```
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 BSS   )8J003,G                                           5  0201  B 257 G     GEN      3   257
142                NOP     TO PATCH IN TRAPS FOR DEBUGGING                  1  0206  N           GEN      3
143         )0J003 EQU   *&1                                                    0207               GEN
144                LCA   )9J003,)6J003                                       7  0207  L 281 110   GEN      3   281     110
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

145             BCE   )1J003,)6K003,1    Q: LOADING FROM CARDS?            8  0214  B 250 700 1 GEN      3   250     700
146             BCE   )1J003,)6L003&4,0  Q: LOADING FROM AUTOCODER TAPE?    8  0222  B 250 708 0 GEN      3   250     708
147             RTW   1,LOADAD           READ THE BLOCK                    8  0230  L %U1 838 R GEN      3   %U1     838
148             BER   )6M003             Q: TAPE ERROR?                    5  0238  B 728 L     GEN      4   728
149             CS    BEGN31,)9R003      ENTER THE BLOCK                   7  0243  / 838 285   GEN      4   838     285
150       )1J003 CS   )6K003,)9R003      LOAD CARDS OR AUTOCODER TAPE      7  0250  / 700 285   GEN      4   700     285
151       )8J003 SW   )9R003                                               4  0257  , 285       GEN      4   285
152             MU    %T0,)8K003,W                                        8  0261  M %T0 273 W GEN      4   %T0     273
153             H     )0J003                                              4  0269  . 207       GEN      4   207
154       )8K003 EQU  *&1                                                    0273              GEN
155       )9J003 DCW  @STNUM FIV@          PHASE ID                        9  0281              GEN      5
156             DCW   #1                                                  1  0282              GEN      5
157             DC    @31@          PHASE NUMBER                        2  0284              GEN      5
158       )9R003 DCW  @}@                                                 1  0285              GEN      5
159             XFR   PHAS31                                                     B 201                 5   201
160       *
161             ORG   BEGIN3                                                      0838
162       LOADAD EQU  *&1          LOAD ADDRESS                              0838
163   838 BEGN31 MCW  X3,SX3                                              7  0838  M 099 S57           6   099    1257
164   845       MCW   X1,SX1                                              7  0845  M 089 S60           6   089    1260
165   852       C     0&X3  GET TO                                        4  0852  C 0?0               6   000+3
166   856       SAR   X3      TOP ENTRY OF HASH TABLE                     4  0856  Q 099               6   099
167   860       CW    1&X3                                                4  0860  ) 0?1               6   001+3
168   864       MCW   TBLBOT,X2                                          7  0864  M 145 094           6   145     094
169   871       C     0&X2                                                4  0871  C 0!0               6   000+2
170   875       SAR   X2                                                  4  0875  Q 094               7   094
171   879       C     X2,SX3                                              7  0879  C 094 S57           7   094    1257
172   886       BE    DONE                                                5  0886  B S37 S             7  1237
173   891       MCW   TBLBOT,SAVBOT                                       7  0891  M 145 S63           7   145    1263
174   898 TSTFIN BW   DONE,0&X1                                           8  0898  V S37 0|0 1         7  1237     000+1
175   906       MCW   0&X1,SEQCOD                                         7  0906  M 0|0 S67           7   000+1  1267
176   913       C     0&X1  GET BELOW PREFIX                              4  0913  C 0|0               8   000+1
177   917       SAR   X1                                                  4  0917  Q 089               8   089
178   921       MCW   KB3,W3                                             7  0921  M S70 S73           8  1270    1273
179   928       BCE   COMPGO,SEQCOD-3,H                                   8  0928  B 968 S64 H         8   968    1264
180   936       MCW   SEQCOD-3,*&8                                        7  0936  M S64 950           8  1264     950
181   943       BCE   LABELS,STMTS,0                                      8  0943  B /78 S79 0         8  1178    1279
182   951       B                                                         1  0951  B                   8
183   952       B                                                         1  0952  B                   9
184   953       B                                                         1  0953  B                   9
185   954       B                                                         1  0954  B                   9
186   955       B                                                         1  0955  B                   9
187   956 ENDSTM C    0&X1                                                4  0956  C 0|0               9   000+1
188   960       SAR   X1                                                  4  0960  Q 089               9   089
189   964       B     TSTFIN                                              4  0964  B 898               9   898
190       *
191       * WAS ORIGINALLY COMPUTED GOTO CODE T, NOW H
192       *
193   968 COMPGO MCW  SAVBOT,X3                                           7  0968  M S63 099          10  1263     099
