900893

704045-11P1

KLNZ

(28)

SUFFIX

PURPOSE: To aid the operator in testing or diagnosing failures associated with all Sigma 7 Byte String (excluding EBC), Stack, Multiple and Convert instructions.

REQUIRED CONFIGURATION: Any Sigma 7 with card or paper tape reader.

PREREQUISITES: The operations and functions tested by AUTO must be successfully operating.

LOADING INSTRUCTIONS: CONTROL MODE in LOCAL, WATCHDOG TIMER in NORMAL, INTERLEAVE SELECT in NORMAL, AUDIO in ON, PARITY ERROR MODE in CONT, SENSE all OFF.

1. Clear memory
2. Perform standard LOAD procedure
3. Program execution begins automatically if LOAD is successful.

SUCCESS INDICATIONS: SS3 and SS4 OFF - Continued execution of the program without a WAIT or ALARM indication.

SS3 ON - A typed REPORT or a WAIT (INSTRUCTION ADDRESS indicators = $1EO_{16}$) if typewriter is OFF see SS3 option.

SS4 ON - No error messages if typewriter is ON.

ERROR INDICATIONS AND PROCEDURES: SS4 OFF - typewriter ON - Error message followed by WAIT (INSTRUCTION ADDRESS indicators = $1\ EO_{16}$).

SS4 OFF - typewriter OFF - WAIT executed ($1EO_{16}$).

SS4 ON - SS3 ON - Error message if typewriter is ON.

SS4 ON - SS3 OFF - No error indications.

See section entitled "ERRORS"

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* "Registers" includes FAST MEMORY, MEMORY and PROGRAM STATUS

OPTIONS:

Suffix has an error counter which can be displayed on demand and also when an error occurs. A pass counter is also included. The pass counter indicates the number of completed runs of the program from its most recent load time, and the number of individual tests performed during the present pass.

The system provides several modes of operation. The selection of these modes is done with the Sense Switches, and are described below.

SS1 ON = Short Loop

OFF = Normal operation

The short loop provides a means of accessing any "Object Instruction"* at the highest possible constant frequency to allow the operator the ability to observe signal levels relative to the instruction with the aid of an oscilloscope. An error WAIT will not occur. The loop consists of those instructions necessary to initialize the pertinent registers ** of the Object Instruction, a means of executing the Object Instruction, and those instructions necessary to test and respond to the Sense Switch settings. SENSE switches 2, 3, and 4 are inoperative when SS1 is ON.

SS2 ON = Long Loop

OFF = Normal Operation

This loop does the following: Reinitializes all the registers ** of the Object Instruction, executes the Object Instruction, tests all the pertinent registers ** and then loops back.

When a catastrophic error occurs such as the Instruction being destroyed, or when the contents of an initializing table in core are destroyed, the short loop will not sufficiently reinitialize the Object Instruction. Therefore, Long Loop must be employed.

*The term "Object Instruction" is understood to mean an instruction which is the object of the present TEST being performed.

** "Registers" includes; FAST MEMORY, MEMORY and PROGRAM STATUS WORDS.

SS3 ON = Report

OFF = Normal Operation

Report is the Display of pertinent information. This information is only available at the end of each object test. The program description will state what information is being displayed. If the typewriter is ON, the program will WAIT at $1EO_{16}$ after printing unless SS4 is ON.

SS4 ON = No Halt or Errors

OFF = Halt on Errors

The ability to bypass error halts is particularly useful when used with the "Long Loop" option (refer SS2). The counters and the visual and audio error indicators provided by the system assure the operator that no error will go unnoticed when the error halts are being inhibited.

TYPEWRITER ON = TYPE ERROR MESSAGE

OFF = NO MESSAGE

There are two types of output: (1) Error Display, and (2) Report.

The Error Display occurs when an error is detected and the typewriter switch is on.

The Report occurs when Sense Switch 3 is set and the typewriter is on.

Both outputs yield the Object Data Block address, the Error Counter, the Pass Counter and the Object Instruction. The Error Display also prints an Error Identifier, the erroneous result, the predetermined result and the differences between the two results.

TEST SELECTION:

If the INTERRUPT button is depressed at any time during program execution, a WAIT will be executed with the INSTRUCTION ADDRESS indicator = FE_{16}. A specific test may be continuously executed by inserting the test address into bits 12 thru 31 of register 1 setting SENSE switch 1 or 2 and clearing the WAIT. Normal operation can be restored by turning off SENSE switch 1 and 2.

PROGRAM DESCRIPTION: The memory parity interrupt is constantly monitored. If a parity error occurs, the program will execute a WAIT with P equal to $(EC)_{16}$. Information concerning which plain the error occurred on can be found in register 4.

The interrupt button is used to reset the Object Test in the event of a Catastrophic failure. A WAIT will be executed with P equal to $(FE)_{16}$. By setting SELECT ADDRESS to 273_{16}, ADDR STOP to ON and allowing the program to continue to that point, the operator can single step or single phase, through the execution of the Object Test Instruction for a more precise observation. This procedure is outlined under "ERRORS".

The interrupt button can also be used to change the Object Test by inserting the desired test address into the address bits of Register One.

The program consists of a "DRIVE PROGRAM" and a "DATA FIELD". The Data Field is comprised of many DATA BLOCKS, each of which contain pre-settings of programmable registers, the instruction to be tested and the pre-determined result with which to test the registers. The Driver provides the "CONTROLS" to use the information in the Data Field for Error detection and Display.

The Driver consists of 5 major portions. They are (1) INITIALIZE, (2) SET UP, (3) EXECUTE, (4) TEST, (5) and CONTROL. These names are used to facilitate the description of the program.

SUFFIX features a wide variety of modes of operation and controls as well as a high degree of error discernibility. The discriminating bit configurations are generated from logic layouts and will provide ERROR DETECTION to the "signal" level.

The program is designed to initialize itself at load time. This initialization resets the Error and Pass Counters to zero. A DATA

BLOCK pointer is set to point to the Object Data Block. The DATA BLOCKS vary in length depending on the Object instruction.

The INITIALIZE portion of the program moves the Object Data Block into a working area called TABLE. The TABLE is always cleared prior to this move. The first word of the data block is a number which indicates how many words are in the Block. The format of the Block is as follows:

TABLE + 0 Negative Count

1 Object Instruction

2 $(CC)_{co-3)}$ + $(FC)_{(4-8)}$+ $(MS+DM, AM)_{(8-11)}$+ $LINKAGE_{(12-3}$

3 PSW1 out

4 Reg 12 in-Index

5 Reg 12 out

6 Memory in/Reg 0 in

7 Memory out/Reg 0 out

8 Reg 13 in-Indirect Address

9 Reg 13 out

10 Memory +1 in/Reg 1 in

11 Memory +1 out/Reg 1 out

The first 12 bits of the third word are used to initialize PSW1 bits 0 through 11. The rest of the bits are used for initializing address modification for trap conditions.

After INITIALIZE, comes SET UP and PERFORM. When the move is completed, the programmable registers are set up (SETUP), and the Object instruction is performed (PERFORM). The Sense Switches are then tested and if Short Loop is called for, Registers 12 and 13, memory and memory +1 and the Program status words are reinitialized and the object instruction is performed. (In the case of the TBS instruction a table is also reinitialized.) This process continues until sense switch 1 is reset. This allows the program to continue on to TEST.

During TEST, all the programmable registers are tested against pre-determined results. Each register is tested in a subroutine called ERROR. If an error is detected, the program looks to see if the typewriter is on-line and not busy. If it is busy and on-line the program waits. If it is on-line and not busy, the program proceeds to a subroutine called EDIT which edits the data for typewriter output and then proceeds to another subroutine called OUTPUT. This subroutine types out the data and then the program proceeds to the error halt test. There it halts or proceeds, depending on Sense Switch 3, and exits ERROR.

After all the registers have been tested, the Sense Switches are interrogated for SENSE Switch 4 (REPORT), and then for SENSE switch 2 (LONG LOOP). If the long loop is called for the program branches back to SET UP. If not, the program continues on to INITIALIZE. These last decisions are made in the CONTROL portion of the program.

ERRORS:

The program runs until a memory parity or a normal error WAIT (P equal to $(EC)_{16}$ or $(1EO)_{16}$ respectively) is encountered. If the program loses control, depress the interrupt button. A halt should occur at Location 273_{16}. Allow program to proceed to that point. By single stepping through EXECUTE, the operator may learn the nature of the failure. If this does not work, reload the program with Sense Switch 4 set. This will cause the REPORT WAIT or typeout to occur after each test. By interference, the operator may determine which test is causing the loss of control.

The normal error WAIT is at Location $(IDF)_{16}$. The contents of the registers is as follows:

R1 Present List Address

R2 Errors

R3 Passes (Bits 0-15)/Module (Bits 16-31)

R4 Instruction

R5 Error Identifier and Address

10000000 = Instruction

20000000 = Location +1 of the execution location

30000000 = Indirect Address word

4000000X = Index Register - R1

50000001 = PSW1

50000002 = PSW2

6000000X = Register X. X=0 through F(15_{10})

7000WXYZ = Memory word in Location WXYZ

7100WXYZ = Memory word in Location WXYZ (FMT table*)

7200WXYZ = Memory word in Location WXYZ (VMT table **)

Also, in connection with locations (WXYZ), the actual data may be found in tables MT1 through MT4 - actual locations may be determined from listing (e.g., if the identifier is 7100 WXYZ, and according to the object BLOCK containing the instruction that failed, MT1 was the object table for FMT, the data word in question would be found in location MT1 + WXYZ - FMT.).

R6 Erroneous Result

R7 Predetermined Result

R8 Difference between R6 and R7 (Exclusive OR)

Explanation of Identifiers:

The programmable registers that are most likely to fail if a machine malfunction is to occur are:

(1) The location occupied by the instruction, because - the instruction is pointed out by an EXU instruction. The memory address register is pointing at the object location during a large portion of the EXU instruction.

(2) The location following the EXU instruction, because - its address is in the Q register during the execution of the Object Instruction.

*FMT - Fixed Memory Table - usually a source table

**VMT - Variable Memory Table - usually a destination table

(3) The Indirect Address word, because - its address is in P register during much of the Object Instructions execution if the IA bit is set.

(4) The Index Register - Register 1 is the only register referenced for Indexing. (X1 is a variable.)

(5) The program status words, because - these reflect the state of the machine and must reflect the proper response.

(6) Registers 0, 12, and 13, because - they are the only registers referred to by the instructions R field and must thereby be monitored.

(7) The contents of the effective tables, because - these addresses are in the P register during the major portion of the Object instructions execution.

PROGRAM LOADER:

All 9 CPU Diagnostic programs use the Diagnostic Loader and are in the diagnostic load format.

The loader is designed to use a minimum amount of the total system's capability in order to provide the best possibility of a successful load.

The first 24 bits of each card contain the byte address of the location in which the card will be loaded. The Address is right justified. The next 8 bits contain a byte count of the bytes on the card. This will usually be 74_H bytes (29_D words). The next 116_D bytes will be the program in binary.

The loader makes use of this format and employs command chaining to simplify the loader and eliminate use of the adder. The first command pair reads the first 3 bytes of the card into the address portion of the third command pair; the second command pair reads the next byte into the byte count of the third command pair; and, the third command pair reads the rest of the card into its designated memory locations.

The last card loads a branch into the loader which transfers control to the designated location in the program. The loader uses the AUTOMATIC FILL LOADER by loading register 0 with a pointer to the above mentioned command chaining pairs and branching back to location 27_H of the AUTO FILL LOADER.

27	SIO, 0	$*25_H$	
28	TIO, 0	$*25_H$	Loaded by AUTO FILE
29	BCS, C_H	28_H	
2A	LW, 0	$2C_H$	
2B	BCR, 0	27_H	
2C	PZE, 0	DA($2E_H$)	DA = Double Word Address DA($92E_H$) = 17_H
2E	Rd	BA(32_H+1)*	BA = Byte Address BA(32_H+1) = $C9_H$
2F		3	BA($_H$+3) = CF_H
30	Rd	BA(33_H+3)*	BA(33_H+3) = CF_H
31		1	
32	Rd	( )	
33		( )	

*The +1, +3 refer to the 1st and 3rd byte of the word respectively.

```
ASIGMET EI,L0
        1                                       SYSTEM   SIG7FDP
        2                                       TITLE    'SUFFIX(2)'
        3                                       SOCW
        4                               *     FORMS    THE ADDRESS FIELD SPECIFIES HOW THE WORD IS DIVIDED AN
        5                               *              HOW MANY BITS THERE WILL BE IN EACH PART OF THE WORD.
        6                               *              EFFECTIVE AT ASSEMBLY TIME ONLY.
        7                               I       FORM     4,28
        8                               J       FORM     8,24
        9                               K       FORM     4,4,4,20
       10                               *
       11                               *          PROCS                EFFECTIVE AT ASSEMBLY TIME ONLY.
       12                               *
       13                               *     P        SPECIFIES A DOUBLEWORD ADDRESS
       14                               *
       15          00000000             P       CNAME
       16                                       PROC
       17                               LF      GEN,32   DA(AF(1))
       18                                       PEND
       19                               *
       20                               *       JJ       CONVERTS TO BYTE ADDRESS
       21          00000000             JJ      CNAME
       22                                       PROC
       23                               LF      GEN,8,24 AF(1),BA(AF(2))
       24                                       PEND
       25                               *
       26                               *       FILL     FILLS ALL LOCATIONS BETWEEN AF AND $ WITH ZEROS
       27          00000000             FILL    CNAME
       28                                       PROC
       29                               LF      EQU      $
       30                                       DO       ABSVAL(AF)-ABSVAL($)
       31                                       GEN,32   0
       32                                       FIN
       33                                       PEND
       34                               *
```

```
                 PAGE
*
*       SUFFIX - SIGMA CPU DIAGNOSTIC SYSTEM
*
*
*                                     SENSE SWITCH DEFINITIONS
*       SS1        SET=SHORT LOOP
*                RESET=NORMAL OPERATION
*
*       SS2        SET=LONG LOOP
*                RESET=NORMAL OPERATION
*
*       SS3        SET=REPORT
*                RESET=NORMAL OPERATION
*
*       SS4        SET=NO HALT ON ERRORS
*                RESET=HALT ON ERRORS
*
*                                     REGISTER CONTENTS ON ERROR HALT
*       R1       PRESENT LIST ADDRESS
*       R2       ERRORS
*       R3       PASSES
*       R4       INSTRUCTION
*       R5       ERROR IDENTIFIER AND ADDRESS:
*                10000000 = INSTRUCTION
*                20000000 = LOCATION+1 OF THE EXECUTION LOCATION
*                30000000 = INDIRECT ADDRESS
*                40000001 = INDEX REGISTER-R1
*                5000000X = PROGRAM STATUS WORD X: X=1 OR 2
*                6000000X = REGISTER X: X=0 THROUGH F(1111)
*                7000WXYZ = MEMORY WORD IN LOCATION WXYZ (WXYZ=0-FFFF)
*                7100WXYZ = MEMORY WORD IN LOCATION WXYZ (FMT TABLE)
*                7200WXYZ = MEMORY WORD IN LOCATION WXYZ (VMT TABLE)
*       R6       ERRONEOUS RESULT
*       R7       PREDETERMINED RESULT
*       R8       DIFFERENCE BETWEEN R6 AND R7
```

```
71                                          PAGE
72      1 00040                             ORG       X'40'           TRAP LOCATIONS
        1 00040
73      1 00040  0F00005E      NAOTR        XPSD,0    NAO             NONALLOWED OPERATION
74      1 00041  0F000072      UIITR        XPSD,0    UII             UNIMPLEMENTED INSTRUCTION
75      1 00042  0F000078      SLTR         XPSD,0    SL              STACK LIMIT
76      1 00043  0F00007E      FXPOTR       XPSD,0    FXPO            OVERFLOW ON CONVERT BY ADDITION
77      1 00044  0F000084      FLPFTR       XPSD,0    FLPF            FLOATING POINT
78      1 00045  0F00008A      DFTR         XPSD,0    DF              NONALLOWED DIGIT CONFIGURATION
79      1 00046  0F000090      WDTRTR       XPSD,0    WDTR            WATCHDOG TIMER RUNOUT
80      1 00047  0F0003D8      BRANCH       XPSD,0    RETURN          BRANCH RETURN
81      1 00048  0F000096      CAL1TR       XPSD,0    CAL1            CALL ONE
82      1 00049  0F0000AA      CAL2TR       XPSD,0    CAL2            CALL TWO
83      1 0004A  0F0000BE      CAL3TR       XPSD,0    CAL3            CALL THREE
84      1 0004B  0F0000D2      CAL4TR       XPSD,0    CAL4            CALL FOUR
85                             *                                      INTERRUPT LOCATIONS
86      1 0004C  00000000  A                FILL      X'54'
        1 0004D  00000000  A
        1 0004E  00000000  A
        1 0004F  00000000  A
        1 00050  00000000  A
        1 00051  00000000  A
        1 00052  00000000  A
        1 00053  00000000  A
87      1 00054  331003E4                   MTW,1     CNT3CP
88      1 00055  331003E5                   MTW,1     CNT4CP
89      1 00056  0F0000E6                   XPSD,0    PARITY          MEMORY PARITY
90      1 00057  00000000  A                FILL      X'5A'
        1 00058  00000000  A
        1 00059  00000000  A
91      1 0005A  0F000360                   XPSD,0    CNT3Z
92      1 0005B  0F000360                   XPSD,0    CNT4Z
93      1 0005C  0F0000EE                   XPSD,0    INOUT           I/O
94      1 0005D  0F0000F6                   XPSD,0    RESET           INTERRUPT BUTTON
```

```
                                              PAGE
                                    *                                       NON-ALLOWED OPERATION TRAP
1 0005E                                       BOUND 8
1 0005E   00000000 A    NA0                   PZE
1 0005F   00000000 A                          PZE
1 00060   00000062                            PZE,0     $+2
1 00061   00000000 A                          PZE
1 00062   0F0003D8      NA0RET                XPSD,0    RETURN          NONALLOWD OPERATION               I9
1 00063   0F0003D8      MPVRET                XPSD,0    RETURN          MEMORY PROTECT VIOLATION TRACC=1  I9
1 00064   0F0003D8      MVRET                 XPSD,0    RETURN          MODE VIOLATION           TRACC=2  I9
1 00065   0F0003D8                            XPSD,0    RETURN
1 00066   0F0003D8      NEARET                XPSD,0    RETURN          NONEXISTAN ADDRESS       TRACC=4  I9
1 00067   0F0003D8                            XPSD,0    RETURN
1 00068   0F0003D8                            XPSD,0    RETURN
1 00069   0F0003D8                            XPSD,0    RETURN
1 0006A   0F0003D8      NEIRET                XPSD,0    RETURN          NONEXISTANT INSTRUCTION  TRACC=8  I9
1 0006B   0F0003D8                            XPSD,0    RETURN
1 0006C   0F0003D8                            XPSD,0    RETURN
1 0006D   0F0003D8                            XPSD,0    RETURN
1 0006E   0F0003D8                            XPSD,0    RETURN
1 0006F   0F0003D8                            XPSD,0    RETURN
1 00070   0F0003D8                            XPSD,0    RETURN
1 00071   0F0003D8                            XPSD,0    RETURN
                                    *                                       UNIMPLIMENTED INSTRUCTION TRAP
1 00072                                       BOUND 8
1 00072   00000000 A    UII                   PZE
1 00073   00000000 A                          PZE
1 00074   00000076                            PZE,0     $+2
1 00075   00000000 A                          PZE
1 00076   0F0003D8      UIIRET                XPSD,0    RETURN
                                    *                                       STACK LIMIT REACHED TRAP
1 00078                                       BOUND 8
1 00078   00000000 A    SL                    PZE
1 00079   00000000 A                          PZE
1 0007A   0000007C                            PZE,0     $+2
1 0007B   00000000 A                          PZE
1 0007C   0F0003D8      SLRET                 XPSD,0    RETURN
```

```
132                                     PAGE
133                             *
134     1 0007E                         BOUND 8
135     1 0007E  00000000 A     FXP0    PZE
136     1 0007F  00000000 A             PZE
137     1 00080  00000082               PZE,0     $+2
138     1 00081  00000000 A             PZE
139     1 00082  7020007E               LC        FXP0
140     1 00083  0F0003D8       FPRET   XPSD,0    RETURN
141                             *
142     1 00084                         BOUND 8
143     1 00084  00000000 A     FLPF    PZE
144     1 00085  00000000 A             PZE
145     1 00086  00000088               PZE,0     $+2
146     1 00087  00000000 A             PZE
147     1 00088  70200084               LC        FLPF
148     1 00089  0F0003D8       FPFRET  XPSD,0    RETURN
149                             *
150     1 0008A                         BOUND 8
151     1 0008A  00000000 A     DF      PZE
152     1 0008B  00000000 A             PZE
153     1 0008C  0000008E               PZE,0     $+2
154     1 0008D  00000000 A             PZE
155     1 0008E  7020008A               LC        DF
156     1 0008F  0F0003D8       DFRET   XPSD,0    RETURN
157                             *
158     1 00090  00000000 A     WDTR    PZE
159     1 00091  00000000 A             PZE
160     1 00092  00000094               PZE,0     $+2
161     1 00093  00000000 A             PZE
162     1 00094  0F0003D8       WDTRET  XPSD,0    RETURN
```

