00278001
	76184F04 7C90E410			291 292	DC DC	EE64'1' EE72'1'			00279001 00280001
	4019999A			293	DC	EE-1'1'			00280001
	3F28F5C3			294	DC	EE-2'1'			00282001
	3E418937			295	DC	EE-3'1'			00283001
	3D68DB8C 3CA7C5AC			296 297	DC DC	EE-4'1' EE-5'1'			00284001 00285001
	3C10C6F8			298	DC	EE-6'1'			00286001
	3B1AD7F3			299	DC	EE-7'1'			00287001
	3A2AF31E 33734ACA			300 301	DC DC	EE-8'1' EE-16'1'			00288001 00289001
	2D1357C3			302	DC	EE-24'1'			00289001
	2633EC48			303	DC	EE-32'1'			00291001
	1F8B6131			304	DC	EE-40'1'			00292001
	19176250 123EC561			305 306	DC DC	EE-48'1' EE-56'1'			00293001 00294001
	0BA87FEA			307	DC	EE-64'1'			00295001
000334	051C4501			308	DC	EE-72'1'			00296001
000338	00000000000000	99		309 * 310 SAVEAREA	DC	18F'0'			00297001 00298001
000558	000000000000000000000000000000000000000	00		311 *	DC	101 0			00299001
000380				312	LTORG	i			00300001
				313 *	DCTAR	NE DEFECT V	/FC		00301001
000000		00000 0	0024	314 315+DSTABLE	DSTAB	BLE DSECT=Y	ES		00302001 01-DSTAB
				316+*					01-DSTAB
	00000000			317+ADCB	DC	F'0'		-> DCB	01-DSTAB
	00000000 00000000			318+R 319+RE	DC DC	F'0' F'0'		CHARACTER POINTER	01-DSTAB 01-DSTAB
	00000000			320+NBB	DC	F'0'			01-DSTAB
	00000000			321+BB	DC	F'0'			01-DSTAB
000014 000016				322+S 323+P	DC DC	H'1' H'80'		RECORD POINTER RECORD LENGTH	01-DSTAB 01-DSTAB
000018				324+K	DC	X'02'		NUMBER OF BLANK DELIM CHARS	01-DSTAB
000019				325+Q	DC	X'00'		NO OF RECORDS PER SECTION	01-DSTAB
00001A	0000			326+DSF 327+*	DC	Н'00'		DATASET FLAGS	01-DSTAB
				328+*	DATAS	SET FLAGS -	DSF		01-DSTAB 01-DSTAB
				329+*					01-DSTAB
		00080		330+DS0	EQU	X'80'		DATASET OPEN	01-DSTAB
		00040 00020		331+DS1 332+DS2	EQU EQU	X'40' X'20'		LAST I/O OUTPUT	01-DSTAB 01-DSTAB
		00010		333+DS3	EQU	X'10'		2431 1/0 001101	01-DSTAB
		80000		334+DS4	EQU	X'08'			01-DSTAB
		00004 00002		335+DS5 336+DS6	EQU EQU	X'04' X'02'		OPEN FOR OUTPUT	01-DSTAB 01-DSTAB
		00001		337+DS7	EQU	X'01'		END OF FILE	01-DSTAB
				338+*	-				01-DSTAB
				339+*	DATAS	SET FLAGS -	DSF+1		01-DSTAB
		00080		340+* 341+DS8	EOU	X'80'		END OF DATA	01-DSTAB 01-DSTAB
		00040		342+DS9	EQU	X'40'			01-DSTAB
		00020		343+DS10	EQU	X'20'		OPENED BY SYSACT 12	01-DSTAB
		00010 00008		344+DS11 345+DSE0D	EQU EQU	X'10' X'08'		INDICATE IHIERR-ROUT	01-DSTAB 01-DSTAB
		00004		346+DSIOERR	_	X'04'		I/O ERROR	01-DSTAB
		00002		347+DS14	EQU	X'02'		DATASET OPENED	01-DSTAB
		00001		348+DS15 349+*	EQU	X'01'		CLOSE FROM IHIERR	01-DSTAB 01-DSTAB
00001C	00000000			350+NOTEADR	DC	F'0'			01-DSTAB
000020				351+BL	DC	H'0'		LRECL+ TWO ARB	01-DSTAB
000022	0000			352+ 353+*	DC	H'0'			01-DSTAB 01-DSTAB
		00024		354+DSTABLEL	EQU	*-DSTABLE		L'DSTABLE ENTRY	01-DSTAB
				355+*					01-DSTAB
000000		00000 0	0120	356 * 357 FAS	DSECT	г			00303001 00304001
000000		00000 0	0120	358 *	DOLCI				00305001
				359	COPY	FSAREA			00306001
				360=* 361=*	COMPC	MENT TD -	360S-LM-532 ALG	OL E LTRPADY	00001001 00002001
				362=*	COMPC	JALIAI ID -	3003-LN-332 ALG	IOL I LIBRARI	00003001
				363=*	STATU	JS - LEVEL	2.1		00004001
				364=*	*****	*****	**********	**********	00005001
				366=*					00007001
				367=*	COMMO	ON DATA ARE	Α		00008001
				368=* 369-*	ECARE	- Λ			00009001
				369=* 370=*	FSARE	A			00010001 00011001
				371=*****	*****	******	********	*********	
				372=*	DATA	THAT TO TH	IMEDIATELY 1005	CIRLE TO ALL	00013001
				373=* 374=*			IMEDIATELY ACCES THE EXECUTION	SIDLE IV ALL	00014001 00015001
				375=*	.5501				00015001
				376=*				FOR THE LIBRARY	00017001
				377=* 378=*	SUBRO	OUTINES) BY	K12		00018001 00019001
		00000		379=FSAREA	EQU	*			00013001
				380=*					00021001
				381=* 382=*	SAVE	AREAS			00022001 00023001
000000				383=	DS	18F		STANDARD SAVE AREA	00023001

D-Loc	Object Code	Addr1	Addr2	Stmt Source	State	ement	X390 3.1.04 2012/08/	17 13.22
	,	00048		384=ASAVE	EQU	*-FSAREA		00025001
000048		00040		385=	DS	18F	CERTAIN SUBROUTINES	00026001
				386=* 387=*	MISC	ELLANEOUS W	NORK AREAS AND CONSTANTS	00027001 00028001
		00090		388=* 389=FCTVALST		*-FSAREA	TEMPORARY STORAGE FOR	00029001
000090		00098		390= 391=ASTLOC	DS EQU	D *-FSAREA		00031001 00032001
000098	00000090	0009C		392= 393=BRRST	DC EQU	A(FSAREA+ *-FSAREA		00033001 00034001
00009C		0009C		394=HW 395=	EQU DS	BRRST F	TEMPORARY HALFWORD STORAGE	00035001 00036001
00003C		000A0		396=PROLREG	EQU DS	*-FSAREA	STORAGE FOR PBT AND LAT WHEN	00037001
ODOOAO				397= 398=*		2A		00038001 00039001
				399=* 400=*				00040001 00041001
0000A8 0000A8	00			401= 402=	DS DC	0H X <b>'00'</b>		00042001 00043001
0000A9	00	000A9		403=PROLPBN 404=	EQU DC	*-FSAREA X'00'		00044001 00045001
0000AA		000AA		405=EIGHT 406=	EQU DC	*-FSAREA H'8'	CONST FOR REDUCING RAS	00046001 00047001
	0000			407=*				00048001
0000AC		000AC		408= 409=ADSTAB	DS EQU	0F *-FSAREA	ADDR OF DSTABLE	00049001 00050001
0000AC		000В0		410= 411=ANOTTAB	DS EQU	A *-FSAREA		00051001 00052001
0000B0				412= 413=*	DS	Α		00053001 00054001
		000B4 000B4		414=IHIFSAST 415=PGOPSW	EQU EQU	* *-FSAREA		00055001 00056001
0000B4		000BC		416= 417=FSAPICA	DS EQU	2F *-FSAREA		00057001 00058001
0000BC	00000000	000C0		418= 419=SCRCS	DC EQU	F'0' *-FSAREA		00059001 00060001
0000C0				420=	DS	Н		00061001
		000C2 000C2		421=DTSW 422=OPTSW	EQU	*-FSAREA DTSW		00062001 00063001
0000C2	00	000C3		423= 424=FSAERCOD	DC EQU	X'00' *-FSAREA		00064001 00065001
0000C3				425= 426=*	DS	С		00066001 00067001
				427=* 428=*	RETU	RN ADDRESS		00068001 00069001
0000C4		000C4		429= 430=IHIFSARS	DS FOLL	0F *		00070001 00071001
0000C4		000C4		431=RASSTART 432=		*-FSAREA F	ADDR OF FIRST ENTRY IN RAS-8	00072001
		000C8		433=RASPT	EQU	*-FSAREA	RAS POINTER FROM TOP	00073001 00074001
0000C8		000CC		434= 435=RASEND	DS EQU	F *-FSAREA	ADDR OF LAST ENTRY IN RAS+8	00075001 00076001
0000CC		000D0		436= 437=RASPB	DS EQU	F *-FSAREA		00077001 00078001
0000D0				438= 439=*	DS	F		00079001 00080001
				440=* 441=*	LIST	OF BRANCH		00081001 00082001
0000D4		000D4		442=BRLIST 443=CAP1	DS EQU	0F *-FSAREA		00083001 00084001
0000D4	4700 0000	000D8	00000	444= 445=CAP2	NOP EQU	0 *-FSAREA		00085001 00086001
0000D8	4700 0000	000DC	00000	446= 447=PROLOGP	NOP EQU	0 *-FSAREA		00087001 00088001
000000	4700 0000	000DC		448=PROLOGFP	EQU	PROLOGP		00089001
	4700 0000	000E0	00000	449= 450=PROLOG	NOP EQU	*-FSAREA	PROLOGUE PROGRAM USUAL ENTRY	00090001
0000E0	4700 0000	000E4	00000	451= 452=RETPROG	NOP EQU	0 *-FSAREA		00092001 00093001
0000E4	4700 0000	000E8	00000	453= 454=EPILOGP	NOP EQU	0 *-FSAREA	EPILOGUE PROGRAM, PROCEDURE ENTRY	00094001 00095001
0000E8	4700 0000	000EC	00000	455= 456=EPILOGB	NOP EQU	0 *-FSAREA	EPILOGE PROGRAM, BETA-BLOCK ENTRY	00096001 00097001
0000EC	4700 0000	000F0	00000	457= 458=EPILPR3	NOP EQU	0 *-FSAREA		00098001 00099001
0000F0	4700 0000	000F4	00000	459= 460=CSWE1	NOP EQU	0 *-FSAREA		00100001 00101001
0000F4	4700 0000		00000	461=	NOP	0		00102001
0000F8	4700 0000	000F8	00000	462=CSWE2 463=	NOP	*-FSAREA		00103001 00104001
0000FC	4700 0000	000FC	00000	464=LOADPP 465=	EQU NOP	*-FSAREA 0		00105001 00106001
000100	D200 0000 0000	00100 00000	00000	466=TRACE 467=	EQU MVC	*-FSAREA 0(0),0		00107001 00108001
	4700 0000 4700 0000		00000 00000	468= 469=	NOP NOP	0		00109001 00110001
	4700 0000	0010E	00000	470=TERMNTE 471=	EQU NOP	*-FSAREA	NORMAL TERMINATION EXIT	00111001 00112001
000101		00112		472=BCR 473=	EQU	*-FSAREA		00113001
		00114	00000	474=GETMSTO	BCR EQU	0,0 *-FSAREA		00114001 00115001
114	4700 0000		00000	475= 476=*	NOP	0		00116001 00117001
000118	4700 0000	00118	00000	477=VALUCALL 478=	NOP	*-FSAREA 0		00118001 00119001
		0011C		479=IORLST	EQU	*-FSAREA		00120001

D-Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.22 00011C 4700 0000 00000 480= NOP 00121001 481=\* 00122001 482=FSAERR 483=\* 001CC EQU X'1CC' DISPL FOR ERROR LIST 00123001 00124001 484=\* DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 485=\* 00126001 486=0UT0FB 0020C EQU FSAERR+4\*16 00127001 487=NUMBIND 488=ARRAYBD FSAERR+4\*19 00218 EQU 00128001 FSAERR+4\*15 00208 00129001 EQU 0026C 489=ERROR40 FSAERR+4\*40 00130001 EOU 00224 490=0ERR22 EQU FSAERR+4\*22 00131001 00210 491=ENDLESL EQU FSAERR+4\*17 00132001 00220 492=0ERR21 EQU FSAERR+4\*21 00133001 00134001 493=\* 494 \* 00307001 495 \* REGISTER EQUATES 00308001 496 \* 00309001 IEZREGS 00310001 497 EQU EQU 00000 498+R0 01-IEZRE 01-IEZRE 0 00001 499+R1 00002 500+R2 EQU 2 3 4 5 6 7 8 01-IEZRE 00003 501+R3 EQU 01-IEZRE 00004 502+R4 EQU 01-IEZRE 503+R5 504+R6 00005 EQU 01-IEZRE EQU EQU 00006 01-IEZRE 00007 505+R7 01-IEZRE 00008 506+R8 EQU 01-IEZRE 00009 507+R9 EQU 01-IEZRE 0000A 508+R10 EQU 10 01-IEZRE 0000B 509+R11 EQU 11 01-IEZRE 0000C 510+R12 EQU 12 01-IEZRE EQU 13 01-IEZRE 0000D 511+R13 0000E 512+R14 EQU 14 01-IEZRE 0000F 513+R15 EQU 15 01-IEZRE 514 \* 515 00311001 END 00312001

Symbol	Length	Value	Id	Type Asm	Program	Defn	Refe	rence	S				X390	3.1.	04 2	012/0	8/17	13.22
ACNVIRD	1	00000120		U		259	120											
BLANKS	4	000000E6	00000001	I		140	142B											
BRRST		0000009C		U		393	394											
BUFF		000002B0				273	208M		218M	219								
CALLNXT CHAR		000000F2 000002AC				143 272	139B 163M		206M	207	250M							
COMMON		000002AC				106	81		100		23011							
DECEXP		00000204				218	254B											
DECEXPAA	4	0000021C	00000001	I		225	221B											
DECEXPBB		00000220				226	223B											
DIG8		00000266				249	205B		127	1204	1504							
DSF DSTABLE		0000001A 00000000				326 315		354	127	12914	150M							
DS0		00000000		U		330	127	JJ-										
DS2		00000020		Ü			110											
DS3	1	00000010		U		333	110	150										
DS6		00000002		U		336	129											
DS7 DTSW		00000001		U U		337 421	111 422											
EV		000000C2 00000008		U		64	107											
EXPLOAA		00000000 0000015A	00000001			172	168B											
EXPLOBB		00000172				178	176B											
EXPLOCC	4	00000184	00000001	I		183	180B											
EXPLODD		0000018A				185	182B											
EXPLOOP		0000013A				163		200B	202B									
EXP0 EXP0AA		000001C8 000001D0				204 206	169B 252B											
EXP1LS8		000001B6				198	189B											
EXP1LS8A		000001AE				196	191B											
FCTVALST	1	00000090		U		389	392											
FIVE		00000298	00000001			268	249											
FPR0		00000000		U		50			162M			197M			249M	250	251	
FSAERR FSAREA		000001CC 00000000		U		482 379	257B 384	486 389	487 391	488 392	489 393	490 396	491 403	492 405	409	411	415	417
FSAREA	1	00000000	FFFFFF	U		3/3	419	421	424	431	433	435	437	443	445	447	450	452
							454	456	458	460	462	464	466	470		474	477	479
IHISORAR	4	00000000	00000001	I		70	46	76U										
IHISOREL		00000040	00000001			89	45	95U										
IORLST		0000011C		U		479	106	130	143	244								
K KE70		00000018				324	229	175	177									
KF70 KF72		0000028C 00000288				264 263	167 190	175 193	177									
LOG2		00000200				265	172	100										
NOCLO		00000250				133	128B											
NONEXREC	4	00000110	00000001	I		151	136B											
NOT0		0000012C	00000001			159	153B											
NX		0000000C		U		65	144	245										
OPCERR		00000010 00000280	00000001	U I		66 256	131 149B											
ORSERR PROLOGP		00000280 000000DC	00000001	U		447	448											
PTTAB		000002B8	00000001			277	179											
R	4	00000004	FFFFFFF	FF		318	133	146	237M									
RE		00000008				319	135		148	230	235							
REAL1		000000B2				126	113B											
REAL1A RECEND		000000B6 00000258				244	124B	236B										
ROUND		00000238				266	173	2300										
R1		00000001	0000000	U		499	109											
R10	1	000000A		U		508	179M	183M	192									
R11		0000000B		U		509		79	80		83U							
R12 R13		0000000C		U U		510 511	96M 77	98 70M	99 79	106 80	120 96		130 98					123M
K13	1	00000000		U		311	238M		/5	00	90	9711	90	22	11/	110	12111	12311
R14	1	0000000E		U		512	108M		123M	132M	145M	246M						
R15	1	0000000F		U		513	76U	82D	95U	101D	106M	107M	108B	130M	131M	132B	143M	144M
									245M									
R2		00000002		U		500			185M							404	404	405
R3	1	00000003		U		501	164M		16/M 199M				1/4M	1/5	1//M	181	184	185
R4	1	00000004		U		502	133M						1/17	15/	155	156	159	161
114	-	00000004		U		302			211									
									233M									
R5		00000005		U		503	48U											
R7		00000007		U		505			119									
R8		00000008		U		506			135				147M	148	228M	229M	234M	
R9		00000009		U		507			184M	213M	218	220M						
SAVEAREA SE		00000338 000002A9				310 271	78 166M	9/ 170M	238 178									
SOUFLPA		000002A9				110	84B		1/0									
TENP7		00000294					204											
TERMIN	4	00000224	00000001	I		227	157B											
TERMINAA		0000022E					234B											
TERMINBB		0000024E					247B											
TESTEXP1		00000196					194B 212B											
TRANSAA TWOP24		000001F6 000002A0					212B 253											
TWOP 24		000002A0					251											

Register References (M=modified, B=branch, U=USING, D=DROP, N=index) X390 3.1.04 2012/08/17 13.22 93 117 123M 241M 93 109 117 123M 241M 1(1) 93 117 118M 123M 185M 187M 188M 190 193M 196M 197N 241M 2(2) 3(3) 74 93 117 123M 164M 165M 167M 171M 172M 173M 174M 175 177M 181 184 185 186M 187M 198M 199M 201N 207M 208 241M 74 93 117 123M 133M 134 138 140 141M 146M 147 154 155 156 159 161 209 210 211 214 215 216 217 219 222 225 226 227M 230 232 233M 235 237 241M 253 48U 74 93 117 123M 241M 4(4) 5(5) 6(6) 7(7) 8(8) 74 93 117 123M 241M 109M 112M 117 119 120M 122B 123M 126 241M 117 122M 123M 134M 135 137M 138M 142M 147M 148 228M 229M 234M 241M 93 74 93 9(9) 123M 151M 181M 184M 213M 218 220M 241M 117 93 117 123M 179M 183M 192 197 201 241M 10(A) 74 11(B) 74 77M 79 80 81M 83U 86D 93 100M 102U 117 123M 241M 96M 98 99 106 117 126N 121 123M 130 143 241M 244 256 257N 78M 79 80 93 96 97M 98 99 117 118 121M 123M 238M 241 256M 12(C) 13(D) 74 93 74 77 74 93 108M 117 119M 123M 132M 145M 241M 242B 246M 14(E) 76U 82D 89B 93 95U 101D 106M 107M 108B 117 123M 130M 131M 132B 143M 144M 145B 241M 244M 245M

REA Dsect Cross Reference PAGE 10

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Dsect Length Id Defn Con Member

DSTABLE 00000024 FFFFFFFF 315 4 DSTABLE

DSTABLE 0000024 FFFFFFFF 315 4 DSTABLE FAS 0000120 FFFFFFFE 357 PRIMARY INPUT

- 1 SYS1.MACLIB

  IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB
  3 SYSD.ALGOLFRT.ASM
  4 SYSD.ALGOLFRT.MACLIB
  DSTABLE FSAREA
- 5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17	13.22
48		USING	Ordinary	FFFFFFF	00000000	00001000	5	0001A	237	DSTABLE,R	5		
76		USING	Ordinary	00000001	00000000	00001000	15	00338	81	IHISORAR,	R15		
82		DROP					15			R15			
83		USING	Ordinary	00000001	0000007C	00001000	11	0000E	84	COMMON, R1	1		
86		DROP	•				11			R11			
95		USING	Ordinary	00000001	00000040	00001000	15	002F8	100	IHISOREL,	R15		
101		DROP					15			R15			
102		USING	Ordinary	00000001	0000007C	00001000	11	002C0	254	COMMON, R1	1		

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISOR PROCSTEP: X390

Primary input: lines 1 to 312 of SYSD.ALGOLFRT.ASM(IHISOR)

SYSLIB library records read: 362
SYSUT1 work file size: 48115 bytes
SYSUT2 work file size: 17960 bytes
SYSUT3 work file size: 24960 bytes
SYSLIN file records written: 18

TXA000I Return code 0, elapsed time 0.33 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)

No uninitialized areas found

## IHISSC LEVEL V2.M01

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```
X390 3.1.04 2012/08/17 13.22
```

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                       -S2//DDN:SYSUT2
                                                       -S3//DDN:SYSUT3
                                                       -SN//DDN:SYSLIN
                                                       -SL//DDN:SYSLIB
                                                       -ST//DDN:SYSPRINT
                                                       -SH//DDN:SYSPUNCH
                                                       -SA//DDN:SYSADATA
                                                       -SM1
Options for this Assembly
                                                                   Source
                                                                   (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                    (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                   Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                   (default)
NoFO1d
                                                                   (default)
    IDR('X390ASM
                                  3104')
                                                                    (default)
NoINFÒ
                                                                   Command Line
     LAnguage(EN)
                                                                   (default)
     LineCount(101)
                                                                   Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                   Command Line
                                                                   (default)
     Object(Omf)
                                                                   Command Line
     OPtable(Uni,NoList)
                                                                   (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                   Command Line
                                                                   (default)
NoPControl
    PRintctl(Asa)
                                                                   //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                   (default)
NoProFile
                                                                    (default)
                                                                   Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                   (default)
     SiZe(3145728)
                                                                   Command Line
NoSUppress
                                                                   (default)
     SysadatA(//DDN:SYSADATA)
                                                                   Command Line
     SvsLib(//DDN:SYSLIB)
                                                                   Command Line
    SysliN(//DDN:SYSLIN)
                                                                   Command Line
                                                                   (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                   Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                   Command Line
                                                                   (default)
                                                                   Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                   Command Line
     Sysut2(//DDN:SYSUT2)
                                                                   Command Line
     Sysut3(//DDN:SYSUT3)
                                                                   Command Line
NoTerm
                                                                   Command Line
NoTEst
                                                                    (default)
    TypeCheck(Magnitude,Register)
                                                                   (default)
NoUsingLimit
                                                                    (default)
    UsingMap
                                                                   (default)
    Xref(Short)
                                                                   Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                         SYSD.ALGOLFRT.ASM(IHISSC)
SYSLIB
                          SYS1.MACLIB
                         SYSD. TOOLS. MACLIB
                         SYSD.ALGOLFRT.ASM
                         SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                         SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                         JES2.J0B09284.S00234
                         SYS12230.T132141.RA000.T1BLD.SYSUT1
SYSUT1
SYSUT2
                         SYS12230.T132141.RA000.T1BLD.SYSUT2
```

