SDS 940 OLDS DIAGNOSTIC SYSTEM

UNIT 0 CPU TEST LISTING

SDS 870030-51A February 1969

SDS

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CPU0    TAP-3.0       01/15  03:01    PAGE 1

             00010            ØCTAL
                      *
      0 01 00000     ØNE     ØPD      0100000,1
      0 02 00000     TWØ     ØPD      0200000,1
      0 03 00000     THREE   ØPD      0300000,1
      0 04 00000     FØUR    ØPD      0400000,1
      0 05 00000     FIVE    ØPD      0500000,1
      0 06 00000     SIX     ØPD      0600000,1
      0 07 00000     SEVEN   ØPD      0700000,1
      0 10 00000     EIGHT   ØPD      01000000,1
                      *
         00000242    INT31   EQU      242
         00000243    I31     EQU      243
         00000246    INT33   EQU      246
         00000247    I33     EQU      247
         00000332    FLAGS   EQU      332
         00000400    UAW     EQU      400
         00000401    STATUS  EQU      401
         00000402    LØCKS   EQU      402
         00000403    RADSIZ  EQU      403
         00000404    DSCSIZ  EQU      404
         00000405    SYSIZE  EQU      405
         00000406    SEED    EQU      406
         00000407    TIME    EQU      407
         00000410    AREG    EQU      410
         00000411    BREG    EQU      411
         00000412    XREG    EQU      412
         00000413    ØVRFLØ  EQU      413
         00000414    ERRØRS  EQU      414
         00000415    RL1     EQU      415
         00000416    RL2     EQU      416
         00000417    RL4     EQU      417
         00000420    UNIT    EQU      420
         00000424    FUNCTN  EQU      424
         00000430    ØBJECT  EQU      430
         00000434    END     EQU      434
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CPU0    TAP-3.0       01/15  03:01    PAGE 2

         00000440    RETURN  EQU      440
         00000450    DIVERT  EQU      450
         00000452    DØNE    EQU      452
         00000454    REPØRT  EQU      454
         00000456    FDØNE   EQU      456
         00000460    ERRØR   EQU      460
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```
                    * 940 CPU DIAGNOSTIC
              00010          OCTAL
                    CPU0     IDENT
         1 00 00000 P8P      8PD       10000000,1
         0 46 00000 RNC      8PD       04600000,2
           00000331 I74      EQU       331
           00000261 T40      EQU       261
           00000263 T41      EQU       263
           00000267 T43      EQU       267
           00000271 T44      EQU       271
00000         04000 ZER8     BSS       4000
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```
                    * PRETEST
04000  0 20 00000          N8P
04001  0 20 20000          N8P       UPT
04002  0 40 20040          BPT4
04003  0 01 06065          BRU       SET940
04004  0 51 04005          BRR       *+1               SET 8V IF 940 M8DE
04005  1 20 04005          N8P       *,1
04006  0 43 04007          BRM       *+1
04007  0 00 00000          PZE       0                 BIT 2 WILL BE SET IF 940 M8DE
04010  0 76 04007          LDA       *-1
04011  0 72 23445          SKA       =10000000         IS IT 940 M8DE
04012  0 01 06065          BRU       SET940            YES, SKIP PRETEST
04013  4 40 00000 SKS1     SKS       0,4               SH8ULD N8T SKIP
04014  0 01 04020          BRU       *+4
04015  0 40 20200          SKS       20200
04016  0 01 04020          BRU       *+2
04017  0 00 00000          HLT
04020  0 40 20400          SKS       20400
04021  0 01 04013          BRU       SKS1
04022  0 76 23446 SKE1     LDA       =11111111
04023  0 75 23447          LDB       =0
04024  4 50 23446          SKE       =11111111,4       SH8ULD SKIP
04025  0 40 20200          SKS       20200
04026  0 01 04030          BRU       *+2
04027  0 00 00000          HLT
04030  0 40 20400          SKS       20400
04031  0 01 04022          BRU       SKE1
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CPU0    TAP=3.0      01/15  03101   PAGE 5

04032  0 76 23450  SKE2   LDA     =22222222
04033  0 75 23447         LDB     =0
04034  4 50 23450         SKE     =22222222,4      SHOULD SKIP
04035  0 40 20200         SKS     20200
04036  0 01 04040         BRU     *+2
04037  0 00 00000         HLT
04040  0 40 20400         SKS     20400
04041  0 01 04032         BRU     SKE2
04042  0 76 23451  SKE3   LDA     =44444444
04043  0 75 23447         LDB     =0
04044  4 50 23451         SKE     =44444444,4      SHOULD SKIP
04045  0 40 20200         SKS     20200
04046  0 01 04050         BRU     *+2
04047  0 00 00000         HLT
04050  0 40 20400         SKS     20400
04051  0 01 04042         BRU     SKE3
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CPU0    TAP=3.0      01/15  03101   PAGE 6

04052  0 76 23452  SKE4   LDA     =1
04053  0 75 23447         LDB     =0
04054  4 50 23447         SKE     =0,4             SHOULD NOT SKIP
04055  0 01 04061         BRU     *+4
04056  0 40 20200         SKS     20200
04057  0 01 04061         BRU     *+2
04060  0 00 00000         HLT
04061  0 40 20400         SKS     20400
04062  0 01 04052         BRU     SKE4
04063  0 76 23453  SKE5   LDA     =2
04064  0 75 23447         LDB     =0
04065  4 50 23447         SKE     =0,4             SHOULD NOT SKIP
04066  0 01 04072         BRU     *+4
04067  0 40 20200         SKS     20200
04070  0 01 04072         BRU     *+2
04071  0 00 00000         HLT
04072  0 40 20400         SKS     20400
04073  0 01 04063         BRU     SKE5
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CPU0    TAP=3,0      01/15  03101   PAGE 7

04074   0 76 23454   SKE6   LDA     #4
04075   0 75 23447          LDB     #0
04076   4 50 23447          SKE     #0,4          SHOULD NOT SKIP
04077   0 01 04103          BRU     **4
04100   0 40 20200          SKS     20200
04101   0 01 04103          BRU     **2
04102   0 00 00000          HLT
04103   0 40 20400          SKS     20400
04104   0 01 04074          BRU     SKE6
04105   0 76 23447   SKE7   LDA     #0
04106   0 75 23447          LDB     #0
04107   4 50 23452          SKE     #1,4          SHOULD NOT SKIP
04110   0 01 04114          BRU     **4
04111   0 40 20200          SKS     20200
04112   0 01 04114          BRU     **2
04113   0 00 00000          HLT
04114   0 40 20400          SKS     20400
04115   0 01 04105          BRU     SKE7
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CPU0    TAP=3,0      01/15  03101   PAGE 8

04116   0 76 23447   SKE8   LDA     #0
04117   0 75 23447          LDB     #0
04120   4 50 23453          SKE     #2,4          SHOULD NOT SKIP
04121   0 01 04125          BRU     **4
04122   0 40 20200          SKS     20200
04123   0 01 04125          BRU     **2
04124   0 00 00000          HLT
04125   0 40 20400          SKS     20400
04126   0 01 04116          BRU     SKE8
04127   0 76 23447   SKE9   LDA     #0
04130   0 75 23447          LDB     #0
04131   4 50 23454          SKE     #4,4          SHOULD NOT SKIP
04132   0 01 04136          BRU     **4
04133   0 40 20200          SKS     20200
04134   0 01 04136          BRU     **2
04135   0 00 00000          HLT
04136   0 40 20400          SKS     20400
04137   0 01 04127          BRU     SKE9
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CPU0    TAP=3.C      01/15  03101   PAGE 9

04140   0 76 23447   SKE10  LDA     =0
04141   0 75 23447          LDB     =0
04142   4 50 23447          SKE     =0,4            SHOULD SKIP
04143   0 40 20200          SKS     20200
04144   0 01 04146          BRU     **2
04145   0 00 00000          HLT
04146   0 40 20400          SKS     20400
04147   0 01 04140          BRU     SKE10
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CPU0    TAP=3.C      01/15  03101   PAGE 10

04150   0 76 23455   SKE11   LDA     =07070707
04151   0 75 23456          LDB     =00770077
04152   0 71 23457          LDX     =00777700
04153   4 50 23455          SKE     =07070707,4     SHOULD SKIP
04154   0 40 20200          SKS     20200
04155   0 01 04157          BRU     **2
04156   0 00 00000          HLT
04157   0 35 23441          STA     TEMPA
04160   0 36 23442          STB     TEMPB
04161   0 37 23440          STX     TEMPX
04162   0 50 23455          SKE     =07070707
04163   0 40 20200          SKS     20200
04164   0 01 04166          BRU     **2
04165   0 00 00000          HLT     0               A WRONG
04166   0 76 23442          LDA     TEMPB
04167   0 50 23456          SKE     =00770077
04170   0 40 20200          SKS     20200
04171   0 01 04173          BRU     **2
04172   0 00 00000          HLT     0               B WRONG
04173   0 76 23440          LDA     TEMPX
04174   0 50 23457          SKE     =00777700
04175   0 40 20200          SKS     20200
04176   0 01 04200          BRU     **2
04177   0 00 00000          HLT     0               X WRONG
04200   0 40 20400          SKS     20400
04201   0 01 04150          BRU     SKE11
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CPU0   TAP=3.0      01/15  03101   PAGE 11

04202  0 76 23447  SKA1   LDA     =0
04203  0 75 23460         LDB     =77777777
04204  0 71 23461         LDX     =01234567
04205  4 72 23460         SKA     =77777777,4      SHOULD SKIP
04206  0 40 20200         SKS     20200
04207  0 01 04211         BRU     *+2
04210  0 00 00000         HLT
04211  0 35 23441         STA     TEMPA
04212  0 36 23442         STB     TEMPB
04213  0 37 23440         STX     TEMPX
04214  0 50 23447         SKE     =0
04215  0 40 20200         SKS     20200
04216  0 01 04220         BRU     *+2
04217  0 00 00000         HLT     0                A WRONG
04220  0 76 23442         LDA     TEMPB
04221  0 50 23460         SKE     =77777777
04222  0 40 20200         SKS     20200
04223  0 01 04225         BRU     *+2
04224  0 00 00000         HLT     0                B WRONG
04225  0 76 23440         LDA     TEMPX
04226  0 50 23461         SKE     =01234567
04227  0 40 20200         SKS     20200
04230  0 01 04232         BRU     *+2
04231  0 00 00000         HLT     0                X WRONG
04232  0 40 20400         SKS     20400
04233  0 01 04202         BRU     SKA1
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CPU0   TAP=3.0      01/15  03101   PAGE 12

04234  0 76 23460  SKA2   LDA     =77777777
04235  0 75 23455         LDB     =7070707
04236  0 71 23456         LDX     =770077
04237  4 72 23447         SKA     =0,4             SHOULD SKIP
04240  0 40 20200         SKS     20200
04241  0 01 04243         BRU     *+2
04242  0 00 00000         HLT
04243  0 35 23441         STA     TEMPA
04244  0 36 23442         STB     TEMPB
04245  0 37 23440         STX     TEMPX
04246  0 50 23460         SKE     =77777777
04247  0 40 20200         SKS     20200
04250  0 01 04252         BRU     *+2
04251  0 00 00000         HLT     0                A WRONG
04252  0 76 23442         LDA     TEMPB
04253  0 50 23455         SKE     =7070707
04254  0 40 20200         SKS     20200
04255  0 01 04257         BRU     *+2
04256  0 00 00000         HLT     0                B WRONG
04257  0 76 23440         LDA     TEMPX
04260  0 50 23456         SKE     =770077
04261  0 40 20200         SKS     20200
04262  0 01 04264         BRU     *+2
04263  0 00 00000         HLT     0                X WRONG
04264  0 40 20400         SKS     20400
04265  0 01 04234         BRU     SKA2
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CPU0    TAP=3.0      01/15  03101   PAGE 13

04266  0 76 23452  SKA3   LDA     =1
04267  0 75 23453         LDB     =2
04270  0 71 23454         LDX     =4
04271  4 72 23452         SKA     =1,4          SHOULD NOT SKIP
04272  0 01 04276         BRU     **4
04273  0 40 20200         SKS     20200
04274  0 01 04276         BRU     **2
04275  0 00 00000         HLT
04276  0 35 23441         STA     TEMPA
04277  0 36 23442         STB     TEMPB
04300  0 37 23440         STX     TEMPX
04301  0 50 23452         SKE     =1
04302  0 40 20200         SKS     20200
04303  0 01 04305         BRU     **2
04304  0 00 00000         HLT     0             A WRONG
04305  0 76 23442         LDA     TEMPB
04306  0 50 23453         SKE     =2
04307  0 40 20200         SKS     20200
04310  0 01 04312         BRU     **2
04311  0 00 00000         HLT     0             B WRONG
04312  0 76 23440         LDA     TEMPX
04313  0 50 23454         SKE     =4
04314  0 40 20200         SKS     20200
04315  0 01 04317         BRU     **2
04316  0 00 00000         HLT     0             X WRONG
04317  0 40 20400         SKS     20400
04320  0 01 04266         BRU     SKA3
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CPU0    TAP=3.0      01/15  03101   PAGE 14

04321  0 76 23453  SKA4   LDA     =2
04322  0 75 23454         LDB     =4
04323  0 71 23452         LDX     =1
04324  4 72 23453         SKA     =2,4          SHOULD NOT SKIP
04325  0 01 04331         BRU     **4
04326  0 40 20200         SKS     20200
04327  0 01 04331         BRU     **2
04330  0 00 00000         HLT
04331  0 35 23441         STA     TEMPA
04332  0 36 23442         STB     TEMPB
04333  0 37 23440         STX     TEMPX
04334  0 50 23453         SKE     =2
04335  0 40 20200         SKS     20200
04336  0 01 04340         BRU     **2
04337  0 00 00000         HLT     0             A WRONG
04340  0 76 23442         LDA     TEMPB
04341  0 50 23454         SKE     =4
04342  0 40 20200         SKS     20200
04343  0 01 04345         BRU     **2
04344  0 00 00000         HLT     0             B WRONG
04345  0 76 23440         LDA     TEMPX
04346  0 50 23452         SKE     =1
04347  0 40 20200         SKS     20200
04350  0 01 04352         BRU     **2
04351  0 00 00000         HLT     0             X WRONG
04352  0 40 20400         SKS     20400
04353  0 01 04321         BRU     SKA4
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CPU0   TAP=3,0      01/15  03101   PAGE 15

04354  0 76 23454  SKA5   LDA     =4
04355  0 75 23452         LDB     =1
04356  0 71 23453         LDX     =2
04357  4 72 23454         SKA     =4,4          SHOULD NOT SKIP
04360  0 01 04364         BRU     *+4
04361  0 40 20200         SKS     20200
04362  0 01 04364         BRU     *+2
04363  0 00 00000         HLT
04364  0 35 23441         STA     TEMPA
04365  0 36 23442         STB     TEMPB
04366  0 37 23440         STX     TEMPX
04367  0 50 23454         SKE     =4
04370  0 40 20200         SKS     20200
04371  0 01 04373         BRU     *+2
04372  0 00 00000         HLT     0             A WRONG
04373  0 76 23442         LDA     TEMPB
04374  0 50 23452         SKE     =1
04375  0 40 20200         SKS     20200
04376  0 01 04400         BRU     *+2
04377  0 00 00000         HLT     0             B WRONG
04400  0 76 23440         LDA     TEMPX
04401  0 50 23453         SKE     =2
04402  0 40 20200         SKS     20200
04403  0 01 04405         BRU     *+2
04404  0 00 00000         HLT     0             X WRONG
04405  0 40 20400         SKS     20400
04406  0 01 04354         BRU     SKA5
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CPU0   TAP=3,0      01/15  03101   PAGE 16

04407  0 76 23460  SKM1   LDA     =77777777
04410  0 75 23447         LDB     =0
04411  0 71 23447         LDX     =0
04412  4 70 23460         SKM     =77777777,4   SHOULD SKIP
04413  0 40 20200         SKS     20200
04414  0 01 04416         BRU     *+2
04415  0 00 00000         HLT
04416  0 35 23441         STA     TEMPA
04417  0 36 23442         STB     TEMPB
04420  0 37 23440         STX     TEMPX
04421  0 50 23460         SKE     =77777777
04422  0 40 20200         SKS     20200
04423  0 01 04425         BRU     *+2
04424  0 00 00000         HLT     0             A WRONG
04425  0 76 23442         LDA     TEMPB
04426  0 50 23447         SKE     =0
04427  0 40 20200         SKS     20200
04430  0 01 04432         BRU     *+2
04431  0 00 00000         HLT     0             B WRONG
04432  0 76 23440         LDA     TEMPX
04433  0 50 23447         SKE     =0
04434  0 40 20200         SKS     20200
04435  0 01 04437         BRU     *+2
04436  0 00 00000         HLT     0             X WRONG
04437  0 40 20400         SKS     20400
04440  0 01 04407         BRU     SKM1
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CPU0    TAP=3,C      01/15  03101   PAGE 17

04441   0 76 23460  SKM2    LDA     #77777777
04442   0 75 23447          LDB     #0
04443   0 71 23447          LDX     #0
04444   4 70 23447          SKM     #0,4            SHOULD SKIP
04445   0 40 20200          SKS     20200
04446   0 01 04450          BRU     *+2
04447   0 00 00000          HLT
04450   0 35 23441          STA     TEMPA
04451   0 36 23442          STB     TEMPB
04452   0 37 23440          STX     TEMPX
04453   0 50 23460          SKE     #77777777
04454   0 40 20200          SKS     20200
04455   0 01 04457          BRU     *+2
04456   0 00 00000          HLT     0               A WRONG
04457   0 76 23442          LDA     TEMPB
04460   0 50 23447          SKE     #0
04461   0 40 20200          SKS     20200
04462   0 01 04464          BRU     *+2
04463   0 00 00000          HLT     0               B WRONG
04464   0 76 23440          LDA     TEMPX
04465   0 50 23447          SKE     #0
04466   0 40 20200          SKS     20200
04467   0 01 04471          BRU     *+2
04470   0 00 00000          HLT     0               X WRONG
04471   0 40 20400          SKS     20400
04472   0 01 04441          BRU     SKM2
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CPU0    TAP=3,C      01/15  03101   PAGE 18

04473   0 76 23447  SKM3    LDA     #0
04474   0 75 23452          LDB     #1
04475   0 71 23462          LDX     #52525252
04476   4 70 23452          SKM     #1,4            SHOULD NOT SKIP
04477   0 01 04503          BRU     *+4
04500   0 40 20200          SKS     20200
04501   0 01 04503          BRU     *+2
04502   0 00 00000          HLT
04503   0 35 23441          STA     TEMPA
04504   0 36 23442          STB     TEMPB
04505   0 37 23440          STX     TEMPX
04506   0 50 23447          SKE     #0
04507   0 40 20200          SKS     20200
04510   0 01 04512          BRU     *+2
04511   0 00 00000          HLT     0               A WRONG
04512   0 76 23442          LDA     TEMPB
04513   0 50 23452          SKE     #1
04514   0 40 20200          SKS     20200
04515   0 01 04517          BRU     *+2
04516   0 00 00000          HLT     0               B WRONG
04517   0 76 23440          LDA     TEMPX
04520   0 50 23462          SKE     #52525252
04521   0 40 20200          SKS     20200
04522   0 01 04524          BRU     *+2
04523   0 00 00000          HLT     0               X WRONG
04524   0 40 20400          SKS     20400
04525   0 01 04473          BRU     SKM3
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CPU0   TAP=3,0      01/15  03101   PAGE 19

04526  0 76 23447  SKM4   LDA     =0
04527  0 75 23453         LDB     =2
04530  0 71 23463         LDX     =25252525
04531  4 70 23453         SKM     =2,4          SHOULD NOT SKIP
04532  0 01 04536         BRU     *+4
04533  0 40 20200         SKS     20200
04534  0 01 04536         BRU     *+2
04535  0 00 00000         HLT
04536  0 35 23441         STA     TEMPA
04537  0 36 23442         STB     TEMPB
04540  0 37 23440         STX     TEMPX
04541  0 50 23447         SKE     =0
04542  0 40 20200         SKS     20200
04543  0 01 04545         BRU     *+2
04544  0 00 00000         HLT     0             A WRONG
04545  0 76 23442         LDA     TEMPB
04546  0 50 23453         SKE     =2
04547  0 40 20200         SKS     20200
04550  0 01 04552         BRU     *+2
04551  0 00 00000         HLT     0             B WRONG
04552  0 76 23440         LDA     TEMPX
04553  0 50 23463         SKE     =25252525
04554  0 40 20200         SKS     20200
04555  0 01 04557         BRU     *+2
04556  0 00 00000         HLT     0             X WRONG
04557  0 40 20400         SKS     20400
04560  0 01 04526         BRU     SKM4
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CPU0   TAP=3,0      01/15  03101   PAGE 20

04561  0 76 23447  SKM5   LDA     =0
04562  0 75 23454         LDB     =4
04563  0 71 23447         LDX     =0
04564  0 70 23454         SKM     =4,0          SHOULD NOT SKIP
04565  0 01 04571         BRU     *+4
04566  0 40 20200         SKS     20200
04567  0 01 04571         BRU     *+2
04570  0 00 00000         HLT
04571  0 35 23441         STA     TEMPA
04572  0 36 23442         STB     TEMPB
04573  0 37 23440         STX     TEMPX
04574  0 50 23447         SKE     =0
04575  0 40 20200         SKS     20200
04576  0 01 04600         BRU     *+2
04577  0 00 00000         HLT     0             A WRONG
04600  0 76 23442         LDA     TEMPB
04601  0 50 23454         SKE     =4
04602  0 40 20200         SKS     20200
04603  0 01 04605         BRU     *+2
04604  0 00 00000         HLT     0             B WRONG
04605  0 76 23440         LDA     TEMPX
04606  0 50 23447         SKE     =0
04607  0 40 20200         SKS     20200
04610  0 01 04612         BRU     *+2
04611  0 00 00000         HLT     0             X WRONG
04612  0 40 20400         SKS     20400
04613  0 01 04561         BRU     SKM5
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CPU0    TAP=3,C      01/15  03101   PAGE 21

04614  0 76 23461  SKN1   LDA     =01234567
04615  0 75 23464         LDB     =76543210
04616  0 71 23465         LDX     =25255252
04617  4 53 23466         SKN     =457,4          SHOULD SKIP
04620  0 40 20200         SKS     20200
04621  0 01 04623         BRU     **2
04622  0 00 00000         HLT
04623  0 35 23441         STA     TEMPA
04624  0 36 23442         STB     TEMPB
04625  0 37 23440         STX     TEMPX
04626  0 50 23461         SKE     =01234567
04627  0 40 20200         SKS     20200
04630  0 01 04632         BRU     **2
04631  0 00 00000         HLT     0               A WRONG
04632  0 76 23442         LDA     TEMPB
04633  0 50 23464         SKE     =76543210
04634  0 40 20200         SKS     20200
04635  0 01 04637         BRU     **2
04636  0 00 00000         HLT     0               B WRONG
04637  0 76 23440         LDA     TEMPX
04640  0 50 23465         SKE     =25255252
04641  0 40 20200         SKS     20200
04642  0 01 04644         BRU     **2
04643  0 00 00000         HLT     0               X WRONG
04644  0 40 20400         SKS     20400
04645  0 01 04614         BRU     SKN1
```

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CPU0    TAP=3,C      01/15  03101   PAGE 22

04646  0 76 23455  SKN2   LDA     =7070707
04647  0 75 23467         LDB     =70707070
04650  0 71 23460         LDX     =77777777
04651  4 53 23470         SKN     =37777777,4     SHOULD NOT SKIP
04652  0 01 04656         BRU     **4
04653  0 40 20200         SKS     20200
04654  0 01 04656         BRU     **2
04655  0 00 00000         HLT
04656  0 35 23441         STA     TEMPA
04657  0 36 23442         STB     TEMPB
04660  0 37 23440         STX     TEMPX
04661  0 50 23455         SKE     =7070707
04662  0 40 20200         SKS     20200
04663  0 01 04665         BRU     **2
04664  0 00 00000         HLT     0               A WRONG
04665  0 76 23442         LDA     TEMPB
04666  0 50 23467         SKE     =70707070
04667  0 40 20200         SKS     20200
04670  0 01 04672         BRU     **2
04671  0 00 00000         HLT     0               B WRONG
04672  0 76 23440         LDA     TEMPX
04673  0 50 23460         SKE     =77777777
04674  0 40 20200         SKS     20200
04675  0 01 04677         BRU     **2
04676  0 00 00000         HLT     0               X WRONG
04677  0 40 20400         SKS     20400
04700  0 01 04646         BRU     SKN2
```

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CPU0   TAP=3,0      01/15  03101   PAGE 23

04701  0 76 23460  SKB1   LDA     =77777777
04702  0 75 23447         LDB     =0
04703  0 71 23447         LDX     =0
04704  4 52 23460         SKB     =77777777,4      SHOULD SKIP
04705  0 40 20200         SKS     20200
04706  0 01 04710         BRU     **2
04707  0 00 00000         HLT
04710  0 35 23441         STA     TEMPA
04711  0 36 23442         STB     TEMPB
04712  0 37 23440         STX     TEMPX
04713  0 50 23460         SKE     =77777777
04714  0 40 20200         SKS     20200
04715  0 01 04717         BRU     **2
04716  0 00 00000         HLT     0                A WRONG
04717  0 76 23442         LDA     TEMPB
04720  0 50 23447         SKE     =0
04721  0 40 20200         SKS     20200
04722  0 01 04724         BRU     **2
04723  0 00 00000         HLT     0                B WRONG
04724  0 76 23440         LDA     TEMPX
04725  0 50 23447         SKE     =0
04726  0 40 20200         SKS     20200
04727  0 01 04731         BRU     **2
04730  0 00 00000         HLT     0                X WRONG
04731  0 40 20400         SKS     20400
04732  0 01 04701         BRU     SKB1
```

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CPU0   TAP=3,0      01/15  03101   PAGE 24

04733  0 76 23447  SKB2   LDA     =0
04734  0 75 23460         LDB     =77777777
04735  0 71 23447         LDX     =0
04736  4 52 23447         SKB     =0,4             SHOULD SKIP
04737  0 40 20200         SKS     20200
04740  0 01 04742         BRU     **2
04741  0 00 00000         HLT
04742  0 35 23441         STA     TEMPA
04743  0 36 23442         STB     TEMPB
04744  0 37 23440         STX     TEMPX
04745  0 50 23447         SKE     =0
04746  0 40 20200         SKS     20200
04747  0 01 04751         BRU     **2
04750  0 00 00000         HLT     0                A WRONG
04751  0 76 23442         LDA     TEMPB
04752  0 50 23460         SKE     =77777777
04753  0 40 20200         SKS     20200
04754  0 01 04756         BRU     **2
04755  0 00 00000         HLT     0                B WRONG
04756  0 76 23440         LDA     TEMPX
04757  0 50 23447         SKE     =0
04760  0 40 20200         SKS     20200
04761  0 01 04763         BRU     **2
04762  0 00 00000         HLT     0                X WRONG
04763  0 40 20400         SKS     20400
04764  0 01 04733         BRU     SKB2
```

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CPU0    TAP=3.C      01/15  03101   PAGE 25

04765  0 76 23452  SKB3    LDA     =1
04766  0 75 23452            LDB     =1
04767  0 71 23452            LDX     =1
04770  4 52 23452            SKB     =1,4          SHOULD NOT SKIP
04771  0 01 04775            BRU     **4
04772  0 40 20200            SKS     20200
04773  0 01 04775            BRU     **2
04774  0 00 00000            HLT
04775  0 35 23441            STA     TEMPA
04776  0 36 23442            STB     TEMPB
04777  0 37 23440            STX     TEMPX
05000  0 50 23452            SKE     =1
05001  0 40 20200            SKS     20200
05002  0 01 05004            BRU     **2
05003  0 00 00000            HLT     0             A WRONG
05004  0 76 23442            LDA     TEMPB
05005  0 50 23452            SKE     =1
05006  0 40 20200            SKS     20200
05007  0 01 05011            BRU     **2
05010  0 00 00000            HLT     0             B WRONG
05011  0 76 23440            LDA     TEMPX
05012  0 50 23452            SKE     =1
05013  0 40 20200            SKS     20200
05014  0 01 05016            BRU     **2
05015  0 00 00000            HLT     0             X WRONG
05016  0 40 20400            SKS     20400
05017  0 01 04765            BRU     SKB3
```

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CPU0    TAP=3.C      01/15  03101   PAGE 26

05020  0 76 23453  SKB4    LDA     =2
05021  0 75 23453            LDB     =2
05022  0 71 23453            LDX     =2
05023  4 52 23453            SKB     =2,4          SHOULD NOT SKIP
05024  0 01 05030            BRU     **4
05025  0 40 20200            SKS     20200
05026  0 01 05030            BRU     **2
05027  0 00 00000            HLT
05030  0 35 23441            STA     TEMPA
05031  0 36 23442            STB     TEMPB
05032  0 37 23440            STX     TEMPX
05033  0 50 23453            SKE     =2
05034  0 40 20200            SKS     20200
05035  0 01 05037            BRU     **2
05036  0 00 00000            HLT     0             A WRONG
05037  0 76 23442            LDA     TEMPB
05040  0 50 23453            SKE     =2
05041  0 40 20200            SKS     20200
05042  0 01 05044            BRU     **2
05043  0 00 00000            HLT     0             B WRONG
05044  0 76 23440            LDA     TEMPX
05045  0 50 23453            SKE     =2
05046  0 40 20200            SKS     20200
05047  0 01 05051            BRU     **2
05050  0 00 00000            HLT     0             X WRONG
05051  0 40 20400            SKS     20400
05052  0 01 05020            BRU     SKB4
```

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CPU0   TAP*3.0      01/15  03101   PAGE 27

05053  0 76 23454  SKB5   LDA     *4
05054  0 75 23454         LDB     *4
05055  0 71 23454         LDX     *4
05056  4 52 23454         SKB     *4,4            SHOULD NOT SKIP
05057  0 01 05063         BRU     **4
05060  0 40 20200         SKS     20200
05061  0 01 05063         BRU     **2
05062  0 00 00000         HLT
05063  0 35 23441         STA     TEMPA
05064  0 36 23442         STB     TEMPB
05065  0 37 23440         STX     TEMPX
05066  0 50 23454         SKE     *4
05067  0 40 20200         SKS     20200
05070  0 01 05072         BRU     **2
05071  0 00 00000         HLT     0               A WRONG
05072  0 76 23442         LDA     TEMPB
05073  0 50 23454         SKE     *4
05074  0 40 20200         SKS     20200
05075  0 01 05077         BRU     **2
05076  0 00 00000         HLT     0               B WRONG
05077  0 76 23440         LDA     TEMPX
05100  0 50 23454         SKE     *4
05101  0 40 20200         SKS     20200
05102  0 01 05104         BRU     **2
05103  0 00 00000         HLT     0               X WRONG
05104  0 40 20400         SKS     20400
05105  0 01 05053         BRU     SKB5
```

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CPU0   TAP*3.0      01/15  03101   PAGE 28

05106  0 76 23471  ETR    LDA     *77
05107  0 75 23461         LDB     *01234567
05110  0 71 23460         LDX     *-1
05111  4 14 23472         ETR     *707,4
05112  0 35 23441         STA     TEMPA
05113  0 36 23442         STB     TEMPB
05114  0 37 23440         STX     TEMPX
05115  0 50 23473         SKE     *7
05116  0 40 20200         SKS     20200
05117  0 01 05121         BRU     **2
05120  0 00 00000         HLT     0               A WRONG
05121  0 76 23442         LDA     TEMPB
05122  0 50 23461         SKE     *01234567
05123  0 40 20200         SKS     20200
05124  0 01 05126         BRU     **2
05125  0 00 00000         HLT     0               B WRONG
05126  0 76 23440         LDA     TEMPX
05127  0 50 23460         SKE     *-1
05130  0 40 20200         SKS     20200
05131  0 01 05133         BRU     **2
05132  0 00 00000         HLT     0               X WRONG
05133  0 40 20400         SKS     20400
05134  0 01 05106         BRU     ETR
```

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CPU0   TAP=3.0      01/15  03101   PAGE 29

05135  0 76 23471  EOR    LDA     =77
05136  0 75 23461         LDB     =01234567
05137  0 71 23464         LDX     =76543210
05140  4 17 23472         EOR     =707,4
05141  0 35 23441         STA     TEMPA
05142  0 36 23442         STB     TEMPB
05143  0 37 23440         STX     TEMPX
05144  0 50 23474         SKE     =770
05145  0 40 20200         SKS     20200
05146  0 01 05150         BRU     *+2
05147  0 00 00000         HLT     0              A WRONG
05150  0 76 23442         LDA     TEMPB
05151  0 50 23461         SKE     =01234567
05152  0 40 20200         SKS     20200
05153  0 01 05155         BRU     *+2
05154  0 00 00000         HLT     0              B WRONG
05155  0 76 23440         LDA     TEMPX
05156  0 50 23464         SKE     =76543210
05157  0 40 20200         SKS     20200
05160  0 01 05162         BRU     *+2
05161  0 00 00000         HLT     0              X WRONG
05162  0 40 20400         SKS     20400
05163  0 01 05135         BRU     EOR
```

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CPU0   TAP=3.0      01/15  03101   PAGE 30

05164  0 76 23471  MRG    LDA     =77
05165  0 75 23460         LDB     =-1
05166  0 71 23447         LDX     =0
05167  4 16 23472         MRG     =707,4
05170  0 35 23441         STA     TEMPA
05171  0 36 23442         STB     TEMPB
05172  0 37 23440         STX     TEMPX
05173  0 50 23475         SKE     =777
05174  0 40 20200         SKS     20200
05175  0 01 05177         BRU     *+2
05176  0 00 00000         HLT     0              A WRONG
05177  0 76 23442         LDA     TEMPB
05200  0 50 23460         SKE     =-1
05201  0 40 20200         SKS     20200
05202  0 01 05204         BRU     *+2
05203  0 00 00000         HLT     0              B WRONG
05204  0 76 23440         LDA     TEMPX
05205  0 50 23447         SKE     =0
05206  0 40 20200         SKS     20200
05207  0 01 05211         BRU     *+2
05210  0 00 00000         HLT     0              X WRONG
05211  0 40 20400         SKS     20400
05212  0 01 05164         BRU     MRG
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CPU0   TAP*3.C      01/15  03101   PAGE 31

05213  0 76 23470  MIN1   LDA     #37777777
05214  0 35 23443         STA     TEMPC
05215  0 76 23476         LDA     #2552
05216  0 75 23477         LDB     #5225
05217  0 71 23500         LDX     #7777
05220  4 61 23443         MIN     TEMPC,4
05221  0 35 23444         STA     TEMPD
05222  0 76 23443         LDA     TEMPC
05223  0 50 23466         SKE     #487
05224  0 40 20200         SKS     20200
05225  0 01 05227         BRU     **2
05226  0 00 00000         HLT
05227  0 76 23444         LDA     TEMPD
05230  0 35 23441         STA     TEMPA
05231  0 36 23442         STB     TEMPB
05232  0 37 23440         STX     TEMPX
05233  0 50 23476         SKE     #2552
05234  0 40 20200         SKS     20200
05235  0 01 05237         BRU     **2
05236  0 00 00000         HLT     0              A WRONG
05237  0 76 23442         LDA     TEMPB
05240  0 50 23477         SKE     #5225
05241  0 40 20200         SKS     20200
05242  0 01 05244         BRU     **2
05243  0 00 00000         HLT     0              B WRONG
05244  0 76 23440         LDA     TEMPX
05245  0 50 23500         SKE     #7777
05246  0 40 20200         SKS     20200
05247  0 01 05251         BRU     **2
05250  0 00 00000         HLT     0              X WRONG
05251  0 40 20400         SKS     20400
05252  0 01 05213         BRU     MIN1
```

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CPU0   TAP*3.C      01/15  03101   PAGE 32

05253  0 76 23460  MIN2   LDA     #*1
05254  0 35 23443         STA     TEMPC
05255  0 76 23446         LDA     #11111111
05256  0 75 23450         LDB     #22222222
05257  0 71 23451         LDX     #44444444
05260  4 61 23443         MIN     TEMPC,4
05261  0 35 23444         STA     TEMPD
05262  0 76 23443         LDA     TEMPC
05263  0 72 23460         SKA     #77777777
05264  0 40 20200         SKS     20200
05265  0 01 05267         BRU     **2
05266  0 00 00000         HLT
05267  0 76 23444         LDA     TEMPD
05270  0 35 23441         STA     TEMPA
05271  0 36 23442         STB     TEMPB
05272  0 37 23440         STX     TEMPX
05273  0 50 23446         SKE     #11111111
05274  0 40 20200         SKS     20200
05275  0 01 05277         BRU     **2
05276  0 00 00000         HLT     0              A WRONG
05277  0 76 23442         LDA     TEMPB
05300  0 50 23450         SKE     #22222222
05301  0 40 20200         SKS     20200
05302  0 01 05304         BRU     **2
05303  0 00 00000         HLT     0              B WRONG
05304  0 76 23440         LDA     TEMPX
05305  0 50 23451         SKE     #44444444
05306  0 40 20200         SKS     20200
05307  0 01 05311         BRU     **2
05310  0 00 00000         HLT     0              X WRONG
05311  0 40 20400         SKS     20400
05312  0 01 05253         BRU     MIN2
```

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CPU0   TAP=3.0      01/15  03101   PAGE 33

05313  0 76 23447  MIN3   LDA     =0
05314  0 35 23443         STA     TEMPC
05315  0 76 23450         LDA     =22222222
05316  0 75 23451         LDB     =44444444
05317  0 71 23446         LDX     =11111111
05320  4 61 23443         MIN     TEMPC,4
05321  0 35 23444         STA     TEMPD
05322  0 76 23443         LDA     TEMPC
05323  0 50 23452         SKE     =1
05324  0 40 20200         SKS     20200
05325  0 01 05327         BRU     *+2
05326  0 00 00000         HLT
05327  0 76 23444         LDA     TEMPD
05330  0 35 23441         STA     TEMPA
05331  0 36 23442         STB     TEMPB
05332  0 37 23440         STX     TEMPX
05333  0 50 23450         SKE     =22222222
05334  0 40 20200         SKS     20200
05335  0 01 05337         BRU     *+2
05336  0 00 00000         HLT     0              A WRONG
05337  0 76 23442         LDA     TEMPB
05340  0 50 23451         SKE     =44444444
05341  0 40 20200         SKS     20200
05342  0 01 05344         BRU     *+2
05343  0 00 00000         HLT     0              B WRONG
05344  0 76 23440         LDA     TEMPX
05345  0 50 23446         SKE     =11111111
05346  0 40 20200         SKS     20200
05347  0 01 05351         BRU     *+2
05350  0 00 00000         HLT     0              X WRONG
05351  0 40 20400         SKS     20400
05352  0 01 05313         BRU     MIN3
```

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CPU0   TAP=3.0      01/15  03101   PAGE 34

05353  0 76 23501  MIN4   LDA     =*+2
05354  0 35 23443         STA     TEMPC
05355  0 76 23451         LDA     =44444444
05356  0 75 23446         LDB     =11111111
05357  0 71 23450         LDX     =22222222
05360  4 61 23443         MIN     TEMPC,4
05361  0 35 23444         STA     TEMPD
05362  0 76 23443         LDA     TEMPC
05363  0 50 23460         SKE     =*+1
05364  0 40 20200         SKS     20200
05365  0 01 05367         BRU     *+2
05366  0 00 00000         HLT
05367  0 76 23444         LDA     TEMPD
05370  0 35 23441         STA     TEMPA
05371  0 36 23442         STB     TEMPB
05372  0 37 23440         STX     TEMPX
05373  0 50 23451         SKE     =44444444
05374  0 40 20200         SKS     20200
05375  0 01 05377         BRU     *+2
05376  0 00 00000         HLT     0              A WRONG
05377  0 76 23442         LDA     TEMPB
05400  0 50 23446         SKE     =11111111
05401  0 40 20200         SKS     20200
05402  0 01 05404         BRU     *+2
05403  0 00 00000         HLT     0              B WRONG
05404  0 76 23440         LDA     TEMPX
05405  0 50 23450         SKE     =22222222
05406  0 40 20200         SKS     20200
05407  0 01 05411         BRU     *+2
05410  0 00 00000         HLT     0              X WRONG
05411  0 40 20400         SKS     20400
05412  0 01 05353         BRU     MIN4
```

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CPU0    TAP=3,0      01/15  03101   PAGE 35

05413   0 76 23451   RCY1   LDA     =44444444
05414   0 75 23451          LDB     =44444444
05415   0 71 23460          LDX     ==1
05416   4 66 20001          RCY     1,4
05417   0 35 23441          STA     TEMPA
05420   0 36 23442          STB     TEMPB
05421   0 37 23440          STX     TEMPX
05422   0 50 23450          SKE     =22222222
05423   0 40 20200          SKS     20200
05424   0 01 05426          BRU     *+2
05425   0 00 00000          HLT     0              A WRONG
05426   0 76 23442          LDA     TEMPB
05427   0 50 23450          SKE     =22222222
05430   0 40 20200          SKS     20200
05431   0 01 05433          BRU     *+2
05432   0 00 00000          HLT     0              B WRONG
05433   0 76 23440          LDA     TEMPX
05434   0 50 23460          SKE     =1
05435   0 40 20200          SKS     20200
05436   0 01 05440          BRU     *+2
05437   0 00 00000          HLT     0              X WRONG
05440   0 40 20400          SKS     20400
05441   0 01 05413          BRU     RCY1
```

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CPU0    TAP=3,0      01/15  03101   PAGE 36

05442   0 76 23450   RCY2   LDA     =22222222
05443   0 75 23450          LDB     =22222222
05444   0 71 23460          LDX     =1
05445   4 66 20001          RCY     1,4
05446   0 35 23441          STA     TEMPA
05447   0 36 23442          STB     TEMPB
05450   0 37 23440          STX     TEMPX
05451   0 50 23446          SKE     =11111111
05452   0 40 20200          SKS     20200
05453   0 01 05455          BRU     *+2
05454   0 00 00000          HLT     0              A WRONG
05455   0 76 23442          LDA     TEMPB
05456   0 50 23446          SKE     =11111111
05457   0 40 20200          SKS     20200
05460   0 01 05462          BRU     *+2
05461   0 00 00000          HLT     0              B WRONG
05462   0 76 23440          LDA     TEMPX
05463   0 50 23460          SKE     =1
05464   0 40 20200          SKS     20200
05465   0 01 05467          BRU     *+2
05466   0 00 00000          HLT     0              X WRONG
05467   0 40 20400          SKS     20400
05470   0 01 05442          BRU     RCY2
```

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CPU0    TAP=3.0      01/15  03101   PAGE 37

05471   0 76 23446   RCY3   LDA     =11111111
05472   0 75 23446          LDB     =11111111
05473   0 71 23447          LDX     =0
05474   4 66 20001          RCY     1,4
05475   0 35 23441          STA     TEMPA
05476   0 36 23442          STB     TEMPB
05477   0 37 23440          STX     TEMPX
05500   0 50 23451          SKE     =44444444
05501   0 40 20200          SKS     20200
05502   0 01 05504          BRU     **2
05503   0 00 00000          HLT     0              A WRONG
05504   0 76 23442          LDA     TEMPB
05505   0 50 23451          SKE     =44444444
05506   0 40 20200          SKS     20200
05507   0 01 05511          BRU     **2
05510   0 00 00000          HLT     0              B WRONG
05511   0 76 23440          LDA     TEMPX
05512   0 50 23447          SKE     =0
05513   0 40 20200          SKS     20200
05514   0 01 05516          BRU     **2
05515   0 00 00000          HLT     0              X WRONG
05516   0 40 20400          SKS     20400
05517   0 01 05471          BRU     RCY3
```

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CPU0    TAP=3.0      01/15  03101   PAGE 38

05520   0 76 23461   RCY4   LDA     =01234567
05521   0 75 23464          LDB     =76543210
05522   0 71 23463          LDX     =25252525
05523   4 66 20001          RCY     1,4
05524   0 35 23441          STA     TEMPA
05525   0 36 23442          STB     TEMPB
05526   0 37 23440          STX     TEMPX
05527   0 50 23502          SKE     =00516273
05530   0 40 20200          SKS     20200
05531   0 01 05533          BRU     **2
05532   0 00 00000          HLT     0              A WRONG
05533   0 76 23442          LDA     TEMPB
05534   0 50 23503          SKE     =77261504
05535   0 40 20200          SKS     20200
05536   0 01 05540          BRU     **2
05537   0 00 00000          HLT     0              B WRONG
05540   0 76 23440          LDA     TEMPX
05541   0 50 23463          SKE     =25252525
05542   0 40 20200          SKS     20200
05543   0 01 05545          BRU     **2
05544   0 00 00000          HLT     0              X WRONG
05545   0 40 20400          SKS     20400
05546   0 01 05520          BRU     RCY4
```

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CPU0   TAP=3.0      01/15  03101   PAGE 39

05547  0 76 23446  LCY1   LDA     =11111111
05550  0 75 23446         LDB     =11111111
05551  0 71 23460         LDX     =*=1
05552  4 67 20002         LCY     2,4
05553  0 35 23441         STA     TEMPA
05554  0 36 23442         STB     TEMPB
05555  0 37 23440         STX     TEMPX
05556  0 50 23451         SKE     =44444444
05557  0 40 20200         SKS     20200
05560  0 01 05562         BRU     *+2
05561  0 00 00000         HLT     0              A WRONG
05562  0 76 23442         LDA     TEMPB
05563  0 50 23451         SKE     =44444444
05564  0 40 20200         SKS     20200
05565  0 01 05567         BRU     *+2
05566  0 00 00000         HLT     0              B WRONG
05567  0 76 23440         LDA     TEMPX
05570  0 50 23460         SKE     =*=1
05571  0 40 20200         SKS     20200
05572  0 01 05574         BRU     *+2
05573  0 00 00000         HLT     0              X WRONG
05574  0 40 20400         SKS     20400
05575  0 01 05547         BRU     LCY1
```

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CPU0   TAP=3.0      01/15  03101   PAGE 40

05576  0 76 23450  LCY2   LDA     =22222222
05577  0 75 23450         LDB     =22222222
05600  0 71 23460         LDX     =*=1
05601  4 67 20002         LCY     2,4
05602  0 35 23441         STA     TEMPA
05603  0 36 23442         STB     TEMPB
05604  0 37 23440         STX     TEMPX
05605  0 50 23446         SKE     =11111111
05606  0 40 20200         SKS     20200
05607  0 01 05611         BRU     *+2
05610  0 00 00000         HLT     0              A WRONG
05611  0 76 23442         LDA     TEMPB
05612  0 50 23446         SKE     =11111111
05613  0 40 20200         SKS     20200
05614  0 01 05616         BRU     *+2
05615  0 00 00000         HLT     0              B WRONG
05616  0 76 23440         LDA     TEMPX
05617  0 50 23460         SKE     =*=1
05620  0 40 20200         SKS     20200
05621  0 01 05623         BRU     *+2
05622  0 00 00000         HLT     0              X WRONG
05623  0 40 20400         SKS     20400
05624  0 01 05576         BRU     LCY2
```

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CPU0    TAP=3,0      01/15  03101   PAGE 41

05625  0 76 23451  LCY3   LDA     =44444444
05626  0 75 23451         LDB     =44444444
05627  0 71 23447         LDX     =0
05630  4 67 20002         LCY     2,4
05631  0 35 23441         STA     TEMPA
05632  0 36 23442         STB     TEMPB
05633  0 37 23440         STX     TEMPX
05634  0 50 23450         SKE     =22222222
05635  0 40 20200         SKS     20200
05636  0 01 05640         BRU     *+2
05637  0 00 00000         HLT     0              A WRONG
05640  0 76 23442         LDA     TEMPB
05641  0 50 23450         SKE     =22222222
05642  0 40 20200         SKS     20200
05643  0 01 05645         BRU     *+2
05644  0 00 00000         HLT     0              B WRONG
05645  0 76 23440         LDA     TEMPX
05646  0 50 23447         SKE     =0
05647  0 40 20200         SKS     20200
05650  0 01 05652         BRU     *+2
05651  0 00 00000         HLT     0              X WRONG
05652  0 40 20400         SKS     20400
05653  0 01 05625         BRU     LCY3
```

```
CPU0    TAP=3,0      01/15  03101   PAGE 42

05654  0 76 23461  LCY4   LDA     =01234567
05655  0 75 23464         LDB     =76543210
05656  0 71 23463         LDX     =25252525
05657  4 67 20002         LCY     2,4
05660  0 35 23441         STA     TEMPA
05661  0 36 23442         STB     TEMPB
05662  0 37 23440         STX     TEMPX
05663  0 50 23504         SKE     =05162737
05664  0 40 20200         SKS     20200
05665  0 01 05667         BRU     *+2
05666  0 00 00000         HLT     0              A WRONG
05667  0 76 23442         LDA     TEMPB
05670  0 50 23505         SKE     =72615040
05671  0 40 20200         SKS     20200
05672  0 01 05674         BRU     *+2
05673  0 00 00000         HLT     0              B WRONG
05674  0 76 23440         LDA     TEMPX
05675  0 50 23463         SKE     =25252525
05676  0 40 20200         SKS     20200
05677  0 01 05701         BRU     *+2
05700  0 00 00000         HLT     0              X WRONG
05701  0 40 20400         SKS     20400
05702  0 01 05654         BRU     LCY4
```