FIXED POINT ARITHMETIC OVERFLOW TRAI

FLOATING POINT ARITHMETIC FAULT TRAI

DECIMAL ARITHMETIC FALUT TRAP

WATCHDOG TIMER RUNOUT TRAP

```
                                 PAGE
                      *                                         CALL 1 TRAP
1 00096                          BOUND 8
1 00096   00000000 A  CAL1       PZE
1 00097   00000000 A             PZE
1 00098   0000009A               PZE,0    $+2
1 00099   00000000 A             PZE
1 0009A   0F0003D8    C1RET      XPSD,0   RETURN            TRACC=0
1 0009B   0F0003D8               XPSD,0   RETURN            TRACC=1    I9=1
1 0009C   0F3003D8               XPSD,3   RETURN            TRACC=2    I9=1
1 0009D   0F0003D8               XPSD,0   RETURN            TRACC=3    I9=1
1 0009E   0F0003D8               XPSD,0   RETURN            TRACC=4    I9=1
1 0009F   0F0003D8               XPSD,0   RETURN            TRACC=5    I9=1
1 000A0   0F0003D8               XPSD,0   RETURN            TRACC=6    I9=1
1 000A1   0F0003D8               XPSD,0   RETURN            TRACC=7    I9=1
1 000A2   0F0003D8               XPSD,0   RETURN            TRACC=8    I9=1
1 000A3   0F0003D8               XPSD,0   RETURN            TRACC=9    I9=1
1 000A4   0F0003D8               XPSD,0   RETURN            TRACC=10   I9=1
1 000A5   0F0003D8               XPSD,0   RETURN            TRACC=11   I9=1
1 000A6   0F0003D8               XPSD,0   RETURN            TRACC=12   I9=1
1 000A7   0F0003D8               XPSD,0   RETURN            TRACC=13   I9=1
1 000A8   0F0003D8               XPSD,0   RETURN            TRACC=14   I9=1
1 000A9   0F0003D8               XPSD,0   RETURN            TRACC=15   I9=1
```

```
                                        SUFFIX(2)
136                                     PAGE
137                             *                                       CALL 2 TRAP
188     1 000AA                         BOUND 8
189     1 000AA  00000000 A     CAL2    PZE
190     1 000AB  00000000 A             PZE
191     1 000AC  000000AE               PZE,0   $+2
192     1 000AD  00000000 A             PZE
193     1 000AE  0F0003D8       C2RET   XPSD,0   RETURN          TRACC=0
194     1 000AF  0F0003D8               XPSD,0   RETURN          TRACC=1   I9=1
195     1 000B0  0F0003D8               XPSD,0   RETURN          TRACC=2   I9=1
196     1 000B1  0F0003D8               XPSD,0   RETURN          TRACC=3   I9=1
197     1 000B2  0F0003D8               XPSD,0   RETURN          TRACC=4   I9=1
198     1 000B3  0F0003D8               XPSD,0   RETURN          TRACC=5   I9=1
199     1 000B4  0F0003D8               XPSD,0   RETURN          TRACC=6   I9=1
200     1 000B5  0F0003D8               XPSD,0   RETURN          TRACC=7   I9=1
201     1 000B6  0F0003D8               XPSD,0   RETURN          TRACC=8   I9=1
202     1 000B7  0F0003D8               XPSD,0   RETURN          TRACC=9   I9=1
203     1 000B8  0F0003D8               XPSD,0   RETURN          TRACC=10  I9=1
204     1 000B9  0F0003D8               XPSD,0   RETURN          TRACC=11  I9=1
205     1 000BA  0F0003D8               XPSD,0   RETURN          TRACC=12  I9=1
206     1 000BB  0F0003D8               XPSD,0   RETURN          TRACC=13  I9=1
207     1 000BC  0F0003D8               XPSD,0   RETURN          TRACC=14  I9=1
208     1 000BD  0F0003D8               XPSD,0   RETURN          TRACC=15  I9=1
```

```
                                              SUFFIX(2)
                                              PAGE
                                    *                                       CALL 3 TRAP
  1 000BE                                     BOUND 8
  1 000BE     00000000 A    CAL3              PZE
  1 000BF     00000000 A                      PZE
  1 000C0     000000C2                        PZE,0        $+2
  1 000C1     00000000 A                      PZE
  1 000C2     0F0003D8      C3RET             XPSD,0       RETURN           TRACC=0
  1 000C3     0F0003D8                        XPSD,0       RETURN           TRACC=1     I9=1
  1 000C4     0F0003D8                        XPSD,0       RETURN           TRACC=2     I9=1
  1 000C5     0F0003D8                        XPSD,0       RETURN           TRACC=3     I9=1
  1 000C6     0F0003D8                        XPSD,0       RETURN           TRACC=4     I9=1
  1 000C7     0F0003D8                        XPSD,0       RETURN           TRACC=5     I9=1
  1 000C8     0F0003D8                        XPSD,0       RETURN           TRACC=6     I9=1
  1 000C9     0F0003D8                        XPSD,0       RETURN           TRACC=7     I9=1
  1 000CA     0F0003D8                        XPSD,0       RETURN           TRACC=8     I9=1
  1 000CB     0F0003D8                        XPSD,0       RETURN           TRACC=9     I9=1
  1 000CC     0F0003D8                        XPSD,0       RETURN           TRACC=10    I9=1
  1 000CD     0F0003D8                        XPSD,0       RETURN           TRACC=11    I9=1
  1 000CE     0F0003D8                        XPSD,0       RETURN           TRACC=12    I9=1
  1 000CF     0F0003D8                        XPSD,0       RETURN           TRACC=13    I9=1
  1 000D0     0F0003D8                        XPSD,0       RETURN           TRACC=14    I9=1
  1 000D1     0F0003D8                        XPSD,0       RETURN           TRACC=15    I9=1
```

```
                                PAGE
                         *                              CALL 4 TRAP
1 000D2                         BOUND 8
1 000D2   00000000 A     CAL4   PZE
1 000D3   00000000 A            PZE
1 000D4   000000D6              PZE,0     $+2
1 000D5   00000000 A            PZE
1 000D6   0F0003D8       C4RET  XPSD,0    RETURN        TRACC=0
1 000D7   0F0003D8              XPSD,0    RETURN        TRACC=1    I9=1
1 000D8   0F0003D8              XPSD,0    RETURN        TRACC=2    I9=1
1 000D9   0F0003D8              XPSD,0    RETURN        TRACC=3    I9=1
1 000DA   0F0003D8              XPSD,0    RETURN        TRACC=4    I9=1
1 000DB   0F0003D8              XPSD,0    RETURN        TRACC=5    I9=1
1 000DC   0F0003D8              XPSD,0    RETURN        TRACC=6    I9=1
1 000DD   0F0003D8              XPSD,0    RETURN        TRACC=7    I9=1
1 000DE   0F0003D8              XPSD,0    RETURN        TRACC=8    I9=1
1 000DF   0F0003D8              XPSD,0    RETURN        TRACC=9    I9=1
1 000E0   0F0003D8              XPSD,0    RETURN        TRACC=10   I9=1
1 000E1   0F0003D8              XPSD,0    RETURN        TRACC=11   I9=1
1 000E2   0F0003D8              XPSD,0    RETURN        TRACC=12   I9=1
1 000E3   0F0003D8              XPSD,0    RETURN        TRACC=13   I9=1
1 000E4   0F0003D8              XPSD,0    RETURN        TRACC=14   I9=1
1 000E5   0F0003D8              XPSD,0    RETURN        TRACC=15   I9=1
```

```
                                         PAGE
                                *                                    PARITY INTERUPT SERVICE ROUTINE
1 000E6                                  BOUND 8
1 000E6   00000000 A   PARITY            PZE,0     0
1 000E7   00000000 A                     PZE,0     0
1 000E8   000000EA                       PZE,0     PARITY+4
1 000E9   00000000 A                     PZE,0     0
1 000EA   6C400010 A                     RD,4      X'10'              RECORD PARITY ERROR PLANS
1 000EB   2E000000 A                     WAIT,0    0
1 000EC   0E3003E0                       LPSD,3    REPEAT             RELEASE PARITY INTERRUPT REPEAT TES
                                *                                    INPUT/OUTPUT TRAP
1 000EE                                  BOUND 8
1 000EE   00000000 A   INOUT             PZE
1 000EF   00000000 A                     PZE
1 000F0   000000F2                       PZE,0     $+2
1 000F1   00000000 A                     PZE
1 000F2   6E000001 A                     AIO,0     1                  ACKNOWLEDGE INTERRUPT
1 000F3   0E3003DC                       LPSD,3    IOREL
1 000F4   703000EE                       LCF       INOUT
1 000F5   0F0003D8     IORET             XPSD,0    RETURN
                                *                                    INTERUPT BUTTON SERVICE ROUTINE
1 000F6                                  BOUND 8
1 000F6   00000000 A   RESET             PZE,0     0
1 000F7   00000000 A                     PZE,0     0
1 000F8   000000FA                       PZE,0     RESET+4
1 000F9   00000000 A                     PZE,0     0
1 000FA   323003E7                       LW,3      PASSES             RESET PASSES TO LAST SETTING
1 000FB   322003E6                       LW,2      ERRORS             RESET ERRORS TO LAST SETTING
1 000FC   32100113                       LW,1      SAVE               REINITIALIZE LOAD WITH LAST SETTING
1 000FD   2E000000 A                     WAIT,0    0
1 000FE   0E3003E0                       LPSD,3    REPEAT             REPEAT LAST TEST
1 000FF   00000000 A                     FILL      X'100'
```

```
                                    PAGE
1 00100   32200360     START    LW,2     ZERO           PRESET ERROR COUNT
1 00101   32300360              LW,3     ZERO           PRESET PASS COUNT
1 00102   32500327              LW,5     PCPINT         PARITY AND CONTROL PANEL INTERRUPT
1 00103   6D501200 A            WD,5     X'1200'        ARM AND ENABLE
1 00104   32100319              LW,1     NEG51
1 00105   3510031B              STW,1    LINE           INITIALIZE LINE COUNT
1 00106   32100341              LW,1     NEG2
1 00107   3510031C              STW,1    FIRST          RESET FIRST PASS COUNTER
1 00108   321002FA     CYCLE    LW,1     LOAD           PRESET LOAD FROM LIST
1 00109   32400360              LW,4     ZERO
1 0010A   35100113              STW,1    SAVE
1 0010B   32500326              LW,5     NOTAE          ALL BUT PARITY AND PANEL INTERRUPT
1 0010C   6D501100 A            WD,5     X'1100'        DISARM
1 0010D   6D501500 A            WD,5     X'1500'        DISABLE
1 0010E   352003E6              STW,2    ERRORS
1 0010F   353003E7              STW,3    PASSES
1 00110   32600317              LW,6     NEG12
1 00111   354C03C4              STW,4    TABLE+12,6     STORE ZEROS IN TABLE
1 00112   65600111              BIR,6    $-1
1 00113   32400610     SAVE     LW,4     LIST+C
1 00114   69300118              BCS,3    NOTEND         TEST FOR MODULE END
1 00115   4B30030D              AND,3    M1G15          DELETE MODULE COUNT
1 00116   20310000 A            AI,3     X'10000'       INCREMENT PASS COUNT
1 00117   68000108              BCR,0    CYCLE          PREPARE TO SET TABLE
1 00118   325002FB     NOTEND   LW,5     STORE
1 00119   32600004 A            LW,6     4              COUNT
1 0011A   3510011C     MOVE     STW,1    FROM           MOVE LIST TO TABLE
1 0011B   3550011D              STW,5    TO
1 0011C   32400610     FROM     LW,4     LIST+C
1 0011D   354003B8     TO       STW,4    TABLE+I
1 0011E   20100001 A            AI,1     1
1 0011F   20500001 A            AI,5     1
1 00120   6560011A              BIR,6    MOVE
1 00121   3510011C              STW,1    FROM           SET MODULE POINTER = NEXT MODULE
1 00122   32100318              LW,1     NE?16          RT2 TO VRTR
1 00123   3242040C              LW,4     RT2+16,1
```

```
                                     SUFFIX(2)
1 0013A  68100174           BCR,3    SETSHT
1 0014B  329002E5           LW,9     BYTINS
1 0014C  45800 2E5          CS,8     BYTINS
1 0014D  6830015F           BCR,3    BYTEST     BRANCH IF BYTE INSTRUCTION
1 0014E  325003C6           LW,5     TABLE+14   STORE CHANGES TO VNTR(TCH/BYTE STR
1 0014F  329002E1           LW,9     MSK2B
1 00150  458002E2           CS,8     MSK09
1 00151  68300159           BCR,3    $+8        SKIP IF FSW
1 00152  21100001 A         CI,1     1
1 00153  68200159           BCR,2    $+6        BRANCH IF NOT OVER 1
1 00154  22100002 A         LI,1     2
1 00155  35500156           STW,5    $+1
1 00156  32D203EB           LW,13    RT1-1,1
1 00157  35D00004 A         STW,13   4
1 00158  354002EF           STW,4    INDX
1 00159  321003C7           LW,1     TABLE+15
1 0015A  3550015B           STW,5    $+1
1 0015B  32D203EB           LW,13    RT1-1,1    LW,13   RT1-1,VRTR-1,1
1 0015C  35D2053D           STW,13   VRTR-1,1
1 0015D  6410015B           BDR,1    $-2
1 0015E  68000174           BCR,0    SETSHT
1 0015F  322003C6   BYTEST  LW,2     TABLE+14   CHANGES TO VNTR BYTE STRING
1 00160  3230030A           LW,3     VNTRCH
1 00161  321003C7           LW,1     TABLE+15
1 00162  68300168           BCR,3    $+6
1 00163  72D40000 A         LB,13    0,2
1 00164  75D60000 A         STB,13   0,3
1 00165  20200001 A         AI,2     1
1 00166  20300001 A         AI,3     1
1 00167  64100163           BDR,1    $-4
1 00168  324003C2           LW,4     TABLE+10
1 00169  354002EF           STW,4    INDX
1 0016A  324003C3           LW,4     TABLE+11
1 0016B  329002E6           LW,9     INSMSK
1 0016C  458002F7           CS,8     EBSINS
1 0016D  68300170           BCR,3    $+3        BRANCH IF EBS
1 0016E  458002E8           CS,8     TBSINS
1 0016F  69300171           BCS,3    $+2        BRANCH IF NOT TBS
```

```
400   1 00170  326002EC          LW,6     SHT1RT    SHORT 1 RETURN IF EBS OR TBS
401   1 00171  458002E9          CS,8     CBSINS
402   1 00172  69300174          BCS,3    $+2
403   1 00173  327002EA          LW,7     CBSLW     PRESET CHANGE IF CBS
404   1 00174  3540053F  SETSHT  STW,4    VRTR+1
405   1 00175  35600278          STW,6    SHTRET    STORE SHORT 1 OR SHORT 2 RETRURN
406   1 00176  35700269          STW,7    VMTCH     STORE VMT CHANGE OR BRANCH
407   1 00177  32C003B9          LW,12    TABLE+1   INSTRUCTION
408   1 00178  35C003CD          STW,12   INSTR
409   1 00179  32C00047          LW,12    XPSD      XPSD 0, RETURN
410   1 0017A  35C00275          STW,12   LOC+1
411   1 0017B  32C003CE          LW,12    IA        INDIRECT ADDRESS
412   1 0017C  35C002EB          STW,12   WKIA
413   1 0017D  32800308          LW,8     LOC2AD
414   1 0017E  358003DA          STW,8    RETURN+2  SET RETURN TO LOC+2
415   1 0017F  324003BA          LW,4     TABLE+2   PSW1  IN
416   1 00180  4B40030C          AND,4    LINKADD   SELECT LINK ADDRESS AND DELETE MS.
417   1 00181  354003E2          STW,4    PSW1
418   1 00182  32500360          LW,5     ZERO      CLEAR R5
419   1 00183  4B40030B          AND,4    COND      CLEAR ADDRESS PORTION OF PSW1
420   1 00184  0E0003E2 ->244    LPSD,0   PSW1      LINKAGE
```

```
                                   PAGE
                          *                                     SET XPSD FOR NOA TRAP
1 00185   32500310      SI9NA0    LW,5     I9                   SET I9=1
1 00186   4850032B      RI9NA0    EOR,5    NA0XD                SET I9=0
1 00187   35500040                STW,5    NA0TR
1 00188   4840032C                EOR,4    NA0AD
1 00189   35400060                STW,4    NA0+2                SET PSW1 BITS 0-11 FOR NA0 TRAP
1 0018A   68000244                BCR,0    SETPSW
                          *                                     SET PSW1 BITS 0-11 FOR UII TRAP
1 0018B   4840032D      UIISW     EOR,4    UIIAD
1 0018C   35400074                STW,4    UII+2
1 0018D   68000244                BCR,0    SETPSW
                          *                                     SET PSW1 BITS 0-11 FOR SL TRAP
1 0018E   4840032E      SLSW      EOR,4    SLAD
1 0018F   3540007A                STW,4    SL+2
1 00190   68000244                BCR,0    SETPSW
                          *                                     SET PSW1 BITS 0-11 FOR EXP0 TRAP
1 00191   4840032F      EXP0SW    EOR,4    FXP0AD
1 00192   35400080                STW,4    FXP0+2
1 00193   68000244                BCR,0    SETPSW
                          *                                     SET PSW1 BITS 0-11 FOR FLPF TRAP
1 00194   48400330      FLPFSW    EOR,4    FLPFAD
1 00195   35400086                STW,4    FLPF+2
1 00196   6800018C                BCR,0    UIISW+1
                          *
1 00197   48400331      DFSW      EOR,4    DFAD                 SET PSW1 BITS 0-11 FOR DF TRAP
1 00198   3540008C                STW,4    DF+2
1 00199   6800018C                BCR,0    UIISW+1
```

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                                         SUFFIX(2)
                                         PAGE
                              *                                    SET PSW1 BITS 0-11 FOR WDTR TRAP
  1 0019A      48400332       WDTRSW     EOR,4      WDTRAD
  1 0019B      35400092                  STW,4      WDTR+2
  1 0019C      68000244                  BCR,0      SETPSW
                              *                                    SET XPSD FOR CAL1
  1 0019D      32500310       SI9CL1     LW,5       I9              SET I9=1
  1 0019E      48500333       RI9CL1     EOR,5      CAL1XD          SET I9=0
  1 0019F      35500048                  STW,5      CAL1TR
  1 001A0      48400337                  EOR,4      CAL1AD
  1 001A1      35400098                  STW,4      CAL1+2
  1 001A2      68000244                  BCR,0      SETPSW
                              *                                    SET XPSD FOR CAL2
  1 001A3      32500310       SI9CL2     LW,5       I9              SET I9=1
  1 001A4      48500334       RI9CL2     EOR,5      CAL2XD          SET I9=0
  1 001A5      35500049                  STW,5      CAL2TR
  1 001A6      48400338                  EOR,4      CAL2AD
  1 001A7      354000AC                  STW,4      CAL2+2
  1 001A8      68000244                  BCR,0      SETPSW
                              *                                    SET XPSD FOR CAL3
  1 001A9      32500310       SI9CL3     LW,5       I9              SET I9=1
  1 001AA      48500335       RI9CL3     EOR,5      CAL3XD          SET I9=0
  1 001AB      3550004A                  STW,5      CAL3TR
  1 001AC      48400339                  EOR,4      CAL3AD
  1 001AD      354000C0                  STW,4      CAL3+2
  1 001AE      68000244                  BCR,0      SETPSW
                              *                                    SET XPSD FOR CAL4
  1 001AF      32500310       SI9CL4     LW,5       I9              SET I9=1
  1 001B0      48500336       RI9CL4     EOR,5      CAL4XD          SET I9=0
  1 001B1      3550004B                  STW,5      CAL4TR
  1 001B2      4840033A                  EOR,4      CAL4AD
  1 001B3      354000D4                  STW,4      CAL4+2
  1 001B4      68000244                  BCR,0      SETPSW           RETURN TO LONG
```

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482                                              SUFFIX(2)
                                                 PAGE
483      1 001B5     00000000 A                  FILL       X'1CE'
         1 001B6     00000000 A
         1 001B7     00000000 A
         1 001B8     00000000 A
         1 001B9     00000000 A
         1 001BA     00000000 A
         1 001BB     00000000 A
         1 001BC     00000000 A
         1 001BD     00000000 A
         1 001BE     00000000 A
         1 001BF     00000000 A
         1 001C0     00000000 A
         1 001C1     00000000 A
         1 001C2     00000000 A
         1 001C3     00000000 A
         1 001C4     00000000 A
         1 001C5     00000000 A
         1 001C6     00000000 A
         1 001C7     00000000 A
         1 001C8     00000000 A
         1 001C9     00000000 A
         1 001CA     00000000 A
         1 001CB     00000000 A
         1 001CC     00000000 A
         1 001CD     00000000 A
484                                  *                                          ERRORLEVEL 2
485      1 001CE                                 BOUND 8
486      1 001CE     00000000 A      ERROR       PZE
487      1 001CF     00000000 A                  PZE
488      1 001D0     000001D2                    PZE,0      ERROR+4
489      1 001D1     00000000 A                  PZE
490      1 001D2     32800006 A                  LW,8       6               PICK UP RESULT
491      1 001D3     48800007 A                  EOR,8      7               COMPARE WITH PREDERMINED RESULT
492      1 001D4     693001D6                    BCS,3      TSTDVC          DIFF      0
493      1 001D5     0E0001CE                    LPSD,0     ERROR
494      1 001D6     652001D7        TSTDVC      BIR,2      *+1             INCREMENT ERROR COUNTER
```

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                                          SUFFIX(2)
1 001D7   6D000041 A            WD,0      X'41'      TURN ON ALARM
1 001D8   4DB00001 A            TIO,11    TYPE       PREPARE FOR TYPEWRITER USAGE
1 001D9   4BB0030E              AND,11    603        SELECT TYPEWRITER STATUS INFO
1 001DA   683001E1              BCR,3     EDIT       TYPEWRITER READY
1 001DB   4BB0030E              EOR,11    603
1 001DC   683001D8              BCR,3     $-4
1 001DD   6C000000 A   HLTEST   RD,0      0          TYPEWRITER BUSY
1 001DE   691001E0              BCS,1     NOHALT     READ SENSE SWITCHES
1 0C1DF   2E000000 A            WAIT
1 001E0   0E0001CE     NOHALT   LPSD,0    ERROR      COMMON ERROR HALT
```

203

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505
506
507     1 001E1     32C002FC     *
508     1 001E2     32900315     EDIT      LW,12     STRMG1        EDIT-LEVEL 3
509     1 001E3     32A00005 A             LW,9      NEG8           SET STORAGE WORD
510     1 001E4     693001E6               LW,10     5
511     1 001E5     3290033F               BCS,3     REPORT+1       TEST RS=0
512     1 001E6     32A002F5     REPORT    LW,9      NEG4           DISPLAY
513     1 001E7     35A001E8               LW,10     LOADR
514     1 001E8     32A00001 A             STW,10    LDREG          SET REGISTER PICKUP
515     1 001E9     35A003E8     LDREG     LW,10     1
516     1 001EA     359003E9               STW,10    WORD           PICK UP REGISTER 1 THRU 8(D'16') OR A
517     1 001EB     32F00341               STW,9     COUNT
518     1 001EC     320002F6               LW,15     NEG2
519     1 001ED     32A002F8               LW,0      LWN            SET WORD COUNT(H)=2
520     1 001EE     32B002F0               LW,10     LWFRM          SET N=-4,-4
521     1 001EF     4B900313               LW,11     ANFR0          SET FRAME = F0F0F0F0, F0F0F0F0
522     1 001F0     693001F5               AND,9     ONE            SET CHAR POSITIONS 1234,5678
523     1 001F1     32F00314               BCS,3     ODD            TEST COUNT EVEN
524     1 001F2     320002F7     EVEN      LW,15     NEG3
525     1 001F3     32A002F9               LW,0      LWN2           SET WORD COUNT(H)=3
526     1 001F4     32B002F1               LW,10     LWFRM2         SET N=-2,-1,-2
527     1 001F5     32E002F2               LW,11     ANFR2          SET FRAME=40404040,F0F0F0F0,F0F0F0F0
528     1 001F6     350001F9     ODD       LW,14     ARMK           SET CHAR POSITIONS   12,3456,78
529     1 001F7     35A001FA     WORDS     STW,0     SETN           SET DIGIT PICK = BITS 0-3, 4-7, ETC
530     1 001F8     35C00215               STW,10    SETFRM         SET NUMBER PICK UP
531     1 001F9     3200033F               STW,12    STRMD          SET FRAME PICK UP
532     1 001FA     32D00344     SETN      LW,0      NUMBER         SET STORAGE LOCATION
533     1 001FB     35B00210     SETFRM    LW,13     FRAME          SET NUMBER
534     1 001FC     35D003EB     BYTES     STW,11    ANDF           SET FRAME (FINAL CHAR BYTE POSITION
535     1 001FD     35E00205               STW,13    WK0            SET FILTER
536     1 001FE     32A002F3               STW,14    ANDM           SAVE FRAME
537     1 001FF     32C0033F               LW,10     LWBIT          SET MASK (ORIGINAL CHAR POSITION)
538     1 00200     32D00340               LW,12     NEG4           SET BIT PICK UP
                                           LW,13     ZERO           SET BIT COUNT
                                                                    SET CHAR GENERATOR TO ZERO
```

```
                                      PAGE
1 00201   35A00203   BITS     STW,10    LWB
1 00202   35A00208            STW,10    LWBT
1 00203   3290033B   LWB      LW,9      BIT        PICK UP BIT 1,2,4OR 8
1 00204   4B9003E8            AND,9     WORD       (BIT)*(WORD)
1 00205   4B900349   ANDM     AND,9     MASK       (BIT)*(WORD)*(MASK)
1 00206   69300208            BCS,3     LWBT       LWBT IF WORD HAS BIT IN MASK POSITI
1 00207   0E0003DE            LPSD,0    BUMP
1 00208   3290033B   LWBT     LW,9      BIT        PICK UP BIT
1 00209   48D00009 A          EOR,13    9          MERGE BIT WITH CHAR BEING CONSTRUCT
1 0020A   65A00208   BUMPER   BIR,10    $+1        INCREMENT BIT PICK UP
1 0020B   65C00201            BIR,12    BITS       CONTINUE CHAR CONSTRUCTION
1 0020C   4BD00350            AND,13    F          PICK OF BINARY 4 BIT CHAR.
1 0020D   48D002F4            EOR,13    LWBYTE     CONSTRUCT BYTE PICK UP WORD
1 0020E   35D0020F            STW,13    LWBY
1 0020F   32D00360   LWBY     LW,13     BYTE       PICK UP COVERTED BYTE
1 00210   4BD00351   ANDF     AND,13    FILTER     SELECT DESIRED TYTE
1 00211   48D003EB            EOR,13    WKO        MERGE BYTE INTO CONVERTED WORD
1 00212   65B00213            BIR,11    $+1        INCREMENT CONVERTED BYTE POSITION
1 00213   65E00214            BIR,14    $+1        INCREMENT SELECTED CHAR POSITION
1 00214   650001FB            BIR,0     BYTES      TEST FOR N CHAR'S
1 00215   35D003A4   STRWD    STW,13    IMAGE+1    STORE CONVERTED WORD
1 00216   320001F9            LW,0      SETN       SET NUMBER PICK UP
1 00217   32A001FA            LW,10     SETFRM     SET FRAME PICK UP
1 00218   32C00215            LW,12     STRWD      PICK UP STORE WORD
1 00219   6500021A            BIR,0     $+1        INCREMENT NUMBER PICK UP
1 0021A   65A0021B            BIR,10    $+1        INCREMENT FRAME PICK UP
1 0021B   65C0021C            BIR,12    $+1        INCREMENT STORE LOCATION
1 0021C   65F001F6            BIR,15    WORDS      INCREMENT M - BRANCH IF M NOT ZERO
1 0021D   329003E9            LW,9      COUNT      SET COUNT
1 0021E   32A001E8            LW,10     LDREG      SET REGISTER PICK UP
1 0021F   65A00220            BIR,10    $+1        INCREMENT REGISTER PICK UP
1 00220   659001E7            BIR,9     LDREG-1    BRANCH TO LDREG IF COUNT NOT ZERO
```

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                                        SUFFIX(2)
                                        PAGE
572
573                                     *
574     1 00221  32F0031B                LW,15    LINE        OUTPUT-LEVEL 3
575     1 00222  32E0031C                LW,14    FIRST        LINE COUNT (-51)
576     1 00223  65E00227                BIR,14   SKIP6        =-2 FIRST TIME
577     1 00224  65F0022C                BIR,15   LINOUT       FIRST TIME THRU
578     1 00225  32000370                LW,0     PSIXCR       LINE COUNT NOT ZERO
579     1 00226  0F000238                XPSD,0   PRINT
580     1 00227  32000371    SKIP6       LW,0     PTITLE       OUTPUT 6 CAR. RET.
581     1 00228  0F000238                XPSD,0   PRINT
582     1 00229  32000372                LW,0     PHEAD        NEW PAGE TITLE
583     1 0022A  0F000238                XPSD,0   PRINT
584     1 0022B  32F00319                LW,15    NEG51        NEW HEADING
585     1 0022C  32000374    LINOUT      LW,0     PLONGL       RESET LINE COUNT
586     1 0022D  32A00005 A              LW,10    5            SET UP DISPLAY PRINTOUT
587     1 0022E  69300230                BCS,3    I0           PICK UP IDENTIFIER
588     1 0022F  32000373                LW,0     PSHRTL
589     1 00230  0F000238    I0          XPSD,0   PRINT       SET UP RECORD PRINTOUT
590     1 00231  35F0031B                STW,15   LINE
591     1 00232  35E0031C                STW,14   FIRST        SAVE NEW LINE COUNT
592     1 00233  6D000040 A              WD,0     X'40'        SAVE NEW FIRST PASS INDICATOR
593     1 00234  0E000236                LPSD,0   GETOUT      TURN OFF ALARM
594     1 00236                          BOUND 8
595     1 00236  003001DD    GETOUT      PZE,3    HLTEST
596     1 00237  00000000 A              PZE
```

```
                                               SUFFIX(2)
                                               PAGE
                                   *                                        PRINT-LEVEL 4
  1 00238                                      BOUND 8
  1 00238    00000000 A    PRINT               PZE
  1 00239    00000000 A                        PZE
  1 0023A    0000023C                          PZE,0     PRINT+4
  1 0023B    00000000 A                        PZE
  1 0023C    4CB00001 A    BUSY                SIO,11    TYPE            SELECT TYPEWRITER FOR OUTPUT
  1 0023D    4BB0030E                          AND,11    6Q3
  1 0023E    65300243                          BCR,3     EXITIO          READY
  1 0023F    48B0030E                          EOR,11    6Q3
  1 00240    6830023C                          BCR,3     BUSY            BUSY
  1 00241    4FB00001 A                        HIO,11    TYPE            UNAVAILABLE OR INOPERATIVE
  1 00242    2E000000 A                        WAIT
  1 00243    0E000238      EXITIO              LPSD,0    PRINT
```

```
                                        SUFFIX(2)
                                        PAGE
 1 00244   324003BA   SETPSW   LW,4     TABLE+2
 1 00245   4B40030B            AND,4    COND          CLEAR ADDRESS
 1 00246   48400309            EOR,4    LOCADD        SET ADDRESS TO LOC
 1 00247   354003E2            STW,4    PSW1
 1 [illegible]   32100318            LW,1     NEG16         RT2 TO BRT
 1 [illegible]   32D2040C            LW,13    RT2+16,1
 1 0024A   35D2053E            STW,13   VRT+16,1
 1 0024B   65100249            BIR,1    $-2
 1 0024C   32C003BD            LW,12    TABLE+5       R120 AND R1[illegible] TO VRTR
 1 0024D   32D003C1            LW,13    TABLE+9
 1 0024E   15C0054A            STD,12   VRTR+12
 1 0024F   3210031A            LW,1     NEG64         PRESET FMT
 1 00250   32C003C4            LW,12    TABLE+12
 1 00251   35C00252            STW,12   $+1
 1 00252   3272045C            LW,7     MT1+64,1      LW,7      MT1+64,1+DP+64,1
 1 00253   3572058E            STW,7    FMT+64,1
 1 00254   65100252            BIR,1    $-2
 1 00255   320003EC            LW,0     RT1
 1 00256   122003EE            LD,2     RT1+2         LOAD
 1 00257   124003F0            LD,4     RT1+4         RT1 TABLE
 1 00258   126003F2            LD,6     RT1+6         IF
 1 00259   128003F4            LD,8     RT1+8         STM,
 1 0025A   12A003F6            LD,10    RT1+10        PSM
 1 0025B   12E003FA            LD,14    RT1+14        OR PSW
 1 0025C   122003FE   LD2?     LD,2     RT2+2
 1 0025D   12400400            LD,4     RT2+4
 1 0025E   12600402            LD,6     RT2+6
 1 0025F   12800404            LD,8     RT2+8
 1 00260   12A00406            LD,10    RT2+10
 1 00261   12E0040A            LD,14    RT2+14
 1 00262   320003BE            LW,0     TABLE+6
 1 00263   3210031A   SHORT1   LW,1     NEG64         PRESET V[illegible]
 1 00264   32D003C5            LW,13    TABLE+13
 1 00265   35D00266            STW,13   $+1
 1 00266   32D2045C            LW,13    MT1+64,1      LW,13     MT1+64,1/EP1+64,1
 1 00267   35D205D0            STW,13   VMT+64,1
```

```
                                    SUFFIX(2)
1 00268   65100266             BIR,1       $-2
1 00269   321003C7    VMTCH    LW,1        TABLE+15          (LW,1   TABLE+15)/BCR,/   SHORT2)
1 0026A   32D203C7             LW,13       TABLE+15,1
1 0026B   35D2053F             STW,13      VMT-1,1
1 0026C   6410026A             BDR,1       $-2
1 0026D   32C003[illegible]    SHORT2   LW,12       TABLE+6           MEMORY 1 IN
1 0026E   32D003[illegible]             LW,13       TABLE+10          MEMORY 2 IN.
1 0026F   15C003[illegible]             STD,12      MEMORY
1 00270   321002EF             LW,1        INDX
1 00271   32C003[illegible]             LW,12       TABLE+4           R12/R1 IN
1 00272   32D003C0             LW,13       TABLE+8           R12 IN
1 00273   0E000332             LPSD,0      PSW1              R13 IN
1 00274   670003CD    LOC      EXU         INSTR             EXECUTE INSTRUCTION
1 00275   0F0003D3             XPSD,0      RETURN
1 00276   6C000000 A           RD,0        0                 READ BREAKPOINTS
1 00277   68800282             BCR,8       TESTS             BRANCH IF BREAKPOINT 1 RESET
1 00278   68000263    SHTRET   BCR,0       SHORT1            BCR,0    SHORT1/SHORT2
1 00279   3500052E    STRG     STW,0       VRT
1 0027A   3510052F             STW,1       VRT+1
1 0027B   15200530             STD,2       VRT+2
1 0027C   15400532             STD,4       VRT+4
1 0027D   15600534             STD,6       VRT+6
1 0027E   15800536             STD,8       VRT+8
1 0027F   15A00538             STD,10      VRT+10
1 00280   15C0053A             STD,12      VRT+12
1 00281   15E0053C             STD,14      VRT+14
1 00282   321000F8    TESTS    LW,1        RESET+2
1 00283   351003DA             STW,1       RETURN+2          SET RETURN TO [illegible]+2
1 00284   32100113             LW,1        SAVE              LIST POINTER
1 00285   322003[illegible]             LW,2        ERRORS            ERROR COUNT
1 00286   323003[illegible]7             LW,3        PASSES            NUMBER OF PASS
1 00287   324003B9             LW,4        TABLE+1           INSTRUCTION
1 00288   325003[illegible]D             LW,5        INSTID            TEST INSTRUCTION
1 00289   327003B9             LW,7        TABLE+1
1 0028A   326003CD             LW,6        INSTR
1 0028B   0F0001CE             XPSD,0      ER[illegible]
1 0028C   32[illegible]031E             LW,[illegible]        X[illegible]D            TEST XPSD
1 0028D   3[illegible]7             LW,7        X[illegible]D
```

