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

101               JOB   FORTRAN COMPILER -- SCANNER -- PHASE 03
102               CTL   6611
103         *
104         * EXTERNALLY REFERENCED SYMBOLS ARE MARKED WITH ASTERISK IN COLUMN 1.
105         *
106         * SCANNER PHASE: INSERT STATEMENT NUMBERS (NOT LABELS)
107         * CLASSIFY STATEMENTS (FORMAT STATEMENTS ALREADY CLASSIFIED)
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         TOPCOR EQU   688  TOP CORE ADDRESS FROM PARAM CARD                0688
116         IMOD   EQU   690  INTEGER MODULUS -- NUMBER OF DIGITS             0690
117         MANTIS EQU   692  FLOATING POINT MANTISSA DIGITS                  0692
118         *
119               EXT00   SNAPSH, LOADNX, CDOVLY                                        MACRO
120         SNAPSH EQU   333                                                  0333      GEN
121         PHASLD EQU   381                                                  0381      GEN
122         SNAPEX EQU   564                                                  0564      GEN
123         LOADNX EQU   700   CARD OVERLAY UNLESS NOP                       0700      GEN
124         CDOVLY EQU   700   1 IF LOADING FROM CARDS, N IF FROM TAPE       0700      GEN
125         TPREAD EQU   704   LOAD OVERLAY FROM TAPE                        0704      GEN
126         TPERR  EQU   728                                                  0728      GEN
127         *
128         089    DCW   000                                              3  0089                1
129         091    DC    00                                               2  0091                1
130         *
131         PHAS3  LDPH  SCANNER,BEGIN3,BEGIN3,,,3                                    MACRO
            * PHAZ   LDPH [PHASID],LOADAD,ENTAD[,SKIPFG,SKIP],[NUMBER][,HALT]      GEN
            *        XFR  PHASZ     PROHIBITED IN A MACRO                         GEN
            *                                                                     GEN
            * LOAD A BLOCK                                                       GEN
            *                                                                     GEN
132         )6J002 EQU   110  PHASE ID                                       0110      GEN
133         )6K002 EQU   700  LOAD NEXT PHASE                                0700      GEN
134         )6L002 EQU   704  TAPE READ INSTRUCTION                          0704      GEN
135         )6M002 EQU   728  TAPE ERROR HANDLER                             0728      GEN
            *                                                                     GEN
136               ORG   201                                                          0201
137         PHAS3  EQU   *&1                                                 0201      GEN
138               LCA   )9J002,)6J002                                        7  0201  L 250 110   GEN      2   250     110
139               BCE   )6K002,)6K002,1      Q: LOADING FROM CARDS?          8  0208  B 700 700 1 GEN      2   700     700
140               BCE   )6K002,)6L002&4,0    Q: LOADING FROM AUTOCODER TAPE? 8  0216  B 700 708 0 GEN      2   700     708
141               RTW   1,BEGIN3             READ THE BLOCK                  8  0224  L %U1 838 R GEN      2   %U1     838
142               BER   )6M002               Q: TAPE ERROR?                  5  0232  B 728 L     GEN      2   728
143               CS    BEGIN3,)9R002        ENTER THE BLOCK                 7  0237  / 838 253   GEN      3   838     253
144         )9J002 DCW   @SCANNER@          PHASE ID                        7  0250              GEN      3
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SEQ PG LIN  LABEL   OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

145            DC    #1                                                      1  0251             GEN      3
146            DC    @3@          PHASE NUMBER                               1  0252             GEN      3
147         )9R002 DCW   @}@                                                  1  0253             GEN      3
148            XFR   PHAS3                                                        B 201              3   201
149         *
150            ORG   838  MOKOTOFF V3M0.LST LINE 193                             0838
151         *
152         * START HERE.