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CPU0   TAP=3.C      01/15  03101   PAGE 43

05703  0 76 23463  BRM1   LDA     =25252525
05704  0 75 23462         LDB     =52525252
05705  0 71 23457         LDX     =00777700
05706  4 43 05710         BRM     BRM2,4
05707  0 00 00000         HLT     0
05710  0 00 00000  BRM2   PZE
05711  0 35 23444         STA     TEMPD
05712  0 76 05710         LDA     BRM2
05713  0 14 23506         ETR     =37777
05714  0 50 23507         SKE     =BRM1+3
05715  0 40 20200         SKS     20200
05716  0 01 05720         BRU     *+2
05717  0 00 00000         HLT
05720  0 76 23444         LDA     TEMPD
05721  0 35 23441         STA     TEMPA
05722  0 36 23442         STB     TEMPB
05723  0 37 23440         STX     TEMPX
05724  0 50 23463         SKE     =25252525
05725  0 40 20200         SKS     20200
05726  0 01 05730         BRU     *+2
05727  0 00 00000         HLT     0              A WRONG
05730  0 76 23442         LDA     TEMPB
05731  0 50 23462         SKE     =52525252
05732  0 40 20200         SKS     20200
05733  0 01 05735         BRU     *+2
05734  0 00 00000         HLT     0              B WRONG
05735  0 76 23440         LDA     TEMPX
05736  0 50 23457         SKE     =00777700
05737  0 40 20200         SKS     20200
05740  0 01 05742         BRU     *+2
05741  0 00 00000         HLT     0              X WRONG
05742  0 40 20400         SKS     20400
05743  0 01 05703         BRU     BRM1
```

```
CPU0   TAP=3.C      01/15  03101   PAGE 44

05744  0 76 23455  BRR1   LDA     =07070707
05745  0 75 23457         LDB     =777700
05746  0 71 23456         LDX     =770077
05747  4 51 05751         BRR     BRR2,4
05750  0 00 00000         HLT     0
05751  0 32 05752  BRR2   WIM     BRR2+1
05752  0 00 00000         PZE
05753  0 35 23444         STA     TEMPD
05754  0 76 05751         LDA     BRR2
05755  0 50 23510         SKE     =3285+BRR2+1
05756  0 40 20200         SKS     20200
05757  0 01 05761         BRU     *+2
05760  0 00 00000         HLT
05761  0 76 23444         LDA     TEMPD
05762  0 35 23441         STA     TEMPA
05763  0 36 23442         STB     TEMPB
05764  0 37 23440         STX     TEMPX
05765  0 50 23455         SKE     =7070707
05766  0 40 20200         SKS     20200
05767  0 01 05771         BRU     *+2
05770  0 00 00000         HLT     0              A WRONG
05771  0 76 23442         LDA     TEMPB
05772  0 50 23457         SKE     =777700
05773  0 40 20200         SKS     20200
05774  0 01 05776         BRU     *+2
05775  0 00 00000         HLT     0              B WRONG
05776  0 76 23440         LDA     TEMPX
05777  0 50 23456         SKE     =770077
06000  0 40 20200         SKS     20200
06001  0 01 06003         BRU     *+2
06002  0 00 00000         HLT     0              X WRONG
06003  0 40 20400         SKS     20400
06004  0 01 05744         BRU     BRR1
```

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CPU0    TAP=3,0      01/15  03101   PAGE 45

06005   0 40 20100   MIW1   SKS     20100
06006   0 01 04013          BRU     SKS1
06007   0 76 23455          LDA     =07070707
06010   0 75 23456          LDB     =770077
06011   0 71 23463          LDX     =25252525
06012   0 40 21000          SKS     21000
06013   0 01 06012          BRU     **1
06014   0 02 03441          EOM     3641
06015   0 12 20662          MIW     MSG
06016   0 12 20663          MIW     MSG+1
06017   0 02 14000          EOM     14000
06020   0 40 21000          SKS     21000
06021   0 01 06020          BRU     **1
06022   0 35 23441          STA     TEMPA
06023   0 36 23442          STB     TEMPB
06024   0 37 23440          STX     TEMPX
06025   0 50 23455          SKE     =07070707
06026   0 40 20200          SKS     20200
06027   0 01 06031          BRU     **2
06030   0 00 00000          HLT     0               A WRONG
06031   0 76 23442          LDA     TEMPB
06032   0 50 23456          SKE     =770077
06033   0 40 20200          SKS     20200
06034   0 01 06036          BRU     **2
06035   0 00 00000          HLT     0               B WRONG
06036   0 76 23440          LDA     TEMPX
06037   0 50 23463          SKE     =25252525
06040   0 40 20200          SKS     20200
06041   0 01 06043          BRU     **2
06042   0 00 00000          HLT     0               X WRONG
06043   0 40 20400          SKS     20400
06044   0 01 06005          BRU     MIW1
```

```
CPU0    TAP=3,0      01/15  03101   PAGE 46

06045   0 02 22000   CKWPB  EOM     22000           TO 940 MODE
06046   0 76 00401          LDA     STATUS
06047   0 72 23511          SKA     =40000
06050   0 43 00454          BRM     REPORT
06051   0 20 20611          NOP     DSCWP           DISC IS WRITE PROTECTED
06052   0 72 23511          SKA     =40000
06053   0 01 06055          BRU     **2
06054   0 43 00454          BRM     REPORT
06055   0 20 20622          NOP     DSCNWP          DISC NOT W.P.
06056   0 72 23512          SKA     =4000
06057   0 43 00454          BRM     REPORT
06060   0 20 20636          NOP     RADWP           RAD IS W.P.
06061   0 72 23512          SKA     =4000
06062   0 01 06064          BRU     **2
06063   0 43 00454          BRM     REPORT
06064   0 20 20647          NOP     RADNWP          RAD IS NOT W.P.
06065   0 02 22000   SET940 EOM     22000           TO 940 MODE
06066   0 40 20001          SKS     20001           RESET OVERFLOW
06067   0 20 00000          NOP     0
06070   0 51 06071          BRR     **1             SET OV IF 940
06071   1 20 06071          NOP     *,1
06072   0 76 00401          LDA     STATUS
06073   0 14 23513          ETR     =77777773       940 BIT
06074   0 40 20001          SKS     20001           SKIP IF OVERFLOW OFF
06075   0 16 23454          MRG     =4
06076   0 35 00401          STA     STATUS
06077   0 43 00420   UNITO  BRM     UNIT
06100   0 20 20000          NOP     UPT
06101   0 76 00401          LDA     STATUS
06102   0 72 23454          SKA     =4              SKIP IF NOT 940
06103   0 01 06105          BRU     **2
06104   0 43 00452          BRM     DONE
06105   0 43 00424   FUNCO  BRM     FUNCTN
06106   0 20 20006          NOP     FPTO
```

```
CPU0    TAP.3.C      01/15  03101   PAGE 47

                            REM     23D22.P31
06107   0 43 00430  01      BRM     OBJECT          START OBJECT TEST
06110   0 75 23460          LDB     .77777777
06111   0 76 23447          LDA     .0
06112   0 46 00000          RNC
06113   0 50 23460          SKE     .77777777
06114   0 01 06116          BRU     ..2             OK, SKIP
06115   0 43 00460          BRM     ERROR           NO,ERROR
06116   0 20 20664          NOP     M1
06117   0 43 00434          BRM     END
                            REM     23D23.P31
06120   0 43 00430  02      BRM     OBJECT          START OBJECT TEST
06121   0 76 23460          LDA     .77777777
06122   0 71 23447          LDX     .0
06123   0 46 00000          RNC
06124   0 50 23447          SKE     .0
06125   0 01 06127          BRU     ..2             OK, SKIP
06126   0 43 00460          BRM     ERROR           NO,ERROR
06127   0 20 20667          NOP     M2
06130   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP.3.C      01/15  03101   PAGE 48

                            REM     23D26.P36
06131   0 43 00430  03      BRM     OBJECT          START OBJECT TEST
06132   0 75 23460          LDB     .77777777
06133   0 46 00000          RNC
06134   0 36 23437          STB     TEMP
06135   0 76 23437          LDA     TEMP
06136   0 50 23447          SKE     .0
06137   0 01 06141          BRU     ..2             OK, SKIP
06140   0 43 00460          BRM     ERROR           NO,ERROR
06141   0 20 20672          NOP     M3
06142   0 43 00434          BRM     END             LOOP IF BP1 SET
                            REM     30D19.P36
06143   0 43 00430  04      BRM     OBJECT          START OBJECT TEST
06144   0 75 23460          LDB     .77777777
06145   0 46 00000          RNC
06146   0 36 23437          STB     TEMP
06147   0 76 23437          LDA     TEMP
06150   0 72 23473          SKA     .7
06151   0 01 06153          BRU     ..2             OK, SKIP
06152   0 43 00460          BRM     ERROR           NO,ERROR
06153   0 20 20675          NOP     M4
06154   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                                REM     31C24=P36
06155  0 43 00430  85           BRM     OBJECT          START OBJECT TEST
06156  0 76 23460              LDA     =77777777
06157  0 75 23447              LDB     =0
06160  0 46 00004              CAB
06161  0 36 23437              STB     TEMP
06162  0 76 23437              LDA     TEMP
06163  0 50 23447              SKE     =0
06164  0 01 06166              BRU     **2             OK, SKIP
06165  0 43 00460              BRM     ERROR           NO,ERROR
06166  0 20 20700              NOP     M5
06167  0 43 00434              BRM     END             LOOP IF BP1 SET
                                REM     31C23=P36
06170  0 43 00430  86           BRM     OBJECT          START OBJECT TEST
06171  0 71 23460              LDX     =77777777
06172  0 75 23447              LDB     =0
06173  0 46 00040              CXB
06174  0 36 23437              STB     TEMP
06175  0 76 23437              LDA     TEMP
06176  0 50 23447              SKE     =0
06177  0 01 06201              BRU     **2             OK, SKIP
06200  0 43 00460              BRM     ERROR           NO,ERROR
06201  0 20 20703              NOP     M6
06202  0 43 00434              BRM     END             LOOP IF BP1 SET
```



```
                                REM     23D14=P31
06203  0 43 00430  87           BRM     OBJECT          START OBJECT TEST
06204  0 75 23460              LDB     =77777777
06205  0 76 23447              LDA     =0
06206  0 46 00010              CBA
06207  0 50 23447              SKE     =0
06210  0 01 06212              BRU     **2             OK, SKIP
06211  0 43 00460              BRM     ERROR           NO,ERROR
06212  0 20 20706              NOP     M7
06213  0 43 00434              BRM     END             LOOP IF BP1 SET
                                REM     23D20,24D42=P31
06214  0 43 00430  88           BRM     OBJECT          START OBJECT TEST
06215  0 71 23460              LDX     =77777777
06216  0 76 23446              LDA     =11111111
06217  0 46 00200              CXA
06220  0 50 23447              SKE     =0
06221  0 01 06223              BRU     **2             OK, SKIP
06222  0 43 00460              BRM     ERROR           NO,ERROR
06223  0 20 20711              NOP     M8
06224  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
                        REM     25828=P31
06225  0 43 00430  09    BRM     OBJECT          START OBJECT TEST
06226  0 76 23514        LDA     =66666666
06227  0 71 23447        LDX     =0
06230  0 46 00200        CXA
06231  0 50 23460        SKE     =77777777
06232  0 01 06234        BRU     *+2             OK, SKIP
06233  0 43 00460        BRM     ERROR           NO,ERROR
06234  0 20 20716        NOP     M9
06235  0 43 00434        BRM     END             LOOP IF BP1 SET
                        REM     25835=P31
06236  0 43 00430  010   BRM     OBJECT          START OBJECT TEST
06237  0 71 23460        LDX     =77777777
06240  0 76 23446        LDA     =11111111
06241  0 46 00200        CXA
06242  0 50 23514        SKE     =66666666
06243  0 01 06245        BRU     *+2             OK, SKIP
06244  0 43 00460        BRM     ERROR           NO,ERROR
06245  0 20 20721        NOP     M10
06246  0 43 00434        BRM     END             LOOP IF BP1 SET
```



```
                        REM     21C11=P31
06247  0 43 00430  011   BRM     OBJECT          START OBJECT TEST
06250  0 71 23515        LDX     =50505050
06251  0 76 23516        LDA     =20202020
06252  0 46 00200        CXA
06253  0 50 23460        SKE     =77777777
06254  0 01 06256        BRU     *+2             OK, SKIP
06255  0 43 00460        BRM     ERROR           NO,ERROR
06256  0 20 20724        NOP     M11
06257  0 43 00434        BRM     END             LOOP IF BP1 SET
                        REM     21C8=P31
06260  0 43 00430  012   BRM     OBJECT          START OBJECT TEST
06261  0 71 23460        LDX     =77777777
06262  0 76 23516        LDA     =20202020
06263  0 46 00200        CXA
06264  0 50 23515        SKE     =50505050
06265  0 01 06267        BRU     *+2             OK, SKIP
06266  0 43 00460        BRM     ERROR           NO,ERROR
06267  0 20 20727        NOP     M12
06270  0 43 00434        BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0       01/15  03:01     PAGE 53
                             REM       21B12=P31
06271  0 43 00430   M13      BRM       OBJECT              START OBJECT TEST
06272  0 71 23517            LDX       =33333333
06273  0 76 23451            LDA       =44444444
06274  0 46 00200            CXA
06275  0 50 23460            SKE       =77777777
06276  0 01 06300            BRU       *+2                 OK, SKIP
06277  0 43 00460            BRM       ERROR               NO,ERROR
06300  0 20 20732            NOP       M13
06301  0 43 00434            BRM       END                 LOOP IF BP1 SET
                             REM       21B08=P31
06302  0 43 00430   M14      BRM       OBJECT              START OBJECT TEST
06303  0 71 23514            LDX       =66666666
06304  0 76 23446            LDA       =11111111
06305  0 46 00200            CXA
06306  0 50 23450            SKE       =22222222
06307  0 01 06311            BRU       *+2                 OK, SKIP
06310  0 43 00460            BRM       ERROR               NO,ERROR
06311  0 20 20735            NOP       M14
06312  0 43 00434            BRM       END                 LOOP IF BP1 SET
```

```
CPU0    TAP=3.0       01/15  03:01     PAGE 54
                             REM       21B31=P36
06313  0 43 00430   M15      BRM       OBJECT              START OBJECT TEST
06314  0 76 23446            LDA       =11111111
06315  0 75 23447            LDB       =0
06316  0 46 00004            CAB
06317  0 36 23437            STB       TEMP
06320  0 76 23437            LDA       TEMP
06321  0 50 23520            SKE       =55555555
06322  0 01 06324            BRU       *+2                 OK, SKIP
06323  0 43 00460            BRM       ERROR               NO,ERROR
06324  0 20 20740            NOP       M15
06325  0 43 00434            BRM       END                 LOOP IF BP1 SET
                             REM       21B32=P36
06326  0 43 00430   M16      BRM       OBJECT              START OBJECT TEST
06327  0 76 23520            LDA       =55555555
06330  0 75 23447            LDB       =0
06331  0 46 00004            CAB
06332  0 36 23437            STB       TEMP
06333  0 76 23437            LDA       TEMP
06334  0 50 23446            SKE       =11111111
06335  0 01 06337            BRU       *+2                 OK, SKIP
06336  0 43 00460            BRM       ERROR               NO,ERROR
06337  0 20 20743            NOP       M16
06340  0 43 00434            BRM       END                 LOOP IF BP1 SET
```

```
                                REM     21D12=P36
06341  0 43 00430  917          BRM     OBJECT          START OBJECT TEST
06342  0 71 23446                  LDX     =11111111
06343  0 75 23447                  LDB     =0
06344  0 46 00040                  CXB
06345  0 36 23437                  STB     TEMP
06346  0 76 23437                  LDA     TEMP
06347  0 50 23520                  SKE     =55555555
06350  0 01 06352                  BRU     *+2             OK, SKIP
06351  0 43 00460                  BRM     ERROR           NO,ERROR
06352  0 20 20746                  NOP     M17
06353  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                REM     21D8=P36
06354  0 43 00430  918          BRM     OBJECT          START OBJECT TEST
06355  0 71 23520                  LDX     =55555555
06356  0 75 23447                  LDB     =0
06357  0 46 00040                  CXB
06360  0 36 23437                  STB     TEMP
06361  0 76 23437                  LDA     TEMP
06362  0 50 23446                  SKE     =11111111
06363  0 01 06365                  BRU     *+2             OK, SKIP
06364  0 43 00460                  BRM     ERROR           NO,ERROR
06365  0 20 20751                  NOP     M18
06366  0 43 00434                  BRM     END             LOOP IF BP1 SET
```



```
                                REM     21C3=P36
06367  0 43 00430  919          BRM     OBJECT          START OBJECT TEST
06370  0 76 23520                  LDA     =55555555
06371  0 75 23447                  LDB     =0
06372  0 46 00004                  CAB
06373  0 36 23437                  STB     TEMP
06374  0 76 23437                  LDA     TEMP
06375  0 50 23460                  SKE     =77777777
06376  0 01 06400                  BRU     *+2             OK, SKIP
06377  0 43 00460                  BRM     ERROR           NO,ERROR
06400  0 20 20754                  NOP     M19
06401  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                REM     25C2=P36
06402  0 43 00430  920          BRM     OBJECT          START OBJECT TEST
06403  0 76 23460                  LDA     =77777777
06404  0 75 23447                  LDB     =0
06405  0 46 00004                  CAB
06406  0 36 23437                  STB     TEMP
06407  0 76 23437                  LDA     TEMP
06410  0 50 23520                  SKE     =55555555
06411  0 01 06413                  BRU     *+2             OK, SKIP
06412  0 43 00460                  BRM     ERROR           NO,ERROR
06413  0 20 20757                  NOP     M20
06414  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 57

                                   REM     25C38=P36
06415  0 43 00430   021    BRM     OBJECT          START OBJECT TEST
06416  0 71 23520          LDX     =55555555
06417  0 75 23447          LDB     =0
06420  0 46 00040          CXB
06421  0 36 23437          STB     TEMP
06422  0 76 23437          LDA     TEMP
06423  0 50 23460          SKE     =77777777
06424  0 01 06426          BRU     *+2
06425  0 43 00460          BRM     ERROR           NO,ERROR
06426  0 20 20762          NOP     M21
06427  0 43 00434          BRM     END             LOOP IF BP1 SET
                                   REM     25C36=P36
06430  0 43 00430   022    BRM     OBJECT          START OBJECT TEST
06431  0 71 23460          LDX     =77777777
06432  0 75 23447          LDB     =0
06433  0 46 00040          CXB
06434  0 36 23437          STB     TEMP
06435  0 76 23437          LDA     TEMP
06436  0 50 23520          SKE     =55555555
06437  0 01 06441          BRU     *+2             OK, SKIP
06440  0 43 00460          BRM     ERROR           NO,ERROR
06441  0 20 20765          NOP     M22
06442  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 58

                                   REM     25C14=P36
06443  0 43 00430   023    BRM     OBJECT          START OBJECT TEST
06444  0 76 23514          LDA     =66666666
06445  0 75 23447          LDB     =0
06446  0 46 00004          CAB
06447  0 36 23437          STB     TEMP
06450  0 76 23437          LDA     TEMP
06451  0 50 23460          SKE     =77777777
06452  0 01 06454          BRU     *+2             OK, SKIP
06453  0 43 00460          BRM     ERROR           NO,ERROR
06454  0 20 20770          NOP     M23
06455  0 43 00434          BRM     END             LOOP IF BP1 SET
                                   REM     25C18=P36
06456  0 43 00430   023A   BRM     OBJECT
06457  0 76 23460          LDA     =77777777
06460  0 75 23447          LDB     =0
06461  0 46 00004          CAB
06462  0 36 23437          STB     TEMP
06463  0 76 23437          LDA     TEMP
06464  0 50 23514          SKE     =66666666
06465  0 01 06467          BRU     *+2
06466  0 43 00460          BRM     ERROR
06467  0 20 20773          NOP     M23A
06470  0 43 00434          BRM     END
```

```
                                REM     25C28=P36
06471  0 43 00430  B24          BRM     OBJECT          START OBJECT TEST
06472  0 71 23514                LDX     =66666666
06473  0 75 23447                LDB     =0
06474  0 46 00040                CXB
06475  0 36 23437                STB     TEMP
06476  0 76 23437                LDA     TEMP
06477  0 50 23460                SKE     =77777777
06500  0 01 06502                BRU     *+2             OK, SKIP
06501  0 43 00460                BRM     ERROR           NO,ERROR
06502  0 20 20776                NOP     M24
06503  0 43 00434                BRM     END             LOOP IF BP1 SET
                                REM     31C22=P36
06504  0 43 00430  B25          BRM     OBJECT          START OBJECT TEST
06505  0 76 23460                LDA     =77777777
06506  0 75 23447                LDB     =0
06507  0 46 00004                CAB
06510  0 50 23447                SKE     =0
06511  0 01 06513                BRU     *+2             OK, SKIP
06512  0 43 00460                BRM     ERROR           NO,ERROR
06513  0 20 21001                NOP     M25
06514  0 43 00434                BRM     END             LOOP IF BP1 SET
```



```
                                REM     29D30=P36
06515  0 43 00430  B26          BRM     OBJECT          START OBJECT TEST
06516  0 76 23446                LDA     =11111111
06517  0 75 23514                LDB     =66666666
06520  0 46 00004                CAB
06521  0 36 23437                STB     TEMP
06522  0 76 23437                LDA     TEMP
06523  0 50 23460                SKE     =77777777
06524  0 01 06526                BRU     *+2             OK, SKIP
06525  0 43 00460                BRM     ERROR           NO,ERROR
06526  0 20 21004                NOP     M26
06527  0 43 00434                BRM     END             LOOP IF BP1 SET
                                REM     21D39=P36
06530  0 43 00430  B27          BRM     OBJECT          START OBJECT TEST
06531  0 75 23450                LDB     =22222222
06532  0 71 23520                LDX     =55555555
06533  0 46 00040                CXB
06534  0 36 23437                STB     TEMP
06535  0 76 23437                LDA     TEMP
06536  0 50 23447                SKE     =0
06537  0 01 06541                BRU     *+2             OK, SKIP
06540  0 43 00460                BRM     ERROR           NO,ERROR
06541  0 20 21007                NOP     M27
06542  0 43 00434                BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0        01/15  03101     PAGE 61

                              REM       29D32=P36
06543  0 43 00430  Ø28        BRM       ØBJECT              START ØBJECT TEST
06544  0 75 23450             LDB       =22222222
06545  0 71 23446             LDX       =11111111
06546  0 46 00040             CXB
06547  0 36 23437             STB       TEMP
06550  0 76 23437             LDA       TEMP
06551  0 50 23517             SKE       =33333333
06552  0 01 06554             BRU       *+2                 ØK, SKIP
06553  0 43 00460             BRM       ERRØR               NØ,ERRØR
06554  0 20 21012             NØP       M28
06555  0 43 00434             BRM       END                 LØØP IF BP1 SET
                              REM       24D9=P36
06556  0 43 00430  Ø29        BRM       ØBJECT              START ØBJECT TEST
06557  0 76 23460             LDA       =77777777
06560  0 75 23450             LDB       =22222222
06561  0 46 00004             CAB
06562  0 36 23437             STB       TEMP
06563  0 76 23437             LDA       TEMP
06564  0 50 23447             SKE       =0
06565  0 01 06567             BRU       *+2                 ØK, SKIP
06566  0 43 00460             BRM       ERRØR               NØ,ERRØR
06567  0 20 21015             NØP       M29
06570  0 43 00434             BRM       END                 LØØP IF BP1 SET
```

```
CPU0    TAP=3.0        01/15  03101     PAGE 62

                              REM       24B34=P46
06571  0 43 00430  Ø30        BRM       ØBJECT              START ØBJECT TEST
06572  0 76 23452             LDA       =00000001
06573  0 35 23437             STA       TEMP
06574  0 75 23462             LDB       =52525252
06575  0 60 23437             SKR       TEMP
06576  0 76 23437             LDA       TEMP
06577  0 50 23462             SKE       =52525252
06600  0 01 06602             BRU       *+2                 ØK, SKIP
06601  0 43 00460             BRM       ERRØR               NØ,ERRØR
06602  0 20 21020             NØP       M30
06603  0 43 00434             BRM       END                 LØØP IF BP1 SET
                              REM       24B38=P46
06604  0 43 00430  Ø31        BRM       ØBJECT              START ØBJECT TEST
06605  0 76 23450             LDA       =22222222
06606  0 35 23437             STA       TEMP
06607  0 75 23520             LDB       =55555555
06610  0 60 23437             SKR       TEMP
06611  0 76 23437             LDA       TEMP
06612  0 50 23460             SKE       =77777777
06613  0 01 06615             BRU       *+2                 ØK, SKIP
06614  0 43 00460             BRM       ERRØR               NØ,ERRØR
06615  0 20 21023             NØP       M31
06616  0 43 00434             BRM       END                 LØØP IF BP1 SET
```

```
                                REM     30D10=P36
06617  0 43 00430  P32          BRM     OBJECT          START OBJECT TEST
06620  0 75 23450                LDB     =22222222
06621  0 60 23437                SKR     TEMP
06622  0 36 23437                STB     TEMP
06623  0 76 23437                LDA     TEMP
06624  0 50 23447                SKE     =0
06625  0 01 06627                BRU     *+2             OK, SKIP
06626  0 43 00460                BRM     ERROR           NO,ERROR
06627  0 20 21026                NOP     M32
06630  0 43 00434                BRM     END             LOOP IF BP1 SET
                                REM     39C27=P31
06631  0 43 00430  P33          BRM     OBJECT          START OBJECT TEST
06632  0 76 23460                LDA     =77777777
06633  0 35 23437                STA     TEMP
06634  0 76 23446                LDA     =11111111
06635  0 62 23437                XMA     TEMP
06636  0 50 23447                SKE     =0
06637  0 01 06641                BRU     *+2             OK, SKIP
06640  0 43 00460                BRM     ERROR           NO,ERROR
06641  0 20 21031                NOP     M33
06642  0 43 00434                BRM     END             LOOP IF BP1 SET
```



```
                                REM     29C5=P46
06643  0 43 00430  P34          BRM     OBJECT          START OBJECT TEST
06644  0 76 23517                LDA     =33333333
06645  0 35 23437                STA     TEMP
06646  0 76 23446                LDA     =11111111
06647  0 62 23437                XMA     TEMP
06650  0 76 23437                LDA     TEMP
06651  0 50 23451                SKE     =44444444
06652  0 01 06654                BRU     *+2             OK, SKIP
06653  0 43 00460                BRM     ERROR           NO,ERROR
06654  0 20 21034                NOP     M34
06655  0 43 00434                BRM     END             LOOP IF BP1 SET
```

```
                                REM     ADDR
06656  0 43 00430  035          BRM     OBJECT          START OBJECT TEST
06657  0 76 23521                  LDA     =01010101
06660  0 55 23522                  ADD     =07172737
06661  0 50 23523                  SKE     =10203040
06662  0 43 00460                  BRM     ERROR           NO,ERROR
06663  0 20 22320                  NOP     MADDR
06664  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                REM     ADDR
06665  0 43 00430  036          BRM     OBJECT          START OBJECT TEST
06666  0 76 23521                  LDA     =01010101
06667  0 55 23524                  ADD     =47576777
06670  0 50 23525                  SKE     =50607100
06671  0 43 00460                  BRM     ERROR           NO,ERROR
06672  0 20 22320                  NOP     MADDR
06673  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                REM     ADDR
06674  0 43 00430  037          BRM     OBJECT          START OBJECT TEST
06675  0 76 23446                  LDA     =11111111
06676  0 55 23522                  ADD     =07172737
06677  0 50 23526                  SKE     =20304050
06700  0 43 00460                  BRM     ERROR           NO,ERROR
06701  0 20 22320                  NOP     MADDR
06702  0 43 00434                  BRM     END             LOOP IF BP1 SET
```



```
                                REM     ADDR
06703  0 43 00430  038          BRM     OBJECT          START OBJECT TEST
06704  0 76 23446                  LDA     =11111111
06705  0 55 23524                  ADD     =47576777
06706  0 50 23527                  SKE     =60710110
06707  0 43 00460                  BRM     ERROR           NO,ERROR
06710  0 20 22320                  NOP     MADDR
06711  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                REM     ADDR
06712  0 43 00430  039          BRM     OBJECT          START OBJECT TEST
06713  0 76 23530                  LDA     =21212121
06714  0 55 23522                  ADD     =07172737
06715  0 50 23531                  SKE     =30405060
06716  0 43 00460                  BRM     ERROR           NO,ERROR
06717  0 20 22320                  NOP     MADDR
06720  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                REM     ADDR
06721  0 43 00430  040          BRM     OBJECT          START OBJECT TEST
06722  0 76 23530                  LDA     =21212121
06723  0 55 23524                  ADD     =47576777
06724  0 50 23532                  SKE     =71011120
06725  0 43 00460                  BRM     ERROR           NO,ERROR
06726  0 20 22320                  NOP     MADDR
06727  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                        REM     ADDR
06730  0 43 00430  941  BRM     OBJECT      START OBJECT TEST
06731  0 76 23533       LDA     =31313131
06732  0 55 23522       ADD     =07172737
06733  0 50 23534       SKE     =40506070
06734  0 43 00460       BRM     ERROR       NO,ERROR
06735  0 20 22320       NOP     MADDR
06736  0 43 00434       BRM     END         LOOP IF BP1 SET
                        REM     ADDR
06737  0 43 00430  942  BRM     OBJECT      START OBJECT TEST
06740  0 76 23533       LDA     =31313131
06741  0 55 23524       ADD     =47576777
06742  0 50 23535       SKE     =01112130
06743  0 43 00460       BRM     ERROR       NO,ERROR
06744  0 20 22320       NOP     MADDR
06745  0 43 00434       BRM     END         LOOP IF BP1 SET
                        REM     ADDR
06746  0 43 00430  943  BRM     OBJECT      START OBJECT TEST
06747  0 76 23536       LDA     =41414141
06750  0 55 23522       ADD     =07172737
06751  0 50 23525       SKE     =50607100
06752  0 43 00460       BRM     ERROR       NO,ERROR
06753  0 20 22320       NOP     MADDR
06754  0 43 00434       BRM     END         LOOP IF BP1 SET
```



```
                        REM     ADDR
06755  0 43 00430  944  BRM     OBJECT      START OBJECT TEST
06756  0 76 23536       LDA     =41414141
06757  0 55 23524       ADD     =47576777
06760  0 50 23537       SKE     =11213140
06761  0 43 00460       BRM     ERROR       NO,ERROR
06762  0 20 22320       NOP     MADDR
06763  0 43 00434       BRM     END         LOOP IF BP1 SET
                        REM     ADDR
06764  0 43 00430  945  BRM     OBJECT      START OBJECT TEST
06765  0 76 23540       LDA     =51515151
06766  0 55 23522       ADD     =07172737
06767  0 50 23527       SKE     =60710110
06770  0 43 00460       BRM     ERROR       NO,ERROR
06771  0 20 22320       NOP     MADDR
06772  0 43 00434       BRM     END         LOOP IF BP1 SET
                        REM     ADDR
06773  0 43 00430  946  BRM     OBJECT      START OBJECT TEST
06774  0 76 23540       LDA     =51515151
06775  0 55 23524       ADD     =47576777
06776  0 50 23541       SKE     =21314150
06777  0 43 00460       BRM     ERROR       NO,ERROR
07000  0 20 22320       NOP     MADDR
07001  0 43 00434       BRM     END         LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 69

                                   REM     ADDR
07002  0 43 00430   847     BRM     OBJECT          START OBJECT TEST
07003  0 76 23542             LDA     =61616161
07004  0 55 23522             ADD     =07172737
07005  0 50 23532             SKE     =71011120
07006  0 43 00460             BRM     ERROR           NO,ERROR
07007  0 20 22320             NOP     MADDR
07010  0 43 00434             BRM     END             LOOP IF BP1 SET
                                   REM     ADDR
07011  0 43 00430   848     BRM     OBJECT          START OBJECT TEST
07012  0 76 23542             LDA     =61616161
07013  0 55 23524             ADD     =47576777
07014  0 50 23543             SKE     =31415160
07015  0 43 00460             BRM     ERROR           NO,ERROR
07016  0 20 22320             NOP     MADDR
07017  0 43 00434             BRM     END             LOOP IF BP1 SET
                                   REM     ADDR
07020  0 43 00430   849     BRM     OBJECT          START OBJECT TEST
07021  0 76 23544             LDA     =71717171
07022  0 55 23522             ADD     =07172737
07023  0 50 23535             SKE     =01112130
07024  0 43 00460             BRM     ERROR           NO,ERROR
07025  0 20 22320             NOP     MADDR
07026  0 43 00434             BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 70

                                   REM     ADDR
07027  0 43 00430   850     BRM     OBJECT          START OBJECT TEST
07030  0 76 23544             LDA     =71717171
07031  0 55 23524             ADD     =47576777
07032  0 50 23545             SKE     =41516170
07033  0 43 00460             BRM     ERROR           NO,ERROR
07034  0 20 22320             NOP     MADDR
07035  0 43 00434             BRM     END             LOOP IF BP1 SET
                                   REM     ADDR
07036  0 43 00430   851     BRM     OBJECT          START OBJECT TEST
07037  0 76 23546             LDA     =10101010
07040  0 55 23547             ADD     =00112233
07041  0 50 23550             SKE     =10213243
07042  0 43 00460             BRM     ERROR           NO,ERROR
07043  0 20 22320             NOP     MADDR
07044  0 43 00434             BRM     END             LOOP IF BP1 SET
                                   REM     ADDR
07045  0 43 00430   852     BRM     OBJECT          START OBJECT TEST
07046  0 76 23546             LDA     =10101010
07047  0 55 23551             ADD     =44556677
07050  0 50 23552             SKE     =54657707
07051  0 43 00460             BRM     ERROR           NO,ERROR
07052  0 20 22320             NOP     MADDR
07053  0 43 00434             BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.0      01/15  03101    PAGE 71

                            REM      ADDR
07054  0 43 00430   853     BRM      OBJECT            START OBJECT TEST
07055  0 76 23516           LDA      =20202020
07056  0 55 23547           ADD      =00112233
07057  0 50 23553           SKE      =20314253
07060  0 43 00460           BRM      ERROR             NO,ERROR
07061  0 20 22320           NOP      MADDR
07062  0 43 00434           BRM      END               LOOP IF BP1 SET
                            REM      ADDR
07063  0 43 00430   854     BRM      OBJECT            START OBJECT TEST
07064  0 76 23516           LDA      =20202020
07065  0 55 23551           ADD      =44556677
07066  0 50 23554           SKE      =64760717
07067  0 43 00460           BRM      ERROR             NO,ERROR
07070  0 20 22320           NOP      MADDR
07071  0 43 00434           BRM      END               LOOP IF BP1 SET
                            REM      ADDR
07072  0 43 00430   855     BRM      OBJECT            START OBJECT TEST
07073  0 76 23555           LDA      =30303030
07074  0 55 23547           ADD      =00112233
07075  0 50 23556           SKE      =30415263
07076  0 43 00460           BRM      ERROR             NO,ERROR
07077  0 20 22320           NOP      MADDR
07100  0 43 00434           BRM      END               LOOP IF BP1 SET
```

```
CPU0    TAP-3.0      01/15  03101    PAGE 72

                            REM      ADDR
07101  0 43 00430   856     BRM      OBJECT            START OBJECT TEST
07102  0 76 23555           LDA      =30303030
07103  0 55 23551           ADD      =44556677
07104  0 50 23557           SKE      =75061727
07105  0 43 00460           BRM      ERROR             NO,ERROR
07106  0 20 22320           NOP      MADDR
07107  0 43 00434           BRM      END               LOOP IF BP1 SET
                            REM      ADDR
07110  0 43 00430   857     BRM      OBJECT            START OBJECT TEST
07111  0 76 23560           LDA      =40404040
07112  0 55 23547           ADD      =00112233
07113  0 50 23561           SKE      =40516273
07114  0 43 00460           BRM      ERROR             NO,ERROR
07115  0 20 22320           NOP      MADDR
07116  0 43 00434           BRM      END               LOOP IF BP1 SET
                            REM      ADDR
07117  0 43 00430   858     BRM      OBJECT            START OBJECT TEST
07120  0 76 23560           LDA      =40404040
07121  0 55 23551           ADD      =44556677
07122  0 50 23504           SKE      =05162737
07123  0 43 00460           BRM      ERROR             NO,ERROR
07124  0 20 22320           NOP      MADDR
07125  0 43 00434           BRM      END               LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 73

                             REM     ADDR
07126   0 43 00430   059     BRM     OBJECT          START OBJECT TEST
07127   0 76 23515           LDA     =50505050
07130   0 55 23547           ADD     =00112233
07131   0 50 23562           SKE     =50617303
07132   0 43 00460           BRM     ERROR           NO,ERROR
07133   0 20 22320           NOP     MADDR
07134   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     ADDR
07135   0 43 00430   060     BRM     OBJECT          START OBJECT TEST
07136   0 76 23515           LDA     =50505050
07137   0 55 23551           ADD     =44556677
07140   0 50 23563           SKE     =15263747
07141   0 43 00460           BRM     ERROR           NO,ERROR
07142   0 20 22320           NOP     MADDR
07143   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     ADDR
07144   0 43 00430   061     BRM     OBJECT          START OBJECT TEST
07145   0 76 23564           LDA     =60606060
07146   0 55 23547           ADD     =00112233
07147   0 50 23565           SKE     =60720313
07150   0 43 00460           BRM     ERROR           NO,ERROR
07151   0 20 22320           NOP     MADDR
07152   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 74

                             REM     ADDR
07153   0 43 00430   062     BRM     OBJECT          START OBJECT TEST
07154   0 76 23564           LDA     =60606060
07155   0 55 23551           ADD     =44556677
07156   0 50 23566           SKE     =25364757
07157   0 43 00460           BRM     ERROR           NO,ERROR
07160   0 20 22320           NOP     MADDR
07161   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     ADDR
07162   0 43 00430   063     BRM     OBJECT          START OBJECT TEST
07163   0 76 23467           LDA     =70707070
07164   0 55 23547           ADD     =00112233
07165   0 50 23567           SKE     =71021323
07166   0 43 00460           BRM     ERROR           NO,ERROR
07167   0 20 22320           NOP     MADDR
07170   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     ADDR
07171   0 43 00430   064     BRM     OBJECT          START OBJECT TEST
07172   0 76 23467           LDA     =70707070
07173   0 55 23551           ADD     =44556677
07174   0 50 23570           SKE     =35465767
07175   0 43 00460           BRM     ERROR           NO,ERROR
07176   0 20 22320           NOP     MADDR
07177   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
                        REM     31B42,24D13=P31
07200  0 43 00430  865   BRM     OBJECT          START OBJECT TEST
07201  0 76 23467        LDA     =70707070
07202  0 55 23521        ADD     =01010101
07203  0 50 23447        SKE     =0
07204  0 01 07206        BRU     *+2             OK, SKIP
07205  0 43 00460        BRM     ERROR           NO,ERROR
07206  0 20 21037        NOP     M35
07207  0 43 00434        BRM     END             LOOP IF BP1 SET
                        REM     2582=P31
07210  0 43 00430  866   BRM     OBJECT          START OBJECT TEST
07211  0 76 23514        LDA     =66666666
07212  0 55 23446        ADD     =11111111
07213  0 50 23514        SKE     =66666666
07214  0 01 07216        BRU     *+2             OK, SKIP
07215  0 43 00460        BRM     ERROR           NO,ERROR
07216  0 20 21044        NOP     M36
07217  0 43 00434        BRM     END             LOOP IF BP1 SET
```



```
                        REM     25B20=P31
07220  0 43 00430  867   BRM     OBJECT          START OBJECT TEST
07221  0 76 23520        LDA     =55555555
07222  0 55 23446        ADD     =11111111
07223  0 50 23460        SKE     =77777777
07224  0 01 07226        BRU     *+2             OK, SKIP
07225  0 43 00460        BRM     ERROR           NO,ERROR
07226  0 20 21047        NOP     M37
07227  0 43 00434        BRM     END             LOOP IF BP1 SET
                        REM     23D16=P31
07230  0 43 00430  868   BRM     OBJECT          START OBJECT TEST
07231  0 71 23447        LDX     =0
07232  0 76 23546        LDA     =10101010
07233  0 57 23555        ADC     =30303030
07234  0 50 23564        SKE     =60606060
07235  0 01 07237        BRU     *+2             OK, SKIP
07236  0 43 00460        BRM     ERROR           NO,ERROR
07237  0 20 21052        NOP     M38
07240  0 43 00434        BRM     END             LOOP IF BP1 SET
```

```
                                REM     21829=P31
07241  0 43 00430  869          BRM     OBJECT          START OBJECT TEST
07242  0 76 23460                LDA     =77777777
07243  0 55 23452                ADD     =1
07244  0 50 23451                SKE     =44444444
07245  0 01 07247                BRU     *+2             OK, SKIP
07246  0 43 00460                BRM     ERROR           NO,ERROR
07247  0 20 21055                NOP     M39
07250  0 43 00434                BRM     END             LOOP IF BP1 SET
                                REM     21828=P31
07251  0 43 00430  870          BRM     OBJECT          START OBJECT TEST
07252  0 76 23447                LDA     =00000000
07253  0 55 23460                ADD     =-1
07254  0 50 23417                SKE     =33333333
07255  0 01 07257                BRU     *+2             OK, SKIP
07256  0 43 00460                BRM     ERROR           NO,ERROR
07257  0 20 21060                NOP     M40
07260  0 43 00434                BRM     END             LOOP IF BP1 SET
```



```
                                REM     31842=P31
07261  0 43 00430  871          BRM     OBJECT          START OBJECT TEST
07262  0 76 23517                LDA     =33333333
07263  0 55 23451                ADD     =44444444
07264  0 50 23447                SKE     =00000000
07265  0 01 07267                BRU     *+2             OK, SKIP
07266  0 43 00460                BRM     ERROR           NO,ERROR
07267  0 20 21063                NOP     M41
07270  0 43 00434                BRM     END             LOOP IF BP1 SET
                                REM     39C27=P31
07271  0 43 00430  872          BRM     OBJECT          START OBJECT TEST
07272  0 76 23517                LDA     =33333333
07273  0 35 23437                STA     TEMP
07274  0 76 23451                LDA     =44444444
07275  0 63 23437                ADM     TEMP
07276  0 50 23460                SKE     =77777777
07277  0 01 07301                BRU     *+2             OK, SKIP
07300  0 43 00460                BRM     ERROR           NO,ERROR
07301  0 20 21066                NOP     M42
07302  0 43 00434                BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 79

                            REM     31B42=P31
07303  0 43 00430   873    BRM     OBJECT          START OBJECT TEST
07304  0 76 23517           LDA     =33333333
07305  0 55 23446           ADD     =11111111
07306  0 50 23447           SKE     =00000000
07307  0 01 07311           BRU     *+2             OK, SKIP
07310  0 43 00460           BRM     ERROR           NO,ERROR
07311  0 20 21071           NOP     M43
07312  0 43 00434           BRM     END             LOOP IF BP1 SET
                            REM     23D16=P31
07313  0 43 00430   874    BRM     OBJECT          START OBJECT TEST
07314  0 76 23517           LDA     =33333333
07315  0 71 23447           LDX     =0
07316  0 57 23446           ADC     =11111111
07317  0 50 23514           SKE     =66666666
07320  0 01 07322           BRU     *+2             OK, SKIP
07321  0 43 00460           BRM     ERROR           NO,ERROR
07322  0 20 21074           NOP     M44
07323  0 43 00434           BRM     END             LOOP IF BP1 SET
```

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CPU0   TAP=3,0      01/15  03101   PAGE 80

                            REM     21C28=P31
07324  0 43 00430   875    BRM     OBJECT          START OBJECT TEST
07325  0 76 23447           LDA     =00000000
07326  0 55 23460           ADD     =+1
07327  0 50 23520           SKE     =55555555
07330  0 01 07332           BRU     *+2             OK, SKIP
07331  0 43 00460           BRM     ERROR           NO,ERROR
07332  0 20 21077           NOP     M45
07333  0 43 00434           BRM     END             LOOP IF BP1 SET
                            REM     29C15=P46
07334  0 43 00430   876    BRM     OBJECT          START OBJECT TEST
07335  0 76 23520           LDA     =55555555
07336  0 35 23437           STA     TEMP
07337  0 76 23446           LDA     =11111111
07340  0 63 23437           ADM     TEMP
07341  0 76 23437           LDA     TEMP
07342  0 50 23447           SKE     =0
07343  0 01 07345           BRU     *+2             OK, SKIP
07344  0 43 00460           BRM     ERROR           NO,ERROR
07345  0 20 21102           NOP     M46
07346  0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 81

                             REM     24D9=P4
07347   0 43 00430   877     BRM     OBJECT          START OBJECT TEST
07350   0 76 23452           LDA     =00000001
07351   0 35 23437           STA     TEMP
07352   0 76 23571           LDA     =37777776
07353   0 54 23437           SUB     TEMP
07354   0 50 23466           SKE     =40000000
07355   0 01 07357           BRU     *+2             OK, SKIP
07356   0 43 00460           BRM     ERROR           NO,ERROR
07357   0 20 21105           NOP     M47
07360   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     24D21=P49
07361   0 43 00430   878     BRM     OBJECT          START OBJECT TEST
07362   0 76 23452           LDA     =00000001
07363   0 35 23437           STA     TEMP
07364   0 76 23572           LDA     =30000001
07365   0 54 23437           SUB     TEMP
07366   0 50 23573           SKE     =27777777
07367   0 01 07371           BRU     *+2             OK, SKIP
07370   0 43 00460           BRM     ERROR           NO,ERROR
07371   0 20 21110           NOP     M48
07372   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 82

                             REM     30B16=P31
07373   0 43 00430   879     BRM     OBJECT          START OBJECT TEST
07374   0 76 23451           LDA     =44444444
07375   0 54 23517           SUB     =33333333
07376   0 50 23517           SKE     =33333333
07377   0 01 07401           BRU     *+2             OK, SKIP
07400   0 43 00460           BRM     ERROR           NO,ERROR
07401   0 20 21113           NOP     M49
07402   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     25D12=P31
07403   0 43 00430   880     BRM     OBJECT          START OBJECT TEST
07404   0 76 23450           LDA     =22222222
07405   0 46 01000           CNA
07406   0 50 23447           SKE     =0
07407   0 01 07411           BRU     *+2             OK, SKIP
07410   0 43 00460           BRM     ERROR           NO,ERROR
07411   0 20 21116           NOP     M50
07412   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 83