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                   X390 3.1.04 2012/08/17 13.22
                                                                                                                          00002001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                          00003001
                                         4
                                                                                                                          00004001
00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                         6
                                                                                                                          00006001
                                                     FUNCTION/OPERATION -
                                                                                                                          00007001
                                           *
                                         8
                                                     1. DIVIDE MAGNITUDE OF ARG BY PI/4 TO FIND OCTANT AND
                                                                                                                          00008001
                                         9
                                                        FRACTION
                                                                                                                          00009001
                                                        IF COSINE ADD 2 TO OCTANT NUMBER
                                        10
                                                                                                                          00010001
                                                     IF SINE FOR NEGATIVE ARG, ADD 4 TO OCTANT NUMBER
3. COMPUTE SINE OR COSINE OF FRACTION*PI/4 DEPENDING ON
                                                                                                                          00011001
                                        11
                                        12
                                                                                                                          00012001
                                        13
                                           *
                                                         THE OCTANT
                                                                                                                          00013001
                                        14
                                                     4. IF OCTANT NUMBER IS FOR LOWER PLANE MAKE SIGN MINUS
                                                                                                                          00014001
                                        15
                                                                                                                          00015001
                                                     ENTRY POINTS -
                                                                                                                          00016001
                                        16
                                                     IHISSCC - COSINE FUNCTION, SHORT
                                                                                                                          00017001
                                        17
                                                                SINE FUNCTION, SHORT
                                        18
                                                                                                                          00018001
                                                                LA
                                        19
                                                                    R1.PARMLIST
                                                                                                                          00019001
                                                                BALR R14,R15
                                        20
                                                                                                                          00020001
                                                                                                                          00021001
                                        21
                                                                DATA PASSED BY NAME
                                                     THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                          00022001
                                        22
                                        23
                                                                                                                          00023001
                                        24
                                                     INPUT - N/A
                                                                                                                          00024001
                                        25
                                                                                                                          00025001
                                                     OUTPUT - N/A
                                                                                                                          00026001
                                        26
                                                                                                                          00027001
                                        27
                                        28
                                                     EXTERNAL ROUTINES - N/A
                                                                                                                          00028001
                                                                                                                          00029001
                                        29
                                        30
                                           *
                                                     EXIT - NORMAL - RETURN VIA R14, RESULT IN FPR0
                                                                                                                          00030001
                                        31
                                                                                                                          00031001
                                        32
                                                     EXIT - ERROR -
                                                                                                                          00032001
                                                     IF ABS(ARG) ¬< PI*2**18 GOTO ERROR ROUTINE VIA
                                                                                                                          00033001
                                        33
                                        34
                                                                                     FSAERR+26*4(R13)
                                                                                                                          00034001
                                        35 *
                                                                                                                          00035001
                                        36
                                                     TABLES/WORKAREAS - N/A
                                                                                                                          00036001
                                        37
                                                                                                                          00037001
000000
                                        38 IHISSCSN CSECT
                                                                                                                          00038001
                       00000 0013C
                                        39
                                                                                                                          00039001
                                                     ENTRY IHISSCC
                                                                                                                          00040001
                                        40
                                        41
                                                     ENTRY IHISSCS
                                                                                                                          99941991
                                        42
                                                                                                                          00042001
                                        43 FPR0
                                                                                      RESULT REGISTER
                        00000
                                                     EOU
                                                            0
                                                                                                                          00043001
                                        44 FPR2
                        00002
                                                     EOU
                                                                                      SCRATCH REGISTERS
                                                                                                                          00044001
                        00004
                                           FPR4
                                                     EQU
                                                                                                                          00045001
                                                                                                                          00046001
                                        46
                                        47 IHISSCC
                                                     SAVE
                                                            (14,12),, 'IHISSCC LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                          00047001
000000 47F0 F026
                              99926
                                                                                                 BRANCH AROUND ID
                                        48+THTSSCC
                                                     В
                                                            38(0.15)
                                                                                                                          01-SAVE
                                                                                                 LENGTH OF IDENTIFIER
                                                                                                                          01-SAVE
000004 21
                                        49+
                                                     DC
                                                            AL1(33)
                                                            CL32'IHISSCC LEVEL 2.1 08/17/12 13.2' IDENTIFIER
000005 C9C8C9E2E2C3C340
                                        50+
                                                     DC
                                                                                                                          01-SAVE
                                                                                                                          01-SAVE
000025 F2
                                                            CL1'2'
                                                                                                 IDENTIFIER
000026 90EC D00C
                              aaaac
                                        52+
                                                     STM
                                                           14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                          01-SAVE
                                                                                                                          00048001
                                        53
                  R:F 00000
                                                     USING IHISSCC, R15
                                                                                                                          00049001
                                        54
00002A 41A0 F07C
                              0007C
                                        55
                                                            R10, COMMON
                                                                                                                          00050001
                                                     LA
                                        56
                                                     DROP
                                                            R15
                                                                                                                          00051001
                  R:A 0007C
                                        57
                                                     USING COMMON, R10
                                                                                                                          00052001
00002E 9202 A097
                        00113
                                        58
                                                     MVI
                                                            CRANK+3,X'02'
                                                                                      FOR COSINE, OCTANT CRANK IS 2
                                                                                                                          00053001
000032 5810 1000
                              99999
                                        59
                                                            R1.0(.R1)
                                                                                      COS(X) = SIN(PI/2+X)
                                                                                                                          00054001
000036 47F0 A000
                                                                                                                          00055001
                              0007C
                                        60
                                                     В
                                                            COMMON
                                        61
                                                                                                                          00056001
                                                     DROP
                                                                                                                          00057001
                                        62
                                                            R10
                                        63 *
                                                                                                                          00058001
                                                            (14,12),, 'IHISSCS LEVEL 2.1 &SYSDATE &SYSTIME'
                                        64 IHISSCS
                                                     SAVE
                                                                                                                          00059001
                                                                                                 BRANCH AROUND ID
00003A 47F0 F026
                              00026
                                        65+IHISSCS
                                                            38(0,15)
                                                     В
                                                                                                                          01-SAVE
00003E 21
                                                                                                 LENGTH OF IDENTIFIER
                                                                                                                          01-SAVE
                                                     DC
                                        66+
00003F C9C8C9E2E2C3E240
                                                            CL32'IHISSCS LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                          01-SAVE
                                        67+
                                                     DC
00005F F2
                                        68+
                                                     DC
                                                                                                 IDENTIFIER
                                                                                                                          01-SAVE
                                                            CL1'2'
000060 90EC D00C
                              aaaac
                                        69+
                                                     STM
                                                           14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                          01-SAVE
                                                                                                                          00060001
                                        70
                                                     USING IHISSCS, R15
                                                                                                                          00061001
                  R:F 0003A
                                        71
000064 41A0 F042
                              0007C
                                        72
                                                            R10, COMMON
                                                                                                                          00062001
                                                     LA
                                        73
                                                     DROP
                                                                                                                          00063001
                                                            R15
                       99970
                                        74
                                                     USING COMMON, R10
                                                                                                                          00064001
000068 9200 A097
                                        75
                                                           CRANK+3,X'00
                                                                                      OCTANT CRANK IS 0 IF +ARG
                                                                                                                          00065001
                        00113
                                                     MVI
                                                                                      OCTANT CRANK IS 4 IF -ARG
                              00000
                                                                                                                          00066001
00006C 5810 1000
                                                            R1.0(,R1)
                                        76
000070 9180 1000
                                        77
                                                     тм
                                                                                      SIN(-X) = SIN(PI+X)
                                                                                                                          00067001
                       00000
                                                            0(R1),X'80'
000074 4780 A000
                              0007C
                                                     ΒZ
                                                            COMMON
                                                                                                                          00068001
                                        78
000078 9204 A097
                        00113
                                        79
                                                     MVI
                                                            CRANK+3.X'04'
                                                                                                                          00069001
00007C 2B00
                                                     SDR
                                                                                      CLEAR FPR0 DOUBLE
                                                                                                                          99979991
                                        80 COMMON
                                                            FPR0. FPR0
                                                                                      CLEAR FPR2 DOUBLE
                                                            FPR2, FPR2
                                                                                                                          00071001
00007E 2B22
                                                     SDR
                                        81
000080 7800 1000
                              00000
                                                            FPR0,0(,R1)
                                                                                      OBTAIN ARGUMENT
                                                                                                                          00072001
                                        82
                                                     LE
000084 3000
                                        83
                                                     LPER
                                                            FPRØ FPRØ
                                                                                      CONSIDER ARGUMENT TO BE POSITIVE
                                                                                                                          00073001
                                                                                      /X/ >= PI*2**18 ?
000086 7900 A098
                              00114
                                                            FPR0,MAX
                                                                                                                          00074001
                                        84
00008A 47B0 A07C
                              000F8
                                        85
                                                     BNI
                                                            FRROR
                                                                                      YES, ERROR
                                                                                                                          00075001
                                                                                      MULTIPLY BY 4/PI (LONG FORM)
                                                            FPR0.FOVPI
00008E 6C00 A084
                              00100
                                        86
                                                     MD
                                                                                                                          00076001
000092 7900 A0B4
                                                            FPRØ, ONE
                                                                                                                          00077001
                              00130
                                        87
                                                     CE
                                                                                      < 1 ?
000096 4740 A026
                              000A2
                                        88
                                                     BL
                                                            SMALL
                                                                                      YES, BRANCH
                                                                                                                          00078001
00009A 6E00 A08C
                              00108
                                        89
                                                     ΑW
                                                            FPR0,CH46
                                                                                      PROD CHAR OF 46, UNNORMALIZED
                                                                                                                          00079001
00009E 3820
                                        90
                                                     LER
                                                            FPR2, FPR0
                                                                                      INT PART OF PROD TO FPR2, UNNORM 00080001
                                                                                      FRACT PART OF PROD TO FPR0, NORM 00081001
ADD OCTANT CRANK TO FPR2, UNNORM 00082001
0000A0 2B02
                                        91
                                                     SDR
                                                            FPR0, FPR2
0000A2 7E20 A094
                              00110
                                        92 SMALL
                                                            FPR2, CRANK
                                                     ΑU
0000A6 7020 A0BC
                              00138
                                        93
                                                            FPR2,OCTNT
                                                                                      SAVE IT
                                                                                                                          00083001
                                                     STE
                                                                                      LAST 3 BITS ARE MODIFIED OCTANT
                                                                                                                          00084001
                                        94
                                                                                      IF ODD OCTANT, TAKE COMPLEMENT OF FRACTION TO OBTAIN THE
                        0013B
0000AA 9101 A0BF
                                        95
                                                     ТМ
                                                            OCTNT+3,X'01'
                                                                                                                          00085001
0000AE 4780 A03C
                              999B8
                                        96
                                                     ΒZ
                                                            FVFN
                                                                                                                          00086001
0000B2 7B00 A0B4
                              00130
                                        97
                                                     SE
                                                            FPRØ, ONE
                                                                                      MOFIFIED FRACTION R
                                                                                                                          00087001
```

Addr1 Addr2 Stmt Source Statement

Loc Object Code

X390 3.1.04 2012/08/17 13.22

0000B6 3000 98 LPER FPR0, FPR0 00088001 0000B8 1B11 99 EVEN SR R1, R1 R1 = 0 FOR COSINE POLYNOMIAL 00089001 THIS IS FOR OCTANT 2,3,6, OR 7 IF OCTANT 1,4,5, OR 8, USE SINE POLYNOMIAL, R1 = 4 0000BA 9103 A0BF 0013B 100 TM OCTNT+3, X'03' 00090001 0000BE 4740 A04A 000C6 ВМ LABAA 00091001 101 0000C2 4110 0004 00092001 00004 102 LA R1,4 0000C6 3840 103 LABAA FPR4, FPR0 00093001 LER 0000C8 3C00 104 MER FPRØ, FPRØ COMPUTE SIN OR COS OF MODIFIED 00094001 00095001 0000CA 3820 105 LER FPR2.FPR0 FRACTION USING PROPER CHEBYSHEV 0000CC 7C01 A09C 00118 FPR0, C3(R1) INTERPOLATION POLYNOMIAL 106 ME 00096001 7A01 A0A4 FPR0, C2(R1) 00097001 0000D0 107 ΑE 00120 0000D4 3C02 00098001 108 MER FPRØ, FPR2 0000D6 7A01 A0AC 00128 109 ΑE FPR0, C1(R1) 00099001 0000DA 3C02 110 MER FPR0, FPR2 00100001 9999DC 7A91 A9B4 00130 FPRO. CO(R1) SIN(R)/R OR COS(R) READY 111 ΔF 99191991 00102001 0000E0 1211 LTR R1, R1 112 0000E2 4780 A06C 000E8 LABBB 00103001 ΒZ 113 FPR0, FPR4 0000E6 3C04 IF SINE POLYNOMIAL, MULTIPLY R 00104001 MER 0000E8 9104 A0BF 0013B 115 LARBR TM OCTNT+3,X'04' 00105001 000F2 IF MODIFIED OCTANT IS IN 0000EC 4780 A076 116 ΒZ LABCC 00106001 LOWER PLANE, SIGN IS NEGATIVE 00107001 0000F0 3100 LNER FPRØ, FPRØ 117 00108001 118 RESTORE CALLERS REGS AND RETURN 119 LABCC **RETURN (14,12)** 00109001 0000F2 120+LABCC DS 0000F2 98EC D00C 0000C 121+ LM 14,12,12(13) RESTORE THE REGISTERS 01-RETUR RETURN 0000F6 07FF 122+ BR 14 01-RFTUR 00110001 123 0000F8 47FD 0234 00234 124 ERROR В FSAERR+26\*4(13) 00111001 00112001 125 001CC 126 FSAERR EQU X'1CC' 00113001 127 00114001 0000FC 00000000 000100 0D'0' 00115001 128 DC 000100 41145F306DC9C830 129 FOVPI DC X'41145F306DC9C830' 00116001 000108 46000000000000000 130 CH46 DC X'46000000000000000' 00117001 X'46000000 000110 46000000 131 CRANK DC 00118001 000114 45C90FDB DC X'45C90FDB 00119001 132 MAX 00120001 133 000118 BE14E5E0 134 C3 DC X'BE14E5E0' -0.00031888 С3 00121001 00011C BD25B368 135 X'BD25B368' -0.00003595 00122001 DC 000120 3F40FBD6 136 C2 DC X'3F40FBD6 0.01584991 C2 00123001 000124 3EA32F62 137 DC X'3EA32F62 0.00249001 **S2** 00124001 -0.30842425 00125001 000128 C04EF4E5 138 C1 DC X'C04EF4E5 C1 + FUDGE 1 00012C C014ABBC DC X'C014ABBC -0.08074543 00126001 139 **S1** 000130 41100000 140 C0 00127001 DC X'41100000' 1.0 C0 000134 40C90FDB 141 DC X'40C90FDB' 0.78539816 00128001 00129001 00130001 00130 142 ONE EQU C0 143 000138 00000000 144 OCTNT DC F'0' 00131001 145 00132001 146 \* REGISTER EQUATES 00133001 147 \* 00134001 **IEZREGS** 148 00135001 00000 149+R0 EOU 0 01-IEZRE 00001 150+R1 EQU 01-IEZRE 00002 151+R2 EQU 01-IEZRE 00003 152+R3 EQU 3 01-IEZRE 00004 153+R4 EQU 4 5 01-IEZRE 99995 154+R5 FOU 01-TF7RF 6 155+R6 01-IEZRE 00006 EQU 00007 156+R7 EQU 01-IEZRE 00008 157+R8 EQU 01-IEZRE 00009 158+R9 EQU 01-IEZRE 0000A 159+R10 EQU 10 01-IEZRE 0000B 160+R11 11 EOU 01-IEZRE 0000C 161+R12 EQU 12 01-IEZRE 0000D 162+R13 EQU 13 01-IEZRE 0000E 163+R14 EQU 14 01-IEZRE 0000F 164+R15 EQU 15 00136001 165 \* END 00137001 166

Symbol	Length Val	ie Id	Type Asm	Program	Defn	Refer	ence	s				X390	3.1.0	ð4 2	012/0	8/17	13.22
CH46	8 00000	.08 0000000	91 X X		130	89											
COMMON	2 00000	7C 000000	91 I		80	55	57U	60B	72	74U	78B						
CRANK	4 00000	10 0000000	01 X X		131	58M	75M	79M	92								
CØ	4 00000	30 000000	91 X X		140	111	142										
C1	4 00000	28 0000000	01 X X		138	109											
C2	4 00000	20 0000000	91 X X		136	107											
C3	4 00000	18 0000000	91 X X		134	106											
ERROR	4 00000	F8 000000	01 I		124	85B											
EVEN	2 00000	B8 000000	01 I		99	96B											
FOVPI	8 00000	.00 000000	91 X X		129	86											
FPR0	1 00000	900	U		43	80M	82M	83M	84	86M	87	89M	90	91M	97M	98M	103
						104M	105	106M	107M	108M	109M	110M	111M	114M	117M		
FPR2	1 00000	902	U		44	81M	90M	91	92M	93	105M	108	110				
FPR4	1 00000	004	U		45	103M	114										
FSAERR	1 00000	LCC	U		126	124B											
IHISSCC	4 00000	9000000	01 I		48	40	54U										
IHISSCS	4 00000	3A 000000	01 I		65	41	71U										
LABAA	2 00000	C6 0000000	01 I		103	101B											
LABBB	4 00000	E8 000000	01 I		115	113B											
LABCC	2 00000	F2 0000000	01 H H		120	116B											
MAX	4 00000	14 0000000	01 X X		132	84											
OCTNT	4 00000	38 0000000	01 F F		144	93M	95	100	115								
ONE	4 00000	30 0000000	01 U		142	87	97										
R1	1 00000	001	U		150	59M	76M	77	82	99M	102M	106	107	109	111	112M	
R10	1 00000	90A	U		159	55M	57U	62D	72M	74U							
R15	1 00000	90F	U		164	54U	56D	71U	73D								
SMALL	4 00000	A2 0000000	01 I		92	88B											

 $\label{eq:Register} \textbf{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ 

69 121M 1(1) 2(2) 3(3) 4(4) 5(5) 52 59M 69 76M 77 82 99M 102M 106N
52 69 121M
53 69 121M
54 69 71U 73D 121M 59M 69 76M 77 82 99M 102M 106N 107N 109N 111N 112M 121M 5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C) 13(D) 14(E) 15(F)

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17 13.22
54		USING	Ordinary	00000001	00000000	00001000	15	0007C	55	IHISSCC,R	15	
56		DROP					15			R15		
57		USING	Ordinary	00000001	0000007C	00001000	10	00097	60	COMMON, R1	.0	
62		DROP					10			R10		
71		USING	Ordinary	00000001	0000003A	00001000	15	00042	72	IHISSCS,R	15	
73		DROP					15			R15		
74		USING	Ordinary	00000001	0000007C	00001000	10	000BF	116	COMMON, R1	0	

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISSC PROCSTEP: X390

Primary input: lines 1 to 137 of SYSD.ALGOLFRT.ASM(IHISSC)

SYSLIB library records read: 161
SYSUT1 work file size: 16439 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 10960 bytes
SYSLIN file records written: 8

TXA000I Return code 0, elapsed time 0.16 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHISSCSN 00013C 4

## IHISSQ LEVEL V2.M01

(c) Copyright 1995-2010 Tachyon Software LLC

```
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHISSQ)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
SYSPRINT
                          JES2.J0B09284.S00238
SYSUT1
                          SYS12230.T132141.RA000.T1BLD.SYSUT1
```

SYSUT2

SYSUT3

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