153         * CHECK MODULUS AND MANTISSA
154         *
155 *  838  BEGIN3 MCW   TOPCOR,CORCHK&6                                       7  0838  M 688 985           4   688     985
156    845         SW    IMOD-1,MANTIS-1                                       7  0845  , 689 691           4   689     691
157    852         BCE   IDEF,IMOD,  INTEGER MODULUS BLANK ON PARAMETER CARD?  8  0852  B 864 690           4   864     690
158    860         B     ISPEC       NO, USE SPECIFIED MODULUS                 4  0860  B 871              4   871
159    864  IDEF   MCW   INTDEF,IMOD  YES, USE DEFAULT MODULUS                 7  0864  M M42 690           4  2442     690
160    871  ISPEC  BCE   FDEF,MANTIS,  FLOATING POINT MANTISSA BLANK?          8  0871  B 883 692           5   883     692
161    879         B     FSPEC        NO, USE SPECIFIED MANTISSA               4  0879  B 890              5   890
162    883  FDEF   MCW   FLTDEF,MANTIS  YES, USE DEFAULT MANTISSA              7  0883  M M44 692           5  2444     692
163    890  FSPEC  C     IMOD,INTMIN  COMPARE MODULUS TO MINIMUM               7  0890  C 690 M46           5   690    2446
164    897         BH    BADMOD                                                5  0897  B U69 U             5  1469
165    902         C     IMOD,DIGMAX  CHECK INTEGER MODULUS                    7  0902  C 690 M48           5   690    2448
166    909         BL    BADMOD                                                5  0909  B U69 T             6  1469
167    914  MANCHK C     MANTIS,DIGMAX  CHECK FLOATING POINT MANTISSA          7  0914  C 692 M48           6   692    2448
168    921         BL    BADMAN                                                5  0921  B U95 T             6  1495
169    926         C     MANTIS,FLTMIN                                         7  0926  C 692 M50           6   692    2450
170    933         BH    BADMAN                                                5  0933  B U95 U             6  1495
171         *
172         * REPORT MODULUS AND MANTISSA
173         *
174    938  BADRET CS    332                                                   4  0938  / 332              6   332
175    942         CS                                                          1  0942  /                  6
176    943         MCW   MODMSG,210                                            7  0943  M M60 210           7  2460     210
177    950         MCS   IMOD,213                                              7  0950  Z 690 213           7   690     213
178    957         W                                                           1  0957  2                  7
179    958         CS    299                                                   4  0958  / 299              7   299
180    962         MCW   MANMSG,211                                           7  0962  M M71 211           7  2471     211
181    969         MCS   MANTIS,214                                           7  0969  Z 692 214           7   692     214
182    976         W                                                           1  0976  2                  7
183    977         CC    J                                                     2  0977  F J                8
184         *
185    979  CORCHK BCE   CORCHK,0-0,0  TOPCOR STORED INTO B                   8  0979  B 979 000 0         8   979     000
186    987         B                                                           1  0987  B                  8
187    988         SBR   MVBACK&6    STORES TOPCOR-2                           4  0988  H T24              8  1324
188    992         SBR   MVSTMT&3                                             4  0992  H 999              8   999
189    996  MVSTMT LCA   0-0,STMTSV  COPY STATEMENT TO WORK AREA               7  0996  L 000 L97           8   000    2397
190  1 003         SAR   MVSTMT&3    READY FOR NEXT STATEMENT                  4  1003  Q 999              8   999
191  1 007         MCW   STMTNO,STMTSV  INSERT STATEMENT NUMBER INTO STMT      7  1007  M M00 L97           9  2400    2397
192  1 014         A     K1,STMTNO        AND BUMP IT                          7  1014  A M01 M00           9  2401    2400
193  1 021         BCE   CLASS2,STMTYP,F  FORMAT STMT IS ALREADY CLASSIFIED    8  1021  B T14 L94 F         9  1314    2394
194         *
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SEQ PG LIN  LABEL   OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

195         * SKIP OVER THE LABEL IF ANY
196         *
197  1 029          SBR   CHKLBL&6,STMTST                                  7  1029  H |49 L93            9  1049    2393
198  1 036          SBR   STMTPT,STMTST-1  INITIALIZE STATEMENT POINTER    7  1036  H M04 L92            9  2404    2392
199  1 043  CHKLBL BCE   STSTMT,STMTST,:  FOUND THE START OF THE STATEMENT? 8  1043  B |75 L93 :         10  1075    2393
200  1 051          SBR   CHKLBL&6                                         4  1051  H |49               10  1049
201  1 055          SBR   CHKLB2&6                                         4  1055  H |65               10  1065
202  1 059  CHKLB2 BCE   CHKLB2,0,  DECREASE B REGISTER                    8  1059  B |59 000           10  1059     000
203  1 067          SBR   STMTPT     SET STATEMENT POINTER                 4  1067  H M04               10  2404
204  1 071          B     CHKLBL                                           4  1071  B |43               10  1043
205         *
206         * START PROCESSING THE STATEMENT PROPER.