                           REM     22C43=P31
07413  0 43 00430   881    BRM     OBJECT          START OBJECT TEST
07414  0 76 23460          LDA     =77777777
07415  0 46 01000          CNA
07416  0 50 23447          SKE     =0
07417  0 01 07421          BRU     **2             OK, SKIP
07420  0 43 00460          BRM     ERROR           NO,ERROR
07421  0 20 21121          NOP     M51
07422  0 43 00434          BRM     END             LOOP IF BP1 SET
                           REM     25B30=P31
07423  0 43 00430   882    BRM     OBJECT          START OBJECT TEST
07424  0 76 23574          LDA     =11111110
07425  0 46 01000          CNA
07426  0 50 23575          SKE     =77777771
07427  0 01 07431          BRU     **2             OK, SKIP
07430  0 43 00460          BRM     ERROR           NO,ERROR
07431  0 20 21124          NOP     M52
07432  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 84

                           REM     25B32=P31
07433  0 43 00430   883    BRM     OBJECT          START OBJECT TEST
07434  0 76 23446          LDA     =11111111
07435  0 46 01000          CNA
07436  0 50 23514          SKE     =66666666
07437  0 01 07441          BRU     **2             OK, SKIP
07440  0 43 00460          BRM     ERROR           NO,ERROR
07441  0 20 21127          NOP     M53
07442  0 43 00434          BRM     END             LOOP IF BP1 SET
                           REM     21C21=P31
07443  0 43 00430   884    BRM     OBJECT          START OBJECT TEST
07444  0 76 23517          LDA     =33333333
07445  0 46 01000          CNA
07446  0 50 23576          SKE     =66666667
07447  0 01 07451          BRU     **2             OK, SKIP
07450  0 43 00460          BRM     ERROR           NO,ERROR
07451  0 20 21132          NOP     M54
07452  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 85

                                   REM     21C23=P31
07453  0 43 00430   885            BRM     OBJECT          START OBJECT TEST
07454  0 76 23520                  LDA     =55555555
07455  0 46 01000                  CNA
07456  0 50 23452                  SKE     =00000001
07457  0 01 07461                  BRU     *+2             OK, SKIP
07460  0 43 00460                  BRM     ERROR           NO,ERROR
07461  0 20 21135                  NOP     M55
07462  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                   REM     21C22=P31
07463  0 43 00430   886            BRM     OBJECT          START OBJECT TEST
07464  0 76 23517                  LDA     =33333333
07465  0 46 01000                  CNA
07466  0 50 23452                  SKE     =1
07467  0 01 07471                  BRU     *+2
07470  0 43 00460                  BRM     ERROR           NO,ERROR
07471  0 20 21140                  NOP     M56
07472  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 86

                                   REM     21C26=P31
07473  0 43 00430   887            BRM     OBJECT          START OBJECT TEST
07474  0 76 23514                  LDA     =66666666
07475  0 46 01000                  CNA
07476  0 50 23577                  SKE     =55555556
07477  0 01 07501                  BRU     *+2             OK, SKIP
07500  0 43 00460                  BRM     ERROR           NO,ERROR
07501  0 20 21143                  NOP     M57
07502  0 43 00434                  BRM     END             LOOP IF BP1 SET
07503  0 01 10000                  BRU     888
       77770274    DUMMY  EQU     ZERO+*
07504      00274                   BSS     DUMMY(AND)3777
                                   REM     20D=P46
10000  0 43 00430   888            BRM     OBJECT          START OBJECT TEST
10001  0 76 23447                  LDA     =0
10002  0 71 23447                  LDX     =0
10003  0 56 23447                  SUC     =0
10004  0 72 23600                  SKA     =40000000
10005  0 01 10007                  BRU     *+2             OK, SKIP
10006  0 43 00460                  BRM     ERROR           NO,ERROR
10007  0 20 21146                  NOP     M58
10010  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                                    REM     26D=P46
10011  0 43 00430  M89              BRM     OBJECT          START OBJECT TEST
10012  0 76 23447                   LDA     =0
10013  0 71 23447                   LDX     =0
10014  0 56 23447                   SUC     =0
10015  0 72 23445                   SKA     =10000000
10016  0 01 10020                   BRU     *+2             OK, SKIP
10017  0 43 00460                   BRM     ERROR           NO,ERROR
10020  0 20 21151                   NOP     M59
10021  0 43 00434                   BRM     END             LOOP IF BP1 SET
                                    REM     13DP47
10022  0 43 00430  M90              BRM     OBJECT          START OBJECT TEST
10023  0 76 23447                   LDA     =0
10024  0 71 23447                   LDX     =0
10025  0 56 23447                   SUC     =0
10026  0 72 23601                   SKA     =06000000
10027  0 01 10031                   BRU     *+2             OK, SKIP
10030  0 43 00460                   BRM     ERROR           NO,ERROR
10031  0 20 21154                   NOP     M60
10032  0 43 00434                   BRM     END             LOOP IF BP1 SET
```



```
                                    REM     16D=P47
10033  0 43 00430  M91              BRM     OBJECT          START OBJECT TEST
10034  0 76 23447                   LDA     =0
10035  0 71 23447                   LDX     =0
10036  0 56 23447                   SUC     =0
10037  0 72 23602                   SKA     =01000000
10040  0 01 10042                   BRU     *+2             OK, SKIP
10041  0 43 00460                   BRM     ERROR           NO,ERROR
10042  0 20 21156                   NOP     M61
10043  0 43 00434                   BRM     END             LOOP IF BP1 SET
                                    REM     7D=P47
10044  0 43 00430  M92              BRM     OBJECT          START OBJECT TEST
10045  0 76 23447                   LDA     =0
10046  0 71 23447                   LDX     =0
10047  0 56 23447                   SUC     =0
10050  0 72 23603                   SKA     =00600000
10051  0 01 10053                   BRU     *+2             OK, SKIP
10052  0 43 00460                   BRM     ERROR           NO,ERROR
10053  0 20 21161                   NOP     M62
10054  0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 89

                                   REM     10D=P47
10055  0 43 00430   893    BRM     OBJECT          START OBJECT TEST
10056  0 76 23447          LDA     =0
10057  0 71 23447          LDX     =0
10060  0 56 23447          SUC     =0
10061  0 72 23604          SKA     =00100000
10062  0 01 10064          BRU     **2             OK, SKIP
10063  0 43 00460          BRM     ERROR           NO,ERROR
10064  0 20 21163          NOP     M63
10065  0 43 00434          BRM     END             LOOP IF BP1 SET
                           REM     1D=P47
10066  0 43 00430   894    BRM     OBJECT          START OBJECT TEST
10067  0 76 23447          LDA     =0
10070  0 71 23447          LDX     =0
10071  0 56 23447          SUC     =0
10072  0 72 23605          SKA     =00060000
10073  0 01 10075          BRU     **2             OK, SKIP
10074  0 43 00460          BRM     ERROR           NO,ERROR
10075  0 20 21166          NOP     M64
10076  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 90

                                   REM     4D=P47,P48
10077  0 43 00430   895    BRM     OBJECT          START OBJECT TEST
10100  0 76 23447          LDA     =0
10101  0 71 23447          LDX     =0
10102  0 56 23447          SUC     =0
10103  0 72 23606          SKA     =00014000
10104  0 01 10106          BRU     **2             OK, SKIP
10105  0 43 00460          BRM     ERROR           NO,ERROR
10106  0 20 21170          NOP     M65
10107  0 43 00434          BRM     END             LOOP IF BP1 SET
                           REM     6D=P48
10110  0 43 00430   896    BRM     OBJECT          START OBJECT TEST
10111  0 76 23447          LDA     =0
10112  0 71 23447          LDX     =0
10113  0 56 23447          SUC     =0
10114  0 72 23607          SKA     =00003000
10115  0 01 10117          BRU     **2             OK, SKIP
10116  0 43 00460          BRM     ERROR           NO,ERROR
10117  0 20 21173          NOP     M66
10120  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 91

                                   REM     10D=P48
10121  0 43 00430   897    BRM     OBJECT          START OBJECT TEST
10122  0 76 23447          LDA     =0
10123  0 71 23447          LDX     =0
10124  0 56 23447          SUC     =0
10125  0 72 23610          SKA     =00000400
10126  0 01 10130          BRU     *+2             OK, SKIP
10127  0 43 00460          BRM     ERROR           NO,ERROR
10130  0 20 21175          NOP     M67
10131  0 43 00434          BRM     END             LOOP IF BP1 SET
                           REM     12D=P48
10132  0 43 00430   898    BRM     OBJECT          START OBJECT TEST
10133  0 76 23447          LDA     =0
10134  0 71 23447          LDX     =0
10135  0 56 23447          SUC     =0
10136  0 72 23611          SKA     =00000300
10137  0 01 10141          BRU     *+2             OK, SKIP
10140  0 43 00460          BRM     ERROR           NO,ERROR
10141  0 20 21200          NOP     M68
10142  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 92

                                   REM     16D=P48
10143  0 43 00430   899    BRM     OBJECT          START OBJECT TEST
10144  0 76 23447          LDA     =0
10145  0 71 23447          LDX     =0
10146  0 56 23447          SUC     =0
10147  0 72 23612          SKA     =00000040
10150  0 01 10152          BRU     *+2             OK, SKIP
10151  0 43 00460          BRM     ERROR           NO,ERROR
10152  0 20 21203          NOP     M69
10153  0 43 00434          BRM     END             LOOP IF BP1 SET
                           REM     18D=P48
10154  0 43 00430   8100   BRM     OBJECT          START OBJECT TEST
10155  0 76 23447          LDA     =0
10156  0 71 23447          LDX     =0
10157  0 56 23447          SUC     =0
10160  0 72 23613          SKA     =00000030
10161  0 01 10163          BRU     *+2             OK, SKIP
10162  0 43 00460          BRM     ERROR           NO,ERROR
10163  0 20 21206          NOP     M70
10164  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                                  REM     26D=P49
10165  0 43 00430  0101   BRM     OBJECT          START OBJECT TEST
10166  0 76 23447          LDA     =0
10167  0 71 23447          LDX     =0
10170  0 56 23447          SUC     =0
10171  0 72 23454          SKA     =00000004
10172  0 01 10174          BRU     *+2             OK, SKIP
10173  0 43 00460          BRM     ERROR           NO,ERROR
10174  0 20 21211          NOP     M71
10175  0 43 00434          BRM     END             LOOP IF BP1 SET
                                  REM     31D=P49
10176  0 43 00430  0102   BRM     OBJECT          START OBJECT TEST
10177  0 76 23447          LDA     =0
10200  0 71 23447          LDX     =0
10201  0 56 23447          SUC     =0
10202  0 72 23614          SKA     =00000003
10203  0 01 10205          BRU     *+2             OK, SKIP
10204  0 43 00460          BRM     ERROR           NO,ERROR
10205  0 20 21214          NOP     M72
10206  0 43 00434          BRM     END             LOOP IF BP1 SET
```



```
                                  REM     20D=P46
10207  0 43 00430  0103   BRM     OBJECT          START OBJECT TEST
10210  0 76 23447          LDA     =0
10211  0 71 23447          LDX     =0
10212  0 56 23460          SUC     =-1
10213  0 20 00000          NOP     0
10214  0 72 23600          SKA     =60000000
10215  0 43 00460          BRM     ERROR           NO,ERROR
10216  0 20 21217          NOP     M73
10217  0 43 00434          BRM     END             LOOP IF BP1 SET
                                  REM     26D=P46
10220  0 43 00430  0104   BRM     OBJECT          START OBJECT TEST
10221  0 76 23447          LDA     =0
10222  0 71 23447          LDX     =0
10223  0 56 23460          SUC     =-1
10224  0 20 00000          NOP     0
10225  0 72 23445          SKA     =10000000
10226  0 43 00460          BRM     ERROR           NO,ERROR
10227  0 20 21222          NOP     M74
10230  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                                REM     13DP47
10231  0 43 00430  0105         BRM     OBJECT          START OBJECT TEST
10232  0 76 23447               LDA     =0
10233  0 71 23447               LDX     =0
10234  0 56 23460               SUC     =-1
10235  0 20 00000               NOP     0
10236  0 72 23601               SKA     =06000000
10237  0 43 00460               BRM     ERROR           NO,ERROR
10240  0 20 21225               NOP     M75
10241  0 43 00434               BRM     END             LOOP IF BP1 SET
                                REM     16D=P47
10242  0 43 00430  0106         BRM     OBJECT          START OBJECT TEST
10243  0 76 23447               LDA     =0
10244  0 71 23447               LDX     =0
10245  0 56 23460               SUC     =-1
10246  0 20 00000               NOP     0
10247  0 72 23402               SKA     =01000000
10250  0 43 00460               BRM     ERROR           NO,ERROR
10251  0 20 21227               NOP     M76
10252  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     7D=P47
10253  0 43 00430  0107         BRM     OBJECT          START OBJECT TEST
10254  0 76 23447               LDA     =0
10255  0 71 23447               LDX     =0
10256  0 56 23460               SUC     =-1
10257  0 20 00000               NOP     0
10260  0 72 23603               SKA     =00600000
10261  0 43 00460               BRM     ERROR           NO,ERROR
10262  0 20 21232               NOP     M77
10263  0 43 00434               BRM     END             LOOP IF BP1 SET
                                REM     10D=P47
10264  0 43 00430  0108         BRM     OBJECT          START OBJECT TEST
10265  0 76 23447               LDA     =0
10266  0 71 23447               LDX     =0
10267  0 56 23460               SUC     =-1
10270  0 20 00000               NOP     0
10271  0 72 23604               SKA     =00100000
10272  0 43 00460               BRM     ERROR           NO,ERROR
10273  0 20 21234               NOP     M78
10274  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 97

                                   REM     1D=P47
10275  0 43 00430   0109           BRM     OBJECT          START OBJECT TEST
10276  0 76 23447                  LDA     =0
10277  0 71 23447                  LDX     =0
10300  0 56 23460                  SUC     =-1
10301  0 20 00000                  NOP     0
10302  0 72 23605                  SKA     =00060000
10303  0 43 00460                  BRM     ERROR           NO,ERROR
10304  0 20 21237                  NOP     M79
10305  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                   REM     4D=P47,P48
10306  0 43 00430   0110           BRM     OBJECT          START OBJECT TEST
10307  0 76 23447                  LDA     =0
10310  0 71 23447                  LDX     =0
10311  0 56 23460                  SUC     =-1
10312  0 20 00000                  NOP     0
10313  0 72 23606                  SKA     =00014000
10314  0 43 00460                  BRM     ERROR           NO,ERROR
10315  0 20 21241                  NOP     M80
10316  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 98

                                   REM     6D=P48
10317  0 43 00430   0111           BRM     OBJECT          START OBJECT TEST
10320  0 76 23447                  LDA     =0
10321  0 71 23447                  LDX     =0
10322  0 56 23460                  SUC     =-1
10323  0 20 00000                  NOP     0
10324  0 72 23607                  SKA     =00003000
10325  0 43 00460                  BRM     ERROR           NO,ERROR
10326  0 20 21244                  NOP     M81
10327  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                   REM     1D=P48
10330  0 43 00430   0112           BRM     OBJECT          START OBJECT TEST
10331  0 76 23447                  LDA     =0
10332  0 71 23447                  LDX     =0
10333  0 56 23460                  SUC     =-1
10334  0 20 00000                  NOP     0
10335  0 72 23610                  SKA     =00000400
10336  0 43 00460                  BRM     ERROR           NO,ERROR
10337  0 20 21246                  NOP     M82
10340  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                                REM     12D•P48
10341  0 43 00430  P113        BRM     OBJECT          START OBJECT TEST
10342  0 76 23447              LDA     •0
10343  0 71 23447              LDX     •0
10344  0 56 23460              SUC     ••1
10345  0 20 00000              NOP     0
10346  0 72 23611              SKA     •00000300
10347  0 43 00460              BRM     ERROR           NO,ERROR
10350  0 20 21251              NOP     M83
10351  0 43 00434              BRM     END             LOOP IF BP1 SET
                                REM     16D•P48
10352  0 43 00430  P114        BRM     OBJECT          START OBJECT TEST
10353  0 76 23447              LDA     •0
10354  0 71 23447              LDX     •0
10355  0 56 23460              SUC     ••1
10356  0 20 00000              NOP     0
10357  0 72 23612              SKA     •00000040
10360  0 43 00460              BRM     ERROR           NO,ERROR
10361  0 20 21254              NOP     M84
10362  0 43 00434              BRM     END             LOOP IF BP1 SET
```



```
                                REM     18D•P48
10363  0 43 00430  P115        BRM     OBJECT          START OBJECT TEST
10364  0 76 23447              LDA     •0
10365  0 71 23447              LDX     •0
10366  0 56 23460              SUC     ••1
10367  0 20 00000              NOP     0
10370  0 72 23613              SKA     •00000030
10371  0 43 00460              BRM     ERROR           NO,ERROR
10372  0 20 21257              NOP     M85
10373  0 43 00434              BRM     END             LOOP IF BP1 SET
                                REM     26D•P49
10374  0 43 00430  P116        BRM     OBJECT          START OBJECT TEST
10375  0 76 23447              LDA     •0
10376  0 71 23447              LDX     •0
10377  0 56 23460              SUC     ••1
10400  0 20 00000              NOP     0
10401  0 72 23454              SKA     •00000004
10402  0 43 00460              BRM     ERROR           NO,ERROR
10403  0 20 21262              NOP     M86
10404  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
                                REM     31D•P49
10405  0 43 00430  0117         BRM     0BJECT          START 0BJECT TEST
10406  0 76 23447               LDA     •0
10407  0 71 23447               LDX     •0
10410  0 56 23460               SUC     •-1
10411  0 20 00000               N0P     0
10412  0 72 23614               SKA     •00000003
10413  0 43 00460               BRM     ERR0R           N0,ERR0R
10414  0 20 21265               N0P     M87
10415  0 43 00434               BRM     END             L00P IF BP1 SET
                                REM     20B•P31
10416  0 43 00430  0118         BRM     0BJECT          START 0BJECT TEST
10417  0 76 23466               LDA     •40000000
10420  0 66 00001               RSH     1
10421  0 72 23615               SKA     •20000000
10422  0 01 10424               BRU     •+2             0K, SKIP
10423  0 43 00460               BRM     ERR0R           N0,ERR0R
10424  0 20 21270               N0P     M88
10425  0 43 00434               BRM     END             L00P IF BP1 SET
```



```
                                REM     20B•P31
10426  0 43 00430  0119         BRM     0BJECT          START 0BJECT TEST
10427  0 76 23470               LDA     •37777777
10430  0 66 00001               RSH     1
10431  0 72 23615               SKA     •20000000
10432  0 43 00460               BRM     ERR0R           N0,ERR0R
10433  0 20 21273               N0P     M89
10434  0 43 00434               BRM     END             L00P IF BP1 SET
                                REM     20B•P31
10435  0 43 00430  0120         BRM     0BJECT          START 0BJECT TEST
10436  0 76 23615               LDA     •20000000
10437  0 66 00001               RSH     1
10440  0 72 23445               SKA     •10000000
10441  0 01 10443               BRU     •+2             0K, SKIP
10442  0 43 00460               BRM     ERR0R           N0,ERR0R
10443  0 20 21276               N0P     M90
10444  0 43 00434               BRM     END             L00P IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 103

                             REM     268=P31
10445   0 43 00430   0121    BRM     OBJECT          START OBJECT TEST
10446   0 76 23616           LDA     =37777777
10447   0 66 00001           RSH     1
10450   0 72 23445           SKA     =10000000
10451   0 43 00460           BRM     ERROR           NO,ERROR
10452   0 20 21301           NOP     M91
10453   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     268=P31
10454   0 43 00430   0122    BRM     OBJECT          START OBJECT TEST
10455   0 76 23445           LDA     =10000000
10456   0 66 00001           RSH     1
10457   0 72 23617           SKA     =04000000
10460   0 01 10462           BRU     *+2             OK, SKIP
10461   0 43 00460           BRM     ERROR           NO,ERROR
10462   0 20 21304           NOP     M92
10463   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 104

                             REM     268P31
10464   0 43 00430   0123    BRM     OBJECT          START OBJECT TEST
10465   0 76 23620           LDA     =67777777
10466   0 66 00001           RSH     1
10467   0 72 23617           SKA     =04000000
10470   0 43 00460           BRM     ERROR           NO,ERROR
10471   0 20 21307           NOP     M93
10472   0 43 00434           BRM     END             LOOP IF BP1 SET
                             REM     138=P32
10473   0 43 00430   0124    BRM     OBJECT          START OBJECT TEST
10474   0 76 23617           LDA     =04000000
10475   0 66 00001           RSH     1
10476   0 72 23621           SKA     =02000000
10477   0 01 10501           BRU     *+2             OK, SKIP
10500   0 43 00460           BRM     ERROR           NO,ERROR
10501   0 20 21311           NOP     M94
10502   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
                                REM     13B•P32
10503  0 43 00430  P125         BRM     0BJECT          START 0BJECT TEST
10504  0 76 23422               LDA     •73777777
10505  0 66 00001               RSH     1
10506  0 72 23421               SKA     •02000000
10507  0 43 00460               BRM     ERR0R           N0,ERR0R
10510  0 20 21314               N0P     M95
10511  0 43 00434               BRM     END             L00P IF BP1 SET
                                REM     13B•P32
10512  0 43 00430  P126         BRM     0BJECT          START 0BJECT TEST
10513  0 76 23421               LDA     •02000000
10514  0 66 00001               RSH     1
10515  0 72 23402               SKA     •01000000
10516  0 01 10520               BRU     *+2             0K, SKIP
10517  0 43 00460               BRM     ERR0R           N0,ERR0R
10520  0 20 21317               N0P     M96
10521  0 43 00434               BRM     END             L00P IF BP1 SET
```



```
                                REM     13B•P32
10522  0 43 00430  P127         BRM     0BJECT          START 0BJECT TEST
10523  0 76 23422               LDA     •75777777
10524  0 66 00001               RSH     1
10525  0 72 23602               SKA     •01000000
10526  0 43 00460               BRM     ERR0R           N0,ERR0R
10527  0 20 21322               N0P     M97
10530  0 43 00434               BRM     END             L00P IF BP1 SET
                                REM     16B•P32
10531  0 43 00430  P128         BRM     0BJECT          START 0BJECT TEST
10532  0 76 23402               LDA     •01000000
10533  0 66 00001               RSH     1
10534  0 72 23424               SKA     •00400000
10535  0 01 10537               BRU     *+2             0K, SKIP
10536  0 43 00460               BRM     ERR0R           N0,ERR0R
10537  0 20 21325               N0P     M98
10540  0 43 00434               BRM     END             L00P IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 107

                                   REM     168=P32
10541  0 43 00430   0129          BRM     OBJECT          START OBJECT TEST
10542  0 76 23625                  LDA     =76777777
10543  0 66 00001                  RSH     1
10544  0 72 23624                  SKA     =00400000
10545  0 43 00460                  BRM     ERROR           NO,ERROR
10546  0 20 21330                  NOP     M99
10547  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                   REM     78=P32
10550  0 43 00430   0130          BRM     OBJECT          START OBJECT TEST
10551  0 76 23624                  LDA     =00400000
10552  0 66 00001                  RSH     1
10553  0 72 23626                  SKA     =00200000
10554  0 01 10556                  BRU     *+2             OK, SKIP
10555  0 43 00460                  BRM     ERROR           NO,ERROR
10556  0 20 21333                  NOP     M100
10557  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 108

                                   REM     78=P32
10560  0 43 00430   0131          BRM     OBJECT          START OBJECT TEST
10561  0 76 23627                  LDA     =77377777
10562  0 66 00001                  RSH     1
10563  0 72 23626                  SKA     =00200000
10564  0 43 00460                  BRM     ERROR           NO,ERROR
10565  0 20 21335                  NOP     M101
10566  0 43 00434                  BRM     END             LOOP IF BP1 SET
                                   REM     78=P32
10567  0 43 00430   0132          BRM     OBJECT          START OBJECT TEST
10570  0 76 23626                  LDA     =00200000
10571  0 66 00001                  RSH     1
10572  0 72 23604                  SKA     =00100000
10573  0 01 10575                  BRU     *+2             OK, SKIP
10574  0 43 00460                  BRM     ERROR           NO,ERROR
10575  0 20 21337                  NOP     M102
10576  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                                REM     78=P32
10577  0 43 00430  0133         BRM     OBJECT          START OBJECT TEST
10600  0 76 23630               LDA     =77577777
10601  0 66 00001               RSH     1
10602  0 72 23604               SKA     =00100000
10603  0 43 00460               BRM     ERROR           NO,ERROR
10604  0 20 21341               NOP     M103
10605  0 43 00434               BRM     END             LOOP IF BP1 SET
                                REM     108=P32
10606  0 43 00430  0134         BRM     OBJECT          START OBJECT TEST
10607  0 76 23604               LDA     =00100000
10610  0 66 00001               RSH     1
10611  0 72 23511               SKA     =00040000
10612  0 01 10614               BRU     *+2             OK, SKIP
10613  0 43 00460               BRM     ERROR           NO,ERROR
10614  0 20 21343               NOP     M104
10615  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     108=P32
10616  0 43 00430  0135         BRM     OBJECT          START OBJECT TEST
10617  0 76 23631               LDA     =77677777
10620  0 66 00001               RSH     1
10621  0 72 23511               SKA     =00040000
10622  0 43 00460               BRM     ERROR           NO,ERROR
10623  0 20 21346               NOP     M105
10624  0 43 00434               BRM     END             LOOP IF BP1 SET
                                REM     118=P32
10625  0 43 00430  0136         BRM     OBJECT          START OBJECT TEST
10626  0 76 23511               LDA     =00040000
10627  0 66 00001               RSH     1
10630  0 72 23632               SKA     =00020000
10631  0 01 10633               BRU     *+2             OK, SKIP
10632  0 43 00460               BRM     ERROR           NO,ERROR
10633  0 20 21351               NOP     M106
10634  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
                                REM     1B=P32
10635  0 43 00430  0137         BRM     OBJECT          START OBJECT TEST
10636  0 76 23633                 LDA     =77737777
10637  0 66 00001                 RSH     1
10640  0 72 23632                 SKA     =00020000
10641  0 43 00460                 BRM     ERROR           NO,ERROR
10642  0 20 21353                 NOP     M107
10643  0 43 00434                 BRM     END             LOOP IF BP1 SET
                                REM     1B=P32
10644  0 43 00430  0138         BRM     OBJECT          START OBJECT TEST
10645  0 76 23632                 LDA     =00020000
10646  0 66 00001                 RSH     1
10647  0 72 23434                 SKA     =00010000
10650  0 01 10652                 BRU     **2             OK, SKIP
10651  0 43 00460                 BRM     ERROR           NO,ERROR
10652  0 20 21355                 NOP     M108
10653  0 43 00434                 BRM     END             LOOP IF BP1 SET
```



```
                                REM     1B=P32
10654  0 43 00430  0139         BRM     OBJECT          START OBJECT TEST
10655  0 76 23635                 LDA     =77757777
10656  0 66 00001                 RSH     1
10657  0 72 23634                 SKA     =00010000
10660  0 43 00460                 BRM     ERROR           NO,ERROR
10661  0 20 21357                 NOP     M109
10662  0 43 00434                 BRM     END             LOOP IF BP1 SET
                                REM     9B=P32
10663  0 43 00430  0140         BRM     OBJECT          START OBJECT TEST
10664  0 76 23634                 LDA     =00010000
10665  0 66 00001                 RSH     1
10666  0 72 23512                 SKA     =00004000
10667  0 01 10671                 BRU     **2             OK, SKIP
10670  0 43 00460                 BRM     ERROR           NO,ERROR
10671  0 20 21361                 NOP     M110
10672  0 43 00434                 BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.C      01/15  03101   PAGE 113

                            REM     9B-P32
10673  0 43 00430   B141    BRM     OBJECT                START OBJECT TEST
10674  0 76 23636           LDA     =77767777
10675  0 66 00001           RSH     1
10676  0 72 23512           SKA     =00004000
10677  0 43 00460           BRM     ERROR                 NO,ERROR
10700  0 20 21363           NOP     M111
10701  0 43 00434           BRM     END                   LOOP IF BP1 SET
                            REM     4B-P33
10702  0 43 00430   B142    BRM     OBJECT                START OBJECT TEST
10703  0 76 23512           LDA     =00004000
10704  0 66 00001           RSH     1
10705  0 72 23637           SKA     =00002000
10706  0 01 10710           BRU     *+2                   OK, SKIP
10707  0 43 00460           BRM     ERROR                 NO,ERROR
10710  0 20 21365           NOP     M112
10711  0 43 00434           BRM     END                   LOOP IF BP1 SET
```

```
CPU0    TAP-3.C      01/15  03101   PAGE 114

                            REM     4B-P33
10712  0 43 00430   B143    BRM     OBJECT                START OBJECT TEST
10713  0 76 23640           LDA     =77773777
10714  0 66 00001           RSH     1
10715  0 72 23637           SKA     =00002000
10716  0 43 00460           BRM     ERROR                 NO,ERROR
10717  0 20 21367           NOP     M113
10720  0 43 00434           BRM     END                   LOOP IF BP1 SET
                            REM     6B-P33
10721  0 43 00430   B144    BRM     OBJECT                START OBJECT TEST
10722  0 76 23637           LDA     =00002000
10723  0 66 00001           RSH     1
10724  0 72 23641           SKA     =00001000
10725  0 01 10727           BRU     *+2                   OK, SKIP
10726  0 43 00460           BRM     ERROR                 NO,ERROR
10727  0 20 21371           NOP     M114
10730  0 43 00434           BRM     END                   LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 115

                                   REM     6B=P33
10731  0 43 00430   0145           BRM     OBJECT          START OBJECT TEST
10732  0 76 23642                  LDA     =77775777
10733  0 66 00001                  RSH     1
10734  0 72 23641                  SKA     =00001000
10735  0 43 00460                  BRM     ERROR           NO,ERROR
10736  0 20 21373                  NOP     M115
10737  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 116

                                   REM     6B=P33
10740  0 43 00430   0146           BRM     OBJECT          START OBJECT TEST
10741  0 76 23641                  LDA     =00001000
10742  0 66 00001                  RSH     1
10743  0 72 23610                  SKA     =00000400
10744  0 01 10746                  BRU     **2             OK, SKIP
10745  0 43 00460                  BRM     ERROR           NO,ERROR
10746  0 20 21375                  NOP     M116
10747  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                                REM     68•P33
10750  0 43 00430  0147         BRM     OBJECT          START OBJECT TEST
10751  0 76 23643               LDA     •77776777
10752  0 66 00001               RSH     1
10753  0 72 23610               SKA     •00000400
10754  0 43 00460               BRM     ERROR           NO,ERROR
10755  0 20 21377               NOP     M117
10756  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     108•P33
10757  0 43 00430  0148         BRM     OBJECT          START OBJECT TEST
10760  0 76 23610               LDA     •00000400
10761  0 66 00001               RSH     1
10762  0 72 23644               SKA     •00000200
10763  0 01 10765               BRU     ••2             OK, SKIP
10764  0 43 00460               BRM     ERROR           NO,ERROR
10765  0 20 21401               NOP     M118
10766  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0     01/15  03101   PAGE 119

                           REM     108=P33
10767  0 43 00430  0149    BRM     OBJECT          START OBJECT TEST
10770  0 76 23645          LDA     =77777377
10771  0 66 00001          RSH     1
10772  0 72 23644          SKA     =00000200
10773  0 43 00460          BRM     ERROR           NO,ERROR
10774  0 20 21404          NOP     M119
10775  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0     01/15  03101   PAGE 120

                           REM     128=P33
10776  0 43 00430  0150    BRM     OBJECT          START OBJECT TEST
10777  0 76 23644          LDA     =00000200
11000  0 66 00001          RSH     1
11001  0 72 23646          SKA     =00000100
11002  0 01 11004          BRU     *+2             OK, SKIP
11003  0 43 00460          BRM     ERROR           NO,ERROR
11004  0 20 21407          NOP     M120
11005  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 121

                                   REM     128=P33
11006  0 43 00430   0151           BRM     OBJECT          START OBJECT TEST
11007  0 76 23647                  LDA     =77777577
11010  0 66 00001                  RBH     1
11011  0 72 23646                  SKA     =00000100
11012  0 43 00460                  BRM     ERROR           NO,ERROR
11013  0 20 21412                  NOP     M121
11014  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 122

                                   REM     128=P33
11015  0 43 00430   0152           BRM     OBJECT          START OBJECT TEST
11016  0 76 23646                  LDA     =00000100
11017  0 66 00001                  RBH     1
11020  0 72 23612                  SKA     =00000040
11021  0 01 11023                  BRU     *+2             OK, SKIP
11022  0 43 00460                  BRM     ERROR           NO,ERROR
11023  0 20 21415                  NOP     M122
11024  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 123

                                   REM     123=P33
11025  0 43 00430   0153           BRM     OBJECT          START OBJECT TEST
11026  0 76 23650                   LDA     =77777677
11027  0 66 00001                   RSH     1
11030  0 72 23612                   SKA     =00000040
11031  0 43 00460                   BRM     ERROR           NO,ERROR
11032  0 20 21420                   NOP     M123
11033  0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 124

                                   REM     168=P33
11034  0 43 00430   0154           BRM     OBJECT          START OBJECT TEST
11035  0 76 23612                   LDA     =00000040
11036  0 66 00001                   RSH     1
11037  0 72 23651                   SKA     =00000020
11040  0 01 11042                   BRU     *+2             OK, SKIP
11041  0 43 00460                   BRM     ERROR           NO,ERROR
11042  0 20 21423                   NOP     M124
11043  0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
                                REM     168=P33
11044  0 43 00430  0155         BRM     OBJECT          START OBJECT TEST
11045  0 76 23652               LDA     =77777737
11046  0 66 00001               RSH     1
11047  0 72 23651               SKA     =00000020
11050  0 43 00460               BRM     ERROR           NO,ERROR
11051  0 20 21426               NOP     M125
11052  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     168=P33
11053  0 43 00430  0156         BRM     OBJECT          START OBJECT TEST
11054  0 76 23651               LDA     =00000020
11055  0 66 00001               RSH     1
11056  0 72 23653               SKA     =00000010
11057  0 01 11061               BRU     *+2             OK, SKIP
11060  0 43 00460               BRM     ERROR           NO,ERROR
11061  0 20 21431               NOP     M126
11062  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 127

                                   REM     18B=P33
11063  0 43 00430   0157           BRM     OBJECT          START OBJECT TEST
11064  0 76 23454                  LDA     =77777787
11065  0 66 00001                  RSH     1
11066  0 72 23653                  SKA     =00000010
11067  0 43 00460                  BRM     ERROR           NO,ERROR
11070  0 20 21434                  NOP     M127
11071  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 128

                                   REM     18B=P33
11072  0 43 00430   0158           BRM     OBJECT          START OBJECT TEST
11073  0 76 23653                  LDA     =00000010
11074  0 66 00001                  RSH     1
11075  0 72 23454                  SKA     =00000004
11076  0 01 11100                  BRU     *+2             OK, SKIP
11077  0 43 00460                  BRM     ERROR           NO,ERROR
11100  0 20 21437                  NOP     M128
11101  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C      01/15  03101   PAGE 129

                                   REM     188=P33
11102  0 43 00430   0159           BRM     OBJECT          START OBJECT TEST
11103  0 76 23655                  LDA     =77777767
11104  0 66 00001                  RSH     1
11105  0 72 23454                  SKA     =00000004
11106  0 43 00460                  BRM     ERROR           NO,ERROR
11107  0 20 21442                  NOP     M129
11110  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C      01/15  03101   PAGE 130

                                   REM     268=P34
11111  0 43 00430   0160           BRM     OBJECT          START OBJECT TEST
11112  0 76 23454                  LDA     =00000004
11113  0 66 00001                  RSH     1
11114  0 72 23453                  SKA     =00000002
11115  0 01 11117                  BRU     **2             OK, SKIP
11116  0 43 00460                  BRM     ERROR           NO,ERROR
11117  0 20 21445                  NOP     M130
11120  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03:01   PAGE 131

                             REM     268=P34
11121   0 43 00430   0161    BRM     OBJECT          START OBJECT TEST
11122   0 76 23513           LDA     =77777773
11123   0 66 00001           RSH     1
11124   0 72 23453           SKA     =00000002
11125   0 43 00460           BRM     ERROR           NO,ERROR
11126   0 20 21450           NOP     M131
11127   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03:01   PAGE 132

                             REM     328=P34
11130   0 43 00430   0162    BRM     OBJECT          START OBJECT TEST
11131   0 76 23453           LDA     =00000002
11132   0 66 00001           RSH     1
11133   0 72 23452           SKA     =00000001
11134   0 01 11136           BRU     **2             OK, SKIP
11135   0 43 00460           BRM     ERROR           NO,ERROR
11136   0 20 21453           NOP     M132
11137   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 133

                            REM     328=P34
11140   0 43 00430   8163   BRM     OBJECT          START OBJECT TEST
11141   0 76 23656          LDA     =77777775
11142   0 66 00001          RSH     1
11143   0 72 23452          SKA     =00000001
11144   0 43 00460          BRM     ERROR           NO,ERROR
11145   0 20 21456          NOP     M133
11146   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 134

                            REM     20C=P36
11147   0 43 00430   8164   BRM     OBJECT          START OBJECT TEST
11150   0 76 23452          LDA     =00000001
11151   0 75 23447          LDB     =0
11152   0 66 00001          RSH     1
11153   0 36 23437          STB     TEMP
11154   0 76 23437          LDA     TEMP
11155   0 72 23466          SKA     =40000000
11156   0 01 11160          BRU     *+2             OK, SKIP
11157   0 43 00460          BRM     ERROR           NO,ERROR
11160   0 20 21461          NOP     M134
11161   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                                REM     20C=P36
11162  0 43 00430  0165        BRM     OBJECT          START OBJECT TEST
11163  0 76 23501              LDA     =77777776
11164  0 75 23460              LDB     =77777777
11165  0 66 00001              RSH     1
11166  0 36 23437              STB     TEMP
11167  0 76 23437              LDA     TEMP
11170  0 72 23466              SKA     =40000000
11171  0 43 00460              BRM     ERROR           NO,ERROR
11172  0 20 21464              NOP     M135
11173  0 43 00434              BRM     END             LOOP IF BP1 SET
```



```
                                REM     20C=P36
11174  0 43 00430  0166        BRM     OBJECT          START OBJECT TEST
11175  0 75 23466              LDB     =40000000
11176  0 66 00001              RSH     1
11177  0 36 23437              STB     TEMP
11200  0 76 23437              LDA     TEMP
11201  0 72 23615              SKA     =20000000
11202  0 01 11204              BRU     *+2             OK, SKIP
11203  0 43 00460              BRM     ERROR           NO,ERROR
11204  0 20 21467              NOP     M136
11205  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
                                REM     20C=P36
11206  0 43 00430  0167         BRM     OBJECT          START OBJECT TEST
11207  0 75 23470               LDB     =37777777
11210  0 66 00001               RSH     1
11211  0 36 23437               STB     TEMP
11212  0 76 23437               LDA     TEMP
11213  0 72 23615               SKA     =20000000
11214  0 43 00460               BRM     ERROR           NO,ERROR
11215  0 20 21472               NOP     M137
11216  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     26C=P36
11217  0 43 00430  0168         BRM     OBJECT          START OBJECT TEST
11220  0 75 23615               LDB     =20000000
11221  0 66 00001               RSH     1
11222  0 36 23437               STB     TEMP
11223  0 76 23437               LDA     TEMP
11224  0 72 23445               SKA     =10000000
11225  0 01 11227               BRU     *+2             OK, SKIP
11226  0 43 00460               BRM     ERROR           NO,ERROR
11227  0 20 21475               NOP     M138
11230  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 139

                                   REM     26C=P36
11231  0 43 00430   0169           BRM     OBJECT          START OBJECT TEST
11232  0 75 23616                  LDB     =07777777
11233  0 66 00001                  RSH     1
11234  0 36 23437                  STB     TEMP
11235  0 76 23437                  LDA     TEMP
11236  0 72 23445                  SKA     =10000000
11237  0 43 00460                  BRM     ERROR           NO,ERROR
11240  0 20 21500                  NOP     M139
11241  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 140

                                   REM     26C=P36
11242  0 43 00430   0170           BRM     OBJECT          START OBJECT TEST
11243  0 75 23445                  LDB     =10000000
11244  0 66 00001                  RSH     1
11245  0 36 23437                  STB     TEMP
11246  0 76 23437                  LDA     TEMP
11247  0 72 23617                  SKA     =04000000
11250  0 01 11252                  BRU     *+2             OK, SKIP
11251  0 43 00460                  BRM     ERROR           NO,ERROR
11252  0 20 21503                  NOP     M140
11253  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 141

                                REM     26C=P36
11254  0 43 00430   0171     BRM     OBJECT          START OBJECT TEST
11255  0 75 23620              LDB     =67777777
11256  0 66 00001              RSH     1
11257  0 36 23437              STB     TEMP
11260  0 76 23437              LDA     TEMP
11261  0 72 23617              SKA     =04000000
11262  0 43 00460              BRM     ERROR           NO,ERROR
11263  0 20 21506              NOP     M141
11264  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 142

                                REM     13C=P37
11265  0 43 00430   0172     BRM     OBJECT          START OBJECT TEST
11266  0 75 23617              LDB     =04000000
11267  0 66 00001              RSH     1
11270  0 36 23437              STB     TEMP
11271  0 76 23437              LDA     TEMP
11272  0 72 23621              SKA     =02000000
11273  0 01 11275              BRU     *+2             OK, SKIP
11274  0 43 00460              BRM     ERROR           NO,ERROR
11275  0 20 21511              NOP     M142
11276  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.0      01/15  03101    PAGE 143

                            REM      13C-P37
11277   0 43 00430   0173   BRM      OBJECT            START OBJECT TEST
11300   0 75 23622          LDB      =73777777
11301   0 66 00001          RSH      1
11302   0 36 23437          STB      TEMP
11303   0 76 23437          LDA      TEMP
11304   0 72 23621          SKA      =02000000
11305   0 43 00460          BRM      ERROR             NO,ERROR
11306   0 20 21514          NOP      M143
11307   0 43 00434          BRM      END               LOOP IF BP1 SET
```

```
CPU0    TAP-3.C      01/15  03101    PAGE 144

                            REM      15C-P37
11310   0 43 00430   0174   BRM      OBJECT            START OBJECT TEST
11311   0 75 23621          LDB      =02000000
11312   0 66 00001          RSH      1
11313   0 36 23437          STB      TEMP
11314   0 76 23437          LDA      TEMP
11315   0 72 23602          SKA      =01000000
11316   0 01 11320          BRU      *+2               OK, SKIP
11317   0 43 00460          BRM      ERROR             NO,ERROR
11320   0 20 21517          NOP      M144
11321   0 43 00434          BRM      END               LOOP IF BP1 SET
```

```
                        REM     15C=P37
11322  0 43 00430  8175 BRM     OBJECT          START OBJECT TEST
11323  0 75 23623       LDB     =75777777
11324  0 66 00001       RSH     1
11325  0 36 23437       STB     TEMP
11326  0 76 23437       LDA     TEMP
11327  0 72 23602       SKA     =01000000
11330  0 43 00460       BRM     ERROR           NO,ERROR
11331  0 20 21522       NOP     M145
11332  0 43 00434       BRM     END             LOOP IF BP1 SET
```



```
                        REM     15C=P37
11333  0 43 00430  8176 BRM     OBJECT          START OBJECT TEST
11334  0 75 23602       LDB     =01000000
11335  0 66 00001       RSH     1
11336  0 36 23437       STB     TEMP
11337  0 76 23437       LDA     TEMP
11340  0 72 23624       SKA     =00400000
11341  0 01 11343       BRU     *+2             OK, SKIP
11342  0 43 00460       BRM     ERROR           NO,ERROR
11343  0 20 21525       NOP     M146
11344  0 43 00434       BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 147

                           REM     15C=P37
11345  0 43 00430  0177    BRM     OBJECT          START OBJECT TEST
11346  0 75 23625          LDB     =76777777
11347  0 66 00001          RSH     1
11350  0 36 23437          STB     TEMP
11351  0 76 23437          LDA     TEMP
11352  0 72 23624          SKA     =00400000
11353  0 43 00460          BRM     ERROR           NO,ERROR
11354  0 20 21530          NOP     M147
11355  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 148

                           REM     7C=P38
11356  0 43 00430  0178    BRM     OBJECT          START OBJECT TEST
11357  0 75 23624          LDB     =00400000
11360  0 66 00001          RSH     1
11361  0 36 23437          STB     TEMP
11362  0 76 23437          LDA     TEMP
11363  0 72 23626          SKA     =00E00000
11364  0 01 11366          BRU     *+2             OK, SKIP
11365  0 43 00460          BRM     ERROR           NO,ERROR
11366  0 20 21533          NOP     M148
11367  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 149

                                   REM     7C=P38
11370   0 43 00430  0179   BRM     OBJECT          START OBJECT TEST
11371   0 75 23627          LDB     =77377777
11372   0 66 00001          RSH     1
11373   0 36 23437          STB     TEMP
11374   0 76 23437          LDA     TEMP
11375   0 72 23626          SKA     =00200000
11376   0 43 00460          BRM     ERROR           NO,ERROR
11377   0 20 21535          NOP     M149
11400   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 150

                                   REM     9C=P38
11401   0 43 00430  0180   BRM     OBJECT          START OBJECT TEST
11402   0 75 23626          LDB     =00200000
11403   0 66 00001          RSH     1
11404   0 36 23437          STB     TEMP
11405   0 76 23437          LDA     TEMP
11406   0 72 23604          SKA     =00100000
11407   0 01 11411          BRU     *+2             OK, SKIP
11410   0 43 00460          BRM     ERROR           NO,ERROR
11411   0 20 21537          NOP     M150
11412   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 151

                            REM     9C=P38
11413  0 43 00430   0181    BRM     OBJECT          START OBJECT TEST
11414  0 75 23630            LDB     =77577777
11415  0 66 00001            RSH     1
11416  0 36 23437            STB     TEMP
11417  0 76 23437            LDA     TEMP
11420  0 72 23604            SKA     =00100000
11421  0 43 00460            BRM     ERROR           NO,ERROR
11422  0 20 21541            NOP     M151
11423  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 152

                            REM     9C=P38
11424  0 43 00430   0182    BRM     OBJECT          START OBJECT TEST
11425  0 75 23604            LDB     =00100000
11426  0 66 00001            RSH     1
11427  0 36 23437            STB     TEMP
11430  0 76 23437            LDA     TEMP
11431  0 72 23511            SKA     =00040000
11432  0 01 11434            BRU     *+2
11433  0 43 00460            BRM     ERROR           NO,ERROR
11434  0 20 21543            NOP     M152
11435  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 153

                                   REM     9C=P38
11436  0 43 00430   9183           BRM     OBJECT          START OBJECT TEST
11437  0 75 23631                  LDB     =77677777
11440  0 66 00001                  RSH     1
11441  0 36 23437                  STB     TEMP
11442  0 76 23437                  LDA     TEMP
11443  0 72 23511                  SKA     =00040000
11444  0 43 00460                  BRM     ERROR           NO,ERROR
11445  0 20 21545                  NOP     M153
11446  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 154

                                   REM     1C=P39
11447  0 43 00430   9184           BRM     OBJECT          START OBJECT TEST
11450  0 75 23511                  LDB     =00040000
11451  0 66 00001                  RSH     1
11452  0 36 23437                  STB     TEMP
11453  0 76 23437                  LDA     TEMP
11454  0 72 23632                  SKA     =00020000
11455  0 01 11457                  BRU     *+2             OK, SKIP
11456  0 43 00460                  BRM     ERROR           NO,ERROR
11457  0 20 21547                  NOP     M154
11460  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03101   PAGE 155

                                    REM     1C=P39
11461   0 43 00430   0185           BRM     OBJECT          START OBJECT TEST
11462   0 75 23633                  LDB     =77737777
11463   0 66 00001                  RSH     1
11464   0 36 23437                  STB     TEMP
11465   0 76 23437                  LDA     TEMP
11466   0 72 23632                  SKA     =00020000
11467   0 43 00460                  BRM     ERROR
11470   0 20 21547                  NOP     M154
11471   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 156

                                    REM     3C=P39
11472   0 43 00430   0186           BRM     OBJECT          START OBJECT TEST
11473   0 75 23632                  LDB     =00020000
11474   0 66 00001                  RSH     1
11475   0 36 23437                  STB     TEMP
11476   0 76 23437                  LDA     TEMP
11477   0 72 23634                  SKA     =00010000
11500   0 01 11502                  BRU     *+2             OK, SKIP
11501   0 43 00460                  BRM     ERROR           NO,ERROR
11502   0 20 21556                  NOP     M156
11503   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03:01   PAGE 157