```
Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                                                                                   X390 3.1.04 2012/08/17 13.22
                                                                                                                           00002001
                                         3
                                                     COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                           00003001
                                         4
                                                                                                                          00004001
00005001
                                         5
                                                     STATUS - LEVEL 2.1
                                         6
                                                                                                                           00006001
                                                      FUNCTION/OPERATION
                                                                                                                           00007001
                                           *
                                         8
                                                     WRITE X = M*16**(2P-Q), M MANTISSA, Q=0 OR 1
                                                                                                                           00008001
                                         9
                                                     THEN SQRT(X) = SQRT(M*16**-Q)*16**P
                                                                                                                           00009001
                                        10
                                                                                                                           00010001
                                                                                                                           00011001
                                                     ENTRY POINT
                                        11
                                                     IHISSQ - SQRT FUNCTION, SHORT
                                        12
                                                                                                                           00012001
                                        13
                                                               LÃ
                                                                     R1, PARMLIST
                                                                                                                           00013001
                                        14
                                                               BALR R14,R15
                                                                                                                           00014001
                                                               DATA PASSED BY NAME
                                        15
                                                                                                                           00015001
                                                     THE MODULE IS ENTERED FROM THE GENERATED OBJECT MODULE
                                                                                                                           00016001
                                        16
                                                                                                                           00017001
                                        17
                                        18
                                                     INPUT - N/A
                                                                                                                           00018001
                                        19
                                                                                                                           00019001
                                                     OUTPUT - N/A
                                        20
                                                                                                                           00020001
                                                                                                                           00021001
                                        21
                                                     EXTERNAL ROUTINES - N/A
                                                                                                                           00022001
                                        22
                                        23
                                                                                                                           00023001
                                        24
                                                     EXIT - NORMAL -
                                                                                                                           00024001
                                        25
                                                     RETURN VIA R14, RESULT IN FPR0
                                                                                                                           00025001
                                                                                                                           00026001
                                        26
                                                                                                                           00027001
                                        27
                                                     EXIT - ERROR
                                        28
                                                     IF ARGUMENT NEGATIVE GOTO ERROR ROUTINE VIA
                                                                                                                           00028001
                                                         FSAERR+23*4(R13)
                                                                                                                           00029001
                                        29
                                        30
                                                                                                                           00030001
                                        31 *
                                                     TABLES/WORKAREAS - N/A
                                                                                                                           00031001
                                        32
                                                                                                                           00032001
000000
                       00000 000C4
                                        33 IHISSQRT CSECT
                                                                                                                           00033001
                                         34
                                                                                                                           00034001
                                        35
                                                     ENTRY IHISSQ
                                                                                                                           00035001
                                        36
                                                                                                                           00036001
                                        37 FPRØ
                                                                                      RESULT REGISTER
                        99999
                                                     FOU
                                                            a
                                                                                                                           00037001
                                        38 FPR2
                                                                                                                           00038001
                                                                                      SCRATCH REGISTERS
                        00002
                                                     EQU
                                                            2
                        00004
                                        39
                                           FPR4
                                                     EQU
                                                                                                                           00039001
                                                                                                                           00040001
                                        40
                                        41 THTSSO
                                                     SAVE
                                                            (14,12),, 'IHISSQRT LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                           00041001
000000 47F0 F026
                              00026
                                        42+IHISSO
                                                     В
                                                            38(0,15)
                                                                                                 BRANCH AROUND ID
                                                                                                                           01-SAVE
                                                                                                 LENGTH OF IDENTIFIER
000004 21
                                        43+
                                                     DC
                                                            AL1(33)
                                                                                                                          01-SAVE
000005 C9C8C9E2E2D8D9E3
                                                     DC
                                                            CL32'IHISSQRT LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                           01-SAVE
                                        44+
000025 F2
                                        45+
                                                     DC
                                                                                                                           01-SAVE
000026 90EC D00C
                              0000C
                                        46+
                                                            14,12,12(13)
                                                                                                 SAVE REGISTERS
                                                                                                                           01-SAVE
                                                     STM
                                        47
                                                                                                                           00042001
                                                     USING IHISSORT, R15
                                                                                                                           00043001
                  R: F 00000
                                        48
                                                            R1,0(,R1)
R0,0(,R1)
00002A 5810 1000
                              00000
                                        49
                                                                                                                           00044001
                                                     L
00002E 5800 1000
                               00000
                                        50
                                                                                      OBTAIN ARGUMENT
                                                                                                                           00045001
000032 7840 1000
                               00000
                                        51
                                                            FPR4,0(,R1)
                                                                                                                           00046001
000036 1200
                                        52
                                                     LTR
                                                            RØ. RØ
                                                                                                                           00047001
                                                                                      ARG IS 0, RESULT IS 0
NEGATIVE ARG, ERROR
ADD X'41' TO CHAR
000038 4780 F08A
                               0008A
                                                                                                                           00048001
                                        53
                                                     ΒZ
                                                            ZRANS
00003C 4740 F090
                              00090
                                                            ERROR
                                                     ВМ
                                                                                                                           00049001
                                        54
000040 5E00 F0A4
                               000A4
                                        55
                                                     AL
                                                            RØ, BIAS
                                                                                                                           00050001
000044 8C00 0019
                               00019
                                        56
                                                     SRDL
                                                            R0,25
                                                                                                                           00051001
                                                                                      CHAR OF RESULT IS READY
KEEP IT IN R14
SIGN BIT OF R1 = 1-Q
000048 8900 0018
                                        57
                                                     SLL
                                                            RØ, 24
                                                                                                                           00052001
                               00018
00004C 18E0
                                        58
                                                     LR
                                                            R14.R0
                                                                                                                           00053001
00004F 1211
                                        59
                                                     LTR
                                                            R1.R1
                                                                                                                           00054001
000050 4740 F058
                               00058
                                                                                                                           00055001
                                        60
                                                     BM
                                                            LABAA
000054 5AE0 F0A8
                               000A8
                                                            R14, FOUR
                                                                                      Q=1,ADD 4 (B31) TO R14 FOR INDEX 00056001
                                        61
000058 8810 0003
                                        62 LABAA
                                                     SRL
                                                                                      SCALE 1+M (Q=0) OR M (Q=1) TO B3
                                                                                                                          00057001
                               00003
00005C 5A1E F0BC
                              000BC
                                        63
                                                            R1,C(R14)
                                                                                      OBTAIN FIRST APPROXIMATION BY
                                                                                                                           00058001
                                                     Α
                                                                                      A HYPERBOLIC FIT OF THE
                                        64
                                                                                                                           00059001
                               000B4
                                                                                      RESPECTIVE INTERVAL
                                                                                                                           00060001
000060 580E F0B4
                                                            R0.B(R14)
                                        65
000064 1D01
                                                                                      Q=1, INTERPRET M AS M/16 (B-1)
                                        66
                                                     DR
                                                                                                                           00061001
                                                            RØ,R1
000066 5A1E F0AC
                               000AC
                                        67
                                                            R1, A(R14)
                                                                                                                           00062001
00006A 1A1E
                                        68
                                                     AR
                                                            R1,R14
                                                                                      ADD ON CHAR TO COMPLETE FIRST
                                                                                                                           00063001
00006C 5010 F0A0
                               000A0
                                        69
                                                     ST
                                                            R1,BUFF
                                                                                      APPROXIMATION
                                                                                                                           00064001
                                                                                      GIVE 2 PASSES OF NEWTON-RAPHSON
                                                                                                                           00065001
000070 3804
                                        70
                                                            FPRØ, FPR4
                                                     LER
000072 7D00 F0A0
                               000A0
                                        71
                                                     DE
                                                            FPR0, BUFF
                                                                                      ITERATION
                                                                                                                           00066001
                                        72
000076
       7A00 F0A0
                               000A0
                                                     ΑE
                                                            FPRØ, BUFF
                                                                                                                           00067001
00007A 3400
                                        73
                                                     HER
                                                            FPRØ, FPRØ
                                                                                                                           00068001
00007C 3D40
                                        74
                                                     DER
                                                            FPR4, FPR0
                                                                                                                           00069001
                                                                                      Y2 = (Y1+X/Y1)/2 = (X/Y1-Y1)/2+Y1
                                        75
                                                            FPR4 FPR0
                                                                                                                          00070001
00007E 3B40
                                                     SER
                                                            FPR4, FPR4
                                                                                      USE THE LATTER TO PROTECT
                                                                                                                           00071001
000080 3444
                                        76
                                                     HER
000082 3404
                                        77
                                                            FPRØ, FPR4
                                                                                      LAST DIGIT
                                                                                                                           00072001
                                                     AER
                                        78 *
                                                                                                                           00073001
                                        79 FIN
                                                     RETURN (14,12)
                                                                                      RESTORE REGS AND RETURN
                                                                                                                           00074001
999984
                                        80+FTN
                                                     DS
                                                            ΩН
                                                                                                                           01-RFTUR
000084 98EC D00C
                               0000C
                                                     LM
                                                            14,12,12(13)
                                                                                                 RESTORE THE REGISTERS
                                                                                                                          01-RETUR
                                        81+
                                                                                                                           01-RETUR
000088 07FE
                                                     BR
                                                                                                 RETURN
                                        82+
                                                            14
                                                                                                                           00075001
                                        83
00008A 3B00
                                        84 ZRANS
                                                     SER
                                                            FPR0, FPR0
                                                                                                                           00076001
00008C 47F0 F084
                              00084
                                        85
                                                     В
                                                            FIN
                                                                                                                           00077001
                                                                                                                           00078001
                                        86
000090 8900 0001
                                        87 ERROR
                                                                                                                           00079001
                              00001
                                                     SLL
                                                            R0.1
000094 1200
                                        88
                                                     LTR
                                                            RØ. RØ
                                                                                      NEGATIVE ZERO ?
                                                                                                                           00080001
000096 4780 F08A
                               0008A
                                        89
                                                     ΒZ
                                                            ZRANS
                                                                                                                           00081001
00009A 47FD 0228
                              00228
                                        90
                                                            FSAERR+23*4(R13)
                                                                                      NEGATIVE PARAMETER
                                                                                                                           00082001
                                                     В
                                        91
                                                                                                                           00083001
                       001CC
                                                                                                                           00084001
                                        92 FSAERR
                                                     EQU
                                                            X'1CC'
                                        93
                                                                                                                           00085001
00009E 0000
                                                            F'0'
00000A0 00000000
                                        94 BUFF
                                                                                                                           00086001
                                                     DC
999944 41999999
                                        95 BTAS
                                                     DC
                                                            X'41000000
                                                                                                                           00087001
0000A8 00000004
                                        96 FOUR
                                                     DC
                                                            F'4'
                                                                                                                           00088001
```

PAGE 3

Loc Object Code Add	lr1 Addr2 Stmt Sou	urce Statement		X390 3.1.04 2012/08	/17 13.22
0000AC 01CE9FE0	97 A	DC X'01CE9F		A0 (B7)	00089001
0000B0 006DC57C	98	DC X'006DC5		A1 (B7) MINUS 4(B31)	
0000B4 FFE6C37D	99 B	DC X'FFE6C3		B0 (B11)	00091001
0000B8 FFFA82EB	100	DC X'FFFA82		B1 (B7)	00092001
0000BC FF44546F	101 C	DC X'FF4454		C0 (B3) MINUS 1(B3)	00093001
0000C0 0E0A7419	102	DC X'0E0A74	19' 0.0548470	C1 (B-1)	00094001
	103 *				00095001
	104 *	REGISTER EQUAT	ES		00096001
	105 *				00097001
	106	IEZREGS			00098001
000		EQU 0			01-IEZRE
000		EQU 1			01-IEZRE
000		EQU 2			01-IEZRE
000		EQU 3			01-IEZRE
000	004 111+R4	EQU 4			01-IEZRE
000	005 112+R5	EQU 5			01-IEZRE
000		EQU 6			01-IEZRE
000		EQU 7			01-IEZRE
000		EQU 8			01-IEZRE
000	009 116+R9	EQU 9			01-IEZRE
000	00A 117+R10	EQU 10			01-IEZRE
000	00B 118+R11	EQU 11			01-IEZRE
000	00C 119+R12	EQU 12			01-IEZRE
000	00D 120+R13	EQU 13			01-IEZRE
000	00E 121+R14	EQU 14			01-IEZRE
000		EQU 15			01-IEZRE
	123 *				00099001
	124	END			00100001

Symbol	Length	Value	Id	Type As	m Program	Defn	Refer	ences					X390	3.1.04	20	12/08/17	13.22
Α	4 00	00000AC	00000001	хх		97	67										
В	4 00	00000B4	00000001	хх		99	65										
BIAS	4 00	00000A4	00000001	ХХ		95	55										
BUFF	4 00	00000A0	00000001	FF		94	69M	71	72								
C	4 00	00000BC	00000001	хх		101	63										
ERROR	4 00	0000090	00000001	I		87	54B										
FIN	2 00	0000084	00000001	. нн		80	85B										
FOUR	4 00	8A00000	00000001	FF		96	61										
FPR0	1 00	0000000		U		37	70M	71M	72M	73M	74	75	77M	84M			
FPR4	1 00	0000004		U		39	51M	70	74M	75M	76M	77					
FSAERR	1 00	00001CC		U		92	90B										
IHISSQ	4 00	0000000	00000001	I		42	35										
IHISSQRT	1 00	0000000	00000001	J		33	48U										
LABAA	4 00	0000058	00000001	I		62	60B										
RØ	1 00	0000000		U		107	50M	52M	55M	56M	57M	58	65M	66M	87M	88M	
R1	1 00	0000001		U		108	49M	50	51	59M	62M	63M	66	67M	68M	69	
R13	1 00	000000D		U		120	90										
R14	1 00	000000E		U		121	58M	61M	63	65	67	68					
R15	1 00	00000F		U		122	48U										
ZRANS	2 00	A800000	00000001	I		84	53B	89B									

 $\label{eq:Register} \textit{References (M=modified, B=branch, U=USING, D=DROP, N=index)}$ X390 3.1.04 2012/08/17 13.22 50M 52M 55M 56M 57M 58 65M 66M 81M 87M 88M 49M 50 51 56M 59M 62M 63M 66M 67M 68M 69 81M 1(1) 2(2) 46 81M 3(3) 4(4) 5(5) 81M 81M 46 46 46 46 46 46 46 81M 5(5) 6(6) 7(7) 8(8) 9(9) 10(A) 11(B) 12(C) 81M 81M 81M 81M 81M 46 46 81M 81M 46 81 90N 46 58M 61M 63N 65N 67N 68 81M 82B 42B 46 48U 81M 13(D) 14(E) 15(F)

1 SYS1.MACLIB

IEZREGS RETURN SAVE

Con Source Members

- 2 SYSD.TOOLS.MACLIB 3 SYSD.ALGOLFRT.ASM 4 SYSD.ALGOLFRT.MACLIB 5 SYS1.AMODGEN

USING Map PAGE 7 Stmt Level Action Type Id Address Range Reg Max Last Text X390 3.1.04 2012/08/17 13.22

USING Ordinary 00000001 00000000 00001000 15 000BC 89 IHISSQRT,R15

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISSQ PROCSTEP: X390

Primary input: lines 1 to 100 of SYSD.ALGOLFRT.ASM(IHISSQ)

SYSLIB library records read: 161
SYSUT1 work file size: 11676 bytes
SYSUT2 work file size: 14137 bytes
SYSUT3 work file size: 8000 bytes
SYSLIN file records written: 6

TXA000I Return code 0, elapsed time 0.14 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHISSQRT 0000C4 4

## IHISYS LEVEL V2.M01

```
X390 3.1.04 2012/08/17 13.22
                                                                                 (c) Copyright 1995-2010 Tachyon Software LLC
TLC002I Tachyon Legacy Assembler is licensed to Thomas Armstrong
TLC011I License expires on 2012/10/17 at 01:00
Command Line Parameters- -PARM("LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT")
-S1//DDN:SYSUT1
                                                        -S2//DDN:SYSUT2
                                                        -S3//DDN:SYSUT3
                                                        -SN//DDN:SYSLIN
                                                        -SL//DDN:SYSLIB
                                                        -ST//DDN:SYSPRINT
                                                        -SH//DDN:SYSPUNCH
                                                        -SA//DDN:SYSADATA
                                                        -SM1
Options for this Assembly
                                                                    Source
                                                                    (default)
    AControl(ALign, NoLibMac)
NoAData
                                                                     (default)
    AdataLevel(5)
                                                                    (default)
NoCompaT
                                                                    (default)
   DXref
                                                                    (default)
NoEsd
                                                                    Command Line
    Flag (\emptyset, ALign, ConT, EXlitw, NoImpLen, PUsh, ReCord, NoSUbstr, Using \emptyset, NoPage \emptyset, NoBrpage \emptyset, NoRent, Using Dup, Using Zero, Using Mult, Range Push, ReCord, NoSUbstr, Using Push, Reco
2,HLasm,NoTRunc,NoIndeX)
                                                                    (default)
NoFO1d
                                                                    (default)
    IDR('X390ASM
                                   3104')
                                                                    (default)
NoINFÒ
                                                                    Command Line
     LAnguage(EN)
                                                                    (default)
     LineCount(101)
                                                                    Command Line
     List(121)
                                                                    (default)
    MsgLevel(0,0)
MXref(Source)
                                                                    Command Line
                                                                    (default)
     Object(Omf)
                                                                    Command Line
     OPtable(Uni,NoList)
                                                                    (default)
    {\tt PARM(LOAD,ASA,SZ(3M),LC(101),NE,NOINFO,ML(0,0),XREF(SHORT),NRL,NT)}\\
                                                                    Command Line
                                                                    (default)
NoPControl
    PRintctl(Asa)
                                                                    //DDN:SYSPRINT
    ProcesS(NoBatch,NoDbcs,NoPestop,Thread,NoWarn0)
                                                                    (default)
NoProFile
                                                                    (default)
                                                                    Command Line
NoRLd
    RXref(NoCr,Gr,NoFr)
                                                                    (default)
     SiZe(3145728)
                                                                    Command Line
NoSUppress
                                                                    (default)
     SysadatA(//DDN:SYSADATA)
                                                                    Command Line
     SvsLib(//DDN:SYSLIB)
                                                                    Command Line
    SysliN(//DDN:SYSLIN)
                                                                    Command Line
                                                                    (default)
NoSysParm
    SysprinT(//DDN:SYSPRINT)
                                                                    Command Line
    SyspuncH(//DDN:SYSPUNCH)
SystemId('MVS 3.8')
                                                                    Command Line
                                                                    (default)
                                                                    Command Line
    SysterM(1)
    Sysut1(//DDN:SYSUT1)
                                                                    Command Line
     Sysut2(//DDN:SYSUT2)
                                                                    Command Line
     Sysut3(//DDN:SYSUT3)
                                                                    Command Line
NoTerm
                                                                    Command Line
NoTEst
                                                                     (default)
    TypeCheck(Magnitude,Register)
                                                                    (default)
NoUsingLimit
                                                                     (default)
    UsingMap
                                                                    (default)
    Xref(Short)
                                                                    Command Line
DDNAMEs
                         File/Data Set Names
SYSIN
                          SYSD.ALGOLFRT.ASM(IHISYS)
SYSLIB
                          SYS1.MACLIB
                          SYSD. TOOLS. MACLIB
                          SYSD.ALGOLFRT.ASM
                          SYSD.ALGOLFRT.MACLIB
                          SYS1.AMODGEN
SYSLIN
                          SYS12230.T132141.RA000.T1BLD.OBJECT
```

SYSPRINT

SYSUT1 SYSUT2

SYSUT3

JES2.J0B09284.S00242

SYS12230.T132141.RA000.T1BLD.SYSUT1

SYS12230.T132141.RA000.T1BLD.SYSUT2

SYS12230.T132141.RA000.T1BLD.SYSUT3

00092001