207         * CHECK FOR ASSIGNMENT STATEMENT.
208         *
209  1 075  STSTMT MCW   STMTPT,ENDCHK&6                                   7  1075  M M04 |95           10  2404    1095
210  1 082          MCW   STMTPT,EQTEST&6                                  7  1082  M M04 /08           11  2404    1108
211  1 089  ENDCHK BCE   CKWORD,0,}   END OF STATEMENT?                    8  1089  B /73 000 } GMARK   11  1173     000
212  1 097          B                                                      1  1097  B                   11
213  1 098          SBR   ENDCHK&6                                         4  1098  H |95               11  1095
214  1 102  EQTEST BCE   EQ,0-0,#                                         8  1102  B /19 000 #         11  1119     000
215  1 110          B                                                      1  1110  B                   11
216  1 111          SBR   EQTEST&6                                         4  1111  H /08               11  1108
217  1 115          B     ENDCHK                                           4  1115  B |89               12  1089
218         *
219         * ASSIGNMENT STATEMENT.
220         *
221  1 119  EQ     SW    ENDCHK&4                                         4  1119  , |93               12  1093
222  1 123         MCW   ENDCHK&6,SVCHAR&3                                7  1123  M |95 /37           12  1095    1137
223  1 130         CW    ENDCHK&4                                         4  1130  ) |93               12  1093
224  1 134  SVCHAR MCW   0-0,CHAR                                         7  1134  M 000 M05           12   000    2405
225  1 141         SAR   SVCHAR&3                                         4  1141  Q /37               12  1137
226  1 145         BCE   LPAREN,CHAR,%                                    8  1145  B T49 M05 %         12  1349    2405
227  1 153         BCE   LPAREN,CHAR,}                                    8  1153  B T49 M05 } GMARK   13  1349    2405
228  1 161         BCE   CKWORD,CHAR,,                                    8  1161  B /73 M05 ,         13  1173    2405
229  1 169         B     SVCHAR                                           4  1169  B /34               13  1134
230         *
231         * CHECK KEYWORD
232         *
233  1 173  CKWORD MCW   STMTPT,*&4                                       7  1173  M M04 /83           13  2404    1183
234  1 180         MCW   0-0,WORD                                         7  1180  M 000 M15           13   000    2415
235  1 187         SW    WORD                                             4  1187  , M15               13  2415
236  1 191         SW                                                     1  1191  ,                   13
237  1 192         MCW   WORD,*&8                                         7  1192  M M15 S06           14  2415    1206
238  1 199         BCE   BFCS1,KBFCS,  IS 1ST LETTER B, F, C OR S?        8  1199  B S37 M24           14  1237    2424
239  1 207         CHAIN 3                                                                 MACRO
240               BCE                                                    1  1207  B           GEN     14
241               BCE                                                    1  1208  B           GEN     14
242               BCE                                                    1  1209  B           GEN     14
243  1 210         MCW   WORD-1,*&8                                       7  1210  M M14 S24           14  2414    1224
244  1 217  TQINUA BCE   QINUA2,KQINUA,  IS 2ND LETTER Q, I, N, U OR A?   8  1217  B S71 M20           14  1271    2420
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SEQ PG LIN  LABEL   OP    OPERANDS                                              SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

245  1 225          CHAIN 4                                                                          MACRO
246                 BCE                                                          1  1225  B           GEN     15
247                 BCE                                                          1  1226  B           GEN     15
248                 BCE                                                          1  1227  B           GEN     15
249                 BCE                                                          1  1228  B           GEN     15
250  1 229          SW    STMTYP                                                 4  1229  , L94               15  2394