```
687    1 0028E    32600275
688    1 0028F    0F0001CE
689    1 00290    3250031F
690    1 00291    327003CE
691    1 00292    326002EB
692    1 00293    0F0001CE
693    1 00294    32500320
694    1 00295    3270053F
695    1 00296    3260052F
696    1 00297    0F0001CE
697    1 00298    32500321
698    1 00299    327003BB
699    1 0029A    326003D8
700    1 0029B    0F0001CE
701    1 0029C    20500001 A
702    1 0029D    327003E3
703    1 0029E    326003D9
704    1 0029F    0F0001CE
705    1 002A0    32100318
706    1 002A1    32500322
707    1 002A2    3510033A
708    1 002A3    327005AE
709    1 002A4    326005BE
710    1 002A5    32100113
711    1 002A6    0F0001CE
712    1 002A7    20500001 A
713    1 002A8    321003EA
714    1 002A9    651002A3
715    1 002AA    328003D3
716    1 002AB    329002E5
717    1 002AC    458002E5
718    1 002AD    683002D7
719    1 002AE    32100113
720    1 002AF    32500323
721    1 002B0    327003FF
722    1 002B1    326003D4
723    1 002B2    0F0001CE
724    1 002B3    20500001 A
```

```
                SUFFIX(2)
                LW,6    LOC+1
                XPSD,0  ERROR
                LW,5    IAID
                LW,7    IA
                LW,6    WKIA
                XPSD,0  ERROR
                LW,5    IXID
                LW,7    VRTR+1
                LW,6    VRT+1
                XPSD,0  ERROR
                LW,5    PSDWID
                LW,7    TABLE+3
                LW,6    RETURN
                XPSD,0  ERROR
                AI,5    1
                LW,7    PSW2
                LW,6    RETURN+1
                XPSD,0  ERROR
                LW,1    NEG1
                LW,5    REGID
STCNT1          STW,1   SVECNT
                LW,7    VRTR+16,1
                LW,6    VRT+16,1
                LW,1    SAVE
                XPSD,0  ERROR
                AI,5    1
                LW,1    SVECNT
                BIR,1   STCNT1
                LW,8    TABLE+1
                LW,9    BYTINS
                CS,8    BYTINS
                BCR,3   TSTFIT
                LW,1    SAVE
                LW,5    MEMID
                LW,7    TABLE+7
                LW,6    MEMORY
                XPSD,0  ERROR
                AI,5    1
```


TEST INDIRECT ADDRESSING

TEST INDEXING

TEST PSDW1

TEST PSDW2

TEST REGISTERS

BRANCH BY BYTE INSTRUCTIONS

TEST MEMORY WORD 1

TEST MEMORY WORD 2

```
725   1 002B4  327003C3          LW,7    TABLE+11
726   1 002B5  326003D5          LW,6    MEMORY+1
727   1 002B6  0F0001CE          XPSD,0  ERROR
728   1 002B7  3210031A  TSTFMT  LW,1    NEG64          TEST FMT
729   1 002B8  32C003C4          LW,12   TABLE+12
730   1 002B9  35C002BC          STW,12  $+3
731   1 002BA  32500324          LW,5    FMTID
732   1 002BB  351003EA  STCNT2  STW,1    SVECNT
733   1 002BC  3272045C          LW,7    MT1+64,1       LW,7    MT1+64,1/DP+64,1
734   1 002BD  3262058E          LW,6    FMT+64,1
735   1 002BE  32100113          LW,1    SAVE
736   1 002BF  0F0001CE          XPSD,0  ERROR
737   1 002C0  20500001  A       AI,5    1
738   1 002C1  321003EA          LW,1    SVECNT
739   1 002C2  65100288          BIR,1   STCNT2
740   1 002C3  3210031A  TSTVMT  LW,1    NEG64          TEST VMT
741   1 002C4  32500325          LW,5    VMTID
742   1 002C5  351003EA  STCNT3  STW,1    SVECNT
743   1 002C6  32720610          LW,7    VMTR+64,1
744   1 002C7  326205D0          LW,6    VMT+64,1
745   1 002C8  32100113          LW,1    SAVE
746   1 002C9  0F0001CE          XPSD,0  ERROR
747   1 002CA  20500001  A       AI,5    1
748   1 002CB  321003EA          LW,1    SVECNT
749   1 002CC  651002C5          BIR,1   STCNT3
750   1 002CD  32500360          LW,5    ZERO           SET IDENTIFIER FOR REPORT
751   1 002CE  32600307          LW,6    RETEND         SET RETURN FROM OUTPUT=END
752   1 002CF  356001CE          STW,6   ERROR
753   1 002D0  32100113          LW,1    SAVE
754   1 002D1  6C000000  A       RD,0    0
755   1 002D2  692001D8          BCS,2   TSTDVC+2       SS3 = REPORT
756   1 002D3  6D000040  A  END   WD,0    X'40'          TURN OFF ALARM
757   1 002D4  653002D5          BIR,3   $+1            INCREMENT MODULE COUNTER
758   1 002D5  6C000000  A       RD,0    0              READ SENSE SWITCHES
759   1 002D6  69400109          BCS,4   CYCLE+1
760   1 002D7  3210011C          LW,1    FROM           RESTORE NEW LIST ADDRESS
761   1 002D8  0E0003E0          LPSD,0  MODULE         UPDATEN POINTER
```

```
                                          PAGE
                                   *                                      CONSTANTS AND WORKING STORAGE
 1 002D9    00000000 A   MEM210    DATA     0,-1
 1 002DA    FFFFFFFF A
 1 002DB    0000041C     LWMT12    PZE,0    MT1
 1 002DC    0000045C               PZE,0    MT2
 1 002DD    6880027A     STRGP1    BCR,8    STRG+1
 1 002DE    68800282     BCRTST    BCR,8    TESTS
 1 002DF    68800279     STOREG    BCR,8    STRG
 1 002E0    0B000000 A   STMSK     J        11,0
 1 002E1    2B000000 A   MSK2B     J        X'2B',0
 1 002E2    09000000 A   MSK09     J        9,0
 1 002E3    7E000000 A   CVMASK    DATA     X'7E000000'
 1 002E4    28000000 A   CVINST    DATA     X'28000000'
 1 002E5    40000000 A   BYTINS    DATA     X'40000000'
 1 002E6    7F000000 A   INSMSK    DATA     X'7F000000'
 1 002E7    63000000 A   EBSINS    DATA     X'63000000'
 1 002E8    41000000 A   TBSINS    DATA     X'41000000'
 1 002E9    60000000 A   CBSINS    DATA     X'60000000'
 1 002EA    321003C7     CBSLW     LW,1     TABLE+15
 1 002EB    00000000 A   WKIA      PZE
 1 002EC    68000263     SHT1RT    BCR,0    SHORT1
 1 002ED    6800026D     SHT2RT    BCR,0    SHORT2
 1 002EE    00020000 A   IXMSK     DATA     X'20000'
 1 002EF    00000000 A   INDX      PZE
 1 002F0    4BD00351     ANFR0     AND,13   FILTER                    PICK OFF CONVERTED BYTE
 1 002F1    4BD00353     ANFR2     AND,13   FILTER+2
 1 002F2    4B900349     ANMK      AND,9    MASK                      PICK OFF CHAR. TO BE CONVERTED
 1 002F3    3290033B     LWBIT     LW,9     BIT                       PICK UP MARCHING BITS
 1 002F4    32D00360     LWBYTE    LW,13    BYTE                      SELECT BYTE
 1 002F5    32A00001 A   LOADR     LW,10    1                         PICK UP REGISTERS FOR OUTPUT
 1 002F6    3200033F     LWN       LW,0     NUMBER                    PICK UP NUMBERS
 1 002F7    32000341     LWN2      LW,0     NUMBER+2
 1 002F8    32D00344     LWFRM     LW,13    FRAME                     PICK UP FRAMES
 1 002F9    32D00346     LWFRM2    LW,13    FRAME+2
 1 002FA    32400610     LOAD      LW,4     LIST                      LOAD TRANSFER VEHICAL WITH DATA MODU
 1 002FB    354003B8     STORE     STW,4    TABLE                     SET TABLE
```

```
798   1 002FC   35D003A4     STRMG1   STW,13   IMAGE+1
799   1 002FD   324003ED     LWRT1    LW,4     RT1+1
800   1 002FE   324003FD     LWRT2    LW,4     RT2+1
801   1 002FF   68000263     LDRT1    BCR,0    SHORT1
802   1 00300   122003FE     LDRT2    LD,2     RT2+2
803   1 00301   00000590     IACV     PZE,0    VMT
804   1 00302   000003D4     IAPUPU   PZE,0    MEMORY
805   1 00303   0000052E     IASTM    PZE,0    VRT
806   1 00304   0000040C     IALM     PZE,0    RT3
807   1 00305   40000000 A   LMSTM    DATA     X'40000000'
808   1 00306   49000000 A   STM      DATA     X'49000000'
809   1 00307   000002D3     RETEND   PZE,0    END                    RETURN TO END
810   1 00308   00000276     LOC2AD   PZE,0    LOC+2
811   1 00309   00000274     LOCADD   PZE,0    LOC
812   1 0030A   00001740     VMTRCH   J        0,BA(VMTR)
813   1 0030B   FFF00000 A   CONQ     DATA     X'FFF00000'
814   1 0030C   FF3FFFFF A   LINKADD  DATA     X'FF3FFFFF'
815   1 0030D   FFFF0000 A   M1015    DATA     X'FFFF0000'
816   1 0030E   60000000 A   603      DATA     X'60000000'
817   1 0030F   20000000 A   203      DATA     X'20000000'
818   1 00310   00400000 A   I9       DATA     X'400000'
819   1 00311   00B0B000 A   SEP      DATA     X'B0B000'
820   1 00312   0000000C A   CEE      DATA     12
821   1 00313   00000001 A   ONE      DATA     1
822   1 00314   FFFFFFFD A   NEG3     DATA     -3
823   1 00315   FFFFFFF8 A   NEG8     DATA     -8
824   1 00316   FFFFFFF6 A   NEG10    DATA     -10
825   1 00317   FFFFFFF4 A   NEG12    DATA     -12
826   1 00318   FFFFFFF0 A   NEG16    DATA     -16
827   1 00319   FFFFFFCD A   NEG51    DATA     -51
828   1 0031A   FFFFFFC0 A   NEG64    DATA     -64
829   1 0031B   FFFFFFCD A   LINE     DATA     -51
830   1 0031C   FFFFFFFE A   FIRST    DATA     -2
831   1 0031D   10000000 A   INSTID   I        1,0                    INSTRUCTION
832   1 0031E   20000275     XPSDID   I        2,LOC+1                LOCATION+1
833   1 0031F   30000000 A   IAID     I        3,0                    INDIRECT ADDRESS
834   1 00320   40000001 A   IXID     I        4,1                    INDEX
835   1 00321   50000001 A   PSDWID   I        5,1                    PROGRAM STATUS DOUBLEWORD
```