                                    REM     3C-P39
11504   0 43 00430   0187           BRM     OBJECT          START OBJECT TEST
11505   0 75 23635                  LDB     =77757777
11506   0 66 00001                  RSH     1
11507   0 36 23437                  STB     TEMP
11510   0 76 23437                  LDA     TEMP
11511   0 72 23634                  SKA     =00010000
11512   0 43 00460                  BRM     ERROR           NO;ERROR
11513   0 20 21560                  NOP     M157
11514   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03:01   PAGE 158

                                    REM     3C-P39
11515   0 43 00430   0188           BRM     OBJECT          START OBJECT TEST
11516   0 75 23634                  LDB     =00010000
11517   0 66 00001                  RSH     1
11520   0 36 23437                  STB     TEMP
11521   0 76 23437                  LDA     TEMP
11522   0 72 23512                  SKA     =00004000
11523   0 01 11525                  BRU     **2             OK, SKIP
11524   0 43 00460                  BRM     ERROR           NO;ERROR
11525   0 20 21562                  NOP     M158
11526   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 159

                                REM     3C=P39
11527  0 43 00430   0189      BRM     OBJECT          START OBJECT TEST
11530  0 75 23636              LDB     =77767777
11531  0 66 00001              RSH     1
11532  0 36 23437              STB     TEMP
11533  0 76 23437              LDA     TEMP
11534  0 72 23512              SKA     =00004000
11535  0 43 00460              BRM     ERROR           NO,ERROR
11536  0 20 21564              NOP     M159
11537  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 160

                                REM     4C=P40
11540  0 43 00430   0190      BRM     OBJECT          START OBJECT TEST
11541  0 75 23512              LDB     =00004000
11542  0 66 00001              RSH     1
11543  0 36 23437              STB     TEMP
11544  0 76 23437              LDA     TEMP
11545  0 72 23637              SKA     =00002000
11546  0 01 11550              BRU     *+2             OK, SKIP
11547  0 43 00460              BRM     ERROR           NO,ERROR
11550  0 20 21566              NOP     M160
11551  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 161

                                   REM     4C=P40
11552  0 43 00430   P191    BRM     OBJECT          START OBJECT TEST
11553  0 75 23640           LDB     =77773777
11554  0 66 00001           RSH     1
11555  0 36 23437           STB     TEMP
11556  0 76 23437           LDA     TEMP
11557  0 72 23637           SKA     =00002000
11560  0 43 00460           BRM     ERROR           NO,ERROR
11561  0 20 21570           NOP     M161
11562  0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 162

                                   REM     6C=P40
11563  0 43 00430   P192    BRM     OBJECT          START OBJECT TEST
11564  0 75 23637           LDB     =00002000
11565  0 66 00001           RSH     1
11566  0 36 23437           STB     TEMP
11567  0 76 23437           LDA     TEMP
11570  0 72 23641           SKA     =00001000
11571  0 01 11573           BRU     *+2             OK, SKIP
11572  0 43 00460           BRM     ERROR           NO,ERROR
11573  0 20 21572           NOP     M162
11574  0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
                                REM     6C=P40
11575  0 43 00430  8193        BRM     OBJECT          START OBJECT TEST
11576  0 75 23642              LDB     =77775777
11577  0 66 00001              RSH     1
11600  0 36 23437              STB     TEMP
11601  0 76 23437              LDA     TEMP
11602  0 72 23641              SKA     =00001000
11603  0 43 00460              BRM     ERROR           NO,ERROR
11604  0 20 21574              NOP     M163
11605  0 43 00434              BRM     END             LOOP IF BP1 SET
```



```
                                REM     6C=P40
11606  0 43 00430  8194        BRM     OBJECT          START OBJECT TEST
11607  0 75 23641              LDB     =00001000
11610  0 66 00001              RSH     1
11611  0 36 23437              STB     TEMP
11612  0 76 23437              LDA     TEMP
11613  0 72 23610              SKA     =00000400
11614  0 01 11616              BRU     *+2             OK, SKIP
11615  0 43 00460              BRM     ERROR           NO,ERROR
11616  0 20 21576              NOP     M164
11617  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 165

                                   REM     6C=P40
11620  0 43 00430   0195           BRM     OBJECT          START OBJECT TEST
11621  0 75 23643                   LDB     =77776777
11622  0 66 00001                   RSH     1
11623  0 36 23437                   STB     TEMP
11624  0 76 23437                   LDA     TEMP
11625  0 72 23610                   SKA     =00000400
11626  0 43 00460                   BRM     ERROR           NO,ERROR
11627  0 20 21600                   NOP     M165
11630  0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 166

                                   REM     10C=P41
11631  0 43 00430   0196           BRM     OBJECT          START OBJECT TEST
11632  0 75 23610                   LDB     =00000400
11633  0 66 00001                   RSH     1
11634  0 36 23437                   STB     TEMP
11635  0 76 23437                   LDA     TEMP
11636  0 72 23644                   SKA     =00000200
11637  0 01 11641                   BRU     *+2             OK, SKIP
11640  0 43 00460                   BRM     ERROR           NO,ERROR
11641  0 20 21602                   NOP     M166
11642  0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0       01/15  03101    PAGE 167

                                REM     10C=P41
11643  0 43 00430  0197         BRM     OBJECT              START OBJECT TEST
11644  0 75 23645               LDB     =77777377
11645  0 66 00001               RSH     1
11646  0 36 23437               STB     TEMP
11647  0 76 23437               LDA     TEMP
11650  0 72 23644               SKA     =00000200
11651  0 43 00460               BRM     ERROR               NO,ERROR
11652  0 20 21605               NOP     M167
11653  0 43 00434               BRM     END                 LOOP IF BP1 SET
```

```
CPU0    TAP=3.0       01/15  03101    PAGE 168

                                REM     12C=P41
11654  0 43 00430  0198         BRM     OBJECT              START OBJECT TEST
11655  0 75 23644               LDB     =00000200
11656  0 66 00001               RSH     1
11657  0 36 23437               STB     TEMP
11660  0 76 23437               LDA     TEMP
11661  0 72 23646               SKA     =00000100
11662  0 01 11664               BRU     *+2                 OK, SKIP
11663  0 43 00460               BRM     ERROR               NO,ERROR
11664  0 20 21610               NOP     M168
11665  0 43 00434               BRM     END                 LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 169

                                  REM     12C=P41
11666  0 43 00430  0199   BRM     OBJECT          START OBJECT TEST
11667  0 75 23647          LDB     =77777577
11670  0 66 00001          RSH     1
11671  0 36 23437          STB     TEMP
11672  0 76 23437          LDA     TEMP
11673  0 72 23646          SKA     =00000100
11674  0 43 00460          BRM     ERROR           NO,ERROR
11675  0 20 21613          NOP     M169
11676  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0     01/15  03101   PAGE 170

                                  REM     12C=P41
11677  0 43 00430  0200   BRM     OBJECT          START OBJECT TEST
11700  0 75 23646          LDB     =00000100
11701  0 66 00001          RSH     1
11702  0 36 23437          STB     TEMP
11703  0 76 23437          LDA     TEMP
11704  0 72 23612          SKA     =00000040
11705  0 01 11707          BRU     *+2             OK, SKIP
11706  0 43 00460          BRM     ERROR           NO,ERROR
11707  0 20 21616          NOP     M170
11710  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 171

                                   REM     12C=P41
11711   0 43 00430  0201           BRM     OBJECT          START OBJECT TEST
11712   0 75 23650                  LDB     =77777677
11713   0 66 00001                  RSH     1
11714   0 36 23437                  STB     TEMP
11715   0 76 23437                  LDA     TEMP
11716   0 72 23612                  SKA     =00000040
11717   0 43 00460                  BRM     ERROR           NO,ERROR
11720   0 20 21621                  NOP     M171
11721   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 172

                                   REM     16C=P42
11722   0 43 00430  0202           BRM     OBJECT          START OBJECT TEST
11723   0 75 23612                  LDB     =00000040
11724   0 66 00001                  RSH     1
11725   0 36 23437                  STB     TEMP
11726   0 76 23437                  LDA     TEMP
11727   0 72 23651                  SKA     =00000020
11730   0 01 11732                  BRU     *+2             OK, SKIP
11731   0 43 00460                  BRM     ERROR           NO,ERROR
11732   0 20 21624                  NOP     M172
11733   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 173

                             REM     16C=P42
11734   0 43 00430   0203    BRM     OBJECT          START OBJECT TEST
11735   0 75 23652           LDB     =77777737
11736   0 66 00001           RSH     1
11737   0 36 23437           STB     TEMP
11740   0 76 23437           LDA     TEMP
11741   0 72 23651           SKA     =00000020
11742   0 43 00460           BRM     ERROR           NO,ERROR
11743   0 20 21627           NOP     M173
11744   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 174

                             REM     16C=P42
11745   0 43 00430   0204    BRM     OBJECT          START OBJECT TEST
11746   0 75 23651           LDB     =00000020
11747   0 66 00001           RSH     1
11750   0 36 23437           STB     TEMP
11751   0 76 23437           LDA     TEMP
11752   0 72 23653           SKA     =00000010
11753   0 01 11755           BRU     *+2             OK, SKIP
11754   0 43 00460           BRM     ERROR           NO,ERROR
11755   0 20 21632           NOP     M174
11756   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
                          REM     18C=P42
11757  0 43 00430  0205   BRM     OBJECT          START OBJECT TEST
11760  0 75 23654         LDB     =77777757
11761  0 66 00001         RSH     1
11762  0 36 23437         STB     TEMP
11763  0 76 23437         LDA     TEMP
11764  0 72 23653         SKA     =00000010
11765  0 43 00460         BRM     ERROR           NO,ERROR
11766  0 20 21635         NOP     M175
11767  0 43 00434         BRM     END             LOOP IF BP1 SET
```



```
                          REM     30C=P43
11770  0 43 00430  0206   BRM     OBJECT          START OBJECT TEST
11771  0 75 23653         LDB     =00000010
11772  0 66 00001         RSH     1
11773  0 36 23437         STB     TEMP
11774  0 76 23437         LDA     TEMP
11775  0 72 23454         SKA     =00000004
11776  0 01 12000         BRU     *+2             OK, SKIP
11777  0 43 00460         BRM     ERROR           NO,ERROR
12000  0 20 21640         NOP     M176
12001  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 177

                             REM     30C=P43
12002   0 43 00430   0207    BRM     OBJECT          START OBJECT TEST
12003   0 75 23655           LDB     =77777767
12004   0 66 00001           RSH     1
12005   0 36 23437           STB     TEMP
12006   0 76 23437           LDA     TEMP
12007   0 72 23454           SKA     =00000004
12010   0 43 00460           BRM     ERROR           NO,ERROR
12011   0 20 21643           NOP     M177
12012   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 178

                             REM     30C=P43
12013   0 43 00430   0208    BRM     OBJECT          START OBJECT TEST
12014   0 75 23454           LDB     =00000004
12015   0 66 00001           RSH     1
12016   0 36 23437           STB     TEMP
12017   0 76 23437           LDA     TEMP
12020   0 72 23453           SKA     =00000002
12021   0 01 12023           BRU     *+2             OK, SKIP
12022   0 43 00460           BRM     ERROR           NO,ERROR
12023   0 20 21646           NOP     M178
12024   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.C     01/15  03101   PAGE 179

                           REM     30VC-P43
12025  0 43 00430  S209   BRM     OBJECT          START OBJECT TEST
12026  0 75 23513         LDB     =77777773
12027  0 66 00001         RSH     1
12030  0 36 23437         STB     TEMP
12031  0 76 23437         LDA     TEMP
12032  0 72 23453         SKA     =00000002
12033  0 43 00460         BRM     ERROR           NO,ERROR
12034  0 20 21651         NOP     M179
12035  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.C     01/15  03101   PAGE 180

                           REM     32C-P43
12036  0 43 00430  S210   BRM     OBJECT          START OBJECT TEST
12037  0 75 23453         LDB     =00000002
12040  0 66 00001         RSH     1
12041  0 36 23437         STB     TEMP
12042  0 76 23437         LDA     TEMP
12043  0 72 23452         SKA     =00000001
12044  0 01 12046         BRU     *+2             OK, SKIP
12045  0 43 00460         BRM     ERROR           NO,ERROR
12046  0 20 21654         NOP     M180
12047  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C        01/15  03:01   PAGE 181

                               REM     32C=P43
12050  0 43 00430  0211        BRM     OBJECT              START OBJECT TEST
12051  0 75 23656              LDB     =77777775
12052  0 66 00001              RSH     1
12053  0 36 23437              STB     TEMP
12054  0 76 23437              LDA     TEMP
12055  0 72 23452              SKA     =00000001
12056  0 43 00460              BRM     ERROR               NO,ERROR
12057  0 20 21657              NOP     M181
12060  0 43 00434              BRM     END                 LOOP IF BP1 SET
```

```
CPU0    TAP=3.C        01/15  03:01   PAGE 182

                               REM     20B=P31
12061  0 43 00430  0212        BRM     OBJECT              START OBJECT TEST
12062  0 76 23620              LDA     =67777777
12063  0 67 00002              LSH     2
12064  0 72 23466              SKA     =40000000
12065  0 43 00460              BRM     ERROR               NO,ERROR
12066  0 20 21662              NOP     M182
12067  0 43 00434              BRM     END                 LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 183

                             REM     208=P31
12070   0 43 00430   8213    BRM     OBJECT          START OBJECT TEST
12071   0 76 23445            LDA     =10000000
12072   0 67 00002            LSH     2
12073   0 72 23466            SKA     =40000000
12074   0 01 12076            BRU     *+2             OK, SKIP
12075   0 43 00460            BRM     ERROR           NO,ERROR
12076   0 20 21665            NOP     M183
12077   0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 184

                             REM     208=P31
12100   0 43 00430   8214    BRM     OBJECT          START OBJECT TEST
12101   0 76 23620            LDA     =67777777
12102   0 67 00002            LSH     2
12103   0 72 23466            SKA     =40000000
12104   0 43 00460            BRM     ERROR           NO,ERROR
12105   0 20 21670            NOP     M184
12106   0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
                                REM     208=P31
12107  0 43 00430  0215         BRM     OBJECT          START OBJECT TEST
12110  0 76 23617               LDA     =04000000
12111  0 67 00002               LSH     2
12112  0 72 23615               SKA     =20000000
12113  0 01 12115               BRU     *+2             OK, SKIP
12114  0 43 00460               BRM     ERROR           NO,ERROR
12115  0 20 21673               NOP     M185
12116  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     208=P31
12117  0 43 00430  0216         BRM     OBJECT          START OBJECT TEST
12120  0 76 23622               LDA     =73777777
12121  0 67 00002               LSH     2
12122  0 72 23615               SKA     =20000000
12123  0 43 00460               BRM     ERROR           NO,ERROR
12124  0 20 21676               NOP     M186
12125  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,0      01/15  03101   PAGE 187

                             REM     208=P31
12126   0 43 00430   9217    BRM     OBJECT          START OBJECT TEST
12127   0 76 23621           LDA     =02000000
12130   0 67 00002           LSH     2
12131   0 72 23445           SKA     =10000000
12132   0 01 12134           BRU     *+2             OK, SKIP
12133   0 43 00460           BRM     ERROR           NO,ERROR
12134   0 20 21701           NOP     M187
12135   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,0      01/15  03101   PAGE 188

                             REM     208=P31
12136   0 43 00430   9218    BRM     OBJECT          START OBJECT TEST
12137   0 76 23623           LDA     =75777777
12140   0 67 00002           LSH     2
12141   0 72 23445           SKA     =10000000
12142   0 43 00460           BRM     ERROR           NO,ERROR
12143   0 20 21704           NOP     M188
12144   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 189

                                   REM     268=P31
12145  0 43 00430   8219           BRM     0BJECT          START 0BJECT TEST
12146  0 76 23602                  LDA     =01000000
12147  0 67 00002                  L$H     2
12150  0 72 23617                  $KA     =04000000
12151  0 01 12153                  BRU     *+2             0K, $KIP
12152  0 43 00460                  BRM     ERR0R           N0,ERR0R
12153  0 20 21707                  N0P     M189
12154  0 43 00434                  BRM     END             L00P IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 190

                                   REM     268P31
12155  0 43 00430   8220           BRM     0BJECT          START 0BJECT TEST
12156  0 76 23625                  LDA     =76777777
12157  0 67 00002                  L$H     2
12160  0 72 23617                  $KA     =04000000
12161  0 43 00460                  BRM     ERR0R           N0,ERR0R
12162  0 20 21712                  N0P     M190
12163  0 43 00434                  BRM     END             L00P IF BP1 SET
```

```
                        REM     138•P32
12164  0 43 00430  0221 BRM     OBJECT          START OBJECT TEST
12165  0 76 23624       LDA     •00400000
12166  0 67 00002       LSH     2
12167  0 72 23621       SKA     •02000000
12170  0 01 12172       BRU     •+2             OK, SKIP
12171  0 43 00460       BRM     ERROR           NO,ERROR
12172  0 20 21714       NOP     M191
12173  0 43 00434       BRM     END             LOOP IF BP1 SET
```



```
                        REM     138•P32
12174  0 43 00430  0222 BRM     OBJECT          START OBJECT TEST
12175  0 76 23627       LDA     •77377777
12176  0 67 00002       LSH     2
12177  0 72 23621       SKA     •02000000
12200  0 43 00460       BRM     ERROR           NO,ERROR
12201  0 20 21717       NOP     M192
12202  0 43 00434       BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 193

                                REM     13B=P32
12203  0 43 00430   0223      BRM     OBJECT          START OBJECT TEST
12204  0 76 23426              LDA     =00200000
12205  0 67 00002              LSH     2
12206  0 72 23602              SKA     =01000000
12207  0 01 12211              BRU     *+2             OK, SKIP
12210  0 43 00460              BRM     ERROR           NO,ERROR
12211  0 20 21722              NOP     M193
12212  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 194

                                REM     13B=P32
12213  0 43 00430   0224      BRM     OBJECT          START OBJECT TEST
12214  0 76 23430              LDA     =77577777
12215  0 67 00002              LSH     2
12216  0 72 23602              SKA     =01000000
12217  0 43 00460              BRM     ERROR           NO,ERROR
12220  0 20 21725              NOP     M194
12221  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 195

                            REM     168=P32
12222   0 43 00430  P225    BRM     OBJECT          START OBJECT TEST
12223   0 76 23634          LDA     =00010000
12224   0 67 00002          LSH     2
12225   0 72 23511          SKA     =00040000
12226   0 01 12230          BRU     *+2             OK, SKIP
12227   0 43 00460          BRM     ERROR           NO,ERROR
12230   0 20 21730          NOP     M195
12231   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 196

                            REM     168=P32
12232   0 43 00430  P226    BRM     OBJECT          START OBJECT TEST
12233   0 76 23631          LDA     =77677777
12234   0 67 00002          LSH     2
12235   0 72 23624          SKA     =00400000
12236   0 43 00460          BRM     ERROR           NO,ERROR
12237   0 20 21733          NOP     M196
12240   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                        REM     7B=P32
12241  0 43 00430 0227  BRM     OBJECT          START OBJECT TEST
12242  0 76 23511       LDA     =00040000
12243  0 67 00002       LSH     2
12244  0 72 23626       SKA     =00200000
12245  0 01 12247       BRU     *+2             OK, SKIP
12246  0 43 00460       BRM     ERROR           NO,ERROR
12247  0 20 21736       NOP     M197
12250  0 43 00434       BRM     END             LOOP IF BP1 SET
```



```
                        REM     7B=P32
12251  0 43 00430 0228  BRM     OBJECT          START OBJECT TEST
12252  0 76 23633       LDA     =77737777
12253  0 67 00002       LSH     2
12254  0 72 23626       SKA     =00200000
12255  0 43 00460       BRM     ERROR           NO,ERROR
12256  0 20 21740       NOP     M198
12257  0 43 00434       BRM     END             LOOP IF BP1 SET
```

```
                                REM     78=P32
12260  0 43 00430  0229         BRM     OBJECT          START OBJECT TEST
12261  0 76 23632               LDA     =00020000
12262  0 67 00002               LSH     2
12263  0 72 23604               SKA     =00100000
12264  0 01 12266               BRU     *+2             OK, SKIP
12265  0 43 00460               BRM     ERROR           NO,ERROR
12266  0 20 21742               NOP     M199
12267  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     78=P32
12270  0 43 00430  0230         BRM     OBJECT          START OBJECT TEST
12271  0 76 23435               LDA     =77757777
12272  0 67 00002               LSH     2
12273  0 72 23604               SKA     =00100000
12274  0 43 00460               BRM     ERROR           NO,ERROR
12275  0 20 21744               NOP     M200
12276  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 201

                             REM     108=P32
12277   0 43 00430   0231    BRM     OBJECT          START OBJECT TEST
12300   0 76 23634           LDA     =00010000
12301   0 67 00002           LSH     2
12302   0 72 23511           SKA     =00040000
12303   0 01 12305           BRU     *+2             OK, SKIP
12304   0 43 00460           BRM     ERROR           NO,ERROR
12305   0 20 21746           NOP     M201
12306   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C      01/15  03101   PAGE 202

                             REM     108=P32
12307   0 43 00430   0232    BRM     OBJECT          START OBJECT TEST
12310   0 76 23636           LDA     =77767777
12311   0 67 00002           LSH     2
12312   0 72 23511           SKA     =00040000
12313   0 43 00460           BRM     ERROR           NO,ERROR
12314   0 20 21751           NOP     M202
12315   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
                          REM     1B•P32
12316  0 43 00430  0233   BRM     OBJECT          START OBJECT TEST
12317  0 76 23512         LDA     •00004000
12320  0 67 00002         L&M     2
12321  0 72 23432         $KA     •00020000
12322  0 01 12324         BRU     •+2             OK, SKIP
12323  0 43 00460         BRM     ERROR           NO,ERROR
12324  0 20 21754         N&P     M203
12325  0 43 00434         BRM     END             LOOP IF BP1 SET
```



```
                          REM     1B•P32
12326  0 43 00430  0234   BRM     OBJECT          START OBJECT TEST
12327  0 76 23640         LDA     •77773777
12330  0 67 00002         L&M     2
12331  0 72 23632         $KA     •00020000
12332  0 43 00460         BRM     ERROR           NO,ERROR
12333  0 20 21756         N&P     M204
12334  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 205

                             REM     1B=P32
12335   0 43 00430   0235    BRM     OBJECT          START OBJECT TEST
12336   0 76 23637           LDA     =00002000
12337   0 67 00002           LSH     2
12340   0 72 23634           SKA     =00010000
12341   0 01 12343           BRU     *+2             OK, SKIP
12342   0 43 00460           BRM     ERROR           NO,ERROR
12343   0 20 21760           NOP     M205
12344   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 206

                             REM     1B=P32
12345   0 43 00430   0236    BRM     OBJECT          START OBJECT TEST
12346   0 76 23642           LDA     =77775777
12347   0 67 00002           LSH     2
12350   0 72 23634           SKA     =00010000
12351   0 43 00460           BRM     ERROR           NO,ERROR
12352   0 20 21762           NOP     M206
12353   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
                                REM     9B=P32
12354  0 43 00430  0237         BRM     OBJECT          START OBJECT TEST
12355  0 76 23641               LDA     =00001000
12356  0 67 00002               LSH     2
12357  0 72 23512               SKA     =00004000
12360  0 01 12362               BRU     *+2             OK, SKIP
12361  0 43 00460               BRM     ERROR           NO,ERROR
12362  0 20 21764               NOP     M207
12363  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     9B=P32
12364  0 43 00430  0238         BRM     OBJECT          START OBJECT TEST
12365  0 76 23643               LDA     =77776777
12366  0 67 00002               LSH     2
12367  0 72 23512               SKA     =00004000
12370  0 43 00460               BRM     ERROR           NO,ERROR
12371  0 20 21766               NOP     M208
12372  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 209

                            REM     4B=P33
12373  0 43 00430   0239    BRM     OBJECT          START OBJECT TEST
12374  0 76 23410           LDA     =00000400
12375  0 67 00002           LSH     2
12376  0 72 23637           SKA     =00002000
12377  0 01 12401           BRU     *+2             OK, SKIP
12400  0 43 00460           BRM     ERROR           NO,ERROR
12401  0 20 21770           NOP     M209
12402  0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 210

                            REM     4B=P33
12403  0 43 00430   0240    BRM     OBJECT          START OBJECT TEST
12404  0 76 23645           LDA     =77777377
12405  0 67 00002           LSH     2
12406  0 72 23637           SKA     =00002000
12407  0 43 00460           BRM     ERROR           NO,ERROR
12410  0 20 21772           NOP     M210
12411  0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 211

                            REM     6B=P33
12412  0 43 00430   P241    BRM     OBJECT          START OBJECT TEST
12413  0 76 23644            LDA     =00000200
12414  0 67 00002            LSH     2
12415  0 72 23641            SKA     =00001000
12416  0 61 12420            BRU     **2             OK, SKIP
12417  0 43 00460            BRM     ERROR           NO,ERROR
12420  0 20 21774            NOP     M211
12421  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 212

                            REM     6B=P33
12422  0 43 00430   P242    BRM     OBJECT          START OBJECT TEST
12423  0 76 23647            LDA     =77777577
12424  0 67 00002            LSH     2
12425  0 72 23641            SKA     =00001000
12426  0 43 00460            BRM     ERROR           NO,ERROR
12427  0 20 21776            NOP     M212
12430  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
                        REM     6B•P33
12431  0 43 00430 0243  BRM     OBJECT          START OBJECT TEST
12432  0 76 23446       LDA     •00000100
12433  0 67 00002       LSH     2
12434  0 72 23610       SKA     •00000400
12435  0 01 12437       BRU     **2             OK, SKIP
12436  0 43 00460       BRM     ERROR           NO,ERROR
12437  0 20 22000       NOP     M213
12440  0 43 00434       BRM     END             LOOP IF BP1 SET
```



```
                        REM     6B•P33
12441  0 43 00430 0244  BRM     OBJECT          START OBJECT TEST
12442  0 76 23450       LDA     •77777677
12443  0 67 00002       LSH     2
12444  0 72 23610       SKA     •00000400
12445  0 43 00460       BRM     ERROR           NO,ERROR
12446  0 20 22002       NOP     M214
12447  0 43 00434       BRM     END             LOOP IF BP1 SET
```

```
                                REM     10B=P33
12450  0 43 00430  0245         BRM     OBJECT          START OBJECT TEST
12451  0 76 23412               LDA     =00000040
12452  0 67 00002               LSH     2
12453  0 72 23644               SKA     =00000200
12454  0 01 12456               BRU     *+2             OK, SKIP
12455  0 43 00460               BRM     ERROR           NO,ERROR
12456  0 20 22004               NOP     M215
12457  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     10B=P33
12460  0 43 00430  0246         BRM     OBJECT          START OBJECT TEST
12461  0 76 23452               LDA     =77777737
12462  0 67 00002               LSH     2
12463  0 72 23444               SKA     =00000200
12464  0 43 00460               BRM     ERROR           NO,ERROR
12465  0 20 22007               NOP     M216
12466  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.0       01/15  03101   PAGE 217

                             REM     12B-P33
12467  0 43 00430  P247      BRM     OBJECT          START OBJECT TEST
12470  0 76 23651            LDA     =00000020
12471  0 67 00002            LSH     2
12472  0 72 23646            SKA     =00000100
12473  0 01 12475            BRU     *+2             OK, SKIP
12474  0 43 00460            BRM     ERROR           NO,ERROR
12475  0 20 22012            NOP     M217
12476  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.0       01/15  03101   PAGE 218

                             REM     12B-P33
12477  0 43 00430  P248      BRM     OBJECT          START OBJECT TEST
12500  0 76 23654            LDA     =77777757
12501  0 67 00002            LSH     2
12502  0 72 23646            SKA     =00000100
12503  0 43 00460            BRM     ERROR           NO,ERROR
12504  0 20 22015            NOP     M218
12505  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
                          REM     128•P33
12506  0 43 00430  0249   BRM     OBJECT          START OBJECT TEST
12507  0 76 23453         LDA     •00000010
12510  0 67 00002         LSH     2
12511  0 72 23412         SKA     •00000040
12512  0 01 12314         BRU     ••2             OK, SKIP
12513  0 43 00460         BRM     ERROR           NO,ERROR
12514  0 20 22220         NOP     M219
12515  0 43 00434         BRM     END             LOOP IF BP1 SET
```



```
                          REM     128•P33
12516  0 43 00430  0250   BRM     OBJECT          START OBJECT TEST
12517  0 76 23455         LDA     •77777767
12520  0 67 00002         LSH     2
12521  0 72 23412         SKA     •00000040
12522  0 43 00460         BRM     ERROR           NO,ERROR
12523  0 20 22223         NOP     M220
12524  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03:01   PAGE 221

                             REM     16B=P33
12525   0 43 00430   0251    BRM     OBJECT          START OBJECT TEST
12526   0 76 23454           LDA     =00000004
12527   0 67 00002           LSH     2
12530   0 72 23651           SKA     =00000020
12531   0 01 12533           BRU     **2             OK, SKIP
12532   0 43 00460           BRM     ERROR           NO,ERROR
12533   0 20 22026           NOP     M221
12534   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03:01   PAGE 222

                             REM     16B=P33
12535   0 43 00430   0252    BRM     OBJECT          START OBJECT TEST
12536   0 76 23513           LDA     =77777773
12537   0 67 00002           LSH     2
12540   0 72 23651           SKA     =00000020
12541   0 43 00460           BRM     ERROR           NO,ERROR
12542   0 20 22031           NOP     M222
12543   0 43 00434           BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP+3.0      01/15  03101   PAGE 223

                            REM     18B+P33
12544  0 43 00430   0253    BRM     0BJECT          START 0BJECT TE0T
12545  0 76 23453           LDA     +00000002
12546  0 67 00002           L0H     2
12547  0 72 23453           0KA     +00000010
12550  0 01 12552           BRU     *+2             0K, 0KIP
12551  0 43 00460           BRM     ERR0R           N0,ERR0R
12552  0 20 22034           N0P     M223
12553  0 43 00434           BRM     END             L00P IF BP1 0ET
```

```
CPU0   TAP+3.0      01/15  03101   PAGE 224

                            REM     18B+P33
12554  0 43 00430   0254    BRM     0BJECT          START 0BJECT TE0T
12555  0 76 23456           LDA     +77777775
12556  0 67 00002           L0H     2
12557  0 72 23453           0KA     +00000010
12560  0 43 00460           BRM     ERR0R           N0,ERR0R
12561  0 20 22037           N0P     M224
12562  0 43 00434           BRM     END             L00P IF BP1 0ET
```

```
                                REM     188•P33
12563  0 43 00430  0255         BRM     OBJECT          START OBJECT TEST
12564  0 76 23452               LDA     #00000001
12565  0 67 00002               LSH     2
12566  0 72 23454               SKA     #00000004
12567  0 01 12571               BRU     **2             OK, SKIP
12570  0 43 00460               BRM     ERROR           NO,ERROR
12571  0 20 22042               NOP     M225
12572  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     188•P33
12573  0 43 00430  0256         BRM     OBJECT          START OBJECT TEST
12574  0 76 23501               LDA     #77777776
12575  0 67 00002               LSH     2
12576  0 72 23454               SKA     #00000004
12577  0 43 00460               BRM     ERROR           NO,ERROR
12600  0 20 22045               NOP     M226
12601  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.C      01/15  03:01    PAGE 227

                                REM      26B-P34
12602  0 43 00430  0257    BRM      OBJECT              START OBJECT TEST
12603  0 75 23466          LDB      =40000000
12604  0 76 23447          LDA      =0
12605  0 67 00002          LSH      2
12606  0 72 23453          SKA      =00000002
12607  0 01 12611          BRU      *+2                 OK, SKIP
12610  0 43 00460          BRM      ERROR               NO,ERROR
12611  0 20 22050          NOP      M227
12612  0 43 00434          BRM      END                 LOOP IF BP1 SET
```

```
CPU0    TAP-3.C      01/15  03:01    PAGE 228

                                REM      26B-P34
12613  0 43 00430  0258    BRM      OBJECT              START OBJECT TEST
12614  0 75 23470          LDB      =37777777
12615  0 76 23460          LDA      =77777777
12616  0 67 00002          LSH      2
12617  0 72 23453          SKA      =00000002
12620  0 43 00460          BRM      ERROR               NO,ERROR
12621  0 20 22053          NOP      M228
12622  0 43 00434          BRM      END                 LOOP IF BP1 SET
```

```
                        REM     328=P34
12623  0 43 00430 0259  BRM     OBJECT          START OBJECT TEST
12624  0 75 23615       LDB     =20000000
12625  0 76 23447       LDA     =0
12626  0 67 00002       LSH     2
12627  0 72 23452       SKA     =00000001
12630  0 01 12632       BRU     *+2             OK, SKIP
12631  0 43 00460       BRM     ERROR           NO,ERROR
12632  0 20 22056       NOP     M229
12633  0 43 00434       BRM     END             LOOP IF BP1 SET
```



```
                        REM     328=P34
12634  0 43 00430 0260  BRM     OBJECT          START OBJECT TEST
12635  0 75 23616       LDB     =57777777
12636  0 76 23460       LDA     =77777777
12637  0 67 00002       LSH     2
12640  0 72 23452       SKA     =00000001
12641  0 43 00460       BRM     ERROR           NO,ERROR
12642  0 20 22061       NOP     M230
12643  0 43 00434       BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03101   PAGE 231

                             REM     20C=P36
12644   0 43 00430   0261    BRM     OBJECT          START OBJECT TEST
12645   0 75 23445            LDB     =10000000
12646   0 67 00002            LSH     2
12647   0 36 23437            STB     TEMP
12650   0 76 23437            LDA     TEMP
12651   0 72 23466            SKA     =40000000
12652   0 01 12654            BRU     *+2             OK, SKIP
12653   0 43 00460            BRM     ERROR           NO,ERROR
12654   0 20 22064            NOP     M231
12655   0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.C      01/15  03101   PAGE 232

                             REM     20C=P36
12656   0 43 00430   0262    BRM     OBJECT          START OBJECT TEST
12657   0 75 23620            LDB     =67777777
12660   0 67 00002            LSH     2
12661   0 36 23437            STB     TEMP
12662   0 76 23437            LDA     TEMP
12663   0 72 23466            SKA     =40000000
12664   0 43 00460            BRM     ERROR           NO,ERROR
12665   0 20 22067            NOP     M232
12666   0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 233

                                  REM     20C=P36
12667  0 43 00430  0263   BRM     OBJECT          START OBJECT TEST
12670  0 75 23617          LDB     =04000000
12671  0 67 00002          LSH     2
12672  0 36 23437          STB     TEMP
12673  0 76 23437          LDA     TEMP
12674  0 72 23415          SKA     =20000000
12675  0 01 12477          BRU     *+2             OK, SKIP
12676  0 43 00460          BRM     ERROR           NO,ERROR
12677  0 20 22072          NOP     M233
12700  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 234

                                  REM     20C=P36
12701  0 43 00430  0264   BRM     OBJECT          START OBJECT TEST
12702  0 75 23622          LDB     =73777777
12703  0 67 00002          LSH     2
12704  0 36 23437          STB     TEMP
12705  0 76 23437          LDA     TEMP
12706  0 72 23615          SKA     =20000000
12707  0 43 00460          BRM     ERROR           NO,ERROR
12710  0 20 22075          NOP     M234
12711  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 235

                            REM     26C=P36
12712  0 43 00430   0265    BRM     OBJECT          START OBJECT TEST
12713  0 75 23621            LDB     =02000000
12714  0 67 00002            LSH     2
12715  0 36 23437            STB     TEMP
12716  0 76 23437            LDA     TEMP
12717  0 72 23445            SKA     =10000000
12720  0 01 12722            BRU     *+2             OK, SKIP
12721  0 43 00460            BRM     ERROR           NO,ERROR
12722  0 20 22100            NOP     M235
12723  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 236

                            REM     26C=P36
12724  0 43 00430   0266    BRM     OBJECT          START OBJECT TEST
12725  0 75 23623            LDB     =75777777
12726  0 67 00002            LSH     2
12727  0 36 23437            STB     TEMP
12730  0 76 23437            LDA     TEMP
12731  0 72 23445            SKA     =10000000
12732  0 43 00460            BRM     ERROR           NO,ERROR
12733  0 20 22103            NOP     M236
12734  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 237

                                  REM     26C=P36
12735  0 43 00430  9267    BRM     OBJECT          START OBJECT TEST
12736  0 75 23602          LDB     =01000000
12737  0 67 00002          LSH     2
12740  0 36 23437          STB     TEMP
12741  0 76 23437          LDA     TEMP
12742  0 72 23617          SKA     =04000000
12743  0 01 12745          BRU     *+2             OK, SKIP
12744  0 43 00460          BRM     ERROR           NO,ERROR
12745  0 20 22106          NOP     M237
12746  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C     01/15  03101   PAGE 238

                                  REM     26C=P36
12747  0 43 00430  9268    BRM     OBJECT          START OBJECT TEST
12750  0 75 23625          LDB     =76777777
12751  0 67 00002          LSH     2
12752  0 36 23437          STB     TEMP
12753  0 76 23437          LDA     TEMP
12754  0 72 23617          SKA     =04000000
12755  0 43 00460          BRM     ERROR           NO,ERROR
12756  0 20 22111          NOP     M238
12757  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP*3.0      01/15  03101   PAGE 239

                            REM     13C*P37
12760  0 43 00430   0269    BRM     OBJECT          START OBJECT TEST
12761  0 75 23624            LDB     *00400000
12762  0 67 00002            LSH     2
12763  0 36 23437            STB     TEMP
12764  0 76 23437            LDA     TEMP
12765  0 72 23621            SKA     *02000000
12766  0 01 12770            BRU     **2             OK, SKIP
12767  0 43 00460            BRM     ERROR           NO,ERROR
12770  0 20 22114            NOP     M239
12771  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP*3.0      01/15  03101   PAGE 240

                            REM     13C*P37
12772  0 43 00430   0270    BRM     OBJECT          START OBJECT TEST
12773  0 75 23627            LDB     *77377777
12774  0 67 00002            LSH     2
12775  0 36 23437            STB     TEMP
12776  0 76 23437            LDA     TEMP
12777  0 72 23621            SKA     *02000000
13000  0 43 00460            BRM     ERROR           NO,ERROR
13001  0 20 22117            NOP     M240
13002  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.0      01/15  03:01    PAGE 241

                            REM      15C-P37
13003  0 43 00430  0271    BRM      OBJECT          START OBJECT TEST
13004  0 75 23626          LDB      =00200000
13005  0 67 00002          LSH      2
13006  0 36 23437          STB      TEMP
13007  0 76 23437          LDA      TEMP
13010  0 72 23602          SKA      =01000000
13011  0 01 13013          BRU      *+2             OK, SKIP
13012  0 43 00460          BRM      ERROR           NO,ERROR
13013  0 20 22122          NOP      M241
13014  0 43 00434          BRM      END             LOOP IF BP1 SET
```

```
CPU0    TAP-3.0      01/15  03:01    PAGE 242

                            REM      15C-P37
13015  0 43 00430  0272    BRM      OBJECT          START OBJECT TEST
13016  0 75 23630          LDB      =77577777
13017  0 67 00002          LSH      2
13020  0 36 23437          STB      TEMP
13021  0 76 23437          LDA      TEMP
13022  0 72 23602          SKA      =01000000
13023  0 43 00460          BRM      ERROR           NO,ERROR
13024  0 20 22125          NOP      M242
13025  0 43 00434          BRM      END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,0      01/15  03:01   PAGE 243

                                    REM     15C=P37
13026   0 43 00430   0273           BRM     OBJECT          START OBJECT TEST
13027   0 75 23604                   LDB     =00100000
13030   0 67 00002                   LSH     2
13031   0 36 23437                   STB     TEMP
13032   0 76 23437                   LDA     TEMP
13033   0 72 23624                   SKA     =00400000
13034   0 01 13036                   BRU     *+2             OK, SKIP
13035   0 43 00460                   BRM     ERROR           NO,ERROR
13036   0 20 22130                   NOP     M243
13037   0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,0      01/15  03:01   PAGE 244

                                    REM     15C=P37
13040   0 43 00430   0274           BRM     OBJECT          START OBJECT TEST
13041   0 75 23631                   LDB     =77677777
13042   0 67 00002                   LSH     2
13043   0 36 23437                   STB     TEMP
13044   0 76 23437                   LDA     TEMP
13045   0 72 23624                   SKA     =00400000
13046   0 43 00460                   BRM     ERROR           NO,ERROR
13047   0 20 22133                   NOP     M244
13050   0 43 00434                   BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 245

                                   REM     7C=P38
13051   0 43 00430  0275           BRM     OBJECT          START OBJECT TEST
13052   0 75 23511                  LDB     =00040000
13053   0 67 00002                  LSH     2
13054   0 36 23437                  STB     TEMP
13055   0 76 23437                  LDA     TEMP
13056   0 72 23626                  SKA     =00200000
13057   0 01 13061                  BRU     *+2             OK, SKIP
13060   0 43 00460                  BRM     ERROR           NO,ERROR
13061   0 20 22136                  NOP     M245
13062   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 246

                                   REM     7C=P38
13063   0 43 00430  0276           BRM     OBJECT          START OBJECT TEST
13064   0 75 23633                  LDB     =77737777
13065   0 67 00002                  LSH     2
13066   0 36 23437                  STB     TEMP
13067   0 76 23437                  LDA     TEMP
13070   0 72 23626                  SKA     =00200000
13071   0 43 00460                  BRM     ERROR           NO,ERROR
13072   0 20 22140                  NOP     M246
13073   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 247

                                   REM     9C=P38
13074  0 43 00430   0277           BRM     OBJECT          START OBJECT TEST
13075  0 75 23632                  LDB     =00020000
13076  0 67 00002                  LSH     2
13077  0 36 23437                  STB     TEMP
13100  0 76 23437                  LDA     TEMP
13101  0 72 23604                  SKA     =00100000
13102  0 01 13104                  BRU     *+2             OK, SKIP
13103  0 43 00460                  BRM     ERROR           NO,ERROR
13104  0 20 22142                  NOP     M247
13105  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 248

                                   REM     9C=P38
13106  0 43 00430   0278           BRM     OBJECT          START OBJECT TEST
13107  0 75 23635                  LDB     =77757777
13110  0 67 00002                  LSH     2
13111  0 36 23437                  STB     TEMP
13112  0 76 23437                  LDA     TEMP
13113  0 72 23604                  SKA     =00100000
13114  0 43 00460                  BRM     ERROR           NO,ERROR
13115  0 20 22144                  NOP     M248
13116  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                                REM     9C=P38
13117  0 43 00430  0279         BRM     OBJECT          START OBJECT TEST
13120  0 75 23634              LDB     =00010000
13121  0 67 00002              LSH     2
13122  0 36 23437              STB     TEMP
13123  0 76 23437              LDA     TEMP
13124  0 72 23634              SKA     =00010000
13125  0 43 00460              BRM     ERROR           NO,ERROR
13126  0 20 22146              NOP     M249
13127  0 43 00434              BRM     END             LOOP IF BP1 SET
```



```
                                REM     9C=P38
13130  0 43 00430  0280         BRM     OBJECT          START OBJECT TEST
13131  0 75 23636              LDB     =77767777
13132  0 67 00002              LSH     2
13133  0 36 23437              STB     TEMP
13134  0 76 23437              LDA     TEMP
13135  0 72 23511              SKA     =00040000
13136  0 43 00460              BRM     ERROR           NO,ERROR
13137  0 20 22150              NOP     M250
13140  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 251

                            REM     1C=P39
13141   0 43 00430  0281    BRM     OBJECT          START OBJECT TEST
13142   0 75 23512          LDB     =00004000
13143   0 67 00002          LSH     2
13144   0 36 23437          STB     TEMP
13145   0 76 23437          LDA     TEMP
13146   0 72 23632          SKA     =00020000
13147   0 01 13151          BRU     *+2             OK, SKIP
13150   0 43 00460          BRM     ERROR           NO,ERROR
13151   0 20 22152          NOP     M251
13152   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 252

                            REM     1C=P39
13153   0 43 00430  0282    BRM     OBJECT          START OBJECT TEST
13154   0 75 23640          LDB     =77773777
13155   0 67 00002          LSH     2
13156   0 36 23437          STB     TEMP
13157   0 76 23437          LDA     TEMP
13160   0 72 23632          SKA     =00020000
13161   0 43 00460          BRM     ERROR           NO,ERROR
13162   0 20 22154          NOP     M252
13163   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C      01/15  03:01   PAGE 253

                                   REM     3C=P39
13164  0 43 00430   0283           BRM     OBJECT          START OBJECT TEST
13165  0 75 23637                  LDB     =00002000
13166  0 67 00002                  LSH     2
13167  0 36 23437                  STB     TEMP
13170  0 76 23437                  LDA     TEMP
13171  0 72 23634                  SKA     =00010000
13172  0 01 13174                  BRU     *+2             OK, SKIP
13173  0 43 00460                  BRM     ERROR           NO,ERROR
13174  0 20 22156                  NOP     M253
13175  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.C      01/15  03:01   PAGE 254

                                   REM     3C=P39
13176  0 43 00430   0284           BRM     OBJECT          START OBJECT TEST
13177  0 75 23642                  LDB     =77775777
13200  0 67 00002                  LSH     2
13201  0 36 23437                  STB     TEMP
13202  0 76 23437                  LDA     TEMP
13203  0 72 23634                  SKA     =00010000
13204  0 43 00460                  BRM     ERROR           NO,ERROR
13205  0 20 22160                  NOP     M254
13206  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C       01/15  03:01   PAGE 255

                              REM     3C=P39
13207   0 43 00430    P285    BRM     OBJECT          START OBJECT TEST
13210   0 75 23641            LDB     #00001000
13211   0 67 00002            LSH     2
13212   0 36 23437            STB     TEMP
13213   0 76 23437            LDA     TEMP
13214   0 72 23512            SKA     #00004000
13215   0 01 13217            BRU     **2             OK, SKIP
13216   0 43 00460            BRM     ERROR           NO,ERROR
13217   0 20 22162            NOP     M255
13220   0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3,C       01/15  03:01   PAGE 256

                              REM     3C=P39
13221   0 43 00430    P286    BRM     OBJECT          START OBJECT TEST
13222   0 75 23643            LDB     #77776777
13223   0 67 00002            LSH     2
13224   0 36 23437            STB     TEMP
13225   0 76 23437            LDA     TEMP
13226   0 72 23512            SKA     #00004000
13227   0 43 00460            BRM     ERROR           NO,ERROR
13230   0 20 22164            NOP     M256
13231   0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 257

                                   REM     4C=P40
13232  0 43 00430   0287           BRM     OBJECT          START OBJECT TEST
13233  0 75 23610                  LDB     =00000400
13234  0 67 00002                  LSH     2
13235  0 36 23437                  STB     TEMP
13236  0 76 23437                  LDA     TEMP
13237  0 72 23637                  SKA     =00002000
13240  0 01 13242                  BRU     *+2             OK, SKIP
13241  0 43 00460                  BRM     ERROR           NO,ERROR
13242  0 20 22166                  NOP     M257
13243  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 258

                                   REM     4C=P40
13244  0 43 00430   0288           BRM     OBJECT          START OBJECT TEST
13245  0 75 23645                  LDB     =77777377
13246  0 67 00002                  LSH     2
13247  0 36 23437                  STB     TEMP
13250  0 76 23437                  LDA     TEMP
13251  0 72 23637                  SKA     =00002000
13252  0 43 00460                  BRM     ERROR           NO,ERROR
13253  0 20 22170                  NOP     M258
13254  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                                REM     6C.P40
13255  0 43 00430  0289         BRM     OBJECT          START OBJECT TEST
13256  0 75 23644               LDB     .00000200
13257  0 67 00002               LSH     2
13260  0 36 23437               STB     TEMP
13261  0 76 23437               LDA     TEMP
13262  0 72 23641               SKA     .00001000
13263  0 01 13265               BRU     *+2             OK, SKIP
13264  0 43 00460               BRM     ERROR           NO,ERROR
13265  0 20 22172               NOP     M259
13266  0 43 00434               BRM     END             LOOP IF BP1 SET
```