251  1 233          B     OTHER                                                  4  1233  B U22               15  1422
252          *
253          * FIRST LETTER IS B(ACKSPACE), F(ORMAT), C(ONTINUE),
254          * S(TOP) OR S(ENSELIGHT)
255          *
256  1 237  BFCS1   C     WORD-2,KNSE  IS WORD [BFCS].NSE?                       7  1237  C M13 M74           15  2413    2474
257  1 244          BE    SENSE                                                  5  1244  B S60 S             16  1260
258  1 249          MCW   WORD,STMTYP  USE FIRST LETTER (BFCS) FOR STMT TYPE     7  1249  M M15 L94           16  2415    2394
259  1 256          B     CLASSD                                                 4  1256  B T09               16  1309
260  1 260  SENSE   MCW   TSENSE,STMTYP                                         7  1260  M M75 L94           16  2475    2394
261  1 267          B     CLASSD                                                 4  1267  B T09               16  1309
262          *
263          * SECOND LETTER IS (E)Q(UIVALENCE), (D)I(MENSION),
264          * (E)N(D) OR (E)N(DFILE), (P)U(NCH) OR (P)A(USE)
265          *
266  1 271  QINUA2 MCW   WORD-1,STMTYP                                           7  1271  M M14 L94           16  2414    2394
267  1 278          BCE   N2,TQINUA&7,N                                          8  1278  B S90 S24 N         17  1290    1224
268  1 286          B     CLASSD                                                 4  1286  B T09               17  1309
269          *
270          * SECOND LETTER IS N.  CHECK FOR ENDFILE.
271          *
272  1 290  N2      C     WORD-2,KDFILE  IS WORD .NDFILE?                        7  1290  C M13 M80           17  2413    2480
273  1 297          BE    CLASSD                                                 5  1297  B T09 S             17  1309
274  1 302          MCW   TSLASH,STMTYP  SET TYPE TO /                          7  1302  M M81 L94           17  2481    2394
275          *
276          * STATEMENT IS CLASSIFIED
277          *
278  1 309  CLASSD  CW    WORD                                                   4  1309  ) M15               17  2415
279  1 313          CW                                                           1  1313  )                   17
280  1 314  CLASS2  CW    STMTYP                                                 4  1314  ) L94               18  2394
281  1 318  MVBACK  LCA   STMTSV,0  MOVE THE STATEMENT BACK                     7  1318  L L97 000           18  2397     000
282  1 325          SBR   MVBACK&6                                               4  1325  H T24               18  1324
283  1 329          SBR   CKBLNK&6                                              4  1329  H T43               18  1343
284  1 333          SBR   83        ADDRESS BELOW LAST STMT, FOR NEXT PHASE      4  1333  H 083               18   083
285  1 337  CKBLNK  BCE   DONE,0-0,                                             8  1337  B W72 000           18  1672     000
286  1 345          B     MVSTMT                                                 4  1345  B 996               18   996
287          *
288          * LEFT PARENTHESIS OR GROUP MARK
289          *
290  1 349  LPAREN  MCW   EQTEST&6,X1                                           7  1349  M /08 089           19  1108     089
291  1 356          BCE   RPAREN,1&X1,)                                         8  1356  B T69 0|1 )         19  1369     001+1
292  1 364          B                                                            1  1364  B                   19
293  1 365          B     CLASS2                                                 4  1365  B T14               19  1314
294  1 369  RPAREN  BCE   LPAR2,2&X1,%                                          8  1369  B T85 0|2 %         19  1385     002+1
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SEQ PG LIN  LABEL  OP    OPERANDS                                  SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

295  1 377         SBR   X1                                          4  1377  H 089               19   089
296  1 381         B     RPAREN                                      4  1381  B T69               19  1369
297  1 385  LPAR2  BCE   F,3&X1,F                                    8  1385  B T97 0|3 F         20  1397     003+1
298  1 393         B     CLASS2                                      4  1393  B T14               20  1314
299  1 397  F      BCE   CLASS2,6&X1,:                               8  1397  B T14 0|6 :         20  1314     006+1