```
Loc Object Code
                        Addr1 Addr2 Stmt Source Statement
                                                                                                     X390 3.1.04 2012/08/17 13.22
                                                                                                                            00002001
                                          3
                                                      COMPONENT ID - 360S-LM-532 ALGOL F LIBRARY
                                                                                                                             00003001
                                          4
                                                                                                                            00004001
00005001
                                          5
                                                      STATUS - LEVEL 2.1
                                                                                                                             00006001
                                          6
                                                      FUNCTION/OPERATION -
                                                                                                                             00007001
                                            *
                                          8
                                                      CONSISTS OF 15 ROUTINES WITH DIFFERENT ACTIONS ON DATASET
                                                                                                                            00008001
                                          9
                                                      WHICH DEPENDING ON SECOND PARAMETER IN SYSACT
                                                                                                                            00009001
                                                                                                                             00010001
                                         10
                                                                                                                            00011001
                                         11
                                                      IHISYSCT - FROM GENERATED OBJECT MODULE
                                                                                                                             00012001
                                         12
                                            *
                                         13
                                                                       R1, PARMLIST
                                                                                                                             00013001
                                         14
                                                                   BALR R14,R15
                                                                                                                            00014001
                                                                  DATA PASSED BY NAME
                                                                                                                             00015001
                                         15
                                                                                                                            00016001
                                         16
                                                      INPUT - SYSACT4 READS TWO RECORDS AFTER REPOSITIONING
                                                                                                                             00017001
                                         17
                                         18
                                                                                                                             00018001
                                         19
                                                      OUTPUT - N/A
                                                                                                                            9991 9991
                                         20
                                                                                                                             00020001
                                                                                                                            00021001
                                         21
                                                      EXTERNAL ROUTINES -
                                                      IHIIOR - EVALUATE DATASET NUMBER
                                                                                                                            00022001
                                         22
                                                                OPEN DATASET
                                         23
                                                                                                                             00023001
                                         24
                                                                CHANGE TO NEXT RECORD
                                                                                                                             00024001
                                                                                                                            00025001
00026001
                                         25
                                                                CLOSE DATASET
                                                                CONVERT REAL TO INTEGER
                                         26
                                                                                                                             00027001
                                         27
                                         28
                                                      EXITS - NORMAL - RELOAD REGISTERS RETURN VIA R14
                                                                                                                             00028001
                                                                                                                             00029001
                                         29
                                                               ERROR
                                         30
                                                               DATASET NUMBER OUT OF RANGE
                                                                                                                      NO 0
                                                                                                                            00030001
                                                               INCOMPATIBLE ACTIONS ON SAME DATASET INPUT REQUEST BEYOND END OF DATASET
                                         31
                                                                                                                     NO 2
                                                                                                                            00031001
                                         32
                                                                                                                      NO 5
                                                                                                                            00032001
                                                               UNDEFINED FUNCTION NUMBER
                                                                                                                      NO 9
                                                                                                                            00033001
                                         33
                                         34
                                                               DATASET CLOSED
                                                                                                                      NO 10 00034001
                                         35
                                            *
                                                               DATASET OPEN
                                                                                                                      NO 11 00035001
                                                               QUANTITY IN SYSACT PROCEDURE MUST BE A VARIABLE QUANTITY IN SYSACT PROCEDURE OUT OF RANGE
                                         36
                                                                                                                     NO 12 00036001
                                                                                                                      NO 13 00037001
                                         37
                                                                                                                     NO 14 00038001
                                                               BACKWARD REPOSITIONING NOT DEFINED
                                         38
                                         39
                                                               BRANCH TO IHIFSA
                                                                                                                            00039001
                                         40
                                                                            R13, IHIFSA
                                                                                                                             00040001
                                         41
                                                                          B FSAERR+XX*4(R13)
                                                                                                       XX FRROR NO
                                                                                                                            00041001
                                         42
                                                                                                                            00042001
                                                                                                                            00043001
                                         43
                                                      TABLES/WORK AREAS - N/A
                                         44
                                                                                                                             00044001
                                                                                                                             00045001
                                         45
                                                      ATTRIBUTES - SERIALLY REUSABLE
                                         46
                                                                                                                            00046001
                                                                                                                            00047001
00048001
                                         47
                                                      THE OPERATION OF THIS MODULE DOES NOT DEPEND LIPON A
                                         48
                                                      SPECIAL INTERNAL REPRESENTATION OF THE EXTERNAL
                                         49
                                                                                                                            00049001
                                         50
                                                      CHARACTER SET
                                                                                                                             00050001
                                         51
                                            *
                                                                                                                            00051001
                                         52
                                                      REGISTERS
                                                                                                                             00052001
                                                      R1 -> PARAMETER LIST
                                                                                                                            00053001
                                         53
                                                          -> DSTABLE ENTRY FOR DATASET
= DATASET NUMBER
                                                                                                                            00054001
                                         54
                                                      R5
                                                                                                                             00055001
                                         55
                                                                                                                             00056001
                                         56
                                                           -> DCB AND DECB
                                         57
                                                      R12 -> FSA
                                                                                                                             00057001
                                         58
                                                      R13 -> SAVE AREA IN FSA
                                                                                                                            00058001
                                         59
                                                      R14 -> RETURN
                                                                                                                             00059001
                                                                                                                            00060001
                                         60
                                                      R15 -> ROUTINE SYSACT
                                                                                                                             00061001
                                         61
000000
                        00000 0077C
                                         62 IHISYSCT CSECT
                                                                                                                             00062001
                                         63
                                                                                                                            00063001
                                                      FLOATING POINT REGISTER
                                         64
                                                                                                                             00064001
                                                                                                                            00065001
                                         65
                                                                                                                             00066001
                        00000
                                         66 FR0
                                                      EOU
                                         67
                                                                                                                             00067001
                                         68
                                                      DISPLACEMENTS IN ADRLST IN IHIFSA
                                                                                                                            00068001
                                         69
                                                                                                                             00069001
                                                                                                                            00070001
                                                                                        DISPLACEMENT FOR -
                                         70
                        00000
                                         71 CI
                                                      EQU
                                                                                        IHIIORCI
                                                                                                                             00071001
                                                             0
                                                                                        IHIIORCL
                        00004
                                         72 CL
                                                      EQU
                                                                                                                             00072001
                        00008
                                         73 EV
                                                      EQU
                                                                                        IHIIOREV
                                                                                                                             00073001
                                                             8
                                                                                                                            00074001
00075001
                        aggac
                                         74 NX
                                                      EQU
                                                             12
                                                                                        IHIIORNX
                                         75 OP
                                                                                        IHIIOROP
                        00010
                                                      EOU
                                                             16
                                                                                                                             00076001
                        00014
                                                                                        IHIIOROO
                                         76 00
                                                      EOU
                                                             20
                                         77
                                                                                                                            00077001
                                         78
                                                      SAVE
                                                             (14,12),, 'IHISYSCT LEVEL 2.1 &SYSDATE &SYSTIME'
                                                                                                                            00078001
000000 47F0 F026
                               00026
                                         79+
                                                      В
                                                             38(0,15)
                                                                                                  BRANCH AROUND ID
                                                                                                                            01-SAVE
                                                                                                  LENGTH OF TDENTTETER
                                                                                                                            01-SAVE
000004 21
                                         80+
                                                      DC
                                                             AI1(33)
000005 C9C8C9E2E8E2C3E3
                                                             CL32'IHISYSCT LEVEL 2.1 08/17/12 13.2' IDENTIFIER
                                                                                                                            01-SAVE
                                                      DC
                                         81+
                                                             CL1'2
                                                                                                   IDENTIFIER
                                                                                                                            01-SAVE
000025 F2
                                                      DC
                                         82+
000026 90EC D00C
                                                             14,12,12(13)
                               0000C
                                         83+
                                                      STM
                                                                                                   SAVE REGISTERS
                                         84 *
                                                                                                                            00079001
                                                                                        LOAD BASE REGISTER
00002A 187F
                                         85
                                                      I R
                                                             R7.R15
                                                                                                                            00080001
                                                      USING IHISYSCT, R7
                                                                                                                             00081001
                   R:7 00000
                                         86
00002C 18CD
                                                                                        ADDR OF FIXED STORAGE AREA
                                                                                                                            00082001
                                         87
                                                      LR
                                                             R12, R13
                                                                                                                             00083001
                                         88
                                                                                        TO R12
00002E 50D0 76EC
                               006EC
                                         89
                                                      ST
                                                             R13, SAVEAR+4
                                                                                                                             00084001
000032 41D0 76E8
                               006E8
                                         90
                                                             R13, SAVEAR
                                                                                                                            00085001
                                                      LA
000036 58F0 C11C
00003A 58F0 F008
                               0011C
00008
                                         91
92
                                                             R15, IORLST(,R12)
R15, EV(,R15)
                                                                                        R15 -> COMMON I/O ROUTINES
                                                                                                                            00086001
00087001
                                                      L
                                                                                        EVALUATE DATASET NUMBER
00003E 05EF
                                         93
                                                      BALR
                                                             R14,R15
                                                                                                                             00088001
                                         94 *
                                                                                                                             00089001
                                         95
                                                      ON RETURN
                                                                                                                            00090001
                                                          = DATASET NUMBER
                                         96
                                                                                                                             00091001
```

97

R5 -> DSTABLE ENTRY

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.22 Loc Object Code 98 \* 00093001 R:5 00000 99 USING DSTABLE, R5 00094001 100 00095001 EVALUATE SECOND PARAMETER FUNCTION 00096001 101 102 00097001 000040 BF2F 1004 00004 00098001 103 R2, B'1111', 4(R1) SYS1 000044 47B0 706A 0006A 104 BNM 00099001 000048 9120 COC2 99902 105 тм OPTSW(R12), X'20' CONVERSION TO INTEGER TEST PRE 00100001 00004C 4710 7058 00058 106 BO SYS11 SHORT 00101001 LONG 00102001 000050 6800 2000 00000 FR0.0(.R2) 107 LD 000054 47F0 705C 0005C SYS11A 00103001 108 В 109 \* 00104001 000058 7800 2000 00000 110 SYS11 LE FR0,0(,R2) 00105001 R15, IORLST(,R12) 00005C 58F0 C11C 9911C 111 SYS11A 1 00106001 000060 58F0 F000 00000 R15.CI(,R15) 00107001 112 L 000064 05EF CONVERT TO INTEGER 00108001 BALR R14 R15 113 000066 47F0 706E 0006E 00109001 114 В 115 \* 00110001 116 SYS1 00006A 5800 2000 00000 Ĺ R0,0(,R2) 00111001 00006E 1220 117 SYS1A LTR R2. R0 00112001 000070 47D0 70B0 SYSERR9 ZERO OR NEG, FUNCT OUT OF RANGE 00113001 000B0 118 BNP EXCEED FUNCTION RANGE 000074 5920 7730 00730 119 C R2.=F'15' 00114001 000078 4720 70B0 000B0 120 ВН SYSERR9 YES, FUNCTION OUT OF RANGE 00115001 00007C 8B20 0002 00002 121 SLA R2,2 CONVERT TO OFFSET 00116001 R3 -> REQUESTED SYSACT ROUTINE R3.SYSVECT(R2) 000080 5832 7730 9973C 122 т 00117001 00118001 123 EVALUATE THIRD PARAMETER QUANTITY 00119001 124 00120001 125 000084 1B99 ZERO REG USED AS FLAG 00121001 126 R9. R9 000086 5820 1008 99998 127 R2,8(,R1) 00122001 00008A 8920 0001 00001 128 SLL R2,1 00123001 00008E 1222 LTR R2,R2 00124001 129 000090 4740 7098 00098 ВМ SYS11B 00125001 000094 4190 9001 00001 R9,1(,R9) QUANTITY IS A VARIABLE 00126001 131 LA 000098 8820 0001 00001 132 SYS11B SRL 00127001 R2,1 R2,=X'00FFFFFF' 000090 5420 7734 00734 133 N 00128001 00129001 0000A0 5840 2000 00000 134 R4,0(,R2) L 135 00130001 R3 -> REQUESTED SYSSACT 00131001 136 137 R2 -> QUANTITY 00132001 138 **R4** = OUANTITY 00133001 00134001 139 R9 EQUAL ONE IF QUANTITY IS A VARIABLE ELSE ZERO 00135001 140 0000A4 07F3 141 BRANCH TO SYSACT ROUTINE 00136001 142 \* 00137001 00138001 00139001 0000A6 58D0 76EC 006EC 143 RETSYS L R13, SAVEAR+4 144 **RETURN (14,12)** RESTORE CALLERS REGS AND RETURN 00140001 145 RESTORE THE REGISTERS 0000AA 98EC D00C 0000C 146+ LM 14,12,12(13) 01-RETUR 0000AE 07FE 147+ BR RETURN 01-RETUR 148 \* 00141001 0000B0 18DC UNDEFINED FUNCTION NUMBER ERR9 149 SYSERR9 LR R13.R12 00142001 0000B2 47FC 01F0 001F0 FSAERR+9\*4(R12) 150 00143001 В 00144001 151 152 BRANCH TO NEXTREC IN IHIIOR 00145001 153 \* 00146001 0000B6 58FC 011C 0011C 154 NXREC Ĺ R15, IORLST(R12) 00147001 0000BA 58FF 000C agaac 155 т R15, NX(R15) 00148001 00149001 0000BE 07FF 156 BR R15 00150001 157 00151001 158 159 ROUTINE SYSACT1 00152001 160 00153001 00154001 161 QUANTITY = R00155001 162 163 \* 00156001 0000C0 9180 501A 164 SYSACT1 TM DSF, DS0 00157001 0001A 165 0000C4 4710 70CE 000CE RΩ SYS1T1 00158001 00159001 0000C8 18DC 166 SYSCLOSD LR DATASET IS CLOSED ERROR 10 R13, R12 0000CA 47FC 01F4 001F4 FSAERR+10\*4(R12) 00160001 167 В 168 00161001 0000CE 1299 00162001 169 SYS1T1 LTR R9, R9 0000D0 4720 70DA 000DA 170 ВP SYS1T2 00163001 0000D4 18DC QUANTITY SHOULD BE A VARIABLE 00164001 171 SYSCONST LR R13.R12 001FC FSAERR+12\*4(R12) 00165001 0000D6 47FC 01FC ERROR12 172 В 00166001 173 0000DA 5840 5004 00004 174 SYS1T2 00167001 R4,R 0000DE 5B40 5008 80000 175 S R4,RE 00168001 00169001 9999F2 4A49 5916 99916 176 ΔН R4.P 0000E6 4140 4001 00001 00170001 177 LA R4,1(,R4) 0000EA 5040 2000 00000 178 ST 00171001 R4,0(,R2) 0000EE 47F0 70A6 000A6 RETSYS 00172001 180 \* 00173001 181 \*-00174001 ROUTINE SYSACT2 182 00175001 183 00176001 184 00177001 185 \* R = QUANTITY00178001 186 \* 00179001 0000F2 1244 187 SYSACT2 LTR R4 R4 00180001 0000F4 4720 70FC 000FC 00181001 SYSACT2A 188 BP 0000F8 47F0 7104 00104 189 SYS2T1 00182001 В 00183001 0000FC 4940 5016 00016 00184001 191 SYSACT2A CH R4.P 000100 47D0 710A 0010A 192 BNH SYS2T1+6 00185001 000104 18DC 193 SYS2T1 LR R13,R12 00186001

Loc	Objec	t Code	Addr1	Addr2	Stmt	Source	State	ment	X390 3.1.04 2012/08,	/17 13.22
000106				00200	194		В	FSAERR+13*4(R12)	QUANTITY OUT OF RANGE ERROR 13	00187001
					195	*		, ,		00188001
00010A 00010E			0001A	000C8	196 197		TM BZ	DSF,DS0 SYSCLOSD	DATASET IS CLOSED	00189001 00190001
000101		7000		00000	198		LR	R3, R4	DATASET IS CLOSED	00191001
000114				00008	199		Α	R3,RE		00192001
000118 00011C		5016		00016	200 201		SH BCTR	R3,P R3,0		00193001 00194001
00011E		5004		00004	202		S	R3,R		00195001
000122	4720	71A6		001A6	203		BP	SYS2T2		00196001
					204 205		NEW C	HARACTER POINTER LESS OR	FOLIAL R	00197001 00198001
					206		III C	THINCIER FOINTER EESS OR	EQUAL II	00199001
000126			0001A	00166	207		TM	DSF, DS2		00200001
00012A 00012E			0001B	0016C	208 209		BO TM	SYS2T3 DSF+1,DS10	DATASET OPENED BY SYSACT 12 ?	00201001 00202001
000132				00162	210		ВО	SYS2T30		00203001
000136 00013A			0001A	00402	211 212		TM BO	DSF,DS7 SYSEOD	EOD BEEN REACHED ?	00204001 00205001
00013E				000B6	213		BAL	R14,NXREC	LAST I/O PROCEDURE WAS INPUT	00205001
000142			0001A		214		TM	DSF,DS7	END OF DATA REACHED ?	00207001
000146 00014A		7150		00150	215 216		BZ LR	SYS2T1A R3,R4	QUANTITY = 1 ?	00208001 00209001
00014C		7402		00402	217		BCT	R3, SYSEOD	NO, INPUT REQUEST BEYOND EOD	00210001
000150				00008		SYS2T1A	A	R4, RE	ACCION A NEW VALUE TO CHARACTER	00211001
000154 000158		2010		00016	219 220		SH BCTR	R4,P R4,0	ASSIGN A NEW VALUE TO CHARACTER	00212001 00213001
00015A	5040			00004	221		ST	R4, R		00214001
00015E	47F0	70A6		000A6	222 223	*	В	RETSYS		00215001
000162	1266					SYS2T30	LTR	R6, R6	DATASET NUMBER = 0 ?	00216001 00217001
000164				005CA	225		BZ		YES, BRANCH	00218001
000168	9620	501A	0001A		226 227	*	OI	DSF,DS2		00219001 00220001
					228		LAST :	I/O PROCEDURE WAS OUTPUT		00221001
000166	F020	F000		00000	229			חס פר		00222001
00016C 000170				00008 00004	230	SYS2T3	L S	R3, RE R3, R		00223001 00224001
000174				0017E	232		BZ	SYS2T31		00225001
000178 00017C		76D4		006D4	233 234		LA BALR	R15,SYBLANK R14,R15	FILL RECORD WITH BLANKS	00226001 00227001
00017E		70B6		000B6		SYS2T31	BAL	R14,NXREC		00228001
000102	1021				236	*	I D	D2 D4		00229001
000182 000184					237 238		LR BCTR	R3,R4 R3,0		00230001 00231001
000186					239		LTR	R3,R3		00232001
000188 00018C			0001A	00196	240 241		BZ OI	SYS2T32 DSF,DS3		00233001 00234001
000190			0002.	006D4	242		LA	R15, SYBLANK	FILL RECORD WITH BLANKS	00235001
000194 000196		E004		00004	243	SYS2T32	BALR L	R14,R15 R11,R		00236001 00237001
00019A		3004		00004	245	3132132	AR	R4, R11		00237001
00019C		5004		20004	246		BCTR	R4,0	CHARACTER POINTER	00239001
00019E 0001A2				00004 000A6	247 248		ST B	R4, R RETSYS	QUANTITY+R-1 ASSIGN TO R	00240001 00241001
					249					00242001
					250 251		NEW CI	HARACTER POINTER GREATER	THAN R	00243001 00244001
0001A6	9120	501A	0001A			SYS2T2	TM	DSF,DS2		00245001
0001AA			0001B	001C0	253		BO	SYS2T20	DC DEEN ODENED BY CYCACT 12 2	00246001
0001AE 0001B2			00010	001DA	254 255		TM BZ	DSF+1,DS10 SYS2T5	DS BEEN OPENED BY SYSACT 12 ?	00247001 00248001
0001B6	1266				256		LTR	R6,R6	DATASET NUMBER = 0 ?	00249001
0001B8 0001BC			0001A	005CA	257 258		BZ OI	SYSINCOM DSF,DS2	YES, BRANCH	00250001 00251001
0001C0	1834		COOIN		259	SYS2T20	LR	R3, R4	LAST I/O WAS OUTPUT	00252001
0001C2				00008	260		A c	R3, RE		00253001
0001C6 0001CA			0001A	00004	261 262		S OI	R3,R DSF,DS3		00254001 00255001
0001CE	4B30			00016	263		SH	R3, P		00256001
0001D2 0001D4		76D4		006D4	264 265		BCTR LA	R3,0 R15,SYBLANK	FILL RECORD WITH BLANKS	00257001 00258001
0001D4		. 554		55554	266			R14,R15	NECOND WEITH DENING	00259001
000104	9101	501 A	0001A		267 268		тм	NSF NS7	FOD REEN PEACHED 3	00260001
0001DA 0001DE			ALGOR	00402	268	SYS2T5	TM BO	DSF,DS7 SYSEOD	EOD BEEN REACHED ?	00261001 00262001
0001E2				00008		SYS2T4	A	R4, RE		00263001
0001E6 0001EA		ρυτρ		00016	271 272		SH BCTR	R4,P R4,0	ASSIGN NEW VALUE TO CHAR POINTER	00264001 00265001
0001EC	5040			00004	273		ST	R4,R		00266001
0001F0	47F0	70A6		000A6	274 275	*	В	RETSYS		00267001 00268001
					275	*				00269001
					277	*	ROUTI	NE SYSACT3		00270001
					278 279					00271001 00272001
					280	*	QUANT	ITY = S		00273001
0001F4	9180	501 ^	0001A		281 282	* SYSACT3	тм	DSF,DS0		00274001 00275001
0001F4			PTOOL	000C8	283	JIJACIJ	BZ		DATASET CLOSED ERROR10	00275001
0001FC		70D4		00004	284		LTR	R9, R9	OHANTITY NOT A MARIE ERR 42	00277001
0001FE 000202				000D4 00014	285 286		BZ LH	SYSCONST R4,S	QUANTITY NOT A VARIABLE ERR 12	00278001 00279001
000206	5040	2000		00000	287		ST	R4,0(,R2)		00280001
00020A	4/F0	/UA6		000A6	288 289	*	В	RETSYS		00281001 00282001
					-					

Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.22 Loc Object Code 290 \*------ 00283001 291 \* ROUTINE SYSACT4 00284001 292 \*-00285001 293 \* 00286001 294 \* UNDEFINED IF DATASET SPLIT INTO SECTION BY SYSACT8 OR 00287001 295 \* IF THE DATASET IS 0 OR 1 00288001 296 \* 00289001 297 \* ACTION AFTER INPUT - S = QUANTITY00290001 298 \* 00291001 ACTION AFTER OUTPUT - S = QUANTITY00292001 299 00293001 301 \* IF FORWARD SKIPPING FILL SKIPPED RECORDS WITH BLANKS 00294001 302 \* 00295001 00020F 5880 5000 303 SYSACT4 99999 - 1 R8. ADCB 00296001 LTR TEST QUANTITY 00297001 000212 1244 304 R4, R4 000214 4720 721E 0021E SYS4T01 305 ВР 00298001 000218 18DC 306 LR R13.R12 00299001 00021A 47FC 0200 00200 307 FSAERR+13\*4(R12) **OUANTITY OUT OF RANGE** 00300001 В 308 \* 00301001 00021E 9140 501B 0001B 309 SYS4T01 TM DSF+1.DS9 DATASET SECTIONED ? 00302001 000222 4710 75CA 005CA 310 во SYSINCOM 00303001 000226 1226 311 LTR R2.R6 DATASET NO = 1 OR 0 ? 00304001 000228 4780 75CA 005CA 312 ΒZ SYSINCOM 00305001 00022C 4620 7234 00234 313 BCT R2, SYS4T0 00306001 000230 47F0 75CA 995CA 314 В SYSTNCOM 99397991 315 \* 00308001 000234 9180 501A 316 SYS4T0 DSF DS0 DATASET OPEN ? 00309001 000238 4780 70C8 000C8 00310001 ΒZ **SYSCLOSD** 00023C 4940 5014 00014 R4,S QUANTITY > S ? 00311001 318 CH 999249 4749 72AF 002AE 319 ΒI SYS4T2 NO, LESS 00312001 000244 4780 73BE 003BE 320 BE SYS4T3 NO, EQUAL 00313001 000248 9120 501A 0001A 321 SYS4T1 DSF DS2 LAST I/O OUTPUT ? 00314001 TM 00024C 4710 728C 0028C 322 SYS4T15 YES, BRANCH TO SYS4T15 00315001 323 \* 00316001 324 \* LAST I/O INPUT AND QUANTITY > S 00317001 325 \* 00318001 000250 9120 501B DS BEEN OPENED BY SYSACT 12 ? 00319001 ТМ DSF+1,DS10 0001B 326 000254 4780 7260 00260 327 ΒZ SYS4T12 00320001 000258 9620 501A DSF,DS2 DATASET OPEN FOR OUTPUT 328 00321001 00025C 47F0 728C 9928C 329 В SYS4T15 00322001 330 \* 00323001 000260 41F0 7408 00408 331 SYS4T12 LA R15.SYSNOT **QUANTITY IN NOTTAB ?** 00324001 000264 05EF 00325001 BALR R14, R15 332 000266 9101 501A DSF, DS7 0001A 333 TM **EOD BEEN REACHED ?** 00326001 00026A 4710 7402 00402 SYSEOD 00327001 334 во 00026E 1233 335 LTR R3, R3 00328001 VES. BRANCH TO SYS4T21 999279 4729 72CA 002CA 00329001 336 **RP** SYS4T21 000274 9101 501A 337 SYS4T13 0001A TM DSF, DS7 END OF DATA BEEM REACHED ? 00330001 000278 4710 7402 00402 338 во SYSEOD 00331001 00027C 45E0 70B6 000B6 339 BAL R14, NXREC GET NEXT RECORD 00332001 000280 4940 5014 00014 340 СН R4.S OUANTITY = S ? 00333001 000284 4770 7274 00274 341 BNE SYS4T13 00334001 000288 47F0 70A6 00335001 000A6 342 RETSYS В 343 \* 00336001 LAST I/O OUTPUT AND QUANTITY > S 00337001 345 \* 00338001 00028C 5830 5008 ดดดดล 346 SYS4T15 L R3.RE FILL RECORD WITH BLANKS 00339001 000290 5B30 5004 99994 347 S R3.R 99349991 000294 4780 729E 00341001 0029E 348 ΒZ SYS4T14 000298 41F0 76D4 006D4 349 LA R15, SYBLANK 00342001 00029C 05EF 00343001 350 BALR R14, R15 00029E 45E0 70B6 000B6 351 SYS4T14 BAL R14.NXREC 00344001 00014 OUANTITY = S ? 0002A2 4940 5014 352 CH R4.S 00345001 0002A6 4770 728C SYS4T15 00346001 0028C 353 **BNE** 0002AA 47F0 70A6 000A6 354 RETSYS 00347001 В 355 \* 00348001 0002AE 41F0 7408 00408 356 SYS4T2 LA R15, SYSNOT QUANTITY IN NOTTAB ? 00349001 0002B2 05EF 357 BALR R14, R15 00350001 0002B4 1233 358 LTR R3.R3 00351001 0002B6 4780 743C 0043C 359 SYSERR14 NO BACKWARD REP. NOT DEFINED 00352001 ΒZ 0002BA 9120 501A 0001A 360 TM DSF DS2 LAST I/O OUTPUT ? 00353001 0002BE 4710 7366 00366 00354001 361 во SYS4T24 362 \* 00355001 363 \* LAST I/O INPUT AND QUANTITY < S 00356001 364 \* 00357001 0002C2 9604 501A 365 00358001 9991A DSF DS5 DS5=1 0002C6 94FC 501A 0001A DSF, 255-DS6-DS7 SET DS6 AND DS7 = 0 366 NI 00359001 0002CA 9680 501B 0001R 367 SYS4T21 OI DSF+1,DS8 DS8=1 00360001 R:8 99999 368 USING THADCE, R8 00361001 369 \* 00362001 CHECK SYDECB 370 00363001 0002CE 4110 8058 00058 371+ LA 1,SYDECB LOAD PARAMETER REG 1 02-IHBIN 0002D2 58E0 1008 80000 14,8(0,1) PICK UP DCB ADDR 01-CHECK 372+ LOAD CHECK ROUTINE ADDR 0002D6 58F0 E034 00034 373+ 15,52(0,14) 01-CHECK LINK TO CHECK ROUTINE 0002DA 05EF 374+ BALR 14,15 01-CHECK 00364001 375 \* 0002DC 947F 501B 0001B 376 ΝI DSF+1,255-DS8 SET DS8=0 00365001 0002E0 180A 377 SYS4T22 LR R0,R10 00366001 0002E2 1818 378  $\mathsf{LR}$ R1,R8 00367001 379 \* 00368001 POINT (1),(0) 380 00369001 0002E4 58F0 1054 00054 381+ 15,84(0,1) LOAD POINT RTN ADDR 01-POINT LINK TO POINT ROUTINE 01-POINT 0002E8 45EF 0004 00004 382+ 14,4(15,0) 383 \* 00370001 0002EC 5820 500C 0000C 384 1 R2.NBB 00371001 385 00372001

000402 18DC

481 SYSEOD

LR

R13, R12

00451001