```
                                REM     6C.P40
13267  0 43 00430  0290         BRM     OBJECT          START OBJECT TEST
13270  0 75 23647               LDB     .77777577
13271  0 67 00002               LSH     2
13272  0 36 23437               STB     TEMP
13273  0 76 23437               LDA     TEMP
13274  0 72 23641               SKA     .00001000
13275  0 43 00460               BRM     ERROR           NO,ERROR
13276  0 20 22174               NOP     M260
13277  0 43 00434               BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 261

                                   REM     6C=P40
13300  0 43 00430   0291           BRM     OBJECT          START OBJECT TEST
13301  0 75 23646                  LDB     =00000100
13302  0 67 00002                  LSH     2
13303  0 36 23437                  STB     TEMP
13304  0 76 23437                  LDA     TEMP
13305  0 72 23610                  SKA     =00000400
13306  0 01 13310                  BRU     *+2             OK, SKIP
13307  0 43 00460                  BRM     ERROR           NO,ERROR
13310  0 20 22176                  NOP     M261
13311  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 262

                                   REM     6C=P40
13312  0 43 00430   0292           BRM     OBJECT          START OBJECT TEST
13313  0 75 23650                  LDB     =77777677
13314  0 67 00002                  LSH     2
13315  0 36 23437                  STB     TEMP
13316  0 76 23437                  LDA     TEMP
13317  0 72 23610                  SKA     =00000400
13320  0 43 00460                  BRM     ERROR           NO,ERROR
13321  0 20 22200                  NOP     M262
13322  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 263

                            REM     10C=P41
13323  0 43 00430   9293    BRM     OBJECT          START OBJECT TEST
13324  0 75 23612            LDB     =00000040
13325  0 67 00002            LSH     2
13326  0 36 23437            STB     TEMP
13327  0 76 23437            LDA     TEMP
13330  0 72 23644            SKA     =00000200
13331  0 01 13333            BRU     *+2             OK, SKIP
13332  0 43 00460            BRM     ERROR           NO,ERROR
13333  0 20 22202            NOP     M263
13334  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 264

                            REM     10C=P41
13335  0 43 00430   9294    BRM     OBJECT          START OBJECT TEST
13336  0 75 23652            LDB     =77777737
13337  0 67 00002            LSH     2
13340  0 36 23437            STB     TEMP
13341  0 76 23437            LDA     TEMP
13342  0 72 23644            SKA     =00000200
13343  0 43 00460            BRM     ERROR           NO,ERROR
13344  0 20 22205            NOP     M264
13345  0 43 00434            BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 265

                             REM     12C=P41
13346   0 43 00430   0295    BRM     OBJECT          START OBJECT TEST
13347   0 75 23651             LDB     =00000020
13350   0 67 00002             LSH     2
13351   0 36 23437             STB     TEMP
13352   0 76 23437             LDA     TEMP
13353   0 72 23646             SKA     =00000100
13354   0 01 13356             BRU     *+2             OK, SKIP
13355   0 43 00460             BRM     ERROR           NO,ERROR
13356   0 20 22210             NOP     M265
13357   0 43 00434             BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 266

                             REM     12C=P41
13360   0 43 00430   0296    BRM     OBJECT          START OBJECT TEST
13361   0 75 23654             LDB     =77777757
13362   0 67 00002             LSH     2
13363   0 36 23437             STB     TEMP
13364   0 76 23437             LDA     TEMP
13365   0 72 23646             SKA     =00000100
13366   0 43 00460             BRM     ERROR           NO,ERROR
13367   0 20 22213             NOP     M266
13370   0 43 00434             BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 267

                                   REM     12C=P41
13371  0 43 00430   0297           BRM     OBJECT          START OBJECT TEST
13372  0 75 23653                  LDB     =00000010
13373  0 67 00002                  LSH     2
13374  0 36 23437                  STB     TEMP
13375  0 76 23437                  LDA     TEMP
13376  0 72 23612                  SKA     =00000040
13377  0 01 13401                  BRU     *+2             OK, SKIP
13400  0 43 00460                  BRM     ERROR           NO,ERROR
13401  0 20 22216                  NOP     M267
13402  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 268

                                   REM     12C=P41
13403  0 43 00430   0298           BRM     OBJECT          START OBJECT TEST
13404  0 75 23655                  LDB     =77777767
13405  0 67 00002                  LSH     2
13406  0 36 23437                  STB     TEMP
13407  0 76 23437                  LDA     TEMP
13410  0 72 23612                  SKA     =00000040
13411  0 43 00460                  BRM     ERROR           NO,ERROR
13412  0 20 22221                  NOP     M268
13413  0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 269

                                   REM     16C=P42
13414   0 43 00430  0299           BRM     OBJECT          START OBJECT TEST
13415   0 75 23454                  LDB     =00000004
13416   0 67 00002                  LSH     2
13417   0 36 23437                  STB     TEMP
13420   0 76 23437                  LDA     TEMP
13421   0 72 23651                  SKA     =00000020
13422   0 01 13424                  BRU     *+2             OK, SKIP
13423   0 43 00460                  BRM     ERROR           NO,ERROR
13424   0 20 22224                  NOP     M269
13425   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
CPU0   TAP=3,0      01/15  03101   PAGE 270

                                   REM     16C=P42
13426   0 43 00430  0300           BRM     OBJECT          START OBJECT TEST
13427   0 75 23513                  LDB     =77777773
13430   0 67 00002                  LSH     2
13431   0 36 23437                  STB     TEMP
13432   0 76 23437                  LDA     TEMP
13433   0 72 23651                  SKA     =00000020
13434   0 43 00460                  BRM     ERROR           NO,ERROR
13435   0 20 22227                  NOP     M270
13436   0 43 00434                  BRM     END             LOOP IF BP1 SET
```

```
                          REM     18C•P42
13437  0 43 00430  0301   BRM     OBJECT          START OBJECT TEST
13440  0 75 23453         LDB     =00000002
13441  0 67 00002         LSH     2
13442  0 36 23437         STB     TEMP
13443  0 76 23437         LDA     TEMP
13444  0 72 23653         SKA     =00000010
13445  0 01 13447         BRU     **2             OK, SKIP
13446  0 43 00460         BRM     ERROR           NO,ERROR
13447  0 20 22232         NOP     M271
13450  0 43 00434         BRM     END             LOOP IF BP1 SET
```



```
                          REM     18C•P42
13451  0 43 00430  0302   BRM     OBJECT          START OBJECT TEST
13452  0 75 23656         LDB     =77777775
13453  0 67 00002         LSH     2
13454  0 36 23437         STB     TEMP
13455  0 76 23437         LDA     TEMP
13456  0 72 23653         SKA     =00000010
13457  0 43 00460         BRM     ERROR           NO,ERROR
13460  0 20 22235         NOP     M272
13461  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
                                    REM     30C•P43
13462  0 43 00430  0303    BRM     OBJECT          START OBJECT TEST
13463  0 75 23452          LDB     •00000001
13464  0 67 00002          LSH     2
13465  0 36 23437          STB     TEMP
13466  0 76 23437          LDA     TEMP
13467  0 72 23454          SKA     •00000004
13470  0 01 13472          BRU     ••2             OK, SKIP
13471  0 43 00460          BRM     ERROR           NO,ERROR
13472  0 20 22240          NOP     M273
13473  0 43 00434          BRM     END             LOOP IF BP1 SET
```



```
                                    REM     30C•P43
13474  0 43 00430  0304    BRM     OBJECT          START OBJECT TEST
13475  0 75 23501          LDB     •77777776
13476  0 67 00002          LSH     2
13477  0 36 23437          STB     TEMP
13500  0 76 23437          LDA     TEMP
13501  0 72 23454          SKA     •00000004
13502  0 43 00460          BRM     ERROR           NO,ERROR
13503  0 20 22243          NOP     M274
13504  0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                          REM     30C,27D=P43
13505  0 43 00430  9305   BRM     OBJECT          START OBJECT TEST
13506  0 76 23460         LDA     =77777777
13507  0 75 23460         LDB     =77777777
13510  0 67 00002         LSH     2
13511  0 36 23437         STB     TEMP
13512  0 76 23437         LDA     TEMP
13513  0 72 23447         SKA     =00000000
13514  0 43 00460         BRM     ERROR           NO,ERROR
13515  0 20 22246         NOP     M275
13516  0 43 00434         BRM     END             LOOP IF BP1 SET
```



```
                          REM     32C,258,31B=P43
13517  0 43 00430  9306   BRM     OBJECT          START OBJECT TEST
13520  0 76 23466         LDA     =40000000
13521  0 75 23447         LDB     =0
13522  0 67 20002         LCY     2
13523  0 36 23437         STB     TEMP
13524  0 76 23437         LDA     TEMP
13525  0 72 23453         SKA     =2
13526  0 01 13530         BRU     *+2
13527  0 43 00460         BRM     ERROR           NO,ERROR
13530  0 20 22252         NOP     M276
13531  0 43 00434         BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03:01   PAGE 277

                                    REM     32C,25B,31B=P43
13532   0 43 00430   0307   BRM     OBJECT          START OBJECT TEST
13533   0 76 23470          LDA     #37777777
13534   0 75 23460          LDB     #77777777
13535   0 67 20002          LCY     2
13536   0 36 23437          STB     TEMP
13537   0 76 23437          LDA     TEMP
13540   0 72 23453          SKA     #2
13541   0 43 00460          BRM     ERROR           NO,ERROR
13542   0 20 22257          NOP     M277
13543   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
CPU0    TAP=3.0      01/15  03:01   PAGE 278

                                    REM     32C,19B,27C=P43
13544   0 43 00430   0308   BRM     OBJECT          START OBJECT TEST
13545   0 76 23415          LDA     #20000000
13546   0 75 23447          LDB     #0
13547   0 67 20002          LCY     2
13550   0 36 23437          STB     TEMP
13551   0 76 23437          LDA     TEMP
13552   0 72 23452          SKA     #1
13553   0 01 13555          BRU     *+2             OK, SKIP
13554   0 43 00460          BRM     ERROR           NO,ERROR
13555   0 20 22264          NOP     M278
13556   0 43 00434          BRM     END             LOOP IF BP1 SET
```

```
                                REM     32C,19B,27C•P43
13557   0 43 00430  0309       BRM     0BJECT          START 0BJECT TEST
13560   0 76 23616              LDA     •57777777
13561   0 75 23460              LDB     •77777777
13562   0 67 20002              LCY     2
13563   0 36 23437              STB     TEMP
13564   0 76 23437              LDA     TEMP
13565   0 72 23452              SKA     •1
13566   0 43 00460              BRM     ERR0R           N0,ERR0R
13567   0 20 22271              N0P     M279
13570   0 43 00434              BRM     END             L00P IF BP1 SET
```



```
                                REM     20B,33D,•P31
13571   0 43 00430  0310        BRM     0BJECT          START 0BJECT TEST
13572   0 76 23447              LDA     •0
13573   0 75 23452              LDB     •1
13574   0 66 20001              RCY     1
13575   0 72 23466              SKA     •40000000
13576   0 01 13400              BRU     ••2             0K, SKIP
13577   0 43 00460              BRM     ERR0R           N0,ERR0R
13600   0 20 22276              N0P     M280
13601   0 43 00434              BRM     END             L00P IF BP1 SET
```

```
                                REM     20B,33D=P31
13602  0 43 00430  9311         BRM     OBJECT          START OBJECT TEST
13603  0 76 23460              LDA     =77777777
13604  0 75 23501              LDB     =77777776
13605  0 66 20001              RCY     1
13606  0 72 23466              SKA     =40000000
13607  0 43 00460              BRM     ERROR           NO,ERROR
13610  0 20 22302              NOP     M281
13611  0 43 00434              BRM     END             LOOP IF BP1 SET
```



```
                                REM     20B=P31,34B=P34
13612  0 43 00430  9312         BRM     OBJECT          START OBJECT TEST
13613  0 76 23415              LDA     =20000000
13614  0 67 00001              LSH     1
13615  0 72 23466              SKA     =40000000
13616  0 01 13620              BRU     *+2             OK, SKIP
13617  0 43 00460              BRM     ERROR           NO,ERROR
13620  0 20 22306              NOP     M282
13621  0 43 00434              BRM     END             LOOP IF BP1 SET
```

```
                             REM     208-P31,348-P34
13622  0 43 00430  R313     BRM     OBJECT              START OBJECT TEST
13623  0 76 23416            LDA     =57777777
13624  0 67 00001            LSH     1
13625  0 72 23466            SKA     =40000000
13626  0 43 00460            BRM     ERROR               NO,ERROR
13627  0 20 22313            NOP     M283
13630  0 43 00434            BRM     END                 LOOP IF BP1 SET
13631  0 43 00456            BRM     FDONE
```



```
                    * FUNCTION 1 =940 TRAP AND MAP DIAGNOSTIC=
        77764146   DUMMY   EQU     ZERO..
13632      00146           BSS     DUMMY(AND)3777
14000  0 43 00424  FUNC1   BRM     FUNCTN
14001  0 20 20014          NOP     FPT1
```

```
                        * THIS OBJECT TEST ATTEMPTS A RELABLED STA AND SHOULD NOT TRAP
                        * IF OUT OF BOUNDS TRAP,CHECK RLOF, TRAP, OBA, OB,SFM AND  RRL1
                        * IF READ ONLY TRAP, CHECK ALL ABOVE PLUS PI AND STV
14002  0 43 00430 TRAP1  BRM     OBJECT              START OBJECT TEST
14003  0 43 00440        BRM     RETURN              SET TRAP RETURN
14004  0 20 14020        NOP     T1
14005  0 76 23447        LDA     =0
14006  0 35 00415        STA     RL1                 RL1 CONTENTS
14007  0 76 23447        LDA     =0
14010  0 35 00416        STA     RL2                 RL2 CONTENTS
14011  0 02 20400        EOM     020400
14012  0 13 00415        POT     RL1                 SET RL1
14013  0 02 21000        EOM     021000
14014  0 13 00416        POT     RL2                 SET RL2
14015  4 35 03777        STA     003777,4            SHOULD NOT TRAP
14016  0 46 00001        CLA
14017  0 01 14021        BRU     **2
14020  0 76 00450 T1     LDA     DIVERT
14021  0 14 23506        ETR     =037777
14022  0 50 23657        SKE     =T43                READ ONLY TRAP ID
14023  0 01 14025        BRU     **2                 NO, SKIP
14024  0 43 00460        BRM     ERROR               YES, ERROR
14025  0 20 22337        NOP     TM1A
14026  0 50 23660        SKE     =T41                OUT OF BOUNDS TRAP ID
14027  0 01 14031        BRU     **2                 NO, SKIP
14030  0 43 00460        BRM     ERROR               YES, ERROR
14031  0 20 22362        NOP     TM1B
14032  0 43 00434        BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM ANY R
                        * IF NO TRAP, CHECK SFM, STV, RLOF, OB, TRAP, REL, RLC1, RLS1,
                        * AND RB
                        * IF OUT OF BOUNDS TRAP, CHECK PI, OBA, AND STV
14033  0 43 00430 TRAP2  BRM     OBJECT              START OBJECT TEST
14034  0 43 00440        BRM     RETURN              SET TRAP RETURN
14035  0 20 14051        NOP     T2
14036  0 76 23460        LDA     =077777777
14037  0 35 00415        STA     RL1                 RL1 CONTENTS
14040  0 76 23460        LDA     =077777777
14041  0 35 00416        STA     RL2                 RL2 CONTENTS
14042  0 02 20400        EOM     020400
14043  0 13 00415        POT     RL1                 SET RL1
14044  0 02 21000        EOM     021000
14045  0 13 00416        POT     RL2                 SET RL2
14046  4 35 03777        STA     003777,4            SHOULD READ ONLY TRAP
14047  0 46 00001        CLA
14050  0 01 14052        BRU     **2
14051  0 76 00450 T2     LDA     DIVERT
14052  0 14 23506        ETR     =037777
14053  0 50 23447        SKE     =0                  NO TRAP ID
14054  0 01 14056        BRU     **2                 NO, SKIP
14055  0 43 00460        BRM     ERROR               YES, ERROR
14056  0 20 22413        NOP     TM2A
14057  0 50 23660        SKE     =T41                OUT OF BOUNDS TRAP ID
14060  0 01 14062        BRU     **2                 NO, SKIP
14061  0 43 00460        BRM     ERROR               YES, ERROR
14062  0 20 22423        NOP     TM2B
14063  0 43 00434        BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM ANY R
                        * IF NO TRAP, CHECK OBA, AND OB
                        * IF READ ONLY TRAP, CHECK OBA, RL0H, RL00, RL01, RL02, RL03, AND
                        * RRL1
14064  0 43 00430 TRAP3  BRM     OBJECT              START OBJECT TEST
14065  0 43 00440        BRM     RETURN              SET TRAP RETURN
14066  0 20 14102        NOP     T3
14067  0 76 23560        LDA     =040404040
14070  0 35 00415        STA     RL1                 RL1 CONTENTS
14071  0 76 23560        LDA     =040404040
14072  0 35 00416        STA     RL2                 RL2 CONTENTS
14073  0 02 20400        EOM     020400
14074  0 13 00415        POT     RL1                 SET RL1
14075  0 02 21000        EOM     021000
14076  0 13 00416        POT     RL2                 SET RL2
14077  4 35 03777        STA     003777,4            SHOULD OUT OF BOUND TRAP
14100  0 46 00001        CLA
14101  0 01 14103        BRU     *+2
14102  0 76 00450 T3     LDA     DIVERT
14103  0 14 23506        ETR     =037777
14104  0 50 23447        SKE     =0                  NO TRAP ID
14105  0 01 14107        BRU     *+2                 NO, SKIP
14106  0 43 00460        BRM     ERROR               YES, ERROR
14107  0 20 22445        NOP     TM3A
14110  0 50 23657        SKE     =T43                READ ONLY TRAP ID
14111  0 01 14113        BRU     *+2                 NO, SKIP
14112  0 43 00460        BRM     ERROR YES, ERROR
14113  0 20 22447        NOP     TM3B
14114  0 43 00434        BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R0
                        * IF NO TRAP, CHECK SELO, RL0F, AND SFM
                        * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14115  0 43 00430 TRAP4  BRM     OBJECT              START OBJECT TEST
14116  0 43 00440        BRM     RETURN              SET TRAP RETURN
14117  0 20 14133        NOP     T4
14120  0 76 23661        LDA     =077000000
14121  0 35 00415        STA     RL1                 RL1 CONTENTS
14122  0 76 23447        LDA     =000000000
14123  0 35 00416        STA     RL2                 RL2 CONTNETS
14124  0 02 20400        EOM     020400
14125  0 13 00415        POT     RL1                 SET RL1
14126  0 02 21000        EOM     021000
14127  0 13 00416        POT     RL2                 SET RL2
14130  4 35 03777        STA     003777,4            SHOULD READ ONLY TRAP
14131  0 46 00001        CLA
14132  0 01 14134        BRU     *+2
14133  0 76 00450 T4     LDA     DIVERT
14134  0 14 23506        ETR     =037777
14135  0 50 23457        SKE     =T43                EXPECTED READ ONLY TRAP ID
14136  0 43 00460        BRM     ERROR
14137  0 20 22500        NOP     TM4
14140  0 43 00434        BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R1
                    * IF NO TRAP, CHECK SEL1, RL1F, AND SFM
                    * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14141  0 43 00430  TRAP5  BRM     OBJECT              START OBJECT TEST
14142  0 43 00440         BRM     RETURN              SET TRAP RETURN
14143  0 20 14157         NOP     T5
14144  0 76 23662         LDA     =000770000
14145  0 35 00415         STA     RL1                 RL1 CONTENTS
14146  0 76 23447         LDA     =000000000
14147  0 35 00416         STA     RL2                 RL2 CONTENTS
14150  0 02 20400         EOM     020400
14151  0 13 00415         POT     RL1                 SET RL1
14152  0 02 21000         EOM     021000
14153  0 13 00416         POT     RL2                 SET RL2
14154  4 35 07777         STA     007777,4            SHOULD READ ONLY TRAP
14155  0 46 00001         CLA
14156  0 01 14160         BRU     *+2
14157  0 76 00450  T5     LDA     DIVERT
14160  0 14 23506         ETR     =037777
14161  0 50 23457         SKE     =T43                EXPECTED READ ONLY TRAP ID
14162  0 43 00460         BRM     ERROR
14163  0 20 22510         NOP     TM5
14164  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R2
                    * IF NO TRAP, CHECK SEL2, RL2F, AND SFM
                    * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14165  0 43 00430  TRAP6  BRM     OBJECT              START OBJECT TEST
14166  0 43 00440         BRM     RETURN              SET TRAP RETURN
14167  0 20 14203         NOP     T6
14170  0 76 23663         LDA     =000007700
14171  0 35 00415         STA     RL1                 RL1 CONTENTS
14172  0 76 23447         LDA     =000000000
14173  0 35 00416         STA     RL2                 RL2 CONTENTS
14174  0 02 20400         EOM     020400
14175  0 13 00415         POT     RL1                 SET RL1
14176  0 02 21000         EOM     021000
14177  0 13 00416         POT     RL2                 SET RELABEING REGISTER 2
14200  4 35 13777         STA     013777,4            SHOULD READ ONLY TRAP
14201  0 46 00001         CLA
14202  0 01 14204         BRU     *+2
14203  0 76 00450  T6     LDA     DIVERT
14204  0 14 23506         ETR     =037777
14205  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
14206  0 43 00460         BRM     ERROR
14207  0 20 22520         NOP     TM6
14210  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R3
                        * IF NO TRAP, CHECK SEL3, RL3F, AND SFM
                        * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14211  0 43 00430 TRAP7 BRM     OBJECT              START OBJECT TEST
14212  0 43 00440       BRM     RETURN              SET TRAP RETRUN
14213  0 20 14227       NOP     T7
14214  0 76 23471       LDA     •000000077
14215  0 35 00415       STA     RL1                 RL1 CONTENTS
14216  0 76 23447       LDA     •000000000
14217  0 35 00416       STA     RL2                 RL2 CONTENTS
14220  0 02 20400       EOM     020400
14221  0 13 00415       POT     RL1                 SET RL1
14222  0 02 21000       EOM     021000
14223  0 13 00416       POT     RL2                 SET RL2
14224  4 35 17777       STA     017777,4            SHOULD READ ONLY TRAP
14225  0 46 00001       CLA
14226  0 01 14230       BRU     •+2
14227  0 76 00450 T7    LDA     DIVERT
14230  0 14 23506       ETR     •037777
14231  0 50 23657       SKE     •T43                EXPECTED READ ONLY TRAP ID
14232  0 43 00460       BRM     ERROR
14233  0 20 22530       NOP     TM7
14234  0 43 00434       BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R4
                        * IF NO TRAP, CHECK SEL4, RL4F, RL62, AND SFM
                        * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14235  0 43 00430 TRAP8 BRM     OBJECT              START OBJECT TEST
14236  0 43 00440       BRM     RETURN              SET TRAP RETURN
14237  0 20 14253       NOP     T8
14240  0 76 23447       LDA     •000000000
14241  0 35 00415       STA     RL1                 RL1 CONTENTS
14242  0 76 23461       LDA     •077000000
14243  0 35 00416       STA     RL2                 RL2 CONTENTS
14244  0 02 20400       EOM     020400
14245  0 13 00415       POT     RL1                 SET RL1
14246  0 02 21000       EOM     021000
14247  0 13 00416       POT     RL2                 SET RL2
14250  4 35 23777       STA     023777,4            SHOULD READ ONLY TRAP
14251  0 46 00001       CLA
14252  0 01 14254       BRU     •+2
14253  0 76 00450 T8    LDA     DIVERT
14254  0 14 23506       ETR     •037777
14255  0 50 23657       SKE     •T43                EXPECTED READ ONLY TRAP ID
14256  0 43 00460       BRM     ERROR
14257  0 20 22540       NOP     TM8
14260  0 43 00434       BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R5
                        * IF NO TRAP, CHECK SEL5, RL5F, AND SFM
                        * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14261  0 43 00430 TRAP9 BRM     OBJECT              START OBJECT TEST
14262  0 43 00440       BRM     RETURN              SET TRAP RETURN
14263  0 20 14277       NOP     T9
14264  0 76 23447       LDA     =000000000
14265  0 35 00415       STA     RL1                 RL1 CONTENTS
14266  0 76 23662       LDA     =000770000
14267  0 35 00416       STA     RL2                 RL2 CONTENTS
14270  0 02 20400       EOM     020400
14271  0 13 00415       POT     RL1                 SET RL1
14272  0 02 21000       EOM     021000
14273  0 13 00416       POT     RL2                 SET RL2
14274  4 35 27777       STA     027777,4            SHOULD READ ONLY TRAP
14275  0 46 00001       CLA
14276  0 01 14300       BRU     *+2
14277  0 76 00450 T9    LDA     DIVERT
14300  0 14 23506       ETR     =037777
14301  0 50 23657       SKE     =T43                EXPECTED READ ONLY TRAP ID
14302  0 43 00460       BRM     ERROR
14303  0 20 22554       NOP     TM9
14304  0 43 00434       BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP FROM R6
                        * IF NO TRAP, CHECK SEL6, RL6F, AND SFM
                        * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14305  0 43 00430 TRAP10 BRM    OBJECT              START OBJECT TEST
14306  0 43 00440       BRM     RETURN              SET TRAP RETURN
14307  0 20 14323       NOP     T10
14310  0 76 23447       LDA     =000000000
14311  0 35 00415       STA     RL1                 RL1 CONTENTS
14312  0 76 23663       LDA     =000007700
14313  0 35 00416       STA     RL2                 RL2 CONTENTS
14314  0 02 20400       EOM     020400
14315  0 13 00415       POT     RL1                 SET RL1
14316  0 02 21000       EOM     021000
14317  0 13 00416       POT     RL2                 SET RL2
14320  4 35 33777       STA     033777,4            SHOULD READ ONLY TRAP
14321  0 46 00001       CLA
14322  0 01 14324       BRU     *+2
14323  0 76 00450 T10   LDA     DIVERT
14324  0 14 23506       ETR     =037777
14325  0 50 23657       SKE     =T43                EXPECTED READ ONLY TRAP ID
14326  0 43 00460       BRM     ERROR
14327  0 20 22564       NOP     TM10
14330  0 43 00434       BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R7
                    * IF NO TRAP, CHECK SEL7, RL7F, AND SFM
                    * OUT OF BOUNDS TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14331  0 43 00430   TRAP11 BRM     OBJECT              START OBJECT TEST
14332  0 43 00440          BRM     RETURN              SET TRAP RETURN
14333  0 20 14347          NOP     T11
14334  0 76 23447          LDA     =000000000
14335  0 35 00415          STA     RL1                 RL1 CONTENTS
14336  0 76 23471          LDA     =000000077
14337  0 35 00416          STA     RL2                 RL2 CONTENTS
14340  0 02 20400          EOM     020400
14341  0 13 00415          POT     RL1                 SET RL1
14342  0 02 21000          EOM     021000
14343  0 13 00416          POT     RL2                 SET RL2
14344  4 35 37777          STA     037777,4            SHOULD OUT OF BOUNDS TRAP
14345  0 46 00001          CLA
14346  0 01 14350          BRU     *+2
14347  0 76 00450   T11    LDA     DIVERT
14350  0 14 23506          ETR     =037777
14351  0 50 23657          SKE     =T43                EXPECTED READ ONLY TRAP ID
14352  0 43 00460          BRM     ERROR
14353  0 20 22574          NOP     TM11
14354  0 43 00434          BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R0
                    * IF READ ONLY TRAP, CHECK RLOH, RL00, RL01, RL02, RL03, AND OBA
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14355  0 43 00430   TRAP12 BRM     OBJECT              START OBJECT TEST
14356  0 43 00440          BRM     RETURN              SET TRAP RETURN
14357  0 20 14373          NOP     T12
14360  0 76 23466          LDA     =040000000
14361  0 35 00415          STA     RL1                 RL1 CONTENTS
14362  0 76 23447          LDA     =000000000
14363  0 35 00416          STA     RL2                 RL2 CONTENTS
14364  0 02 20400          EOM     020400
14365  0 13 00415          POT     RL1                 SET RL1
14366  0 02 21000          EOM     021000
14367  0 13 00416          POT     RL2                 SET RL2
14370  4 35 03777          STA     003777,4            SHOULD OUT OF BOUNDS TRAP
14371  0 46 00001          CLA
14372  0 01 14374          BRU     *+2
14373  0 76 00450   T12    LDA     DIVERT
14374  0 14 23506          ETR     =037777
14375  0 50 23660          SKE     =T41                EXPECTED OUT OF BOUNDS TRAP ID
14376  0 43 00460          BRM     ERROR
14377  0 20 22604          NOP     TM12
14400  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R1
                    * IF READ ONLY TRAP, CHECK RL1H, RL10, RL11, RL12, RL13, AND OBA
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14401  0 43 00430  TRAP13 BRM     OBJECT              START OBJECT TEST
14402  0 43 00440         BRM     RETURN              SET TRAP RETURN
14403  0 20 14417         NOP     T13
14404  0 76 23624         LDA     •000400000
14405  0 35 00415         STA     RL1                 RL1 CONTENTS
14406  0 76 23447         LDA     •000000000
14407  0 35 00416         STA     RL2                 RL2 CONTENTS
14410  0 02 20400         EOM     020400
14411  0 13 00415         POT     RL1                 SET RL1
14412  0 02 21000         EOM     021000
14413  0 13 00416         POT     RL2                 SET RL2
14414  4 35 07777         STA     007777,4            SHOULD OUT OF BOUNDS TRAP
14415  0 46 00001         CLA
14416  0 01 14420         BRU     ••2
14417  0 76 00450  T13    LDA     DIVERT
14420  0 14 23506         ETR     •037777
14421  0 50 23660         SKE     •T41                EXPECTED OUT OF BOUNDS TRAP ID
14422  0 43 00460         BRM     ERROR
14423  0 20 22620         NOP     TM13
14424  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R2
                    * IF READ ONLY TRAP, CHECK RL2H, RL20, RL21, RL22, RL23, AND OBA
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14425  0 43 00430  TRAP14 BRM     OBJECT              START OBJECT TEST
14426  0 43 00440         BRM     RETURN              SET TRAP RETURN
14427  0 20 14443         NOP     T14
14430  0 76 23512         LDA     •000004000
14431  0 35 00415         STA     RL1                 RL1 CONTENTS
14432  0 76 23447         LDA     •000000000
14433  0 35 00416         STA     RL2                 RL2 CONTENTS
14434  0 02 20400         EOM     020400
14435  0 13 00415         POT     RL1                 SET RL1
14436  0 02 21000         EOM     021000
14437  0 13 00416         POT     RL2                 SET RL2
14440  4 35 13777         STA     013777,4            SHOULD OUT OF BOUNDS TRAP
14441  0 46 00001         CLA
14442  0 01 14444         BRU     ••2
14443  0 76 00450  T14    LDA     DIVERT
14444  0 14 23506         ETR     •037777
14445  0 50 23660         SKE     •T41                EXPECTED OUT OF BOUNDS TRAP ID
14446  0 43 00460         BRM     ERROR
14447  0 20 22634         NOP     TM14
14450  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R3
                        * IF READ ONLY TRAP, CHECK RL3H, RL30, RL31, RL32, RL33, AND OBA
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14451  0 43 00430  TRAP15 BRM     OBJECT              START OBJECT TEST
14452  0 43 00440         BRM     RETURN              SET TRAP RETURN
14453  0 20 14467         NOP     T15
14454  0 76 23612         LDA     =000000040
14455  0 35 00415         STA     RL1                 RL1 CONTENTS
14456  0 76 23447         LDA     =000000000
14457  0 35 00416         STA     RL2                 RL2 CONTENTS
14460  0 02 20400         EOM     020400
14461  0 13 00415         POT     RL1                 SET RL1
14462  0 02 21000         EOM     021000
14463  0 13 00416         POT     RL2                 SET RL2
14464  4 35 17777         STA     017777,4            SHOULD OUT OF BOUNDS TRAP
14465  0 46 00001         CLA
14466  0 01 14470         BRU     *+2
14467  0 76 00450  T15    LDA     DIVERT
14470  0 14 23506         ETR     =037777
14471  0 50 23660         SKE     =T41                EXPECTED OUT OF BOUNDS TRAP ID
14472  0 43 00460         BRM     ERROR
14473  0 20 22650         NOP     TM15
14474  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R4
                        * IF READ ONLY TRAP, CHECK RL4H, RL40, RL41, RL42, RL43, RRL2 AND
                        * OBA
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14475  0 43 00430  TRAP16 BRM     OBJECT              START OBJECT TEST
14476  0 43 00440         BRM     RETURN              SET TRAP RETURN
14477  0 20 14513         NOP     T16
14500  0 76 23447         LDA     =000000000
14501  0 35 00415         STA     RL1                 RL1 CONTENTS
14502  0 76 23466         LDA     =040000000
14503  0 35 00416         STA     RL2                 RL2 CONTENTS
14504  0 02 20400         EOM     020400
14505  0 13 00415         POT     RL1                 SET RL1
14506  0 02 21000         EOM     021000
14507  0 13 00416         POT     RL2                 SET RL2
14510  4 35 23777         STA     023777,4            SHOULD OUT OF BOUNDS TRAP
14511  0 46 00001         CLA
14512  0 01 14514         BRU     *+2
14513  0 76 00450  T16    LDA     DIVERT
14514  0 14 23506         ETR     =037777
14515  0 50 23660         SKE     =T41                EXPECTED OUT OF BOUNDS TRAP ID
14516  0 43 00460         BRM     ERROR
14517  0 20 22664         NOP     TM16
14520  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R5
                        * IF READ ONLY TRAP, CHECK RL6H, RL50, RL51, RL52, RL53, AND 0BA
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14521  0 43 00430  TRAP17 BRM     OBJECT              START OBJECT TEST
14522  0 43 00440         BRM     RETURN              SET TRAP RETURN
14523  0 20 14537         NOP     T17
14524  0 76 23447         LDA     =000000000
14525  0 35 00415         STA     RL1                 RL1 CONTENTS
14526  0 76 23624         LDA     =000400000
14527  0 35 00416         STA     RL2                 RL2 CONTENTS
14530  0 02 20400         EOM     020400
14531  0 13 00415         POT     RL1                 SET RL1
14532  0 02 21000         EOM     021000
14533  0 13 00416         POT     RL2                 SET RL2
14534  4 35 27777         STA     027777,4            SHOULD OUT OF BOUNDS TRAP
14535  0 46 00001         CLA
14536  0 01 14540         BRU     *+2
14537  0 76 00450  T17    LDA     DIVERT
14540  0 14 23506         ETR     =037777
14541  0 50 23660         SKE     =T41                EXPECTED OUT OF BOUNDS TRAP ID
14542  0 43 00460         BRM     ERROR
14543  0 20 22700         NOP     TM17
14544  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R6
                        * IF READ ONLY TRAP, CHECK RL6H, RL60, RL61, RL62, RL63, AND 0BA
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14545  0 43 00430  TRAP18 BRM     OBJECT              START OBJECT TEST
14546  0 43 00440         BRM     RETURN              SET TRAP RETURN
14547  0 20 14563         NOP     T18
14550  0 76 23447         LDA     =000000000
14551  0 35 00415         STA     RL1                 RL1 CONTENTS
14552  0 76 23512         LDA     =000004000
14553  0 35 00416         STA     RL2                 RL2 CONTENTS
14554  0 02 20400         EOM     020400
14555  0 13 00415         POT     RL1                 SET RL1
14556  0 02 21000         EOM     021000
14557  0 13 00416         POT     RL2                 SET RL2
14560  4 35 33777         STA     033777,4            SHOULD OUT OF BOUNDS TRAP
14561  0 46 00001         CLA
14562  0 01 14564         BRU     *+2
14563  0 76 00450  T18    LDA     DIVERT
14564  0 14 23506         ETR     =037777
14565  0 50 23660         SKE     =T41                EXPECTED OUT OF BOUNDS TRAP ID
14566  0 43 00460         BRM     ERROR
14567  0 20 22714         NOP     TM18
14570  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS AN OUT OF BOUNDS TRAP FROM R7
                        * IF READ ONLY TRAP, CHECK RL7H, RL70, RL71, RL72, RL73, AND OBA
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14571  0 43 00430  TRAP19 BRM   OBJECT          START OBJECT TEST
14572  0 43 00440         BRM   RETURN          SET TRAP RETURN
14573  0 20 14607         NOP   T19
14574  0 76 23447         LDA   •000000000
14575  0 35 00415         STA   RL1             RL1 CONTENTS
14576  0 76 23612         LDA   •000000040
14577  0 35 00416         STA   RL2             RL2 CONTENTS
14600  0 02 20400         EOM   020400
14601  0 13 00415         POT   RL1             SET RL1
14602  0 02 21000         EOM   021000
14603  0 13 00416         POT   RL2             SET RL2
14604  4 35 37777         STA   037777,4        SHOULD OUT OF BOUNDS TRAP
14605  0 46 00001         CLA
14606  0 01 14610         BRU   ••2
14607  0 76 00450  T19    LDA   DIVERT
14610  0 14 23506         ETR   •037777
14611  0 50 23660         SKE   •T41            EXPECTED OUT OF BOUNDS TRAP ID
14612  0 43 00460         BRM   ERROR
14613  0 20 22730         NOP   TM19
14614  0 43 00434         BRM   END             LOOP IF SP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL03
                        * IF OUT OF BOUNDS TRAP, CHECK RL03 AND S31
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14615  0 43 00430  TRAP20 BRM   OBJECT          START OBJECT TEST
14616  0 43 00440         BRM   RETURN          SET TRAP RETURN
14617  0 20 14633         NOP   T20
14620  0 76 23664         LDA   •041000000
14621  0 35 00415         STA   RL1             RL1 CONTENTS
14622  0 76 23447         LDA   •000000000
14623  0 35 00416         STA   RL2             RL2 CONTENTS
14624  0 02 20400         EOM   020400
14625  0 13 00415         POT   RL1             SET RL1
14626  0 02 21000         EOM   021000
14627  0 13 00416         POT   RL2             SET RL2
14630  4 35 03777         STA   003777,4        SHOULD READ ONLY TRAP
14631  0 46 00001         CLA
14632  0 01 14634         BRU   ••2
14633  0 76 00450  T20    LDA   DIVERT
14634  0 14 23506         ETR   •037777
14635  0 50 23657         SKE   •T43            EXPECTED READ ONLY TRAP ID
14636  0 43 00460         BRM   ERROR
14637  0 20 22744         NOP   TM20
14640  0 43 00434         BRM   END             LOOP IF SP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL02
                        * IF OUT OF BOUNDS TRAP, CHECK RL02 AND LS2A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14641  0 43 00430  TRAP21 BRM     OBJECT              START OBJECT TEST
14642  0 43 00440         BRM     RETURN              SET TRAP RETURN
14643  0 20 14657         NOP     T21
14644  0 76 23665         LDA     =042000000
14645  0 35 00415         STA     RL1                 RL1 CONTENTS
14646  0 76 23447         LDA     =000000000
14647  0 35 00416         STA     RL2                 RL2 CONTENTS
14650  0 02 20400         EOM     020400
14651  0 13 00415         POT     RL1                 SET RL1
14652  0 02 21000         EOM     021000
14653  0 13 00416         POT     RL2                 SET RL2
14654  4 35 03777         STA     003777,4            SHOULD READ ONLY TRAP
14655  0 46 00001         CLA
14656  0 01 14660         BRU     *+2
14657  0 76 00450  T21    LDA     DIVERT
14660  0 14 23506         ETR     =037777
14661  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
14662  0 43 00460         BRM     ERROR
14663  0 20 22751         NOP     TM21
14664  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL01
                        * IF OUT OF BOUNDS TRAP, CHECK RL01 AND LS1A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14665  0 43 00430  TRAP22 BRM     OBJECT              START OBJECT TEST
14666  0 43 00440         BRM     RETURN              SET TRAP RETURN
14667  0 20 14703         NOP     T22
14670  0 76 23666         LDA     =044000000
14671  0 35 00415         STA     RL1                 RL1 CONTENTS
14672  0 76 23447         LDA     =000000000
14673  0 35 00416         STA     RL2                 RL2 CONTENTS
14674  0 02 20400         EOM     020400
14675  0 13 00415         POT     RL1                 SET RL1
14676  0 02 21000         EOM     021000
14677  0 13 00416         POT     RL2                 SET RL2
14700  4 35 03777         STA     003777,4            SHOULD READ ONLY TRAP
14701  0 46 00001         CLA
14702  0 01 14704         BRU     *+2
14703  0 76 00450  T22    LDA     DIVERT
14704  0 14 23506         ETR     =037777
14705  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
14706  0 43 00460         BRM     ERROR
14707  0 20 22756         NOP     TM22
14710  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL00
                    * IF OUT OF BOUNDS TRAP, CHECK RL00 AND LBOA! BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14711  0 43 00430   TRAP23 BRM     OBJECT              START OBJECT TEST
14712  0 43 00440          BRM     RETURN              SET TRAP RETURN
14713  0 20 14727          NOP     T23
14714  0 76 23667          LDA     •050000000
14715  0 35 00415          STA     RL1                 RL1 CONTENTS
14716  0 76 23447          LDA     •000000000
14717  0 35 00416          STA     RL2                 RL2 CONTENTS
14720  0 02 20400          EOM     020400
14721  0 13 00415          POT     RL1                 SET RL1
14722  0 02 21000          EOM     021000
14723  0 13 00416          POT     RL2                 SET RL2
14724  4 35 03777          STA     03777,4             SHOULD READ ONLY TRAP
14725  0 46 00001          CLA
14726  0 01 14730          BRU     •+2
14727  0 76 00450   T23    LDA     DIVERT
14730  0 14 23506          ETR     •037777
14731  0 50 23657          SKE     •T•3                EXPECTED READ ONLY TRAP ID
14732  0 43 00460          BRM     ERROR
14733  0 20 22763          NOP     TM23
14734  0 43 00434          BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL0H
                    * IF OUT OF BOUNDS TRAP, CHECK RL0H AND LBOOA! BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14735  0 43 00430   TRAP24 BRM     OBJECT              START OBJECT TEST
14736  0 43 00440          BRM     RETURN              SET TRAP RETURN
14737  0 20 14753          NOP     T24
14740  0 76 23600          LDA     •060000000
14741  0 35 00415          STA     RL1                 RL1 CONTENTS
14742  0 76 23447          LDA     •000000000
14743  0 35 00416          STA     RL2                 RL2 CONTENTS
14744  0 02 20400          EOM     020400
14745  0 13 00415          POT     RL1                 SET RL1
14746  0 02 21000          EOM     021000
14747  0 13 00416          POT     RL2                 SET RL2
14750  4 35 03777          STA     003777,4            SHOULD READ ONLY TRAP
14751  0 46 00001          CLA
14752  0 01 14754          BRU     •+2
14753  0 76 00450   T24    LDA     DIVERT
14754  0 14 23506          ETR     •037777
14755  0 50 23657          SKE     •T•3                EXPECTED READ ONLY TRAP ID
14756  0 43 00460          BRM     ERROR
14757  0 20 22770          NOP     TM24
14760  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL13
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
14761  0 43 00430  TRAP25 BRM     OBJECT              START OBJECT TEST
14762  0 43 00440         BRM     RETURN              SET TRAP RETURN
14763  0 20 14777         NOP     T25
14764  0 76 23670         LDA     •000410000
14765  0 35 00415         STA     RL1                 RL1 CONTENTS
14766  0 76 23447         LDA     •000000000
14767  0 35 00416         STA     RL2                 RL2 CONTENTS
14770  0 02 20400         EOM     020400
14771  0 13 00415         POT     RL1                 SET RL1
14772  0 02 21000         EOM     021000
14773  0 13 00416         POT     RL2                 SET RL2
14774  4 35 07777         STA     007777,4            SHOULD READ ONLY TRAP
14775  0 46 00001         CLA
14776  0 01 15000         BRU     •+2
14777  0 76 00450  T25    LDA     DIVERT
15000  0 14 23506         ETR     •037777
15001  0 50 23657         SKE     •T43                EXPECTED READ ONLY TRAP ID
15002  0 43 00460         BRM     ERROR
15003  0 20 22775         NOP     TM25
15004  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL12
                    * IF OUT OF BOUNDS TRAP, CHECK RL12 AND LS2A1 BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15005  0 43 00430  TRAP26 BRM     OBJECT
15006  0 43 00440         BRM     RETURN              SET TRAP RETURN
15007  0 20 15023         NOP     T26
15010  0 76 23671         LDA     •000420000
15011  0 35 00415         STA     RL1                 RL1 CONTENTS
15012  0 76 23447         LDA     •000000000
15013  0 35 00416         STA     RL2                 RL2 CONTENTS
15014  0 02 20400         EOM     020400
15015  0 13 00415         POT     RL1                 SET RL1
15016  0 02 21000         EOM     021000
15017  0 13 00416         POT     RL2                 SET RL2
15020  4 35 07777         STA     007777,4            SHOULD READ ONLY TRAP
15021  0 46 00001         CLA
15022  0 01 15024         BRU     •+2
15023  0 76 00450  T26    LDA     DIVERT
15024  0 14 23506         ETR     •037777
15025  0 50 23657         SKE     •T43                EXPECTED READ ONLY TRAP ID
15026  0 43 00460         BRM     ERROR
15027  0 20 23005         NOP     TM26
15030  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL11
                    * IF OUT OF BOUNDS TRAP, CHECK RL11 AND LSIA' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15031  0 43 00430   TRAP27 BRM     OBJECT              START OBJECT TEST
15032  0 43 00440          BRM     RETURN              SET TRAP RETURN
15033  0 20 15047          NOP     T27
15034  0 76 23672          LDA     =000440000
15035  0 35 00415          STA     RL1                 RL1 CONTENTS
15036  0 76 23447          LDA     =000000000
15037  0 35 00416          STA     RL2                 RL2 CONTENTS
15040  0 02 20400          EOM     020400
15041  0 13 00415          POT     RL1                 SET RL1
15042  0 02 21000          EOM     021000
15043  0 13 00416          POT     RL2                 SET RL2
15044  4 35 07777          STA     007777,4            SHOULD READ ONLY TRAP
15045  0 46 00001          CLA
15046  0 01 15050          BRU     **2
15047  0 76 00450   T27    LDA     DIVERT
15050  0 14 23506          ETR     =037777
15051  0 50 23657          SKE     =T43                EXPECTED READ ONLY TRAP ID
15052  0 43 00460          BRM     ERROR
15053  0 20 23012          NOP     TM27
15054  0 43 00434          BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL10
                    * IF OUT OF BOUNDS TRAP, CHECK RL10 AND LSOA' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15055  0 43 00430   TRAP28 BRM     OBJECT              START OBJECT TEST
15056  0 43 00440          BRM     RETURN              SET TRAP RETURN
15057  0 20 15073          NOP     T28
15060  0 76 23673          LDA     =000500000
15061  0 35 00415          STA     RL1                 RL1 CONTENTS
15062  0 76 23447          LDA     =000000000
15063  0 35 00416          STA     RL2                 RL2 CONTENTS
15064  0 02 20400          EOM     020400
15065  0 13 00415          POT     RL1                 SET RL1
15066  0 02 21000          EOM     021000
15067  0 13 00416          POT     RL2                 SET RL2
15070  4 35 07777          STA     007777,4            SHOULD READ ONLY TRAP
15071  0 46 00001          CLA
15072  0 01 15074          BRU     **2
15073  0 76 00450   T28    LDA     DIVERT
15074  0 14 23506          ETR     =037777
15075  0 50 23657          SKE     =T42                EXPECTED READ ONLY TRAP ID
15076  0 43 00460          BRM     ERROR
15077  0 20 23017          NOP     TM28
15100  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
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                    * THIS OBJECT ATTEMPTS A READ TRAP DEPENDENT ON RL1H
                    * IF OUT OF BOUNDS TRAP, CHECK RL1H AND L600A' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15101  0 43 00430   TRAP29 BRM     OBJECT              START OBJECT TEST
15102  0 43 00440          BRM     RETURN              SET TRAP RETURN
15103  0 20 15117          NOP     T29
15104  0 76 23603          LDA     #000600000
15105  0 35 00415          STA     RL1                 RL1 CONTENTS
15106  0 76 23447          LDA     #000000000
15107  0 35 00416          STA     RL2                 RL2 CONTENTS
15110  0 02 20400          EOM     020400
15111  0 13 00415          POT     RL1                 SET RL1
15112  0 02 21000          EOM     021000
15113  0 13 00416          POT     RL2                 SET RL2
15114  4 35 07777          STA     007777,4            SHOULD READ ONLY TRAP
15115  0 46 00001          CLA
15116  0 01 15120          BRU     *+2
15117  0 76 00450   T29     LDA     DIVERT
15120  0 14 23506          ETR     #037777
15121  0 50 23657          SKE     #T43                EXPECTED READ ONLY TRAP ID
15122  0 43 00460          BRM     ERROR
15123  0 20 23024          NOP     TM29
15124  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