300  1 405         CHAIN 2                                                         MACRO
301                BCE                                               1  1405  B           GEN     20
302                BCE                                               1  1406  B           GEN     20
303  1 407         MCW   TARITH,STMTYP                               7  1407  M M82 L94           20  2482    2394
304  1 414         SW    195                                         4  1414  , 195               20   195
305  1 418         B     CLASS2                                      4  1418  B T14               21  1314
306         *
307         * FIRST LETTER IS NOT BFCS AND SECOND LETTER IS NOT QINUA
308         *
309  1 422  OTHER  CW    WORD                                        4  1422  ) M15               21  2415
310  1 426         CW                                                1  1426  )                   21
311  1 427         C     WORD,KFI  IF ( SENSE...?                    7  1427  C M15 M32           21  2415    2432
312  1 434         BU    NOTIF                                       5  1434  B V21 /             21  1521
313  1 439         BCE   SLITE,WORD-8,L                              8  1439  B U58 M07 L         21  1458    2407
314  1 447         MCW   TSSW,STMTYP  SENSE SWITCH                  7  1447  M M40 L94           21  2440    2394
315  1 454         B     CLASS2                                      4  1454  B T14               22  1314
316         *
317         * NINTH CHARACTER IS L -- ASSUME IF ( SENSE LIGHT ... )
318         *
319  1 458  SLITE  MCW   TSLITE,STMTYP                               7  1458  M M83 L94           22  2483    2394
320  1 465         B     CLASS2                                      4  1465  B T14               22  1314
321         *
322         * BAD MODULUS MESSAGE
323         *
324  1 469  BADMOD CS    332                                         4  1469  / 332               22   332
325  1 473         CS                                                1  1473  /                   22
326  1 474         MCW   MSG42,218                                   7  1474  M N01 218           22  2501     218
327  1 481         W                                                 1  1481  2                   22
328  1 482         CC    J                                           2  1482  F J                 23
329  1 484         MCW   INTDEF,IMOD                                7  1484  M M42 690           23  2442     690
330  1 491         B     MANCHK                                      4  1491  B 914               23   914
331         *
332         * BAD MANTISSA MESSAGE
333         *
334  1 495  BADMAN CS    332                                         4  1495  / 332               23   332
335  1 499         CS                                                1  1499  /                   23
336  1 500         MCW   MSG43,219                                   7  1500  M N20 219           23  2520     219
337  1 507         W                                                 1  1507  2                   23
338  1 508         CC    J                                           2  1508  F J                 24
339  1 510         MCW   FLTDEF,MANTIS                              7  1510  M M44 692           24  2444     692
340  1 517         B     BADRET                                      4  1517  B 938               24   938
341         *
342         * NOT AN IF STATEMENT, CHECK FOR OTHERS
343         *
344  1 521  NOTIF  BCE   DO,WORD,D                                   8  1521  B V95 M15 D         24  1595    2415
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SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR
345  1 529         BCE   LPAR3,WORD-2,%                                      8  1529  B W06 M13 %         24  1606    2413
346  1 537         BCE   LPAR5,WORD-4,%                                      8  1537  B W17 M11 %         24  1617    2411
347  1 545         BCE   GOTO,WORD,G                                         8  1545  B W28 M15 G         25  1628    2415
348  1 553         BCE   PRINT,WORD,P                                        8  1553  B W39 M15 P         25  1639    2415
349  1 561         BWZ   READ,WORD-4,2                                       8  1561  V W50 M11 2         25  1650    2411
350  1 569         BCE   RWD,WORD-5,D                                        8  1569  B W61 M10 D         25  1661    2410
351  1 577         MCW   K1,STMTYP                                          7  1577  M M01 L94           25  2401    2394
