```
SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

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         GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR               0184
114         *
115                EXT00   SNAPSH, LOADNX, CDOVLY                                        MACRO
116         SNAPSH EQU   333                                                     0333     GEN
117         PHASLD EQU   381                                                     0381     GEN
118         SNAPEX EQU   564                                                     0564     GEN
119         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                         0700     GEN
120         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE         0700     GEN
121         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                          0704     GEN
122         TPERR  EQU   728                                                     0728     GEN
123         *
124                EXT03   START, TOP OF PHASE 3                                  MACRO
125         BEGIN3 EQU   838                                                     0838     GEN
126         TOP3   EQU   2600                                                    2600     GEN
127         *
128         110    DCW   @I/O TWO@                                         7   0110                1
129         094    DCW   000                                               3   0094                2
130         096    DC    00                                                2   0096                2
131         *
132         PHAS39 LDPH  I/O TWO,LOADAD,LOOP,,,39                                 MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]  GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                      GEN
            *                                                                  GEN
            * LOAD A BLOCK                                                     GEN
            *                                                                  GEN
133         )6J003 EQU   110  PHASE ID                                         0110     GEN
134         )6K003 EQU   700  LOAD NEXT PHASE                                  0700     GEN
135         )6L003 EQU   704  TAPE READ INSTRUCTION                            0704     GEN
136         )6M003 EQU   728  TAPE ERROR HANDLER                               0728     GEN
            *                                                                  GEN
137                ORG   201                                                        0201
138         PHAS39 EQU   *&1                                                     0201     GEN
139                LCA   )9J003,)6J003                                     7   0201  L 250 110   GEN      3   250     110
140                BCE   )6K003,)6K003,1      Q: LOADING FROM CARDS?       8   0208  B 700 700 1 GEN      3   700     700
141                BCE   )6K003,)6L003&4,0    Q: LOADING FROM AUTOCODER TAPE? 8 0216  B 700 708 0 GEN      3   700     708
142                RTW   1,LOADAD             READ THE BLOCK               8   0224  L %U1 838 R GEN      3   %U1     838
143                BER   )6M003               Q: TAPE ERROR?               5   0232  B 728 L     GEN      3   728
144                CS    LOOP,)9R003        ENTER THE BLOCK                 7   0237  / 838 254   GEN      4   838     254
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

145         )9J003  DCW   @I/O TWO@          PHASE ID                    7  0250              GEN      4
146                 DC    #1                                            1  0251              GEN      4
147                 DC    @39@          PHASE NUMBER                    2  0253              GEN      4
148         )9R003  DCW   @}@                                           1  0254              GEN      4
149                 XFR   PHAS39                                                B 201               5   201
150         *
151                 ORG   BEGIN3                                                0838
152         LOADAD  EQU   *&1          LOAD ADDRESS                          0838
153    838  LOOP    BCE   DONE,0&X1,                                    8  0838  B 870 0|0           6   870     000+1
154    846          MCW   0&X1,CODSEQ                                   7  0846  M 0|0 S16           6   000+1  1216
155    853          MCW   CODSEQ-3,*&8                                  7  0853  M S13 867           6  1213     867
156    860          BCE   IOSTMT,CODES,0  INTERESTING STATEMENT?        8  0860  B 879 S19 0         6   879    1219
157    868          B                                                   1  0868  B                   6
158    869          B                                                   1  0869  B                   6
159    870  DONE    BSS   SNAPSH,C                                      5  0870  B 333 C             6   333
160    889          B     LOADNX                                        4  0875  B 700               7   700
161         *
162         * STATEMENT IS BACKSPACE, ENDFILE OR REWIND
163         *
164    893  IOSTMT  MCW   KB,IOINST      ASSUME BACKSPACE               7  0879  M S20 S12           7  1220    1212
165    900          MCW   KLESS,2&X1                                    7  0886  M S21 0|2           7  1221     002+1
166    907          SBR   TSTLES&6,2&X1                                 7  0893  H /09 0|2           7  1109     002+1
167    914          BCE   MOVEUP,CODSEQ-3,B  BACKSPACE?                8  0900  B 930 S13 B         7   930    1213
168    922          MCW   KR,IOINST      ASSUME REWIND                  7  0908  M S22 S12           8  1222    1212
169    929          BCE   MOVEUP,CODSEQ-3,Z  REWIND?                   8  0915  B 930 S13 Z         8   930    1213
170    937          MCW   KM,IOINST      MUST BE ENDFILE                7  0923  M S23 S12           8  1223    1212
171    944  MOVEUP  LCA   0&X1,0&X3                                     7  0930  L 0|0 0?0           8   000+1   000+3
172    951          SAR   X1                                           4  0937  Q 089               8   089
