```
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 -- I/O PHASE TWO -- PHASE 39                          PAGE    1

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

 101               JOB   FORTRAN COMPILER -- I/O PHASE TWO -- PHASE 39
 102               CTL   6611
 103         *
 104         * IN-LINE INSTRUCTIONS ARE GENERATED FOR EXECUTING END FILE,
 105         * REWIND AND BACKSPACE STATEMENTS.
 106         *
 107         X1    EQU   89                                                      0089
 108         X2    EQU   94                                                      0094
 109         X3    EQU   99                                                      0099
 110         *
 111         * STUFF IN THE RESIDENT AREA
 112         *
 113         PHASID EQU  110  PHASE ID, FOR SNAPSHOT DUMPS                      0110
 114         GLOBER EQU  184  GLOBAL ERROR FLAG -- WM MEANS ERROR               0184
 115         SNAPSH EQU  333  CORE DUMP SNAPSHOT                                0333
 116         LOADNX EQU  700  LOAD NEXT OVERLAY                                 0700
 117         CLEARL EQU  707  CS AT START OF OVERLAY LOADER                     0707
 118         CDOVLY EQU  769  1 IF RUNNING FROM CARDS, N IF FROM TAPE           0769
 119         *
 120               ORG   838                                                          0838
 121         LOADDD EQU  *&1          LOAD ADDRESS                              0838
 122    838  LOOP   BCE   DONE,0&X1,                                        8  0838  B 870 0|0            4
 123    846         MCW   0&X1,CODSEQ                                       7  0846  M 0|0 S30            4
 124    853         MCW   CODSEQ-3,*&8                                      7  0853  M S27 867            4
 125    860         BCE   IOSTMT,CODES,0  INTERESTING STATEMENT?            8  0860  B 893 S33 0          4
 126    868         B                                                       1  0868  B                    4
 127    869         B                                                       1  0869  B                    4
 128    870  DONE   BSS   SNAPSH,C                                         5  0870  B 333 C              4
 129    875         SBR   CLEARL&3,GMWM                                     7  0875  H 710 T24            5
 130    882         LCA   CGOTO,PHASID                                     7  0882  L S38 110            5
 131    889         B     LOADNX                                            4  0889  B 700                5
 132         *
 133         * STATEMENT IS BACKSPACE, ENDFILE OR REWIND
 134         *
 135    893  IOSTMT MCW   KB,IOINST      ASSUME BACKSPACE                    7  0893  M S39 S26            5
 136    900         MCW   KLESS,2&X1                                        7  0900  M S40 0|2            5
 137    907         SBR   TSTLES&6,2&X1                                     7  0907  H /23 0|2            5
 138    914         BCE   MOVEUP,CODSEQ-3,B  BACKSPACE?                    8  0914  B 944 S27 B          6
 139    922         MCW   KR,IOINST      ASSUME REWIND                     7  0922  M S41 S26            6
 140    929         BCE   MOVEUP,CODSEQ-3,Z  REWIND?                       8  0929  B 944 S27 Z          6
 141    937         MCW   KM,IOINST      MUST BE ENDFILE                   7  0937  M S42 S26            6
 142    944  MOVEUP LCA   0&X1,0&X3                                         7  0944  L 0|0 0?0            6
 143    951         SAR   X1                                                4  0951  Q 089                7
 144    955         C     0&X3                                              4  0955  C 0?0                7
 145    959         SAR   X3                                                4  0959  Q 099                7
 146    963         LCA   1&X1,2&X3                                         7  0963  L 0|1 0?2            7
 147    970         SBR   X3                                                4  0970  H 099                7
```

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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD
148    974         BWZ   *&5,CODSEQ,2                                          8  0974  V 986 S30 2          7
149    982         B     *&9                                                   4  0982  B 994               7
150    986         BWZ   *&15,CODSEQ-2,2                                       8  0986  V |08 S28 2          8
151    994         MCW   CODSEQ,X2      ZONE IN CODSEQ HIGH OR LOW             7  0994  M S30 094           8
152  1 001         MCW   0&X2,CODSEQ      MEANS IT'S AN ADDRESS                7  1001  M 0!0 S30           8
153  1 008         BCE   SYNTAX,0&X1,}                                         8  1008  B /59 0|0 } GMARK   8
154  1 016         MN    0&X1                                                  4  1016  D 0|0               8
155  1 020         SAR   X2                                                    4  1020  Q 094               8
156  1 024         BCE   UNITK,0&X2,}   UNIT NUMBER IS A CONSTANT             8  1024  B S04 0!0 } GMARK   9
157  1 032  UVAR   MCW   K0,IOINST-1                                           7  1032  M S43 S25           9
158  1 039         MCW   0&X1,MVUNIT&3                                         7  1039  M 0|0 S18           9
159  1 046         MCW   MN,MVUNIT                                            7  1046  M S44 S15           9
160  1 053         MZ    *-4,MVUNIT&2   CLOBBER TYPE TAG                      7  1053  Y |55 S17           9
161  1 060         CW    FLAG                                                  4  1060  ) S45              10
162  1 064  GOTU   C     0&X1                                                  4  1064  C 0|0              10
163  1 068         SAR   X1                                                    4  1068  Q 089              10
164  1 072         LCA   IOINST,0&X3    LOAD CU INSTRUCTION                   7  1072  L S26 0?0          10
165  1 079         SBR   X3                                                    4  1079  H 099              10