352  1 584         MN    WORD-5,STMTYP  USE NUMERIC OF SIXTH CHAR           7  1584  D M10 L94           26  2410    2394
353  1 591         B     NOTIF2  PATCH IN V3M4                              4  1591  B N26               26  2526
354         *
355         * FIRST LETTER IS D(O)
356         *
357  1 595  DO     MCW   TDO,STMTYP                                         7  1595  M M39 L94           26  2439    2394
358  1 602         B     CLASS2                                             4  1602  B T14               26  1314
359         *
360         * THIRD CHARACTER IS LEFT PARENTHESIS
361         *
362  1 606  LPAR3  MCW   TIF,STMTYP                                         7  1606  M M38 L94           26  2438    2394
363  1 613         B     CLASS2                                             4  1613  B T14               26  1314
364         *
365         * FIFTH CHARACTER IS LEFT PARENTHESIS -- ASSUME COMPUTED GOTO
366         *
367  1 617  LPAR5  MCW   TCGO,STMTYP                                        7  1617  M M37 L94           27  2437    2394
368  1 624         B     CLASS2                                             4  1624  B T14               27  1314
369         *
370         * FIRST CHARACTER IS G
371         *
372  1 628  GOTO   MCW   TGO,STMTYP                                         7  1628  M M36 L94           27  2436    2394
373  1 635         B     CLASS2                                             4  1635  B T14               27  1314
374         *
375         * FIRST CHARACTER IS P
376         *
377  1 639  PRINT  MCW   TPRINT,STMTYP                                      7  1639  M M35 L94           27  2435    2394
378  1 646         B     CLASS2                                             4  1646  B T14               27  1314
379         *
380         * FIFTH CHARACTER IS NUMERIC -- ASSUME IT'S READ
381         *
382  1 650  READ   MCW   TREAD,STMTYP                                       7  1650  M M34 L94           28  2434    2394
383  1 657         B     CLASS2                                             4  1657  B T14               28  1314
384         *
385         * SIXTH CHARACTER IS D -- ASSUME REWIND
386         *
387  1 661  RWD    MCW   TREW,STMTYP                                       7  1661  M M33 L94           28  2433    2394
388  1 668         B     CLASS2                                             4  1668  B T14               28  1314
389         *
390         * ALL DONE
391         *
392  1 672  DONE   BSS   SNAPSH,C                                          5  1672  B 333 C             28   333
393  1 698         B     LOADNX                                             4  1677  B 700               28   700
394               DCW   #1                                                 1  1681                      28
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SEQ PG LIN  LABEL  OP    OPERANDS                                        SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR

395         *
396         STMTST EQU   2393  STATEMENT START                                  2393
397         STMTYP EQU   2394  STATEMENT TYPE -- F FOR FORMAT                   2394
398         STMTSV EQU   2397                                                    2397
399         *
400         * CONSTANTS AND WORK AREAS
401         *
402               ORG   2398  SEE MOKOTOFF V3M0.LST LINE 803                          2398
403  2 400  STMTNO DCW   001                                              3  2400                    29
404  2 401  K1     DCW   1                                                1  2401                    29
405  2 404  STMTPT DCW   #3  STATEMENT POINTER                            3  2404                    29
406  2 405  CHAR   DCW   #1  CHARACTER BEING EXAMINED                      1  2405                    29
407  2 415  WORD   DCW   #10                                              10  2415                    29
408  2 420  KQINUA DC    @QINUA@   TEST SECOND CHARACTER OF STATEMENT      5  2420                    29
409  2 424  KBFCS  DC    @BFCS@    TEST FIRST CHARACTER OF STATEMENT       4  2424                    29
410  2 430  KFI    DCW   @ESNES%FI@  IF(SENSE SPELLED BACKWARD            8  2432                    29
411  2 433  TREW   DC    @Z@       STATEMENT CODE FOR REWIND             1  2433                    29
412  2 434  TREAD  DC    @L@       STATEMENT CODE FOR READ               1  2434                    29