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                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL23
                    * IF OUT OF BOUNDS TRAP, CHECK RL23 AND $31
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15125  0 43 00430   TRAP30 BRM     OBJECT              START OBJECT TEST
15126  0 43 00440          BRM     RETURN              SET TRAP RETURN
15127  0 20 15143          NOP     T30
15130  0 76 23674          LDA     #000004100
15131  0 35 00415          STA     RL1                 RL1 CONTENTS
15132  0 76 23447          LDA     #000000000
15133  0 35 00416          STA     RL2                 RL2 CONTENTS
15134  0 02 20400          EOM     020400
15135  0 13 00415          POT     RL1                 SET RL1
15136  0 02 21000          EOM     021000
15137  0 13 00416          POT     RL2                 SET RL2
15140  4 35 13777          STA     013777,4            SHOULD READ ONLY TRAP
15141  0 46 00001          CLA
15142  0 01 15144          BRU     *+2
15143  0 76 00450   T30     LDA     DIVERT
15144  0 14 23506          ETR     #037777
15145  0 50 23657          SKE     #T43                EXPECTED READ ONLY TRAP ID
15146  0 43 00460          BRM     ERROR
15147  0 20 23031          NOP     TM30
15150  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL22
                        * IF OUT OF BOUNDS TRAP, CHECK RL22 AND LS2A' BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15151  0 43 00430  TRAP31 BRM     OBJECT              START OBJECT TEST
15152  0 43 00440         BRM     RETURN              SET TRAP RETURN
15153  0 20 15167         NOP     T31
15154  0 76 23675         LDA     =000004200
15155  0 35 00415         STA     RL1                 RL1 CONTNETS
15156  0 76 23447         LDA     =000000000
15157  0 35 00416         STA     RL2                 RL2 CONTENTS
15160  0 02 20400         EOM     020400
15161  0 13 00415         POT     RL1                 SET RL1
15162  0 02 21000         EOM     021000
15163  0 13 00416         POT     RL2                 SET RL2
15164  4 35 13777         STA     013777,4            SHOULD READ ONLY TRAP
15165  0 46 00001         CLA
15166  0 01 15170         BRU     *+2
15167  0 76 00450  T31    LDA     DIVERT
15170  0 14 23506         ETR     =037777
15171  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
15172  0 43 00460         BRM     ERROR
15173  0 20 23036         NOP     TM31
15174  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL21
                        * IF OUT OF BOUNDS TRAP, CHECK RL21 AND LS1A' BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15175  0 43 00430  TRAP32 BRM     OBJECT              START OBJECT TEST
15176  0 43 00440         BRM     RETURN              SET TRAP RETURN
15177  0 20 15213         NOP     T32
15200  0 76 23676         LDA     =000004400
15201  0 35 00415         STA     RL1                 RL1 CONTENTS
15202  0 76 23447         LDA     =000000000
15203  0 35 00416         STA     RL2                 RL2 CONTENTS
15204  0 02 20400         EOM     020400
15205  0 13 00415         POT     RL1                 SET RL1
15206  0 02 21000         EOM     021000
15207  0 13 00416         POT     RL2                 SET RL2
15210  4 35 13777         STA     013777,4            SHOULD READ ONLY TRAP
15211  0 46 00001         CLA
15212  0 01 15214         BRU     *+2
15213  0 76 00450  T32    LDA     DIVERT
15214  0 14 23506         ETR     =037777
15215  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
15216  0 43 00460         BRM     ERROR
15217  0 20 23043         NOP     TM32
15220  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL20
                    * IF OUT OF BOUNDS TRAP, CHECK RL20 AND LS0A1 BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15221  0 43 00430  TRAP33 BRM     OBJECT              START OBJECT TEST
15222  0 43 00440         BRM     RETURN              SET TRAP RETURN
15223  0 20 15237         NOP     T33
15224  0 76 23677         LDA     •000005000
15225  0 35 00415         STA     RL1                 RL1 CONTENTS
15226  0 76 23447         LDA     •000000000
15227  0 35 00416         STA     RL2                 RL2 CONTENTS
15230  0 02 20400         EOM     020400
15231  0 13 00415         POT     RL1                 SET RL1
15232  0 02 21000         EOM     021000
15233  0 13 00416         POT     RL2                 SET RL2
15234  4 35 13777         STA     013777,4            SHOULD READ ONLY TRAP
15235  0 46 00001         CLA
15236  0 01 15240         BRU     •+2
15237  0 76 00450  T33    LDA     DIVERT
15240  0 14 23506         ETR     •037777
15241  0 50 23657         SKE     •T43                EXPECTED READ ONLY TRAP ID
15242  0 43 00460         BRM     ERROR
15243  0 20 23050         NOP     TM33
15244  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL2H
                    * IF OUT OF BOUNDS TRAP, CHECK RL2H AND LS00A1 BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15245  0 43 00430  TRAP34 BRM     OBJECT              START OBJECT TEST
15246  0 43 00440         BRM     RETURN              SET TRAP RETURN
15247  0 20 15263         NOP     T34
15250  0 76 23700         LDA     •000006000
15251  0 35 00415         STA     RL1                 RL1 CONTENTS
15252  0 76 23447         LDA     •000000000
15253  0 35 00416         STA     RL2                 RL2 CONTENTS
15254  0 02 20400         EOM     020400
15255  0 13 00415         POT     RL1                 SET RL1
15256  0 02 21000         EOM     021000
15257  0 13 00416         POT     RL2                 SET RL2
15260  4 35 13777         STA     013777,4            SHOULD READ ONLY TRAP
15261  0 46 00001         CLA
15262  0 01 15264         BRU     •+2
15263  0 76 00450  T34    LDA     DIVERT
15264  0 14 23506         ETR     •037777
15265  0 50 23657         SKE     •T43                EXPECTED READ ONLY TRAP ID
15266  0 43 00460         BRM     ERROR
15267  0 20 23055         NOP     TM34
15270  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL33
                    * IF OUT OF BOUNDS TRAP, CHECK RL33 AND S3!
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15271  0 43 00430   TRAP35 BRM    OBJECT              START OBJECT TEST
15272  0 43 00440          BRM    RETURN              SET TRAP RETURN
15273  0 20 15307          NOP    T35
15274  0 76 23701          LDA    •00000041
15275  0 35 00415          STA    RL1                 RL1 CONTENTS
15276  0 76 23447          LDA    •000000000
15277  0 35 00416          STA    RL2                 RL2 CONTENTS
15300  0 02 20400          EOM    020400
15301  0 13 00415          POT    RL1                 SET RL1
15302  0 02 21000          EOM    021000
15303  0 13 00416          POT    RL2                 SET RL2
15304  4 35 17777          STA    017777,4            SHOULD READ ONLY TRAP
15305  0 46 00001          CLA
15306  0 01 15310          BRU    ••2
15307  0 76 00450   T35    LDA    DIVERT
15310  0 14 23506          ETR    •037777
15311  0 50 23657          SKE    •T43                EXPECTED READ ONLY TRAP ID
15312  0 43 00460          BRM    ERROR
15313  0 20 23062          NOP    TM35
15314  0 43 00434          BRM    END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL32
                    * IF OUT OF BOUNDS TRAP, CHECK RL32 AND LS2A! BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15315  0 43 00430   TRAP36 BRM    OBJECT              START OBJECT TEST
15316  0 43 00440          BRM    RETURN              SET TRAP RETURN
15317  0 20 15333          NOP    T36
15320  0 76 23702          LDA    •00000042
15321  0 35 00415          STA    RL1                 RL1 CONTENTS
15322  0 76 23447          LDA    •0000000
15323  0 35 00416          STA    RL2                 RL2 CONTENTS
15324  0 02 20400          EOM    020400
15325  0 13 00415          POT    RL1                 SET RL1
15326  0 02 21000          EOM    021000
15327  0 13 00416          POT    RL2                 SET RL2
15330  4 35 17777          STA    017777,4            SHOULD READ ONLY TRAP
15331  0 46 00001          CLA
15332  0 01 15334          BRU    ••2
15333  0 76 00450   T36    LDA    DIVERT
15334  0 14 23506          ETR    •037777
15335  0 50 23657          SKE    •T43                EXPECTED READ ONLY TRAP ID
15336  0 43 00460          BRM    ERROR
15337  0 20 23067          NOP    TM36
15340  0 43 00434          BRM    END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL31
                    * IF OUT OF BOUNDS TRAP, CHECK RL31 AND LS1A' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15341  0 43 00430   TRAP37 BRM   OBJECT              START OBJECT TEST
15342  0 43 00440          BRM   RETURN              SET TRAP RETURN
15343  0 20 15357          NOP   T37
15344  0 76 23703          LDA   =000000044
15345  0 35 00415          STA   RL1                 RL1 CONTENTS
15346  0 76 23447          LDA   =000000000
15347  0 35 00416          STA   RL2                 RL2 CONTENTS
15350  0 02 20400          EOM   020400
15351  0 13 00415          POT   RL1                 SET RL1
15352  0 02 21000          EOM   021000
15353  0 13 00416          POT   RL2                 SET RL2
15354  4 35 17777          STA   017777,4            SHOULD READ ONLY TRAP
15355  0 46 00001          CLA
15356  0 01 15360          BRU   *+2
15357  0 76 00450   T37     LDA   DIVERT
15360  0 14 23506          ETR   =037777
15361  0 50 23457          SKE   =T43                EXPECTED READ ONLY TRAP ID
15362  0 43 00460          BRM   ERROR
15363  0 20 23074          NOP   TM37
15364  0 43 00434          BRM   END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL30
                    * IF OUT OF BOUNDS TRAP, CHECK RL30 AND LS0A' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15365  0 43 00430   TRAP38 BRM   OBJECT              START OBJECT TEST
15366  0 43 00440          BRM   RETURN              SET TRAP RETURN
15367  0 20 15403          NOP   T38
15370  0 76 23704          LDA   =000000050
15371  0 35 00415          STA   RL1                 RL1 CONTENTS
15372  0 76 23447          LDA   =000000000
15373  0 35 00416          STA   RL2                 RL2 CONTENTS
15374  0 02 20400          EOM   020400
15375  0 13 00415          POT   RL1                 SET RL1
15376  0 02 21000          EOM   021000
15377  0 13 00416          POT   RL2                 SET RL2
15400  4 35 17777          STA   017777,4            SHOULD READ ONLY TRAP
15401  0 46 00001          CLA
15402  0 01 15404          BRU   *+2
15403  0 76 00450   T38     LDA   DIVERT
15404  0 14 23506          ETR   =037777
15405  0 50 23657          SKE   =T43                EXPECTED READ ONLY TRAP ID
15406  0 43 00460          BRM   ERROR
15407  0 20 23101          NOP   TM38
15410  0 43 00434          BRM   END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL3H
                    * IF OUT OF BOUNDS TRAP, CHECK RL3H AND L00A' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15411  0 43 00430 TRAP39 BRM     OBJECT              START OBJECT TEST
15412  0 43 00440        BRM     RETURN              SET TRAP RETURN
15413  0 20 15427        NOP     T39
15414  0 76 23705        LDA     •000000060
15415  0 35 00415        STA     RL1                 RL1 CONTENTS
15416  0 76 23447        LDA     •000000000
15417  0 35 00416        STA     RL2                 RL2 CONTENTS
15420  0 02 20400        EOM     020400
15421  0 13 00415        POT     RL1                 SET RL1
15422  0 02 21000        EOM     021000
15423  0 13 00416        POT     RL2                 SET RL2
15424  4 35 17777        STA     017777,4            SHOULD READ ONLY TRAP
15425  0 46 00001        CLA
15426  0 01 15430        BRU     •+2
15427  0 76 00450 T39    LDA     DIVERT
15430  0 14 23506        ETR     •037777
15431  0 50 23657        SKE     •T43                EXPECTED READ ONLY TRAP ID
15432  0 43 00460        BRM     ERROR
15433  0 20 23106        NOP     TM39
15434  0 43 00434        BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL43
                    * IF OUT OF BOUNDS TRAP, CHECK RL43 AND S3'
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15435  0 43 00430 TRAP40 BRM     OBJECT              START OBJECT TEST
15436  0 43 00440        BRM     RETURN              SET TRAP RETURN
15437  0 20 15453        NOP     T40A
15440  0 76 23447        LDA     •000000000
15441  0 35 00415        STA     RL1                 RL1 CONTENTS
15442  0 76 23664        LDA     •041000000
15443  0 35 00416        STA     RL2                 RL2 CONTENTS
15444  0 02 20400        EOM     020400
15445  0 13 00415        POT     RL1                 SET RL1
15446  0 02 21000        EOM     021000
15447  0 13 00416        POT     RL2                 SET RL2
15450  4 35 23777        STA     023777,4            SHOULD READ ONLY TRAP
15451  0 46 00001        CLA
15452  0 01 15454        BRU     •+2
15453  0 76 00450 T40A   LDA     DIVERT
15454  0 14 23506        ETR     •037777
15455  0 50 23657        SKE     •T43                EXPECTED READ ONLY TRAP ID
15456  0 43 00460        BRM     ERROR
15457  0 20 23113        NOP     TM40
15460  0 43 00434        BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPS A READ ONLY TRAP DEPENDENT ON RL42
                        * IF OUT OF BOUNDS TRAP, CHECK RL42 AND LS2A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15461  0 43 00430  TRAP41 BRM     OBJECT              START OBJECT TEST
15462  0 43 00440         BRM     RETURN              SET TRAP RETURN
15463  0 20 15477         NOP     T41A
15464  0 76 23447         LDA     =000000000
15465  0 35 00415         STA     RL1                 RL1 CONTENTS
15466  0 76 23665         LDA     =042000000
15467  0 35 00416         STA     RL2                 RL2 CONTENTS
15470  0 02 20400         EOM     020400
15471  0 13 00415         POT     RL1                 SET RL1
15472  0 02 21000         EOM     021000
15473  0 13 00416         POT     RL2                 SET RL2
15474  4 35 23777         STA     023777,4            SHOULD READ ONLY TRAP
15475  0 46 00001         CLA
15476  0 01 15500         BRU     *+2
15477  0 76 00450  T41A   LDA     DIVERT
15500  0 14 23506         ETR     =037777
15501  0 50 23457         SKE     =T43                EXPECTED READ ONLY TRAP ID
15502  0 43 00460         BRM     ERROR
15503  0 20 23120         NOP     TM41
15504  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL41
                        * IF OUT OF BOUNDS TRAP, CHECK RL41 AND LS1A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15505  0 43 00430  TRAP42 BRM     OBJECT              START OBJECT TEST
15506  0 43 00440         BRM     RETURN              SET TRAP RETURN
15507  0 20 15523         NOP     T42A
15510  0 76 23447         LDA     =000000000
15511  0 35 00415         STA     RL1                 RL1 CONTENTS
15512  0 76 23666         LDA     =044000000
15513  0 35 00416         STA     RL2                 RL2 CONTENTS
15514  0 02 20400         EOM     020400
15515  0 13 00415         POT     RL1                 SET RL1
15516  0 02 21000         EOM     021000
15517  0 13 00416         POT     RL2                 SET RL2
15520  4 35 23777         STA     023777,4            SHOULD READ ONLY TRAP
15521  0 46 00001         CLA
15522  0 01 15524         BRU     *+2
15523  0 76 00450  T42A   LDA     DIVERT
15524  0 14 23506         ETR     =037777
15525  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
15526  0 43 00460         BRM     ERROR
15527  0 20 23125         NOP     TM42
15530  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL40
                        * IF OUT OF BOUNDS TRAP, CHECK RL40 AND LS0A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15531  0 43 00430  TRAP43 BRM   OBJECT              START OBJECT TEST
15532  0 43 00440         BRM   RETURN              SET TRAP RETURN
15533  0 20 15547         NOP   T43A
15534  0 76 23447         LDA   =0
15535  0 35 00415         STA   RL1                 RL1 CONTENTS
15536  0 76 23667         LDA   =050000000
15537  0 35 00416         STA   RL2                 RL2 CONTENTS
15540  0 02 20400         EOM   020400
15541  0 13 00415         POT   RL1                 SET RL1
15542  0 02 21000         EOM   021000
15543  0 13 00416         POT   RL2                 SET RL2
15544  4 35 23777         STA   023777,4            SHOULD READ ONLY TRAP
15545  0 46 00001         CLA
15546  0 01 15550         BRU   *+2
15547  0 76 00450  T43A   LDA   DIVERT
15550  0 14 23506         ETR   =037777
15551  0 50 23657         SKE   =T43                EXPECTED READ ONLY TRAP ID
15552  0 43 00460         BRM   ERROR
15553  0 20 23132         NOP   TM43
15554  0 43 00434         BRM   END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL4H
                        * IF OUT OF BOUNDS TRAP, CHECK RL4H AND LS00A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15555  0 43 00430  TRAP44 BRM   OBJECT              START OBJECT TEST
15556  0 43 00440         BRM   RETURN              SET TRAP RETURN
15557  0 20 15573         NOP   T44A
15560  0 76 23447         LDA   =000000000
15561  0 35 00415         STA   RL1                 RL1 CONTENTS
15562  0 76 23600         LDA   =060000000
15563  0 35 00416         STA   RL2                 RL2 CONTENTS
15564  0 02 20400         EOM   020400
15565  0 13 00415         POT   RL1                 SET RL1
15566  0 02 21000         EOM   021000
15567  0 13 00416         POT   RL2                 SET RL2
15570  4 35 23777         STA   023777,4            SHOULD READ ONLY TRAP
15571  0 46 00001         CLA
15572  0 01 15574         BRU   *+2
15573  0 76 00450  T44A   LDA   DIVERT
15574  0 14 23506         ETR   =037777
15575  0 50 23657         SKE   =T43                EXPECTED READ ONLY TRAP ID
15576  0 43 00460         BRM   ERROR
15577  0 20 23137         NOP   TM44
15600  0 43 00434         BRM   END                 LOOP IF BP1 SET
```

```
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                     * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL53
                     * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15601   0 43 00430   TRAP45 BRM     OBJECT              START OBJECT TEST
15602   0 43 00440          BRM     RETURN              SET TRAP RETURN
15603   0 20 15617          NOP     T45
15604   0 76 23447          LDA     *000000000
15605   0 35 00415          STA     RL1                 RL1 CONTENTS
15606   0 76 23670          LDA     *000410000
15607   0 35 00416          STA     RL2                 RL2 CONTENTS
15610   0 02 20400          EOM     020400
15611   0 13 00415          POT     RL1                 SEY RL1
15612   0 02 21000          EOM     021000
15613   0 13 00416          POT     RL2                 SET RL2
15614   4 35 27777          STA     027777,4            SHOULD READ ONLY TRAP
15615   0 46 00001          CLA
15616   0 01 15620          BRU     **2
15617   0 76 00450   T45    LDA     DIVERT
15620   0 14 23506          ETR     *037777
15621   0 50 23657          SKE     *T43                EXPECTED READ ONLY TRAP ID
15622   0 43 00460          BRM     ERROR
15623   0 20 23144          NOP     TM45
15624   0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
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                     * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL52
                     * IF OUT OF BOUNDS TRAP, CHECK RL52 AND LS2A1 BAR
                     * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15625   0 43 00430   TRAP46 BRM     OBJECT              START OBJECT TEST
15626   0 43 00440          BRM     RETURN              SET TRAP RETURN
15627   0 20 15643          NOP     T46
15630   0 76 23447          LDA     *000000000
15631   0 35 00415          STA     RL1                 RL1 CONTENTS
15632   0 76 23671          LDA     *000420000
15633   0 35 00416          STA     RL2                 RL2 CONTENTS
15634   0 02 20400          EOM     020400
15635   0 13 00415          POT     RL1                 SET RL1
15636   0 02 21000          EOM     021000
15637   0 13 00416          POT     RL2                 SET RL2
15640   4 35 27777          STA     027777,4            SHOULD READ ONLY TRAP
15641   0 46 00001          CLA
15642   0 01 15644          BRU     **2
15643   0 76 00450   T46    LDA     DIVERT
15644   0 14 23506          ETR     *037777
15645   0 50 23657          SKE     *T43                EXPECTED READ ONLY TRAP ID
15646   0 43 00460          BRM     ERROR
15647   0 20 23154          NOP     TM46
15650   0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL51
                        * IF OUT OF BOUNDS TRAP, CHECK RL51 AND LS1A! BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15651  0 43 00430  TRAP47 BRM     OBJECT              START OBJECT TEST
15652  0 43 00440         BRM     RETURN              SET TRAP RETURN
15653  0 20 15667         NOP     T47
15654  0 76 23447         LDA     •000000000
15655  0 35 00415         STA     RL1                 RL1 CONTENTS
15656  0 76 23672         LDA     •000440000
15657  0 35 00416         STA     RL2                 RL2 CONTENTS
15660  0 02 20400         EOM     020400
15661  0 13 00415         POT     RL1                 SET RL1
15662  0 02 21000         EOM     021000
15663  0 13 00416         POT     RL2                 SET RL2
15664  4 35 27777         STA     027777,4            SHOULD READ ONLY TRAP
15665  0 46 00001         CLA
15666  0 01 15670         BRU     •+2
15667  0 76 00450  T47    LDA     DIVERT
15670  0 14 23506         ETR     •037777
15671  0 50 23457         SKE     •T43                EXPECTED READ ONLY TRAP ID
15672  0 43 00460         BRM     ERROR
15673  0 20 23161         NOP     TM47
15674  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL50
                        * IF OUT OF BOUNDS TRAP, CHECK RL50 AND LS0A! BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15675  0 43 00430  TRAP48 BRM     OBJECT              START OBJECT TEST
15676  0 43 00440         BRM     RETURN              SET TRAP RETURN
15677  0 20 15713         NOP     T48
15700  0 76 23447         LDA     •000000000
15701  0 35 00415         STA     RL1                 RL1 CONTENTS
15702  0 76 23673         LDA     •000500000
15703  0 35 00416         STA     RL2                 RL2 CONTENTS
15704  0 02 20400         EOM     020400
15705  0 13 00415         POT     RL1                 SET RL1
15706  0 02 21000         EOM     021000
15707  0 13 00416         POT     RL2                 SET RL2
15710  4 35 27777         STA     027777,4            SHOULD READ ONLY TRAP
15711  0 46 00001         CLA
15712  0 01 15714         BRU     •+2
15713  0 76 00450  T48    LDA     DIVERT
15714  0 14 23506         ETR     •037777
15715  0 50 23657         SKE     •T43                EXPECTED READ ONLY TRAP ID
15716  0 43 00460         BRM     ERROR
15717  0 20 23166         NOP     TM48
15720  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL5H
                    * IF OUT OF BOUNDS TRAP, CHECK RL5H AND LS00A' BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15721  0 43 00430   TRAP49 BRM     OBJECT              START OBJECT TEST
15722  0 43 00440          BRM     RETURN              SET TRAP RETURN
15723  0 20 15737          NOP     T49
15724  0 76 23447          LDA     #000000000
15725  0 35 00415          STA     RL1                 RL1 CONTENTS
15726  0 76 23603          LDA     #000600000
15727  0 35 00416          STA     RL2                 RL2 CONTENTS
15730  0 02 20400          EOM     020400
15731  0 13 00415          POT     RL1                 SET RL1
15732  0 02 21000          EOM     021000
15733  0 13 00416          POT     RL2                 SET RL2
15734  4 35 27777          STA     027777,4            SHOULD READ ONLY TRAP
15735  0 46 00001          CLA
15736  0 01 15740          BRU     *+2
15737  0 76 00450   T49    LDA     DIVERT
15740  0 14 23506          ETR     #037777
15741  0 50 23457          SKE     #T43                EXPECTED READ ONLY TRAP ID
15742  0 43 00460          BRM     ERROR
15743  0 20 23173          NOP     TM49
15744  0 43 00434          BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL63
                    * IF OUT OF BOUNDS TRAP, CHECK RL63 AND S31
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15745  0 43 00430   TRAP50 BRM     OBJECT              START OBJECT TEST
15746  0 43 00440          BRM     RETURN              SET TRAP RETURN
15747  0 20 15763          NOP     T50
15750  0 76 23447          LDA     #000000000
15751  0 35 00415          STA     RL1                 RL1 CONTENTS
15752  0 76 23674          LDA     #000004100
15753  0 35 00416          STA     RL2                 RL2 CONTENTS
15754  0 02 20400          EOM     020400
15755  0 13 00415          POT     RL1                 SET RL1
15756  0 02 21000          EOM     021000
15757  0 13 00416          POT     RL2                 SET RL2
15760  4 35 33777          STA     033777,4            SHOULD READ ONLY TRAP
15761  0 46 00001          CLA
15762  0 01 15764          BRU     *+2
15763  0 76 00450   T50    LDA     DIVERT
15764  0 14 23506          ETR     #037777
15765  0 50 23457          SKE     #T43                EXPECTED READ ONLY TRAP ID
15766  0 43 00460          BRM     ERROR
15767  0 20 23200          NOP     TM50
15770  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL62
                        * IF OUT OF BOUNDS TRAP, CHECK RL62 AND LS2A! BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
15771  0 43 00430  TRAP51 BRM     OBJECT              START OBJECT TEST
15772  0 43 00440         BRM     RETURN              SET TRAP RETURN
15773  0 20 16007         NOP     T51
15774  0 76 23447         LDA     =000000000
15775  0 35 00415         STA     RL1                 RL1 CONTENTS
15776  0 76 23675         LDA     =00004200
15777  0 35 00416         STA     RL2                 RL2 CONTENTS
16000  0 02 20400         EOM     020400
16001  0 13 00415         POT     RL1                 SET RL1
16002  0 02 21000         EOM     021000
16003  0 13 00416         POT     RL2                 SET RL2
16004  4 35 33777         STA     033777,4            SHOULD READ ONLY TRAP
16005  0 46 00001         CLA
16006  0 01 16010         BRU     *+2
16007  0 76 00450  T51    LDA     DIVERT
16010  0 14 23506         ETR     =037777
16011  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
16012  0 43 00460         BRM     ERROR
16013  0 20 23205         NOP     TM51
16014  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL61
                        * IF OUT OF BOUNDS TRAP, CHECK RL61 AND LS1A! BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16015  0 43 00430  TRAP52 BRM     OBJECT              START OBJECT TEST
16016  0 43 00440         BRM     RETURN              SET TRAP RETURN
16017  0 20 16033         NOP     T52
16020  0 76 23447         LDA     =000000000
16021  0 35 00415         STA     RL1                 RL1 CONTENTS
16022  0 76 23676         LDA     =00004400
16023  0 35 00416         STA     RL2                 RL2 CONTENTS
16024  0 02 20400         EOM     020400
16025  0 13 00415         POT     RL1                 SET RL1
16026  0 02 21000         EOM     021000
16027  0 13 00416         POT     RL2                 SET RL2
16030  4 35 33777         STA     033777,4            SHOULD READ ONLY TRAP
16031  0 46 00001         CLA
16032  0 01 16034         BRU     *+2
16033  0 76 00450  T52    LDA     DIVERT
16034  0 14 23506         ETR     =037777
16035  0 50 23657         SKE     =T43                EXPECTED READ ONLY TRAP ID
16036  0 43 00460         BRM     ERROR
16037  0 20 23212         NOP     TM52
16040  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL60
                        * IF OUT OF BOUNDS TRAP, CHECK RL60 AND LS0A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16041  0 43 00430  TRAP53 BRM     OBJECT              START OBJECT TEST
16042  0 43 00440         BRM     RETURN              SET TRAP RETURN
16043  0 20 16057         NOP     T53
16044  0 76 23447         LDA     •000000000
16045  0 35 00415         STA     RL1                 RL1 CONTENTS
16046  0 76 23677         LDA     •000005000
16047  0 35 00416         STA     RL2                 RL2 CONTENTS
16050  0 02 20400         EOM     020400
16051  0 13 00415         POT     RL1                 SET RL1
16052  0 02 21000         EOM     021000
16053  0 13 00416         POT     RL2                 SET RL2
16054  4 35 33777         STA     033777,4            SHOULD READ ONLY TRAP
16055  0 46 00001         CLA
16056  0 01 16060         BRU     •+2
16057  0 76 00450  T53    LDA     DIVERT
16060  0 14 23506         ETR     •037777
16061  0 50 23457         SKE     •T43                EXPECTED READ ONLY TRAP ID
16062  0 43 00460         BRM     ERROR
16063  0 20 23217         NOP     TM53
16064  0 43 00434         BRM     END                 LOOP IF BP1 SET
```



```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL6H
                        * IF OUT OF BOUNDS TRAP, CHECK RL6H AND LS00A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16065  0 43 00430  TRAP54 BRM     OBJECT              START OBJECT TEST
16066  0 43 00440         BRM     RETURN              SET TRAP RETURN
16067  0 20 16103         NOP     T54
16070  0 76 23447         LDA     •000000000
16071  0 35 00415         STA     RL1                 RL1 CONTENTS
16072  0 76 23700         LDA     •000006000
16073  0 35 00416         STA     RL2                 RL2 CONTENTS
16074  0 02 20400         EOM     020400
16075  0 13 00415         POT     RL1                 SET RL1
16076  0 02 21000         EOM     021000
16077  0 13 00416         POT     RL2                 SET RL2
16100  4 35 33777         STA     033777,4            SHOULD READ ONLY TRAP
16101  0 46 00001         CLA
16102  0 01 16104         BRU     •+2
16103  0 76 00450  T54    LDA     DIVERT
16104  0 14 23506         ETR     •037777
16105  0 50 23657         SKE     •T43                EXPECTED READ ONLY TRAP ID
16106  0 43 00460         BRM     ERROR
16107  0 20 23224         NOP     TM54
16110  0 43 00434         BRM     END                 LOOP IF BP1 SET
```

```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL73
                    * IF OUT OF BOUNDS TRAP, CHECK RL73 AND S3'
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16111  0 43 00430   TRAP55 BRM     OBJECT              START OBJECT TEST
16112  0 43 00440          BRM     RETURN              SET TRAP RETURN
16113  0 20 16127          NOP     T55
16114  0 76 23447          LDA     #000000000
16115  0 35 00415          STA     RL1                 RL1 CONTENTS
16116  0 76 23701          LDA     #000000041
16117  0 35 00416          STA     RL2                 RL2 CONTENTS
16120  0 02 20400          EOM     020400
16121  0 13 00415          POT     RL1                 SET RL1
16122  0 02 21000          EOM     021000
16123  0 13 00416          POT     RL2                 SET RL2
16124  4 35 37777          STA     037777,4            SHOULD READ ONLY TRAP
16125  0 46 00001          CLA
16126  0 01 16130          BRU     **2
16127  0 76 00450   T55    LDA     DIVERT
16130  0 14 23506          ETR     #037777
16131  0 50 23457          SKE     #T43                EXPECTED READ ONLY TRAP ID
16132  0 43 00460          BRM     ERROR
16133  0 20 23231          NOP     TM55
16134  0 43 00434          BRM     END                 LOOP IF BP1 SET
```



```
                    * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL72
                    * IF OUT OF BOUNDS TRAP, CHECK RL72 AND LS2A1 BAR
                    * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16135  0 43 00430   TRAP56 BRM     OBJECT              START OBJECT TEST
16136  0 43 00440          BRM     RETURN              SET TRAP RETURN
16137  0 20 16153          NOP     T56
16140  0 76 23447          LDA     #000000000
16141  0 35 00415          STA     RL1                 RL1 CONTENTS
16142  0 76 23702          LDA     #000000042
16143  0 35 00416          STA     RL2                 RL2 CONTENTS
16144  0 02 20400          EOM     020400
16145  0 13 00415          POT     RL1                 SET RL1
16146  0 02 21000          EOM     021000
16147  0 13 00416          POT     RL2                 SET RL2
16150  4 35 37777          STA     037777,4            SHOULD READ ONLY TRAP
16151  0 46 00001          CLA
16152  0 01 16154          BRU     **2
16153  0 76 00450   T56    LDA     DIVERT
16154  0 14 23506          ETR     #037777
16155  0 50 23457          SKE     #T43                EXPECTED READ ONLY TRAP ID
16156  0 43 00460          BRM     ERROR
16157  0 20 23236          NOP     TM56
16160  0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
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                     * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL71
                     * IF OUT OF BOUNDS TRAP, CHECK RL71 AND LS1A! BAR
                     * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16161   0 43 00430   TRAP57 BRM     OBJECT              START OBJECT TEST
16162   0 43 00440          BRM     RETURN              SET TRAP RETURN
16163   0 20 16177          NOP     T57
16164   0 76 23447          LDA     =000000000
16165   0 35 00415          STA     RL1                 RL1 CONTENTS
16166   0 76 23703          LDA     =000000044
16167   0 35 00416          STA     RL2                 RL2 CONTENTS
16170   0 02 20400          EOM     020400
16171   0 13 00415          POT     RL1                 SET RL1
16172   0 02 21000          EOM     021000
16173   0 13 00416          POT     RL2                 SET RL2
16174   4 35 37777          STA     037777,4            SHOULD READ ONLY TRAP
16175   0 46 00001          CLA
16176   0 01 16200          BRU     *+2
16177   0 76 00450   T57    LDA     DIVERT
16200   0 14 23506          ETR     =037777
16201   0 50 23457          SKE     =T43                EXPECTED TEAD ONLY TRAP ID
16202   0 43 00460          BRM     ERROR
16203   0 20 23243          NOP     TM57
16204   0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
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                     * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL70
                     * IF OUT OF BOUNDS TRAP, CHECK RL70 AND LS0A! BAR
                     * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16205   0 43 00430   TRAP58 BRM     OBJECT              START OBJECT TEST
16206   0 43 00440          BRM     RETURN              SET TRAP RETURN
16207   0 20 16223          NOP     T58
16210   0 76 23447          LDA     =000000000
16211   0 35 00415          STA     RL1                 RL1 CONTENTS
16212   0 76 23704          LDA     =000000050
16213   0 35 00416          STA     RL2                 RL2 CONTENTS
16214   0 02 20400          EOM     020400
16215   0 13 00415          POT     RL1                 SET RL1
16216   0 02 21000          EOM     021000
16217   0 13 00416          POT     RL2                 SET RL2
16220   4 35 37777          STA     037777,4            SHOULD READ ONLY TRAP
16221   0 46 00001          CLA
16222   0 01 16224          BRU     *+2
16223   0 76 00450   T58    LDA     DIVERT
16224   0 14 23506          ETR     =037777
16225   0 50 23457          SKE     =T43                EXPECTED READ ONLY TRAP ID
16226   0 43 00460          BRM     ERROR
16227   0 20 23250          NOP     TM58
16230   0 43 00434          BRM     END                 LOOP IF BP1 SET
```

```
                        * THIS OBJECT TEST ATTEMPTS A READ ONLY TRAP DEPENDENT ON RL7H
                        * IF OUT OF BOUNDS TRAP, CHECK RL7H AND LS00A1 BAR
                        * NO TRAP MAY BE CAUSED BY AN INTERMITTENT FAILURE
16231  0 43 00430 TRAP59 BRM     OBJECT              START OBJECT TEST
16232  0 43 00440        BRM     RETURN              SET TRAP RETURN
16233  0 20 16247        NOP     T59
16234  0 76 23447        LDA     =000000000
16235  0 35 00415        STA     RL1                 RL1 CONTENTS
16236  0 76 23705        LDA     =000000060
16237  0 35 00416        STA     RL2                 RL2 CONTENTS
16240  0 02 20400        EOM     020400
16241  0 13 00415        POT     RL1                 SET RL1
16242  0 02 21000        EOM     021000
16243  0 13 00416        POT     RL2                 SET RL2
16244  4 35 37777        STA     037777,4            SHOULD READ ONLY TRAP
16245  0 46 00001        CLA
16246  0 01 16250        BRU     *+2
16247  0 76 00450 T59    LDA     DIVERT
16250  0 14 23506        ETR     =037777
16251  0 50 23657        SKE     =T43                EXPECTED READ ONLY TRAP ID
16252  0 43 00460        BRM     ERROR
16253  0 20 23255        NOP     TM59
16254  0 43 00434        BRM     END                 LOOP IF BP1 SET
16255  0 43 00456        BRM     FDONE
```



```
                        * TRANSITION DIAGNOSTIC
16256  0 43 00424 FUNC2  BRM     FUNCTN
16257  0 20 20022        NOP     FPT2
16260  0 76 23706        LDA     =40010203           MAKE PAGE 0 OUT OF BOUNDS
16261  0 35 00415        STA     RL1
16262  0 02 20400        EOM     20400
16263  0 13 00415        POT     RL1                 SET RL1
16264  0 76 23707        LDA     =04050607
16265  0 35 00416        STA     RL2
16266  0 02 21000        EOM     21000
16267  0 13 00416        POT     RL2                 SET RL2
```

```
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                    * BRU TRANSITION
16270  0 43 00430   TRAN1  BRM     OBJECT
16271  0 43 00440          BRM     RETURN          SET TRAP RETURN
16272  0 20 16301          NOP     TRANR1
16273  0 02 22400          EOM     22400           ARM MUT TRAP
16274  4 01 16275          BRU     **1,4           SHOULD TRANSITION AND TRAP
16275  0 02 22000          EOM     22000           SHOULD PIT
16276  0 35 00000          STA     0               SHOULD OOBT
16277  0 43 00460          BRM     ERROR           DID NOT TRANSITION
16300  0 20 23262          NOP     TRANM1
16301  0 43 00434   TRANR1 BRM     END
                    * BRR TRANSITION
16302  0 43 00430   TRAN2  BRM     OBJECT
16303  0 43 00440          BRM     RETURN          SET TRAP RETURN
16304  0 20 16314          NOP     TRANR2
16305  0 02 22400          EOM     22400           ARM MUT TRAP
16306  0 51 16307          BRR     **1             SHOULD TRANSITION AND TRAP
16307  4 20 16307          NOP     *,4
16310  0 02 22000          EOM     22000           SHOULD PIT
16311  0 35 00000          STA     0               SHOULD OOBT
16312  0 43 00460          BRM     ERROR           DID NOT TRANSITION
16313  0 20 23267          NOP     TRANM2
16314  0 43 00434   TRANR2 BRM     END
                    * BRM TRANSITION
16315  0 43 00430   TRAN3  BRM     OBJECT
16316  0 43 00440          BRM     RETURN          SET TRAP RETURN
16317  0 20 16327          NOP     TRANR3
16320  0 02 22400          EOM     22400           ARM     MUT TRAP
16321  4 43 16322          BRM     **1,4           SHOULD TRANSITION AND TRAP
16322  0 20 00000          NOP
16323  0 02 22000          EOM     22000           SHOULD PIT
16324  0 35 00000          STA     0               SHOULD OOBT
16325  0 43 00460          BRM     ERROR           DID NOT TRANSITION
16326  0 20 23273          NOP     TRANM3
16327  0 43 00434   TRANR3 BRM     END
```

```
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                    * THESE SHOULD NOT CAUSE TRANSITION
16330  0 43 00430   TRAN4  BRM     OBJECT
16331  0 43 00440          BRM     RETURN          SET TRAP RETURN
16332  0 20 16344          NOP     TRANR4
16333  4 71 37777          LDX     37777,4         SHOULD NOT TRANSITION
16334  4 55 37777          ADD     37777,4         *
16335  4 53 37777          SKN     37777,4         *
16336  0 20 00000          NOP     0               *
16337  4 50 37777          SKE     37777,4         *
16340  0 20 00000          NOP     0               *
16341  0 02 22000          EOM     22000           SHOULD NOT PIT
16342  0 35 00000          STA     0               SHOULD NOT OOBT
16343  0 01 16345          BRU     **2             OK
16344  0 43 00460   TRANR4 BRM     ERROR           TRAPPED
16345  0 20 23267          NOP     TRANM2
16346  0 43 00434          BRM     END
                    * CHECK NON BRANCHING BRX
16347  0 43 00430   TRAN5  BRM     OBJECT
16350  0 43 00440          BRM     RETURN          SET TRAP RETURN
16351  0 20 16357          NOP     TRANR5
16352  2 46 00000          CLX
16353  4 41 16354          BRX     **1,4           SHOULD NOT TRANSITION
16354  0 02 22000          EOM     22000           SHOULD NOT PIT
16355  0 35 00000          STA     0               SHOULD NOT OOBT
16356  0 01 16360          BRU     **2
16357  0 43 00460   TRANR5 BRM     ERROR           TRAPPED
16360  0 20 23277          NOP     TRANM4
16361  0 43 00434          BRM     END
```

```
                    * CHECK RELABLED LDA
16362  0 43 00430  TRAN6  BRM     OBJECT
16363  0 43 00440         BRM     RETURN          SET TRAP RETURN
16364  0 20 16371         NOP     TRANR6
16365  4 76 37777         LDA     37777,4         SHOULD NOT TRANSITION
16366  0 02 22000         EOM     22000           SHOULD NOT PIT
16367  0 35 00000         STA     0               SHOULD NOT OOBT
16370  0 01 16372         BRU     *+2
16371  0 43 00460  TRANR6 BRM     ERROR           TRAPPED
16372  0 20 23273         NOP     TRANM3
16373  0 43 00434         BRM     END
```



```
                    * IS THE MONITOR TO USER TRANSITION TRAP ALWAYS ARMED
16374  0 43 00430  MUT1   BRM     OBJECT
16375  0 43 00440         BRM     RETURN          SET TRAP RETURN
16376  0 20 16413         NOP     MUTR1
16377  0 02 20400         EOM     20400           DUMMY EOM
16400  0 13 00415         POT     RL1             SETS RL1 AGAIN
16401  0 02 22000         EOM     22000
16402  0 02 02400         EOM     02400
16403  0 02 23400         EOM     23400
16404  0 02 32400         EOM     32400
16405  0 20 22400         NOP     22400
16406  4 01 16407         BRU     *+1,4           TO USER MODE
16407  0 02 22000         EOM     22000           SHOULD PIT
16410  0 35 00000         STA     0               IF NO PIT THEN OOBT
16411  0 46 00001         CLA
16412  0 01 16414         BRU     *+2
16413  0 76 00450  MUTR1  LDA     DIVERT
16414  0 14 23506         ETR     =37777
16415  0 50 23710         SKE     =T44            IS IT A MUTT
16416  0 01 16420         BRU     *+2             NO, OK
16417  0 43 00460         BRM     ERROR           YES, ERROR
16420  0 20 23303         NOP     MUTM1
16421  0 43 00434         BRM     END
```

```
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                     * IS THE MUTT POSSIBLE
16422  0 43 00430    MUT2    BRM     OBJECT
16423  0 43 00440            BRM     RETURN          SET TRAP RETURN
16424  0 20 16433            NOP     MUTR2
16425  0 02 22400            EOM     22400           ARM MUTT
16426  4 01 16427            BRU     *+1,4           SHOULD MUTT
16427  0 02 22000            EOM     22000           IF NO MUTT, THEN PIT
16430  0 35 00000            STA     0               IF NO MUTT OR PIT, THEN OOBT
16431  0 46 00001            CLA
16432  0 01 16434            BRU     *+2
16433  0 76 00450    MUTR2   LDA     DIVERT
16434  0 14 23506            ETR     =37777
16435  0 50 23710            SKE     =T44            DID IT MUTT
16436  0 43 00460            BRM     ERROR           NO
16437  0 20 23314            NOP     MUTM2
16440  0 43 00434            BRM     END
```

```
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                     * WILL IT MUTT FROM MONITOR MODE
16441  0 43 00430    MUT3    BRM     OBJECT
16442  0 43 00440            BRM     RETURN          SET TRAP RETURN
16443  0 20 16450            NOP     MUTR3A
16444  0 02 22400            EOM     22400
16445  0 43 00440            BRM     RETURN
16446  0 20 16452            NOP     MUTR3B
16447  4 01 16450            BRU     *+1,4           SHOULD MUTT
16450  0 43 00460    MUTR3A  BRM     ERROR           MUTT FROM MONITOR MODE
16451  0 20 23324            NOP     MUTM3
16452  0 43 00434    MUTR3B  BRM     END
16453  0 43 00436            BRM     FDONE
```

```
16454  0 43 00424  FUNC3  BRM     FUNCTN
16455  0 20 20030         NOP     FPT3
16456  0 76 23706         LDA     =40010203
16457  0 35 00415         STA     RL1             MAKE PAGE 0 OUT OF BOUNDS
16460  0 02 20400         EOM      20400
16461  0 13 00415         POT     RL1             SET RL1
16462  0 76 23707         LDA     =04050607
16463  0 35 00416         STA     RL2
16464  0 02 21000         EOM     21000
16465  0 13 00416         POT     RL2             SET RL2
```



```
                   * IS A PRIVILEGED INSTRUCTION TRAP POSSIBLE
16466  0 43 00430  PIT1   BRM     OBJECT
16467  0 43 00440         BRM     RETURN          SET TRAP RETURN
16470  0 20 16477         NOP     PIR1
16471  4 01 16472         BRU     **1,4           TO USER MODE
16472  0 42 00000         42      0               UNDEFINED NOP
16473  0 24 00000         24      0               UNDIFINED NOP
16474  5 00 00000         POP     0,4             IF NO PIT, THEN SYSPOP
16475  0 46 00001         CLA
16476  0 01 16500         BRU     **2             NO TRAP OR SYSPOP
16477  0 76 00450  PIR1   LDA     DIVERT          GET TRAP ID
16500  0 14 23506         ETR     =37777
16501  0 50 23711         SKE     =T40            DID IT PIT
16502  0 43 00460         BRM     ERROR           NO
16503  0 20 23330         NOP     PIM1
16504  0 43 00434         BRM     END
```

```
                    * NONE OF THESE SHOULD TRAP
16505  0 43 00430   PIT2    BRM     OBJECT
16506  0 43 00440           BRM     RETURN          SET TRAP RETURN
16507  0 20 16533           NOP     PIR2
16510  4 01 16511           BRU     **1,4           TO USER MODE
16511  0 46 00000           RCH     0               SHOULD NOT TRAP
16512  0 35 37777           STA     37777             *
16513  0 36 37777           STB     37777             *
16514  0 20 00000           NOP     0                 *
16515  0 14 37777           ETR     37777             *
16516  0 23 16517           EXU     **1               *
16517  0 17 37777           EOR     37777             *
16520  0 01 16521           BRU     **1               *
16521  0 65 37777           DIV     37777             *
16522  0 50 37777           SKE     37777             *
16523  0 20 00000           NOP     0                 *
16524  0 22 00001           ROV                       *
16525  0 55 37777           ADD     37777             *
16526  0 70 37777           SKM     37777             *
16527  0 20 00000           NOP     0                 *
16530  5 00 00000           POP     0,4             SHOULD SYSPOP
16531  0 46 00001           CLA
16532  0 01 16534           BRU     **2
16533  0 76 00440   PIR2    LDA     RETURN          GET TRAP ID
16534  0 14 23506           ETR     *37777
16535  0 50 23711           SKE     *T40            IS IT A PIT
16536  0 01 16540           BRU     **2             NO, OK
16537  0 43 00460           BRM     ERROR
16540  0 20 23347           NOP     PIM2
16541  0 43 00434           BRM     END
```



