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

101               JOB   FORTRAN COMPILER -- STMT NUMBERS FIVE -- PHASE 31
102               CTL   6611
103         *
104         * UNDEFINED STATEMENT NUMBERS ARE NOTED.
105         *
106         * ON ENTRY, X1 IS THE TOP OF STATEMENTS, AND X3 IS ONE BELOW
107         * THE LABEL TABLE AT THE TOP OF CORE.
108         *
109         X1     EQU   89                                                  0089
110         X2     EQU   94                                                  0094
111         X3     EQU   99                                                  0099
112         *
113         * STUFF IN THE RESIDENT AREA
114         *
115         TBLBOT EQU   145  ONE BELOW NUMBERS, FORMATS, I/O LISTS          0145
116         GLOBER EQU   184  GLOBAL ERROR FLAG -- WM MEANS ERROR            0184
117         *
118               EXT00   SNAPSH, LOADNX, CDOVLY                                      MACRO
119         SNAPSH EQU   333                                                 0333      GEN
120         PHASLD EQU   381                                                 0381      GEN
121         SNAPEX EQU   564                                                 0564      GEN
122         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                      0700      GEN
123         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE      0700      GEN
124         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                       0704      GEN
125         TPERR  EQU   728                                                 0728      GEN
126         *
127               EXT03   START, TOP OF PHASE 3                                       MACRO
128         BEGIN3 EQU   838                                                 0838      GEN
129         TOP3   EQU   2600                                                2600      GEN
130         *
131         110    DCW   @STNUM FIV@                                    9  0110                1
132         094    DCW   000                                            3  0094                2
133         096    DC    00                                             2  0096                2
134         *
135         PHAS31 LDPH  STNUM FIV,LOADAD,BEGN31,,,31                           MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]    GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                       GEN
            *                                                                   GEN
            * LOAD A BLOCK                                                      GEN
            *                                                                   GEN
136         )6J003 EQU   110  PHASE ID                                       0110      GEN
137         )6K003 EQU   700  LOAD NEXT PHASE                                0700      GEN
138         )6L003 EQU   704  TAPE READ INSTRUCTION                          0704      GEN
139         )6M003 EQU   728  TAPE ERROR HANDLER                             0728      GEN
            *                                                                   GEN
140               ORG   201                                                       0201
141         PHAS31 EQU   *&1                                                 0201      GEN
142               LCA   )9J003,)6J003                                     7  0201  L 252 110   GEN      3   252     110
143               BCE   )6K003,)6K003,1      Q: LOADING FROM CARDS?       8  0208  B 700 700 1 GEN      3   700     700
144               BCE   )6K003,)6L003&4,0    Q: LOADING FROM AUTOCODER TAPE? 8  0216  B 700 708 0 GEN      3   700     708
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SEQ PG LIN  LABEL   OP   OPERANDS                                SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

145            RTW  1,LOADAD          READ THE BLOCK              8  0224  L %U1 838 R GEN      3   %U1     838
146            BER  )6M003            Q: TAPE ERROR?              5  0232  B 728 L     GEN      3   728
147            CS   BEGN31,)9R003     ENTER THE BLOCK             7  0237  / 838 256   GEN      4   838     256
148        )9J003 DCW  @STNUM FIV@       PHASE ID                 9  0252              GEN      4
149            DC   #1                                            1  0253              GEN      4
150            DC   @31@          PHASE NUMBER                    2  0255              GEN      4
151        )9R003 DCW  @}@                                        1  0256              GEN      4
152            XFR  PHAS31                                              B 201                4   201
153        *
154            ORG  BEGIN3                                               0838
155        LOADAD EQU  *&1          LOAD ADDRESS                        0838
156    838 BEGN31 MCW  X3,SX3                                         7  0838  M 099 S62           5   099    1262
157    845        MCW  X1,SX1                                         7  0845  M 089 S65           5   089    1265
158    852        C    0&X3  GET TO                                   4  0852  C 0?0               5   000+3