413  2 435  TPRINT DC    @P@       STATEMENT CODE FOR PRINT              1  2435                    29
414  2 436  TGO    DC    @G@       STATEMENT CODE FOR GOTO               1  2436                    29
415  2 437  TCGO   DC    @T@       STATEMENT CODE FOR COMPUTED GOTO      1  2437                    30
416  2 438  TIF    DC    @E@       STATEMENT CODE FOR IF                 1  2438                    30
417  2 439  TDO    DC    @D@       STATEMENT CODE FOR DO                 1  2439                    30
418  2 440  TSSW   DC    @W@       STATEMENT CODE FOR IF ( SENSE SWITCH ...  1  2440                    30
419  2 442  INTDEF DCW   05  DEFAULT INTEGER MODULUS                      2  2442                    30
420  2 444  FLTDEF DCW   08  DEFAULT FLOATING POINT MANTISSA DIGITS       2  2444                    30
421  2 446  INTMIN DCW   01  MINIMUM INTEGER MODULUS                      2  2446                    30
422  2 448  DIGMAX DCW   20  MAXIMUM INT MOD AND MAX FP MANTISSA         2  2448                    30
423  2 450  FLTMIN DCW   02  MINIMUM FLOATING POINT MANTISSA DIGITS      2  2450                    31
424  2 460  MODMSG DCW   @MODULUS IS@                                    10  2460                    31
425  2 471  MANMSG DCW   @MANTISSA IS@                                   11  2471                    31
426  2 474  KNSE   DCW   @ESN@     NSE (PART OF SENSELIGHT) SPELT BACKWARD  3  2474                    31
427  2 475  TSENSE DCW   @J@       STATEMENT CODE FOR SENSE LIGHT        1  2475                    31
428  2 480  KDFILE DCW   @ELIFD@   DFILE (PART OF ENDFILE) SPELT BACKWARD  5  2480                    31
429  2 481  TSLASH DCW   @/@       STATEMENT CODE FOR END                1  2481                    31
430  2 482  TARITH DCW   @R@       STATEMENT CODE FOR ARITHMETIC         1  2482                    32
431  2 483  TSLITE DCW   @K@       STATEMENT CODE FOR IF ( SENSE LIGHT...  1  2483                    32
432  2 501  MSG42  DCW   @ERROR 42 - MODULUS@                           18  2501                    32
433  2 520  MSG43  DCW   @ERROR 43 - MANTISSA@                          19  2520                    32
434         *
435         * PATCH IN V3M4
436         *
437         K9     DCW   9                                                1  2521                    33
438         TESTW6 DCW   6531                                             4  2525                    33
439         NOTIF2 MZ    WORD-5,*&8                                       7  2526  Y M10 N40         33  2410    2540
440               BCE   CLASS2,TESTW6,0  READ TAPE?                       8  2533  B T14 N25 0       33  1314    2525
441               B                     WRITE TAPE?                      1  2541  B                 33
442               B                     READ INPUT TAPE?                 1  2542  B                 33
443               B                     WRITE OUTPUT TAPE?               1  2543  B                 33
444               MN    K9,STMTYP       USE CODE 9                       7  2544  D N21 L94         34  2521    2394
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD A-ADDR  B-ADDR
445                BIN   CLASS2,                                             5  2551  B T14              34  1314
446                ORG   2600      SAME AS MOKOTOFF V3M0.LST LINE 835                 2600
447  2 600 GMWM    DCW   @}@                                                 1  2600              GMARK   35
448 *      TOP3    EQU   GMWM                                                   2600
449                XFR   BEGIN3                                                     B 838              35   838
450          *
451          * IT IS NECESSARY NOT TO CLEAR THE GMWM, WHICH IS USED TO MARK
452          * THE CODE STORAGE AREA.
453          *
454          CLRME  CLRA  BEGIN3,GMWM-1                                                              MACRO
             *      CLRA  CLRBOT,CLRTOP[,ORG,GMWMAD]                                                 GEN
             *                                                                                       GEN
             * CLEAR CORE AFTER A PHASE USING THE CLRTOP ADDRESS                                     GEN
             *                                                                                       GEN
455                ORG   201                                                          0201
             *                                                                                       GEN