```
1 00322   60000000 A  REGID    I         6,0              REGISTERS
1 00323   700003D4    MEMID    I         7,MEMORY         MEMORY WORDS
1 00324   7100054E    FMTID    CB,0      FMT
1 00325   72000590    VMTID    LB,0      VMT
1 00326   0000F7EF A  NOTAE    DATA      X'F7EF'
1 00327   00000810 A  PCPINT   DATA      X'810'
1 00328   00000020 A  IOINT    DATA      X'20'
1 00329   000000F4    IOAD     PZE,0     IORET-1
1 0032A   000001EA    MEMAD    P         MEMORY
1 0032B   0F00005E    NAOXD    XPSD,0    NAO
1 0032C   00000062    NAOAD    PZE,0     NAO+4
1 0032D   00000076    UIIAD    PZE,0     UII+4
1 0032E   0000007C    SLAD     PZE,0     SL+4
1 0032F   00000082    FXPOAD   PZE,0     FXPO+4
1 00330   00000088    FLPFAD   PZE,0     FLPF+4
1 00331   0000008E    DFAD     PZE,0     DF+4
1 00332   00000094    WDTRAD   PZE,0     WDTR+4
1 00333   0F000096    CAL1XD   XPSD,0    CAL1
1 00334   0F0000AA    CAL2XD   XPSD,0    CAL2
1 00335   0F0000BE    CAL3XD   XPSD,0    CAL3
1 00336   0F0000D2    CAL4XD   XPSD,0    CAL4
1 00337   0000009A    CAL1AD   PZE,0     CAL1+4
1 00338   000000AE    CAL2AD   PZE,0     CAL2+4
1 00339   000000C2    CAL3AD   PZE,0     CAL3+4
1 0033A   000000D6    CAL4AD   PZE,0     CAL4+4
1 0033B   11111111 A  BIT      DATA      X'11111111'
1 0033C   22222222 A           DATA      X'22222222'
1 0033D   44444444 A           DATA      X'44444444'
1 0033E   88888888 A           DATA      X'88888888'
1 0033F   FFFFFFFC A  NUMBER   DATA      -4,-4,-2,-4,-2
1 00340   FFFFFFFC A
1 00341   FFFFFFFE A
1 00342   FFFFFFFC A
1 00343   FFFFFFFE A
1 00344   F0F0F0F0 A  FRAME    DATA      X'F0F0F0F0'      2 WORDS
1 00345   F0F0F0F0 A           DATA      X'F0F0F0F0'
1 00346   4040F0F0 A           DATA      X'4040F0F0'      3 WORDS
1 00347   F0F0F0F0 A           DATA      X'F0F0F0F0'
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870     1 00348     F0F04040 A                 DATA      X'F0F04040'
871     1 00349     F0000000 A     MASK        DATA      X'F0000000'
872     1 0034A     0F000000 A                 DATA      X'F000000'
873     1 0034B     00F00000 A                 DATA      X'F00000'
874     1 0034C     000F0000 A                 DATA      X'F0000'
875     1 0034D     0000F000 A                 DATA      X'F000'
876     1 0034E     00000F00 A                 DATA      X'F00'
877     1 0034F     000000F0 A                 DATA      X'F0'
878     1 00350     0000000F A                 DATA      X'F'
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                                                  SUFFIX(2)
879                                              PAGE
880   1 00351    FF000000 A   FILTER   DATA      X'FF000000'
881   1 00352    00FF0000 A            DATA      X'FF0000'
882   1 00353    0000FF00 A            DATA      X'FF00'
883   1 00354    000000FF A            DATA      X'FF'
884   1 00355    FF000000 A            DATA      X'FF000000'
885   1 00356    00FF0000 A            DATA      X'FF0000'
886   1 00357    0000FF00 A            DATA      X'FF00'
887   1 00358    000000FF A            DATA      X'FF'
888   1 00359    FF000000 A            DATA      X'FF000000'
889   1 0035A    00FF0000 A            DATA      X'FF0000'
890   1 0035B    00000000 A            FILL      X'360'
      1 0035C    00000000 A
      1 0035D    00000000 A
      1 0035E    00000000 A
      1 0035F    00000000 A
```

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                                      SUFFIX(2)
                                      PAGE
1 00360   00000000 A   BYTE           DATA     0              0
1 00361   01010101 A                  DATA     X'01010101'    1
1 00362   02020202 A                  DATA     X'02020202'    2
1 00363   03030303 A                  DATA     X'03030303'    3
1 00364   04040404 A                  DATA     X'04040404'    4
1 00365   05050505 A                  DATA     X'05050505'    5
1 00366   06060606 A                  DATA     X'06060606'    6
1 00367   07070707 A                  DATA     X'07070707'    7
1 00368   08080808 A                  DATA     X'08080808'    8
1 00369   09090909 A                  DATA     X'09090909'    9
1 0036A   31313131 A                  DATA     X'31313131'    A
1 0036B   32323232 A                  DATA     X'32323232'    B
1 0036C   33333333 A                  DATA     X'33333333'    C
1 0036D   34343434 A                  DATA     X'34343434'    D
1 0036E   35353535 A                  DATA     X'35353535'    E
1 0036F   36363636 A                  DATA     X'36363636'    F
                       *                                      COMMAND PAIRS
1 00370   000001BB     PSIXCR         P        SIXCR
1 00371   000001BC     PTITLE         P        TITLE
1 00372   000001BD     PHEAD          P        HEAD
1 00373   000001BE     PSHRTL         P        SHORTL
1 00374   000001BF     PLONGL         P        LONGL
1 00376                               BOUND 8
1 00376   01000E00     SIXCR          JJ       1,TTL
1 00377   08000006 A                  DATA     X'8000006'
1 00378   01000E00     TITLE          JJ       1,TTL
1 00379   0800003A A                  DATA     X'800003A'
1 0037A   01000E3C     HEAD           JJ       1,HDG
1 0037B   08000050 A                  DATA     X'8000050'
1 0037C   01000E8C     SHORTL         JJ       1,IMAGE
1 0037D   0800002C A                  DATA     X'800002C'
1 0037E   01000E8C     LONGL          JJ       1,IMAGE
1 0037F   08000054 A                  DATA     X'8000054'
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                                           SUFFIX(2)
925                                        PAGE
926    1 00380     15151515 A    TTL       DATA      X'15151515'
927    1 00381     15151540 A              DATA      X'15151540'
928    1 00382     40404040 A              DATA      X'40404040'
929    1 00383     40404040 A              DATA      X'40404040'
930    1 00384     40404040 A              DATA      X'40404040'
931    1 00385     40404040 A              DATA      X'40404040'
932    1 00386     40404040 A              DATA      X'40404040'
933    1 00387     40404040 A              DATA      X'40404040'
934    1 00388     40404040 A              DATA      X'40404040'
935    1 00389     40E2E4C6 A              DATA      X'40E2E4C6'
936    1 0038A     C6C9E740 A              DATA      X'C6C9E740'
937    1 0038B     C5D9D9D6 A              DATA      X'C5D9D9D6'
938    1 0038C     D940C4C9 A              DATA      X'D940C4C9'
939    1 0038D     E2D7D3C1 A              DATA      X'E2D7D3C1'
940    1 0038E     E8404040 A              DATA      X'E8404040'
941    1 0038F     15404040 A    HDG       DATA      X'15404040'
942    1 00390     40D3C9E2 A              DATA      X'40D3C9E2'
943    1 00391     E3404040 A              DATA      X'E3404040'
944    1 00392     4040C5D9 A              DATA      X'4040C5D9'
945    1 00393     D9D6D9E2 A              DATA      X'D9D6D9E2'
946    1 00394     40404040 A              DATA      X'40404040'
947    1 00395     D7C1E2E2 A              DATA      X'D7C1E2E2'
948    1 00396     C5E24040 A              DATA      X'C5E24040'
949    1 00397     404040C9 A              DATA      X'404040C9'
950    1 00398     D5E2E340 A              DATA      X'D5E2E340'
951    1 00399     4040C9C4 A              DATA      X'4040C9C4'
952    1 0039A     C5D5E3C9 A              DATA      X'C5D5E3C9'
953    1 0039B     C6C9C5D9 A              DATA      X'C6C9C5D9'
954    1 0039C     40404040 A              DATA      X'40404040'
955    1 0039D     C9E24040 A              DATA      X'C9E24040'
956    1 0039E     4040E2C8 A              DATA      X'4040E2C8'
957    1 0039F     D6E4D3C4 A              DATA      X'D6E4D3C4'
958    1 003A0     40C2C540 A              DATA      X'40C2C540'
959    1 003A1     404040C4 A              DATA      X'404040C4'
960    1 003A2     C9C6C615 A              DATA      X'C9C6C615'
961    1 003A3     40404015 A    IMAGE     DATA      X'40404015'
```

```
962     1 003A4     00000000 A          SUFFIX(2)
        1 003A5     00000000 A          FILL      $+19
        1 003A6     00000000 A
        1 003A7     00000000 A
        1 003A8     00000000 A
        1 003A9     00000000 A
        1 003AA     00000000 A
        1 003AB     00000000 A
        1 003AC     00000000 A
        1 003AD     00000000 A
        1 003AE     00000000 A
        1 003AF     00000000 A
        1 003B0     00000000 A
        1 003B1     00000000 A
        1 003B2     00000000 A
        1 003B3     00000000 A
        1 003B4     00000000 A
        1 003B5     00000000 A
        1 003B6     00000000 A
```

```
                                                    SUFFIX(2)
963                                                 PAGE
964     1 003B8                                     BOUND 8
965     1 003B8     00000000 A    TABLE   FILL      $+20
        1 003B9     00000000 A
        1 003BA     00000000 A
        1 003BB     00000000 A
        1 003BC     00000000 A
        1 003BD     00000000 A
        1 003BE     00000000 A
        1 003BF     00000000 A
        1 003C0     00000000 A
        1 003C1     00000000 A
        1 003C2     00000000 A
        1 003C3     00000000 A
        1 003C4     00000000 A
        1 003C5     00000000 A
        1 003C6     00000000 A
        1 003C7     00000000 A
        1 003C8     00000000 A
        1 003C9     00000000 A
        1 003CA     00000000 A
        1 003CB     00000000 A
966     1 003CC     00000000 A    TEST    FILL      $+12
        1 003CD     00000000 A
        1 003CE     00000000 A
        1 003CF     00000000 A
        1 003D0     00000000 A
        1 003D1     00000000 A
        1 003D2     00000000 A
        1 003D3     00000000 A
        1 003D4     00000000 A
        1 003D5     00000000 A
        1 003D6     00000000 A
        1 003D7     00000000 A
967     1 003D8     00000000 A    RETURN  PZE
968     1 003D9     00000000 A            PZE
969     1 003DA     00000276              PZE,0     LOC+2
```

```
970     1 003DB     00000000 A
971     1 003DC     000000F4
972     1 003DD     00000000 A
973     1 003DE     0000020A
974     1 003DF     00000000 A
975     1 003E0     00000109
976     1 003E1     00000000 A
977     1 003E2     00000000 A
978     1 003E3     00000000 A
979     1 003E4     00000000 A
980     1 003E5     00000000 A
981     1 003E6     00000000 A
982     1 003E7     00000000 A
983     1 003E8     00000000 A
984     1 003E9     00000000 A
985     1 003EA     00000000 A
986     1 003EB     00000000 A
987     1 003EC
988
989           00000008
990     1 003EC     01234567 A
        1 003ED     FEDCBA98 A
991
989
990     1 003EE     01234567 A
        1 003EF     FEDCBA98 A
991
989
990     1 003F0     01234567 A
        1 003F1     FEDCBA98 A
991
989
990     1 003F2     01234567 A
        1 003F3     FEDCBA98 A
991
989
990     1 003F4     01234567 A
        1 003F5     FEDCBA98 A
```

```
          SUFFIX(2)
          PZE
I0REL     PZE,0     I0RET-1
          PZE
BUMP      PZE,0     BUMPER
          PZE
REPEAT    PZE,0     CYCLE+1
          PZE
PSW1      PZE
PSW2      PZE
CNT3CP    PZE
CNT4CP    PZE
ERR0RS    PZE
PASSES    PZE
WORD      PZE
COUNT     PZE
SVECNT    PZE
WK0       PZE
          BOUND 8
RT1       FILL      $
          D8        8
          DATA      X'1234567',X'FEDCBA98'

          ELSE
          D0        8
          DATA      X'1234567',X'FEDCBA98'

          ELSE
          D0        8
          DATA      X'1234567',X'FEDCBA98'

          ELSE
          D0        8
          DATA      X'1234567',X'FEDCBA98'

          ELSE
          D0        8
          DATA      X'1234567',X'FEDCBA98'
```

```
991
989
990     1 003F6     01234567 A
        1 003F7     FEDCBA98 A
991
989
990     1 003F8     01234567 A
        1 003F9     FEDCBA98 A
991
989
990     1 003FA     01234567 A
        1 003FB     FEDCBA98 A
991
992
993
994                                  RT2
                00000008
995     1 003FC     FEDCBA98 A
        1 003FD     01234567 A
996
994
995     1 003FE     FEDCBA98 A
        1 003FF     01234567 A
996
994
995     1 00400     FEDCBA98 A
        1 00401     01234567 A
996
994
995     1 00402     FEDCBA98 A
        1 00403     01234567 A
996
994
995     1 00404     FEDCBA98 A
        1 00405     01234567 A
996
994
995     1 00406     FEDCBA98 A
        1 00407     01234567 A
```

```
 SUFFIX(2)
ELSE
D0      8
DATA    X'1234567',X'FEDCBA98'

ELSE
D0      8
DATA    X'1234567',X'FEDCBA98'

ELSE
D0      8
DATA    X'1234567',X'FEDCBA98'

ELSE
FIN
FILL    $
D0      8
DATA    X'FEDCBA98',X'1234567'

ELSE
D0      8
DATA    X'FEDCBA98',X'1234567'

ELSE
D0      8
DATA    X'FEDCBA98',X'1234567'

ELSE
D0      8
DATA    X'FEDCBA98',X'1234567'

ELSE
D0      8
DATA    X'FEDCBA98',X'1234567'

ELSE
D0      8
DATA    X'FEDCBA98',X'1234567'
```

```
 996
 994
 995    1 00408     FEDCBA98 A
        1 00409     01234567 A
 996
 997
 998
 999    1 0040A     FEDCBA98 A
        1 0040B     01234567 A
 996
 997
 998                                  RT3
 999          00000008
1000    1 0040C     00000000 A
        1 0040D     FFFFFFFF A
1001
 999
1000    1 0040E     00000000 A
        1 0040F     FFFFFFFF A
1001
 999
1000    1 00410     00000000 A
        1 00411     FFFFFFFF A
1001
 999
1000    1 00412     00000000 A
        1 00413     FFFFFFFF A
1001
 999
1000    1 00414     00000000 A
        1 00415     FFFFFFFF A
1001
 999
1000    1 00416     00000000 A
        1 00417     FFFFFFFF A
1001
 999
1000    1 00418     00000000 A
        1 00419     FFFFFFFF A
```

```
  SUFFIX(2)
ELSE
D0      8
DATA    X'FEDCBA98',X'12345678'

ELSE
D8      8
DATA    X'FEDCBA98',X'12345678'

ELSE
FIN
FILL    $
D8      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1

ELSE
D0      8
DATA    0,-1
```

```
1001
 999
1000     1 0041A     00000000 A
         1 0041B     FFFFFFFF A
1001
1002
1003                                  MT1
1004          00000020
1005     1 0041C     F0F0F0F0 A
         1 0041D     0F0F0F0F A
1006
1004
1005     1 0041E     F0F0F0F0 A
         1 0041F     0F0F0F0F A
1006
1004
1005     1 00420     F0F0F0F0 A
         1 00421     0F0F0F0F A
1006
1004
1005     1 00422     F0F0F0F0 A
         1 00423     0F0F0F0F A
1006
1004
1005     1 00424     F0F0F0F0 A
         1 00425     0F0F0F0F A
1006
1004
1005     1 00426     F0F0F0F0 A
         1 00427     0F0F0F0F A
1006
1004
1005     1 00428     F0F0F0F0 A
         1 00429     0F0F0F0F A
1006
1004
1005     1 0042A     F0F0F0F0 A
         1 0042B     0F0F0F0F A
```

```
 SUFFIX(2)
ELSE
D8        8
DATA      0,-1

ELSE
FIN
FILL      $
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'

ELSE
D8        32
DATA      X'F0F0F0F0',X'F0F0F0F'
```

```
                                              SUFFIX(2)
1006                                         ELSE
1004                                         D0        32
1005    1 0042C      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 0042D      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 0042E      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 0042F      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 00430      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 00431      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 00432      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 00433      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 00434      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 00435      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 00436      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 00437      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 00438      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 00439      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 0043A      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 0043B      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
1005    1 0043C      F0F0F0F0 A              DATA      X'F0F0F0F0',X'F0F0F0F'
        1 0043D      0F0F0F0F A
1006                                         ELSE
1004                                         D0        32
```

```
                                               SUFFIX(2)
1005     1 0043E     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 0043F     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 00440     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 00441     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 00442     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 00443     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 00444     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 00445     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 00446     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 00447     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 00448     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 00449     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 0044A     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 0044B     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 0044C     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 0044D     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 0044E     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 0044F     OFOFOFOF A
1006                                        ELSE
1004                                        DO        32
1005     1 00450     FOFOFOFO A             DATA      X'FOFOFOFO',X'FOFOFOF'
         1 00451     OFOFOFOF A
```

```
1006                                                   SUFFIX(2)
1004                                                  ELSE
1005      1 00452     FOFOFOFO A                      DO        32
                                                      DATA      X'FOFOFOFO',X'FOFOFOF'
          1 00453     OFOFOFOF A
1006
1004                                                  ELSE
1005      1 00454     FOFOFOFO A                      DO        32
                                                      DATA      X'FOFOFOFO',X'FOFOFOF'
          1 00455     OFOFOFOF A
1006
1004                                                  ELSE
1005      1 00456     FOFOFOFO A                      DO        32
                                                      DATA      X'FOFOFOFO',X'FOFOFOF'
          1 00457     OFOFOFOF A
1006
1004                                                  ELSE
1005      1 00458     FOFOFOFO A                      DO        32
                                                      DATA      X'FOFOFOFO',X'FOFOFOF'
          1 00459     OFOFOFOF A
1006
1004                                                  ELSE
1005      1 0045A     FOFOFOFO A                      DO        32
                                                      DATA      X'FOFOFOFO',X'FOFOFOF'
          1 0045B     OFOFOFOF A
1006                                                  ELSE
1007                                                  FIN
1008                                       *
1009      1 0045C     00000001 A           MT2        DATA      1            MT2 USED WITH CAL-CVS
1010      1 0045D     00000002 A                      DATA      2
1011      1 0045E     00000004 A                      DATA      4
1012      1 0045F     00000008 A                      DATA      8
1013      1 00460     00000010 A                      DATA      X'10'
1014      1 00461     00000020 A                      DATA      X'20'
1015      1 00462     00000040 A                      DATA      X'40'
1016      1 00463     00000080 A                      DATA      X'80'
1017      1 00464     00000100 A                      DATA      X'100'
1018      1 00465     00000200 A                      DATA      X'200'
1019      1 00466     00000400 A                      DATA      X'400'
1020      1 00467     00000800 A                      DATA      X'800'
1021      1 00468     00001000 A                      DATA      X'1000'
1022      1 00469     00002000 A                      DATA      X'2000'
1023      1 0046A     00004000 A                      DATA      X'4000'
```

```
                                                  SUFFIX(2)
1024   1 0046B   00008000 A                      DATA      X'8000'
1025   1 0046C   00010000 A                      DATA      X'10000'
1026   1 0046D   00020000 A                      DATA      X'20000'
1027   1 0046E   00040000 A                      DATA      X'40000'
1028   1 0046F   00080000 A                      DATA      X'80000'
1029   1 00470   00100000 A                      DATA      X'100000'
1030   1 00471   00200000 A                      DATA      X'200000'
1031   1 00472   00400000 A                      DATA      X'400000'
1032   1 00473   00800000 A                      DATA      X'800000'
1033   1 00474   01000000 A                      DATA      X'1000000'
1034   1 00475   02000000 A                      DATA      X'2000000'
1035   1 00476   04000000 A                      DATA      X'4000000'
1036   1 00477   08000000 A                      DATA      X'8000000'
1037   1 00478   10000000 A                      DATA      X'10000000'
1038   1 00479   20000000 A                      DATA      X'20000000'
1039   1 0047A   40000000 A                      DATA      X'40000000'
1040   1 0047B   80000000 A                      DATA      X'80000000'
1041   1 0047C   F0F0F0F0 A                      DATA      X'F0F0F0F0'
1042   1 0047D   0F0F0F0F A                      DATA      X'F0F0F0F'
1043   1 0047E   00000000 A                      DATA      0
1044   1 0047F   00000001 A                      DATA      1
1045   1 00480   FFFFFFFF A                      DATA      -1
1046   1 00481   0F0F0F0F A                      DATA      X'F0F0F0F'
1047   1 00482   F0F0F0F0 A                      DATA      X'F0F0F0F0'
1048   1 00483   00000001 A                      DATA      1
1049   1 00484   FFFFFFFF A                      DATA      -1
1050   1 00485   F0F0F0F0 A                      DATA      X'F0F0F0F0'
1051   1 00486   0F0F0F12 A                      DATA      X'F0F0F12'
1052   1 00487   0F0F0F0F A                      DATA      X'F0F0F0F'
1053   1 00488   0F0F0F0F A                      DATA      X'F0F0F0F'
1054   1 00489   D2D2D2D2 A                      DATA      X'D2D2D2D2'
1055   1 0048A   F0F0F0F0 A                      DATA      X'F0F0F0F0'
1056   1 0048B   1E1E1E1F A                      DATA      X'1E1E1E1F'
1057   1 0048C   00000000 A                      DATA      0
1058   1 0048D   00000001 A                      DATA      1
1059   1 0048E   00000000 A                      DATA      0
1060   1 0048F   80000000 A                      DATA      X'80000000'
1061   1 00490   00000000 A                      DATA      0
```

```
                                        SUFFIX(2)
 1 00491   00000001 A             DATA     1
 1 00492   00000000 A             DATA     0
 1 00493   FFFFFFFF A             DATA     -1
 1 00494   00000000 A             DATA     0
 1 00495   00000001 A             DATA     1
 1 00496   00000000 A             DATA     0
 1 00497   F0F0F0F0 A             DATA     X'F0F0F0F0'
 1 00498   00000000 A             DATA     0
 1 00499   00000001 A             DATA     1
 1 0049A   00000000 A             DATA     0
 1 0049B   0F0F0F0F A             DATA     X'F0F0F0F'
 1 0049C   0696968B A             DATA     X'696968B'
 1 0049E                          BOUND    8
 1 0049E   F0F0F0F0 A   MT4       DATA     X'F0F0F0F0'
 1 0049F   0F0F0F1F A             DATA     X'F0F0F1F'
 1 004A0   F0F0F2F0 A             DATA     X'F0F0F2F0'
 1 004A1   F0F4F0F0 A             DATA     X'F0F4F0F0'
 1 004A2   F8F0F0F0 A             DATA     X'F8F0F0F0'
 1 004A3   F0F0F0E0 A             DATA     X'F0F0F0E0'
 1 004A4   F0F0D0F0 A             DATA     X'F0F0D0F0'
 1 004A5   F0B0F0F0 A             DATA     X'F0B0F0F0'
 1 004A6   70F0F0F0 A             DATA     X'70F0F0F0'
 1 004A7   F0F0F0F0 A             DATA     X'F0F0F0F0'
 1 004A8   F0F0F0F0 A             DATA     X'F0F0F0F0'
 1 004A9   F0F0F0F0 A             DATA     X'F0F0F0F0'
 1 004AA   0F0FF0F0 A             DATA     X'F0FF0F0'
 1 004AC                          BOUND    8
                        MT3       FILL     $
             00000000   XXX       CNAME
                                  PROC
                        F         FORM     8,24
                        X         SET      0
                        XX        SET      X'010[illegible]'
                                  DO       64
                                  F        X,XX
                        X         SET      X+4
                        XX        SET      XX+X'0101[illegible]'
                                  ELSE
```

```
1100
1101
1102
```

```
 1 004AC    00010203 A
 1 004AD    04050607 A
 1 004AE    08090A0B A
 1 004AF    0C0D0E0F A
 1 004B0    10111213 A
 1 004B1    14151617 A
 1 004B2    18191A1B A
 1 004B3    1C1D1E1F A
 1 004B4    20212223 A
 1 004B5    24252627 A
 1 004B6    28292A2B A
 1 004B7    2C2D2E2F A
 1 004B8    30313233 A
 1 004B9    34353637 A
 1 004BA    38393A3B A
 1 004BB    3C3D3E3F A
 1 004BC    40414243 A
 1 004BD    44454647 A
 1 004BE    48494A4B A
 1 004BF    4C4D4E4F A
 1 004C0    50515253 A
 1 004C1    54555657 A
 1 004C2    58595A5B A
 1 004C3    5C5D5E5F A
 1 004C4    60616263 A
 1 004C5    64656667 A
 1 004C6    68696A6B A
 1 004C7    6C6D6E6F A
 1 004C8    70717273 A
 1 004C9    74757677 A
 1 004CA    78797A7B A
 1 004CB    7C7D7E7F A
 1 004CC    80818283 A
 1 004CD    84858687 A
 1 004CE    88898A8B A
 1 004CF    8C8D8E8F A
```

```
 SUFFIX(2)
FIN
PEND
XXX
```

```
                1 004D0     90919293 A
                1 004D1     94959697 A
                1 004D2     98999A9B A
                1 004D3     9C9D9E9F A
                1 004D4     A0A1A2A3 A
                1 004D5     A4A5A6A7 A
                1 004D6     A8A9AAAB A
                1 004D7     ACADAEAF A
                1 004D8     B0B1B2B3 A
                1 004D9     B4B5B6B7 A
                1 004DA     B8B9BABB A
                1 004DB     BCBDBEBF A
                1 004DC     C0C1C2C3 A
                1 004DD     C4C5C6C7 A
                1 004DE     C8C9CACB A
                1 004DF     CCCDCECF A
                1 004E0     D0D1D2D3 A
                1 004E1     D4D5D6D7 A
                1 004E2     D8D9DADB A
                1 004E3     DCDDDEDF A
                1 004E4     E0E1E2E3 A
                1 004E5     E4E5E6E7 A
                1 004E6     E8E9EAEB A
                1 004E7     ECEDEEEF A
                1 004E8     F0F1F2F3 A
                1 004E9     F4F5F6F7 A
                1 004EA     F8F9FAFB A
                1 004EB     FCFDFEFF A
1103            1 004EC     00212020 A    EPI       DATA X'212020'
1104            1 004EE                   BOUND 8
1105            1 004EE     00000000 A    ERR1      FILL      C'64
                1 004EF     00000000 A
                1 004F0     00000000 A
                1 004F1     00000000 A
                1 004F2     00000000 A
                1 004F3     00000000 A
                1 004F4     00000000 A
                1 004F5     00000000 A
```

```
1 004F6     00000000 A
1 004F7     00000000 A
1 004F8     00000000 A
1 004F9     00000000 A
1 004FA     00000000 A
1 004FB     00000000 A
1 004FC     00000000 A
1 004FD     00000000 A
1 004FE     00000000 A
1 004FF     00000000 A
1 00500     00000000 A
1 00501     00000000 A
1 00502     00000000 A
1 00503     00000000 A
1 00504     00000000 A
1 00505     00000000 A
1 00506     00000000 A
1 00507     00000000 A
1 00508     00000000 A
1 00509     00000000 A
1 0050A     00000000 A
1 0050B     00000000 A
1 0050C     00000000 A
1 0050D     00000000 A
1 0050E     00000000 A
1 0050F     00000000 A
1 00510     00000000 A
1 00511     00000000 A
1 00512     00000000 A
1 00513     00000000 A
1 00514     00000000 A
1 00515     00000000 A
1 00516     00000000 A
1 00517     00000000 A
1 00518     00000000 A
1 00519     00000000 A
1 0051A     00000000 A
1 0051B     00000000 A
```

```
      1 0051C     00000000 A
      1 0051D     00000000 A
      1 0051E     00000000 A
      1 0051F     00000000 A
      1 00520     00000000 A
      1 00521     00000000 A
      1 00522     00000000 A
      1 00523     00000000 A
      1 00524     00000000 A
      1 00525     00000000 A
      1 00526     00000000 A
      1 00527     00000000 A
      1 00528     00000000 A
      1 00529     00000000 A
      1 0052A     00000000 A
      1 0052B     00000000 A
      1 0052C     00000000 A
      1 0052D     00000000 A
1106  1 0052E     00000000 A   VRT       FILL      $*16
      1 0052F     00000000 A
      1 00530     00000000 A
      1 00531     00000000 A
      1 00532     00000000 A
      1 00533     00000000 A
      1 00534     00000000 A
      1 00535     00000000 A
      1 00536     00000000 A
      1 00537     00000000 A
      1 00538     00000000 A
      1 00539     00000000 A
      1 0053A     00000000 A
      1 0053B     00000000 A
      1 0053C     00000000 A
      1 0053D     00000000 A
1107  1 0053E     00000000 A   VRTR      FILL      $*16
      1 0053F     00000000 A
      1 00540     00000000 A
      1 00541     00000000 A
```

```
          1 00542     00000000 A
          1 00543     00000000 A
          1 00544     00000000 A
          1 00545     00000000 A
          1 00546     00000000 A
          1 00547     00000000 A
          1 00548     00000000 A
          1 00549     00000000 A
          1 0054A     00000000 A
          1 0054B     00000000 A
          1 0054C     00000000 A
          1 0054D     00000000 A
1108      1 0054E     00000000 A   FMT     FILL     $+66
          1 0054F     00000000 A
          1 00550     00000000 A
          1 00551     00000000 A
          1 00552     00000000 A
          1 00553     00000000 A
          1 00554     00000000 A
          1 00555     00000000 A
          1 00556     00000000 A
          1 00557     00000000 A
          1 00558     00000000 A
          1 00559     00000000 A
          1 0055A     00000000 A
          1 0055B     00000000 A
          1 0055C     00000000 A
          1 0055D     00000000 A
          1 0055E     00000000 A
          1 0055F     00000000 A
          1 00560     00000000 A
          1 00561     00000000 A
          1 00562     00000000 A
          1 00563     00000000 A
          1 00564     00000000 A
          1 00565     00000000 A
          1 00566     00000000 A
          1 00567     00000000 A
```

```
1 00568     00000000 A
1 00569     00000000 A
1 0056A     00000000 A
1 0056B     00000000 A
1 0056C     00000000 A
1 0056D     00000000 A
1 0056E     00000000 A
1 0056F     00000000 A
1 00570     00000000 A
1 00571     00000000 A
1 00572     00000000 A
1 00573     00000000 A
1 00574     00000000 A
1 00575     00000000 A
1 00576     00000000 A
1 00577     00000000 A
1 00578     00000000 A
1 00579     00000000 A
1 0057A     00000000 A
1 0057B     00000000 A
1 0057C     00000000 A
1 0057D     00000000 A
1 0057E     00000000 A
1 0057F     00000000 A
1 00580     00000000 A
1 00581     00000000 A
1 00582     00000000 A
1 00583     00000000 A
1 00584     00000000 A
1 00585     00000000 A
1 00586     00000000 A
1 00587     00000000 A
1 00588     00000000 A
1 00589     00000000 A
1 0058A     00000000 A
1 0058B     00000000 A
1 0058C     00000000 A
1 0058D     00000000 A
```

```
                1 00588E    00000000 A
                1 00588F    00000000 A
1109            1 005890    00000000 A   VMT      FILL     $+5%
                1 005891    00000000 A
                1 005892    00000000 A
                1 005893    00000000 A
                1 005894    00000000 A
                1 005895    00000000 A
                1 005896    00000000 A
                1 005897    00000000 A
                1 005898    00000000 A
                1 005899    00000000 A
                1 00589A    00000000 A
                1 00589B    00000000 A
                1 00589C    00000000 A
                1 00589D    00000000 A
                1 00589E    00000000 A
                1 00589F    00000000 A
                1 0058A0    00000000 A
                1 0058A1    00000000 A
                1 0058A2    00000000 A
                1 0058A3    00000000 A
                1 0058A4    00000000 A
                1 0058A5    00000000 A
                1 0058A6    00000000 A
                1 0058A7    00000000 A
                1 0058A8    00000000 A
                1 0058A9    00000000 A
                1 0058AA    00000000 A
                1 0058AB    00000000 A
                1 0058AC    00000000 A
                1 0058AD    00000000 A
                1 0058AE    00000000 A
                1 0058AF    00000000 A
                1 0058B0    00000000 A
                1 0058B1    00000000 A
                1 0058B2    00000000 A
                1 0058B3    00000000 A
```

```
                1 005B4     00000000 A
                1 005B5     00000000 A
                1 005B6     00000000 A
                1 005B7     00000000 A
                1 005B8     00000000 A
                1 005B9     00000000 A
                1 005BA     00000000 A
                1 005BB     00000000 A
                1 005BC     00000000 A
                1 005BD     00000000 A
                1 005BE     00000000 A
                1 005BF     00000000 A
                1 005C0     00000000 A
                1 005C1     00000000 A
                1 005C2     00000000 A
                1 005C3     00000000 A
                1 005C4     0000000  A
                1 005C5     0000000  A
                1 005C6     0000000  A
                1 005C7     0000000  A
                1 005C8     0000000  A
                1 005C9     0000000  A
                1 005CA     0000000  A
                1 005CB     0000000  A
                1 005CC     0000000  A
                1 005CD     00000000 A
                1 005CE     00000000 A
                1 005CF     00000000 A
1110            1 005D0     00000000 A   VHTR    FILL    $+64
                1 005D1     00000000 A
                1 005D2     00000000 A
                1 005D3     00000000 A
                1 005D4     00000000 A
                1 005D5     00000000 A
                1 005D6     00000000 A
                1 005D7     00000000 A
                1 005D8     00000000 A
                1 005D9     00000000 A
```

```
1 005DA     00000000 A
1 005DB     00000000 A
1 005DC     00000000 A
1 005DD     00000000 A
1 005DE     00000000 A
1 005DF     00000000 A
1 005E0     00000000 A
1 005E1     00000000 A
1 005E2     00000000 A
1 005E3     00000000 A
1 005E4     00000000 A
1 005E5     00000000 A
1 005E6     00000000 A
1 005E7     00000000 A
1 005E8     00000000 A
1 005E9     00000000 A
1 005EA     00000000 A
1 005EB     00000000 A
1 005EC     00000000 A
1 005ED     00000000 A
1 005EE     00000000 A
1 005EF     00000000 A
1 005F0     00000000 A
1 005F1     00000000 A
1 005F2     00000000 A
1 005F3     00000000 A
1 005F4     00000000 A
1 005F5     00000000 A
1 005F6     00000000 A
1 005F7     00000000 A
1 005F8     00000000 A
1 005F9     00000000 A
1 005FA     00000000 A
1 005FB     00000000 A
1 005FC     00000000 A
1 005FD     00000000 A
1 005FE     00000000 A
1 005FF     00000000 A
```

```
1 00600     00000000 A
1 00601     00000000 A
1 00602     00000000 A
1 00603     00000000 A
1 00604     00000000 A
1 00605     00000000 A
1 00606     00000000 A
1 00607     00000000 A
1 00608     00000000 A
1 00609     00000000 A
1 0060A     00000000 A
1 0060B     00000000 A
1 0060C     00000000 A
1 0060D     00000000 A
1 0060E     00000000 A
1 0060F     00000000 A
```

```
                                         PAGE
                                *                                   LM
   1 00610   FFFFFFF0 A   LIST  DATA     -16                         COUNT
   1 00611   2A00040C             LM,0     RT3                         INSTRUCTION
   1 00612   07300244             K        0,7,3,SETPSW                PSW1 IN
   1 00613   07300276             K        0,7,3,LOC+2                 PSW1 OUT
   1 00614   FEDCBA98 A           DATA     X'FEDCBA98'                 R12 IN
   1 00615   00000000 A           DATA     0                           R12 OUT
   1 00616   FFFFFFFF A           DATA     -1                          M1 IN
   1 00617   FFFFFFFF A           DATA     -1                          M1 OUT
   1 00618   01234567 A           DATA     X'1234567'                  R13 IN
   1 00619   FFFFFFFF A           DATA     -1                          R13 OUT
   1 0061A   00000000 A           DATA     0                           M2 IN
   1 0061B   00000000 A           DATA     0                           M2 OUT
   1 0061C   3272045C             LW,7     MT1+64,1                    FMT
   1 0061D   32D2049C             LW,13    MT2+64,1                    VMT/VMTR
   1 0061E   32D2040B             LW,13    RT3-1,1                     VRTRCH
   1 0061F   00000010 A           DATA     16                          RC
                                *                                   LM-INDEXING
   1 00620   FFFFFFF0 A           DATA     -16                         COUNT
   1 00621   2A02040D             LM,0     RT3+1,1                     INSTRUCTION
   1 00622   F0300244             K        15,0,3,SETPSW               PSW1 IN
   1 00623   F0300276             K        15,0,3,LOC+2                PSW1 OUT
   1 00624   FFFFFFEF A           DATA     -1                          R12 IN-INDEX
   1 00625   00000000 A           PZE                                  R12 OUT
   1 00626   00000000 A           PZE                                  M1 IN
   1 00627   00000000 A           PZE                                  M1 OUT
   1 00628   FEDCBA98 A           DATA     X'FEDCBA98'                 R13 IN
   1 00629   FFFFFFFF A           DATA     -1                          R13 OUT
   1 0062A   FFFFFFFF A           DATA     -1                          M2 IN
   1 0062B   FFFFFFFF A           DATA     -1                          M2 OUT
   1 0062C   3272045C             LW,7     MT1+64,1                    FMT
   1 0062D   32D2049C             LW,13    MT2+64,1                    VMT/VMTR
   1 0062E   32D2040B             LW,13    RT3-1,1                     VRTRCH
   1 0062F   0000000F A           DATA     15                          RC
                                *                                   LM-INDIRECT ADDRESSING
   1 00630   FFFFFFF0 A           DATA     -16                         COUNT
```

```
1148    1 00631    AA0002EB       LM,0     *WKIA              INSTRUCTION
1149    1 00632    17000244       K        1,7,0,SETPSW       PSW1 IN
1150    1 00633    17000276       K        1,7,0,LOC+2        PSW1 OUT
1151    1 00634    FFFFFFFF A     DATA     -1                 R12 IN
1152    1 00635    FFFFFFFF A     DATA     -1                 R12 OUT
1153    1 00636    FFFFFFFF A     DATA     -1                 M1 IN
1154    1 00637    FFFFFFFF A     DATA     -1                 M1 OUT
1155    1 00638    0000040C       PZE,0    RT3                R13 IN-INDIRECT ADDRESS
1156    1 00639    0000040C       PZE,0    RT3                R13 OUT
1157    1 0063A    00000000 A     PZE                         M2 IN
1158    1 0063B    00000000 A     PZE                         M2 OUT
1159    1 0063C    3272045C       LW,7     MT1+64,1           FMT
1160    1 0063D    32D2049C       LW,13    MT2+64,1           VMT/VMTR
1161    1 0063E    32D20408       LW,13    RT3+1,1            VRTRCH
1162    1 0063F    00000001 A     DATA     1                  RC
1163                              *                           LM-INDIRECT ADDRESSING-INDEXING
1164    1 00640    FFFFFFF0 A     DATA     -16                COUNT
1165    1 00641    AA0202EB       LM,0     *WKIA,1            INSTRUCTION
1166    1 00642    E0000244       K        14,0,0,SETPSW      PSW1 IN
1167    1 00643    E0000276       K        14,0,0,LOC+2       PSW1 OUT
1168    1 00644    FFFFFFFF A     DATA     -1                 R12 IN-INDEX
1169    1 00645    00000000 A     PZE                         R12 OUT
1170    1 00646    00000000 A     PZE                         M1 IN
1171    1 00647    00000000 A     PZE                         M1 OUT
1172    1 00648    0000040D       PZE,0    RT3+1              R13 IN-INDIRECT ADDRESS
1173    1 00649    FFFFFFFF A     DATA     -1                 R13 OUT
1174    1 0064A    FFFFFFFF A     DATA     -1                 M2 IN
1175    1 0064B    FFFFFFFF A     DATA     -1                 M2 OUT
1176    1 0064C    3272045C       LW,7     MT1+64,1           FMT
1177    1 0064D    32D2049C       LW,13    MT2+64,1           VMT/VMTR
1178    1 0064E    32D20408       LW,13    RT3+1,1            VRTRCH
1179    1 0064F    0000000E A     DATA     14                 RC
1180                              *                           STM
1181    1 00650    FFFFFFF0 A     DATA     -16                COUNT
1182    1 00651    2B800528       STM,0    VRT                INSTRUCTION
1183    1 00652    07300244       K        0,7,3,SETPSW       PSW1 IN
1184    1 00653    07300276       K        0,7,3,LOC+2        PSW1 OUT
1185    1 00654    FEDCBA98 A     DATA     X'FEDCBA98'        R12 IN
```

```
                                        SUFFIX(2)
1 00655   FEDCBA98 A                   DATA      X'FEDCBA98'         R12 OUT
1 00656   01234567 A                   DATA      X'1234567'          M1 IN
1 00657   01234567 A                   DATA      X'1234567'          M1 OUT
1 00658   FEDCBA98 A                   DATA      X'FEDCBA98'         R13 IN
1 00659   FEDCBA98 A                   DATA      X'FEDCBA98'         R13 OUT
1 0065A   01234567 A                   DATA      X'1234567'          M2 IN
1 0065B   01234567 A                   DATA      X'1234567'          M2 OUT
1 0065C   3272045C                     LW,7      MT1+64,1            FMT
1 0065D   32D2049C                     LW,13     MT2+64,1            VMT/VMTR
1 0065E   32D203EB                     LW,13     RT1-1,1             VRTRCH
1 0065F   00000010 A                   DATA      16                  RC
                                                                    STM-INDEXING
1 00660   FFFFFFF0 A                   DATA      -16                 COUNT
1 00661   2BE34A96                     STM,14    VRT-X'CBA98',1      INSTRUCTION
1 00662   2030024?                     K         2,0,3,SETPSW        PSW1 IN
1 00663   20300?76                     K         2,0,3,LOC+2         PSW1 OUT
1 00664   FEDCBA98 A                   DATA      X'FEDCBA98'         R12 IN-INDEX
1 00665   FEDCBA98 A                   DATA      X'FEDCBA98'         R12 OUT
1 00666   01234567 A                   DATA      X'1234567'          M1 IN
1 00667   01234567 A                   DATA      X'1234567'          M1 OUT
1 00668   01234567 A                   DATA      X'1234567'          R13 IN
1 00669   01234567 A                   DATA      X'1234567'          R13 OUT
1 0066A   FEDCBA98 A                   DATA      X'FEDCBA98'         M2 IN
1 0066B   FEDCBA98 A                   DATA      X'FEDCBA98'         M2 OUT
1 0066C   32720[illegible]             LW,7      MT1+64,1            FMT
1 0066D   32D204[illegible]            LW,13     MT2+64,1            VMT/VMTR
1 0066E   32D203[illegible]            LW,13     RT1-1,1             VRTRCH
1 0066F   0000000[illegible] A         DATA      1                   RC
                                                                    STM-INDIRECT ADDRESSING
1 00670   FFFFFFF0 A                   DATA      -16                 COUNT
1 00671   AB000[illegible]B            STM,0     *WKIA               INSTRUCTION
1 00672   E7000[illegible]             K         14,7,0,SETPSW       PSW1 IN
1 00673   E7000[illegible]             K         14,7,0,LOC+2        PSW1 OUT
1 00674   01234567 A                   DATA      X'1234567'          R12 IN
1 00675   01234567 A                   DATA      X'1234567'          R12 OUT
1 00676   FEDCBA98 A                   DATA      X'FEDCBA98'         M1 IN
1 00677   FEDCBA98 A                   DATA      X'FEDCBA98'         M1 OUT
1 00678   0000[illegible]              PZE,0     V[illegible]        R13 IN-INDIRECT ADDRESS
```

```
1224    1 00679    0000052E
1225    1 0067A    01234567 A
1226    1 0067B    01234567 A
1227    1 0067C    3272045C
1228    1 0067D    32D2049C
1229    1 0067E    32D203EB
1230    1 0067F    0000000E A
1231
1232    1 00680    FFFFFFF0 A
1233    1 00681    AB0202EB
1234    1 00682    00000244
1235    1 00683    00000276
1236    1 00684    000CBA98 A
1237    1 00685    000CBA98 A
1238    1 00686    00000000 A
1239    1 00687    00000000 A
1240    1 00688    00014A96
1241    1 00689    00014A96
1242    1 0068A    01234567 A
1243    1 0068B    01234567 A
1244    1 0068C    3272045C
1245    1 0068D    32D2049C
1246    1 0068E    32D203EB
1247    1 0068F    00000010 A
1248
1249    1 00690    FFFFFFF0 A
1250    1 00691    08C003D4
1251    1 00692    F7300244
1252    1 00693    17300276
1253    1 00694    FFFFFFFF A
1254    1 00695    00000000 A
1255    1 00696    0000040C
1256    1 00697    00000403
1257    1 00698    FFFFFFFF A
1258    1 00699    FFFFFFFF A
1259    1 0069A    00000001 A
1260    1 0069B    00010000 A
1261    1 0069C    3272045C
```

```
 SUFFIX(2)
PZE,0     VRT                 R13 OUT
DATA      X'1234567'          M2 IN
DATA      X'1234567'          M2 OUT
LW,7      MT1+64,1            FMT
LW,13     MT2+64,1            VMT/VMTR
LW,13     RT1-1,1             VRTRCH
DATA      14                  RC
                             STM-INDIRECT ADDRESSING-INDEXING
DATA      -16                 COUNT
STM,0     *WKIA,1             INSTRUCTION
K         0,0,0,SETPSW        PSW1 IN
K         0,0,0,L0C+2         PSW1 OUT
DATA      X'CBA98'            R12 IN-INDEX
DATA      X'CBA98'            R12 OUT
PZE                           M1 IN
PZE                           M1 OUT
PZE,0     VRT-X'CBA98'        R13 IN
PZE,0     VRT-X'CBA98'        R13 OUT
DATA      X'1234567'          M2 IN
DATA      X'1234567'          M2 OUT
LW,7      MT1+64,1            FMT
LW,13     MT2+64,1            VMT/VMTR
LW,13     RT1-1,1             VRTRCH
DATA      16                  RC
                             PLW
DATA      -16                 COUNT
PLW,12    MEMORY              INSTRUCTION
K         15,7,3,SETPSW       PSW1 IN
K         1,7,3,L0C+2         PSW1 OUT
DATA      -1                  R12 IN
DATA      0                   R12 OUT
PZE,0     RT3                 M1 IN
PZE,0     RT3-1               M1 OUT
DATA      -1                  R13 IN
DATA      -1                  R13 OUT
DATA      X'1'                M2 IN
DATA      X'10000'            M2 OUT
LW,7      MT1+64,1            FMT
```

```
1262    1 0069D    32D2049C
1263    1 0069E    32D203BD
1264    1 0069F    00000001 A
1265
1266    1 006A0    FFFFFFF0 A
1267    1 006A1    08D203D2
1268    1 006A2    F0300244
1269    1 006A3    00300276
1270    1 006A4    00000001 A
1271    1 006A5    00000001 A
1272    1 006A6    0000040C
1273    1 006A7    00000408
1274    1 006A8    FFFFFFFF A
1275    1 006A9    00000000 A
1276    1 006AA    00000002 A
1277    1 006AB    00010001 A
1278    1 006AC    3272045C
1279    1 006AD    32D2049C
1280    1 006AE    32D203BD
1281    1 006AF    00000001 A
1282
1283    1 006B0    FFFFFFF0 A
1284    1 006B1    88C202EB
1285    1 006B2    0700024?
1286    1 006B3    07000276
1287    1 006B4    00000014 A
1288    1 006B5    00000000 A
1289    1 006B6    0000040C
1290    1 006B7    00000408
1291    1 006B8    000003AC
1292    1 006B9    000003AC
1293    1 006BA    0000FFFF A
1294    1 006BB    0001FFFE A
1295    1 006BC    3272045C
1296    1 006BD    32D2049C
1297    1 006BE    32D203BD
1298    1 006BF    00000001 A
1299
```

```
 SUFFIX(2)
LW,13    MT2+64,1          VMT/VMTR
LW,13    TABLE+5,1         VRTRCH
DATA     1                 RC

DATA     -16               PLW-ODD REGISTER-INDEXING
PLW,13   MEMORY-2,1        COUNT
K        15,0,3,SETPSW     INSTRUCTION
K        0,0,3,LOC+2       PSW1 IN
DATA     1                 PSW1 OUT
DATA     1                 R12 IN-INDEX
PZE,0    RT3               R12 OUT
PZE,0    RT3-1             M1 IN
DATA     -1                M1 OUT
DATA     0                 R13 IN
DATA     X'2'              R13 OUT
DATA     X'10001'          M2 IN
LW,7     MT1+64,1          M2 OUT
LW,13    MT2+64,1          FMT
LW,13    TABLE+5,1         VMT/VMTR
DATA     1                 VRTRCH
                           RC
DATA     -16               PLW-INDIRECT ADDRESSING-INDEXING
PLW,12   *WKIA,1           COUNT
K        0,7,0,SETPSW      INSTRUCTION
K        0,7,0,LOC+2       PSW1 IN
DATA     20                PSW1 OUT
PZE                        R12 IN-INDEX
PZE,0    RT3               R12 OUT
PZE,0    RT3-1             M1 IN
PZE,0    MEMORY-40         M1 OUT
PZE,0    MEMORY-40         R13 IN-INDIRECT ADDRESS
DATA     X'FFFF'           R13 OUT
DATA     X'1FFFE'          M2 IN
LW,7     MT1+64,1          M2 OUT
LW,13    MT2+64,1          FMT
LW,13    TABLE+5,1         VMT/VMTR
DATA     1                 VRTRCH
                           RC
                          PLW-INDIRECT ADDRESSING-
```

```
                                           SUFFIX(2)
1 006C0   FFFFFF[illegible] A             DATA     -16                COUNT
1 006C1   88C002[illegible]               PLW,12   *WKIA              INSTRUCTION
1 006C2   0000024[illegible]              K        0,0,0,SETPSW       PSW1 IN
1 006C3   300002[illegible]               K        3,0,0,LOC+2        PSW1 OUT
1 006C4   FFFFFFFF A                      DATA     -1                 R12 IN
1 006C5   FFFFFFFF A                      DATA     -1                 R12 OUT
1 006C6   0000040C                        PZE,0    RT3                M1 IN
1 006C7   0000040C                        PZE,0    RT3                M1 OUT
1 006C8   000003D4                        PZE,0    MEMORY             R13 IN-INDIRECT ADDRESS
1 006C9   000003D4                        PZE,0    MEMORY             R13 OUT
1 006CA   00018000 A                      DATA     X'18000'           M2 IN
1 006CB   00018000 A                      DATA     X'18000'           M2 OUT
1 006CC   3272045C                        LW,7     MT1+64,1           FMT
1 006CD   32D2049C                        LW,13    MT2+64,1           VMT/VMTR
1 006CE   32D203BD                        LW,13    TABLE+5,1          VRTRCH
1 006CF   00000001 A                      DATA     1                  RC
                              *                                     PLW
1 006D0   FFFFFFF0 A                      DATA     -16                COUNT
1 006D1   08C003D4                        PLW,12   MEMORY             INSTRUCTION
1 006D2   F0000244                        K        15,0,0,SETPSW      PSW1 IN
1 006D3   80000276                        K        8,0,0,LOC+2        PSW1 OUT
1 006D4   FFFFFFFF A                      DATA     -1                 R12 IN
1 006D5   FFFFFFFF A                      DATA     -1                 R12 OUT
1 006D6   0000040C                        PZE,0    RT3                M1 IN
1 006D7   0000040C                        PZE,0    RT3                M1 OUT
1 006D8   00000000 A                      PZE                         R13 IN
1 006D9   00000000 A                      PZE                         R13 OUT
1 006DA   FFFF0001 A                      DATA     X'FFFF0001'        M2 IN
1 006DB   FFFF0001 A                      DATA     X'FFFF0001'        M2 OUT
1 006DC   3272045C                        LW,7     MT1+64,1           FMT
1 006DD   32D2049C                        LW,13    MT2+64,1           VMT/VMTR
1 006DE   32D203BD                        LW,13    TABLE+5,1          VRTRCH
1 006DF   00000001 A                      DATA     1                  RC
                              *                                     PLW
1 006E0   FFFFFFF0 A                      DATA     -16                COUNT
1 006E1   08C003D4                        PLW,12   MEMORY             INSTRUCTION
1 006E2   83100244                        K        8,3,1,SETPSW       PSW1 IN
1 006E3   73100276                        K        7,3,1,LOC+2        PSW1 OUT
```