194   975 COMPG2 C    0&X1,X3                                             7  0975  C 0|0 099          10   000+1   099
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SEQ PG LIN  LABEL   OP    OPERANDS                                    SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195    982          BE    COMPG3                                        5  0982  B |45 S             10  1045
196    987          MN    0&X3                                          4  0987  D 0?0               10   000+3
197    991          MN                                                  1  0991  D                   10
198    992          MN                                                  1  0992  D                   10
199    993          SAR   X3                                          4  0993  Q 099               10   099
200    997          SBR   X2                                          4  0997  H 094               11   094
201  1 001  COMPGL  BW    COMPG4,1&X2                                   8  1001  V /67 0!1 1         11  1167     001+2
202  1 009          BWZ   COMPG2,2&X2,2                               8  1009  V 975 0!2 2         11   975     002+2
203  1 017          MCW   3&X2,X2                                     7  1017  M 0!3 094           11   003+2   094
204  1 024          MZ    NOZONE,X2-1                                 7  1024  Y S80 093           11  1280     093
205  1 031          MN    0&X2                                        4  1031  D 0!0               11   000+2
206  1 035          MN                                                1  1035  D                   11
207  1 036          MN                                                1  1036  D                   12
208  1 037          SAR   X2                                          4  1037  Q 094               12   094
209  1 041          B     COMPGL                                      4  1041  B |01               12  1001
210  1 045  COMPG3  MCW   X3,SAVBOT                                   7  1045  M 099 S63           12   099    1263
211  1 052  TUNDEF  BCE   ENDSTM,W3,                                  8  1052  B 956 S73           12   956    1273
212  1 060          BWZ   *&5,SEQCOD,2                                8  1060  V |72 S67 2         12  1072    1267
213  1 068          B     *&9                                         4  1068  B |80               12  1080
214  1 072          BWZ   UNDEF,SEQCOD-2,2                            8  1072  V |94 S65 2         13  1094    1265
215  1 080          MCW   SEQCOD,X3                                   7  1080  M S67 099           13  1267     099
216  1 087          MCW   0&X3,SEQCOD                                 7  1087  M 0?0 S67           13   000+3  1267
217  1 094  UNDEF   CS    299                                         4  1094  / 299               13   299
218  1 098          SW    GLOBER                                      4  1098  , 184               13   184
219  1 102          MCW   ERR21,210                                   7  1102  M S90 210           13  1290     210
220  1 109          MCW   MSG21,253                                   7  1109  M T28 253           14  1328     253
221  1 116          MN    SEQCOD,257                                  7  1116  D S67 257           14  1267     257
222  1 123          MN                                                1  1123  D                   14
223  1 124          MN                                                1  1124  D                   14
224  1 125          MCS   W3,214                                      7  1125  Z S73 214           14  1273     214
225  1 132          C     W3,K001                                     7  1132  C S73 T31           14  1273    1331
226  1 139          BU    *&8                                         5  1139  B /51 /             14  1151
227  1 144          MCW   KCOM,243                                   7  1144  M T33 243           15  1333     243
228  1 151          W                                                 1  1151  2                   15
229  1 152          BCV   *&5                                         5  1152  B /61 @             15  1161
230  1 157          B     *&3                                         4  1157  B /63               15  1163
231  1 161          CC    1                                           2  1161  F 1                 15
232  1 163          B     ENDSTM                                      4  1163  B 956               15   956
233  1 167  COMPG4  A     K1,W3                                       7  1167  A T34 S73           15  1334    1273
234  1 174          B     COMPG2                                      4  1174  B 975               16   975
235          *
236          * STATEMENTS CONTAINING LABELS OF EXECUTABLE STATEMENTS.  NOT
237          * I/O STATEMENTS CONTAINING FORMAT STATEMENT LABELS.
238          *
239  1 178  LABELS  BW    TUNDEF,0&X1                                 8  1178  V |52 0|0 1         16  1052     000+1
240  1 186          BCE   TUNDEF,0&X1,,                               8  1186  B |52 0|0 ,         16  1052     000+1
241  1 194          MCW   0&X1,X3                                     7  1194  M 0|0 099           16   000+1   099
242  1 201          SAR   X1                                          4  1201  Q 089               16   089
243  1 205          MN    0&X3                                        4  1205  D 0?0               16   000+3
244  1 209          MN                                                1  1209  D                   16
```

