```
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

                      FORTRAN COMPILER -- STMT NUMBERS TWO -- PHASE 28                              PAGE   1

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

101               JOB   FORTRAN COMPILER -- STMT NUMBERS TWO -- PHASE 28
102               CTL   6611
103        *
104        * SAME AS VARIABLES PHASE TWO (14).
105        *
106        * THE ENTIRE SOURCE PROGRAM IS SHIFTED TO THE TOP (LEFTMOST
107        * PART) OF AVAILABLE STORAGE, LEAVING ROOM FOR SUBSEQUENT
108        * COMPILER PHASES.  THE REMAINING STORAGE IS CLEARED FOR
109        * TABLES.
110        *
111        * ON ENTRY, 83 IS THE TOP OF CODE IN HIGH CORE AND X2 IS ONE
112        * BELOW THE BOTTOM OF CODE IN HIGH CORE.
113        *
114        * ON EXIT, 83 IS ONE BELOW THE TABLES IN HIGH CORE, AND X1 AND
115        * X2 ARE THE TOP OF CODE IN LOW CORE.
116        *
117        X1     EQU   89                                                      0089
118        X2     EQU   94                                                      0094
119        X3     EQU   99                                                      0099
120        *
121        * STUFF IN THE RESIDENT AREA
122        *
123        PHASID EQU   110  PHASE ID, FOR SNAPSHOT DUMPS                       0110
124        SNAPSH EQU   333  CORE DUMP SNAPSHOT                                 0333
125        LOADNX EQU   700  LOAD NEXT OVERLAY                                  0700
126        CLEARL EQU   707  CS AT START OF OVERLAY LOADER                      0707
127        TPREAD EQU   780  TAPE READ INSTRUCTION IN OVERLAY LOADER            0780
128        LOADXX EQU   793  EXIT FROM OVERLAY LOADER                           0793
129        CLRBOT EQU   833  BOTTOM OF CORE TO CLEAR IN OVERLAY LOADER          0833
130        *
131        BOTCOD EQU   3199  ONE BELOW BOTTOM OF CODE                          3199
132        *
133               ORG   838                                                               0838
134        LOADDD EQU   *&1          LOAD ADDRESS                               0838
135    840 TOPCD9 DCW   #3  TOP OF CODE & 5 & X00 - 1                        3  0840                        4
136    846 DIFF16 DCW   #6  16 * (BOTTAB - 1 - TOPCD9)                       6  0846                        4
137    849 BNDRY  DCW   #3  TOPCD9 + 0.48 * (BOTTAB - 1 - TOPCD9)            3  0849                        4
138    852 BOTTAB DCW   #3  BOTTOM OF TABLES                                 3  0852                        4
139        *
140        * MOVE DOWN
141        *
142    853 MOVEDN SBR   MOVEDX&3                                            4  0853  H 936                  4
143    857        MN    0&X1                                                4  0857  D 0|0                  4
144    861        SAR   X1                                                  4  0861  Q 089                  4
145    865 MORE   MCM   0&X2                                                4  0865  P 0!0                  5
146    869        SAR   NEWX2&6                                             4  0869  Q 891                  5
147    873        MCM   0&X2,1&X1                                           7  0873  P 0!0 0|1              5
```

FORTRAN COMPILER -- STMT NUMBERS TWO -- PHASE 28   PAGE   2

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD
148		880		MN			1	0880	D		5
149		881		SBR	X1		4	0881	H 089		5
150		885	NEWX2	SBR	X2,0		7	0885	H 094 000		5
151		892		BCE	MORE,0&X1,|		8	0892	B 865 0|0			5
152		900		MN	0&X2		4	0900	D 0!0		6
153		904		CW			1	0904	)		6
154		905		SW	0&X1 UNDER THE GM		4	0905	, 0|0		6
155		909		C	X2,BOTTAB		7	0909	C 094 852		6
156		916		BU	MORE		5	0916	B 865 /		6
157		921		MN	0&X1		4	0921	D 0|0		6
158		925		SAR	X1		4	0925	Q 089		6
159		929		SBR	X2 SEQNO OF TOP OF CODE IN LOW CORE		4	0929	H 094		7
160		933	MOVEDX	B	0-0		4	0933	B 000		7
161				*							
162		937	BEGINN	MCW	83,X3 TOP OF CODE		7	0937	M 083 099		7
163		944		SBR	BOTTAB,1&X3 BOTTOM OF TABLES		7	0944	H 852 0?1		7
164		951		MCW	X2,X3		7	0951	M 094 099		7
165		958	CLEAR	CS	0&X3		4	0958	/ 0?0		7
166		962		SBR	X3		4	0962	H 099		7
167		966		C	X3,ABOT DONE?		7	0966	C 099 T10		8
168		973		BU	CLEAR NO		5	0973	B 958 /		8
169		978		SBR	X1,BOTCOD		7	0978	H 089 A99		8
170		985		B	MOVEDN		4	0985	B 853		8
171		989		SBR	TOPCD9,5&X1		7	0989	H 840 0|5		8
172		996		MN	K99,TOPCD9		7	0996	D S75 840		8
173	1	003		MN			1	1003	D		8
174	1	004		MCW	83,X3		7	1004	M 083 099		9
175	1	011	CLEAR2	CS	0&X3		4	1011	/ 0?0		9
176	1	015		SBR	X3		4	1015	H 099		9
177	1	019		C	X3,TOPCD9		7	1019	C 099 840		9
178	1	026		BU	CLEAR2		5	1026	B |11 /		9
179	1	031		MCW	KLESS,0&X3		7	1031	M T11 0?0		9
180	1	038		MCW	83,TOCONV		7	1038	M 083 S73		10
181	1	045		B	CONV		4	1045	B S00		10
182	1	049		MCW	W5,DIFF16		7	1049	M T16 846		10
183	1	056		MCW	TOPCD9,TOCONV		7	1056	M 840 S73		10
184	1	063		B	CONV		4	1063	B S00		10
185	1	067		S	W5,DIFF16		7	1067	S T16 846		10
186	1	074		A	DIFF16		4	1074	A 846		11
187	1	078		A	DIFF16		4	1078	A 846		11
188	1	082		A	DIFF16		4	1082	A 846		11
189	1	086		A	DIFF16 16 * (BOTTAB - 1 - TOPCD9)		4	1086	A 846		11
190	1	090		A	DIFF16-2,W6		7	1090	A 844 T22		11
191	1	097		A	W6		4	1097	A T22		11
192	1	101		A	DIFF16-2,W6 0.48 * (BOTTAB - 1 - TOPCD9)		7	1101	A 844 T22		11
193	1	108		A	W5,W6 TOPCD9 + 0.48 * (BOTTAB - 1 - TOPCD9)		7	1108	A T16 T22		12
194	1	115		MCW	W6-3,X3		7	1115	M T19 099		12
195	1	122		A	X3		4	1122	A 099		12
196	1	126		MZ	ZONES-1&X3,W6-2		7	1126	Y SG6 T20		12
197	1	133		MZ	ZONES&X3,W6		7	1133	Y SG7 T22		12

