```
CLEAR STORAGE 1      ,008015,022026,030037,044,049,053053N000000N00001026                              1
CLEAR STORAGE 2      L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?           2
BOOTSTRAP            ,008015,022029,036040,047054,061068,072/061039              ,0010011040            3
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                     FORTRAN COMPILER -- VARIABLES PHASE 5 -- 17                          PAGE   1

SEQ PG LIN  LABEL  OP    OPERANDS                                 SFX CT  LOCN  INSTRUCTION TYPE  CARD

101                JOB   FORTRAN COMPILER -- VARIABLES PHASE 5 -- 17
102                CTL   6611
103         *
104         * A CHECK IS MADE FOR UNREFERENCED VARIABLES
105         *
106         X1     EQU   89                                                0089
107         X2     EQU   94                                                0094
108         X3     EQU   99                                                0099
109         *
110         * ON ENTRY AND EXIT, X1 IS THE TOP OF CODE, TOPCOR IS THE TOP OF
111         * THE SYMBOL TABLE, AND 83 IS THE BOTTOM OF THE SYMBOL TABLE.
112         *
113         * EACH ELEMENT OF THE SCALAR SYMBOLS TABLE CONSISTS OF THE
114         * THREE-CHARACTER RUN-TIME ADDRESS, WITH A WORD MARK UNDER
115         * THE FIRST CHARACTER, A GROUP MARK, WITH A WORD MARK UNDER
116         * IT IF THE VARIABLE IS NOT REFERENCED, AND THE VARIABLE, WITH
117         * CHARACTERS REVERSED.
118         *
119         * STUFF IN THE RESIDENT AREA
120         *
121         PHASID EQU   110  PHASE ID, FOR SNAPSHOT DUMPS                  0110
122         SNAPSH EQU   333  CORE DUMP SNAPSHOT                            0333
123         TOPCOR EQU   688  TOP CORE ADDRESS FROM PARAM CARD              0688
124         LOADNX EQU   700  LOAD NEXT OVERLAY                             0700
125         CLEARL EQU   707  CS AT START OF OVERLAY LOADER                 0707
126         TPREAD EQU   780  TAPE READ INSTRUCTION IN OVERLAY LOADER       0780
127         LOADXX EQU   793  EXIT FROM OVERLAY LOADER                      0793
128         CLRBOT EQU   833  BOTTOM OF CORE TO CLEAR IN OVERLAY LOADER     0833
129         *
130                ORG   857                                                     0857
131         LOADDD EQU   *&1           LOAD ADDRESS                         0857
132     857 BEGINN CC    J                                          2 0857  F J               4
133     859        MCW   X1,SX1        MEMORIZE TOP OF CODE           7 0859  M 089 |79         4
134     866        MCW   TOPCOR,X2     TOP OF SYMBOL TABLE            7 0866  M 688 094         4
135     873 LOOP   BCE   TABENT,0&X2,} GM MEANS BOTTOM OF SYM TAB NAME 8 0873  B 945 0!0 } GMARK 4
136     881        SBR   X2                                         4 0881  H 094             4
137     885        C     X2,83         BOTTOM OF SYMBOL TABLE?        7 0885  C 094 083         4
138     892        BU    LOOP          NO                            5 0892  B 873 /           5
139         *
140         * DONE
141         *
142     897        MCW   SX1,X1        RECALL TOP OF CODE             7 0897  M |79 089         5
143     904        BSS   SNAPSH,D                                   5 0904  B 333 D           5
144     909        SBR   TPREAD&6,838                               7 0909  H 786 838         5
145     916        SBR   CLRBOT                                     4 0916  H 833             5
146     920        SBR   LOADXX&3,838                               7 0920  H 796 838         5
147     927        SBR   CLEARL&3,2698                              7 0927  H 710 O98         6
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                    FORTRAN COMPILER -- VARIABLES PHASE 5 -- 17                                    PAGE    2

SEQ PG LIN  LABEL  OP     OPERANDS                                 SFX CT  LOCN  INSTRUCTION TYPE  CARD

148    934         LCA    CONST1,PHASID                               7  0934  L |88 110            6
149    941         B      LOADNX                                      4  0941  B 700                6
150         *
151         * X2 IS AT GM BELOW A NAME IN THE SYMBOL TABLE
152         *