```
16542  0 43 00430   PIT3    BRM     OBJECT
16543  0 43 00440           BRM     RETURN          SET TRAP RETURN
16544  0 20 16551           NOP     PIR3
16545  4 01 16546           BRU     **1,4           TO USER MODE
16546  0 45 00000           45      0               SHOULD PIT
16547  0 46 00001           CLA
16550  0 01 16552           BRU     **2
16551  0 76 00450   PIR3    LDA     DIVERT          GET TRAP MARK
16552  0 14 23506           ETR     *37777
16553  0 50 23711           SKE     *T40            IS IT A PIT
16554  0 43 00460           BRM     ERROR           NO
16555  0 20 23347           NOP     PIM2
16556  0 43 00434           BRM     END
                    *
16557  0 43 00430   PIT4    BRM     OBJECT
16560  0 43 00440           BRM     RETURN          SET TRAP RETURN
16561  0 20 16566           NOP     PIR4
16562  4 01 16563           BRU     **1,4           TO USER MODE
16563  0 44 00000           44      0               SHOULD PIT
16564  0 46 00001           CLA
16565  0 01 16567           BRU     **2
16566  0 76 00450   PIR4    LDA     DIVERT          GET TRAP MARK
16567  0 14 23506           ETR     *37777
16570  0 50 23711           SKE     *T40            IS IT A PIT
16571  0 43 00460           BRM     ERROR           NO
16572  0 20 23347           NOP     PIM2
16573  0 43 00434           BRM     END
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 355

16574  0 43 00430  PIT5   BRM     OBJECT
16575  0 43 00440         BRM     RETURN          SET TRAP RETURN
16576  0 20 16603         NOP     PIR5
16577  4 01 16600         BRU     **1,4           TO USER MODE
16600  0 34 00000         34      0               SHOULD PIT
16601  0 46 00001         CLA
16602  0 01 16604         BRU     **2
16603  0 76 00450  PIR5   LDA     DIVERT          GET TRAP MARK
16604  0 14 23506         ETR     =37777
16605  0 50 23711         SKE     =T40            IS IT A PIT
16606  0 43 00460         BRM     ERROR           NO
16607  0 20 23347         NOP     PIM2
16610  0 43 00434         BRM     END
                  *
16611  0 43 00430  PIT6   BRM     OBJECT
16612  0 43 00440         BRM     RETURN          SET TRAP RETURN
16613  0 20 16620         NOP     PIR6
16614  4 01 16615         BRU     **1,4           TO USER MODE
16615  0 15 00000         15      0               SHOULD PIT
16616  0 46 00001         CLA
16617  0 01 16621         BRU     **2
16620  0 76 00450  PIR6   LDA     DIVERT          GET TRAP MARK
16621  0 14 23506         ETR     =37777
16622  0 50 23711         SKE     =T40            IS IT A PIT
16623  0 43 00460         BRM     ERROR           NO
16624  0 20 23347         NOP     PIM2
16625  0 43 00434         BRM     END
```

```
CPU0   TAP=3.0      01/15  03:01   PAGE 356

16626  0 43 00430  PIT7   BRM     OBJECT
16627  0 43 00440         BRM     RETURN          SET TRAP RETURN
16630  0 20 16635         NOP     PIR7
16631  4 01 16632         BRU     **1,4           TO USER MODE
16632  0 03 00000         03      0               SHOULD PIT
16633  0 46 00001         CLA
16634  0 01 16636         BRU     **2
16635  0 76 00450  PIR7   LDA     DIVERT          GET TRAP MARK
16636  0 14 23506         ETR     =37777
16637  0 50 23711         SKE     =T40            IS IT A PIT
16640  0 43 00460         BRM     ERROR           NO
16641  0 20 23347         NOP     PIM2
16642  0 43 00434         BRM     END
                  *
16643  0 43 00430  PIT8   BRM     OBJECT
16644  0 43 00440         BRM     RETURN          SET TRAP RETURN
16645  0 20 16652         NOP     PIR8
16646  4 01 16647         BRU     **1,4           TO USER MODE
16647  0 42 00000         42      0               SHOULD PIT
16650  0 46 00001         CLA
16651  0 01 16653         BRU     **2
16652  0 76 00450  PIR8   LDA     DIVERT          GET TRAP MARK
16653  0 14 23506         ETR     =37777
16654  0 50 23711         SKE     =T40            IS IT A PIT
16655  0 43 00460         BRM     ERROR           NO
16656  0 20 23347         NOP     PIM2
16657  0 43 00434         BRM     END
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 357

16660   0 43 00430   PIT9   BRM     OBJECT
16661   0 43 00440          BRM     RETURN          SET TRAP RETURN
16662   0 20 16667          NOP     PIR9
16663   4 01 16664          BRU     **1,4           TO USER MODE
16664   0 31 00000          31      0               SHOULD PIT
16665   0 46 00001          CLA
16666   0 01 16670          BRU     **2
16667   0 76 00450   PIR9   LDA     DIVERT          GET TRAP MARK
16670   0 14 23506          ETR     #37777
16671   0 50 23711          SKE     *T40            IS IT A PIT
16672   0 43 00460          BRM     ERROR           NO
16673   0 20 23347          NOP     PIM2
16674   0 43 00434          BRM     END
                    *
16675   0 43 00430   PIT10  BRM     OBJECT
16676   0 43 00440          BRM     RETURN          SET TRAP RETURN
16677   0 20 16704          NOP     PIR10
16700   4 01 16701          BRU     **1,4           TO USER MODE
16701   0 24 00000          24      0               SHOULD PIT
16702   0 46 00001          CLA
16703   0 01 16705          BRU     **2
16704   0 76 00450   PIR10  LDA     DIVERT          GET TRAP MARK
16705   0 14 23506          ETR     #37777
16706   0 50 23711          SKE     *T40            IS IT A PIT
16707   0 43 00460          BRM     ERROR           NO
16710   0 20 23347          NOP     PIM2
16711   0 43 00434          BRM     END
```

```
CPU0    TAP=3.0      01/15  03101   PAGE 358

16712   0 43 00430   PIT11  BRM     OBJECT
16713   0 43 00440          BRM     RETURN          SET TRAP RETURN
16714   0 20 16721          NOP     PIR11
16715   4 01 16716          BRU     **1,4           TO USER MODE
16716   0 21 00000          21      0               SHOULD PIT
16717   0 46 00001          CLA
16720   0 01 16722          BRU     **2
16721   0 76 00450   PIR11  LDA     DIVERT          GET TRAP MARK
16722   0 14 23506          ETR     #37777
16723   0 50 23711          SKE     *T40            IS IT A PIT
16724   0 43 00460          BRM     ERROR           NO
16725   0 20 23347          NOP     PIM2
16726   0 43 00434          BRM     END
16727   0 43 00456          BRM     FDONE
```

```
                    * REAL TIME CLOCK DIAGNOSTIC
16730  0 43 00424  FUNC4  BRM     FUNCTN
16731  0 20 20036         NOP     FPT4
16732  0 02 20002         EOM     20002          ENABLE INTERRUPTS
16733  0 43 00430  RTC0    BRM     OBJECT
16734  0 43 00440         BRM     RETURN
16735  0 20 17073         NOP     SPURCI
16736  0 43 17052         BRM     RTCON          TURN ON RTC
16737  0 02 20200         EOM     20200          TURN RTC OFF
16740  0 71 23511         LDX     •40000         TIMER COUNT
16741  0 76 00407         LDA     TIME
16742  0 41 16742         BRX     •
16743  0 17 00407         EOR     TIME
16744  0 43 17061         BRM     RTCOFF         RESTORE RTC
16745  0 72 23460         SKA     ••1            DID TIME CHANGE AFTER TIMEOUT
16746  0 43 00460         BRM     ERROR          NO, CANNOT DISARM CLOCK
16747  0 20 23362         NOP     RTCM0
16750  0 43 00434         BRM     END
```



```
16751  0 43 00430  RTC1    BRM     OBJECT
16752  0 43 00440         BRM     RETURN
16753  0 20 17073         NOP     SPURCI         SPURIOUS CLOCK INTERRUPT
16754  0 43 17052         BRM     RTCON          TURN RTC ON
16755  0 71 23511         LDX     •40000
16756  0 76 00407         LDA     TIME
16757  0 50 00407  RTC1A   SKE     TIME           DOES TIME CHANGE
16760  0 01 16767         BRU     RTC1B          YES
16761  0 41 16757         BRX     RTC1A          NO TRY AGAIN
16762  0 75 00407         LDB     TIME
16763  0 43 17061         BRM     RTCOFF         RESTORE RTC
16764  0 43 00460         BRM     ERROR          TIMED OUT, RTC NOT WORKING
16765  0 20 23367         NOP     RTCM1
16766  0 01 17014         BRU     RTC1E          EXIT
16767  0 71 23511  RTC1B  LDX     •40000
16770  0 55 23452         ADD     •1
16771  0 50 00407  RTC1C   SKE     TIME           LOOK FOR NEXT CHANGE
16772  0 01 17001         BRU     RTC1D          YES CHANGED
16773  0 41 16771         BRX     RTC1C          NO, TRY AGAIN
16774  0 75 00407         LDB     TIME
16775  0 43 17061         BRM     RTCOFF         RESTORE CLOCK
16776  0 43 00460         BRM     ERROR          TIMED OUT
16777  0 20 23367         NOP     RTCM1
17000  0 01 17014         BRU     RTC1E          EXIT
17001  0 75 00407  RTC1D  LDB     TIME
17002  0 43 17061         BRM     RTCOFF         RESTORE RTC
17003  0 46 00600         XXA
17004  0 14 23506         ETR     •37777
17005  0 73 23712         SKG     •2142D         MINUS 10 PERCENT
17006  0 43 00460         BRM     ERROR          RTC FAST OR CPU SLOW
17007  0 20 23401         NOP     RTCM2
17010  0 73 23713         SKG     •2619D         PLUS 10 PERCENT
17011  0 01 17013         BRU     ••2
17012  0 43 00460         BRM     ERROR          RTC SLOW OF CPU FAST
17013  0 20 23407         NOP     RTCM3
17014  0 43 00434  RTC1E  BRM     END
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 361

17015  0 43 00430  RTC2   BRM     OBJECT          CHECK CLOCK SYNC INTERRUPT
17016  0 43 00440         BRM     RETURN          SET INTERRUPT RETURN
17017  0 20 17035         NOP     RTC2A
17020  0 02 20200         EOM     20200           TURN RTC OFF
17021  0 76 23714         LDA     =06000000+TIME
17022  0 35 00075         STA     75
17023  0 76 23460         LDA     =-1
17024  0 35 00407         STA     TIME
17025  0 43 17052         BRM     RTCON           TURN ON RTC
17026  0 71 23511         LDX     =40000
17027  0 41 17027         BRX     *               WAIT FOR INTERRUPT
17030  0 75 00407         LDB     TIME
17031  0 43 17061         BRM     RTCOFF          RESTORE RTC
17032  0 43 00460         BRM     ERROR           TIMED OUT
17033  0 20 23415         NOP     RTCM4
17034  0 01 17046         BRU     RTC2B           EXIT
17035  0 11 17036  RTC2A   BRI     *+1             CLEAR INTERRUPT
17036  0 20 17036         NOP     *
17037  0 75 00407         LDB     TIME
17040  0 43 17061         BRM     RTCOFF          RESTORE RTC
17041  0 76 00450         LDA     DIVERT
17042  0 14 23506         ETR     =37777
17043  0 50 23715         SKE     =174            IS IT CLOCK SYNC
17044  0 43 00460         BRM     ERROR           NO
17045  0 20 23427         NOP     RTCM5
17046  0 43 00434  RTC2B   BRM     END
17047  0 02 20004         EOM     20004           DISABLE INTERRUPTS
17050  0 43 00456         BRM     FDONE
17051  0 43 00452  LAST   BRM     DONE
```

```
CPU0   TAP=3.0      01/15  03101   PAGE 362

17052  0 00 00000  RTCON  PZE
17053  0 35 23441         STA     TEMPA
17054  0 76 00407         LDA     TIME
17055  0 35 17072         STA     TMPTIM          SAVE TIME
17056  0 76 23441         LDA     TEMPA
17057  0 02 20100         EOM     20100           ARM RTC
17060  0 51 17052         BRR     RTCON
                  *
17061  0 00 00000  RTCOFF PZE
17062  0 02 20200         EOM     20200           DISARM RTC
17063  0 35 23441         STA     TEMPA
17064  0 76 23716         LDA     =06100000+TIME
17065  0 35 00075         STA     75              RESTORE INTERRUPT CELL
17066  0 76 17072         LDA     TMPTIM
17067  0 35 00407         STA     TIME            RESTORE TIME
17070  0 76 23441         LDA     TEMPA           RESTORE A REG
17071  0 51 17061         BRR     RTCOFF
17072  0 00 00000  TMPTIM PZE
```

```
                    *
                    *       ALL INTERRUPTS AND TRAPS SPURIOUS
                    *
17073  0 02 20004   SPURCI  DIR                     DISABLE INTERRUPTS
17074  0 43 17061           BRM     RTCOFF
17075  0 76 00450           LDA     DIVERT          GET INTERRUPT MARK ADDRESS
17076  0 14 23506           ETR     =37777          EXTRACT ADDRESS PORTION
17077  0 43 17101           BRM     SPURI           PROCESS SPURIOUS INTERRUPT/TRAP
17100  0 20 23447           NOP     =0
```



```
                    *
                    *       PROCESS SPURIOUS POP, INTERRUPT, OR TRAP
                    *
17101  0 00 00000   SPURI   PZE     0
17102  0 73 23471           SKG     =77             WAS SPIT LEGAL
17103  0 01 17114           BRU     IEXT            NO
17104  0 73 23717           SKG     =177            WAS IT A POP
17105  0 01 17122           BRU     POP             YES
17106  0 73 23720           SKG     =237            WAS IT LEGAL
17107  0 01 17114           BRU     IEXT            NO
17110  0 73 23721           SKG     =273            WAS IT I30 = T44
17111  0 01 17130           BRU     I30T44          YES
17112  0 73 23722           SKG     =377            WAS IT I56 = I74
17113  0 01 17127           BRU     I56I74          YES
                    *
                    *       PROCESS ILLEGAL OR EXTERNAL INTERRUPT
                    *
17114  0 76 23460   IEXT    LDA     =-1
17115  0 35 17167           STA     ITABLE+1        RECEIVED
17116  0 76 00450           LDA     DIVERT          MARK
17117  0 43 00454           BRM     REPORT
17120  0 20 17172           NOP     ILLEXT
17121  0 01 17140           BRU     COMMON
```

```
                        *
                        *       PROCESS SPURIOUS POPS
                        *
17122  0 35 17167  POP  STA     ITABLE+1        RECEIVED
17123  0 76 00000       LDA     0               MARK
17124  0 43 00454       BRM     REPORT
17125  0 20 17205       NOP     POPED
17126  0 01 17140       BRU     COMMON
                        *
                        *       PROCESS I56 THROUGH I74
                        *
17127  0 55 23651  I56I74 ADD     •20
                        *
                        *       PROCESS I30 THROUGH T44
                        *
17130  0 54 23723  I30T44 SUB     •161
17131  0 66 00001       RSH     1
17132  0 35 17167       STA     ITABLE+1        RECEIVED
17133  0 77•00450       EAX•    DIVERT
17134  2 77 37777       EAX     •1,2
17135  2 76 00000       LDA     0,2
17136  0 43 00454       BRM     REPORT
17137  0 20 17211       NOP     SPRINT
```



```
                        *
                        *       COMMON INTERRUPT ROUTINE
                        *
17140  0 35 17170  COMMON STA     ITABLE+2        MARK
17141  0 76•17170       LDA•    ITABLE+2
17142  0 35 17171       STA     ITABLE+3        INSTRUCTION
17143  0 61 17101       MIN     SPURI
17144  0 71•17101       LDX•    SPURI
17145  2 76 00000       LDA     0,2
17146  0 35 17166       STA     ITABLE          EXPECTED
17147  0 43 00454       BRM     REPORT          REPORT ERROR
17150  4 20 17220       NOP     IMSG,4          MESSAGE
17151  0 04 17166       FOUR    ITABLE          DATA
17152  0 43 17156       BRM     CLEAR           CLEAR PRESENT INTERRUPT
17153  0 43 00460       BRM     ERROR           GO TO CONTROL
17154  0 20 17232       NOP     CARRET          (NO MESSAGE)
17155  0 01•00430       BRU•    OBJECT
```

```
                        *
                        *       CLEAR PRESENT INTERRUPT
                        *
17156  0 00 00000 CLEAR  PZE     0
17157  0 76 00401        LDA     STATUS
17160  0 72 23454        SKA     •4              SKIP IF NOT 940
17161  0 11 17163        BRI     **2             940
17162  0 01•17163        BRU•    **1             925/930
17163  0 20 17163        NOP     •
17164  0 02 20002        EIR                     ENABLE INTERRUPTS
17165  0 51 17156        BRR     CLEAR           RETURN
                        *
                        *       MESSAGES
                        *
17166  0 00 00000 ITABLE PZE     0               INTERRUPTS EXPECTED
17167  0 00 00000        PZE     0               INTERRUPT RECEIVED
17170  0 00 00000        PZE     0               LOCATION AT TIME OF INTERRUPT/TRAP
17171  0 00 00000        PZE     0               INSTRUCTION BEING EXECUTED
17172    52526445 ILLEXT BCD     '  UNDEFINED ILLEGAL OR EXTERNAL INTERRUPT!'
17173    24252631
17174    45252412
17175    31434325
17176    27214312
17177    46511225
17200    67632551
17201    45214312
17202    31456925
17203    51516447
17204    63371212
17205    52624764 POPED  BCD     ' SPURIOUS POP!'
17206    51314464
17207    62124746
17210    47371212
17211    52624764 SPRINT BCD     ' SPURIOUS INTERRUPT OR TRAP!'
17212    51314464
17213    62123145
```



```
17214    63255151
17215    64476312
17216    46511263
17217    51214737
17220    52256747 IMSG   BCD     ' EXPECTED RECEIVED LOCATION CONTENTS '
17221    25236325
17222    24125125
17223    23253165
17224    25241243
17225    46232163
17226    31464512
17227    23464563
17230    25456362
17231    52371212
17232    52371212 CARRET BCD     ' '
```

```
                    * UNIT TABLE
          77760545  DUMMY  EQU     ZERO**
17233       00545          BSS     DUMMY(AND)3777
20000   0 20 20044  UPT    NOP     UIM
20001   0 20 20054         NOP     UAM
20002   0 20 20163         NOP     UVM
20003   0 01 20005         ONE     FAW
20004     40000000         DATA    40000000
20005     77777777  FAW    DATA    77777777
```



```
20006   0 20 20165  FPT0   NOP     FIM0
20007   0 20 20175         NOP     FAM0
20010   0 20 20207         NOP     FVM0
20011   0 01 20013         ONE     FID0
20012   0 00 14000         PZE     FUNC1
20013     40000000  FID0   DATA    40000000
20014   0 20 20211  FPT1   NOP     FIM1
20015   0 20 20220         NOP     FAM1
20016   0 20 20435         NOP     FVM1
20017   0 01 20021         ONE     FID1
20020   0 00 16256         PZE     FUNC2
20021     20000000  FID1   DATA    20000000
20022   0 20 20437  FPT2   NOP     FIM2
20023   0 20 20450         NOP     FAM2
20024   0 20 20510         NOP     FVM2
20025   0 01 20027         ONE     FID2
20026   0 00 16454         PZE     FUNC3
20027     10000000  FID2   DATA    10000000
20030   0 20 20512  FPT3   NOP     FIM3
20031   0 20 20525         NOP     FAM3
20032   0 20 20553         NOP     FVM3
20033   0 01 20035         ONE     FID3
20034   0 00 16730         PZE     FUNC4
20035     04000000  FID3   DATA    04000000
20036   0 20 20555  FPT4   NOP     FIM4
20037   0 20 20567         NOP     FAM4
20040   0 20 20607         NOP     FVM4
20041   0 01 20043         ONE     FID4
20042   0 00 17051         PZE     LAST
20043     02000000  FID4   DATA    02000000
```

```
20044    52641200  UIM     BCD     ' U 0 • 940 CPU DIAGNOSTIC 2.0''
20045    12401211
20046    04001223
20047    47641224
20050    31212745
20051    46626331
20052    23120233
20053    00371212
20054    52121212  UAM     BCD     '       THIS UNIT CONTAINS THE CPU DIAGNOSTICS.'
20055    12126330
20056    31621264
20057    45316312
20060    23464563
20061    21314562
20062    12633025
20063    12234764
20064    12243121
20065    27454662
20066    63312362
20067    33121212
20070    52266445          BCD     ' FUNCTION 0 IS A MONITOR MODE INSTRUCTION DIAGNOSTIC'
20071    23633146
20072    45120312
20073    31621221
20074    12444445
20075    31634451
20076    12444424
20077    25123145
20100    62635164
20101    23633146
20102    45122431
20103    21274546
20104    62633123
20105    52266445          BCD     ' FUNCTION 1 IS A USER MAP DIAGNOSTIC'
20106    23633146
20107    45120112
```



```
20110    31621221
20111    12646225
20112    51124421
20113    47122431
20114    21274546
20115    62633123
20116    52266445          BCD     ' FUNCTION 2 IS A MODE TRANSITION DIAGNOSTIC'
20117    23633146
20120    45120212
20121    31621221
20122    12444424
20123    25126351
20124    21456231
20125    63314445
20126    12243121
20127    27454662
20130    63312312
20131    52266445          BCD     ' FUNCTION 3 IS A PRIVILEGED INSTRUCTION TRAP DIAGNOSTIC'
20132    23633146
20133    45120312
20134    31621221
20135    12475131
20136    65314325
20137    27252412
20140    31456263
20141    51642263
20142    31464512
20143    63512147
20144    12243121
20145    27454662
20146    63312312
20147    52266445          BCD     ' FUNCTION 4 IS A REAL TIME CLOCK DIAGNOSTIC'
20150    23633146
20151    45120412
20152    31621221
20153    12512521
```

```
20154    43126331
20155    44251223
20156    43462342
20157    12243121
20160    27454662
20161    63312312
20162    52371212          BCD     ' !!
20163    52122621  UVM     BCD     '  FAW !!
20164    66523712
20165    52261200  FIM0    BCD     ' F 00 • MONITOR MODE DIAGNOSTIC!!
20166    01124012
20167    44464531
20170    63465112
20171    44462425
20172    12243121
20173    27454662
20174    63312337
20175    52121212  FAM0    BCD     '       THIS FUNCTION IS NOT COMPLETE YET!!
20176    12126330
20177    31621226
20200    64452363
20201    31464512
20202    31621245
20203    46631223
20204    46444743
20205    25632512
20206    70256337
20207    52122431  FVM0    BCD     '  FIDO !!
20210    24005237
20211    52261200  FIM1    BCD     ' F 01 • USER MAP DIAGNOSTIC!!
20212    01124012
20213    64622551
20214    12442147
20215    12243121
20216    27454662
20217    63312337
```



```
20220    52321212  FAM1    BCD     '       THIS FUNCTION DIAGNOSES FAULTS IN THE 940 USER'
20221    12121263
20222    30316212
20223    26644523
20224    63314445
20225    12243121
20226    27454662
20227    25621226
20230    21644363
20231    62123145
20232    12633025
20233    12110400
20234    12646225
20235    51121212
20236    52214524          BCD     ' AND MONITOR MAPS.'
20237    12444445
20240    31634651
20241    12442147
20242    62331212
20243    52121212          BCD     '       THE DIAGNOSES IS DONE USING THE READ ONLY (ROT)'
20244    12126330
20245    25122431
20246    21274546
20247    62256212
20250    31621224
20251    46452512
20252    64623145
20253    27126330
20254    25125125
20255    21241246
20256    45437212
20257    74514663
20260    34121212
20261    52214524          BCD     ' AND OUT OF BOUNDS (OOBT) MEMORY TRAPS.  IT IS'
20262    12466463
20263    12462412
```

```
20264    22466445
20265    24621274
20266    46462263
20267    34124425
20270    44465170
20271    12635121
20272    47623312
20273    12316312
20274    31621212
20275    52314524          BCD     ' INDEPENDENT OF THE OPERATION OF UPPER MEMORY.'
20276    25472545
20277    24254563
20300    12462612
20301    63302512
20302    46472551
20303    21633146
20304    45124626
20305    12644747
20306    25511244
20307    25444651
20310    70331212
20311    52121212          BCD     '      CORRECT OPERATION IS DEPENDENT ON THE MACHINE'
20312    12122346
20313    51512523
20314    63124647
20315    25512163
20316    31464512
20317    31621224
20320    25472545
20321    24254563
20322    12464512
20323    63302512
20324    44212330
20325    31452512
20326    52222531          BCD     ' BEING ABLE TO PERFORM THE 940 INSTRUCTION DIAGNOSTIC'
20327    45271221
```



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20330    22432512
20331    63461247
20332    25512646
20333    51441263
20334    30251211
20335    04001231
20336    45626351
20337    64236931
20340    46451224
20341    31212745
20342    46626331
20343    23121212
20344    52214524          BCD     ' AND MEMORY LOCATIONS 0 - 37777 OPERATING CORRECTLY.'
20345    12442544
20346    46517012
20347    43462321
20350    63314445
20351    62120012
20352    40120307
20353    07070712
20354    46472551
20355    21633145
20356    27122346
20357    51512523
20360    63437033
20361    52121212          BCD     '      AT ERROR HALTS!'
20362    12122163
20363    12255151
20364    46511230
20365    21436362
20366    15121212
20367    52211213          BCD     ' A = ACTUAL TRAP ID'
20370    12212363
20371    64214312
20372    63512147
20373    12312412
```

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20374    52221213          BCD     ' B = CORRECT TRAP ID'
20375    12234651
20376    51252363
20377    12635121
20400    47123124
20401    52671213          BCD     ' X = TEST LOCATION'
20402    12632562
20403    63124346
20404    23216331
20405    46451212
20406    52121212          BCD     '       ERROR MESSAGES WILL STATE SIGNAL NAMES AND'
20407    12122551
20410    51465112
20411    44256262
20412    21272562
20413    12663143
20414    43126263
20415    21632512
20416    62312745
20417    21431245
20420    21442562
20421    12214524
20422    52444424          BCD     ' MODULE LOCATIONS OF THE PROBABLE FAULT.'
20423    64432512
20424    43462321
20425    63314445
20426    62134426
20427    12633025
20430    12475146
20431    22212243
20432    25132421
20433    64436333
20434    52121237          BCD     '   ''
20435    52122631  FVM1    BCD     '  FID1 ''
20436    24015237
20437    52261200  FIM2    BCD     ' F 02 = MODE TRANSITION DIAGNOSTIC''
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CPU0   TAP=3.C     01/15  03:01   PAGE 378

20440    02124012
20441    44462425
20442    12635121
20443    45623163
20444    31464512
20445    24312127
20446    45466263
20447    31233712
20450    52121212  FAM2    BCD     '       THIS FUNCTION DIAGNOSES FAULTS IN THE'
20451    12126330
20452    31621226
20453    64452363
20454    31464512
20455    24312127
20456    45466225
20457    62122621
20460    64436362
20461    12314512
20462    63302512
20463    52444645          BCD     ' MONITOR TO USER TRANSITIONS, IT ALSO CHECKS THE'
20464    31634451
20465    12634612
20466    64622551
20467    12635121
20470    45623163
20471    31464562
20472    33123163
20473    12214362
20474    46122330
20475    25234262
20476    12633025
20477    52444445          BCD     ' MONITOR TO USER TRANSITION TRAP''
20500    31634451
20501    12634412
20502    64622551
20503    12635121
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20504    45623163
20505    31464512
20506    63512147
20507    37121212
20510    52122631  FVM2   BCD      ' FID2 !!
20511    24025237
20512    52261200  FIM3   BCD      ' F 03 = PRIVILEGED INSTRUCTION DIAGNOSTIC!!
20513    03124012
20514    47513165
20515    31432527
20516    25241231
20517    45626351
20520    64236331
20521    46451224
20522    31212745
20523    46626331
20524    23371212
20525    52121212  FAM3   BCD      '       THIS FUNCTION CHECKS THAT THE PRIVILEGED INSTRUCTION'
20526    12126330
20527    31621226
20530    64452363
20531    31464512
20532    23302523
20533    42621263
20534    30216312
20535    63302512
20536    47513165
20537    31432527
20540    25241231
20541    45626351
20542    64236331
20543    46451212
20544    52635121          BCD      ' TRAP IS WORKING PROPERLY.!!
20545    47123162
20546    12664651
20547    42314527
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20550    12475146
20551    47255143
20552    70333712
20553    52122631  FVM3   BCD      ' FID3 !!
20554    24035237
20555    52261200  FIM4   BCD      ' F 04 = 940 REAL TIME CLOCK DIAGNOSTIC!!
20556    04124012
20557    11040012
20560    51252143
20561    12633144
20562    25122343
20563    46234212
20564    24312127
20565    45466263
20566    31233712
20567    52121212  FAM4   BCD      '       THIS FUNCTION DIAGNOSES FAULTS IN THE REAL TIME'
20570    12126330
20571    31621226
20572    64452363
20573    31464512
20574    24312127
20575    45466225
20576    62122621
20577    64436362
20600    12314512
20601    63302512
20602    51252143
20603    12633144
20604    25121212
20605    52234346          BCD      ' CLOCK.!!
20606    23423337
20607    52122631  FVM4   BCD      ' FID4 !!
20610    24045237
```

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                    * ERROR MESSAGES
20611    52243162  DSCWP  BCD     ! DISC IS SOFTWARE WRITE PROTECTED!!
20612    23123162
20613    12624626
20614    63662151
20615    25126451
20616    31632512
20617    47514463
20620    25236325
20621    24371212
20622    52243162  DSCNWP BCD     ! DISC IS •••NOT••• SOFTWARE WRITE PROTECTED!
20623    23123162
20624    12404040
20625    45466340
20626    40401362
20627    46266366
20630    21512512
20631    66513163
20632    25124751
20633    46632523
20634    63252437
20635    52121212
20636    52512124  RADWP  BCD     ! RAD IS SOFTWARE WRITE PROTECTED!!
20637    12316212
20640    62462663
20641    66215125
20642    12665131
20643    63251247
20644    51466325
20645    23632524
20646    37121212
20647    52512124  RADNWP BCD     ! RAD IS •••NOT••• SOFTWARE WRITE PROTECTED!!
20650    12316212
20651    40404045
20652    46634040
20653    40126246
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20654    26636621
20655    51251266
20656    51316325
20657    12475146
20660    63252363
20661    25243712
20662    52475125  MSG    BCD     ! PRETEST!
20663    63256363
20664    52020324  M1     BCD     ! 23D22•P31!!
20665    02024047
20666    03013712
20667    52020324  M2     BCD     ! 23D23•P31!!
20670    02034047
20671    03013712
20672    52020324  M3     BCD     ! 23D26•P36!!
20673    02064047
20674    03063712
20675    52030024  M4     BCD     ! 30D19•P36!!
20676    01114047
20677    03063712
20700    52030123  M5     BCD     ! 31C24•P36!!
20701    02044047
20702    03063712
20703    52030123  M6     BCD     ! 31C23•P36!!
20704    02034047
20705    03063712
20706    52020324  M7     BCD     ! 23D14•P31!!
20707    01044047
20710    03013712
20711    52020324  M8     BCD     ! 23D20,24D42•P31!!
20712    02007302
20713    04240402
20714    40470301
20715    37121212
20716    52020522  M9     BCD     ! 25B28•P31!!
20717    02104047
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20720    03013712
20721    52020522  M10    BCD     ' 25B35=P31''
20722    03054047
20723    03013712
20724    52020123  M11    BCD     ' 21C11=P31''
20725    01014047
20726    03013712
20727    52020123  M12    BCD     ' 21C8=P31''
20730    10404703
20731    01371212
20732    52020122  M13    BCD     ' 21B12=P31''
20733    01024047
20734    03013712
20735    52020122  M14    BCD     ' 21B08=P31''
20736    00104047
20737    03013712
20740    52020122  M15    BCD     ' 21B31=P36''
20741    03014047
20742    03063712
20743    52020122  M16    BCD     ' 21B32=P36''
20744    03024047
20745    03063712
20746    52020124  M17    BCD     ' 21D12=P36''
20747    01024047
20750    03063712
20751    52020124  M18    BCD     ' 21D8=P36''
20752    10404703
20753    06371212
20754    52020123  M19    BCD     ' 21C3=P36''
20755    03404703
20756    06371212
20757    52020523  M20    BCD     ' 25C2=P36''
20760    02404703
20761    06371212
20762    52020523  M21    BCD     ' 25C38=P36''
20763    03104047
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20764    03063712
20765    52020523  M22    BCD     ' 25C36=P36''
20766    03064047
20767    03063712
20770    52020523  M23    BCD     ' 25C14=P36''
20771    01044047
20772    03063712
20773    52020523  M23A   BCD     ' 25C18=P36''
20774    01104047
20775    03063712
20776    52020523  M24    BCD     ' 25C28=P36''
20777    02104047
21000    03063712
21001    52030123  M25    BCD     ' 31C22=P36''
21002    02024047
21003    03063712
21004    52021124  M26    BCD     ' 29D30=P36''
21005    03004047
21006    03063712
21007    52020124  M27    BCD     ' 21D39=P36''
21010    03114047
21011    03063712
21012    52021124  M28    BCD     ' 29D32=P36''
21013    03024047
21014    03063712
21015    52020424  M29    BCD     ' 24D9=P36''
21016    11404703
21017    06371212
21020    52020422  M30    BCD     ' 24B34=P46''
21021    03044047
21022    04063712
21023    52020422  M31    BCD     ' 24B38=P46''
21024    03104047
21025    04063712
21026    52030024  M32    BCD     ' 30D10=P36''
21027    01004047
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21030    03063712
21031    52031123  M33    BCD     ' 39C27•P31''
21032    02074047
21033    03013712
21034    52021123  M34    BCD     ' 29C5•P46''
21035    05404704
21036    06371212
21037    52030122  M35    BCD     ' 31B42,24D13•P31''
21040    04027302
21041    04240103
21042    40470301
21043    37121212
21044    52020522  M36    BCD     ' 2582•P31''
21045    02404703
21046    01371212
21047    52020522  M37    BCD     ' 25B20•P31''
21050    02004047
21051    03013712
21052    52020324  M38    BCD     ' 23D16•P31''
21053    01064047
21054    03013712
21055    52020122  M39    BCD     ' 21B29•P31''
21056    02114047
21057    03013712
21060    52020122  M40    BCD     ' 21B28•P31''
21061    02104047
21062    03013712
21063    52030122  M41    BCD     ' 31B42•P31''
21064    04024047
21065    03013712
21066    52031123  M42    BCD     ' 39C27•P31''
21067    02074047
21070    03013712
21071    52030122  M43    BCD     ' 31B42•P31''
21072    04024047
21073    03013712
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21074    52020324  M44    BCD     ' 23D16•P31''
21075    01064047
21076    03013712
21077    52020123  M45    BCD     ' 21C28•P31''
21100    02104047
21101    03013712
21102    52021123  M46    BCD     ' 29C15•P46''
21103    01054047
21104    04063712
21105    52020424  M47    BCD     ' 2409•P41''
21106    11404704
21107    37121212
21110    52020424  M48    BCD     ' 24D21•P49''
21111    02014047
21112    04113712
21113    52030022  M49    BCD     ' 30B16•P31''
21114    01064047
21115    03013712
21116    52020524  M50    BCD     ' 25D12•P31''
21117    01024047
21120    03013712
21121    52020223  M51    BCD     ' 22C43•P31''
21122    04034047
21123    03013712
21124    52020522  M52    BCD     ' 25B30•P31''
21125    03004047
21126    03013712
21127    52020522  M53    BCD     ' 25B32•P31''
21130    03024047
21131    03013712
21132    52020123  M54    BCD     ' 21C21•P31''
21133    02014047
21134    03013712
21135    52020123  M55    BCD     ' 21C23•P31''
21136    02034047
21137    03013712
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21140    52020123  M56    BCD     ' 21C22•P31''
21141    02024047
21142    03013712
21143    52020123  M57    BCD     ' 21C26•P31''
21144    02064047
21145    03013712
21146    52020024  M58    BCD     ' 20D•P46''
21147    40470406
21150    37121212
21151    52020624  M59    BCD     ' 26D•P46''
21152    40470406
21153    37121212
21154    52010324  M60    BCD     ' 13DP47''
21155    47040737
21156    52010624  M61    BCD     ' 16D•P47''
21157    40470407
21160    37121212
21161    52072440  M62    BCD     ' 7D•P47''
21162    47040737
21163    52010024  M63    BCD     ' 10D•P47''
21164    40470407
21165    37121212
21166    52012440  M64    BCD     ' 1D•P47''
21167    47040737
21170    52042440  M65    BCD     ' 4D•P47,P48''
21171    47040773
21172    47041037
21173    52062440  M66    BCD     ' 6D•P48''
21174    47041037
21175    52010024  M67    BCD     ' 10D•P48''
21176    40470410
21177    37121212
21200    52010224  M68    BCD     ' 12D•P48''
21201    40470410
21202    37121212
21203    52010624  M69    BCD     ' 16D•P48''
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21204    40470410
21205    37121212
21206    52011024  M70    BCD     ' 18D•P48''
21207    40470410
21210    37121212
21211    52020624  M71    BCD     ' 26D•P49''
21212    40470411
21213    37121212
21214    52030124  M72    BCD     ' 31D•P49''
21215    40470411
21216    37121212
21217    52020024  M73    BCD     ' 20D•P46''
21220    40470406
21221    37121212
21222    52020624  M74    BCD     ' 26D•P46''
21223    40470406
21224    37121212
21225    52010324  M75    BCD     ' 13DP47''
21226    47040737
21227    52010624  M76    BCD     ' 16D•P47''
21230    40470407
21231    37121212
21232    52072440  M77    BCD     ' 7D•P47''
21233    47040737
21234    52010024  M78    BCD     ' 10D•P47''
21235    40470407
21236    37121212
21237    52012440  M79    BCD     ' 1D•P47''
21240    47040737
21241    52042440  M80    BCD     ' 4D•P47,P48''
21242    47040773
21243    47041037
21244    52062440  M81    BCD     ' 6D•P48''
21245    47041037
21246    52010024  M82    BCD     ' 10D•P48''
21247    40470410
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CPU0   TAP=3.0      01/15  0301   PAGE 389

21250     37121212
21251     52010224  M83    BCD     ' 12D=P48''
21252     40470410
21253     37121212
21254     52010624  M84    BCD     ' 16D=P48''
21255     40470410
21256     37121212
21257     52011024  M85    BCD     ' 18D=P48''
21260     40470410
21261     37121212
21262     52020424  M86    BCD     ' 26D=P49''
21263     40470411
21264     37121212
21265     52030124  M87    BCD     ' 31D=P49''
21266     40470411
21267     37121212
21270     52020022  M88    BCD     ' 20B=P31''
21271     40470301
21272     37121212
21273     52020022  M89    BCD     ' 20B=P31''
21274     40470301
21275     37121212
21276     52020022  M90    BCD     ' 20B=P31''
21277     40470301
21300     37121212
21301     52020022  M91    BCD     ' 20B=P31''
21302     40470301
21303     37121212
21304     52020422  M92    BCD     ' 26B=P31''
21305     40470301
21306     37121212
21307     52020422  M93    BCD     ' 26BP31''
21310     47030137
21311     52010322  M94    BCD     ' 13B=P32''
21312     40470302
21313     37121212
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CPU0   TAP=3.0      01/15  0301   PAGE 390

21314     52010322  M95    BCD     ' 13B=P32''
21315     40470302
21316     37121212
21317     52010322  M96    BCD     ' 13B=P32''
21320     40470302
21321     37121212
21322     52010322  M97    BCD     ' 13B=P32''
21323     40470302
21324     37121212
21325     52010622  M98    BCD     ' 16B=P32''
21326     40470302
21327     37121212
21330     52010622  M99    BCD     ' 16B=P32''
21331     40470302
21332     37121212
21333     52072240  M100   BCD     ' 7B=P32''
21334     47030237
21335     52072240  M101   BCD     ' 7B=P32''
21336     47030237
21337     52072240  M102   BCD     ' 7B=P32''
21340     47030237
21341     52072240  M103   BCD     ' 7B=P32''
21342     47030237
21343     52010022  M104   BCD     ' 10B=P32''
21344     40470302
21345     37121212
21346     52010022  M105   BCD     ' 10B=P32''
21347     40470302
21350     37121212
21351     52012240  M106   BCD     ' 18=P32''
21352     47030237
21353     52012240  M107   BCD     ' 18=P32''
21354     47030237
21355     52012240  M108   BCD     ' 18=P32''
21356     47030237
21357     52012240  M109   BCD     ' 18=P32''
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21360    47030237
21361    52112240  M110   BCD      ! 98•P32!!
21362    47030237
21363    52112240  M111   BCD      ! 98•P32!!
21364    47030237
21365    52042240  M112   BCD      ! 48•P33!!
21366    47030337
21367    52042240  M113   BCD      ! 48•P33!!
21370    47030337
21371    52062240  M114   BCD      ! 68•P33!!
21372    47030337
21373    52062240  M115   BCD      ! 68•P33!!
21374    47030337
21375    52062240  M116   BCD      ! 68•P33!!
21376    47030337
21377    52062240  M117   BCD      ! 68•P33!!
21400    47030337
21401    52010022  M118   BCD      ! 108•P33!!
21402    40470303
21403    37121212
21404    52010022  M119   BCD      ! 108•P33!!
21405    40470303
21406    37121212
21407    52010222  M120   BCD      ! 128•P33!!
21410    40470303
21411    37121212
21412    52010222  M121   BCD      ! 128•P33!!
21413    40470303
21414    37121212
21415    52010222  M122   BCD      ! 128•P33!!
21416    40470303
21417    37121212
21420    52010222  M123   BCD      ! 128•P33!!
21421    40470303
21422    37121212
21423    52010622  M124   BCD      ! 168•P33!!
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21424    40470303
21425    37121212
21426    52010622  M125   BCD      ! 168•P33!!
21427    40470303
21430    37121212
21431    52011022  M126   BCD      ! 188•P33!!
21432    40470303
21433    37121212
21434    52011022  M127   BCD      ! 188•P33!!
21435    40470303
21436    37121212
21437    52011022  M128   BCD      ! 188•P33!!
21440    40470303
21441    37121212
21442    52011022  M129   BCD      ! 188•P33!!
21443    40470303
21444    37121212
21445    52020622  M130   BCD      ! 268•P34!!
21446    40470304
21447    37121212
21450    52020622  M131   BCD      ! 268•P34!!
21451    40470304
21452    37121212
21453    52030222  M132   BCD      ! 328•P34!!
21454    40470304
21455    37121212
21456    52030222  M133   BCD      ! 328•P34!!
21457    40470304
21460    37121212
21461    52020023  M134   BCD      ! 20C•P36!!
21462    40470306
21463    37121212
21464    52020023  M135   BCD      ! 20C•P36!!
21465    40470306
21466    37121212
21467    52020023  M136   BCD      ! 20C•P36!!
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21470    40470306
21471    37121212
21472    52020023  M137   BCD      ' 20C•P36''
21473    40470306
21474    37121212
21475    52020623  M138   BCD      ' 26C•P36''
21476    40470306
21477    37121212
21500    52020623  M139   BCD      ' 26C•P36''
21501    40470306
21502    37121212
21503    52020623  M140   BCD      ' 26C•P36''
21504    40470306
21505    37121212
21506    52020623  M141   BCD      ' 26C•P36''
21507    40470306
21510    37121212
21511    52010323  M142   BCD      ' 13C•P37''
21512    40470307
21513    37121212
21514    52010323  M143   BCD      ' 13C•P37''
21515    40470307
21516    37121212
21517    52010523  M144   BCD      ' 15C•P37''
21520    40470307
21521    37121212
21522    52010523  M145   BCD      ' 15C•P37''
21523    40470307
21524    37121212
21525    52010523  M146   BCD      ' 15C•P37''
21526    40470307
21527    37121212
21530    52010523  M147   BCD      ' 15C•P37''
21531    40470307
21532    37121212
21533    52072340  M148   BCD      ' 7C•P38''
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21534    47031037
21535    52072340  M149   BCD      ' 7C•P38''
21536    47031037
21537    52112340  M150   BCD      ' 9C•P38''
21540    47031037
21541    52112340  M151   BCD      ' 9C•P38''
21542    47031037
21543    52112340  M152   BCD      ' 9C•P38''
21544    47031037
21545    52112340  M153   BCD      ' 9C•P38''
21546    47031037
21547    52012340  M154   BCD      ' 1C•P39''
21550    47031137
21551    52224523  M155   BCD      ' BNC 000200001C•P39''
21552    12000000
21553    02000000
21554    00012340
21555    47031137
21556    52032340  M156   BCD      ' 3C•P39''
21557    47031137
21560    52032340  M157   BCD      ' 3C•P39''
21561    47031137
21562    52032340  M158   BCD      ' 3C•P39''
21563    47031137
21564    52032340  M159   BCD      ' 3C•P39''
21565    47031137
21566    52042340  M160   BCD      ' 4C•P40''
21567    47040037
21570    52042340  M161   BCD      ' 4C•P40''
21571    47040037
21572    52062340  M162   BCD      ' 6C•P40''
21573    47040037
21574    52062340  M163   BCD      ' 6C•P40''
21575    47040037
21576    52062340  M164   BCD      ' 6C•P40''
21577    47040037
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CPU0    TAP.3.C      01/15  03101   PAGE 395

21600     52062340  M165   BCD      ' 6C.P40''
21601     47040037
21602     52010023  M166   BCD      ' 10C.P41''
21603     40470401
21604     37121212
21605     52010023  M167   BCD      ' 10C.P41''
21606     40470401
21607     37121212
21610     52010223  M168   BCD      ' 12C.P41''
21611     40470401
21612     37121212
21613     52010223  M169   BCD      ' 12C.P41''
21614     40470401
21615     37121212
21616     52010223  M170   BCD      ' 12C.P41''
21617     40470401
21620     37121212
21621     52010223  M171   BCD      ' 12C.P41''
21622     40470401
21623     37121212
21624     52010423  M172   BCD      ' 16C.P42''
21625     40470402
21626     37121212
21627     52010423  M173   BCD      ' 16C.P42''
21630     40470402
21631     37121212
21632     52011023  M174   BCD      ' 18C.P42''
21633     40470402
21634     37121212
21635     52011023  M175   BCD      ' 18C.P42''
21636     40470402
21637     37121212
21640     52030023  M176   BCD      ' 30C.P43''
21641     40470403
21642     37121212
21643     52030023  M177   BCD      ' 30C.P43''
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CPU0    TAP.3.C      01/15  03101   PAGE 396

21644     40470403
21645     37121212
21646     52030023  M178   BCD      ' 30C.P43''
21647     40470403
21650     37121212
21651     52030065  M179   BCD      ' 30VC.P43''
21652     23404704
21653     03371212
21654     52030223  M180   BCD      ' 32C.P43''
21655     40470403
21656     37121212
21657     52030223  M181   BCD      ' 32C.P43''
21660     40470403
21661     37121212
21662     52020022  M182   BCD      ' 20B.P31''
21663     40470301
21664     37121212
21665     52020022  M183   BCD      ' 20B.P31''
21666     40470301
21667     37121212
21670     52020022  M184   BCD      ' 20B.P31''
21671     40470301
21672     37121212
21673     52020022  M185   BCD      ' 20B.P31''
21674     40470301
21675     37121212
21676     52020022  M186   BCD      ' 20B.P31''
21677     40470301
21700     37121212
21701     52020022  M187   BCD      ' 20B.P31''
21702     40470301
21703     37121212
21704     52020022  M188   BCD      ' 20B.P31''
21705     40470301
21706     37121212
21707     52020622  M189   BCD      ' 26B.P31''
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21710    40470301
21711    37121212
21712    52020622  M190   BCD      ' 26BP31''
21713    47030137
21714    52010322  M191   BCD      ' 13B•P32''
21715    40470302
21716    37121212
21717    52010322  M192   BCD      ' 13B•P32''
21720    40470302
21721    37121212
21722    52010322  M193   BCD      ' 13B•P32''
21723    40470302
21724    37121212
21725    52010322  M194   BCD      ' 13B•P32''
21726    40470302
21727    37121212
21730    52010622  M195   BCD      ' 16B•P32''
21731    40470302
21732    37121212
21733    52010622  M196   BCD      ' 16B•P32''
21734    40470302
21735    37121212
21736    52072240  M197   BCD      ' 7B•P32''
21737    47030237
21740    52072240  M198   BCD      ' 7B•P32''
21741    47030237
21742    52072240  M199   BCD      ' 7B•P32''
21743    47030237
21744    52072240  M200   BCD      ' 7B•P32''
21745    47030237
21746    52010022  M201   BCD      ' 10B•P32''
21747    40470302
21750    37121212
21751    52010022  M202   BCD      ' 10B•P32''
21752    40470302
21753    37121212
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21754    52012240  M203   BCD      ' 1B•P32''
21755    47030237
21756    52012240  M204   BCD      ' 1B•P32''
21757    47030237
21760    52012240  M205   BCD      ' 1B•P32''
21761    47030237
21762    52012240  M206   BCD      ' 1B•P32''
21763    47030237
21764    52112240  M207   BCD      ' 9B•P32''
21765    47030237
21766    52112240  M208   BCD      ' 9B•P32''
21767    47030237
21770    52042240  M209   BCD      ' 4B•P33''
21771    47030337
21772    52042240  M210   BCD      ' 4B•P33''
21773    47030337
21774    52062240  M211   BCD      ' 6B•P33''
21775    47030337
21776    52062240  M212   BCD      ' 6B•P33''
21777    47030337
22000    52062240  M213   BCD      ' 6B•P33''
22001    47030337
22002    52062240  M214   BCD      ' 6B•P33''
22003    47030337
22004    52010022  M215   BCD      ' 10B•P33''
22005    40470303
22006    37121212
22007    52010022  M216   BCD      ' 10B•P33''
22010    40470303
22011    37121212
22012    52010222  M217   BCD      ' 12B•P33''
22013    40470303
22014    37121212
22015    52010222  M218   BCD      ' 12B•P33''
22016    40470303
22017    37121212
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22020    52010222  M219   BCD      ' 12B-P33''
22021    40470303
22022    37121212
22023    52010222  M220   BCD      ' 12B-P33''
22024    40470303
22025    37121212
22026    52010622  M221   BCD      ' 16B-P33''
22027    40470303
22030    37121212
22031    52010622  M222   BCD      ' 16B-P33''
22032    40470303
22033    37121212
22034    52011022  M223   BCD      ' 18B-P33''
22035    40470303
22036    37121212
22037    52011022  M224   BCD      ' 18B-P33''
22040    40470303
22041    37121212
22042    52011022  M225   BCD      ' 18B-P33''
22043    40470303
22044    37121212
22045    52011022  M226   BCD      ' 18B-P33''
22046    40470303
22047    37121212
22050    52020622  M227   BCD      ' 26B-P34''
22051    40470304
22052    37121212
22053    52020622  M228   BCD      ' 26B-P34''
22054    40470304
22055    37121212
22056    52030222  M229   BCD      ' 32B-P34''
22057    40470304
22060    37121212
22061    52030222  M230   BCD      ' 32B-P34''
22062    40470304
22063    37121212
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22064    52020023  M231   BCD      ' 20C-P36''
22065    40470306
22066    37121212
22067    52020023  M232   BCD      ' 20C-P36''
22070    40470306
22071    37121212
22072    52020023  M233   BCD      ' 20C-P36''
22073    40470306
22074    37121212
22075    52020023  M234   BCD      ' 20C-P36''
22076    40470306
22077    37121212
22100    52020623  M235   BCD      ' 26C-P36''
22101    40470306
22102    37121212
22103    52020623  M236   BCD      ' 26C-P36''
22104    40470306
22105    37121212
22106    52020623  M237   BCD      ' 26C-P36''
22107    40470306
22110    37121212
22111    52020623  M238   BCD      ' 26C-P36''
22112    40470306
22113    37121212
22114    52010323  M239   BCD      ' 13C-P37''
22115    40470307
22116    37121212
22117    52010323  M240   BCD      ' 13C-P37''
22120    40470307
22121    37121212
22122    52010523  M241   BCD      ' 15C-P37''
22123    40470307
22124    37121212
22125    52010523  M242   BCD      ' 15C-P37''
22126    40470307
22127    37121212
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22130    52010523  M243   BCD      ' 15C•P37''
22131    40470307
22132    37121212
22133    52010523  M244   BCD      ' 15C•P37''
22134    40470307
22135    37121212
22136    52072340  M245   BCD      ' 7C•P38''
22137    47031037
22140    52072340  M246   BCD      ' 7C•P38''
22141    47031037
22142    52112340  M247   BCD      ' 9C•P38''
22143    47031037
22144    52112340  M248   BCD      ' 9C•P38''
22145    47031037
22146    52112340  M249   BCD      ' 9C•P38''
22147    47031037
22150    52112340  M250   BCD      ' 9C•P38''
22151    47031037
22152    52012340  M251   BCD      ' 1C•P39''
22153    47031137
22154    52012340  M252   BCD      ' 1C•P39''
22155    47031137
22156    52032340  M253   BCD      ' 3C•P39''
22157    47031137
22160    52032340  M254   BCD      ' 3C•P39''
22161    47031137
22162    52032340  M255   BCD      ' 3C•P39''
22163    47031137
22164    52032340  M256   BCD      ' 3C•P39''
22165    47031137
22166    52042340  M257   BCD      ' 4C•P40''
22167    47040037
22170    52042340  M258   BCD      ' 4C•P40''
22171    47040037
22172    52062340  M259   BCD      ' 6C•P40''
22173    47040037
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22174    52062340  M260   BCD      ' 6C•P40''
22175    47040037
22176    52062340  M261   BCD      ' 6C•P40''
22177    47040037
22200    52062340  M262   BCD      ' 6C•P40''
22201    47040037
22202    52010323  M263   BCD      ' 10C•P41''
22203    40470401
22204    37121212
22205    52010323  M264   BCD      ' 10C•P41''
22206    40470401
22207    37121212
22210    52010323  M265   BCD      ' 12C•P41''
22211    40470401
22212    37121212
22213    52010323  M266   BCD      ' 12C•P41''
22214    40470401
22215    37121212
22216    52010323  M267   BCD      ' 12C•P41''
22217    40470401
22220    37121212
22221    52010323  M268   BCD      ' 12C•P41''
22222    40470401
22223    37121212
22224    52010623  M269   BCD      ' 16C•P42''
22225    40470402
22226    37121212
22227    52010623  M270   BCD      ' 16C•P42''
22230    40470402
22231    37121212
22232    52011023  M271   BCD      ' 18C•P42''
22233    40470402
22234    37121212
22235    52011023  M272   BCD      ' 18C•P42''
22236    40470402
22237    37121212
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CPU0    TAP=3.0      01/15  03101   PAGE 403

22240     52030023  M273   BCD      ' 30C=P43''
22241     40470403
22242     37121212
22243     52030023  M274   BCD      ' 30C=P43''
22244     40470403
22245     37121212
22246     52030023  M275   BCD      ' 30C,27D=P43''
22247     73020724
22250     40470403
22251     37121212
22252     52030223  M276   BCD      ' 32C,25B,31B=P43''
22253     73020522
22254     73030122
22255     40470403
22256     37121212
22257     52030223  M277   BCD      ' 32C,25B,31B=P43''
22260     73020522
22261     73030122
22262     40470403
22263     37121212
22264     52030223  M278   BCD      ' 32C,19B,27C=P43''
22265     73011122
22266     73020723
22267     40470403
22270     37121212
22271     52030223  M279   BCD      ' 32C,19B,27C=P43''
22272     73011122
22273     73020723
22274     40470403
22275     37121212
22276     52020022  M280   BCD      ' 20B,33D,=P31''
22277     73030324
22300     73404703
22301     01371212
22302     52020022  M281   BCD      ' 20B,33D=P31''
22303     73030324
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CPU0    TAP=3.0      01/15  03101   PAGE 404

22304     40470301
22305     37121212
22306     52020022  M282   BCD      ' 20B=P31,34B=P34''
22307     40470301
22310     73030422
22311     40470304
22312     37121212
22313     52020022  M283   BCD      ' 20B=P31,34B=P34''
22314     40470301
22315     73030422
22316     40470304
22317     37121212
22320     52030524  MADDR  BCD      ' 35D,36D,37D,39D=P53 35C,36C,37C,38C,35E,36E,37E,38E=P52''
22321     73030624
22322     73030724
22323     73031124
22324     40470503
22325     12030523
22326     73030623
22327     73030723
22330     73031023
22331     73030525
22332     73030625
22333     73030725
22334     73031025
22335     40470502
22336     37121212
22337     52462240  TM1A   BCD      ' 8B=58F,58C,49F,52C,44C,5FM=59F,58F '
22340     05102673
22341     05102373
22342     04112673
22343     05022373
22344     04042312
22345     62264440
22346     05112673
22347     05102612
```