SUFFIX(2)

```
1 006E4   FFFFFFFF A        DATA     -1              R12 IN
1 006E5   FFFFFFFF A        DATA     -1              R12 OUT
1 006E6   0000040C          PZE,0    RT3             M1 IN
1 006E7   0000040C          PZE,0    RT3             M1 OUT
1 006E8   00000000 A        PZE                      R13 IN
1 006E9   00000000 A        PZE                      R13 OUT
1 006EA   00008000 A        DATA     X'8000'         M2 IN
1 006EB   00008000 A        DATA     X'8000'         M2 OUT
1 006EC   3272045C          LW,7     MT1+64,1        FMT
1 006ED   32D2049C          LW,13    MT2+64,1        VMT/VMTR
1 006EE   32D203BD          LW,13    TABLE+5,1       VRTRCH
1 006EF   00000001 A        DATA     1               RC
                   *                                PLW
1 006F0   FFFFFFF0 A        DATA     -16             COUNT
1 006F1   08C003D4          PLW,12   MEMORY          INSTRUCTION
1 006F2   42200244          K        4,2,2,SETPSW    PSW1 IN
1 006F3   B2200276          K        11,2,2,LOC+2    PSW1 OUT
1 006F4   FFFFFFFF A        DATA     -1              R12 IN
1 006F5   FFFFFFFF A        DATA     -1              R12 OUT
1 006F6   0000040C          PZE,0    RT3             M1 IN
1 006F7   0000040C          PZE,0    RT3             M1 OUT
1 006F8   00000000 A        PZE                      R13 IN
1 006F9   00000000 A        PZE                      R13 OUT
1 006FA   FFFF8000 A        DATA     X'FFFF8000'     M2 IN
1 006FB   FFFF8000 A        DATA     X'FFFF8000'     M2 OUT
1 006FC   3272045C          LW,7     MT1+64,1        FMT
1 006FD   32D2049C          LW,13    MT2+64,1        VMT/VMTR
1 006FE   32D203BD          LW,13    TABLE+5,1       VRTRCH
1 006FF   00000001 A        DATA     1               RC
                   *                                PLW-TRAP
1 00700   FFFFFFF0 A        DATA     -16             COUNT
1 00701   08C003D4          PLW,12   MEMORY          INSTRUCTION
1 00702   C730018E          K        12,7,3,SLSW     PSW1 IN
1 00703   C730007D          K        12,7,3,SLRET+1  PSW1 OUT
1 00704   FFFFFFFF A        DATA     -1              R12 IN
1 00705   FFFFFFFF A        DATA     -1              R12 OUT
1 00706   0000040C          PZE,0    RT3             M1 IN
1 00707   0000040C          PZE,0    RT3             M1 OUT
```

```
1376    1 00708    00000000 A
1377    1 00709    00000000 A
1378    1 0070A    00010000 A
1379    1 0070B    00010000 A
1380    1 0070C    3272045C
1381    1 0070D    32D2049C
1382    1 0070E    32D203BD
1383    1 0070F    00000001 A
1384
1385    1 00710    FFFFFFF0 A
1386    1 00711    08C003D4
1387    1 00712    8730018E
1388    1 00713    8730007D
1389    1 00714    FFFFFFFF A
1390    1 00715    FFFFFFFF A
1391    1 00716    00000040
1392    1 00717    00000040
1393    1 00718    00000000 A
1394    1 00719    00000000 A
1395    1 0071A    00000000 A
1396    1 0071B    00000000 A
1397    1 0071C    3272045C
1398    1 0071D    32D2049C
1399    1 0071E    32D203BD
1400    1 0071F    00000001 A
1401
1402    1 00720    FFFFFFF0 A
1403    1 00721    08C203D0
1404    1 00722    7730018E
1405    1 00723    7730007D
1406    1 00724    00000002 A
1407    1 00725    00000002 A
1408    1 00726    00000040
1409    1 00727    00000040
1410    1 00728    00000000 A
1411    1 00729    00000000 A
1412    1 0072A    7FFF0007 A
1413    1 0072B    7FFF0007 A
```

```
SUFFIX(2)
PZE                                  R13 IN
PZE                                  R13 OUT
DATA     X'10000',                   M2 IN
DATA     X'10000'                    M2 OUT
LW,7     MT1+64,1                    FMT
LW,13    MT2+64,1                    VMT/VMTR
LW,13    TABLE+5,1                   VRTRCH
DATA     1                           RC
                                     PLW-TRAP
DATA     -16                         COUNT
PLW,12   MEMORY                      INSTRUCTION
K        8,7,3,SLSW                  PSW1 IN
K        8,7,3,SLRET+1               PSW1 OUT
DATA     -1                          R12 IN
DATA     -1                          R12 OUT
PZE,0    RT3                         M1 IN
PZE,0    RT3                         M1 OUT
PZE                                  R13 IN
PZE                                  R13 OUT
PZE                                  M2 IN
PZE                                  M2 OUT
LW,7     MT1+64,1                    FMT
LW,13    MT2+64,1                    VMT/VMTR
LW,13    TABLE+5,1                   VRTRCH
DATA     1                           RC
                                     PLW-INDEX-TRAP
DATA     -16                         COUNT
PLW,12   MEMORY+4,1                  INSTRUCTION
K        7,7,3,SLSW                  PSW1 IN
K        7,7,3,SLRET+1               PSW1 OUT
DATA     2                           R12 IN-INDEX
DATA     2                           R12 OUT
PZE,0    RT3                         M1 IN
PZE,0    RT3                         M1 OUT
PZE                                  R13 IN
PZE                                  R13 OUT
DATA     X'7FFF0007'                 M2 IN
DATA     X'7FFF0007'                 M2 OUT
```

```
1414    1 0072C    32720458          LW,7     MT1+64,1       FMT
1415    1 0072D    32D2049C          LW,13    MT2+64,1       VMT/MVTR
1416    1 0072E    32D2038D          LW,13    TABLE+5,1      VRTRCH
1417    1 0072F    00000001 A        DATA     1              RC
1418                                                         *PLW-INDIRECT ADDRESSING-TRAP
1419    1 00730    FFFFFFF0 A        DATA     -16            COUNT
1420    1 00731    88C002EB          PLW,12   *WKIA          INSTRUCTION
1421    1 00732    4730018E          K        4,7,3,SLOW     PSW1 IN
1422    1 00733    47300079          K        4,7,3,SLRET+1  PSW1 OUT
1423    1 00734    FFFFFFFF A        DATA     -1             R12 IN
1424    1 00735    FFFFFFFF A        DATA     -1             R12 OUT
1425    1 00736    0000040C          PZE,0    RT3            M1 IN
1426    1 00737    0000040C          PZE,0    RT3            M1 OUT
1427    1 00738    000003D4          PZE,0    MEMORY         R13 IN-INDIRECT ADDRESSING
1428    1 00739    000003D4          PZE,0    MEMORY         R13 OUT
1429    1 0073A    7FFF0000 A        DATA     X'7FFF0000'    M2 IN
1430    1 0073B    7FFF0000 A        DATA     X'7FFF0000'    M2 OUT
1431    1 0073C    32720458          LW,7     MT1+64,1       FMT
1432    1 0073D    32D2049C          LW,13    MT2+64,1       VMT/VMTR
1433    1 0073E    32D2038D          LW,13    TABLE+5,1      VRTRCH
1434    1 0073F    00000001 A        DATA     1              RC
1435                                                         *PSW
1436    1 00740    FFFFFFF0 A        DATA     -16            COUNT
1437    1 00741    09C003D4          PSW,12   MEMORY         INSTRUCTION
1438    1 00742    07300244          K        0,7,3,SETPSW   PSW1 IN
1439    1 00743    47300076          K        4,7,3,LOOP2    PSW1 OUT
1440    1 00744    01234567 A        DATA     X'01234567'    R12 IN
1441    1 00745    01234567 A.       DATA     X'01234567'    R12 OUT
1442    1 00746    00000528          PZE,0    VRT+1          M1 IN
1443    1 00747    00000528          PZE,0    VRT            M1 OUT
1444    1 00748    00000000 A        DATA     0              R13 IN
1445    1 00749    00000000 A        DATA     0              R13 OUT
1446    1 0074A    00010000 A        DATA     X'10000'       M2 IN
1447    1 0074B    00000001 A        DATA     1              M2 OUT
1448    1 0074C    32720458          LW,7     MT1+64,1       FMT
1449    1 0074D    32D2049C          LW,13    MT2+64,1       VMT/VMTR
1450    1 0074E    32D2038D          LW,13    TABLE+5,1      VRTRCH
1451    1 0074F    00000010 A        DATA     16             RC
```

```
                                    *                                   PSW-ODD REGISTER-INDEXING
1 00750   FFFFFFF0 A                    DATA      -16                    COUNT
1 00751   09D203D0                      PSW,13    MEMORY-4,1             INSTRUCTION
1 00752   F0300244                      K         15,0,3,SETPSW          PSW1 IN
1 00753   00300276                      K         0,0,3,LOC+2            PSW1 OUT
1 00754   00000002 A                    DATA      2                      R12 IN-INDEX
1 00755   00000002 A                    DATA      2                      R12 OUT
1 00756   0000052D                      PZE,0     VRT-1                  M1 IN
1 00757   0000052E                      PZE,0     VRT                    M1 OUT
1 00758   01234567 A                    DATA      X'1234567'             R13 IN
1 00759   01234567 A                    DATA      X'1234567'             R13 OUT
1 0075A   FFFF0000 A                    DATA      X'FFFF0000'            M2 IN
1 0075B   FFFE0001 A                    DATA      X'FFFE0001'            M2 OUT
1 0075C   3272045C                      LW,7      MT1+64,1               FMT
1 0075D   32D2049C                      LW,13     MT2+64,1               VMT/VMTR
1 0075E   32D203EB                      LW,13     RT1-1,1                VRTRCH
1 0075F   00000010 A                    DATA      16                     RC
                                    *                                   PSW-INDIRECT ADDRESSING
1 00760   FFFFFFF0 A                    DATA      -16                    COUNT
1 00761   89C002EB                      PSW,12    *WKIA                  INSTRUCTION
1 00762   B7000244                      K         11,7,0,SETPSW          PSW1 IN
1 00763   07000276                      K         0,7,0,LOC+2            PSW1 OUT
1 00764   01234567 A                    DATA      X'1234567'             R12 IN
1 00765   01234567 A                    DATA      X'1234567'             R12 OUT
1 00766   0000052D                      PZE,0     VRT-1                  M1 IN
1 00767   0000052E                      PZE,0     VRT                    M1 OUT
1 00768   000003D4                      PZE,0     MEMORY                 R13 IN-INDIRECT ADDRESS
1 00769   000003D4                      PZE,0     MEMORY                 R13 OUT
1 0076A   FFFF0000 A                    DATA      X'FFFF0000'            M2 IN
1 0076B   FFFE0001 A                    DATA      X'FFFE0001'            M2 OUT
1 0076C   3272045C                      LW,7      MT1+64,1               FMT
1 0076D   32D2049C                      LW,13     MT2+64,1               VMT/VMTR
1 0076E   32D203EB                      LW,13     RT1-1,1                VRTRCH
1 0076F   00000010 A                    DATA      16                     RC
                                    *                                   PSW-INDIRECT ADDRESSING-INDEXING
1 00770   FFFFFFF0 A                    DATA      -16                    COUNT
1 00771   89C202EB                      PSW,12    *WKIA,1                INSTRUCTION          ABORT
1 00772   D0000244                      K         13,0,0,SETPSW          PSW1 IN
```

```
1490    1 00773    20000276
1491    1 00774    FFFFFFF0 A
1492    1 00775    FFFFFFF0 A
1493    1 00776    0000052D
1494    1 00777    0000052D
1495    1 00778    000003F4
1496    1 00779    000003F4
1497    1 0077A    FFFFFFFF A
1498    1 0077B    FFFFFFFF A
1499    1 0077C    3272045C
1500    1 0077D    32D2049C
1501    1 0077E    32D203FA
1502    1 0077F    00000010 A
1503
1504    1 00780    FFFFFFF0 A
1505    1 00781    09C003D4
1506    1 00782    30C00244
1507    1 00783    C0000276
1508    1 00784    00000000 A
1509    1 00785    00000000 A
1510    1 00786    0000052D
1511    1 00787    0000052D
1512    1 00788    FFFFFFFF A
1513    1 00789    FFFFFFFF A
1514    1 0078A    80000002 A
1515    1 0078B    80000002 A
1516    1 0078C    3272045C
1517    1 0078D    32D2049C
1518    1 0078E    32D203FA
1519    1 0078F    00000010 A
1520
1521    1 00790    FFFFFFF0 A
1522    1 00791    09C003D4
1523    1 00792    20000244
1524    1 00793    D0000276
1525    1 00794    FFFFFFFF A
1526    1 00795    FFFFFFFF A
1527    1 00796    0000052D
```

```
SUFFIX(2)
K       2,0,0,LOC+2     PSW1 OUT
DATA    -16             R12 IN-INDEX
DATA    -16             R12 OUT
PZE,0   VRT-1           M1 IN
PZE,0   VRT-1           M1 OUT
PZE,0   MEMORY+32       R13 IN-INDIRECT ADDRESS
PZE,0   MEMORY+32       R13 OUT
DATA    -1              M2 IN
DATA    -1              M2 OUT
LW,7    MT1+64,1        FMT
LW,13   MT2+64,1        VMT/VMTR
LW,13   RT2-2,1         VRTRCH
DATA    16              RC
                        PSW-ABORT
DATA    -16             COUNT
PSW,12  MEMORY          INSTRUCTION
K       3,0,0,SETPSW    PSW1 IN
K       12,0,0,LOC+2    PSW1 OUT
PZE                     R12 IN
PZE                     R12 OUT
PZE,0   VRT-1           M1 IN
PZE,0   VRT-1           M1 OUT
DATA    -1              R13 IN
DATA    -1              R13 OUT
DATA    X'80000002'     M2 IN
DATA    X'80000002'     M2 OUT
LW,7    MT1+64,1        FMT
LW,13   MT2+64,1        VMT/VMTR
LW,13   RT2-2,1         VRTRCH
DATA    16              RC
                        PSW-ABORT
DATA    -16             COUNT
PSW,12  MEMORY          INSTRUCTION
K       2,0,0,SETPSW    PSW1 IN
K       13,0,0,LOC+2    PSW1 OUT
DATA    -1              R12 IN
DATA    -1              R12 OUT
PZE,0   VRT-1           M1 IN
```

```
1528    1 00797    00000520          PZE,0    VRT-1              M1 OUT
1529    1 00798    00000000 A        PZE                         R13 IN
1530    1 00799    00000C00 A        PZE                         R13 OUT
1531    1 0079A    80000000 A        DATA     X'80000000'        M2 IN
1532    1 0079B    80000000 A        DATA     X'80000000'        M2 OUT
1533    1 0079C    3272045C          LW,7     MT1+64,1           FMT
1534    1 0079D    32D2049C          LW,13    MT2+64,1           VMT/VMTR
1535    1 0079E    32D203FA          LW,13    RT2-2,1            VRTRCH
1536    1 0079F    00000010 A        DATA     16                 RC
1537                                 *                           PSW-ABORT
1538    1 007A0    FFFFFFF0 A        DATA     -16                COUNT
1539    1 007A1    09C003D4          PSW,12   MEMORY             INSTRUCTION
1540    1 007A2    10000244          K        1,0,0,SETPSW       PSW1 IN
1541    1 007A3    E0000276          K        14,0,0,L9C+2       PSW1 OUT
1542    1 007A4    00000000 A        PZE      0                  R12 IN
1543    1 007A5    00000000 A        PZE      0                  R12 OUT
1544    1 007A6    00000520          PZE,0    VRT-1              M1 IN
1545    1 007A7    00000520          PZE,0    VRT-1              M1 OUT
1546    1 007A8    FFFFFFFF A        DATA     -1                 R13 IN
1547    1 007A9    FFFFFFFF A        DATA     -1                 R13 OUT
1548    1 007AA    8000FFFF A        DATA     X'8000FFFF'        M2 IN
1549    1 007AB    8000FFFF A        DATA     X'8000FFFF'        M2 OUT
1550    1 007AC    3272045C          LW,7     MT1+64,1           FMT
1551    1 007AD    32D2049C          LW,13    MT2+64,1           VMT/VMTR
1552    1 007AE    32D203FA          LW,13    RT2-2,1            VRTRCH
1553    1 007AF    00000010 A        DATA     16                 RC
1554                                 *                           PSW-TRAP
1555    1 007B0    FFFFFFF0 A        DATA     -16                COUNT
1556    1 007B1    09C003D4          PSW,12   MEMORY             INSTRUCTION
1557    1 007B2    D730018E          K        13,7,3,SLSW        PSW1 IN
1558    1 007B3    D730007D          K        13,7,3,SLRET+1     PSW1 OUT
1559    1 007B4    FFFFFFFF A        DATA     -1                 R12 IN
1560    1 007B5    FFFFFFFF A        DATA     -1                 R12 OUT
1561    1 007B6    00000520          PZE,0    VRT-1              M1 IN
1562    1 007B7    00000520          PZE,0    VRT-1              M1 OUT
1563    1 007B8    00000000 A        PZE                         R13 IN
1564    1 007B9    00000000 A        PZE                         R13 OUT
1565    1 007BA    00027FFF A        DATA     X'27FFF'           M2 IN
```

```
                                        SUFFIX(2)
1 007BB   00027FFF A                   DATA      X'27FFF'         M2 OUT
1 007BC   3272045C                     LW,7      MT1+64,1         FMT
1 007BD   32D2049C                     LW,13     MT2+64,1         VM /VMTR
1 007BE   32D203FA                     LW,13     RT2-2,1          VRTRCH
1 007BF   00000010 A                   DATA      16               RC
                               *                                 PSW-TRAP
1 007C0   FFFFFFF0 A                   DATA      -16              COUNT
1 007C1   09C003D4                     PSW,12    MEMORY           INSTRUCTION
1 007C2   3730018E                     K         3,7,3,SLSW       PSW1 IN
1 007C3   3730007D                     K         3,7,3,SLRET+1    PSW1 OUT
1 007C4   FEDCBA98 A                   DATA      X'FEDCBA98'      R12 IN
1 007C5   FEDCBA98 A                   DATA      X'FEDCBA98'      R12 OUT
1 007C6   0000052D                     PZE,0     VRT-1            M1 IN
1 007C7   0000052D                     PZE,0     VRT-1            M1 OUT
1 007C8   01234567 A                   DATA      X'1234567'       R13 IN
1 007C9   01234567 A                   DATA      X'1234567'       R13 OUT
1 007CA   00000003 A                   DATA      3                M2 IN
1 007CB   00000003 A                   DATA      3                M2 OUT
1 007CC   3272045C                     LW,7      MT1+64,1         FMT
1 007CD   32D2049C                     LW,13     MT2+64,1         VMT/VMTR
1 007CE   32D203FA                     LW,13     RT2-2,1          VRTRCH
1 007CF   00000010 A                   DATA      16               RC
                               *                                 PSW-INDEX-TRAP
1 007D0   FFFFFFF0 A                   DATA      -16              COUNT
1 007D1   09C203FC                     PSW,12    MEMORY+40,1      INSTRUCTION
1 007D2   2730018E                     K         2,7,3,SLSW       PSW1 IN
1 007D3   2730007D                     K         2,7,3,SLRET+1    PSW1 OUT
1 007D4   FFFFFFEC A                   DATA      -20              R12 IN-INDEX
1 007D5   FFFFFFEC A                   DATA      -20              R12 OUT
1 007D6   0000052D                     PZE,0     VRT-1            M1 IN
1 007D7   0000052D                     PZE,0     VRT-1            M1 OUT
1 007D8   FFFFFFFF A                   DATA      -1               R13 IN
1 007D9   FFFFFFFF A                   DATA      -1               R13 OUT
1 007DA   00000000 A                   PZE                        M2 IN
1 007DB   00000000 A                   PZE                        M2 OUT
1 007DC   3272045C                     LW,7      MT1+64,1         FMT
1 007DD   32D2049C                     LW,13     MT2+64,1         VMT/VMTR
1 007DE   32D203FA                     LW,13     RT2-2,1          VRTRCH
```

```
1604     1 007DF     00000010 A
1605
1606     1 007E0     FFFFFFF0 A
1607     1 007E1     89C002EB
1608     1 007E2     1730018E
1609     1 007E3     17300070
1610     1 007E4     00000000 A
1611     1 007E5     00000000 A
1612     1 007E6     0000052D
1613     1 007E7     0000052D
1614     1 007E8     000003D4
1615     1 007E9     000003D4
1616     1 007EA     00007FFF A
1617     1 007EB     00007FFF A
1618     1 007EC     32720450
1619     1 007ED     32D2040C
1620     1 007EE     32D203FA
1621     1 007EF     00000010 A
1622
1623     1 007F0     FFFFFFF0 A
1624     1 007F1     0A0003D4
1625     1 007F2     07300244
1626     1 007F3     17300276
1627     1 007F4     FFFFFFFF A
1628     1 007F5     00000000 A
1629     1 007F6     00000418
1630     1 007F7     00000408
1631     1 007F8     00000000 A
1632     1 007F9     FFFFFFFF A
1633     1 007FA     00000010 A
1634     1 007FB     00100000 A
1635     1 007FC     32720450
1636     1 007FD     32D20480
1637     1 007FE     32D20403
1638     1 007FF     00000010 A
1639
1640     1 00800     FFFFFFF0 A
1641     1 00801     0A0203D6
```

```
SUFFIX(2)
DATA     16                          RC
                                    PSW-INDIRECT ADDRESS-TRAP
DATA     -16                         COUNT
PSW,12   *WKIA                       INSTRUCTION
K        1,7,3,SLSW                  PSW1 IN
K        1,7,3,SLRET+1               PSW1 OUT
PZE                                  R12 IN
PZE                                  R12 OUT
PZE,0    VRT-1                       M1 IN
PZE,0    VRT-1                       M1 OUT
PZE,0    MEMORY                      R13 IN
PZE,0    MEMORY                      R13 OUT
DATA     X'7FFF'                     M2 IN
DATA     X'7FFF'                     M2 OUT
LW,7     MT1+64,1                    FMT
LW,13    MT2+64,1                    VMT/VMTR
LW,13    RT2-2,1                     VRTRCH
DATA     16                          RC
                                    PLM
DATA     -16                         COUNT
PLM,0    MEMORY                      INSTRUCTION
K        0,7,3,SETPSW                PSW1 IN
K        1,7,3,LOC+2                 PSW1 OUT
DATA     -1                          R12 IN
DATA     0                           R12 OUT
PZE,0    RT3+15                      M1 IN
PZE,0    RT3-1                       M1 OUT
DATA     0                           R13 IN
DATA     -1                          R13 OUT
DATA     16                          M2 IN
DATA     X'1000000'                  M2 OUT
LW,7     MT1+64,1                    FMT
LW,13    MT2+64,1                    VMT/VMTR
LW,13    RT3-1,1                     VRTRCH
DATA     16                          RC
                                    PLM-INDEXING
DATA     -16                         COUNT
PLM,0    MEMORY+2,1                  INSTRUCTION
```

```
1642    1 0080    10300244          K       1,0,3,SETPSW    PSW1 IN
1643    1 00803   00300276          K       0,0,3,L0C+2     PSW1 OUT
1644    1  0804   FFFFFFFF  A       DATA    -1              R12 IN-INDEX
1645    1 00805   FFFFFFFF  A       DATA    -1              R12 OUT
1646    1 00806   0000040C          PZE,0   RT3             M1 IN
1647    1 00807   00000408          PZE,0   RT3-1           M1 OUT
1648    1 00808   FFFFFFFF  A       DATA    -1              R13 IN
1649    1 00809   FFFFFFFF  A       DATA    -1              R13 OUT
1650    1 0080A   0000000A  A       DATA    10              M2 IN
1651    1 00808   00010009  A       DATA    X'10009'        M2 OUT
1652    1 0080C   3272045C          LW,7    MT1+64,1        FMT
1653    1 0080D   32D2045C          LW,13   MT2+64,1        VMT/VMTR
1654    1 0080E   32D20408          LW,13   RT3-1,1          VRTRCH
1655    1 0080F   00000001  A       DATA    1               RC
1656                                                        PLM-INDIRECT ADDRESSING
1657    1 00810   FFFFFFF0  A       DATA    -16             COUNT
1658    1 00811   8A000CEB          PLM,0   *WKIA           INSTRUCTION
1659    1 00812   17000244          K       1,7,0,SETPSW    PSW1 IN
1660    1 00813   07000276          K       0,7,0,L0C+2     PSW1 OUT
1661    1 00814   00000000  A       PZE                     R12 IN
1662    1 00815   00000000  A       PZE                     R12 OUT
1663    1 00816   0000040E          PZE,0   RT3             M1 IN
1664    1 00817   00000408          PZE,0   RT3-1           M1 OUT
1665    1 00818   00000384          PZE,0   MEMORY          R13 IN-INDIRECT ADDRESS
1666    1 00819   00000384          PZE,0   MEMORY          R13 OUT
1667    1 0081A   00030002  A       DATA    X'30002'        M2 IN
1668    1 0081B   00040001  A       DATA    X'40001'        M2 OUT
1669    1 0081C   3272045C          LW,7    MT1+64,1        FMT
1670    1 0081D   32D2049C          LW,13   MT2+64,1        VMT/VMTR
1671    1 0081E   32D20408          LW,13   RT3-1,1          VRTRCH
1672    1 0081F   00000001  A       DATA    1               RC
1673                                                        PLM-INDIRECT ADDRESSING-INDEXED
1674    1 00820   FFFFFFF0  A       DATA    -16             COUNT
1675    1 00821   8A020CEB          PLM,0   *WKIA,1         INSTRUCTION
1676    1 00822   F0000244          K       15,0,0,SETPSW   PSW1 IN
1677    1 00823   00000276          K       0,0,0,L0C+2     PSW1 OUT
1678    1 00824   FFFFFFFF  A       DATA    -1              R12 IN-INDEX
1679    1 00825   00000000  A       PZE                     R12 OUT
```