173    955          C     0&X3                                          4  0941  C 0?0               8   000+3
174    959          SAR   X3                                           4  0945  Q 099               9   099
175    963          LCA   1&X1,2&X3                                    7  0949  L 0|1 0?2           9   001+1   002+3
176    970          SBR   X3                                           4  0956  H 099               9   099
177    974          BWZ   *&5,CODSEQ,2                                 8  0960  V 972 S16 2         9   972    1216
178    982          B     *&9                                           4  0968  B 980               9   980
179    986          BWZ   *&15,CODSEQ-2,2                              8  0972  V 994 S14 2         9   994    1214
180    994          MCW   CODSEQ,X2      ZONE IN CODSEQ HIGH OR LOW    7  0980  M S16 094          10  1216     094
181  1 001          MCW   0&X2,CODSEQ      MEANS IT'S AN ADDRESS        7  0987  M 0!0 S16          10   000+2  1216
182  1 008          BCE   SYNTAX,0&X1,}                                 8  0994  B /45 0|0 } GMARK  10  1145     000+1
183  1 016          MN    0&X1                                          4  1002  D 0|0              10   000+1
184  1 020          SAR   X2                                           4  1006  Q 094              10   094
185  1 024          BCE   UNITK,0&X2,}   UNIT NUMBER IS A CONSTANT     8  1010  B /90 0!0 } GMARK  10  1190     000+2
186  1 032  UVAR    MCW   K0,IOINST-1                                   7  1018  M S24 S11          11  1224    1211
187  1 039          MCW   0&X1,MVUNIT&3                                 7  1025  M 0|0 S04          11   000+1  1204
188  1 046          MCW   MN,MVUNIT                                     7  1032  M S25 S01          11  1225    1201
189  1 053          MZ    *-4,MVUNIT&2   CLOBBER TYPE TAG               7  1039  Y |41 S03          11  1041    1203
190  1 060          CW    FLAG                                          4  1046  ) S26              11  1226
191  1 064  GOTU    C     0&X1                                          4  1050  C 0|0              11   000+1
192  1 068          SAR   X1                                           4  1054  Q 089              12   089
193  1 072          LCA   IOINST,0&X3    LOAD CU INSTRUCTION           7  1058  L S12 0?0          12  1212     000+3
194  1 079          SBR   X3                                           4  1065  H 099              12   099
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195  1 083          BW    CONST,FLAG     UNIT NUMBER IS A CONSTANT             8  1069  V |92 S26 1         12  1092    1226
196  1 091          SW    FLAG                                                 4  1077  , S26               12  1226
197  1 095          LCA   MVUNIT&6,0&X3  LOAD MOVE UNIT NUMBER INSTR           7  1081  L S07 0?0           12  1207     000+3
198  1 102          SBR   X3                                                   4  1088  H 099               12   099
199  1 106  CONST   LCA   1&X1,0&X3                                           7  1092  L 0|1 0?0           13   001+1   000+3
200  1 113          SBR   X3                                                   4  1099  H 099               13   099
201  1 117  TSTLES  BCE   LOOP,0,<  NOT TOO BIG IF LESS-THAN NOT CLOBBERED     8  1103  B 838 000 <         13   838     000
202  1 125          CS    332                                                  4  1111  / 332               13   332
203  1 129          CS                                                         1  1115  /                   13
204  1 130          CC    1                                                    2  1116  F 1                 13
205  1 132          MCW   ERROR2,270                                          7  1118  M S62 270           13  1262     270
206  1 139          W                                                          1  1125  2                   14
207  1 140          CC    1                                                    2  1126  F 1                 14
208  1 142          BCE   HALT,CDOVLY,1                                       8  1128  B /41 700 1         14  1141     700
209  1 150          RWD   1                                                    5  1136  U %U1 R             14   %U1
210  1 155  HALT    H     HALT                                                 4  1141  . /41               14  1141
211  1 159  SYNTAX  CS    332                                                  4  1145  / 332               14   332
212  1 163          CS                                                         1  1149  /                   14
213  1 164          SW    GLOBER                                               4  1150  , 184               15   184
214  1 168          MN    CODSEQ,245                                           7  1154  D S16 245           15  1216     245
215  1 175          MN                                                         1  1161  D                   15
216  1 176          MN                                                         1  1162  D                   15
217  1 177          MCW   ERR33                                               4  1163  M T04               15  1304
218  1 181          W                                                          1  1167  2                   15
219  1 182          BCV   *&5                                                 5  1168  B /77 @             15  1177
220  1 187          B     *&3                                                  4  1173  B /79               16  1179
221  1 191          CC    1                                                    2  1177  F 1                 16
222  1 193          MCW   K0,IOINST-1                                        7  1179  M S24 S11           16  1224    1211
223  1 200          B     UVAR                                                 4  1186  B |18               16  1018
224          *
225          * UNIT NUMBER IS A CONSTANT
226          *
227  1 204  UNITK   MN    0&X1,IOINST-1                                        7  1190  D 0|0 S11           16   000+1  1211
228  1 211          B     GOTU                                                 4  1197  B |50               16  1050
229          *