Addr1 Addr2 Stmt X390 3.1.04 2012/08/17 13.22 Loc Object Code Source Statement 386 READ SYDECB, SF, (R8), (R2), MF=E 00373001 1,SYDECB 0002F0 4110 8058 00058 387+ LOAD DECB ADDRESS LA 5(1),X'80' 0002F4 9280 1005 00005 388+ MVI SET TYPE FIELD 02-THRRD 00008 STORE DCB ADDRESS 0002F8 5081 0008 ST R8.8(1.0) 02-IHBRD 389+ 0002FC 5021 000C 0000C 390+ ST R2,12(1,0) STORE AREA ADDRESS 02-IHBRD 000300 58F1 0008 00008 391+ LOAD DCB ADDRESS LOAD RDWR ROUTINE ADDR 02-IHBRD 000304 58F0 F030 00030 392+ 15,48(0,15) 000308 05EF 393+ BALR 14,15 LINK TO RDWR ROUTINE 02-THBRD 394 00374001 00375001 00030A 5820 5010 00010 395 R2.BB 396 00030E 4A20 5020 00020 ΑН R2,BL 00376001 000312 5020 5008 397 ST R2, RE 00377001 00008 000316 1824 398 LR R2,R4 00378001 000318 0620 399 **BCTR** R2.0 00379001 00031A 4020 5014 00014 S = QUANTITY - 1 00380001 400 STH R2,S 00031E 45E0 70B6 00381001 000B6 401 R14, NXREC BAL 000322 9140 501A 0001A 402 ТМ DSF DS1 DATASET BLOCKED ? 00382001 000326 4710 70A6 000A6 103 RΩ RETSYS 00383001 00032A 1B22 404 SR R2,R2 YES, EVALUATE NUMBER OF FIRST 00384001 00032C 5830 5020 RECORD IN THE BLOCK = 00385001 00020 405 R3.BL L 000330 8830 0010 00010 ENTIER((QUANTITY-1)/(BLKLTH/ 00386001 406 SRL R3.16 000334 5810 5014 00014 407 R1,S RECLNTH))\*(BLKLNTH/RECLNTH)+1 00387001 000338 8910 0010 00010 408 SLL R1,16 00388001 00033C 8810 0010 00010 409 SRL R1,16 00389001 00390001 000340 1D21 410 DR R2.R1 00391001 000342 1813 LR 411 R1, R3 000344 1B22 412 SR R2. R2 00392001 000346 1834 LR 00393001 413 R3, R4 000348 0630 **BCTR** R3,0 00394001 414 00034A 1D21 415 DR R2,R1 00395001 00034C 1C21 416 MR R2,R1 00396001 00034E 4133 0001 00001 LA 00397001 417 R3,1(R3) 000352 4030 5014 00014 STH R3.S 00398001 000356 4940 5014 00014 419 SYS4T23 R4,S QUANTITY = S ? 00399001 CH 00035A 4780 70A6 000A6 420 BE **RETSYS** 00400001 00035F 45F0 70B6 R14 NXRFC 00401001 999B6 421 BΔI 00402001 000362 47F0 7356 00356 SYS4T23 422 В 423 00403001 424 \* LAST I/O WAS OUTPUT AND QUANTITY < S 00404001 425 \* 00405001 000366 9140 501A 0001A 426 SYS4T24 TM DSF DS1 DATASET BLOCKED ? 00406001 00407001 00036A 4710 737A 0037A 427 во SYS4T25 00036E 5830 5010 00010 00408001 R3.BB 428 000372 4A30 5020 00409001 00020 429 R3,BL 000376 5030 5008 00008 R3, RE 00410001 430 ST 00411001 00412001 00037A 5830 5008 00008 431 SYS4T25 R3, RE FILL BLOCK WITH BLANKS 00037F 5B30 5004 99994 432 R3.R 000382 4780 7380 0038C 433 ΒZ SYS4T26 00413001 000386 41F0 76D4 006D4 434 LA R15.SYBLANK 00414001 00038A 05EF 435 **BALR** R14, R15 00415001 00038C 45E0 70B6 000B6 436 SYS4T26 BAL R14 NXREC 00416001 437 00417001 438 SYS4T27 **CHECK SYDECB** 00418001 02-IHBIN 000390 4110 8058 00058 439+SYS4T27 1,SYDECB LOAD PARAMETER REG 1 LA 000394 58E0 1008 PICK UP DCB ADDR 00008 440+ 14,8(0,1) 01-CHECK 000398 58F0 E034 441+ 15,52(0,14) LOAD CHECK ROUTINE ADDR 01-CHECK 00034 00039C 05EF 442+ BALR 14,15 LINK TO CHECK ROUTINE 443 \* 00419001 SET END OF DATA MARK 444 CLOSE ((R8), LEAVE), TYPE=T 00420001 ALIGN LIST TO FULLWORD 00039E 0700 445+ CNOP 0,4 0003A0 4510 73A8 003A8 446+ 1,\*+8 LOAD REG1 W/LIST ADDR 01-CLOSE BAL 0003A4 00000000 447+ DC A(0) OPTION AND DCB ADDRESS 01-CLOSE STORE DCB ADDRESS 0003A8 5081 0000 00000 448+ ST R8,0(1,0) 01-CLOSE 0003AC 92B0 1000 MOVE IN OPTION BYTE 00000 449+ MVI 01-CLOSE 0(1),1760003B0 0A17 450+ 23 ISSUE TCLOSE SVC SVC 451 \* 00421001 0003B2 9604 501A 0001A 452 OI DSF,DS5 00422001 SET DS2 AND DS6 = 0 0003B6 94DD 501A 0001A 453 NI DSF, 255-DS2-DS6 00423001 0003BA 47F0 72E0 002E0 WAS LAST I/O OUTPUT 00424001 454 В SYS4T22 455 \* 00425001 00426001 0003BE 9120 501A 0001A 456 SYS4T3 TM DSF DS2 0003C2 4780 73F2 003F2 00427001 457 ΒZ SYS4T31 458 \* 00428001 LAST I/O OUTPUT AND QUANTITY = S 00429001 459 00430001 460 DSF,DS4 0003C6 9608 501A 00431001 0001A 461 ΟI 0003CA 5830 5010 00010 00432001 462 R3,BB 0003CE 4A30 5020 00020 463 AΗ R3,BL 00433001 99998 00434001 000302 5030 5008 464 ST R3.RF 0003D6 5B30 5004 00004 FILL BLOCK WITH BLANKS 00435001 465 R3,R 0003DA 4780 73E4 SYS4T33 00436001 003E4 ΒZ 466 0003DE 41F0 76D4 006D4 467 LA R15, SYBLANK 00437001 0003E2 05EF R14,R15 00438001 468 BALR 0003E4 45E0 70B6 999B6 469 SYS4T33 BAL R14, NXREC WRITE BLOCK 00439001 MAKE NOTTAB ENTRY 0003E8 41F0 7408 00408 470 LA R15, SYSNOT 00440001 0003EC 05EF R14, R15 00441001 471 **BALR** 0003EE 47F0 7390 00390 472 В SYS4T27 00442001 473 \* 00443001 474 \* LAST I/O INPUT AND QUANTITY = S 00444001 475 00445001 0003F2 5820 5008 00446001 00008 476 SYS4T31 R2, RE 0003F6 4B20 5016 00016 477 SH R2,P 00447001 RESET CHARACTER POINTER 00448001 0003FA 5020 5004 00004 478 ST R2,R 0003FE 47F0 70A6 000A6 479 00449001 В **RETSYS** 480 \* 00450001

Loc Object Code Addr1 Addr2 Stmt Source Statement X390 3.1.04 2012/08/17 13.22 000404 47FC 01E0 001E0 482 FSAERR+5\*4(R12) 00452001 483 \* 00453001 SCAN NOTTAB IN ORDER TO FIND OUT IF AN ENTRY HAS BEEN 484 \* 00454001 00455001 MADE FOR QUANTITY 485 IF YES R3 IS SET TO ONE, ADDR OF NOTEADR IN R10 00456001 486 00457001 487 000408 583C 00B0 aaara 488 SYSNOT R3.ANOTTAB(R12) 00458001 00040C 18A3 489 LR R10,R3 00459001 00000 490 SYSNOT1 R10,0(,R3) 00040E 59A0 3000 C 00460001 000412 4780 7438 00461001 SYSNOT2 00438 491 BE 000416 41A0 A008 00008 492 LA R10,8(,R10) 00462001 493 00041A 1826 LR R2,R6 00463001 00041C 4920 A000 00000 494 CH R2,0(,R10) 00464001 000420 4770 740F 9949F 495 BNF SYSNOT1 00465001 000424 4940 A002 00002 СН R4,2(,R10) 00466001 496 000428 4770 740E SYSNOT1 00467001 0040E 497 BNE 00042C 1B33 00468001 498 SR R3,R3 00042E 4130 3001 99991 499 LA R3,1(,R3) 00469001 000432 41A0 A004 00004 500 LA R10,4(,R10) 00470001 00471001 000436 07FE 501 BR R14 00472001 502 R3,R3 00473001 000438 1B33 503 SYSNOT2 SR 00043A 07FE 504 BR R14 00474001 505 \* 00475001 00476001 BACKWARD REPOSTITIONING NOT 00043C 18DC 506 SYSERR14 IR R13.R12 00043E 47FC 0204 DEFINED 00204 507 FSAERR+14\*4(R12) 00477001 В 508 00478001 509 00479001 510 ROUTINE SYSACT5 00480001 511 \*-00481001 512 \* 00482001 OUANTITY = P 00483001 513 514 \* 00484001 000442 9180 501A 515 SYSACT5 DSF,DS0 00485001 0001A ТМ 000446 4780 70C8 000C8 516 ΒZ **SYSCLOSD** DATASET CLOSED ERROR10 00486001 000444 1299 00487001 517 LTR R9. R9 00488001 00044C 4780 70D4 000D4 SYSCONST QUANTITY NOT A VARIABLE ERR 12 518 ΒZ 000450 4840 5016 00016 519 LH R4,P 00489001 000454 5040 2000 00000 R4,0(,R2) 00490001 520 000458 47F0 70A6 000A6 521 B RETSYS 00491001 522 \* 00492001 00493001 523 ROUTINE SYSACT6 00494001 524 00495001 525 00496001 526 527 \* 00497001 00498001 P = QUANTITY 528 \* DATASET HAS TO BE CLOSED 00499001 529 00045C 9180 501A 0001A 530 SYSACT6 TM DSF,DS0 00500001 000460 4710 747A 0047A во **SYSOPEN** 00501001 000464 1244 532 I TR R4.R4 TEST OUANTITY 00502001 SYSQOUTR 00503001 000466 47D0 74C6 004C6 533 BNP MINUS OR ZERO 00046A 5940 7738 00738 R4.=F'32760' 00504001 534 C 00046E 4720 74C6 SYSQOUTR 00505001 004C6 535 вн TOO GREAT 000472 4040 5016 00016 536 STH R4,P 00506001 000476 47F0 70A6 537 RETSYS 00507001 000A6 В 538 00508001 00047A 18DC 539 SYSOPEN I R R13.R12 DATASET IS OPEN ERROR 11 00509001 00510001 00047C 47FC 01F8 001F8 540 FSAERR+11\*4(R12) В 541 00511001 542 00512001 543 \* ROUTINE SYSACT7 00513001 544 \*-00514001 00515001 545 546 QUANTITY = Q00516001 547 \* 00517001 000480 1299 548 SYSACT7 LTR R9, R9 00518001 000482 4780 70D4 000D4 549 ΒZ SYSCONST QUANTITY NOT A VARIABLE ERR 12 00519001 00520001 000486 1B44 550 SR R4.R4 000488 4340 5019 00019 IC R4.0 00521001 551 00048C 5040 2000 00000 552 R4.0(,R2) 00522001 ST 000490 47F0 70A6 000A6 00523001 553 RETSYS 554 \* 00524001 00525001 555 ROUTINE SYSACT8 00526001 556 557 00527001 00528001 558 559 0 = QUANTITY 00529001 00530001 DATASET HAS TO BE CLOSED 560 561 \* ASSIGNING A VALUE TO Q 00531001 00532001 562 000494 9180 501A 0001A 563 SYSACT8 TM DSF,DS0 00533001 000498 4710 747A 0047A **SYSOPEN** DATASET IS OPEN ERROR11 00534001 564 во 00049C 1266 565 LTR R6, R6 DATASET 0 ? 00535001 YES, INCOMPATIBLE ACTION
TEST QUANTITY 00049E 4780 75CA 005CA SYSINCOM 566 ΒZ 00536001 0004A2 1234 00537001 567 LTR R3.R4 0004A4 47D0 74C6 004C6 568 BNP SYSQOUTR MINUS OR ZERO 00538001 0004A8 5B30 74CC 004CC 569 R3, KF256 00539001 0004AC 4720 74C6 004C6 570 BP SYSQOUTR 00540001 00541001 00542001 0004B0 4780 74C6 004C6 571 R7 SYSQOUTR 0004B4 4240 5019 STC 00019 572 R4,0 0004B8 9640 501B 0001B 573 OI DSF+1,DS9 RECORD CONTAIN CNTL CHARACTER 00543001 0004BC 47F0 70A6 RETSYS 00544001 000A6 574 В 575 \* 00545001 0004C0 18DC 576 SYSDSN0 I R R13.R12 DATASET NUMBER OUT OF RANGE 00546001 0004C2 47FC 01CC 001CC 577 В FSAERR(R12) 00547001

X390 3.1.04 2012/08/17 13.22 Loc Object Code Addr1 Addr2 Stmt Source Statement 578 \* 00548001 0004C6 18DC 579 SYSQOUTR LR R13.R12 **QUANTITY OUT OF RANGE ERROR 13** 00549001 0004C8 47FC 0200 00200 580 В FSAERR+13\*4(R12) 00550001 00551001 581 0004CC 00000100 582 KF256 DC F'256' 00552001 583 00553001 584 \*-00554001 585 ROUTINE SYSACT9 00555001 586 00556001 00557001 587 588 QUANTITY = K00558001 589 \* 00559001 0004D0 1299 590 SYSACT9 LTR R9. R9 00560001 9994D2 4789 79D4 99904 591 **B7** SYSCONST OLIANTITY NOT A VARIABLE FRR 12 00561001 0004D6 1B44 00562001 592 SR R4, R4 0004D8 4340 5018 00018 593 IC 00563001 R4,K 0004DC 5040 2000 00000 594 R4.0(,R2) 00564001 ST 0004E0 47F0 70A6 000A6 595 RETSYS 00565001 596 00566001 597 00567001 598 ROUTINE SYSACT10 00568001 599 00569001 600 00570001 601 K = QUANTITY 00571001 ASSIGN NUMBER OF BLANK DELIMTERS 602 00572001 603 00573001 0004E4 1244 604 SYSACT10 LTR TEST QUANTITY 00574001 0004E6 47D0 74C6 004C6 MINUS OR ZERO 00575001 **BNP SYSOOUTR** 0004EA 5940 74CC 004CC 00576001 606 R4, KF256 0004EE 47B0 74C6 004C6 607 BNI SYSQOUTR TOO GREAT 00577001 0004F2 4240 5018 00018 608 STC R4.K 00578001 0004F6 47F0 70A6 000A6 00579001 609 RETSYS 00580001 00581001 611 \* 612 00582001 **ROUTINE SYSACT11** 613 00583001 00584001 614 ASSIGN VALUE TO QUANTITY FOR DEFINING IF DATASET OPEN 00585001 615 00586001 616 617 \* 00587001 0004FA 1299 618 SYSACT11 LTR R9. R9 00588001 0004FC 4780 70D4 000D4 619 ΒZ SYSCONST **OUANTITY NOT A VARIABLE ERR 12** 00589001 000500 1B44 00590001 SR R4.R4 620 DSF, DS0 000502 9180 501A 0001A ТМ 00591001 621 000506 4780 756E 0056E SYS11T1 DATASET IS CLOSED 00592001 622 ΒZ 00050A 4140 4001 00001 623 LA R4,1(,R4) 00593001 00050F 9101 501A 9991A DSF DS7 00594001 624 TM 000512 4710 756C 0056C во SYS11T2 DS7 EQUAL 1 00595001 625 000516 9120 501A 0001A 626 TM DSF DS2 00596001 00051A 4710 756E 0056E 627 во SYS11T1 OUTPUT 00597001 00051E 9140 501A 0001A 628 тм DSF DS1 00598001 0056E 00599001 000522 4710 756E 629 во SYS11T1 UNBLOCKED 000526 58B0 5004 00004 00600001 630 L R11.R R1, RE 00052A 5810 5008 00008 00601001 631 00052E 4B10 5016 00016 632 SH R1,P 00602001 000532 191B 633 CR R1, R11 00603001 000534 4770 756E 0056E 634 BNE SYS11T1 R NOT EQUAL RE MINUS P 00604001 000538 5810 5010 99919 635 R1.BB 99695991 00053C 4A10 5020 00606001 00020 636 ΑH R1,BL 000540 1B1B SR R1,R11 00607001 637 000542 9540 B000 638 SYS11T3 0(R11),C'' 00608001 00000 000546 4770 756E 0056E 639 BNE SYS11T1 CHARACTER NOT BLANK 00609001 00054A 41BB 0001 00001 640 LA R11,1(R11) 00610001 00054E 4610 7542 00611001 00542 641 **BCT** R1.SYS11T3 000552 5880 5000 00000 642 R8, ADCB 00612001 L 643 \* 00613001 644 **CHECK SYDECB** 00614001 000556 4110 8058 00058 645+ LA 1,SYDECB LOAD PARAMETER REG 1 02-IHBIN PICK UP DCB ADDR 00055A 58E0 1008 00008 646+ L 14.8(0.1) 01-CHECK 00055E 58F0 E034 00034 647+ LOAD CHECK ROUTINE ADDR 01-CHECK 15,52(0,14) 000562 05EF 648+ BALR LINK TO CHECK ROUTINE 649 \* 00615001 000564 9101 501A 9991A 650 тм DSF DS7 00616001 NO END OF DATA 000568 4780 756E 0056E 651 ΒZ SYS11T1 00617001 00056C 1144 652 SYS11T2 LNR R4, R4 00618001 00000 00619001 00056E 5040 2000 653 SYS11T1 ST R4.0(,R2) 000572 47F0 70A6 000A6 00620001 654 RETSYS 655 \* 00621001 656 99622991 ROUTINE SYSACT12 657 00623001 658 00624001 659 00625001 660 \* OPEN OR CLOSE DATASET 00626001 661 \* 00627001 662 SYSACT12 LTR 000576 1244 R4.R4 00628001 000578 4780 759A 00629001 0059A SYS12T1 663 **B7** 00057C 4640 74C6 004C6 664 вст R4, SYSQOUTR QUANTITY OUT OF RANGE 00630001 000580 9180 501A 0001A 665 TM DSF,DS0 ROUTINE SHOULD PERFORM OPEN 00631001 000584 4710 75AC 005AC 666 во SYS12T2 DATASET WAS OPEN ALREADY 00632001 00633001 00634001 000588 9620 501B 0001B 667 ΟI DSF+1,DS10 DS10=1 DS OPENED BY SYSACT 12 00058C 58FC 011C 0011C R15, IORLST(R12) 668 L 000590 58FF 0014 00014 669 R15,0Q(R15) OPEN DATASET 00635001 R14,R15 000594 05EF 670 00636001 000596 47F0 70A6 000A6 RETSYS 00637001 671 В 672 00638001 00059A 9180 501A 0001A 673 SYS12T1 TM DSF,DS0 ROUTINE SHOULD PERFORM CLOSE 00639001

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Loc Object Code
                       Addr1 Addr2 Stmt
                                                                                                  X390 3.1.04 2012/08/17 13.22
                                             Source Statement
00059E 4780 75AC
                              005AC
                                       674
                                                            SYS12T2
                                                                                     DATASET WAS CLOSED ALREADY
                                                                                                                         00640001
0005A2 58FC 011C
                              0011C
                                       675
                                                            R15, IORLST(R12)
                                                                                                                          00641001
                                                     L
0005A6 58F0 F004
                              00004
                                       676
                                                           R15,CL(,R15)
R14,R15
                                                                                                                         00642001
0005AA 05EF
                                                     BALR
                                                                                                                          00643001
                                       677
0005AC 47F0 70A6
                              000A6
                                       678 SYS12T2
                                                           RETSYS
                                                                                                                          00644001
                                                    В
                                                                                                                          00645001
                                       680 *-
                                                                                                                         00646001
                                       681 *
                                                     ROUTINE SYSACT13
                                                                                                                         00647001
                                       682
                                                                                                                         00648001
                                                                                                                         00649001
                                       683
                                       684
                                                                                                                          00650001
                                       685 *
                                                     SETTING DS4 FLAG USED BY A LATER SYSACT4 FOR AN ENTRY
                                                                                                                          00651001
                                       686 *
                                                     TO NOTTAB
                                                                                                                         00652001
                                       687
                                                                                                                          00653001
0005B0 9180 501A
                                       688 SYSACT13 TM
                                                           DSF,DS0
                                                                                                                         00654001
                       0001A
0005B4 4780 70C8
                              000C8
                                                            SYSCLOSD
                                                                                     DATASET IS CLOSED ERROR10
                                                                                                                          00655001
                                       689
                                                     ΒZ
                                                                                      DATASET SECTIONED ?
0005B8 9140 501B
                                       690
                                                     ТМ
                                                            DSF+1,DS9
                                                                                                                          00656001
                                                                                      YES, INCOMPATIBLE ACTION
0005BC 4710 75CA
                              005CA
                                       691
                                                     RΩ
                                                            SYSINCOM
                                                                                                                          00657001
0005C0 1236
                                       692
                                                     LTR
                                                            R3.R6
                                                                                      DATASET NO = 1 OR 0 ?
                                                                                                                          00658001
                                                                                                                         00659001
0005C2 4780 75CA
                              005CA
                                                            SYSINCOM
                                       693
                                                     ΒZ
0005C6 4630 75D0
                                                                                                                          00660001
                              005D0
                                       694
                                                     BCT
                                                           R3.SYS13T1
                                       695
                                                                                                                          00661001
0005CA 18DC
                                       696 SYSINCOM LR
                                                            R13,R12
                                                                                      INCOMPATIBLE ACTION ON THE SAME
                                                                                                                         00662001
                                                                                                                         00663001
00664001
0005CC 47FC 01D4
                              001D4
                                       697
                                                     В
                                                            FSAERR+2*4(R12)
                                                                                      DATASET
                                       698 *
                                                                                                                          00665001
0005D0 1299
                                       699 SYS13T1
                                                     LTR
                                                            R9, R9
0005D2 4780 70D4
                              000D4
                                       700
                                                     ΒZ
                                                            SYSCONST
                                                                                      OUANTITY NOT A VARIABLE ERR 12
                                                                                                                         00666001
0005D6 4840 5014
                                                                                                                          00667001
                              00014
                                       701
                                                     LH
                                                            R4,S
0005DA 5040 2000
                              00000
                                                            R4,0(,R2)
                                                                                                                          00668001
                                       702
                                                     ST
0005DE 9608 501A
                       0001A
                                       703
                                                     ОТ
                                                           DSF DS4
                                                                                     SET FLAG DS4
                                                                                                                         00669001
0005E2 47F0 70A6
                              000A6
                                       704
                                                     В
                                                            RETSYS
                                                                                                                          00670001
                                                                                                                         00671001
                                       705
                                       706
                                                                                                                         00672001
                                       707 *
                                                     ROUTINE SYSACT14
                                                                                                                          00673001
                                       708 *-
                                                                                                                         00674001
                                                                                                                          00675001
                                       709
                                                     SKIPS RECORDS OR FILLS THEM BY BLANKS, DEPENDING ON THE
                                                                                                                         00676001
                                       710
                                                     LAST I/O PROCEDURE
                                                                                                                          00677001
                                       711
                                                                                                                          00678001
0005E6 1244
                                       713 SYSACT14 LTR
                                                            R4. R4
                                                                                                                         00679001
0005E8 47D0 74C6
                              004C6
                                       714
                                                     BNP
                                                           SYSQOUTR
                                                                                     OUANTITY OUT OF RANGE ERROR13
                                                                                                                          00680001
0005EC 9180 501A
                                                                                                                         00681001
                        0001A
                                       715
                                                     TM
                                                           DSF DS0
0005F0 4780 70C8
                              000C8
                                                                                                                          00682001
                                                     ΒZ
                                                            SYSCLOSD
                                       716
0005F4 4A40 5014
                                                                                                                          00683001
                              00014
                                       717 SYS14T1
                                                     ΑН
                                                            R4,S
0005F8 91FF 5019
                        00019
                                       718
                                                     ТМ
                                                            Q,X'FF'
                                                                                                                         00684001
                                                                                                                         00685001
00686001
0005FC 4780 7630
                              00630
                                       719
                                                     ΒZ
                                                            SYS14T2
                                       720
                                                     SECTIONED FORMAT ONLY OUTPUT POSSIBLE
                                                                                                                         00687001
                                       721
                                       722
                                                                                                                          00688001
000600 1B22
                                                     SR
                                                                                                                          00689001
000602 4320 5019
                              00019
                                       724
                                                     IC
                                                            R2,Q
                                                                                                                          00690001
                                                                                                                         00691001
000606 1942
                                       725
                                                     CR
                                                            R4. R2
000608 47D0 7630
                              00630
                                                           SYS14T2
                                                     BNH
                                                                                                                          00692001
                                       726
00060C 5830 5008
                              00008
                                       727
                                                            R3,RE
                                                                                                                          00693001
                                                     L
000610 5B30 5004
                              00004
                                       728
                                                            R3,R
                                                                                      NUMBER OF BLANKS IN R3
                                                                                                                          00694001
000614 4780 761E
                                       729
                                                     ΒZ
                                                            SYS14T11
                                                                                                                          00695001
                              0061E
000618 41F0 76D4
                              006D4
                                       730
                                                     LA
                                                            R15, SYBLANK
                                                                                      FILL RECORD WITH BLANKS
                                                                                                                         00696001
00061C 05FF
                                       731
                                                     BAIR
                                                           R14.R15
                                                                                                                          99697991
00061E D200 5015 5019 00015 00019
                                                                                                                         00698001
                                       732 SYS14T11 MVC
                                                           S+1(1),0
000624 9620 501A
                        0001A
                                       733
                                                     OI
                                                            DSF DS2
                                                                                      OUTPUT
                                                                                                                          00699001
000628 45E0 70B6
                              000B6
                                                            R14, NXREC
                                                                                      SKIP TO BEGIN OF NEXT SECTION
                                                                                                                          00700001
                                       734
                                                     BAL
00062C 47F0 70A6
                              000A6
                                       735
                                                     В
                                                            RETSYS
                                                                                                                         00701001
                                       736 *
                                                                                                                          00702001
                                                                                                                         00703001
                                                     NOT SECTIONED FORMAT OR QUANTITY LESS OR EQUAL Q
                                       737
                                       738
                                                                                                                          00704001
000630 9120 501A
                        0001A
                                       739 SYS14T2
                                                     ТМ
                                                           DSF,DS2
                                                                                                                          00705001
000634 4780 765A
                              0065A
                                       740
                                                     ΒZ
                                                            SYS14T4
                                                                                      LAST I/O WAS INPUT
                                                                                                                         00706001
000638 5830 5008
00063C 5B30 5004
                              00008
                                       741 SYS14T3
                                                            R3, RE
                                                                                                                          00707001
                                                                                                                         00707001
                              00004
                                       742
                                                            R3.R
000640 4780 764A
                              0064A
                                       743
                                                     ΒZ
                                                            SYS14T5
                                                                                                                         00709001
000644 41F0 76D4
                              006D4
                                       744
                                                     LA
                                                            R15, SYBLANK
                                                                                      FILL RECORD WITH BLANKS
                                                                                                                          00710001
000648 05EF
                                                                                                                         00711001
                                       745
                                                     BALR
                                                            R14, R15
00064A 45E0 70B6
                              000B6
                                       746 SYS14T5
                                                     BAL
                                                            R14 NXREC
                                                                                                                          00712001
00064E 4940 5014
                              00014
                                                                                                                         00713001
                                       747
                                                     CH
                                                            R4.S
000652 4770 7638
                                                            SYS14T3
                              00638
                                                                                                                         00714001
                                       748
                                                     BNE
000656 47F0 70A6
                              000A6
                                       749
                                                                                                                         00715001
                                                     В
                                                            RETSYS
                                       750 *
                                                                                                                          00716001
                                       751 *
                                                     INPUT
                                                                                                                          00717001
                                       752 *
                                                                                                                         00718001
00065A 9120 501B
                       0001B
                                       753 SYS14T4
                                                           DSF+1,DS10
                                                                                     DS BEEN OPENED BY SYSACT 12 ?
                                                                                                                         00719001
                                                     TM
00065E 4710 767A
                              0067A
                                                                                                                         00720001
                                                     во
                                       754
                                                           SYS14T7
                                       755
                                                                                                                          00721001
                                       756 *
                                                     ONLY INPUT READ THE FOLLWING UNTIL RECORD POINTER S
                                                                                                                          00722001
                                       757 *
                                                     EQUALS QUANTITY
                                                                                                                         00723001
                                       758 *
                                                                                                                         00724001
                                                                                     EOD BEEN REACHED ?
                                                                                                                         00725001
000662 9101 501A
                        0001A
                                       759 SYS14T6
                                                     TM
                                                            DSF DS7
                                                            SYSEOD
000666 4710 7402
                              00402
                                       760
                                                     во
                                                                                                                          00726001
00066A 45E0 70B6
                              000B6
                                       761
                                                     BAL
                                                            R14, NXREC
                                                                                                                         00727001
00066E 4940 5014
                              00014
                                       762
                                                     СН
                                                            R4,S
                                                                                                                         00728001
                                                                                                                         00729001
00730001
000672 4780 70A6
                              000A6
                                       763
                                                     RF
                                                            RFTSVS
000676 47F0 7662
                              00662
                                       764
                                                     В
                                                            SYS14T6
                                                                                                                          00731001
                                       765
                                                                                      DATASET NUMBER = 0 ?
                                                                                                                          00732001
00067A 1266
                                       766 SYS14T7
                                                     LTR
00067C 4780 75CA
                              005CA
                                                            SYSINCOM
                                                                                      YES, BRANCH
                                                                                                                         00733001
                                       767
000680 9620 501A
                       9991A
                                       768
                                                     ΟI
                                                            DSF,DS2
                                                                                      OUTPUT
                                                                                                                         00734001
000684 47F0 7638
                              00638
                                       769
                                                     В
                                                            SYS14T3
                                                                                                                         00735001
```