159    856        SAR  X3      TOP ENTRY OF HASH TABLE                4  0856  Q 099               5   099
160    860        CW   1&X3                                          4  0860  ) 0?1               5   001+3
161    864        MCW  TBLBOT,X2                                      7  0864  M 145 094           5   145     094
162    871        C    0&X2                                           4  0871  C 0!0               5   000+2
163    875        SAR  X2                                             4  0875  Q 094               6   094
164    879        C    X2,SX3                                         7  0879  C 094 S62           6   094    1262
165    886        BE   DONE                                          5  0886  B S37 S             6  1237
166    891        MCW  TBLBOT,SAVBOT                                  7  0891  M 145 S68           6   145    1268
167    898 TSTFIN BW   DONE,0&X1                                      8  0898  V S37 0|0 1         6  1237     000+1
168    906        MCW  0&X1,SEQCOD                                    7  0906  M 0|0 S72           6   000+1  1272
169    913        C    0&X1  GET BELOW PREFIX                         4  0913  C 0|0               7   000+1
170    917        SAR  X1                                             4  0917  Q 089               7   089
171    921        MCW  KB3,W3                                         7  0921  M S75 S78           7  1275    1278
172    928        BCE  COMPGO,SEQCOD-3,H                              8  0928  B 968 S69 H         7   968    1269
173    936        MCW  SEQCOD-3,*&8                                   7  0936  M S69 950           7  1269     950
174    943        BCE  LABELS,STMTS,0                                 8  0943  B /78 S84 0         7  1178    1284
175    951        B                                                   1  0951  B                   7
176    952        B                                                   1  0952  B                   8
177    953        B                                                   1  0953  B                   8
178    954        B                                                   1  0954  B                   8
179    955        B                                                   1  0955  B                   8
180    956 ENDSTM C    0&X1                                           4  0956  C 0|0               8   000+1
181    960        SAR  X1                                             4  0960  Q 089               8   089
182    964        B    TSTFIN                                         4  0964  B 898               8   898
183        *
184        * WAS ORIGINALLY COMPUTED GOTO CODE T, NOW H
185        *
186    968 COMPGO MCW  SAVBOT,X3                                      7  0968  M S68 099           9  1268     099
187    975 COMPG2 C    0&X1,X3                                        7  0975  C 0|0 099           9   000+1   099
188    982        BE   COMPG3                                        5  0982  B |45 S             9  1045
189    987        MN   0&X3                                          4  0987  D 0?0               9   000+3
190    991        MN                                                 1  0991  D                   9
191    992        MN                                                 1  0992  D                   9
192    993        SAR  X3                                            4  0993  Q 099               9   099
193    997        SBR  X2                                            4  0997  H 094              10   094
194  1 001 COMPGL BW   COMPG4,1&X2                                    8  1001  V /67 0!1 1        10  1167     001+2
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195  1 009          BWZ   COMPG2,2&X2,2                                     8  1009  V 975 0!2 2         10   975     002+2
196  1 017          MCW   3&X2,X2                                          7  1017  M 0!3 094           10   003+2   094
197  1 024          MZ    NOZONE,X2-1                                     7  1024  Y S85 093           10  1285     093
198  1 031          MN    0&X2                                            4  1031  D 0!0               10   000+2
199  1 035          MN                                                    1  1035  D                   10
200  1 036          MN                                                    1  1036  D                   11
201  1 037          SAR   X2                                              4  1037  Q 094               11   094
202  1 041          B     COMPGL                                          4  1041  B |01               11  1001
203  1 045  COMPG3  MCW   X3,SAVBOT                                       7  1045  M 099 S68           11   099    1268
204  1 052  TUNDEF  BCE   ENDSTM,W3,                                      8  1052  B 956 S78           11   956    1278
205  1 060          BWZ   *&5,SEQCOD,2                                    8  1060  V |72 S72 2         11  1072    1272
206  1 068          B     *&9                                             4  1068  B |80               11  1080