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CPU0   TAP=3.0     01/15  03101   PAGE 405

22350    51514301          BCD     'RRL1=17F,16F,29D,25D TRAP=58B RLOF=49A!'
22351    40010726
22352    73010626
22353    73021124
22354    73020524
22355    12635121
22356    47400510
22357    22125143
22360    00264004
22361    11213712
22362    52002240  TM1B    BCD     ' OB=58F,58C,49F,52C,44C SFM=59F,58F '
22363    05102673
22364    05102373
22365    04112473
22366    05022373
22367    04042312
22370    62264440
22371    05112673
22372    05102612
22373    52515143          BCD     ' RRL1=17F,16F,29D,25D TRAP=58B PI=53F STV=27F,51F!'
22374    01400107
22375    26730106
22376    26730211
22377    24730205
22400    24126351
22401    21474005
22402    10221247
22403    31400503
22404    26126263
22405    65400207
22406    26730501
22407    26371212
22410    52462240  TM2A    BCD     ' 9B=58F,58C,49F,52C,44C PI=53F STV=27F,51F!'
22411    05102673
22412    05102373
22413    04112473
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CPU0   TAP=3.0     01/15  03101   PAGE 406

22414    05022373
22415    04042312
22416    47314005
22417    03261262
22420    63654002
22421    07267305
22422    01263712
22423    52462240  TM2B    BCD     ' 8B=58F,58C,49F,52C,44C SFM=59F,58F '
22424    05102473
22425    05102373
22426    04112673
22427    05022373
22430    04042312
22431    62264440
22432    05112673
22433    05102612
22434    51430026          BCD     'RLOF=49A REL=53F,52F RLS1=53E,55F!'
22435    40041121
22436    12512543
22437    40050326
22440    73050226
22441    12514362
22442    01400503
22443    25730505
22444    26371212
22445    52462240  TM3A    BCD     ' 8B=48F!'
22446    04102637
22447    52462221  TM3B    BCD     ' 8BA=48F,58F,58C,49F,52C,49F RLOH=46A '
22450    40041026
22451    73051026
22452    73051023
22453    73041126
22454    73050223
22455    73041126
22456    12514300
22457    30400406
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22460    21121212
22461    51430000          BCD     'RL00=50A RL01=50A RL02=50A RL03=49A RRL1=17F,'
22462    40050021
22463    12514300
22464    01400500
22465    21125143
22466    00024005
22467    00211251
22470    43000340
22471    04112112
22472    51514301
22473    40010726
22474    73121212
22475    31062673          BCD     '16F,29D,25D''
22476    02112473
22477    02052437
22500    52622543  TM4     BCD     ' SEL0=46F RL0F=49A SFM=59F,48F''
22501    00400406
22502    26125143
22503    00264004
22504    11211262
22505    26444005
22506    11267304
22507    10263712
22510    52622543  TM5     BCD     ' SEL1=46F RL1F=49A SFM=59F,48F''
22511    01400406
22512    26125143
22513    01264004
22514    11211262
22515    26444005
22516    11267304
22517    10263712
22520    52622543  TM6     BCD     ' SEL2=46F RL2F=46A SFM=59F,48F''
22521    02400406
22522    26125143
22523    02264004
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22524    06211262
22525    26444005
22526    11267304
22527    10263712
22530    52622543  TM7     BCD     ' SEL3=46F RL3F=46A SFM=59F,48F''
22531    03400406
22532    26125143
22533    03264004
22534    06211262
22535    26444005
22536    11267304
22537    10263712
22540    52622543  TM8     BCD     ' SEL4=47F RL4F=48A SFM=59F,48F '
22541    04400407
22542    26125143
22543    04264004
22544    10211262
22545    26444005
22546    11267304
22547    10261212
22550    51430502          BCD     'RL52=55F,48F''
22551    40050526
22552    73041026
22553    37121212
22554    52622543  TM9     BCD     ' SEL5=47F RL5F=58A SFM=59F,48F''
22555    05400407
22556    26125143
22557    05264005
22560    10211262
22561    26444005
22562    11267304
22563    10263712
22564    52622543  TM10    BCD     ' SEL6=47F RL6F=47A SFM=59F,48F''
22565    06400407
22566    26125143
22567    06264004
```

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22570    07211262
22571    26444005
22572    11267304
22573    10263712
22574    52622543  TM11   BCD      ! SEL7=47F RL7F=47A SFM=59F,48F!!
22575    07400407
22576    26125143
22577    07264004
22600    07211262
22601    26444005
22602    11267304
22603    10263712
22604    52514300  TM12   BCD      ! RL0H=46A RL00=50A RL01=50A !
22605    30400406
22606    21125143
22607    00004005
22610    00211251
22611    43000140
22612    05002112
22613    51430002           BCD     !RL02=50A RL03=49A!!
22614    40050021
22615    12514300
22616    03400411
22617    21371212
22620    52514301  TM13   BCD      ! RL1H=53A RL10=18F RL11=18F !
22621    30400503
22622    21125143
22623    01004001
22624    10261251
22625    43010140
22626    01102612
22627    51430102           BCD     !RL12=18F RL13=20F!!
22630    40011026
22631    12514301
22632    03400300
22633    26371212
```



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22634    52514302  TM14   BCD      ! RL2H=53A RL20=20F RL21=20F !
22635    30400403
22636    21125143
22637    02004002
22640    00261251
22641    43020140
22642    02002612
22643    51430202           BCD     !RL22=22F RL23=22F!!
22644    40020226
22645    12514302
22646    03400202
22647    26371212
22650    52510302  TM15   BCD      ! R32H=53A RL30=22F RL31=24F !
22651    30400503
22652    21125143
22653    03004002
22654    02261251
22655    43030140
22656    02042612
22657    51430302           BCD     !RL32=24F RL33=24F!!
22660    40020426
22661    12514303
22662    03400204
22663    26371212
22664    52510304  TM16   BCD      ! R34H=47A RL40=51A RL41=51A !
22665    30400407
22666    21125143
22667    04004005
22670    01211251
22671    43040140
22672    05012112
22673    51430402           BCD     !RL42=51A RL43=48A!!
22674    40050121
22675    12514304
22676    03400410
22677    21371212
```

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22700    52510305  TM17   BCD     ! R35H=52A RL50=19F RL51=19F !
22701    30400502
22702    21125143
22703    05004001
22704    11261251
22705    43050140
22706    01112612
22707    51430502          BCD     !RL52=19F RL53=21F!!
22710    40011126
22711    12514305
22712    03400201
22713    26371212
22714    52510306  TM18   BCD     ! R36H=52A RL60=21F RL61=21F !
22715    30400502
22716    21125143
22717    06004002
22720    01261251
22721    43060140
22722    02012612
22723    51430602          BCD     !RL62=23F RL63=23F!!
22724    40020326
22725    12514306
22726    03400203
22727    26371212
22730    52510307  TM19   BCD     ! R37H=52A RL70=23F RL71=26F !
22731    30400502
22732    21125143
22733    07004002
22734    03261251
22735    43070140
22736    02062612
22737    51430702          BCD     !RL72=26F RL73=26F!!
22740    40020426
22741    12514307
22742    03400206
22743    26371212
```



```
22744    52514300  TM20   BCD     ! RL03=49A GATE=55F!!
22745    03400411
22746    21122721
22747    63254005
22750    05263712
22751    52514300  TM21   BCD     ! RL02=50A GATE=55F!!
22752    02400500
22753    21122721
22754    63254005
22755    05263712
22756    52514300  TM22   BCD     ! RL01=50A GATE=55F!!
22757    01400500
22760    21122721
22761    63254005
22762    05263712
22763    52514300  TM23   BCD     ! RL00=50A GATE=55F!!
22764    00400500
22765    21122721
22766    63254005
22767    05263712
22770    52514300  TM24   BCD     ! RL0H=46A GATE=56F!!
22771    30400406
22772    21122721
22773    63254005
22774    06263712
22775    52514301  TM25   BCD     ! RL13=20F GATE=31F RL61=17F!!
22776    03400300
22777    26122721
23000    63254003
23001    01261251
23002    43620154
23003    40010726
23004    37121212
23005    52514301  TM26   BCD     ! RL12=18F GATE=27F!!
23006    02400110
23007    26122721
```

```
23010    63254002
23011    07263712
23012    52514301  TM27   BCD     ! RL11=18F GATE=31F!!
23013    01400110
23014    26122721
23015    63254003
23016    01263712
23017    52514301  TM28   BCD     ! RL10=18F GATE=27F!!
23020    00400110
23021    26122721
23022    63254002
23023    07263712
23024    52514301  TM29   BCD     ! RL1H=53A GATE=56F!!
23025    30400503
23026    21122721
23027    63254005
23030    06263712
23031    52514302  TM30   BCD     ! RL23=22F GATE=31F!!
23032    03400202
23033    26122721
23034    63254003
23035    01263712
23036    52514302  TM31   BCD     ! RL22=22F GATE=27F!!
23037    02400202
23040    26122721
23041    63254002
23042    07263712
23043    52514302  TM32   BCD     ! RL21=20F GATE=31F!!
23044    01400200
23045    26122721
23046    63254003
23047    01263712
23050    52514302  TM33   BCD     ! RL20=20F GATE=27F!!
23051    00400200
23052    26122721
23053    63254002
```



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23054    07263712
23055    52514302  TM34   BCD     ! RL2H=53A GATE=56F!!
23056    30400503
23057    21122721
23060    63254005
23061    10263712
23062    52514303  TM35   BCD     ! RL33=24F GATE=31F!!
23063    03400204
23064    26122721
23065    63254003
23066    01263712
23067    52514303  TM36   BCD     ! RL32=24F GATE=27F!!
23070    02400204
23071    26122721
23072    63254002
23073    07263712
23074    52514303  TM37   BCD     ! RL31=24F GATE=31F!!
23075    01400204
23076    26122721
23077    63254003
23100    01263712
23101    52514303  TM38   BCD     ! RL30=22F GATE=27F!!
23102    00400202
23103    26122721
23104    63254002
23105    07263712
23106    52514303  TM39   BCD     ! RL3H=53A GATE=56F!!
23107    30400503
23110    21122721
23111    63254005
23112    10263712
23113    52514304  TM40   BCD     ! RL43=48A GATE=55F!!
23114    03400410
23115    21122721
23116    63254005
23117    05263712
```

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23120    52514304  TM41   BCD      ' RL42=51A GATE=55F''
23121    02400501
23122    21122721
23123    63254005
23124    05263712
23125    52514304  TM42   BCD      ' RL41=51A GATE=55F''
23126    01400501
23127    21122721
23130    63254005
23131    05263712
23132    52514304  TM43   BCD      ' RL40=51A GATE=58F''
23133    00400501
23134    21122721
23135    63254005
23136    10263712
23137    52514304  TM44   BCD      ' RL4H=47A GATE=58F''
23140    30400407
23141    21122721
23142    63254005
23143    10263712
23144    52514301  TM45   BCD      ' RL13=21F GATE=31F RLS1=-17F''
23145    03400801
23146    26122721
23147    63254003
23150    01261251
23151    43620154
23152    40010726
23153    37121212
23154    52514305  TM46   BCD      ' RL52=19F GATE=27F''
23155    02400111
23156    26122721
23157    63254002
23160    07263712
23161    52514305  TM47   BCD      ' RL51=19F GATE=31F''
23162    01400111
23163    26122721
```



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23164    63254003
23165    01263712
23166    52514305  TM48   BCD      ' RL50=19F GATE=27F''
23167    00400111
23170    26122721
23171    63254002
23172    07263712
23173    52514305  TM49   BCD      ' RL5H=52A GATE=56F''
23174    30400502
23175    21122721
23176    63254005
23177    06263712
23200    52514306  TM50   BCD      ' RL63=23F GATE=31F''
23201    03400203
23202    26122721
23203    63254003
23204    01263712
23205    52514306  TM51   BCD      ' RL62=23F GATE=27F''
23206    02400203
23207    26122721
23210    63254002
23211    07263712
23212    52514306  TM52   BCD      ' RL61=21F GATE=31F''
23213    01400201
23214    26122721
23215    63254003
23216    01263712
23217    52514306  TM53   BCD      ' RL60=21F GATE=27F''
23220    00400201
23221    26122721
23222    63254002
23223    07263712
23224    52514306  TM54   BCD      ' RL6H=52A GATE=56F''
23225    30400502
23226    21122721
23227    63254005
```

```
CPU0   TAP*3.0      01/15  03:01   PAGE 417

23230    06263712
23231    52514307  TM55   BCD      ! RL73*26F GATE*31F!!
23232    03400206
23233    26122721
23234    63254003
23235    01263712
23236    52514307  TM56   BCD      ! RL72*26F GATE*27F!!
23237    02400206
23240    26122721
23241    63254002
23242    07263712
23243    52514307  TM57   BCD      ! RL71*26F GATE*31F!!
23244    01400206
23245    26122721
23246    63254003
23247    01263712
23250    52514307  TM58   BCD      ! RL70*23F GATE*27F!!
23251    00400203
23252    26122721
23253    63254002
23254    07263712
23255    52514307  TM59   BCD      ! RL7H*52A GATE*56F!!
23256    30400502
23257    21122721
23260    63254005
23261    06263712
23262    52442440  TRANM1 BCD      ! MD*51F MUT BAR*51F!!
23263    05012612
23264    44646312
23265    22215140
23266    05012637
23267    52446463  TRANM2 BCD      ! MUT BAR*52F!!
23270    12222151
23271    40050226
23272    37121212
23273    52446463  TRANM3 BCD      ! MUT BAR*58F!!
```

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CPU0   TAP*3.0      01/15  03:01   PAGE 418

23274    12222151
23275    40051026
23276    37121212
23277    52446463  TRANM4 BCD      ! MUT BAR*51F!!
23300    12222151
23301    40050126
23302    37121212
23303    52473150  MUTM1  BCD      ! PIQ BAR*47F TTE*64D,16F,25D,29D,5C!!
23304    12222151
23305    40040726
23306    12636325
23307    40060424
23310    73010626
23311    73020524
23312    73021124
23313    73052337
23314    52636325  MUTM2  BCD      ! TTE*64D PIQ BAR*47F S12*63D!!
23315    40060424
23316    12473150
23317    12222151
23320    40040726
23321    12620102
23322    40060324
23323    37121212
23324    52473150  MUTM3  BCD      ! PIQ BAR*47F!!
23325    12222151
23326    40040726
23327    37121212
23330    52473150  PIM1   BCD      ! PIQ BAR*17F PI*53F TRAP*54B S9*59C S12*63D FI,F3*44C,38C!!
23331    12222151
23332    40010726
23333    12473140
23334    05032612
23335    63512147
23336    40050422
23337    12621140
```

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23340    05112312
23341    62010240
23342    06032412
23343    26017326
23344    03400404
23345    23730310
23346    23371212
23347    52473150  PIM2   BCD     ' PIO•17F,8E,14E''
23350    40010726
23351    73102573
23352    01042537
23353    52624764  SPIT   BCD     ' SPURIOUS INTERRUPT OR TRAP''
23354    51314464
23355    62123145
23356    63255151
23357    64476312
23360    46511263
23361    51214737
23362    52516303  RTCM0  BCD     ' RT3•42H IS8•30H''
23363    40040230
23364    12316210
23365    40030030
23366    37121212
23367    52516303  RTCM1  BCD     ' RT3•42H IS8•30H RTC•43H RECIEVERS•11F''
23370    40040230
23371    12316210
23372    40030030
23373    12516323
23374    40040330
23375    12512523
23376    31256525
23377    51624001
23400    01263712
23401    52516323  RTCM2  BCD     ' RTC•43H CPU CLOCK•1E''
23402    40040330
23403    12234764
```



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23404    12234746
23405    23424001
23406    25371212
23407    52516323  RTCM3  BCD     ' RTC•43H CPU CLOCK•1E''
23410    40040330
23411    12234764
23412    12234746
23413    23424001
23414    25121212
23415    52516303  RTCM4  BCD     ' RT3•42H IS7•30H SKI BAR•49B SKI•21E''
23416    40040230
23417    12316207
23420    40030030
23421    12624231
23422    12222151
23423    40041122
23424    12624231
23425    40020125
23426    37121212
23427    52624231  RTCM5  BCD     ' SKI BAR•49B SKI•21E IS7•30H''
23430    12222151
23431    40041122
23432    12624231
23433    40020125
23434    12316207
23435    40030030
23436    37121212
23437  0 00 00000  TEMP   PZE
23440  0 00 00000  TEMPX  PZE
23441  0 00 00000  TEMPA  PZE
23442  0 00 00000  TEMPB  PZE
23443  0 00 00000  TEMPC  PZE
23444  0 00 00000  TEMPD  PZE
                   END
LITERALS USED:
23445    10000000
```

```
23446    11111111
23447    00000000
23450    22222222
23451    44444444
23452    00000001
23453    00000002
23454    00000004
23455    07070707
23456    00770077
23457    00777700
23460    77777777
23461    01234567
23462    52525252
23463    25252525
23464    76543210
23465    25255252
23466    40000000
23467    70707070
23470    37777777
23471    00000077
23472    00000707
23473    00000007
23474    00000770
23475    00000777
23476    00002552
23477    00005225
23500    00007777
23501    77777776
23502    00516273
23503    77261504
23504    05162737
23505    72615040
23506    00037777
23507    00006706
23510    03205752
23511    00040000
```



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23512    00004000
23513    77777773
23514    66666666
23515    50505050
23516    20202020
23517    33333333
23520    55555555
23521    01010101
23522    07172737
23523    10203040
23524    47576777
23525    50607100
23526    20304050
23527    60710110
23530    21212121
23531    30405060
23532    71011120
23533    31313131
23534    40506070
23535    01112130
23536    41414141
23537    11213140
23540    51515151
23541    21314150
23542    61616161
23543    31415160
23544    71717171
23545    41516170
23546    10101010
23547    00112233
23550    10213243
23551    44556677
23552    54657707
23553    20314253
23554    64760717
23555    30303030
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23556    30415263
23557    75061727
23560    40404240
23561    40516273
23562    50617303
23563    15263747
23564    60606060
23565    60720313
23566    25364757
23567    71021323
23570    35465767
23571    37777776
23572    30000001
23573    27777777
23574    11111110
23575    77777771
23576    66666667
23577    55555556
23600    60000000
23601    06000000
23602    01000000
23603    00600000
23604    00100000
23605    00060000
23606    00014000
23607    00003000
23610    00000400
23611    00000300
23612    00000040
23613    00000030
23614    00000003
23615    60000000
23616    57777777
23617    04000000
23620    67777777
23621    02000000
```



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23622    73777777
23623    75777777
23624    00400000
23625    76777777
23626    00200000
23627    77377777
23630    77577777
23631    77677777
23632    00020000
23633    77737777
23634    00010000
23635    77757777
23636    77767777
23637    00002000
23640    77773777
23641    00001000
23642    77775777
23643    77776777
23644    00000300
23645    77777377
23646    00000100
23647    77777577
23650    77777677
23651    00000020
23652    77777737
23653    00000010
23654    77777757
23655    77777767
23656    77777775
23657    00000067
23660    00000063
23661    77000000
23662    00770000
23663    00007700
23664    41000000
23665    42000000
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23666    44000000
23667    50000000
23670    00410000
23671    00420000
23672    00440000
23673    00500000
23674    00004100
23675    00004200
23676    00004400
23677    00005000
23700    00006000
23701    00000041
23702    00000042
23703    00000044
23704    00000050
23705    00000060
23706    40010203
23707    04050607
23710    00000271
23711    00000261
23712    00004136
23713    00005073
23714    06000407
23715    00000331
23716    06100407
23717    00000177
23720    00000237
23721    00000273
23722    00000377
23723    00000161
```

23724 CELLS USED BY PROGRAM

LOCAL SYMBOLS USED •

AREG	N	410	BREG	N	411	BRM1	5703•
BRM2	5710•	BRR1	5744•	BRR2	5751•
CARRET	17232•	CKWPB	N	6045•	CLEAR	17156•
COMMON	17140•	DIVERT	450	DONE	452
DSCNWP	20622•	DSCSIZ	N	404	DSCWP	20611•
DUMMY	77760545	END	434	EOR	5135•
ERROR	460	ERRORS	N	414	ETR	5106•
FAM0	20175•	FAM1	20220•	FAM2	20450•
FAM3	20525•	FAM4	20567•	FAW	20005•
FDONE	456	FID0	20013•	FID1	20021•
FID2	20027•	FID3	20035•	FID4	20043•
FIM0	20165•	FIM1	20211•	FIM2	20437•
FIM3	20512•	FIM4	20555•	FLAGS	N	332
FPT0	20006•	FPT1	20014•	FPT2	20022•
FPT3	20030•	FPT4	20036•	FUNCTN	424
FUNC0	N	4105•	FUNC1	14000•	FUNC2	16256•
FUNC3	14454•	FUNC4	16730•	FVM0	20207•
FVM1	20435•	FVM2	20510•	FVM3	20553•
FVM4	20607•	I30T44	17130•	I31	N	243
I33	N	247	I56174	17127•	I74	331
IEXT	17114•	ILLEXT	17172•	IMSG	17220•
INT31	N	242	INT33	N	246	ITABLE	17166•
LAST	17051•	LCY1	5547•	LCY2	5576•
LCY3	5625•	LCY4	5654•	LOCKS	N	402
M10	20721•	M100	21333•	M101	21335•
M102	21337•	M103	21341•	M104	21343•
M105	21346•	M106	21351•	M107	21353•
M108	21355•	M109	21357•	M11	20724•
M110	21361•	M111	21363•	M112	21365•
M113	21367•	M114	21371•	M115	21373•
M116	21375•	M117	21377•	M118	21401•
M119	21404•	M12	20727•	M120	21407•
M121	21412•	M122	21415•	M123	21420•

M124	21423+	M125	21426+	M126	21431+
M127	21434+	M128	21437+	M129	21442+
M13	20732+	M130	21445+	M131	21450+
M132	21453+	M133	21456+	M134	21461+
M135	21464+	M136	21467+	M137	21472+
M138	21475+	M139	21500+	M14	20735+
M140	21503+	M141	21506+	M142	21511+
M143	21514+	M144	21517+	M145	21522+
M146	21525+	M147	21530+	M148	21533+
M149	21535+	M15	20740+	M150	21537+
M151	21541+	M152	21543+	M153	21545+
M154	21547+	M155	21551+	M156	21556+
M157	21560+	M158	21562+	M159	21564+
M16	20743+	M160	21566+	M161	21570+
M162	21572+	M163	21574+	M164	21576+
M165	21600+	M166	21602+	M167	21605+
M168	21610+	M169	21613+	M17	20746+
M170	21616+	M171	21621+	M172	21624+
M173	21627+	M174	21632+	M175	21635+
M176	21640+	M177	21643+	M178	21646+
M179	21651+	M18	20751+	M180	21654+
M181	21657+	M182	21662+	M183	21665+
M184	21670+	M185	21673+	M186	21676+
M187	21701+	M188	21704+	M189	21707+
M19	20754+	M190	21712+	M191	21714+
M192	21717+	M193	21722+	M194	21725+
M195	21730+	M196	21733+	M197	21736+
M198	21740+	M199	21742+	M1	20664+
M20	20757+	M200	21744+	M201	21746+
M202	21751+	M203	21754+	M204	21756+
M205	21760+	M206	21762+	M207	21764+
M208	21766+	M209	21770+	M21	20762+
M210	21772+	M211	21774+	M212	21776+
M213	22000+	M214	22002+	M215	22004+
M216	22007+	M217	22012+	M218	22015+
M219	22020+	M22	20765+	M220	22023+

M221	22026+	M222	22031+	M223	22034+
M224	22037+	M225	22042+	M226	22045+
M227	22050+	M228	22053+	M229	22056+
M23	20770+	M230	22061+	M231	22064+
M232	22067+	M233	22072+	M234	22075+
M235	22100+	M236	22103+	M237	22106+
M238	22111+	M239	22114+	M23A	20773+
M24	20776+	M240	22117+	M241	22122+
M242	22125+	M243	22130+	M244	22133+
M245	22136+	M246	22140+	M247	22142+
M248	22144+	M249	22146+	M25	21001+
M250	22150+	M251	22152+	M252	22154+
M253	22156+	M254	22160+	M255	22162+
M256	22164+	M257	22166+	M258	22170+
M259	22172+	M26	21004+	M260	22174+
M261	22176+	M262	22200+	M263	22202+
M264	22205+	M265	22210+	M266	22213+
M267	22216+	M268	22221+	M269	22224+
M27	21007+	M270	22227+	M271	22232+
M272	22235+	M273	22240+	M274	22243+
M275	22246+	M276	22252+	M277	22257+
M278	22264+	M279	22271+	M28	21012+
M280	22276+	M281	22302+	M282	22306+
M283	22313+	M29	21015+	M2	20667+
M30	21020+	M31	21023+	M32	21026+
M33	21031+	M34	21034+	M35	21037+
M36	21044+	M37	21047+	M38	21052+
M39	21055+	M3	20672+	M40	21060+
M41	21063+	M42	21066+	M43	21071+
M44	21074+	M45	21077+	M46	21102+
M47	21105+	M48	21110+	M49	21113+
M4	20675+	M50	21116+	M51	21121+
M52	21124+	M53	21127+	M54	21132+
M55	21135+	M56	21140+	M57	21143+
M58	21146+	M59	21151+	M5	20700+
M60	21154+	M61	21156+	M62	21161+

M63		21163*	M64		21166*	M65		21170*
M66		21173*	M67		21175*	M68		21200*
M69		21203*	M6		20703*	M70		21206*
M71		21211*	M72		21214*	M73		21217*
M74		21222*	M75		21225*	M76		21227*
M77		21232*	M78		21234*	M79		21237*
M7		20706*	M80		21241*	M81		21244*
M82		21246*	M83		21251*	M84		21254*
M85		21257*	M86		21262*	M87		21265*
M88		21270*	M89		21273*	M8		20711*
M90		21276*	M91		21301*	M92		21304*
M93		21307*	M94		21311*	M95		21314*
M96		21317*	M97		21322*	M98		21325*
M99		21330*	M9		20716*	MADDR		22320*
MIN1		5213*	MIN2		5253*	MIN3		5313*
MIN4		5353*	MIN1		6005*	MRG		5164*
MSG		20662*	MUT1		16374*	MUT2	N	16422*
MUT3	N	16441*	MUTM1		23303*	MUTM2		23314*
MUTM3		23324*	MUTR1		16413*	MUTR2		16433*
MUTR3A		16450*	MUTR3B		16452*	810	N	6236*
8100	N	10154*	8101		10165*	8102	N	10176*
8103	N	10207*	8104	N	10220*	8105	N	10231*
8106	N	10242*	8107	N	10253*	8108	N	10264*
8109	N	10275*	811		6247*	8110	N	10306*
8111	N	10317*	8112	N	10330*	8113	N	10341*
8114	N	10352*	8115	N	10363*	8116	N	10374*
8117	N	10405*	8118	N	10416*	8119	N	10426*
812	N	6260*	8120	N	10435*	8121	N	10445*
8122	N	10454*	8123	N	10464*	8124	N	10473*
8125	N	10503*	8126	N	10512*	8127	N	10522*
8128	N	10531*	8129	N	10541*	813	N	6271*
8130	N	10550*	8131	N	10560*	8132	N	10567*
8133	N	10577*	8134	N	10606*	8135	N	10616*
8136	N	10625*	8137	N	10635*	8138	N	10644*
8139	N	10654*	814	N	6302*	8140	N	10663*
8141	N	10673*	8142	N	10702*	8143	N	10712*

8144	N	10721*	8145	N	10731*	8146	N	10740*
8147	N	10750*	8148	N	10757*	8149	N	10767*
815	N	6313*	8150	N	10776*	8151	N	11006*
8152	N	11015*	8153	N	11025*	8154	N	11034*
8155	N	11044*	8156	N	11053*	8157	N	11063*
8158	N	11072*	8159	N	11102*	816	N	6326*
8160	N	11111*	8161	N	11121*	8162	N	11130*
8163	N	11140*	8164	N	11147*	8165	N	11162*
8166	N	11174*	8167	N	11206*	8168	N	11217*
8169	N	11231*	817	N	6341*	8170	N	11242*
8171	N	11254*	8172	N	11265*	8173	N	11277*
8174	N	11310*	8175	N	11322*	8176	N	11333*
8177	N	11345*	8178	N	11356*	8179	N	11370*
818	N	6354*	8180	N	11401*	8181	N	11413*
8182	N	11424*	8183	N	11436*	8184	N	11447*
8185	N	11461*	8186	N	11472*	8187	N	11504*
8188	N	11515*	8189	N	11527*	819	N	6367*
8190	N	11540*	8191	N	11552*	8192	N	11563*
8193	N	11575*	8194	N	11606*	8195	N	11620*
8196	N	11631*	8197	N	11643*	8198	N	11654*
8199	N	11666*	81	N	6107*	820	N	6402*
8200	N	11677*	8201	N	11711*	8202	N	11722*
8203	N	11734*	8204	N	11745*	8205	N	11757*
8206	N	11770*	8207	N	12002*	8208	N	12013*
8209	N	12025*	821	N	6415*	8210	N	12036*
8211	N	12050*	8212	N	12061*	8213	N	12070*
8214	N	12100*	8215	N	12107*	8216	N	12117*
8217	N	12126*	8218	N	12136*	8219	N	12145*
822	N	6430*	8220	N	12155*	8221	N	12164*
8222	N	12174*	8223	N	12203*	8224	N	12213*
8225	N	12222*	8226	N	12232*	8227	N	12241*
8228	N	12251*	8229	N	12260*	823	N	6443*
8230	N	12270*	8231	N	12277*	8232	N	12307*
8233	N	12316*	8234	N	12326*	8235	N	12335*
8236	N	12345*	8237	N	12354*	8238	N	12364*
8239	N	12373*	823A	N	6456*	824	N	6471*

8240	N	12403+	8241	N	12412+	8242	N	12422+
8243	N	12431+	8244	N	12441+	8245	N	12450+
8246	N	12460+	8247	N	12467+	8248	N	12477+
8249	N	12506+	825	N	6504+	8250	N	12516+
8251	N	12525+	8252	N	12535+	8253	N	12544+
8254	N	12554+	8255	N	12563+	8256	N	12573+
8257	N	12602+	8258	N	12613+	8259	N	12623+
826	N	6515+	8260	N	12634+	8261	N	12644+
8262	N	12656+	8263	N	12667+	8264	N	12701+
8265	N	12712+	8266	N	12724+	8267	N	12735+
8268	N	12747+	8269	N	12760+	827	N	6530+
8270	N	12772+	8271	N	13003+	8272	N	13015+
8273	N	13026+	8274	N	13040+	8275	N	13051+
8276	N	13063+	8277	N	13074+	8278	N	13106+
8279	N	13117+	828	N	6543+	8280	N	13130+
8281	N	13141+	8282	N	13153+	8283	N	13164+
8284	N	13176+	8285	N	13207+	8286	N	13221+
8287	N	13232+	8288	N	13244+	8289	N	13255+
829	N	6556+	8290	N	13267+	8291	N	13300+
8292	N	13312+	8293	N	13323+	8294	N	13335+
8295	N	13346+	8296	N	13360+	8297	N	13371+
8298	N	13403+	8299	N	13414+	82	N	6120+
830	N	6571+	8300	N	13426+	8301	N	13437+
8302	N	13451+	8303	N	13462+	8304	N	13474+
8305	N	13505+	8306	N	13517+	8307	N	13532+
8308	N	13544+	8309	N	13557+	831	N	6604+
8310	N	13571+	8311	N	13602+	8312	N	13612+
8313	N	13622+	832	N	6617+	833	N	6631+
834	N	6643+	835	N	6656+	836	N	6665+
837	N	6674+	838	N	6703+	839	N	6712+
83	N	4131+	840	N	6721+	841	N	6730+
842	N	6737+	843	N	6746+	844	N	6755+
845	N	6764+	846	N	6773+	847	N	7002+
848	N	7011+	849	N	7020+	84	N	6143+
850	N	7027+	851	N	7036+	852	N	7045+
853	N	7054+	854	N	7063+	855	N	7072+

856	N	7101+	857	N	7110+	858	N	7117+
859	N	7126+	85	N	6155+	860	N	7135+
861	N	7144+	862	N	7153+	863	N	7162+
864	N	7171+	865	N	7200+	866	N	7210+
867	N	7220+	868	N	7230+	869	N	7241+
86	N	6170+	870	N	7251+	871	N	7261+
872	N	7271+	873	N	7303+	874	N	7313+
875	N	7324+	876	N	7334+	877	N	7347+
878	N	7361+	879	N	7373+	87	N	6203+
880	N	7403+	881	N	7413+	882	N	7423+
883	N	7433+	884	N	7443+	885	N	7453+
886	N	7463+	887	N	7473+	888		10000+
889	N	10011+	88	N	6214+	890	N	10022+
891	N	10033+	892	N	10044+	893	N	10055+
894	N	10066+	895	N	10077+	896	N	10110+
897	N	10121+	898	N	10132+	899	N	10143+
89	N	6225+	8BJECT		430	BVRFLB	N	413
PIM1		23330+	PIM2		23347+	PIR1		16477+
PIR10		16704+	PIR11		16721+	PIR2		16533+
PIR3		16551+	PIR4		16566+	PIR5		16603+
PIR6		16620+	PIR7		16635+	PIR8		16652+
PIR9		16667+	PIT1	N	16466+	PIT10	N	16675+
PIT11	N	16712+	PIT2	N	16505+	PIT3	N	16542+
PIT4	N	16557+	PIT5	N	16574+	PIT6	N	16611+
PIT7	N	16626+	PIT8	N	16643+	PIT9	N	16660+
P8P		17122+	P8PED		17205+	RADNWP		20647+
RADSIZ	N	403	RADWP		20636+	RCY1		5413+
RCY2		5442+	RCY3		5471+	RCY4		5520+
REP8RT		454	RETURN		440	RL1		415
RL2		416	RL4	N	417	RTC0	N	16733+
RTC1	N	16751+	RTC1A		16757+	RTC1B		16767+
RTC1C		16771+	RTC1D		17001+	RTC1E		17014+
RTC2	N	17015+	RTC2A		17035+	RTC2B		17046+
RTCM0		23362+	RTCM1		23367+	RTCM2		23401+
RTCM3		23407+	RTCM4		23415+	RTCM5		23427+
RTC8FF		17061+	RTC8N		17052+	SEED	N	406

SET940		6065*	SKA1		4202*	SKA2		4234*
SKA3		4266*	SKA4		4321*	SKA5		4354*
SKB1		4701*	SKB2		4733*	SKB3		4765*
SKB4		5020*	SKB5		5053*	SKE1		4022*
SKE10		4140*	SKE11		4150*	SKE2		4032*
SKE3		4042*	SKE4		4052*	SKE5		4063*
SKE6		4074*	SKE7		4105*	SKE8		4116*
SKE9		4127*	SKM1		4407*	SKM2		4441*
SKM3		4473*	SKM4		4526*	SKM5		4561*
SKN1		4614*	SKN2		4646*	SKS1		4013*
SPIT	N	23353*	SPRINT		17211*	SPURCI		17073*
SPURI		17101*	STATUS		401	SYSIZE	N	405
T10		14323*	T11		14347*	T12		14373*
T13		14417*	T14		14443*	T15		14467*
T16		14513*	T17		14537*	T18		14563*
T19		14607*	T1		14020*	T20		14633*
T21		14657*	T22		14703*	T23		14727*
T24		14753*	T25		14777*	T26		15023*
T27		15047*	T28		15073*	T29		15117*
T2		14051*	T30		15143*	T31		15167*
T32		15213*	T33		15237*	T34		15263*
T35		15307*	T36		15333*	T37		15357*
T38		15403*	T39		15427*	T3		14102*
T40		261	T40A		15453*	T41		263
T41A		15477*	T42A		15523*	T43		267
T43A		15547*	T44		271	T44A		15573*
T45		15617*	T46		15643*	T47		15667*
T48		15713*	T49		15737*	T4		14133*
T50		15763*	T51		16007*	T52		16033*
T53		16057*	T54		16103*	T55		16127*
T56		16153*	T57		16177*	T58		16223*
T59		14247*	T5		14157*	T6		14203*
T7		14227*	T8		14253*	T9		14277*
TEMPX		23440*	TEMP		23437*	TEMPA		23441*
TEMPB		23442*	TEMPC		23443*	TEMPD		23444*
TIME		407	TM10		22564*	TM11		22574*

TM12		22604*	TM13		22620*	TM14		22634*
TM15		22650*	TM16		22664*	TM17		22700*
TM18		22714*	TM19		22730*	TM1A		22337*
TM1B		22362*	TM20		22744*	TM21		22751*
TM22		22756*	TM23		22763*	TM24		22770*
TM25		22775*	TM26		23005*	TM27		23012*
TM28		23017*	TM29		23024*	TM2A		22410*
TM2B		22423*	TM30		23031*	TM31		23036*
TM32		23043*	TM33		23050*	TM34		23055*
TM35		23062*	TM36		23067*	TM37		23074*
TM38		23101*	TM39		23106*	TM3A		22445*
TM3B		22447*	TM4		22500*	TM40		23113*
TM41		23120*	TM42		23125*	TM43		23132*
TM44		23137*	TM45		23144*	TM46		23154*
TM47		23161*	TM48		23166*	TM49		23173*
TM5		22510*	TM50		23200*	TM51		23205*
TM52		23212*	TM53		23217*	TM54		23224*
TM55		23231*	TM56		23236*	TM57		23243*
TM58		23250*	TM59		23255*	TM6		22520*
TM7		22530*	TM8		22540*	TM9		22554*
TMPTIM		17072*	TRANR1		16301*	TRANR2		16314*
TRANR3		14327*	TRANR4		16344*	TRANR5		16357*
TRANR6		16371*	TRAN1	N	16270*	TRAN2	N	16302*
TRAN3	N	14315*	TRAN4	N	16330*	TRAN5	N	16347*
TRAN6	N	16362*	TRANM1		23262*	TRANM2		23267*
TRANM3		23273*	TRANM4		23277*	TRAP1	N	14002*
TRAP10	N	14305*	TRAP11	N	14331*	TRAP12	N	14355*
TRAP13	N	14401*	TRAP14	N	14425*	TRAP15	N	14451*
TRAP16	N	14475*	TRAP17	N	14521*	TRAP18	N	14545*
TRAP19	N	14571*	TRAP2	N	14033*	TRAP20	N	14615*
TRAP21	N	14641*	TRAP22	N	14665*	TRAP23	N	14711*
TRAP24	N	14735*	TRAP25	N	14761*	TRAP26	N	15005*
TRAP27	N	15031*	TRAP28	N	15055*	TRAP29	N	15101*
TRAP3	N	14064*	TRAP30	N	15125*	TRAP31	N	15151*
TRAP32	N	15175*	TRAP33	N	15221*	TRAP34	N	15245*
TRAP35	N	15271*	TRAP36	N	15315*	TRAP37	N	15341*

TRAP38	N	15365*	TRAP39	N	15411*	TRAP4	N	14115*
TRAP40	N	15435*	TRAP41	N	15461*	TRAP42	N	15505*
TRAP43	N	15531*	TRAP44	N	15555*	TRAP45	N	15601*
TRAP46	N	15625*	TRAP47	N	15651*	TRAP48	N	15675*
TRAP49	N	15721*	TRAP5	N	14141*	TRAP50	N	15745*
TRAP51	N	15771*	TRAP52	N	16015*	TRAP53	N	16041*
TRAP54	N	16065*	TRAP55	N	16111*	TRAP56	N	16135*
TRAP57	N	16161*	TRAP58	N	16205*	TRAP59	N	16231*
TRAP6	N	14165*	TRAP7	N	14211*	TRAP8	N	14235*
TRAP9	N	14261*	UAM		20054*	UAW	N	400
UIM		20044*	UNIT		420	UNITO	N	6077*
UPT		20000*	UVM		20163*	XREG	N	412
ZERO		0*						