166  1 083         BW    CONST,FLAG     UNIT NUMBER IS A CONSTANT              8  1083  V /06 S45 1        10
167  1 091         SW    FLAG                                                  4  1091  , S45              10
168  1 095         LCA   MVUNIT&6,0&X3  LOAD MOVE UNIT NUMBER INSTR           7  1095  L S21 0?0          11
169  1 102         SBR   X3                                                    4  1102  H 099              11
170  1 106  CONST  LCA   1&X1,0&X3                                            7  1106  L 0|1 0?0          11
171  1 113         SBR   X3                                                    4  1113  H 099              11
172  1 117  TSTLES BCE   LOOP,0,<  NOT TOO BIG IF LESS-THAN NOT CLOBBERED     8  1117  B 838 000 <        11
173  1 125         CS    332                                                   4  1125  / 332              11
174  1 129         CS                                                          1  1129  /                  11
175  1 130         CC    1                                                     2  1130  F 1                12
176  1 132         MCW   ERROR2,270                                            7  1132  M S81 270          12
177  1 139         W                                                           1  1139  2                  12
178  1 140         CC    1                                                     2  1140  F 1                12
179  1 142         BCE   HALT,CDOVLY,1                                        8  1142  B /55 769 1        12
180  1 150         RWD   1                                                     5  1150  U %U1 R            12
181  1 155  HALT   H     HALT                                                  4  1155  . /55              12
182  1 159  SYNTAX CS    332                                                   4  1159  / 332              13
183  1 163         CS                                                          1  1163  /                  13
184  1 164         SW    GLOBER                                                4  1164  , 184              13
185  1 168         MN    CODSEQ,245                                            7  1168  D S30 245          13
186  1 175         MN                                                          1  1175  D                  13
187  1 176         MN                                                          1  1176  D                  13
188  1 177         MCW   ERR33                                                 4  1177  M T23              13
189  1 181         W                                                           1  1181  2                  14
190  1 182         BCV   *&5                                                   5  1182  B /91 @            14
191  1 187         B     *&3                                                   4  1187  B /93              14
192  1 191         CC    1                                                     2  1191  F 1                14
193  1 193         MCW   K0,IOINST-1                                           7  1193  M S43 S25          14
194  1 200         B     UVAR                                                  4  1200  B |32              14
195         *
196         * UNIT NUMBER IS A CONSTANT
197         *
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

198  1 204  UNITK   MN    0&X1,IOINST-1                                       7  1204  D 0|0 S25          14
199  1 211         B     GOTU                                                4  1211  B |64              15
200          *
201          * DATA
202          *
203  1 215  MVUNIT MCW    5777&X1,4&X3                                        7  1215  M XXX 0?4          15
204  1 226  IOINST DCW    @U%U0X@                                             5  1226                     15
205  1 230  CODSEQ DCW    #4  STATEMENT CODE AND SEQUENCE NUMBER              4  1230                     15
206  1 233  CODES  DCW    @BZN@  BACKSPACE, REWIND, ENDFILE STATEMENT CODES    3  1233                     15
207  1 238  CGOTO  DCW    @CGOTO@                                             5  1238                     15
208  1 239  KB     DCW    @B@                                                 1  1239                     15
209  1 240  KLESS  DCW    @<@  CORE IS NOT FULL YET SENTINEL                  1  1240                     16
210  1 241  KR     DCW    @R@                                                 1  1241                     16
211  1 242  KM     DCW    @M@                                                 1  1242                     16
212  1 243  K0     DCW    @0@                                                 1  1243                     16
213  1 244  MN     MN                                                         1  1244  D                  16
214  1 245  FLAG   DCW    #1  NO WM MEANS UNIT IS VARIABLE, WM MEANS CONST    1  1245                     16
215  1 281  ERROR2 DCW    @MESSAGE 2 - OBJECT PROGRAM TOO LARGE@             36  1281                     17
216  1 323  ERR33  DCW    @ERROR 33 - NO TAPE UNIT NUMBER, STATEMENT @       42  1323                     19
217  1 324  GMWM   DCW    @}@                                                 1  1324          GMARK   19
218                ORG    201                                                        0201
219    203         DSA    LOADDD    LOAD ADDRESS FOR CARD-TO-TAPE PROGRAM     3  0203  838                20
220                EX     LOOP                                                       B 838              21
221                END                                                               / 000 080
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
CDOVLY	769	CGOTO	1238	CLEARL	707	CODES	1233	CODSEQ	1230	CONST	1106	DONE	870
ERR33	1323	ERROR2	1281	FLAG	1245	GLOBER	184	GMWM	1324	GOTU	1064	HALT	1155
IOINST	1226	IOSTMT	893	K0	1243	KB	1239	KLESS	1240	KM	1242	KR	1241
LOADDD	838	LOADNX	700	LOOP	838	MN	1244	MOVEUP	944	MVUNIT	1215	PHASID	110
SNAPSH	333	SYNTAX	1159	TSTLES	1117	UNITK	1204	UVAR	1032	X1	89	X2	94
X3	99												