207  1 072          BWZ   UNDEF,SEQCOD-2,2                                8  1072  V |94 S70 2         12  1094    1270
208  1 080          MCW   SEQCOD,X3                                       7  1080  M S72 099           12  1272     099
209  1 087          MCW   0&X3,SEQCOD                                     7  1087  M 0?0 S72           12   000+3  1272
210  1 094  UNDEF   CS    299                                             4  1094  / 299               12   299
211  1 098          SW    GLOBER                                          4  1098  , 184               12   184
212  1 102          MCW   ERR21,210                                       7  1102  M S95 210           12  1295     210
213  1 109          MCW   MSG21,253                                       7  1109  M T33 253           13  1333     253
214  1 116          MN    SEQCOD,257                                      7  1116  D S72 257           13  1272     257
215  1 123          MN                                                    1  1123  D                   13
216  1 124          MN                                                    1  1124  D                   13
217  1 125          MCS   W3,214                                          7  1125  Z S78 214           13  1278     214
218  1 132          C     W3,K001                                         7  1132  C S78 T36           13  1278    1336
219  1 139          BU    *&8                                             5  1139  B /51 /             13  1151
220  1 144          MCW   KCOM,243                                       7  1144  M T38 243           14  1338     243
221  1 151          W                                                     1  1151  2                   14
222  1 152          BCV   *&5                                            5  1152  B /61 @             14  1161
223  1 157          B     *&3                                             4  1157  B /63               14  1163
224  1 161          CC    1                                               2  1161  F 1                 14
225  1 163          B     ENDSTM                                          4  1163  B 956               14   956
226  1 167  COMPG4  A     K1,W3                                           7  1167  A T39 S78           14  1339    1278
227  1 174          B     COMPG2                                          4  1174  B 975               15   975
228          *
229          * STATEMENTS CONTAINING LABELS OF EXECUTABLE STATEMENTS.  NOT
230          * I/O STATEMENTS CONTAINING FORMAT STATEMENT LABELS.
231          *
232  1 178  LABELS  BW    TUNDEF,0&X1                                     8  1178  V |52 0|0 1         15  1052     000+1
233  1 186          BCE   TUNDEF,0&X1,,                                   8  1186  B |52 0|0 ,         15  1052     000+1
234  1 194          MCW   0&X1,X3                                         7  1194  M 0|0 099           15   000+1   099
235  1 201          SAR   X1                                              4  1201  Q 089               15   089
236  1 205          MN    0&X3                                            4  1205  D 0?0               15   000+3
237  1 209          MN                                                    1  1209  D                   15
238  1 210          SAR   X3                                              4  1210  Q 099               16   099
239  1 214          BW    *&5,0&X3                                        8  1214  V S26 0?0 1         16  1226     000+3
240  1 222          B     LABELS                                          4  1222  B /78               16  1178
241  1 226          A     K1,W3                                           7  1226  A T39 S78           16  1339    1278
242  1 233          B     LABELS                                          4  1233  B /78               16  1178
243          *
244  1 237  DONE    MCW   SX1,X1                                         7  1237  M S65 089           16  1265     089
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 244          MCW   SX3,X3                                            7  1244  M S62 099          17  1262     099
246  1 251          BSS   SNAPSH,E                                          5  1251  B 333 E            17   333
247  1 270          B     LOADNX                                            4  1256  B 700              17   700
248  1 276  SX3     DCW   #3                                                3  1262                     17
249  1 279  SX1     DCW   #3                                                3  1265                     17
250  1 282  SAVBOT  DCW   #3                                                3  1268                     17
251  1 286  SEQCOD  DCW   #4                                                4  1272                     17
252  1 289  KB3     DCW   #3                                                3  1275                     18
253  1 292  W3      DCW   #3                                                3  1278                     18
254  1 298  STMTS   DCW   @TWEDGK@  CODES FOR STATEMENTS WITH LABELS        6  1284                     18
255  1 299  NOZONE  DCW   #1                                                1  1285                     18