230          * DATA
231          *
232  1 215  MVUNIT  MCW   5777&X1,4&X3                                        7  1201  M XXX 0?4           16  5777+1   004+3
233  1 226  IOINST  DCW   @U%U0X@                                            5  1212                      17
234  1 230  CODSEQ  DCW   #4  STATEMENT CODE AND SEQUENCE NUMBER              4  1216                      17
235  1 233  CODES   DCW   @BZN@  BACKSPACE, REWIND, ENDFILE STATEMENT CODES   3  1219                      17
236  1 239  KB      DCW   @B@                                                  1  1220                      17
237  1 240  KLESS   DCW   @<@  CORE IS NOT FULL YET SENTINEL                  1  1221                      17
238  1 241  KR      DCW   @R@                                                  1  1222                      17
239  1 242  KM      DCW   @M@                                                  1  1223                      17
240  1 243  K0      DCW   @0@                                                  1  1224                      18
241  1 244  MN      MN                                                         1  1225  D                   18
242  1 245  FLAG    DCW   #1  NO WM MEANS UNIT IS VARIABLE, WM MEANS CONST     1  1226                      18
243  1 281  ERROR2  DCW   @MESSAGE 2 - OBJECT PROGRAM TOO LARGE@             36  1262                      18
244  1 323  ERR33   DCW   @ERROR 33 - NO TAPE UNIT NUMBER, STATEMENT @       42  1304                      21
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 324  GMWM   DCW   @}@                                                    1  1305              GMARK   21
246                XFR   LOOP                                                         B 838                22   838
247         CLRME  CLRA  LOADAD,GMWM                                                                 MACRO
            *      CLRA  CLRBOT,CLRTOP[,ORG,GMWMAD]                                                  GEN
            *                                                                                        GEN
            * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                                      GEN
            *                                                                                        GEN
248                ORG   201                                                           0201
            *                                                                                        GEN
            * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                                GEN
            *                                                                                        GEN
249         CLRME  EQU   *&1                                                       0201              GEN
250         )0J004 CS    GMWM         CLEAR FROM CLRTOP                         4  0201  / T05       GEN     23  1305
251                SBR   )0J004&3                                               4  0205  H 204       GEN     23   204
252                SBR   )0L004&6                                               4  0209  H 250       GEN     23   250
253                C     )0J004&3,)0M004   DOWN TO CLRBOT & X00?                7  0213  C 204 261   GEN     23   204     261
254                BU    )0J004                                                 5  0220  B 201 /     GEN     23   201
            *                                                                                        GEN
            * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                                  GEN
            *                                                                                        GEN
255         )0K004 C     )0L004&6,)0N004                                        7  0225  C 250 264   GEN     23   250     264
256                BU    )0L004                                                 5  0232  B 244 /     GEN     23   244
257                CS    LOADNX,)0Q004  LOAD THE NEXT BLOCK AT 1                7  0237  / 700 271   GEN     24   700     271
258         )0L004 LCA   )0P004,0-0     CLEAR WITH BLANK AND WORD MARK          7  0244  L 265 000   GEN     24   265     000
259                SBR   )0L004&6                                               4  0251  H 250       GEN     24   250
260                B     )0K004                                                 4  0255  B 225       GEN     24   225
261         )0M004 DSA   )0R004         CLRBOT & X00 - 1                        3  0261  899         GEN     24   899
262         )0N004 DSA   LOADAD         CLRBOT                                  3  0264  838         GEN     24   838
263         )0P004 DCW   #1                                                     1  0265              GEN     24
264                DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP          5  0270              GEN     24
265         )0Q004 DCW   @}@                                                    1  0271              GEN     25
266                ORG   LOADAD&X00                                                    0900
267         )0R004 EQU   *           CLRBOT & X00 - 1                              0899              GEN
268                XFR   CLRME                                                        B 201                26   201
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J004	0201: 0	)0K004	0225: 0	)0L004	0244: 0	)0M004	0261: 0	)0N004	0264: 0	)0P004	0265: 0
)0Q004	0271: 0	)0R004	0899: 0	)6J003	0110: 0	)6K003	0700: 0	)6L003	0704: 0	)6M003	0728: 0
)9J003	0250: 0	)9R003	0254: 0	BEGIN3	0838: 0	CDOVLY	0700: 0	CLRME	0201: 0	CODES	1219: 0
CODSEQ	1216: 0	CONST	1092: 0	DONE	0870: 0	ERR33	1304: 0	ERROR2	1262: 0	FLAG	1226: 0
GLOBER	0184: 0	GMWM	1305: 0	GOTU	1050: 0	HALT	1141: 0	IOINST	1212: 0	IOSTMT	0879: 0
K0	1224: 0	KB	1220: 0	KLESS	1221: 0	KM	1223: 0	KR	1222: 0	LOADAD	0838: 0
LOADNX	0700: 0	LOOP	0838: 0	MN	1225: 0	MOVEUP	0930: 0	MVUNIT	1201: 0	PHAS39	0201: 0
PHASLD	0381: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	SYNTAX	1145: 0	TOP3	2600: 0	TPERR	0728: 0
TPREAD	0704: 0	TSTLES	1103: 0	UNITK	1190: 0	UVAR	1018: 0	X1	0089: 0	X2	0094: 0
X3	0099: 0										

UNREFERENCED SYMBOLS

PHASLD SNAPEX TOP3 TPERR TPREAD