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                                          SUFFIX(2)
1 00826   0000041A              PZE,0     RT3+14            M1 IN
1 00827   0000040B              PZE,0     RT3-1             M1 OUT
1 00828   000003D6              PZE,0     MEMORY+2          R12 IN-INDIRECT ADDRESS
1 00829   FFFFFFFF A            DATA      -1                R13 OUT
1 0082A   00000010 A            DATA      16                M2 IN
1 0082B   000F0001 A            DATA      X'F0001'          M2 OUT
1 0082C   3272045C              LW,7      MT1+64,1          FMT
1 0082D   32D2049C              LW,13     MT2+64,1          VMT/VMTR
1 0082E   32D2040B              LW,13     RT3-1,1
1 0082F   0000000F A            DATA      15                RC
                      *                                    PLM-INDIRECT ADDRESSING-INDEXING
1 00830   FFFFFFF0 A            DATA      -16               COUNT
1 00831   8A0202EB              PLM,0     *WKIA,1           INSTRUCTION
1 00832   C0000244              K         12,0,0,SETPSW     PSW1 IN
1 00833   10000276              K         1,0,0,LOC+2       PSW1 OUT
1 00834   FFFFFFFF A            DATA      -1                R12 IN-INDEX
1 00835   FFFFFFFF A            DATA      -1                R12 OUT
1 00836   00000417              PZE,0     RT3+11            M1 IN
1 00837   0000040B              PZE,0     RT3-1             M1 OUT
1 00838   000003D6              PZE,0     MEMORY+2          R13 IN-INDIRECT ADDRESS
1 00839   000003D6              PZE,0     MEMORY+2          R13 OUT
1 0083A   0FFF000C A            DATA      X'FFF000C'        M2 IN
1 0083B   10080000 A            DATA      X'10080000'       M2 OUT
1 0083C   3272045C              LW,7      MT1+64,1          FMT
1 0083D   32D2049C              LW,13     MT2+64,1          VMT/VMTR
1 0083E   32D2040B              LW,13     RT3-1,1           VRTRCH
1 0083F   0000000C A            DATA      12                RC
                      *                                    PLM-ABORT
1 00840   FFFFFFF0 A            DATA      -16               COUNT
1 00841   0AF003D4              PLM,15    MEMORY            INSTRUCTION
1 00842   D0000244              K         13,0,0,SETPSW     PSW1 IN
1 00843   20000276              K         2,0,0,LOC+2       PSW1 OUT
1 00844   FFFFFFFF A            DATA      -1                R12 IN
1 00845   FFFFFFFF A            DATA      -1                R12 OUT
1 00846   0000041A              PZE,0     RT3+14            M1 IN
1 00847   0000041A              PZE,0     RT3+14            M1 OUT
1 00848   00000000 A            PZE                         R13 IN
1 00849   00000000 A            PZE                         R13 OUT
```

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                                       SUFFIX(2)
1 0084A   00028[illegible]  A                DATA      X'2800C'           M2 IN
1 0084B   00028[illegible]  A                DATA      X'2800C'           M2 OUT
1 0084C   32720[illegible]                   LW,7      MT1+64,1           FMT
1 0084D   32D20[illegible]                   LW,13     MT2+64,1           VMT/VMTR
1 0084E   32D20[illegible]                   LW,13     RT3-1,1            VRTRCH
1 0084F   00000[illegible]  A                DATA      0                  RC
                                   *                                     PLM-ABORT
1 00850   FFFFF[illegible]0 A                DATA      -16                COUNT
1 00851   0AC00[illegible]4                  PLM,12    MEMORY             INSTRUCTIONS
1 00852   C0000[illegible]4                  K         12,0,0,SETPSW      PSW1 IN
1 00853   30000276                           K         3,0,0,LOC+2        PSW1 OUT
1 00854   00000000 A                         PZE                          R12 IN
1 00855   00000000 A                         PZE                          R12 OUT
1 00856   00000417                           PZE,0     RT3+11             M1 IN
1 00857   00000417                           PZE,0     RT3+11             M1 OUT
1 00858   FFFFFFFF A                         DATA      -1                 R13 IN
1 00859   FFFFFFFF A                         DATA      -1                 R13 OUT
1 0085A   00018000 A                         DATA      X'18000'           M2 IN
1 0085B   00018000 A                         DATA      X'18000'           M2 OUT
1 0085C   3272045C                           LW,7      MT1+64,1           FMT
1 0085D   32D2049C                           LW,13     MT2+64,1
1 0085E   32D20408                           LW,13     RT3-1,1            VRTRCH
1 0085F   00000000 A                         DATA      0                  RC
                                   *                                     PLM-INDIRECT ADDRESSING-INDEXING
1 00860   FFFFFFF0 A                         DATA      -16                COUNT
1 00861   8A0202EB                           PLM,0     *WKIA,1            INSTRUCTION         ABORT
1 00862   90000244                           K         9,0,0,SETPSW       PSW1 IN
1 00863   60000276                           K         6,0,0,LOC+2        PSW1 OUT
1 00864   FFFFFFFF A                         DATA      -1                 R12 IN-INDEX
1 00865   FFFFFFFF A                         DATA      -1                 R12 OUT
1 00866   00000414                           PZE,0     RT3+8              M1 IN
1 00867   00000414                           PZE,0     RT3+8              M1 OUT
1 00868   000003D6                           PZE,0     MEMORY+2           R13 IN-INDIRECT ADDRESS
1 00869   000003D6                           PZE,0     MEMORY+2           R13 OUT
1 0086A   00008008 A                         DATA      X'8008'            M2 IN
1 0086B   00008008 A                         DATA      X'8008'            M2 OUT
1 0086C   3272045C                           LW,7      MT1+64,1           FMT
1 0086D   32D2049C                           LW,13     MT2+64,1           VMT/VMTR
```

```
1756    1 0086E    32D2040B          LW,13    RT3-1,1          VRTRCH
1757    1 0086F    00000000 A        DATA     0                RC
1758                          *                                 PLM-ABORT
1759    1 00870    FFFFFFF0 A        DATA     -16              COUNT
1760    1 00871    0A0003D4          PLM,0    MEMORY           INSTRUCTION
1761    1 00872    80000244          K        8,0,0,SETPSW     PSW1 IN
1762    1 00873    70000276          K        7,0,0,LOC+2      PSW1 OUT
1763    1 00874    00000000 A        PZE                       R12 IN
1764    1 00875    00000000 A        PZE                       R12 OUT
1765    1 00876    00000413          PZE,0    RT3+7            M1 IN
1766    1 00877    00000413          PZE,0    RT3+7            M1 OUT
1767    1 00878    FFFFFFFF A        DATA     -1               R13 IN
1768    1 00879    FFFFFFFF A        DATA     -1               R13 OUT
1769    1 0087A    00008000 A        DATA     X'8000'          M2 IN
1770    1 0087B    00008000 A        DATA     X'8000'          M2 OUT
1771    1 0087C    3272045C          LW,7     MT1+64,1         FMT
1772    1 0087D    32D2049C          LW,13    MT2+64,1         VMT/VMTR
1773    1 0087E    32D2040B          LW,13    RT3-1,1          VRTRCH
1774    1 0087F    00000000 A        DATA     0                RC
1775                          *                                 PLM-ABORT
1776    1 00880    FFFFFFF0 A        DATA     -16              COUNT
1777    1 00881    0A0003D4          PLM,0    MEMORY           INSTRUCTION
1778    1 00882    70000244          K        7,0,0,SETPSW     PSW1 IN
1779    1 00883    80000276          K        8,0,0,LOC+2      PSW1 OUT
1780    1 00884    FFFFFFFF A        DATA     -1               R12 IN
1781    1 00885    FFFFFFFF A        DATA     -1               R12 OUT
1782    1 00886    00000412          PZE,0    RT3+6
1783    1 00887    00000412          PZE,0    RT3+6            M1 OUT
1784    1 00888    00000000 A        PZE                       R13 IN
1785    1 00889    00000000 A        PZE                       R13 OUT
1786    1 0088A    FFF90008 A        DATA     X'FFF90008'      M2 IN
1787    1 0088B    FFF90008 A        DATA     X'FFF90008'      M2 OUT
1788    1 0088C    3272045C          LW,7     MT1+64,1         FMT
1789    1 0088D    32D2049C          LW,13    MT2+64,1         VMT/VMTR
1790    1 0088E    32D2040B          LW,13    RT3-1,1          VRTRCH
1791    1 0088F    00000000 A        DATA     0                RC
1792                          *                                 PLM-ABORT
1793    1 00890    FFFFFFF0 A        DATA     -16              COUNT
```

```
1794    1 00891    0A0003D4
1795    1 00892    50000244
1796    1 00893    A0000276
1797    1 00894    00000000 A
1798    1 00895    00000000 A
1799    1 00896    00000410
1800    1 00897    00000410
1801    1 00898    FFFFFFFF A
1802    1 00899    FFFFFFFF A
1803    1 0089A    FFFB8004 A
1804    1 0089B    FFFB8004 A
1805    1 0089C    32720450
1806    1 0089D    32D2049C
1807    1 0089E    32D20408
1808    1 0089F    00000000 A
1809
1810    1 008A0    FFFFFFF0 A
1811    1 008A1    0A0003D4
1812    1 008A2    40000244
1813    1 008A3    B0000276
1814    1 008A4    FFFFFFFF A
1815    1 008A5    FFFFFFFF A
1816    1 008A6    0000040F
1817    1 008A7    0000040F
1818    1 008A8    00000000 A
1819    1 008A9    00000000 A
1820    1 008AA    FFFC8000 A
1821    1 008AB    FFFC8000 A
1822    1 008AC    32720450
1823    1 008AD    32D2049C
1824    1 008AE    32D20408
1825    1 008AF    00000000 A
1826
1827    1 008B0    FFFFFFF0 A
1828    1 008B1    0A0003D4
1829    1 008B2    D730018E
1830    1 008B3    D7300070
1831    1 008B4    00000000 A
```

```
SUFFIX(2)
PLM,0     MEMORY              INSTRUCTION
K         5,0,0,SETPSW        PSW1 IN
K         10,0,0,LOC+2        PSW1 OUT
PZE                           R12 IN
PZE                           R12 OUT
PZE,0     RT3+4               M1 IN
PZE,0     RT3+4               M1 OUT
DATA      -1                  R13 IN
DATA      -1                  R13 OUT
DATA      X'FFFB8004'         M2 IN
DATA      X'FFFB8004'         M2 OUT
LW,7      MT1+64,1            FMT
LW,13     MT2+64,1            VMT/VMTR
LW,13     RT3-1,1             VRTRCH
DATA      0                   RC
                              PLM-ABORT
DATA      -16                 COUNT
PLM,0     MEMORY              INSTRUCTION
K         4,0,0,SETPSW        PSW1 IN
K         11,0,0,LOC+2        PSW1 OUT
DATA      -1                  R12 IN
DATA      -1                  R12 OUT
PZE,0     RT3+3               M1 IN
PZE,0     RT3+3               M1 OUT
PZE                           R13 IN
PZE                           R13 OUT
DATA      X'FFFC8000'         M2 IN
DATA      X'FFFC8000'         M2 OUT
LW,7      MT1+64,1            FMT
LW,13     MT2+64,1            VMT/VMTR
LW,13     RT3-1,1             VRTRCH
DATA      0                   RC
                              PLM-TRAP
DATA      -16                 COUNT
PLM,0     MEMORY              INSTRUCTION
K         13,7,3,SLSW         PSW1 IN
K         13,7,3,SLRET+1      PSW1 OUT
PZE                           R12 IN
```

```
1832    1 008B5    00000000 A
1833    1 008B6    00000418
1834    1 008B7    00000418
1835    1 008B8    FFFFFFFF A
1836    1 008B9    FFFFFFFF A
1837    1 008BA    00FF000C A
1838    1 008BB    C0FF000C A
1839    1 008BC    3272045C
1840    1 008BD    32D2049C
1841    1 008BE    32D20408
1842    1 008BF    00000000 A
1843                        *
1844    1 008C0    FFFFFFF0 A
1845    1 008C1    8AC202E3
1846    1 008C2    C730018E
1847    1 008C3    C730007D
1848    1 008C4    00000001 A
1849    1 008C5    00000001 A
1850    1 008C6    00000417
1851    1 008C7    00000417
1852    1 008C8    000003D2
1853    1 008C9    000003D2
1854    1 008CA    000F0000 A
1855    1 008CB    000F0000 A
1856    1 008CC    3272045C
1857    1 008CD    32D2049C
1858    1 008CE    32D20408
1859    1 008CF    00000000 A
1860                        *
1861    1 008D0    FFFFFFF0 A
1862    1 008D1    0AD003D4
1863    1 008D2    9730018E
1864    1 008D3    9730007D
1865    1 008D4    FFFFFFFF A
1866    1 008D5    FFFFFFFF A
1867    1 008D6    00000414
1868    1 008D7    00000414
1869    1 008D8    00000000 A
```

```
SUFFIX(2)
PZE                          R12 OUT
PZE,0     RT3+12             M1 IN
PZE,0     RT3+12             M1 OUT
DATA      -1                 R13 IN
DATA      -1                 R13 OUT
DATA      X'00FF000C'        M2 IN
DATA      X'00FF000C'        M2 OUT
LW,7      MT1+64,1           FMT
LW,13     MT2+64,1           VMT/VMTR
LW,13     RT3-1,1            VRTRCH
DATA      0                  RC
                             PLM-INDIRECT ADDRESSING-INDEXING
DATA      -16                COUNT
PLM,12    *WKIA,1            INSTRUCTION          TRAP
K         12,7,3,SLSW        PSW1 IN
K         12,7,3,SLRET+1     PSW1 OUT
DATA      1                  R12 IN-INDEX
DATA      1                  R12 OUT
PZE,0     RT3+11             M1 IN
PZE,0     RT3+11             M1 OUT
PZE,0     MEMORY-2           R13 IN-INDIRECT ADDRESS
PZE,0     MEMORY-2           R13 OUT
DATA      X'000F0000'        M2 IN
DATA      X'000F0000'        M2 OUT
LW,7      MT1+64,1           FMT
LW,13     MT2+64,1           VMT/VMTR
LW,13     RT3-1,1            VRTRCH
DATA      0                  RC
                             PLM-TRAP
DATA      -16                COUNT
PLM,13    MEMORY             INSTRUCTION
K         9,7,3,SLSW         PSW1 IN
K         9,7,3,SLRET+1      PSW1 OUT
DATA      -1                 R12 IN
DATA      -1                 R12 OUT
PZE,0     RT3+8              M1 IN
PZE,0     RT3+8              M1 OUT
PZE                          R13 IN
```

```
                                    SUFFIX(2)
1 008D9    00000000 A       PZE                        R13 OUT
1 008DA    00000008 A       DATA     8                 M2 IN
1 008DB    00000008 A       DATA     8                 M2 OUT
1 008DC    3272045C         LW,7     MT1+64,1          FMT
1 008DD    32D2049C         LW,13    MT2+64,1          VMT/VMTR
1 008DE    32D2040B         LW,13    RT3-1,1           VRTRCH
1 008DF    00000000 A       DATA     0                 RC
                       *                              PLM-TRAP
1 008E0    FFFFFFF0 A       DATA     -16               COUNT
1 008E1    0A1003D4         PLM,1    MEMORY            INSTRUCTION
1 008E2    8730018E         K        8,7,3,SLSW        PSW1 IN
1 008E3    87300070         K        8,7,3,SLRET+1     PSW1 OUT
1 008E4    00000000 A       PZE                        R12 IN
1 008E5    00000000 A       PZE                        R12 OUT
1 008E6    00000413         PZE,0    RT3+7             M1 IN
1 008E7    00000413         PZE,0    RT3+7             M1 OUT
1 008E8    FFFFFFFF A       DATA     -1                R13 IN
1 008E9    FFFFFFFF A       DATA     -1                R13 OUT
1 008EA    00000000 A       PZE                        M2 IN
1 008EB    00000000 A       PZE                        M2 OUT
1 008EC    3272045C         LW,7     MT1+64,1          FMT
1 008ED    32D2049C         LW,13    MT2+64,1          VMT/VMTR
1 008EE    32D2040B         LW,13    RT3-1,1           VRTRCH
1 008EF    00000000 A       DATA     0                 RC
                       *                              PLM-TRAP
1 008F0    FFFFFFF0 A       DATA     -16               COUNT
1 008F1    0A2003D4         PLM,2    MEMORY            INSTRUCTION
1 008F2    7730018E         K        7,7,3,SLSW        PSW1 IN
1 008F3    77300070         K        7,7,3,SLRET+1     PSW1 OUT
1 008F4    FFFFFFFF A       DATA     -1                R12 IN
1 008F5    FFFFFFFF A       DATA     -1                R12 OUT
1 008F6    00000412         PZE,0    RT3+6             M1 IN
1 008F7    00000412         PZE,0    RT3+6             M1 OUT
1 008F8    00000000 A       PZE                        R13 IN
1 008F9    00000000 A       PZE                        R13 OUT
1 008FA    7FF90008 A       DATA     X'7FF90008'       M2 IN
1 008FB    7FF90008 A       DATA     X'7FF90008'       M2 OUT
1 008FC    3272045C         LW,7     MT1+64,1          FMT
```

```
                                         SUFFIX(2)
1 008FD   32D2049C               LW,13     MT2+64,1          VMT/VMTR
1 008FE   32D2040B               LW,13     RT3-1,1           VRTRCH
1 008FF   00000000 A             DATA      0                 RC
                        *                                   PLM-TRAP
1 00900   FFFFFFF0 A             DATA      -16               COUNT
1 00901   0A3003D4               PLM,3     MEMORY            INSTRUCTION
1 00902   5730018E               K         5,7,3,SLSW        PSW1 IN
1 00903   5730007D               K         5,7,3,SLRCT+1     PSW1 OUT
1 00904   00000000 A             PZE                         R12 IN
1 00905   00000000 A             PZE                         R12 OUT
1 00906   00000410               PZE,0     RT3+4             M1 IN
1 00907   00000410               PZE,0     RT3+4             M1 OUT
1 00908   FFFFFFFF A             DATA      -1                R13 IN
1 00909   FFFFFFFF A             DATA      -1                R13 OUT
1 0090A   7FFB0004 A             DATA      X'7FFB0004'       M2 IN
1 0090B   7FFB0004 A             DATA      X'7FFB0004'       M2 OUT
1 0090C   3272049C               LW,7      MT1+64,1          FMT
1 0090D   32D2049C               LW,13     MT2+64,1          VMT/VMTR
1 0090E   32D2040B               LW,13     RT3-1,1           VRTRCH
1 0090F   00000000 A             DATA      0                 RC
                        *                                   PLM-TRAP
1 00910   FFFFFFF0 A             DATA      -16               COUNT
1 00911   0A4003D4               PLM,4     MEMORY            INSTRUCTION
1 00912   4730018E               K         4,7,3,SLSW        PSW1 IN
1 00913   4730007D               K         4,7,3,SLRCT+1     PSW1 OUT
1 00914   FFFFFFFF A             DATA      -1                R12 IN
1 00915   FFFFFFFF A             DATA      -1                R12 OUT
1 00916   0000040F               PZE,0     RT3+3             M1 IN
1 00917   0000040F               PZE,0     RT3+3             M1 OUT
1 00918   00000000 A             PZE                         R13 IN
1 00919   00000000 A             PZE                         R13 OUT
1 0091A   7FFC0000 A             DATA      X'7FFC0000'       M2 IN
1 0091B   7FFC0000 A             DATA      X'7FFC0000'       M2 OUT
1 0091C   3272049C               LW,7      MT1+64,1          FMT
1 0091D   32D2049C               LW,13     MT2+64,1          VMT/VMTR
1 0091E   32D2040B               LW,13     RT3-1,1           VRTRCH
1 0091F   00000000 A             DATA      0                 RC
                        *                                   PSM
```

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                                      SUFFIX(2)
1 00920   FFFFFFF0 A                 DATA      -16                 COUNT
1 00921   0B0003D4                   PSM,0     MEMORY              INSTRUCTION
1 00922   00300244                   K         0,0,3,SETPS ¦       PSW1 IN
1 00923   40300276                   K         4,0,3,LOC+2         PSW1 OUT
1 00924   01234567 A                 DATA      X'1234567'          R12 IN
1 00925   01234567 A                 DATA      X'1234567'          R12 OUT
1 00926   0000052D                   PZE,0     VRT-1               M1 IN
1 00927   0000053D                   PZE,0     VRT+15              M1 OUT
1 00928   FEDCBA98 A                 DATA      X'FEDCBA98'         R13 IN
1 00929   FEDCBA98 A                 DATA      X'FEDCBA98'         R13 OUT
1 0092A   00100000 A                 DATA      X'100000'           M2 IN
1 0092B   00000010 A                 DATA      16                  M2 OUT
1 0092C   3272045C                   LW,7      MT1+64,1            FMT
1 0092D   32D2049C                   LW,13     MT2+64,1            VMT/VMTR
1 0092E   32D203EB                   LW,13     RT1-1,1             VRTRCH
1 0092F   00000010 A                 DATA      16                  RC
                          *                                      PSM
1 00930   FFFFFFF0 A                 DATA      -16                 COUNT
1 00931   0B0003D4                   PSM,0     MEMORY              INSTRUCTION
1 00932   07000244                   K         0,7,0,SETPSW        PSW1 IN
1 00933   07000276                   K         0,7,0,LOC+2         PSW1 OUT
1 00934   01234567 A                 DATA      X'1234567'          R12 2N
1 00935   01234567 A                 DATA      X'1234567'          R12 3UT
1 00936   0000052D                   PZE,0     VRT-1               M1 IN
1 00937   0000053D                   PZE,0     VRT+15              M1 OUT
1 00938   FEDCBA98 A                 DATA      X'FEDCBA98'         R13 IN
1 00939   FEDCBA98 A                 DATA      X'FEDCBA98'         R13 OUT
1 0093A   00110000 A                 DATA      X'110000'           M2 IN
1 0093B   00010010 A                 DATA      X'10010'            M2 OUT
1 0093C   3272045C                   LW,7      MT1+64,1            FMT
1 0093D   32D2049C                   LW,13     MT2+64,1            VMT/VMTR
1 0093E   32D203EB                   LW,13     RT1-1,1             VRTRCH
1 0093F   00000010 A                 DATA      16                  RC
                          *                                      PSM-INDEXING
1 00940   FFFFFFF0 A                 DATA      -16                 COUNT
1 00941   0B028EA4                   PSM,0     MEMORY+X'68AD0',1   INSTRUCTION
1 00942   B0000244                   K         11,0,0,SETPSW       PSW1 IN
1 00943   00000276                   K         0,0,0,LOC+2         PSW1 OUT
```