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

245  1 210          SAR   X3                                                4  1210  Q 099               17   099
246  1 214          BW    *&5,0&X3                                          8  1214  V S26 0?0 1         17  1226     000+3
247  1 222          B     LABELS                                            4  1222  B /78               17  1178
248  1 226          A     K1,W3                                             7  1226  A T34 S73           17  1334    1273
249  1 233          B     LABELS                                            4  1233  B /78               17  1178
250          *
251  1 237  DONE    MCW   SX1,X1                                           7  1237  M S60 089           17  1260     089
252  1 244          MCW   SX3,X3                                           7  1244  M S57 099           18  1257     099
253  1 270          B     LOADNX                                            4  1251  B 700               18   700
254  1 276  SX3     DCW   #3                                               3  1257                      18
255  1 279  SX1     DCW   #3                                               3  1260                      18
256  1 282  SAVBOT  DCW   #3                                               3  1263                      18
257  1 286  SEQCOD  DCW   #4                                               4  1267                      18
258  1 289  KB3     DCW   #3                                               3  1270                      18
259  1 292  W3      DCW   #3                                               3  1273                      19
260  1 298  STMTS   DCW   @TWEDGK@  CODES FOR STATEMENTS WITH LABELS       6  1279                      19
261  1 299  NOZONE  DCW   #1                                               1  1280                      19
262  1 309  ERR21   DCW   @ERROR 21 -@                                     10  1290                      19
263  1 347  MSG21   DCW   @UNDEFINED STATEMENT NUMBERS, STATEMENT@        38  1328                      20
264  1 350  K001    DCW   001                                              3  1331                      21
265  1 352  KCOM    DCW   @, @                                            2  1333                      21
266  1 353  K1      DCW   1                                                1  1334                      21
267  1 361  GMWM    DCW   @}@                                              1  1335              GMARK   21
268                 XFR   BEGN31                                                 B 838               21   838
269          CLRME   CLRA  BEGN31,GMWM,E                                                       MACRO
             *       CLRA  CLRBOT,CLRTOP[,SS,HERE,GWMAD]                                       GEN
             *                                                                                 GEN
             * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                               GEN
             *                                                                                 GEN
270                 ORG   201                                                          0201
             *                                                                                 GEN
             * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                         GEN
             *                                                                                 GEN
271          CLRME   EQU   *&1                                                  0201           GEN
272                 BSS   SNAPSH,E                                             5  0201  B 333 E     GEN     22   333
273          )0J004 CS     GMWM         CLEAR FROM CLRTOP                     4  0206  / T35       GEN     22  1335
274                 SBR   )0J004&3                                           4  0210  H 209       GEN     22   209
275                 SBR   )0L004&6                                           4  0214  H 255       GEN     22   255
276                 C     )0J004&3,)0M004   DOWN TO CLRBOT & X00?           7  0218  C 209 266   GEN     22   209     266
277                 BU    )0J004                                             5  0225  B 206 /     GEN     22   206
             *                                                                                 GEN
             * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                           GEN
             *                                                                                 GEN
278          )0K004 C     )0L004&6,)0N004                                    7  0230  C 255 269   GEN     22   255     269
279                 BU    )0L004                                             5  0237  B 249 /     GEN     23   249
280                 CS    LOADNX,)0Q004  LOAD THE NEXT BLOCK AT 1            7  0242  / 700 276   GEN     23   700     276
281          )0L004 LCA   )0P004,0-0     CLEAR WITH BLANK AND WORD MARK     7  0249  L 270 000   GEN     23   270     000
282                 SBR   )0L004&6                                           4  0256  H 255       GEN     23   255
283                 B     )0K004                                             4  0260  B 230       GEN     23   230
284          )0M004 DSA   )0R004         CLRBOT & X00 - 1                   3  0266  899         GEN     23   899
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

285         )0N004 DSA   BEGN31         CLRBOT                             3  0269  838         GEN     23   838
286         )0P004 DCW   #1                                                1  0270              GEN     24
287                DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP      5  0275              GEN     24
288         )0Q004 DCW   @}@                                               1  0276              GEN     24
289                ORG   BEGN31&X00                                                 0900
290         )0R004 EQU   *           CLRBOT & X00 - 1                         0899              GEN
291                XFR   CLRME                                                      B 201               24   201
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J003	0207: 0	)0J004	0206: 0	)0K004	0230: 0	)0L004	0249: 0	)0M004	0266: 0	)0N004	0269: 0
)0P004	0270: 0	)0Q004	0276: 0	)0R004	0899: 0	)1J003	0250: 0	)6J003	0110: 0	)6K003	0700: 0
)6L003	0704: 0	)6M003	0728: 0	)8J003	0257: 0	)8K003	0273: 0	)9J003	0281: 0	)9R003	0285: 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	1290: 0
GLOBER	0184: 0	GMWM	1335: 0	K001	1331: 0	K1	1334: 0	KB3	1270: 0	KCOM	1333: 0
LABELS	1178: 0	LOADAD	0838: 0	LOADNX	0700: 0	MSG21	1328: 0	NOZONE	1280: 0	PHAS31	0201: 0
PHASLD	0381: 0	SAVBOT	1263: 0	SEQCOD	1267: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	STMTS	1279: 0
SX1	1260: 0	SX3	1257: 0	TBLBOT	0145: 0	TOP3	2600: 0	TPERR	0728: 0	TPREAD	0704: 0
TSTFIN	0898: 0	TUNDEF	1052: 0	UNDEF	1094: 0	W3	1273: 0	X1	0089: 0	X2	0094: 0
X3	0099: 0										

UNREFERENCED SYMBOLS

CDOVLY PHASLD SNAPEX TOP3 TPERR TPREAD