Active USINGs: IHADCB,R8 DSTABLE,R5 IHISYSCT,R7

00001

864+DS7

EQU

X'01

END OF FILE

01-DSTAB

```
X390 3.1.04 2012/08/17 13.22
  Loc Object Code
                       Addr1 Addr2 Stmt Source Statement
                                      770 *
                                                                                                                        00736001
                                      771 *--
                                                                                                                        00737001
                                      772 *
                                                    ROUTINE SYSACT15
                                                                                                                        00738001
                                      773 *--
                                                                                                                        00739001
                                      774 *
                                                                                                                        00740001
                                                    SKIP TO RECORD EQUAL QUANTITY IN NEXT SECTION IF DATA
                                                                                                                        00741001
                                      776 *
                                                    IS NOT SECTIONED. SYSACT14 IS INVOKED
                                                                                                                         00742001
                                      777 *
                                                                                                                        00743001
000688 1244
                                                                                                                         00744001
                                      778 SYSACT15 LTR
                                                           R4.R4
                                                                                                                        00745001
00068A 47D0 74C6
                                                           SYSQOUTR
                                                                                     QUANTITY OUT OF RANGE ERROR13
                              004C6
                                                    BNP
                                      779
00068E 9180 501A
                       0001A
                                      780
                                                    ТМ
                                                           DSF,DS0
                                                                                                                         00746001
000692 4780 70C8
                              000C8
                                                           SYSCLOSD
                                                                                                                         00747001
                                      781
                                                    ΒZ
                                                           Q,X'FF'
000696 91FF 5019
                       00019
                                      782
                                                    TM
                                                                                                                         00748001
                                                                                     DATA IS NOT SECTIONED SYSACT14
00069A 4780 75F4
                              005F4
                                                           SYS14T1
                                      783
                                                    B7
                                                                                                                         00749001
                                                                                     IS INVOKED
                                                                                                                         00750001
                                      784
00069E 1B33
                                                    SR
                                                                                                                         00751001
                                      785
                                                           R3, R3
0006A0 4330 5019
                              00019
                                                    IC
                                                           R3,Q
                                                                                                                         00752001
                                      786
0006A4 1943
                                      787
                                                    CR
                                                           R4 R3
                                                                                                                        00753001
0006A6 4720 74C6
                              004C6
                                                           SYSOOUTR
                                      788
                                                    BH
                                                                                                                         00754001
0006AA 5830 5008
                              00008
                                                                                                                        00755001
                                      789
                                                           R3.RE
                                                    L
0006AE 5B30 5004
                              00004
                                                                                     FILL RECORD WITH BLANKS
                                                                                                                        00756001
                                      790
                                                           R3.R
0006B2 4780 76BC
                                                           SYS15T0
                              006BC
                                      791
                                                    ΒZ
                                                                                                                         00757001
0006B6 41F0 76D4
                              006D4
                                      792
                                                    LA
                                                           R15,SYBLANK
                                                                                     FILL RECORD WITH BLANKS
                                                                                                                         00758001
                                                                                                                        00759001
00760001
0006BA 05EF
                                      793
                                                    BALR
                                                           R14,R15
0006BC D200 5015 5019 00015 00019
                                      794 SYS15T0
                                                    MVC
                                                           S+1(1).0
0006C2 9620 501A
                                                           DSF, DS2
                                                                                     OUTPUT
                                                                                                                         00761001
                       0001A
                                                    ΟI
                                      795
0006C6 45E0 70B6
                              000B6
                                      796
                                                    BAL
                                                           R14, NXREC
                                                                                                                         00762001
0006CA 1834
                                       797
                                                                                                                         00763001
                                                    LR
                                                           R3, R4
0006CC 4630 7638
                              00638
                                      798
                                                           R3, SYS14T3
                                                                                                                         00764001
                                                    BCT
                                      799 *
                                                                                                                        00765001
0006D0 47F0 70A6
                              000A6
                                      800 SYS15T1 B
                                                           RETSYS
                                                                                     OUANTITY EQUALS ONE
                                                                                                                         00766001
                                                                                     FIRST RECORD IN NEXT SECTION
                                                                                                                        00767001
                                      801
                                      802
                                                                                                                         00768001
                                      803 *
                                                    SYBLANK FILL RECORD WITH BLANKS
                                                                                                                        00769001
                                      804
                                                                                                                        00770001
0006D4 58B0 5004
                                      805 SYBLANK I
                              99994
                                                           R11.R
                                                                                                                         00771001
0006D8 9240 B000
                                                           0(R11),C''
                                                                                                                        00772001
                       00000
                                      806 SYBLANK1 MVI
0006DC 41B0 B001
                              00001
                                      807
                                                    LA
                                                           R11,1(,R11)
                                                                                                                         00773001
0006E0 4630 76D8
                                                    вст
                                                                                                                         00774001
                              006D8
                                      808
                                                           R3, SYBLANK1
0006F4 07FF
                                      809
                                                    BR
                                                           R14
                                                                                                                        00775001
                                      810 *
                                                                                                                        00776001
                                      811 *
                                                    CONSTANTS
                                                                                                                        00777001
                                                                                                                        00778001
                                      812
0006E6 0000
0006E8 0000000000000000
                                      813 SAVEAR
                                                    DC
                                                           18F'0'
                                                                                     SAVEAREA
                                                                                                                        00779001
                                      814 *
                                                                                                                         00780001
                                      815
                                                    LTORG
                                                                                                                        00781001
000730
000730 0000000F
                                                           =F'15'
                                      816
                                                           =X'00FFFFFF'
000734 00FFFFF
                                      817
000738 00007FF8
                                      818
                                                           =F'32760'
                                      819 *
                                                                                                                        00782001
                                      820 *
                                                    SYSACT VECTOR TABLE
                                                                                                                        00783001
                                      821 *
                                                                                                                         00784001
                                                                                                                         00785001
00073C
                                      822 SYSVECT
                                                    DS
                                                           A(0)
000740 000000C0
                                                           A(SYSACT1)
                                                                                                                         00786001
                                      823
                                                    DC
000744 000000F2
                                      824
                                                    DC
                                                           A(SYSACT2)
                                                                                                                         00787001
                                                           A(SYSACT3)
A(SYSACT4)
000748 000001F4
                                      825
                                                    DC
                                                                                                                        00788001
99974C 9999929F
                                      826
                                                    DC
                                                                                                                         00789001
000750 00000442
                                                           A(SYSACT5)
                                                                                                                        00790001
                                      827
                                                    DC
000754 0000045C
                                      828
                                                    DC
                                                           A(SYSACT6)
                                                                                                                         00791001
000758 00000480
                                                           A (SYSACT7)
                                                                                                                         00792001
                                      829
                                                    DC
00075C 00000494
                                      830
                                                    DC
                                                           A(SYSACT8
                                                                                                                        00793001
000760 000004D0
                                                           A SYSACT9
                                      831
                                                    DC
                                                                                                                        00794001
000764 000004E4
                                                                                                                        00795001
                                                    DC
                                                           A(SYSACT10)
                                      832
000768 000004FA
                                      833
                                                    DC
                                                           A(SYSACT11)
                                                                                                                         00796001
00076C 00000576
                                      834
                                                    DC
                                                           A(SYSACT12)
                                                                                                                         00797001
000770 000005B0
                                      835
                                                    DC
                                                           A(SYSACT13)
                                                                                                                        00798001
                                                           A(SYSACT14
000774 000005E6
                                      836
                                                    DC
                                                                                                                         00799001
                                                                                                                        00800001
000778 00000688
                                      837
                                                    DC
                                                           A(SYSACT15)
                                      838
                                                                                                                         00801001
                                      839
                                                    DSTABLE
                                                                                                                         00802001
                                      840 *
                                                                                                                        00803001
                                                    DSTABLE DSECT=YES
                                      841
                                                                                                                        00804001
000000
                                      842+DSTABLE
                       00000 00024
                                                    DSECT
                                                                                                                        01-DSTAB
                                                                                                                        01-DSTAB
                                      843+
000000 00000000
                                      844+ADCB
                                                           F'0'
                                                                                                                        01-DSTAB
                                                    DC
000004 00000000
                                      845+R
                                                    DC
                                                           F'0'
                                                                                     CHARACTER POINTER
                                                                                                                        01-DSTAB
                                                           F'0'
000008 00000000
                                      846+RE
                                                    DC
                                                                                                                        01-DSTAB
                                                           F'0'
999990 99999999
                                      847+NBB
                                                    DC
                                                                                                                        01-DSTAR
000010 00000000
                                      848+BB
                                                           F'0'
                                                                                                                        01-DSTAB
                                                    DC
000014 0001
                                      849+5
                                                           H'1'
                                                                                     RECORD POINTER
                                                                                                                        01-DSTAB
                                                    DC
000016 0050
                                                                                     RECORD LENGTH
                                      850+P
                                                    DC
                                                           H'80'
000018 02
                                      851+K
                                                    DC
                                                           X'02'
                                                                                     NUMBER OF BLANK DELIM CHARS
                                                                                                                        01-DSTAB
000019 00
                                      852+0
                                                    DC
                                                           X'00
                                                                                     NO OF RECORDS PER SECTION
                                                                                                                        01-DSTAB
00001A 0000
                                                           H'00'
                                                                                     DATASET FLAGS
                                      853+DSF
                                                    DC
                                                                                                                        01-DSTAB
                                                                                                                        01-DSTAB
                                      854+
                                      855+*
                                                    DATASET FLAGS - DSF
                                                                                                                        01-DSTAB
                                      856+*
                                                                                                                        01-DSTAB
                       00080
                                      857+DS0
                                                    EQU
                                                           X'80'
                                                                                     DATASET OPEN
                                                                                                                        01-DSTAB
                       aaa4a
                                      858+DS1
                                                    EQU
                                                           X'40'
                                                                                                                        01-DSTAB
                       00020
                                      859+DS2
                                                           X'20'
                                                                                     LAST I/O OUTPUT
                                                                                                                        01-DSTAB
                                                    EQU
                       00010
                                      860+DS3
                                                    EQU
                                                           X'10'
                                                                                                                        01-DSTAB
                                       861+DS4
                                                           X'08'
                                                                                                                        01-DSTAB
                       00008
                                                    EQU
                       00004
                                      862+DS5
                                                    EQU
                                                           X'04'
                                                                                                                        01-DSTAB
                                                                                     OPEN FOR OUTPUT
                       99992
                                      863+DS6
                                                    EOU
                                                           X'02'
                                                                                                                        01-DSTAR
```

999B4

0000B4

1465=PGOPSW

1466=

EQU

DS

\*-FSAREA

2F

PROGRAM CHECK OLD PSW

00056001

00057001

X390 3.1.04 2012/08/17 13.22 D-Loc Object Code Addr1 Addr2 Stmt Source Statement 000BC 1467=FSAPICA \*-FSAREA OLD PICA ADDR EQU 00058001 0000BC 00000000 1468= DC F'0' 00059001 00000 1469=SCRCS EQU \*-FSAREA SEMICOLON NUMBER 00060001 000000 Н 00061001 1470= DS 000C2 1471=DTSW EQU \*-FSAREA OPTION SWITCHES 00062001 00063001 000C2 1472=OPTSW EQU DTSW X'00' 0000C2 00 1473= DC DUMP-80, TRACE-40, SHORT-20 00064001 000C3 1474=FSAERCOD EQU \*-FSAREA ERROR CODE FOR ERROR ROUTINE 00065001 0000C3 1475= DS C 00066001 1476= 00067001 1477= RETURN ADDRESS STACK POINTERS DO NOT CHANGE ORDER 00068001 1478=\* 00069001 0000C4 1479= 00070001 1480=THTESARS FOLL 99904 99971991 1481=RASSTART EQU \*-FSAREA ADDR OF FIRST ENTRY IN RAS-8 00072001 000C4 0000C4 00073001 1482= DS 1483=RASPT 00074001 000C8 EQU FSAREA RAS POINTER FROM TOP 0000C8 1484= DS 00075001 000CC 1485=RASEND EQU \*-FSAREA ADDR OF LAST ENTRY IN RAS+8 00076001 0000CC 00077001 1486= DS 000D0 1487=RASPB EOU \*-FSAREA RAS POINTER FROM BOTTOM 00078001 0000D0 1488= DS 00079001 1489= 00080001 1490= LIST OF BRANCH INSTRUCTIONS TO COMMONLY USED SUBROUTINES 00081001 1491= 99982991 0000D4 1492=BRLIST 00083001 DS 000D4 1493=CAP1 EQU \*-FSAREA FIRST PART CAPS 00084001 0000D4 4700 0000 00085001 00000 1494= NOP 000D8 1495=CAP2 \*-FSAREA SECOND PART CAPS 00086001 0000D8 4700 0000 00000 1496= NOP 00087001 000DC 1497=PROLOGP EOU -FSAREA PROLOGUE FORMAL PARAMETER ENTRY 00088001 1498=PROLOGFP PROLOGP 00089001 000DC EOU 0000DC 4700 0000 00000 1499= 00090001 000E0 1500=PROLOG \*-FSAREA PROLOGUE PROGRAM USUAL ENTRY 00091001 EQU 1501= 0000E0 4700 0000 00000 NOP 00092001 999F4 \*-FSARFA 1502=RFTPROG FOU DISPLACEMENT RETURN PROGRAM 9993991 0000E4 4700 0000 00000 00094001 1503= NOP 000E8 1504=EPILOGP FSAREA EPILOGUE PROGRAM, PROCEDURE ENTRY 00095001 EQU 0000E8 4700 0000 00096001 00000 1505= NOP 999FC 1506=FPTLOGB EOU \*-FSARFA EPILOGE PROGRAM, BETA-BLOCK ENTRY 00097001 0000EC 4700 0000 00000 1507= NOP 00098001 000F0 1508=EPILPR3 EOU \*-FSAREA EPILOGUE PROGRAM ENTRY 3 00099001 0000F0 4700 0000 00000 00100001 1509= NOP 000F4 1510=CSWE1 FSAREA FIRST PART CSWES 00101001 EQU 0000F4 4700 0000 00000 NOP 00102001 1511= 000F8 1512=CSWE2 EQU \*-FSAREA SECOND PART CSWES 00103001 9999E8 4799 9999 aaaaa 1513= NOP 99194991 -FSAREA 000FC 1514=LOADPF LOAD PRECOMPILED PROC ROUTINE 00105001 EQU 0000FC 4700 0000 00000 1515= NOP 00106001 00100 1516=TRACE EQU \*-FSAREA 00107001 000100 D200 0000 0000 00000 00000 1517= MVC 0(0),0 00108001 000106 4700 0000 00000 1518= NOP 00109001 00010A 4700 0000 00000 NOP 00110001 1519= 0010E 1520=TERMNTE -FSAREA NORMAL TERMINATION EXIT 00111001 EQU 00010E 4700 0000 00000 NOP 00112001 1521= 00112 1522=BCR \*-FSAREA 00113001 EQU 000112 0700 1523= BCR 0,0 VARIABLE CONDITIONAL BRANCH 00114001 99114 1524=GFTMSTO FOU \*-FSARFA 00115001 00116001 000114 4700 0000 00000 1525= 0 NOP 1526= 00117001 1527=VALUCALL 00118001 00118 EQU \*-FSAREA 000118 4700 0000 00000 1528= NOP 0 00119001 0011C 1529=IORLST EOU \*-FSAREA 00120001 00011C 4700 0000 00000 00121001 1530= a NOP 1531= 00122001 001CC 1532=FSAERR DISPL FOR ERROR LIST 00123001 EQU X'1CC' 1533= 00124001 1534= DISPLACEMENTS FOR CERTAIN ERROR EXITS IN FSA 00125001 00126001 1535= 0020C 1536=OUTOFB FSAERR+4\*16 00127001 EQU 1537=NUMBIND 00218 EQU FSAERR+4\*19 00128003 00129001 00208 1538=ARRAYBD FSAERR+4\*15 EQU 0026C 1539=ERROR40 EOU FSAERR+4\*40 00130001 FSAERR+4\*22 00224 1540=0ERR22 EOU 00131001 1541=ENDLESL FSAERR+4\*17 00210 EOU 00132001 00220 1542=0ERR21 FSAERR+4\*21 00133001 EOU 1543= 1544 \* 00819001 1545 TF7RFGS 00820001 00000 1546+R0 EQU 0 01-IEZRE 1547+R1 00001 01-IEZRE EQU 1548+R2 00002 EQU 01-IEZRE 00003 1549+R3 01-IEZRE EQU 00004 1550+R4 EQU 4 01-IEZRE 00005 1551+R5 EOU 01-IEZRE 00006 1552+R6 EOU 6 01-IEZRE 00007 1553+R7 EQU 01-IEZRE 00008 1554+R8 EQU 01-IEZRE 00009 1555+R9 EQU 01-IEZRE ααααΔ 1556+R10 EQU 10 01-IEZRE 1557+R11 0000B EQU 01-IEZRE 11 0000C 1558+R12 EQU 12 01-IEZRE 1559+R13 13 0000D EQU 01-IEZRE 0000E 1560+R14 EQU 01-IEZRE AAAAF 1561+R15 EQU 15 01-TF7RF 1562 00821001