```
1984    1 00944    FEDCBA98 A          DATA     X'FEDCBA98'          R12 IN-INDEX
1985    1 00945    FEDCBA98 A          DATA     X'FEDCBA98'          R12 OUT
1986    1 00946    0000052D            PZE,0    VRT-1                M1 IN
1987    1 00947    00000538            PZE,0    VRT+10               M1 OUT
1988    1 00948    01234567 A          DATA     X'1234567'           R13 IN
1989    1 00949    01234567 A          DATA     X'1234567'           R13 OUT
1990    1 0094A    7FFF7FF4 A          DATA     X'7FFF7FF4'          M2 IN
1991    1 0094B    7FF47FFF A          DATA     X'7FF47FFF'          M2 OUT
1992    1 0094C    3272045C            LW,7     MT1+64,1             FMT
1993    1 0094D    32D2049C            LW,13    MT2+64,1             VMT/WMTR
1994    1 0094E    32D203EB            LW,13    RT1-1,1              VRTRCH
1995    1 0094F    0000000B A          DATA     11                   RC
1996                               *                                 PSM-INDIRECT ADDRESSING
1997    1 00950    FFFFFFF0 A          DATA     -16                  COUNT
1998    1 00951    8B0002EB            PSM,0    *WKIA                INSTRUCTION
1999    1 00952    C0000244            K        12,0,0,SETPSW        PSW1 IN
2000    1 00953    40000276            K        4,0,0,L0C+2          PSW1 OUT
2001    1 00954    FEDCBA98 A          DATA     X'FEDCBA98'          R12 IN
2002    1 00955    FEDCBA98 A          DATA     X'FEDCBA98'          R12 OUT
2003    1 00956    0000052D            PZE,0    VRT-1                M1 IN
2004    1 00957    00000539            PZE,0    VRT+11               M1 OUT
2005    1 00958    000003D4            PZE,0    MEMORY               R13 IN-INDIRECT ADDRESS
2006    1 00959    01234567 A          DATA     X'1234567'           R13 OUT
2007    1 0095A    000C0001 A          DATA     X'C0001'             M2 IN
2008    1 0095B    0000000D A          DATA     13                   M2 OUT
2009    1 0095C    3272045C            LW,7     MT1+64,1             FMT
2010    1 0095D    32D2049C            LW,13    MT2+64,1             VMT/VMTR
2011    1 0095E    32D203EB            LW,13    RT1-1,1              VRTRCH
2012    1 0095F    0000000C A          DATA     12                   RC
2013                               *                                 PSM-INDIRECT ADDRESSING-INDEXING
2014    1 00960    FFFFFFF0 A          DATA     -16                  COUNT
2015    1 00961    8B020?EB            PSM,0    *WKIA,1              INSTRUCTION
2016    1 00962    B0000244            K        11,0,0,SETPSW        PSW1 IN
2017    1 00963    00000276            K        0,0,0,L0C+2          PSW1 OUT
2018    1 00964    FEDCBA98 A          DATA     X'FEDCBA98'          R12 IN-INDEX
2019    1 00965    FEDCBA98 A          DATA     X'FEDCBA98'          R12 OUT
2020    1 00966    0000052D            PZE,0    VRT-1                M1 IN
2021    1 00967    00000538            PZE,0    VRT+10               M1 OUT
```

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2022    1 00968    00008EA4          PZE,0    MEMORY+X'68AD0'   R13 IN-INDIRECT ADDRESS
2023    1 00969    01234567 A        DATA     X'1234567'        R13 OUT
2024    1 0096A    000C0000 A        DATA     X'C0000'          M2 IN
2025    1 0096B    0001000B A        DATA     X'1000B'          M2 OUT
2026    1 0096C    3272045C          LW,7,    MT1+64,1          FMT
2027    1 0096D    32D2049C          LW,13    MT2+64,1          VMT/VMTR
2028    1 0096E    32D203EB          LW,13    RT1-1,1           VRTRCH
2029    1 0096F    0000000B A        DATA     11                RC
2030                         *                                  PSM-ABORT
2031    1 00970    FFFFFFF0 A        DATA     -16               COUNT
2032    1 00971    0BC003D4          PSM,12   MEMORY            INSTRUCTION
2033    1 00972    D0000244          K        13,0,0,SETPSW     PSW1 IN
2034    1 00973    20000276          K        2,0,0,L0C+2       PSW1 OUT
2035    1 00974    FFFFFFFF A        DATA     -1                R12 IN
2036    1 00975    FFFFFFFF A        DATA     -1                R12 OUT
2037    1 00976    00000520          PZE,0    VRT-1             M1 IN
2038    1 00977    00000520          PZE,0    VRT-1             M1 OUT
2039    1 00978    00000000 A        PZE                        R13 IN
2040    1 00979    00000000 A        PZE                        R13 OUT
2041    1 0097A    000EFFF3 A        DATA     X'000EFFF3'       M2 IN
2042    1 0097B    000EFFF3 A        DATA     X'000EFFF3'       M2 OUT
2043    1 0097C    3272045C          LW,7     MT1+64,1          FMT
2044    1 0097D    32D2049C          LW,13    MT2+64,1          VMT/VMTR
2045    1 0097E    32D203EB          LW,13    RT1-1,1           VRTRCH
2046    1 0097F    00000000 A        DATA     0                 RC
2047                         *                                  PSM-INDIRECT ADDRESSING-ABORT
2048    1 00980    FFFFFFF0 A        DATA     -16               COUNT
2049    1 00981    80D002EB          PSM,13   *WKIA             INSTRUCTION
2050    1 00982    70000244          K        7,0,0,SETPSW      PSW1 IN
2051    1 00983    80000276          K        8,0,0,L0C+2       PSW1 OUT
2052    1 00984    00000000 A        PZE                        R12 IN
2053    1 00985    00000000 A        PZE                        R12 OUT
2054    1 00986    00000520          PZE,0    VRT-1             M1 IN
2055    1 00987    00000520          PZE,0    VRT-1             M1 OUT
2056    1 00988    000003D4          PZE,0    MEMORY            R13 IN
2057    1 00989    000003D4          PZE,0    MEMORY            R13 OUT
2058    1 0098A    80067FF8 A        DATA     X'80067FF8'       M2 IN
2059    1 0098B    80067FF8 A        DATA     X'80067FF8'       M2 OUT
```

```
2060    1 0098C    3272045C          LW,7     MT1+64,1      FMT
2061    1 0098D    32D2049C          LW,13    MT2+64,1      VMT/VMTR
2062    1 0098E    32D203EB          LW,13    RT1-1,1       VRTRCH
2063    1 0098F    00000000 A        DATA     0             RC
2064                              *                         PSM-INDEXING-ABORT
2065    1 00990    FFFFFFF0 A        DATA     -16           COUNT
2066    1 00991    0B1203D2          PSM,1    MEMORY-2,1    INSTRUCTION
2067    1 00992    60000244          K        6,0,0,SETPSW  PSW1 IN
2068    1 00993    90000276          K        9,0,0,LOC+2   PSW1 OUT
2069    1 00994    00000001 A        DATA     1             R12 IN-INDEX
2070    1 00995    00000001 A        DATA     1             R12 OUT
2071    1 00996    0000052D          PZE,0    VRT-1         M1 IN
2072    1 00997    0000052D          PZE,0    VRT-1         M1 OUT
2073    1 00998    FFFFFFFF A        DATA     -1            R13 IN
2074    1 00999    FFFFFFFF A        DATA     -1            R13 OUT
2075    1 0099A    80050000 A        DATA     X'80050000'   M2 IN
2076    1 0099B    80050000 A        DATA     X'80050000'   M2 OUT
2077    1 0099C    3272045C          LW,7     MT1+64,1      FMT
2078    1 0099D    32D2049C          LW,13    MT2+64,1      VMT/VMTR
2079    1 0099E    32D203EB          LW,13    RT1-1,1       VRTRCH
2080    1 0099F    00000000 A        DATA     0             RC
2081                              *                         PSM-INDIRECT ADDRESSING-INDEXING
2082    1 009A0    FFFFFFF0 A        DATA     -16           COUNT
2083    1 009A1    8B2202E8          PSM,2    *WKIA,1       INSTRUCTION          ABORT
2084    1 009A2    50000244          K        5,0,0,SETPSW  PSW1 IN
2085    1 009A3    A0000276          K        10,0,0,LOC+2  PSW1 OUT
2086    1 009A4    FFFFFFC0 A        DATA     -64           R12 IN-INDEX
2087    1 009A5    FFFFFFC0 A        DATA     -64           R12 OUT
2088    1 009A6    0000052D          PZE,0    VRT-1         M1 IN
2089    1 009A7    0000052D          PZE,0    VRT-1         M1 OUT
2090    1 009A8    00000454          PZE,0    MEMORY+128    R13 IN-INDIRECT ADDRESS
2091    1 009A9    00000454          PZE,0    MEMORY+128    R13 OUT
2092    1 009AA    8004FFFB A        DATA     X'8004FFFB'   M2 IN
2093    1 009AB    8004FFFB A        DATA     X'8004FFFB'   M2 OUT
2094    1 009AC    3272045C          LW,7     MT1+64,1      FMT
2095    1 009AD    32D2049C          LW,13    MT2+64,1      VMT/VMTR
2096    1 009AE    32D203EB          LW,13    RT1-1,1       VRTRCH
2097    1 009AF    00000000 A        DATA     0             RC
```

```
                                  *                        PSM-ABORT
1 009B0    FFFFFFF0 A     DATA     -16                      COUNT
1 009B1    0B3003D4       PSM,3    MEMORY                   INSTRUCTION
1 009B2    30000244       K        3,0,0,SETPSW             PSW1 IN
1 009B3    C0000276       K        12,0,0,LOC+2             PSW1 OUT
1 009B4    FFFFFFFF A     DATA     -1                       R12 IN
1 009B5    FFFFFFFF A     DATA     -1                       R12 OUT
1 009B6    0000052D       PZE,0    VRT-1                    M1 IN
1 009B7    0000052D       PZE,0    VRT-1                    M1 OUT
1 009B8    00000000 A     PZE                               R13 IN
1 009B9    00000000 A     PZE                               R13 OUT
1 009BA    80007FFC A     DATA     X'80007FFC'              M2 IN
1 009BB    80007FFC A     DATA     X'80007FFC'              M2 OUT
1 009BC    3272045C       LW,7     MT1+64,1                 FMT
1 009BD    32D2049C       LW,13    MT2+64,1                 VMT/VMTR
1 009BE    32D203EB       LW,13    RT1-1,1                  VRTRCH
1 009BF    00000000 A     DATA     0                        RC
                                  *                        PSM-ABORT
1 009C0    FFFFFFF0 A     DATA     -16                      COUNT
1 009C1    0B4003D4       PSM,4    MEMORY                   INSTRUCTION
1 009C2    20000244       K        2,0,0,SETPSW             PSW1 IN
1 009C3    D0000276       K        13,0,0,LOC+2             PSW1 OUT
1 009C4    00000000 A     PZE                               R12 IN
1 009C5    00000000 A     PZE                               R12 OUT
1 009C6    0000052D       PZE,0    VRT-1                    M1 IN
1 009C7    0000052D       PZE,0    VRT-1                    M1 OUT
1 009C8    FFFFFFFF A     DATA     -1                       R13 IN
1 009C9    FFFFFFFF A     DATA     -1                       R13 OUT
1 009CA    80000000 A     DATA     X'80000000'              M2 IN
1 009CB    80000000 A     DATA     X'80000000'              M2 OUT
1 009CC    3272045C       LW,7     MT1+64,1                 FMT
1 009CD    32D2049C       LW,13    MT2+64,1                 VMT/VMTR
1 009CE    32D203EB       LW,13    RT1-1,1                  VRTRCH
1 009CF    00000000 A     DATA     0                        RC
                                  *                        PSM-ABORT
1 009D0    FFFFFFF0 A     DATA     -16                      COUNT
1 009D1    0B5003D4       PSM,5    MEMORY                   INSTRUCTION
1 009D2    10000244       K        1,0,0,SETPSW             PSW1 IN
```

```
                                         SUFFIX(2)
1 009D3    E0000276           K         14,0,0,LOC+2        PSW1 OUT
1 009D4    FFFFFFFF A         DATA      -1                  R12 IN
1 009D5    FFFFFFFF A         DATA      -1                  R12 OUT
1 009D6    0000052D           PZE,0     VRT-1               M1 IN
1 009D7    0000052D           PZE,0     VRT-1               M1 OUT
1 009D8    00000000 A         PZE                           R13 IN
1 009D9    00000000 A         PZE                           R13 OUT
1 009DA    8000FFFF A         DATA      X'8000FFFF'         M2 IN
1 009DB    8000FFFF A         DATA      X'8000FFFF'         M2 OUT
1 009DC    3272045C           LW,7      MT1+64,1            FMT
1 009DD    32D2049C           LW,13     MT2+64,1            VMT/VMTR
1 009DE    32D203EB           LW,13     RT1-1,1             VRTRCH
1 009DF    00000000 A         DATA      0                   RC
                          *                                PSM-TRAP
1 009E0    FFFFFFF0 A         DATA      -16                 COUNT
1 009E1    0B6003D4           PSM,6     MEMORY              INSTRUCTION
1 009E2    D730018E           K         13,7,3,SLSW         PSW1 IN
1 009E3    D730007D           K         13,7,3,SLRET+1      PSW1 OUT
1 009E4    00000000 A         PZE                           R12 IN
1 009E5    00000000 A         PZE                           R12 OUT
1 009E6    0000052D           PZE,0     VRT-1               M1 IN
1 009E7    0000052D           PZE,0     VRT-1               M1 OUT
1 009E8    FFFFFFFF A         DATA      -1                  R13 IN
1 009E9    FFFFFFFF A         DATA      -1                  R13 OUT
1 009EA    000E7FF3 A         DATA      X'000E7FF3'         M2 IN
1 009EB    000E7FF3 A         DATA      X'000E7FF3'         M2 OUT
1 009EC    3272045C           LW,7      MT1+64,1            FMT
1 009ED    32D2049C           LW,13     MT2+64,1            VMT/VMTR
1 009EE    32D203EB           LW,13     RT1-1,1             VRTRCH
1 009EF    00000000 A         DATA      0                   RC
                          *                                PSM-INDIRECT ADDRESSING-INDEXING
1 009F0    FFFFFFF0 A         DATA      -16                 COUNT
1 009F1    887202EB           PSM,7     *WKIA,1             INSTRUCTION                    TRAP
1 009F2    7730018E           K         7,7,3,SLSW          PSW1 IN
1 009F3    7730007D           K         7,7,3,SLRET+1       PSW1 OUT
1 009F4    FFFFFFFF A         DATA      -1                  R12 IN-IN[illegible]
1 009F5    FFFFFFFF A         DATA      -1                  R12 OUT
1 009F6    0000052D           PZE,0     VRT-1               M1 IN
```

```
2174    1 009F7    0000052D
2175    1 009F8    00000306
2176    1 009F9    00000306
2177    1 009FA    00067FF9 A
2178    1 009FB    00067FF9 A
2179    1 009FC    32720450
2180    1 009FD    32D2049C
2181    1 009FE    32D203E8
2182    1 009FF    00000000 A
2183
2184    1 00A00    FFFFFFF0 A
2185    1 00A01    0B7003D4
2186    1 00A02    6730018E
2187    1 00A03    6730007D
2188    1 00A04    00000000 A
2189    1 00A05    00000000 A
2190    1 00A06    0000052D
2191    1 00A07    0000052D
2192    1 00A08    FFFFFFFF A
2193    1 00A09    FFFFFFFF A
2194    1 00A0A    00050000 A
2195    1 00A0B    00050000 A
2196    1 00A0C    32720450
2197    1 00A0D    32D2049C
2198    1 00A0E    32D203E8
2199    1 00A0F    00000000 A
2200
2201    1 00A10    FFFFFFF0 A
2202    1 00A11    0B8003D4
2203    1 00A12    5730018E
2204    1 00A13    5730007D
2205    1 00A14    FFFFFFFF A
2206    1 00A15    FFFFFFFF A
2207    1 00A16    0000052D
2208    1 00A17    0000052D
2209    1 00A18    00000000 A
2210    1 00A19    00000000 A
2211    1 00A1A    00047FFB A
```

```
SUFFIX(2)
PZE,0     VRT-1              M1 OUT
PZE,0     MEMORY+2           R13 IN-INDIRECT ADDRESS
PZE,0     MEMORY+2           R13 OUT
DATA      X'00067FF9'        M2 IN
DATA      X'00067FF9'        M2 OUT
LW,7      MT1+64,1           FMT
LW,13     MT2+64,1           VMT/VMTR
LW,13     RT1-1,1            VRTRCH
DATA      0                  RC
                             PSM-TRAP
DATA      -16                COUNT
PSM,7     MEMORY             INSTRUCTION
K         6,7,3,SLSW         PSW1 IN
K         6,7,3,SLRET+1      PSW1 OUT
PZE                          R12 IN
PZE                          R12 OUT
PZE,0     VRT-1              M1 IN
PZE,0     VRT-1              M1 OUT
DATA      -1                 R13 IN
DATA      -1                 R13 OUT
DATA      X'00050000'        M2 IN
DATA      X'00050000'        M2
LW,7      MT1+64,1           FMT
LW,13     MT2+64,1           VMT/VMTR
LW,13     RT1-1,1            VRTRCH
DATA      0                  RC
                             PSM-TRAP
DATA      -16                COUNT
PSM,8     MEMORY             INSTRUCTION
K         5,7,3,SLSW         PSW1 IN
K         5,7,3,SLRET+1      PSW1 OUT
DATA      -1                 R12 IN
DATA      -1                 R12 OUT
PZE,0     VRT-1              M1 IN
PZE,0     VRT-1              M1 OUT
PZE                          R13 IN
PZE                          R13 OUT
DATA      X'00047FFB'        M2 IN
```

```
2212    1 00A1B    00047FFB A
2213    1 00A1C    3272045C
2214    1 00A1D    32D2049C
2215    1 00A1E    32D203EB
2216    1 00A1F    00000000 A
2217
2218    1 00A20    FFFFFFF0 A
2219    1 00A21    0B9003D4
2220    1 00A22    3730018E
2221    1 00A23    3730007D
2222    1 00A24    00000000 A
2223    1 00A25    00000000 A
2224    1 00A26    0000052D
2225    1 00A27    0000052D
2226    1 00A28    FFFFFFFF A
2227    1 00A29    FFFFFFFF A
2228    1 00A2A    00007FFC A
2229    1 00A2B    00007FFC A
2230    1 00A2C    3272045C
2231    1 00A2D    32D2049C
2232    1 00A2E    32D203EB
2233    1 00A2F    00000000 A
2234
2235    1 00A30    FFFFFFF0 A
2236    1 00A31    03A003D4
2237    1 00A32    2730018E
2238    1 00A33    2730007D
2239    1 00A34    FFFFFFFF A
2240    1 00A35    FFFFFFFF A
2241    1 00A36    0000052D
2242    1 00A37    0000052D
2243    1 00A38    00000000 A
2244    1 00A39    00000000 A
2245    1 00A3A    00000000 A
2246    1 00A3B    00000000 A
2247    1 00A3C    3272045C
2248    1 00A3D    32D2049C
2249    1 00A3E    32D203EB
```

```
SUFFIX(2)
DATA      X'00047FFB'      M2 OUT
LW,7      MT1+64,1         FMT
LW,13     MT2+64,1         VMT/VMTR
LW,13     RT1-1,1          VRTRCH
DATA      0                RC
                           PSM-TRAP
DATA      -16              COUNT
PSM,9     MEMORY           INSTRUCTION
K         3,7,3,SLSW       PSW1 IN
K         3,7,3,SLRET+1    PSW1 OUT
PZE                        R12 IN
PZE                        R12 OUT
PZE,0     VRT-1            M1 IN
PZE,0     VRT-1            M1 OUT
DATA      -1               R13 IN
DATA      -1               R13 OUT
DATA      X'00007FFC'      M2 IN
DATA      X'00007FFC'      M2 OUT
LW,7      MT1+64,1         FMT
LW,13     MT2+64,1         VMT/VMTR
LW,13     RT1-1,1          VRTRCH
DATA      0                RC
                           PSM-TRAP
DATA      -16              COUNT
PSM,10    MEMORY           INSTRUCTION
K         2,7,3,SLSW       PSW1 IN
K         2,7,3,SLRET+1    PSW1 OUT
DATA      -1               R12 IN
DATA      -1               R12 OUT
PZE,0     VRT-1            M1 IN
PZE,0     VRT-1            M1 OUT
PZE                        R13 IN
PZE                        R13 OUT
PZE                        M2 IN
PZE                        M2 OUT
LW,7      MT1+64,1         FMT
LW,13     MT2+64,1         VMT/VMTR
LW,13     RT1-1,1          VRTRCH
```

```
2250     1 00A3F    00000000 A
2251
2252     1 00A40    FFFFFFF0 A
2253     1 00A41    03E003D4
2254     1 00A42    1730018E
2255     1 00A43    1730007D
2256     1 00A44    00000000 A
2257     1 00A45    00000000 A
2258     1 00A46    0000052D
2259     1 00A47    0000052D
2260     1 00A48    FFFFFFFF A
2261     1 00A49    FFFFFFFF A
2262     1 00A4A    00007FFF A
2263     1 00A4B    00007FFF A
2264     1 00A4C    3272045C
2265     1 00A4D    32D2049C
2266     1 00A4E    32D2038B
2267     1 00A4F    00000000 A
2268
2269     1 00A50    FFFFFFF2 A
2270     1 00A51    29C00590
2271     1 00A52    073C0244
2272     1 00A53    07300276
2273     1 00A54    FEDCBA98 A
2274     1 00A55    00000000 A
2275     1 00A56    FEDCBA98 A
2276     1 00A57    FEDCBA98 A
2277     1 00A58    00000000 A
2278     1 00A59    00000000 A
2279     1 00A5A    00000000 A
2280     1 00A5B    00000000 A
2281     1 00A5C    3272045C
2282     1 00A5D    32D2049C
2283
2284     1 00A5E    FFFFFFF2 A
2285     1 00A5F    29C20590
2286     1 00A60    F0300244
2287     1 00A61    D0300276
```

```
SUFFIX(2)
DATA     0                      RC
                                PSM-TRAP
DATA     -16                    COUNT
PSM,11   MEMORY                 INSTRUCTION
K        1,7,3,SLSW             PSW1 IN
K        1,7,3,SLRET+1          PSW1 OUT
PZE                             R12 IN
PZE                             R12 OUT
PZE,0    VRT-1                  M1 IN
PZE,0    VRT-1                  M1 OUT
DATA     -1                     R13 IN
DATA     -1                     R13 OUT
DATA     X'00007FFF'            M2 IN
DATA     X'00007FFF'            M2 OUT
LW,7     MT1+64,1               FMT
LW,13    MT2+64,1               VMT/VMTR
LW,13    RT1-1,1                VRTRCH
DATA     0                      RC
                                CVA
DATA     -14                    COUNT
CVA,12   VMT                    INSTRUCTION
K        0,7,3,SETPSW           PSW1 IN
K        0,7,3,LOC+2            PSW1 OUT
DATA     X'FEDCBA98'            R12 IN
DATA     0                      R12 OUT
DATA     X'FEDCBA98'            M1 IN
DATA     X'FEDCBA98'            M1 OUT
DATA     0                      R13 IN
DATA     0                      R13 OUT
DATA     0                      M2 IN
DATA     0                      M2 OUT
LW,7     MT1+64,1               FMT
LW,13    MT2+64,1               VMT/VMTR
                                CVA-INDEXING
DATA     -14                    COUNT
CVA,12   VMT,1                  INSTRUCTION
K        15,0,3,SETPSW          PSW1 IN
K        13,0,3,LOC+2           PSW1 OUT
```

```
2288    1 00A62    00000020 A      DATA    32              R12 IN-INDEX
2289    1 00A63    FFFFFFFF A      DATA    -1              R12 OUT
2290    1 00A64    00000000 A      DATA    0               M1 IN
2291    1 00A65    00000000 A      DATA    0               M1 OUT
2292    1 00A66    FFFF0000 A      DATA    X'FFFF0000'     R13 IN
2293    1 00A67    FFFF0000 A      DATA    X'FFFF0000'     R13 OUT
2294    1 00A68    FFFFFFFF A      DATA    -1              M2 IN
2295    1 00A69    FFFFFFFF A      DATA    -1              M2 OUT
2296    1 00A6A    32720450        LW,7    MT1+64,1        FMT
2297    1 00A6B    32D2049C        LW,13   MT2+64,1        VMT/VMTR
2298                                                       CVA
2299    1 00A6C    FFFFFFF2 A      DATA    -14             COUNT
2300    1 00A6D    29C00590        CVA,12  VMT             INSTRUCTION
2301    1 00A6E    A7000244        K       10,7,0,SETPSW   PSW1 IN
2302    1 00A6F    17000276        K       1,7,0,L0C+2     PSW1 OUT
2303    1 00A70    00000000 A      DATA    0               R12 IN
2304    1 00A71    FFFFFFFF A      DATA    -1              R12 OUT
2305    1 00A72    FFFFFFFF A      DATA    -1              M1 IN
2306    1 00A73    FFFFFFFF A      DATA    -1              M1 OUT
2307    1 00A74    FFFFFFFF A      DATA    -1              R13 IN
2308    1 00A75    FFFFFFFF A      DATA    -1              R13 OUT
2309    1 00A76    00000000 A      DATA    0               M2 IN
2310    1 00A77    00000000 A      DATA    0               M2 OUT
2311    1 00A78    32720450        LW,7    MT1+64,1        FMT
2312    1 00A79    32D2049C        LW,13   MT2+64,1        VMT/VMTR
2313                                                       CVA-INDIRECT ADDRESSING
2314    1 00A7A    FFFFFFF2 A      DATA    -14             COUNT
2315    1 00A7B    A9C002E8        CVA,12  *WK1A           INSTRUCTION
2316    1 00A7C    50000244        K       5,0,0,SETPSW    PSW1 IN
2317    1 00A7D    60000276        K       6,0,0,L0C+2     PSW1 OUT
2318    1 00A7E    FFFFFFFF A      DATA    -1              R12 IN
2319    1 00A7F    02A00000 A      DATA    X'02A00000'
2320    1 00A80    FFFFFFFF A      DATA    -1              M1 IN
2321    1 00A81    FFFFFFFF A      DATA    -1              M1 OUT
2322    1 00A82    00000590        PZE,0   VMT             R13 IN
2323    1 00A83    00000590        PZE,0   VMT             R13 OUT
2324    1 00A84    00000000 A      PZE                     M2 IN
2325    1 00A85    00000000 A      PZE                     M2 OUT
```

```
                                     SUFFIX(2)
1 00A86   3272045C            LW,7       MT1+64,1           FMT
1 00A87   32D2049C            LW,13      MT2+64,1           VMT/VMTR
                          *                                CVA
1 00A88   FFFFFFF2 A          DATA       -14                 COUNT
1 00A89   29C005B0            CVA,12     VMT+32              INSTRUCTION
1 00A8A   00100244            K          0,0,1,SETPSW        PSW1 IN
1 00A8B   90100276            K          9,0,1,LOC+2         PSW1 OUT
1 00A8C   00000000 A          PZE                            R12 IN
1 00A8D   80000001 A          DATA       X'80000001'         R12 OUT
1 00A8E   FFFFFFFF A          DATA       -1                  M1 IN
1 00A8F   FFFFFFFF A          DATA       -1                  M1 OUT
1 00A90   FFFFFFFF A          DATA       -1                  R13 IN
1 00A91   FFFFFFFF A          DATA       -1                  R13 OUT
1 00A92   00000000 A          PZE                            M2 IN
1 00A93   00000000 A          PZE                            M2 OUT
1 00A94   3272045C            LW,7       MT1+64,1            FMT
1 00A95   32D2049C            LW,13      MT2+64,1            VMT/VMTR
                          *                                CVS
1 00A96   FFFFFFF2 A          DATA       -14                 COUNT
1 00A97   28C00590            CVS,12     VMT                 INSTRUCTION
1 00A98   07300244            K          0,7,3,SETPSW        PSW1 IN
1 00A99   07300276            K          0,7,3,LOC+2         PSW1 OUT
1 00A9A   00000000 A          DATA       0                   R12 IN
1 00A9B   00000000 A          DATA       0                   R12 OUT
1 00A9C   FEDCBA98 A          DATA       X'FEDCBA98'         M1 IN
1 00A9D   FEDCBA98 A          DATA       X'FEDCBA98'         M1 OUT
1 00A9E   FFFFFFFF A          DATA       -1                  R13 IN
1 00A9F   00000000 A          DATA       0                   R13 OUT
1 00AA0   FFFFFFFF A          DATA       -1                  M2 IN
1 00AA1   FFFFFFFF A          DATA       -1                  M2 OUT
1 00AA2   3272045C            LW,7       MT1+64,1            FMT
1 00AA3   32D2045C            LW,13      MT1+64,1            VMT/VMTR
                          *                                CVS
1 00AA4   FFFFFFF2 A          DATA       -14                 COUNT
1 00AA5   28C005B0            CVS,12     VMT+32              INSTRUCTION
1 00AA6   00300244            K          0,0,3,SETPSW        PSW1 IN
1 00AA7   20300276            K          2,0,3,LOC+2         PSW1 OUT
1 00AA8   EFFFFFFF A          DATA       X'EFFFFFFF'         R12 IN
```

```
                                      SUFFIX(2)
1 00AA9   0696968C A         DATA     X'696968C'         R12 OUT
1 00AAA   00000000 A         PZE                         M1 IN
1 00AAB   00000000 A         PZE                         M1 OUT
1 00AAC   F0F0F0F0 A         DATA     X'F0F0F0F0'        R13 IN
1 00AAD   7539FEEE A         DATA     X'7539FEEE'        R13 OUT
1 00AAE   FFFFFFFF A         DATA     -1                 M2 IN
1 00AAF   FFFFFFFF A         DATA     -1                 M2 OUT
1 00AB0   3272045C           LW,7     MT1+64,1           FMT
1 00AB1   32D2049C           LW,13    MT2+64,1           VMT/VMTR
                      *                                 CVS
1 00AB2   FFFFFFF2 A         DATA     -14                COUNT
1 00AB3   28C005B0           CVS,12   VMT+32             INSTRUCTION
1 00AB4   F7000244           K        15,7,0,SETPSW      PSW1 IN
1 00AB5   D7000276           K        13,7,0,LOC+2       PSW1 OUT
1 00AB6   EFFFFFFF A         DATA     X'EFFFFFFF'        R12 IN
1 00AB7   00000001 A         DATA     1                  R12 OUT
1 00AB8   FFFFFFFF A         DATA     -1                 M1 IN
1 00AB9   FFFFFFFF A         DATA     -1                 M1 OUT
1 00ABA   FFFFFFFF A         DATA     -1                 R13 IN
1 00ABB   EA73FDDD A         DATA     X'EA73FDDD'        R13 OUT
1 00ABC   00000000 A         PZE                         M2 IN
1 00ABD   00000000 A         PZE                         M2 OUT
1 00ABE   3272045C           LW,7     MT1+64,1           FMT
1 00ABF   32D2049D           LW,13    MT2+65,1           VMT/VMTR
                      *                                 CVS-INDEXING
1 00AC0   FFFFFFF2 A         DATA     -14                COUNT
1 00AC1   28C205B1           CVS,12   VMT+33,1           INSTRUCTION
1 00AC2   50000244           K        5,0,0,SETPSW       PSW1 IN
1 00AC3   50000276           K        5,0,0,LOC+2        PSW1 OUT
1 00AC4   FFFFFFFF A         DATA     -1                 R12 IN-INDEX
1 00AC5   00000000 A         DATA     0                  R12 OUT
1 00AC6   F0F0F0F0 A         DATA     X'F0F0F0F0'        M1 IN
1 00AC7   FCF0F0F0 A         DATA     X'F0F0F0F0'        M1 OUT
1 00AC8   0F0F0F0F A         DATA     X'F0F0F0F'         R13 IN
1 00AC9   E000AAAA A         DATA     X'E000AAAA'        R13 OUT
1 00ACA   0F0F0F0F A         DATA     X'F0F0F0F'         M2 IN
1 00ACB   0F0F0F0F A         DATA     X'F0F0F0F'         M2 OUT
1 00ACC   3272045C           LW,7     MT1+64,1           FMT
```

```
2402    1 00ACD   32D2049C          LW,13    MT2+64,1        VMT/VMTR
2403                                *                        CVS-INDIRECT ADDRESSING
2404    1 00ACE   FFFFFFF2 A        DATA     -14             COUNT
2405    1 00ACF   A8C002EB           CVS,12   *WKIA           INSTRUCTION
2406    1 00AD0   A0000244          K        10,0,0,SETPSW   PSW1 IN
2407    1 00AD1   90000276          K        9,0,0,LOC+2     PSW1 OUT
2408    1 00AD2   FFFFFFFF A        DATA     -1              R12 IN
2409    1 00AD3   00000000 A        DATA     0               R12 OUT
2410    1 00AD4   0F0F0F0F A        DATA     X'F0F0F0F'      M1 IN
2411    1 00AD5   0F0F0F0F A        DATA     X'F0F0F0F'      M1 OUT
2412    1 00AD6   00000590          PZE,0    VMT             R13 IN-INDIRECT ADDRESS
2413    1 00AD7   FFFFFFFF A        DATA     -1              R13 OUT
2414    1 00AD8   F0F0F0F0 A        DATA     X'F0F0F0F0'     M2 IN
2415    1 00AD9   F0F0F0F0 A        DATA     X'F0F0F0F0'     M2 OUT
2416    1 00ADA   3272045C          LW,7     MT1+64,1        FMT
2417    1 00ADB   32D2049C          LW,13    MT2+64,1        VMT/VMTR
2418                                *                        MBS
2419    1 00ADC   FFFFFFF0 A        DATA     -16             COUNT
2420    1 00ADD   61C00000 A        MBS,12   0               INSTRUCTION
2421    1 00ADE   00000244          K        0,0,0,SETPSW    PSW1 IN
2422    1 00ADF   00000276          K        0,0,0,LOC+2     PSW1 OUT
2423    1 00AE0   00001538          J        0,BA(FMT)       R12 IN
2424    1 00AE1   00001637          J        0,BA(FMT)+255   R12 OUT
2425    1 00AE2   F0F0F0F0 A        DATA     X'F0F0F0F0'     R0 IN
2426    1 00AE3   F0F0F0F0 A        DATA     X'F0F0F0F0'     R0 OUT
2427    1 00AE4   FF001640          J        X'FF',BA(VMT)   R13 IN
2428    1 00AE5   0000173F          J        0,BA(VMT)+255   R13 OUT
2429    1 00AE6   0F0F0F0F A        DATA     X'F0F0F0F'      R1 IN
2430    1 00AE7   0F0F0F0F A        DATA     X'F0F0F0F'      R1 OUT
2431    1 00AE8   3272045C          LW,7     MT1+64,1        FMT
2432    1 00AE9   32D2049C          LW,13    MT2+64,1        VMT/VMTR
2433    1 00AEA   00001070          J        0,BA(MT1)       VMTRCH
2434    1 00AEB   000000FF A        DATA     255             MC
2435                                *                        MBS
2436    1 00AEC   FFFFFFF0 A        DATA     -16             COUNT
2437    1 00AED   61C00009 A        MBS,12   9               INSTRUCTION
2438    1 00AEE   57100244          K        5,7,1,SETPSW    PSW1 IN
2439    1 00AEF   57100276          K        5,7,1,LOC+2     PSW1 OUT
```