256  1 309  ERR21   DCW   @ERROR 21 -@                                     10  1295                     18
257  1 347  MSG21   DCW   @UNDEFINED STATEMENT NUMBERS, STATEMENT@         38  1333                     19
258  1 350  K001    DCW   001                                               3  1336                     20
259  1 352  KCOM    DCW   @, @                                             2  1338                     20
260  1 353  K1      DCW   1                                                 1  1339                     20
261  1 361  GMWM    DCW   @}@                                             1  1340             GMARK   20
262                 XFR   BEGN31                                                 B 838                20   838
263          CLRME  CLRA  BEGN31,GMWM                                                                  MACRO
             *      CLRA  CLRBOT,CLRTOP[,ORG,GMWMAD]                                                   GEN
             *                                                                                         GEN
             * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                                       GEN
             *                                                                                         GEN
264                 ORG   201                                                          0201
             *                                                                                         GEN
             * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                                 GEN
             *                                                                                         GEN
265          CLRME  EQU   *&1                                                   0201                   GEN
266          )0J004 CS    GMWM         CLEAR FROM CLRTOP                     4  0201  / T40            GEN     21  1340
267                 SBR   )0J004&3                                           4  0205  H 204            GEN     21   204
268                 SBR   )0L004&6                                           4  0209  H 250            GEN     21   250
269                 C     )0J004&3,)0M004   DOWN TO CLRBOT & X00?           7  0213  C 204 261        GEN     21   204     261
270                 BU    )0J004                                            5  0220  B 201 /          GEN     21   201
             *                                                                                         GEN
             * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                                   GEN
             *                                                                                         GEN
271          )0K004 C     )0L004&6,)0N004                                   7  0225  C 250 264        GEN     21   250     264
272                 BU    )0L004                                            5  0232  B 244 /          GEN     21   244
273                 CS    LOADNX,)0Q004  LOAD THE NEXT BLOCK AT 1           7  0237  / 700 271        GEN     22   700     271
274          )0L004 LCA   )0P004,0-0     CLEAR WITH BLANK AND WORD MARK    7  0244  L 265 000        GEN     22   265     000
275                 SBR   )0L004&6                                           4  0251  H 250            GEN     22   250
276                 B     )0K004                                            4  0255  B 225            GEN     22   225
277          )0M004 DSA   )0R004         CLRBOT & X00 - 1                  3  0261  899              GEN     22   899
278          )0N004 DSA   BEGN31         CLRBOT                            3  0264  838              GEN     22   838
279          )0P004 DCW   #1                                                1  0265                   GEN     22
280                 DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP     5  0270                   GEN     22
281          )0Q004 DCW   @}@                                               1  0271                   GEN     23
282                 ORG   BEGN31&X00                                                   0900
283          )0R004 EQU   *           CLRBOT & X00 - 1                             0899                   GEN
284                 XFR   CLRME                                                        B 201                23   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	0252: 0	)9R003	0256: 0	BEGIN3	0838: 0	BEGN31	0838: 0	CDOVLY	0700: 0	CLRME	0201: 0
COMPG2	0975: 0	COMPG3	1045: 0	COMPG4	1167: 0	COMPGL	1001: 0	COMPGO	0968: 0	DONE	1237: 0
ENDSTM	0956: 0	ERR21	1295: 0	GLOBER	0184: 0	GMWM	1340: 0	K001	1336: 0	K1	1339: 0
KB3	1275: 0	KCOM	1338: 0	LABELS	1178: 0	LOADAD	0838: 0	LOADNX	0700: 0	MSG21	1333: 0
NOZONE	1285: 0	PHAS31	0201: 0	PHASLD	0381: 0	SAVBOT	1268: 0	SEQCOD	1272: 0	SNAPEX	0564: 0
SNAPSH	0333: 0	STMTS	1284: 0	SX1	1265: 0	SX3	1262: 0	TBLBOT	0145: 0	TOP3	2600: 0
TPERR	0728: 0	TPREAD	0704: 0	TSTFIN	0898: 0	TUNDEF	1052: 0	UNDEF	1094: 0	W3	1278: 0
X1	0089: 0	X2	0094: 0	X3	0099: 0						

UNREFERENCED SYMBOLS

CDOVLY PHASLD SNAPEX TOP3 TPERR TPREAD