153    945  TABENT  BW    UNREF,0&X2     UNREFERENCED IF GM HAS WM    8  0945  V 965 0!0 1          6
154    953         MN     0&X2                                        4  0953  D 0!0                6
155    957         SBR    X2                                          4  0957  H 094                6
156    961         B      LOOP                                        4  0961  B 873                6
157         *
158         * UNREFERENCED SYMBOL
159         *
160         * MOVE X3 (INITIALLY X2) UP TO WM ABOVE SYMBOL
161         *
162    965  UNREF   CS    299                                         4  0965  / 299                7
163    969         MCW    ERR11,233                                   7  0969  M /21 233            7
164    976         MCW    X2,X3                                       7  0976  M 094 099            7
165    983  LOOPU   NOP   1&X3           WHY NOT                      4  0983  N 0?1                7
166    987         SAR    X3             JUST SBR  X3,1&X3?           4  0987  Q 099                7
167    991         BW     *&5,2&X3       AT WM ABOVE SYMBOL?          8  0991  V |03 0?2 1          7
168    999         B      LOOPU                                       4  0999  B 983                7
169  1 003         MN     234            WHY NOT                      4  1003  D 234                8
170  1 007         MN                    JUST                        1  1007  D                    8
171  1 008         SAR    X1              SBR  X1,232?                4  1008  Q 089                8
172  1 012         SBR    X3,1&X3                                     7  1012  H 099 0?1            8
173  1 019  LOOPW   MCW   0&X3,CH        MOVE SYMBOL                  7  1019  M 0?0 /22            8
174  1 026         SAR    X3             TO PRINT                     4  1026  Q 099                8
175  1 030         MCW    CH,2&X1        LINE WHILE                   7  1030  M /22 0|2            8
176  1 037         SBR    X1               REVERSING CHARACTERS       4  1037  H 089                9
177  1 041         BW     *&5,1&X3         TO CORRECT                 8  1041  V |53 0?1 1          9
178  1 049         B      LOOPW            ORDER                      4  1049  B |19                9
179  1 053         W                                                 1  1053  2                    9
180  1 054         BCV    *&5                                         5  1054  B |63 @              9
181  1 059         B      *&3                                         4  1059  B |65                9
182  1 063         CC     1                                           2  1063  F 1                  9
183  1 065         MN     0&X2                                        4  1065  D 0!0               10
184  1 069         SAR    X2                                          4  1069  Q 094               10
185  1 073         B      LOOP                                        4  1073  B 873               10
186         *
187         * DATA
188         *
189  1 079  SX1     DCW   #3                                          3  1079                      10
190  1 088  CONST1  DCW   @CONST ONE@                                 9  1088                      10
191  1 121  ERR11   DCW   @ERROR 11 - UNREFERENCED VARIABLE @        33  1121                      11
192  1 122  CH      DCW   #1                                          1  1122                      11
193  1 123  GMWM    DCW   @}@                                         1  1123            GMARK      11
194              ORG    201                                               0201
195    203      DSA    LOADDD   LOAD ADDRESS FOR CARD-TO-TAPE PROGRAM   3  0203  857                12
196              EX     BEGINN                                             B 857                    13
197              END                                                      / 000 080
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SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
BEGINN	857	CH	1122	CLEARL	707	CLRBOT	833	CONST1	1088	ERR11	1121	GMWM	1123
LOADDD	857	LOADNX	700	LOADXX	793	LOOP	873	LOOPU	983	LOOPW	1019	PHASID	110
SNAPSH	333	SX1	1079	TABENT	945	TOPCOR	688	TPREAD	780	UNREF	965	X1	89
X2	94	X3	99										