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D-Loc Object Code Addr1 Addr2 Stmt Source Statement

1563 END 00822001

Symbol	Length	Value	Id -	Гуре Asm	Program	Defn	Refer	ences				X390 3	3.1.04	2012	/08/17	13.22
=F'15' =F'32760'		00000730	00000001	FF		816	119									
=X'00FFFF	4	00000738	00000001	FF		818	534									
ADCB		00000734 00000000		X X F F		817 844	133 303	642								
ANOTTAB		000000B0		U		1461	488									
BB		00000010		FF		848	395	428	462	635						
BL		00000020	FFFFFFF	нн		878	396	405	429	463	636					
BRRST CI		0000009C		U U		1443 71	1444 112									
CL		00000004		Ü		72	676									
DCBBIT0	1	00000080		U		910	996	1004	1016	1039	1066	1068	1069	1071	1094	1097
							1117	1121	1136	1173	1228	1252	1291	1295	1308	
DCBBIT1	1	00000040		U		911	997	1005	1018	1040	1041	1050	1066	1068	1070	1071
							1099 1254	1117 1297	1119 1299	1121 1311	1139 1355	1140	1141	1176	1177	1228
DCBBIT2	1	00000020		U		912	998	1006	1019	1020	1021	1040	1041	1045	1051	1066
							1067	1072	1101	1122	1123	1144	1145	1146	1180	1181
DCDDTTA		00000010				04.2	1229	1259	1300	1316	1358	1361	4072	4404	4422	4425
DCBBIT3	1	00000010		U		913	999 1148	1019 1149	1021 1150	1022 1184	1040 1185	1053 1229	1073 1261	1104 1264	1122 1266	1125 1302
							1317	1358	1362	1104	1103	1223	1201	1204	1200	1302
DCBBIT4	1	00000008		U		914	1007	1054	1074	1105	1127	1132	1133	1153	1154	1188
							1189	1191	1192	1230	1269	1318	1358	1363		
DCBBIT5	1	00000004		U		915	1008	1055	1077	1078	1107	1127	1129	1130	1133	1157
							1159 1304	1160 1320	1161 1353	1195	1196	1197	1198	1230	1271	1274
DCBBIT6	1	00000002		U		916	1000	1056	1057	1060	1077	1079	1108	1164	1165	1166
							1167	1201	1202	1203	1204	1231	1277	1322	1364	
DCBBIT7	1	00000001		U		917	1001	1056	1058	1060	1081	1112	1169	1170	1207	1208
0005040						027	1210	1211	1280	1306	1323	1366				
DCBFDAD DSF		00000005 0000001A		С С Н Н		937 853	940 164	196	207	209	211	214	226M	241M	252	254
551	-	000001A				033	258M	262M	268	282	309	316	321	326	328M	333
							337	360	365M	366M	367M	376M	402	426	452M	453M
							456	461M	515	530	563	573M	621	624	626	628
							650 753	665 759	667M 768M	673 780	688 795M	690	703M	715	733M	739
DSTABLE	1	00000000	FFFFFFF	J		842	99U	881	70011	700	79311					
DS0		00000080		Ü		857	164	196	282	316	515	530	563	621	665	673
							688	715	780							
DS1		00000040		U		858	402	426	628							
DS10		00000020		U		870	209	254	326	667	753	220	260	452	456	c2c
DS2	1	00000020		U		859	207 733	226 739	252 768	258 795	321	328	360	453	456	626
DS3	1	00000010		U		860	241	262	700	,,,,						
DS4		00000008		U		861	461	703								
DS5		00000004		U		862	365	452								
DS6		00000002		U		863	366	453	260	222	227	266		650	750	
DS7 DS8		00000001 00000080		U U		864 868	211 367	214 376	268	333	337	366	624	650	759	
DS9		000000000		U		869	309	573	690							
DTSW		000000C2		Ü		1471	1472	3.3	020							
EV	1	00000008		U		73	92									
FCTVALST		00000090		U		1439	1442	44014								
FRØ FSAERR		00000000 00001CC		U U		66 1532	107M 150B	110M 167B	172B	194B	307B	482B	507B	540B	577B	580B
FJAERK	1	00000ICC		U		1552		1536	1537	1538	1539	1540		1542	3//6	3000
FSAREA	1	00000000	FFFFFFD	U		1429	1434	1439	1441	1442	1443	1446	1453	1455	1459	1461
							1465	1467	1469	1471	1474	1481	1483	1485	1487	1493
							1495	1497	1500	1502	1504	1506	1508	1510	1512	1514
IHADCB	1	00000000		J		893	1516 368U	1520 978	1522 1025	1524 1090	1527 1219	1529 1234	1247	12/12	1349	1376
IHISYSCT		00000000		3		62	86U	376	1023	1030	1219	1254	1247	1343	1349	1370
IORLST		0000011C		Ü		1529	91	111	154	668	675					
K		00000018				851	593	608M								
KF256		000004CC		FF		582	569	606								
NBB NX		0000000C	ccccttt	F F U		847 74	384 155									
NXREC		0000000C	00000001			154	213B	235B	339B	351B	401B	421B	436B	469B	734B	746B
							761B	796B								
OPTSW		000000C2		U		1472	105									
OQ P		00000014 00000016		U H H		76 850	669 176	191	200	219	263	271	477	519	536M	632
PROLOGP		00000016	FFFFFFF	U		1497	1498	191	200	219	263	2/1	4//	219	330M	632
Q		000000000000000000000000000000000000000	FFFFFFF	ХX		852	551	572M	718	724	732	782	786	794		
Ř		00000004		FF		845	174	202	221M	231	244	247M	261	273M	347	432
						_	465	478M		728	742	790	805			
RE	4	00000008	FFFFFFF	F F		846	175	199	218	230	260	270	346	397M	430M	431
RETSYS	1	000000A6	00000001	т		143	464M 179B	476 222B	631 248B	727 274B	741 288B	789 342B	354B	403B	420B	479B
WE 1313	4	JUJUUUMU	30300001	-		1+3	521B	537B	553B	574B	595B	609B	654B	671B		704B
							735B	749B	763B	800B						
R0		00000000		U		1546	116M	117	377M							
R1	1	00000001		U		1547	103	127 622M	378M	407M	408M	409M	410 641M	411M	415	416
R10	1	0000000A		U		1556	631M 377	632M 489M	633 490	635M 492M	636M 494	637M 496	641M 500M			
R11		0000000A		U		1557	244M		630M	633	637	638	640M	805M	806	807M
R12		0000000C		Ü		1558	87M	91	105	111	149	150	154	166	167	171
							172	193	194	306	307	481	482	488	506	507
D1.3	_	0000000				1550	539	540	576	577	579	580	668	675	696	697
R13	1	000000D		U		1559	87 506M	89 539M	90M 576M	143M 579M	149M 696M	166M	171M	193M	306M	481M
R14	1	0000000E		U		1560	93M	113M	213M		235M	243M	266M	332M	339M	350M
-	-			-			351M	357M	401M	421M	435M	436M	468M	469M		501B
							504B	670M	677M	731M	734M	745M	746M	761M	793M	796M

Comb - 1	1	\/-1	<b>T</b> J	T	D		D-C					V200 2	1 04	2012	00/17	12 22
Symbol	Length	Value	Id	Type Asm	Program	Detn	Refere	nces				X390 3	.1.04	2012/	08/1/	13.22
R15	1	0000000F		U		1561	809B 85	91M	92M	93B	111M	112M	1120	1 E 1 M	1 E E M	1E C D
KID	1	0000000		U		1301	233M	234B	242M	243B	111M 265M	266B	113B 331M	154M 332B	155M 349M	156B 350B
							356M	357B	434M	435B	467M	468B	470M	471B	668M	669M
R2	1	00000002		U		1548	670B 103M	675M 107	676M 110	677B 116	730M 117M	731B 119	744M 121M	745B 122	792M 127M	793B 128M
							129M	132M	133M	134	178	287	311M	313M	384M	390
							395M 416M	396M 476M	397 477M	398M 478	399M 493M	400 494	404M 520	410M 552	412M 594	415M 653
							702	723M	724M	725						
R3	1	00000003		U		1549	122M 231M	141B 237M	198M 238M	199M 239M	200M 259M	201M 260M	202M 261M	216M 263M	217M 264M	230M 335M
							346M	347M	358M	405M	406M	411	413M	414M	417M	418
							428M 489	429M 490	430 498M	431M 499M	432M 503M	462M 567M	463M 569M	464 692M	465M 694M	488M 727M
							728M	741M	742M	785M	786M	787	789M	790M	797M	798M
R4	1	00000004		U		1550	808M 134M	174M	175M	176M	177M	178	187M	191	198	216
N-F	-	00000004		O		1330	218M	219M	220M	221	237	245M	246M	247	259	270M
							271M 413	272M 419	273 496	286M 519M	287 520	304M 532M	318 534	340 536	352 550M	398 551M
							552	567	572	592M	593M	594	604M	606	608	620M
							623M 747	652M 762	653 778M	662M 787	664M 797	701M	702	713M	717M	725
R5	1	00000005		U		1551	990	702	77011	707	, , ,					
R6 R7		00000006 00000007		U U		1552 1553	224M 85M	256M 86U	311	493	565M	692	766M			
R8		00000007		U		1554	303M	368U	378	389	448	642M				
R9		00000009		U		1555	126M	131M	169M	284M	517M	548M	590M	618M	699M	717
S	2	00000014	FFFFFFF	нн		849	286 732M	318 747	340 762	352 794M	400M	407	418M	419	701	717
SAVEAR		000006E8				813	89M	90	143	240	424	467	720	744	702	
SYBLANK SYBLANK1		000006D4 000006D8				805 806	233 808B	242	265	349	434	467	730	744	792	
SYDECB		00000058				1399	371	387	439	645						
SYSACT1 SYSACT10		000000C0 000004E4		I I		164 604	823 832									
SYSACT11		000004FA				618	833									
SYSACT12 SYSACT13		00000576 000005B0				662 688	834 835									
SYSACT14	2	000005E6	00000001	I		713	836									
SYSACT15 SYSACT2		00000688 000000F2				778 187	837 824									
SYSACT2A	4	000000FC	00000001	I		191	188B									
SYSACT3 SYSACT4		000001F4 0000020E				282 303	825 826									
SYSACT5	4	00000442	00000001	I		515	827									
SYSACT6 SYSACT7		0000045C 00000480				530 548	828 829									
SYSACT8		00000494				563	830									
SYSACT9 SYSCLOSD		000004D0 000000C8				590 166	831 197B	283B	317B	516B	689B	716B	781B			
SYSCONST SYSEOD		000000D4 00000402				171 481	285B 212B	518B 217B	549B 269B	591B	619B 338B	700B 760B				
SYSERR14		00000402 0000043C				506	359B	21/6	2096	334b	3300	7000				
SYSERR9 SYSINCOM		000000B0 000005CA				149 696	118B 225B	120B 257B	310B	212B	21 / R	566B	601 B	603B	767B	
SYSNOT		000003CA				488	331	356	470	3120	3140	3000	0310	0556	7075	
SYSNOT1 SYSNOT2		0000040E 00000438				490 503	495B 491B	497B								
SYSOPEN	2	0000047A	00000001	I		539	531B	564B								
SYSQOUTR	2	000004C6	00000001	I		579	533B 788B	535B	568B	570B	571B	605B	607B	664B	714B	779B
SYSVECT		0000073C				822	122									
SYS1 SYS1A		0000006A 0000006E				116 117	104B 114B									
SYS1T1	2	000000CE	00000001	I		169	165B									
SYS1T2 SYS11		000000DA 00000058				174 110	170B 106B									
SYS11A		0000005C				111	108B									
SYS11B SYS11T1		00000098 0000056E				132 653	130B 622B	627B	620R	634B	630R	651B				
SYS1111 SYS11T2		0000056C				652	625B	02/D	UZJD	0.340	<i>مو</i> د ن	0310				
SYS11T3 SYS12T1		00000542 0000059A				638 673	641B 663B									
SYS12T2		00000535A				678	666B	674B								
SYS13T1 SYS14T1		000005D0 000005F4				699 717	694B 783B									
SYS14T1		000003F4				732	729B									
SYS14T2		00000630 00000638				739 741	719B 748B	726B 769B	798B							
SYS14T3 SYS14T4		0000065A				753	748B 740B	7696	7965							
SYS14T5	4	0000064A	00000001	I		746	743B									
SYS14T6 SYS14T7		00000662 0000067A				759 766	764B 754B									
SYS15T0	6	000006BC	00000001	I		794	791B	100-								
SYS2T1 SYS2T1A		00000104 00000150				193 218	189B 215B	192B								
SYS2T2	4	000001A6	00000001	I		252	203B									
SYS2T20 SYS2T3		000001C0 0000016C				259 230	253B 208B									
SYS2T30	2	00000162	00000001	I		224	210B									
SYS2T31 SYS2T32		0000017E 00000196				235 244	232B 240B									
SYS2T5	4	000001DA	00000001	I		268	255B									
SYS4T0 SYS4T01		00000234 0000021E				316 309	313B 305B									

Symbol	Length Val	ue Id	Type Asm	Program	Defn	Refere	nces		X390 3.1.04	2012/08/17 13.22
SYS4T12	4 00000	260 0000000	91 I		331	327B				
SYS4T13	4 00000	274 0000000	91 I		337	341B				
SYS4T14	4 00000	29E 000000	91 I		351	348B				
SYS4T15	4 00000	28C 000000	91 I		346	322B	329B	353B		
SYS4T2	4 00000	2AE 000000	91 I		356	319B				
SYS4T21	4 00000	2CA 000000	91 I		367	336B				
SYS4T22	2 00000	2E0 0000000	91 I		377	454B				
SYS4T23	4 00000	356 0000000	91 I		419	422B				
SYS4T24	4 00000	366 0000000	91 I		426	361B				
SYS4T25	4 00000	37A 000000	91 I		431	427B				
SYS4T26	4 00000	38C 000000	91 I		436	433B				
SYS4T27	4 00000	390 0000000	91 I		439	472B				
SYS4T3	4 00000	BE 000000	91 I		456	320B				
SYS4T31	4 00000	3F2 0000000	91 I		476	457B				
SYS4T33	4 00000	3E4 0000000	91 I		469	466B				

SYS					G	eneral	Purpo	se Reg	ister	Cross	Refere	nce					P	AGE 17
Register	Refere	nces (	M=modi	fied,	B=bran	ch, U=	USING,	D=DRO	P, N=i	ndex)				X39	0 3.1.	04 20	12/08/	17 13.22
0(0)	83	116M	117	146M	377M													
1(1)	83	103	127	146M	371M	372	378M	381	387M	388	389N	390N	391N	407M	408M	409M	410	411M
	415	416	439M	440	446M	448N	449	631M	632M	633	635M	636M	637M	641M	645M	646		
2(2)	83	103M	107	110	116	117M	119	121M	122N	127M	128M	129M	132M	133M	134	146M	178	287
	311M	313M	384M	390	395M	396M	397	398M	399M	400	404M	410M	412M	415M	416M	476M	477M	478
	493M	494	520	552	594	653	702	723M	724M	725								
3(3)	83	122M	141B	146M	198M	199M	200M	201M	202M	216M	217M	230M	231M	237M	238M	239M	259M	260M
	261M	263M	264M	335M	346M	347M	358M	405M	406M	410M	411	413M	414M	415M	416M	417M	417N	418
	428M	429M	430	431M	432M	462M	463M	464	465M	488M	489	490	498M	499M	503M	567M	569M	692M
	694M	727M	728M	741M	742M	785M	786M	787	789M	790M	797M	798M	808M					
4(4)	83	134M	146M	174M	175M	176M	177M	178	187M	191	198	216	218M	219M	220M	221	237	245M
	246M	247	259	270M	271M	272M	273	286M	287	304M	318	340	352	398	413	419	496	519M
	520	532M	534	536	550M	551M	552	567	572	592M	593M	594	604M	606	608	620M	623M	652M
_ , _ ,	653	662M	664M	701M	702	713M	717M	725	747	762	778M	787	797					
5(5)	83	990	146M															
6(6)	83	146M	224M	256M	311	493	565M	692	766M									
7(7)	83	85M	86U	146M														
8(8)	83	146M	303M	368U	378	389	448	642M										
9(9)	83	126M	131M	146M	169M	284M	517M	548M	590M	618M	699M							
10(A)	83	146M	377	489M	490	492M	494	496	500M									
11(B)	83	146M	244M	245	630M	633	637	638	640M	640N	805M	806	807M					
12(C)	83	87M	91	105	111	146M	149	150N	154N	166	167N	171	172N	193	194N	306	307N	481
40(0)	482N	488N	506	507N	539	540N	576	577N	579	580N	668N	675N	696	697N				
13(D)	83	87	89	90M	143M	146	149M	166M	171M	193M	306M	481M	506M	539M	576M	579M	696M	
14(E)	83	93M	113M	146M	147B	213M	234M	235M	243M	266M	332M	339M	350M	351M	357M	372M	373	374M
	382M	393M	401M	421M	435M	436M	440M	441	442M	468M	469M	471M	501B	504B	646M	647	648M	670M
45(5)	677M	731M	734M	745M	746M	761M	793M	796M	809B		4 - 414	4554	4551	4560	2224	22.45	2424	2425
15(F)	79B	83	85	91M	92M	93B	111M	112M	113B	146M	154M	155M	155N	156B	233M	234B	242M	243B
	265M	266B	331M	332B	349M	350B	356M	357B	373M	374B	381M	382N	391M	392M	393B	434M	435B	441M
	442B 792M	467M 793B	468B	470M	471B	647M	648B	668M	669M	669N	670B	675M	676M	677B	730M	731B	744M	745B

SYS Dsect Cross Reference PAGE 18

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DSTABLE 00000024 FFFFFFFF 842 4 DSTABLE FAS 00000120 FFFFFFF 1407 PRIMARY INPUT IHADCB 000006C FFFFFFFE 893 1 DCBD

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RETURN SAVE

Con Source Members X390 3.1.04 2012/08/17 13.22

IEZREGS IHBINNRA IHBRDWRS POINT READ

1 SYS1.MACLIB

CHECK CLOSE DCBD

2 SYSD.TOOLS.MACLIB
3 SYSD.ALGOLFRT.ASM
4 SYSD.ALGOLFRT.MACLIB
DSTABLE FSAREA

5 SYS1.AMODGEN

Stmt	Level	Action	Туре	Id	Address	Range	Reg	Max	Last	Text	X390 3.1.04	2012/08/17 13.22
86		USING	Ordinary	00000001	00000000	00001000	7	0073C	808	IHISYSCT	, R7	
99		USING	Ordinary	FFFFFFF	00000000	00001000	5	00020	805	DSTABLE,	R5	
368		USING	Ordinary	FFFFFFE	00000000	00001000	8	00058	645	IHADCB, R	3	

X390 3.1.04 2012/08/17 13.22

No statements flagged in this assembly.

TACHYON LEGACY ASSEMBLER, VERSION 3.1.04

SYSTEM: MVS 3.8 JOBNAME: T1BLD STEPNAME: IHISYS PROCSTEP: X390

Primary input: lines 1 to 822 of SYSD.ALGOLFRT.ASM(IHISYS)

SYSLIB library records read: 3114

SYSUT1 work file size: 111697 bytes

SYSUT2 work file size: 292892 bytes

SYSUT3 work file size: 65760 bytes

SYSLIN file records written: 39

TXA000I Return code 0, elapsed time 1.06 seconds.

INITOBJ - Uninitialized Areas Page No. 1
Csect Rel Addr(hex) Length(dec)
IHISYSCT 00077C 4

# LINKEDIT

RELEASE LVL2.1

F64-LEVEL LINKAGE EDITOR OPTIONS SPECIFIED LIST, LET, MAP, NCAL

DEFAULT OPTION(S) USED - SIZE=(1015808,516096)
INCLUDE OBJECT(IHIERR)
INCLUDE OBJECT(IHIERM) IEW0000 00046001 IEW0000 00047001 IEW0000 IDENTIFY IHIERROR('360SLM532 V02 M01 ALGOL F LIBRARY') 00048001 IEW0670 IHIERROR 360SLM532 V02 M01 ALGOL F LIBRARY IDENTIFY IHIERMSG('360SLM532 V02 M01 ALGOL F LIBRARY')
IHIERMSG 360SLM532 V02 M01 ALGOL F LIBRARY IEW0000 IEW0670 00049001 IHIERROR IEW0000 ENTRY 00050001 IEW0000 ALIAS IHIERROR 00051001 LOADED DYNAMICALLY FROM LINKLIB 00052001 IEW0000 NAME IHIERR(R)

**ENTRY** 

MODULE MAP

CONTROL SECTION

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIERROR 00 6E8 IHIERMSG 6E8 9B8

IHIERM01 798

ENTRY ADDRESS 00

TOTAL LENGTH 10A0

\*\*\*\*IHIERR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HIERROR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

INCLUDE OBJECT(IHIFDD)
IDENTIFY IHIFDDXP('360SLM532 V02 M01 ALGOL F LIBRARY')
IHIFDDXP 360SLM532 V02 M01 ALGOL F LIBRARY IEW0000 00053001 IEW0000 00054001 IEW0670 IEW0000 00055001 IEW0461 IHILLO

IEW0461 IHILEX

MODULE MAP

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHIFDDXP

IHIFDD 00

ENTRY ADDRESS 00

TOTAL LENGTH 100 
\*\*\*\*\*IHIFDD DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS 0.

DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000	INCLUDE OBJECT(IHIFDI)	00056001
IEW0000	IDENTIFY IHIFDIXP('360SLM532 V02 M01 ALGOL F LIB	RARY') 00057001
IEW0670	IHIFDIXP 360SLM532 V02 M01 ALGOL F L	IBRARY
IEW0000	NAME IHIFDI(R)	00058001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIFDIXP 00 A0 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIFDI

ENTRY ADDRESS 00

TOTAL LENGTH A0 \*\*\*\*\* HIFDI DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS 0.

INCLUDE OBJECT(IHIFII)
IDENTIFY IHIFIIXP('3605LM532 V02 M01 ALGOL F LIBRARY')
IHIFIIXP 360SLM532 V02 M01 ALGOL F LIBRARY
NAME IHIFII(R) **IEW0000** IEW0000 00059001 00060001 IEW0670 IEW0000 00061001

MODULE MAP

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH
IHIFIIXP AA NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

ENTRY ADDRESS 00

TOTAL LENGTH CO
\*\*\*\*\*HIFII DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

AUTHORIZATION CODE IS

IEW0000	INCLUDE OBJECT(	(IHIFRI)	00062001
IEW0000	IDENTIFY IHIFRIX	(P('360SLM532 V02 M01 ALGOL F LIBRARY')	00063001
IEW0670	IHIFRIXP	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	NAME IHIFRI(	(R)	00064001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIFRIXP 00 A0 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIFRI

ENTRY ADDRESS 00

TOTAL LENGTH A0 \*\*\*\*\* HIFRI DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS 0.

INCLUDE OBJECT(IHIFRR)
IDENTIFY IHIFRRXP('360SLM532 V02 M01 ALGOL F LIBRARY')
IHIFRRXP 360SLM532 V02 M01 ALGOL F LIBRARY IEW0000 00065001 IEW0000 00066001 IEW0670 IEW0000 00067001 IEW0461 IHISLO

IEW0461 IHISEX

MODULE MAP

CONTROL SECTION ENTRY

ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHIFRRXP

IHIFRR 00

ENTRY ADDRESS 00

TOTAL LENGTH F8 \*\*\*\*\* HIFRR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS  $\theta.$ 

DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000		INCLUDE	OBJECT(IHIFSA)	00068001
IEW0000		IDENTIFY	<pre>IHIFSARA('360SLM532 V02 M01 ALGOL F LIBRARY')</pre>	00069001
IEW0670		IHIFSARA	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000		IDENTIFY	<pre>IHIFSARB('360SLM532 V02 M01 ALGOL F LIBRARY')</pre>	00070001
IEW0670		IHIFSARB	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000		ALIAS	IHIFSAIN	00071001
IEW0000		NAME	IHIFSA(R)	00072001
IEW0461	IHIDSTAB			
IEW0461	IHIENTIF			
IEW0461	IHIIOROP			
IEW0461	IHIIORCL			
IEW0461	IHIIORNX			
IEW0461	IHIIORCI			
IEW0461	IHIIOREV			
IEW0461	IHIIOROQ			
IEW0461	IHIIOREN			
IEW0461	IHIIORGP			
IEW0461	IHIIORCP			
IEW0461	IHIIORER			
IEW0461	IHIERROR			

CONTROL SECTION ENTRY

690

NAME LOCATION ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME IHIFSARA 00

IHIFSAIN DFC

ENTRY ADDRESS 00

IHIFSARB

TOTAL LENGTH 1500

E70

DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000	INCLUDE	OBJECT(IHIGPR)	00073001
IEW0000	IDENTIFY	<pre>IHIGPRTN('360SLM532 V02 M01 ALGOL F LIBRARY')</pre>	00074001
IEW0670	IHIGPRTN	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHIGPRCL	00075001
IEW0000	ALIAS	IHIGPRGT	00076001
IEW0000	ALIAS	IHIGPRPT	00077001
IEW0000	NAME	IHIGPR(R)	00078001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIGPRTN 00 A60 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION 00 210 IHIGPRGT IHIGPRPT IHIGPROT 3E4 IHIGPRIT 5C4 IHIGPRCL IHIGPROP 740 830

ENTRY ADDRESS

TOTAL LENGTH A60

\*\*\*\*THIGPR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIGPRGT IS AN ALIAS FOR THIS MEMBER

\*\*\*\*THIGPRCL IS AN ALIAS FOR THIS MEMBER

\*\*\*\*THIGPRCL IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

IEW0000	INCLUDE	OBJECT(IHIIAR)	00079001
IEW0000	IDENTIFY	' IHIIARTN('360SLM532 V02 M01 ALGOL F LIBRARY')	00080001
IEW0670	IHIIART	N 360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHIIARRT	00081001
IEW0000	ALIAS	IHIIARRY	00082001
IEW0000	NAME	IHIIAR(R)	00083001
IEW0461 IHIIOREV			
IEW0461 IHIIDEAI			

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHIIARTN 00 В8 3C

IHIIARRT 00 IHIIARRY

ENTRY ADDRESS

TOTAL LENGTH B8

\*\*\*\*IHITAR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHITARRY IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHITARRT IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS

0.

DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

INCLUDE OBJECT(IHIIBA)
IDENTIFY IHIIBARR('360SLM532 V02 M01 ALGOL F LIBRARY')
THIIBARR 360SLM532 V02 M01 ALGOL F LIBRARY IEW0000 00084001 IEW0000 00085001 IEW0670 IHIIBARR IEW0000 ALIAS 00086001 IEW0000 NAME IHIIBA(R) 00087001

IEW0461 IHIIOREV IEW0461 IHIIBOAR

MODULE MAP

ENTRY CONTROL SECTION

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIIBARR 00

ENTRY ADDRESS 00

68

TOTAL LENGTH
\*\*\*\*IHIIBA \*\*\*\*\*HIIBA DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HIIBARR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

# DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED. IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000	INCLUDE	OBJECT(IHIIBO)	00088001
IEW0000	IDENTIFY	'IHIIBOOL('360SLM532 V02 M01 ALGOL F LIBRARY')	00089001
IEW0670	IHIIBO	DL 360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHIIBOAR	00090001
IEW0000	ALIAS	IHIIBOOL	00091001
IEW0000	NAME	IHIIBO(R)	00092001

ENTRY CONTROL SECTION

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIIBOOL 00 288

IHIIBOAR 4A

ENTRY ADDRESS 00

TOTAL LENGTH 288

\*\*\*\*IHIIBO DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIIBOOL IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHIIBOAR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

# DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

IEW0000		INCLUDE	OBJECT(IHI	IDE)		00093001
IEW0000		IDENTIFY	IHIIDECM('	360SLM532 V02 M01 ALGOL F LIBRARY	')	00094001
IEW0670		IHIIDEC	М	360SLM532 V02 M01 ALGOL F LIBRA	RY	
IEW0000		ALIAS	IHIIDEAI			00095001
IEW0000		ALIAS	IHIIDEII			00096001
IEW0000		ALIAS	IHIIDEIR			00097001
IEW0000		NAME	<pre>IHIIDE(R)</pre>			00098001
IEW0461	IHIPTTAB					

CONTROL SECTION ENTRY

ORIGIN LENGTH NAME LOCATION NAME NAME LOCATION NAME LOCATION NAME LOCATION IHIIDECM 6D8 00 IHIIDEAI 00 IHIIDEII 44 IHIIDEIR 88

ENTRY ADDRESS

TOTAL LENGTH 6D8

\*\*\*\*THITDE DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HITDEIR IS AN ALIAS FOR THIS MEMBER

\*\*\*\*HITDEII IS AN ALIAS FOR THIS MEMBER

\*\*\*\*THITDEAI IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED.

IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000	INCLUDE	OBJECT(IHIIOR)	00099001
IEW0000	IDENTIFY	' IHIIORTN('360SLM532 V02 M01 ALGOL F LIBRARY')	00100001
IEW0670	IHIIORT	N 360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHIIOREN	00101001
IEW0000	ALIAS	IHIIOREV	00102001
IEW0000	ALIAS	IHIIORNX	00103001
IEW0000	ALIAS	IHIIOROP	00104001
IEW0000	NAME	<pre>IHIIOR(R)</pre>	00105001

CONTROL	SECTION	ENTRY	

NAME IHIIORTN	ORIGIN 00	LENGTH D70	NAME	LOCATION	NAME	LOCATION	NAME	LOCATION	NAME	LOCATION
			IHIIOROQ	00	IHIIOROP	E6	IHIIORNX	4B4	IHIIORCL	6FC
			IHIIORCP	8A6	IHIIORGP	9A8	IHIIORCN	9AC	IHIIOREN	A0C
			IHIIOREV	A8A	IHIIORED	B20	IHIIORCI	BF8	IHIIORER	C7C

ENTRY ADDRESS 00

TOTAL LENGTH

\*\*\*\*IHIIOR

DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIIOROP IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHIIORNX IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHIIOREV IS AN ALIAS FOR THIS MEMBER

\*\*\*\*THIIOREN IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS

0.

IEW0000	INCLUDE	OBJECT(IHIISY)	00106001
IEW0000	IDENTIFY	/ IHIISYMB('360SLM532 V02 M01 ALGOL F LIBRARY'	) 00107001
IEW0670	IHIISYM	MB 360SLM532 V02 M01 ALGOL F LIBRAR	Y
IEW0000	ALIAS	IHIISYMB	00108001
IEW0000	NAME	IHIISY(R)	00109001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIISYMB 00 150 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

ENTRY ADDRESS 00

TOTAL LENGTH 150

\*\*\*\*\*THIISY DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HIISYMB IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

INCLUDE OBJECT(IHILAT)
IDENTIFY IHILATAN('360SLM532 V02 M01 ALGOL F LIBRARY')
IHILATAN 360SLM532 V02 M01 ALGOL F LIBRARY **IEW0000** IEW0000 00110001 00111001 IEW0670 IEW0000 NAME 00112001

MODULE MAP

CONTROL SECTION ENTRY

ORIGIN LENGTH NAME NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHILATAN 158 00

IHILAT 00

ENTRY ADDRESS 00

TOTAL LENGTH 158
\*\*\*\*\*HILAT DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

AUTHORIZATION CODE IS

INCLUDE OBJECT(IHILEX)

IDENTIFY IHILEXPT('360SLM532 V02 M01 ALGOL F LIBRARY')

IHILEXPT 360SLM532 V02 M01 ALGOL F LIBRARY **IEW0000** IEW0000 00113001 00114001 IEW0670 IEW0000 NAME 00115001

MODULE MAP

CONTROL SECTION ENTRY

ORIGIN LENGTH NAME NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHILEXPT 00 1E0

IHILEX 00

ENTRY ADDRESS 00

TOTAL LENGTH 1E0

\*\*\*\*\*HILEX DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

AUTHORIZATION CODE IS

INCLUDE OBJECT(IHILLO)
IDENTIFY IHILLOGM('360SLM532 V02 M01 ALGOL F LIBRARY')
IHILLOGM 360SLM532 V02 M01 ALGOL F LIBRARY **IEW0000** IEW0000 00116001 00117001 IEW0670 IEW0000 NAME 00118001

MODULE MAP

CONTROL SECTION ENTRY

ORIGIN LENGTH NAME NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHILLOGM 158 00

IHILLO 00

ENTRY ADDRESS 00

TOTAL LENGTH 158
\*\*\*\*\*HILLO DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

AUTHORIZATION CODE IS

INCLUDE OBJECT(IHILOR)
IDENTIFY IHILOREA('360SLM532 V02 M01 ALGOL F LIBRARY') IEW0000 00119001 IEW0000 00120001 360SLM532 V02 M01 ALGOL F LIBRARY IEW0670 IHILOREA IEW0000 ALIAS IHILORAR 00121001 IEW0000 ALIAS IHILOREL 00122001 IEW0000 NAME IHILOR(R) 00123001 IEW0461 IHIPTTAB

MODULE MAP

CONTROL SECTION **ENTRY** 

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHILOREA 00 330 IHILORAR 00 IHILOREL 40

ENTRY ADDRESS 00

330

TOTAL LENGTH
\*\*\*\*IHILOR

\*\*\*\*IHILOR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHILOREL IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHILORAR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS

#### DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED. IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

<b>IEW0000</b> IEW0000	<pre>INCLUDE OBJECT(IF IDENTIFY IHILSCSN()</pre>	HILSC) ('360SLM532 V02 M01 ALGOL F LIBRARY')	<b>00124001</b> 00125001
IEW0670	IHILSCSN	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS IHILSCC		00126001
IEW0000	ALIAS IHILSCS		00127001
IEW0000	NAME IHILSC(R)	)	00128001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHILSCSN 00 1B0 IHILSCC 00 IHILSCS 3A

ENTRY ADDRESS 00

TOTAL LENGTH 1B0

\*\*\*\*IHILSC DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHILSCS IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHILSCC IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

# DIAGNOSTIC MESSAGE DIRECTORY

IEW0000	INCLUDE OBJECT(	(IHILSQ)	00129001
IEW0000	IDENTIFY IHILSQF	RT('360SLM532 V02 M01 ALGOL F LIBRARY')	00130001
IEW0670	IHILSQRT	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	NAME IHILSQ(	(R)	00131001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHILSQRT 00 A8 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHILSQ

ENTRY ADDRESS 00

TOTAL LENGTH A8 \*\*\*\*HILSQ DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS 0.

<b>IEW0000</b> IEW0000			OBJECT(IHI	- ,	1 ALGOL F LIBRAR	-	0 <b>0132001</b>
IEW0670		IHIOARR	,		M01 ALGOL F LIBRA	,	
IEW0000		ALIAS	IHIOARRY			6	0134001
IEW0000		NAME	<pre>IHIOAR(R)</pre>			e	0135001
IEW0461	IHIIOREV						
IEW0461	IHISORAR						
IEW0461	IHILORAR						

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIOARRY 00 B0 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

ENTRY ADDRESS

TOTAL LENGTH B0

\*\*\*\*IHIOAR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIOARRY IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

#### DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED. IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

INCLUDE OBJECT(IHIOBA)
IDENTIFY IHIOBARR('360SLM532 V02 M01 ALGOL F LIBRARY')
THIOBARR 360SLM532 V02 M01 ALGOL F LIBRARY IEW0000 00136001 IEW0000 00137001 IEW0670 IEW0000 ALIAS IHIOBARR 00138001 IEW0000 NAME IHIOAR(R) 00139001 IEW0461 IHIIOREV

IEW0461 IHIOBOAR

MODULE MAP

ENTRY CONTROL SECTION

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIOBARR 00

ENTRY ADDRESS 00

68

TOTAL LENGTH
\*\*\*\*IHIOAR \*\*\*\*\*IHIOAR NOW REPLACED IN DATA SET

\*\*\*\*IHIOBARR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

### DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED. IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000	INCLUDE	OBJECT(IHIOBO)		00140001
IEW0000	IDENTIFY	IHIOBOOL('360SLM53	32 V02 M01 ALGOL F LIB	RARY') 00141001
IEW0670	IHIOBO0	L 360SLM	1532 V02 M01 ALGOL F L:	EBRARY
IEW0000	ALIAS	IHIOBOAR		00142001
IEW0000	ALIAS	IHIOBOOL		00143001
IEW0000	NAME	IHIOBO(R)		00144001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIOBOOL 00 1C8 IHIOBOAR 52

ENTRY ADDRESS 00

TOTAL LENGTH 1C8

\*\*\*\*IHIOBO DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIOBOOL IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHIOBOAR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

# DIAGNOSTIC MESSAGE DIRECTORY

IEW0000	INCLUDE OBJEC	T(IHIOIN) 00145001
IEW0000	IDENTIFY IHIOI	NTE('360SLM532 V02 M01 ALGOL F LIBRARY') 00146001
IEW0670	IHIOINTE	360SLM532 V02 M01 ALGOL F LIBRARY
IEW0000	ALIAS IHIOI	NAR 00147001
IEW0000	ALIAS IHIOI	:NTG 00148001
IEW0000	NAME IHIOI	N(R) 00149001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHIOINTE 00 1F8

IHIOINAR 00 IHIOINTG 40

ENTRY ADDRESS 00

TOTAL LENGTH 1F8

\*\*\*\*IHIOIN DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIOINTG IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHIOINAR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

### DIAGNOSTIC MESSAGE DIRECTORY

IEW0000	INCLUDE	OBJECT(IHIOST)	00150001
IEW0000	IDENTIFY	/ IHIOSTRG('360SLM532 V02 M01 ALGOL F LIBRARY'	) 00151001
IEW0670	IHIOST	RG 360SLM532 V02 M01 ALGOL F LIBRAR	Υ
IEW0000	ALIAS	IHIOSTRG	00152001
IEW0000	NAME	IHIOST(R)	00153001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIOSTRG 00 148 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

ENTRY ADDRESS 00

TOTAL LENGTH 148

\*\*\*\*\*THIOST DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HIOSTRG IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

IEW0000	INCLUDE	OBJECT(IHIOSY)	00154001
IEW0000	IDENTIF	/ IHIOSYMB('360SLM532 V02 M01 ALGOL F LIBRARY')	00155001
IEW0670	IHIOSY	4B 360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHIOSYMB	00156001
IEW0000	NAME	IHIOSY(R)	00157001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIOSYMB 00 138 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

ENTRY ADDRESS 00

TOTAL LENGTH 138

\*\*\*\*\*THIOSY DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*\*IHIOSYMB IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

INCLUDE OBJECT(IHIOTA)
IDENTIFY IHIOTARR('360SLM532 V02 M01 ALGOL F LIBRARY')
THIOTARR 360SLM532 V02 M01 ALGOL F LIBRARY IEW0000 00158001 IEW0000 00159001 IEW0670 IHIOTARR IEW0000 ALIAS 00160001 IEW0000 NAME IHIOTA(R) 00161001 IEW0461 IHIIOREV

IEW0461 IHIOINAR

MODULE MAP

CONTROL SECTION **ENTRY** 

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHIOTARR 00

ENTRY ADDRESS 00

TOTAL LENGTH 98

\*\*\*\*IHIOTA DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHIOTARR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

# DIAGNOSTIC MESSAGE DIRECTORY

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED. IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE; NCAL WAS SPECIFIED, OR THE REFERENCE WAS MARKED FOR RESTRICTED NO-CALL OR NEVERCALL.

IEW0000	INCLUDE	OBJECT(IHIPTT	)			00162001
IEW0000	IDENTIF	'IHIPTTAB('360	SLM532 V02 M01	1 ALGOL F	LIBRARY')	00163001
IEW0670	IHIPTT	AB 30	60SLM532 V02 N	M01 ALGOL	F LIBRARY	
IEW0000	ALIAS	IHIPTTAB				00164001
IEW0000	NAME	<pre>IHIPTT(R)</pre>				00165001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHIPTTAB 00 108 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION 00 108

ENTRY ADDRESS 00

TOTAL LENGTH 108

\*\*\*\*\*THIPTT DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HIPTTAB IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

IEW0000	INCLUDE OBJECT(IHISAT)	00166001
IEW0000	<pre>IDENTIFY IHISATAN('360SLM532 V02 M01 ALGOL F LIBRARY')</pre>	00167001
IEW0670	IHISATAN 360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	NAME IHISAT(R)	00168001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHISATAN 00 E0 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHISAT 00

ENTRY ADDRESS 00

TOTAL LENGTH E0 \*\*\*\*\*IHISAT DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS 0.

INCLUDE OBJECT(IHISEX)

IDENTIFY IHISEXPT('360SLM532 V02 M01 ALGOL F LIBRARY')

IHISEXPT 360SLM532 V02 M01 ALGOL F LIBRARY **IEW0000** IEW0000 00169001 00170001 IEW0670 IEW0000 NAME 00171001

MODULE MAP

CONTROL SECTION ENTRY

ORIGIN LENGTH NAME NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHISEXPT

00 138 IHISEX 00

ENTRY ADDRESS 00

TOTAL LENGTH 138

\*\*\*\*\*HISEX DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

AUTHORIZATION CODE IS

INCLUDE OBJECT(IHISLO)
NAME IHISLO(R) IEW0000 00172001 IEW0000 00173001

MODULE MAP

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHISLOGM 00 E8 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHISLO 00

ENTRY ADDRESS 00

TOTAL LENGTH  $$\tt E8$$  \*\*\*\*HISLO DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS  $\theta.$ 

IEW0000	INCLUDE	OBJECT(IHI	SOR)	00174001
IEW0000	IDENTIF	Y IHISOREA('	360SLM532 V02 M01 ALGOL F LIBRARY')	00175001
IEW0670	IHISORI	EΑ	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHISORAR		00176001
IEW0000	ALIAS	IHISOREL		00177001
IEW0000	NAME	<pre>IHISOR(R)</pre>		00178001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHISOREA 00

IHISORAR 00 IHISOREL 40

ENTRY ADDRESS 00

TOTAL LENGTH 380

\*\*\*\*IHISOR DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHISOREL IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHISORAR IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

### DIAGNOSTIC MESSAGE DIRECTORY

IEW0000	INCLUDE	OBJECT(IHI	SSC)	00179001
IEW0000	IDENTIFY	/ IHISSCSN('	360SLM532 V02 M01 ALGOL F LIBRARY')	00180001
IEW0670	IHISSCS	5N	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHISSCS		00181001
IEW0000	ALIAS	IHISSCC		00182001
IEW0000	NAME	<pre>IHISSC(R)</pre>		00183001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION IHISSCSN 00 140 IHISSCC 00 IHISSCS 3A

ENTRY ADDRESS 00

TOTAL LENGTH 140

\*\*\*\*IHISSC DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*IHISSCS IS AN ALIAS FOR THIS MEMBER

\*\*\*\*IHISSCS IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.

# DIAGNOSTIC MESSAGE DIRECTORY

IEW0000	INCLUDE OBJECT	(IHISSQ)	00184001
IEW0000	IDENTIFY IHISSQ	RT('360SLM532 V02 M01 ALGOL F LIBRARY')	00185001
IEW0670	IHISSQRT	360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	NAME IHISSQ	(R)	00186001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHISSQRT 00 C8 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

IHISSQ 00

ENTRY ADDRESS 00

TOTAL LENGTH C8 \*\*\*\*\*IHISSQ DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET AUTHORIZATION CODE IS 0.

IEW0000	INCLUDE	OBJECT(IHISYS)	00187001
IEW0000	IDENTIFY	'IHISYSCT('360SLM532 V02 M01 ALGOL F LIBRARY')	00188001
IEW0670	IHISYSO	T 360SLM532 V02 M01 ALGOL F LIBRARY	
IEW0000	ALIAS	IHISYSCT	00189001
IEW0000	NAME	IHISYS(R)	00190001

CONTROL SECTION ENTRY

NAME ORIGIN LENGTH IHISYSCT 00 780 NAME LOCATION NAME LOCATION NAME LOCATION NAME LOCATION

ENTRY ADDRESS 00

TOTAL LENGTH 780

\*\*\*\*\*THISYS DOES NOT EXIST BUT HAS BEEN ADDED TO DATA SET

\*\*\*\*HISYSCT IS AN ALIAS FOR THIS MEMBER

AUTHORIZATION CODE IS 0.