             * CLEAR DOWN TO CLRBOT & X00 THE EASY WAY                                               GEN
             *                                                                                       GEN
456          CLRME  EQU   *&1                                                   0201                GEN
457          )0J003 CS    GMWM-1         CLEAR FROM CLRTOP                   4  0201  / N99         GEN      36  2599
458                 SBR   )0J003&3                                           4  0205  H 204         GEN      36   204
459                 SBR   )0L003&6                                           4  0209  H 250         GEN      36   250
460                 C     )0J003&3,)0M003   DOWN TO CLRBOT & X00?            7  0213  C 204 261     GEN      36   204      261
461                 BU    )0J003                                             5  0220  B 201 /       GEN      36   201
             *                                                                                       GEN
             * NOW CLEAR DOWN TO CLRBOT THE HARD WAY                                                 GEN
             *                                                                                       GEN
462          )0K003 C     )0L003&6,)0N003                                    7  0225  C 250 264     GEN      36   250      264
463                 BU    )0L003                                             5  0232  B 244 /       GEN      36   244
464                 CS    LOADNX,)0Q003  LOAD THE NEXT BLOCK AT 1            7  0237  / 700 271     GEN      37   700      271
465          )0L003 LCA   )0P003,0-0     CLEAR WITH BLANK AND WORD MARK     7  0244  L 265 000     GEN      37   265      000
466                 SBR   )0L003&6                                           4  0251  H 250         GEN      37   250
467                 B     )0K003                                             4  0255  B 225         GEN      37   225
468          )0M003 DSA   )0R003         CLRBOT & X00 - 1                   3  0261  899           GEN      37   899
469          )0N003 DSA   BEGIN3         CLRBOT                             3  0264  838           GEN      37   838
470          )0P003 DCW   #1                                                 1  0265                GEN      37
471                 DC    @CLRA @     IDENTIFY IN A DECK, TAPE, OR DUMP     5  0270                GEN      37
472          )0Q003 DCW   @}@                                                1  0271                GEN      38
473                 ORG   BEGIN3&X00                                                 0900
474          )0R003 EQU   *           CLRBOT & X00 - 1                          0899                GEN
475                 XFR   CLRME                                                      B 201              38   201
```

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)0J003	0201: 0	)0K003	0225: 0	)0L003	0244: 0	)0M003	0261: 0	)0N003	0264: 0	)0P003	0265: 0
)0Q003	0271: 0	)0R003	0899: 0	)6J002	0110: 0	)6K002	0700: 0	)6L002	0704: 0	)6M002	0728: 0
)9J002	0250: 0	)9R002	0253: 0	BADMAN	1495: 0	BADMOD	1469: 0	BADRET	0938: 0	BEGIN3	0838: 0
BFCS1	1237: 0	CDOVLY	0700: 0	CHAR	2405: 0	CHKLB2	1059: 0	CHKLBL	1043: 0	CKBLNK	1337: 0
CKWORD	1173: 0	CLASS2	1314: 0	CLASSD	1309: 0	CLRME	0201: 0	CORCHK	0979: 0	DIGMAX	2448: 0
DO	1595: 0	DONE	1672: 0	ENDCHK	1089: 0	EQ	1119: 0	EQTEST	1102: 0	F	1397: 0
FDEF	0883: 0	FLTDEF	2444: 0	FLTMIN	2450: 0	FSPEC	0890: 0	GMWM	2600: 0	GOTO	1628: 0
IDEF	0864: 0	IMOD	0690: 0	INTDEF	2442: 0	INTMIN	2446: 0	ISPEC	0871: 0	K1	2401: 0
K9	2521: 0	KBFCS	2424: 0	KDFILE	2480: 0	KFI	2432: 0	KNSE	2474: 0	KQINUA	2420: 0
LOADNX	0700: 0	LPAR2	1385: 0	LPAR3	1606: 0	LPAR5	1617: 0	LPAREN	1349: 0	MANCHK	0914: 0
MANMSG	2471: 0	MANTIS	0692: 0	MODMSG	2460: 0	MSG42	2501: 0	MSG43	2520: 0	MVBACK	1318: 0
MVSTMT	0996: 0	N2	1290: 0	NOTIF	1521: 0	NOTIF2	2526: 0	OTHER	1422: 0	PHAS3	0201: 0
PHASLD	0381: 0	PRINT	1639: 0	QINUA2	1271: 0	READ	1650: 0	RPAREN	1369: 0	RWD	1661: 0
SENSE	1260: 0	SLITE	1458: 0	SNAPEX	0564: 0	SNAPSH	0333: 0	STMTNO	2400: 0	STMTPT	2404: 0
STMTST	2393: 0	STMTSV	2397: 0	STMTYP	2394: 0	STSTMT	1075: 0	SVCHAR	1134: 0	TARITH	2482: 0
TCGO	2437: 0	TDO	2439: 0	TESTW6	2525: 0	TGO	2436: 0	TIF	2438: 0	TOP3	2600: 0
TOPCOR	0688: 0	TPERR	0728: 0	TPREAD	0704: 0	TPRINT	2435: 0	TQINUA	1217: 0	TREAD	2434: 0
TREW	2433: 0	TSENSE	2475: 0	TSLASH	2481: 0	TSLITE	2483: 0	TSSW	2440: 0	WORD	2415: 0
X1	0089: 0	X2	0094: 0	X3	0099: 0						

UNREFERENCED SYMBOLS

CDOVLY PHASLD SNAPEX TOP3 TPERR TPREAD X2 X3