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

198  1 140          MCW   W6,X3                                            7  1140  M T22 099          12
199  1 147          SW    2&X3                                             4  1147  , 0?2              13
200  1 151          MCW   KLESS                                            4  1151  M T11              13
201  1 155          SBR   BNDRY                                            4  1155  H 849              13
202  1 159          BSS   SNAPSH,C                                         5  1159  B 333 C            13
203  1 164          SBR   TPREAD&6,BEGINN                                  7  1164  H 786 937          13
204  1 171          SBR   CLRBOT                                           4  1171  H 833              13
205  1 175          SBR   LOADXX&3,1187                                    7  1175  H 796 /87          13
206  1 182          SBR   CLEARL&3,BOTCOD                                  7  1182  H 710 A99          14
207  1 189          LCA   STNUM3,PHASID                                    7  1189  L T31 110          14
208  1 196          B     LOADNX                                           4  1196  B 700              14
209           *
210           * CONVERT TOCONV TO DECIMAL IN W5
211           *
212  1 200  CONV    SBR   CONVX&3                                          4  1200  H S68              14
213  1 204          MN    TOCONV,W5                                        7  1204  D S73 T16          14
214  1 211          MN                                                     1  1211  D                  14
215  1 212          MN                                                     1  1212  D                  14
216  1 213          MCW                                                    1  1213  M                  15
217  1 214          MZ    TOCONV,K99                                       7  1214  Y S73 S75          15
218  1 221          MZ    TOCONV-2,K99-1                                   7  1221  Y S71 S74          15
219  1 228          SBR   X3,ZONES-4                                       7  1228  H 099 S73          15
220  1 235  CONVL   C     4&X3,K99                                         7  1235  C 0?4 S75          15
221  1 242          SAR   X3                                               4  1242  Q 099              15
222  1 246          A     KP1,W5-3                                         7  1246  A T32 T13          16
223  1 253          BU    CONVL                                            5  1253  B S35 /            16
224  1 258          MZ    KB,W5-3                                          7  1258  Y T33 T13          16
225  1 265  CONVX   B     0-0                                              4  1265  B 000              16
226           *
227           * DATA
228           *
229  1 273  TOCONV DCW    @0J  @                                           5  1273                     16
230  1 275  K99    DCW    @99@                                             2  1275                     16
231         ZONES  EQU    *&2                                                 1277
232  1 307         DC     @99Z9R9I99ZZZRZIZ9RZRRRIR9IZIRIII@              32  1307                     17
233  1 310  ABOT   DSA    BOTCOD                                           3  1310  A99                17
234  1 311  KLESS  DCW    @<@                                              1  1311                     17
235  1 316  W5     DCW    #5                                               5  1316                     18
236  1 322  W6     DCW    #6                                               6  1322                     18
237  1 331  STNUM3 DCW    @STNUM TRI@                                      9  1331                     18
238  1 332  KP1    DCW    &1                                               1  1332                     18
239  1 333  KB     DCW    #1                                               1  1333                     18
240  1 334  GMWM   DCW    @}@                                              1  1334            GMARK     18
241         ORG    201                                                        0201
242    203         DSA    LOADDD   LOAD ADDRESS FOR CARD-TO-TAPE PROGRAM    3  0203  838                19
243         EX     BEGINN                                                     B 937              20
244         END                                                            / 000 080
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phase-28.27.asc   Mon Jul 14 23:50:04 2008   4

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
ABOT	1310	BEGINN	937	BNDRY	849	BOTCOD	3199	BOTTAB	852	CLEAR	958	CLEAR2	1011
CLEARL	707	CLRBOT	833	CONV	1200	CONVL	1235	CONVX	1265	DIFF16	846	GMWM	1334
K99	1275	KB	1333	KLESS	1311	KP1	1332	LOADDD	838	LOADNX	700	LOADXX	793
MORE	865	MOVEDN	853	MOVEDX	933	NEWX2	885	PHASID	110	SNAPSH	333	STNUM3	1331
TOCONV	1273	TOPCD9	840	TPREAD	780	W5	1316	W6	1322	X1	89	X2	94
X3	99	ZONES	1277										