```
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
```



```
 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
```

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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
```

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										