35D003B8
R12= 3252045C
R13= 00000000

R12 =
R13 =

```
2440    1 00AF0    0000152F
2441    1 00AF1    00001538
2442    1 00AF2    FFFFFFFF A
2443    1 00AF3    FFFFFFFF A
2444    1 00AF4    09001640
2445    1 00AF5    00001649
2446    1 00AF6    00000000 A
2447    1 00AF7    00000000 A
2448    1 00AF8    3272045C
2449    1 00AF9    32D2049C
2450    1 00AFA    00001070
2451    1 00AFB    00000009 A
2452
2453    1 00AFC    FFFFFFF0 A
2454    1 00AFD    61C0000A A
2455    1 00AFE    A3200244
2456    1 00AFF    A3200276
2457    1 00B00    0000152E
2458    1 00B01    00001538
2459    1 00B02    01234567 A
2460    1 00B03    01234567 A
2461    1 00B04    0A001640
2462    1 00B05    0000164A
2463    1 00B06    FEDCBA98 A
2464    1 00B07    FEDCBA98 A
2465    1 00B08    3272045C
2466    1 00B09    32D2049C
2467    1 00B0A    00001070
2468    1 00B0B    0000000A A
2469
2470    1 00B0C    FFFFFFF0 A
2471    1 00B0D    61C00014 A
2472    1 00B0E    F1300244
2473    1 00B0F    F1300276
2474    1 00B10    00001524
2475    1 00B11    00001524
2476    1 00B12    FFFFFFFF A
2477    1 00B13    FFFFFFFF A
```

```
 SUFFIX(2)
J         0,BA(FMT)-9          R12 IN
J         0,BA(FMT)            R12 OUT
DATA      -1                   R0 IN
DATA      -1                   R0 OUT
J         9,BA(VMT)            R13 IN
J         0,BA(VMT)+9          R13 OUT
DATA      0                    R1 IN
DATA      0                    R1 OUT
LW,7      MT1+64,1             FMT
LW,13     MT2+64,1             VMT/VMTR
J         0,BA(MT1)            VMTRCH
DATA      9                    MC
                               MBS
DATA      -16                  COUNT
MBS,12    10                   INSTRUCTION      R12 =
K         10,3,2,SETPSW        PSW1 IN          R13=
K         10,3,2,LOC+2         PSW1 OUT
J         0,BA(FMT)-10         R12 IN
J         0,BA(FMT)            R12 OUT
DATA      X'1234567'           R0 IN
DATA      X'1234567'           R0 OUT
J         10,BA(VMT)           R13 IN
J         0,BA(VMT)+10         R13 OUT
DATA      X'FEDCBA98'          R1 IN
DATA      X'FEDCBA98'          R1 OUT
LW,7      MT1+64,1             FMT
LW,13     MT2+64,1             VMT/VMTR
J         0,BA(MT1)            VMTRCH
DATA      10                   MC
                               MBS-MOVE ZERO BYTES
DATA      -16                  COUNT
MBS,12    20                   INSTRUCTION
K         15,1,3,SETPSW        PSW1 IN          R12 =
K         15,1,3,LOC+2         PSW1 OUT         R13=
J         0,BA(FMT)-20         R12 IN
J         0,BA(FMT)-20         R12 OUT
DATA      -1                   R0 IN
DATA      -1                   R0 OUT
```

```
2478    1 00B14    00001640
2479    1 00B15    00001640
2480    1 00B16    00000000 A
2481    1 00B17    00000000 A
2482    1 00B18    3272045C
2483    1 00B19    32D2049C
2484    1 00B1A    00001640
2485    1 00B1B    00000000 A
2486
2487    1 00B1C    FFFFFFF0 A
2488    1 00B1D    61DFFEF8 A
2489    1 00B1E    F0300244
2490    1 00B1F    F0300276
2491    1 00B20    00000000 A
2492    1 00B21    00000000 A
2493    1 00B22    FFFFFFFF A
2494    1 00B23    FFFFFFFF A
2495    1 00B24    FF001640
2496    1 00B25    0000173F
2497    1 00B26    00000000 A
2498    1 00B27    00000000 A
2499    1 00B28    3272045C
2500    1 00B29    32D2049C
2501    1 00B2A    00001070
2502    1 00B2B    000000FF A
2503
2504    1 00B2C    FFFFFFF0 A
2505    1 00B2D    61DFFEF8 A
2506    1 00B2E    B2000244
2507    1 00B2F    B2000276
2508    1 00B30    FFFFFFFF A
2509    1 00B31    FFFFFFFF A
2510    1 00B32    FFFFFFFF A
2511    1 00B33    FFFFFFFF A
2512    1 00B34    0B001640
2513    1 00B35    0000164B
2514    1 00B36    FFFFFFFF A
2515    1 00B37    FFFFFFFF A
```

```
SUFFIX(2)
J       0,BA(VMT)       R13 IN
J       0,BA(VMT)       R13 0UT
PZE                     R1 IN
PZE                     R1 0UT
LW,7    MT1+64,1        FMT
LW,13   MT2+64,1        VMT/VMTR
J       0,BA(VMT)       VMTRCH
DATA    0               MC
                        MBS-0DD REGISTER
DATA    -16             C0UNT
MBS,13  -264            INSTRUCTI0N
K       15,0,3,SETPSW   PSW1 IN
K       15,0,3,L0C+2    PSW1 0UT
DATA    0               R12 IN
DATA    0               R12 0UT
DATA    -1              R0 IN
DATA    -1              R0 0UT
J       X'FF',BA(VMT)   R13 IN
J       0,BA(VMT)+255   R13 0UT
DATA    0               R1 IN
DATA    0               R1 0UT
LW,7    MT1+64,1        FMT
LW,13   MT2+64,1        VMT/VMTR
J       0,BA(MT1)       VMTRCH
DATA    255             MC
                        MBS-0DD REGISTER
DATA    -16             C0UNT
MBS,13  -264            INSTRUCTI0N
K       11,2,0,SETPSW   PSW1 IN
K       11,2,0,L0C+2    PSW1 0UT
DATA    -1              R12 IN
DATA    -1              R12 0UT
DATA    -1              R0 IN
DATA    -1              R0 0UT
J       11,BA(VMT)      R13 IN
J       0,BA(VMT)+11    R13 0UT
DATA    -1              R1 IN
DATA    -1              R1 0UT
```

R13 =
~~R14~~ =

R13 =
~~R14~~ =

```
                                            SUFFIX(2)
1 00B38   3272045C        LW,7      MT1+64,1           FMT
1 00B39   32D2049C        LW,13     MT2+64,1           VMT/VMTR
1 00B3A   00001070        J         0,BA(MT1)          VMTRCH
1 00B3B   0000000B A      DATA      11                 MC

                     *                                MBS-REGISTER 0
1 00B3C   FFFFFFF0 A      DATA      -16                COUNT
1 00B3D   6100153B        MBS,0     BA(FMT)+3          INSTRUCTION
1 00B3E   04000244        K         0,4,0,SETPSW       PSW1 IN       Ro =
1 00B3F   04000276        K         0,4,0,L0C+2        PSW1 0UT      R1 =
1 00B40   FFFFFFFF A      DATA      -1                 R12 IN
1 00B41   FFFFFFFF A      DATA      -1                 R12 0UT
1 00B42   FFFFFFFF A      DATA      -1                 R0 IN
1 00B43   FFFFFFFF A      DATA      -1                 R0 0UT
1 00B44   00000000 A      DATA      0                  R13 IN
1 00B45   00000000 A      DATA      0                  R13 0UT
1 00B46   05001640        J         5,BA(VMT)          R1 IN
1 00B47   00001645        J         0,BA(VMT)+5        R1 0UT
1 00B48   3272045C        LW,7      MT1+64,1           FMT
1 00B49   32D2049C        LW,13     MT2+64,1           VMT/VMTR
1 00B4A   0000129C        J         0,BA(MT4)+36       VMTRCH
1 00B4B   00000005 A      DATA      5                  MC

                     *                                MBS-REGISTER 0
1 00B4C   FFFFFFF0 A      DATA      -16                C0UNT
1 00B4D   6100153B        MBS,0     BA(FMT)+3          INSTRUCTI0N
1 00B4E   C0000244        K         12,0,0,SETPSW      PSW1 IN       Ro =
1 00B4F   C0000276        K         12,0,0,L0C+2       PSW1 0UT      R1 =
1 00B50   00000000 A      DATA      0                  R12 IN
1 00B51   00000000 A      DATA      0                  R12 0UT
1 00B52   00000000 A      DATA      0                  R0 IN
1 00B53   00000000 A      DATA      0                  R0 0UT
1 00B54   00000000 A      DATA      0                  R13 IN
1 00B55   00000000 A      DATA      0                  R13 0UT
1 00B56   0C001640        J         12,BA(VMT)         R1 IN
1 00B57   0000164C        J         0,BA(VMT)+12       R1 0UT
1 00B58   3272045C        LW,7      MT1+64,1           FMT
1 00B59   32D2049C        LW,13     MT2+64,1           VMT/VMTR
1 00B5A   0000129C        J         0,BA(MT4)+36       VMTRCH
1 00B5B   0000000C A      DATA      12                 MC
```

```
                                 *                    MBS-INDIRECT ADDR_SSING-TRAP
1 00B5C  FFFFFFF0 A     DATA     -16                  COUNT
1 00B5D  E1C002E9 A     DATA     X'E1C002E9'          INSTRUCTION
1 00B5E  17300185       K        1,7,3,SI9NA0         PSW1 IN
1 00B5F  9730006B       K        9,7,3,NEIRET+1       PSW1 OUT
1 00B60  00001538       J        0,BA(FMT)            R12 IN
1 00B61  00001538       J        0,BA(FMT)            R12 OUT
1 00B62  FFFFFFFF A     DATA     -1                   R0 IN
1 00B63  FFFFFFFF A     DATA     -1                   R0 OUT
1 00B64  00001640       J        0,BA(VMT)            R13 IN
1 00B65  00001640       J        0,BA(VMT)            R13 OUT
1 00B66  00000000 A     PZE                           R1 IN
1 00B67  00000000 A     PZE                           R1 OUT
1 00B68  3272045C       LW,7     MT1+64,1             FMT
1 00B69  32D2049C       LW,13    MT2+64,1             VMT/VMTR
1 00B6A  00001070       J        0,BA(MT1)            VMTRCH
1 00B6B  00000000 A     DATA     0                    MC
                                 *                    MBS-NOT WORD BOUNDARY-OVERLAP
1 00B6C  FFFFFFF0 A     DATA     -16                  COUNT
1 00B6D  61C00000 A     MBS,12   0                    INSTRUCTION
1 00B6E  00000244       K        0,0,0,SETPSW         PSW1 IN
1 00B6F  00000276       K        0,0,0,LOC+2          PSW1 OUT
1 00B70  00001640       J        0,BA(VMT)            R12 IN
1 00B71  00001648       J        0,BA(VMT)+8          R12 OUT
1 00B72  FFFFFFFF A     DATA     -1                   R0 IN
1 00B73  FFFFFFFF A     DATA     -1                   R0 OUT
1 00B74  08001642       J        8,BA(VMT)+2          R13 IN
1 00B75  0000164A       J        0,BA(VMT)+10         R13 OUT
1 00B76  00000000 A     PZE                           R1 IN
1 00B77  00000000 A     PZE                           R1 OUT
1 00B78  3272045C       LW,7     MT1+64,1             FMT
1 00B79  32D2045C       LW,13    MT1+64,1             VMT/VMTR
1 00B7A  000012A0       J        0,BA(MT4)+40         VMTRCH
1 00B7B  0000000C A     DATA     12                   MC
                                 *                    CBS
1 00B7C  FFFFFFF0 A     DATA     -16                  COUNT
1 00B7D  60C00000 A     CBS,12   0                    INSTRUCTION
1 00B7E  30000244       K        3,0,0,SETPSW         PSW1 IN
```

```
1 00B7F   00000276          K          0,0,0,LOC+2         PSW1 OUT
1 00B80   00001538          J          0,BA(FMT)           R12 IN
1 00B81   00001637          J          0,BA(FMT)+255       R12 OUT
1 00B82   F0F0F0F0 A        DATA       X'F0F0F0F0'         R0 IN
1 00B83   F0F0F0F0 A        DATA       X'F0F0F0F0'         R0 OUT
1 00B84   FF001640          J          X'FF',BA(VMT)       R13 IN
1 00B85   0000173F          J          0,BA(VMT)+255       R13 OUT
1 00B86   0F0F0F0F A        DATA       X'F0F0F0F'          R1 IN
1 00B87   0F0F0F0F A        DATA       X'F0F0F0F'          R1 OUT
1 00B88   3272045C          LW,7       MT1+64,1            FMT
1 00B89   32D2045C          LW,13      MT1+64,1            VMT/VMTR
1 00B8A   00001070          J          0,BA(MT1)           VMTRCH
1 00B8B   00000000 A        DATA       0
                    *                                      CBS-COMPARE ZERO BYTES
1 00B8C   FFFFFFF0 A        DATA       -16                 COUNT
1 00B8D   60C00014 A        CBS,12     20                  INSTRUCTION
1 00B8E   37300244          K          3,7,3,SETPSW        PSW1 IN
1 00B8F   07300276          K          0,7,3,LOC+2         PSW1 OUT
1 00B90   00001524          J          0,BA(FMT)-20        R12 IN
1 00B91   00001524          J          0,BA(FMT)-20        R12 OUT
1 00B92   00000000 A        PZE                            R0 IN
1 00B93   00000000 A        PZE                            R0 OUT
1 00B94   00001640          J          0,BA(VMT)           R13 IN
1 00B95   00001640          J          0,BA(VMT)           R13 OUT
1 00B96   FFFFFFFF A        DATA       -1                  R1 IN
1 00B97   FFFFFFFF A        DATA       -1                  R1 OUT
1 00B98   3272045C          LW,7       MT1+64,1            FMT
1 00B99   32D2045C          LW,13      MT1+64,1            VMT/VMTR
1 00B9A   00001070          J          0,BA(MT1)           VMTRCH
1 00B9B   00000000 A        DATA       0                   MC
                    *                                      CBS-EIGHT BYTE DOESN'T COMPARE
1 00B9C   FFFFFFF0 A        DATA       -16                 COUNT
1 00B9D   60C0000D A        CBS,12     13                  INSTRUCTION
1 00B9E   E3100244          K          14,3,1,SETPSW       PSW1 INT
1 00B9F   D3100276          K          13,3,1,LOC+2        PSW1 OUT
1 00BA0   0000152B          J          0,BA(FMT)-13        R12 IN
1 00BA1   00001532          J          0,BA(FMT)-6         R12 OUT
1 00BA2   FFFFFFFF A        DATA       -1                  R0 IN
```

```
2630    1 00BA3    FFFFFFFF A
2631    1 00BA4    0D001640
2632    1 00BA5    06001647
2633    1 00BA6    00000000 A
2634    1 00BA7    00000000 A
2635    1 00BA8    3272045C
2636    1 00BA9    32D204DE
2637    1 00BAA    00001278
2638    1 00BAB    00000000 A
2639
2640    1 00BAC    FFFFFFF0 A
2641    1 00BAD    60C00000 A
2642    1 00BAE    02200244
2643    1 00BAF    12200276
2644    1 00BB0    00001538
2645    1 00BB1    0000153A
2646    1 00BB2    00000000 A
2647    1 00BB3    00000000 A
2648    1 00BB4    FF001640
2649    1 00BB5    FD001642
2650    1 00BB6    FFFFFFFF A
2651    1 00BB7    FFFFFFFF A
2652    1 00BB8    3272045C
2653    1 00BB9    32D204E0
2654    1 00BBA    00001280
2655    1 00BBB    00000000 A
2656
2657    1 00BBC    FFFFFFF0 A
2658    1 00BBD    60C00000 A
2659    1 00BBE    F7000244
2660    1 00BBF    D7000276
2661    1 00BC0    00001538
2662    1 00BC1    00001539
2663    1 00BC2    FFFFFFFF A
2664    1 00BC3    FFFFFFFF A
2665    1 00BC4    FF001640
2666    1 00BC5    FE001641
2667    1 00BC6    00000000 A
```

```
 SUFFIX(2)
DATA      -1
J         13,BA(VMT)
J         6,BA(VMT)+7
PZE
PZE
LW,7      MT1+64,1
LW,13     MT4+64,1
J         0,BA(MT4)
DATA      0

DATA      -16
CBS,12    0
K         0,2,2,SETPSW
K         1,2,2,L0C+2
J         0,BA(FMT)
J         0,BA(FMT)+2
PZE
PZE
J         X'FF',BA(VMT)
J         253,BA(VMT)+2
DATA      -1
DATA      -1
LW,7      MT1+64,1
LW,13     MT4+66,1
J         0,BA(MT4)+8
DATA      0

DATA      -16
CBS,12    0
K         15,7,0,SETPSW
K         13,7,0,L0C+2
J         0,BA(FMT)
J         0,BA(FMT)+1
DATA      -1
DATA      -1
J         X'FF',BA(VMT)
J         254,BA(VMT)+1
PZE
```

```
R0 0UT
R13 IN
R13 0UT
R1 IN
R1 0UT
FMT
VMT/VMTR
VMTRCH

CBS-THIRD BYTE D0ESN'T C0MPARE
C0UNT
INSTRUCTI0N
PSW1 IN
PSW1 0UT
R12 IN
R12 0UT
R0 IN
R0 0UT
R13 IN
R13 0UT
R1 IN
R1 0UT
FMT
VMT/VMTR
VMTRCH
MC
CBS-SEC0ND BYTE D0ESN'T C0MPARE
C0UNT
INSTRUCTI0N
PSW1 IN
PSW1 0UT
R12 IN
R12 0UT
R0 IN
R0 0UT
R13 IN
R13 0UT
R1 IN
```

```
2668    1 00BC7    00000000 A        PZE                        R1 OUT
2669    1 00BC8    3272045C          LW,7     MT1+64,1          FMT
2670    1 00BC9    32D204E1          LW,13    MT4+67,1          VMT/VMTR
2671    1 00BCA    00001284          J        0,BA(MT4)+12      VMTRCH
2672    1 00BCB    00000000 A        DATA     0                 MC
2673                            *                               CBS-FIRST BYTE DOESN'T COMPARE
2674    1 00BCC    FFFFFFF0 A        DATA     -16               COUNT
2675    1 00BCD    60C00000 A        CBS,12   0                 INSTRUCTION
2676    1 00BCE    10300244          K        1,0,3,SETPSW      PSW1 IN
2677    1 00BCF    10300276          K        1,0,3,LOC+2       PSW1 OUT
2678    1 00BD0    00001538          J        0,BA(FMT)         R12 IN
2679    1 00BD1    00001538          J        0,BA(FMT)         R12 OUT
2680    1 00BD2    00000000 A        PZE                        RO IN
2681    1 00BD3    00000000 A        PZE                        RO OUT
2682    1 00BD4    01001640          J        1,BA(VMT)         R13 IN
2683    1 00BD5    01001640          J        1,BA(VMT)         R13 OUT
2684    1 00BD6    FFFFFFFF A        DATA     -1                R1 IN
2685    1 00BD7    FFFFFFFF A        DATA     -1                R1 OUT
2686    1 00BD8    3272045C          LW,7     MT1+64,1          FMT
2687    1 00BD9    32D204E2          LW,13    MT4+68,1          VMT/VMTR
2688    1 00BDA    00001288          J        0,BA(MT4)+16      VMTRCH
2689    1 00BDB    00000000 A        DATA     0                 RC
2690                            *                               CBS-FOURTH BYTE DOESN'T COMPARE
2691    1 00BDC    FFFFFFF0 A        DATA     -16               COUNT
2692    1 00BDD    60C00000 A        CBS,12   0                 INSTRUCTION
2693    1 00BDE    D0000244          K        13,0,0,SETPSW     PSW1 IN
2694    1 00BDF    E0000276          K        14,0,0,LOC+2      PSW1 OUT
2695    1 00BE0    00001538          J        0,BA(FMT)         R12 IN
2696    1 00BE1    00001538          J        0,BA(FMT)+3       R12 OUT
2697    1 00BE2    FFFFFFFF A        DATA     -1                RO IN
2698    1 00BE3    FFFFFFFF A        DATA     -1                RO OUT
2699    1 00BE4    04001640          J        4,BA(VMT)         R13 IN
2700    1 00BE5    01001643          J        1,BA(VMT)+3       R13 OUT
2701    1 00BE6    00000C00 A        PZE                        R1 IN
2702    1 00BE7    00000000 A        PZE                        R1 OUT
2703    1 00BE8    3272045C          LW,7     MT1+64,1          FMT
2704    1 00BE9    32D204E3          LW,13    MT4+69,1          VMT/VMTR
2705    1 00BEA    0000128C          J        0,BA(MT4)+20      VMTRCH
```

```
                                                SUFFIX(2)
1 00BEB     00000000 A                          DATA      0                   RC
                                  *                                          CBS-THIRD BYTE DOESN'T COMPARE
1 00BEC     FFFFFFF0 A                          DATA      -16                 COUNT
1 00BED     60C00000 A                          CBS,12    0                   INSTRUCTION
1 00BEE     10000244                            K         1,0,0,SETPSW        PSW IN
1 00BEF     20000276                            K         2,0,0,LOC+2         PSW1 OUT
1 00BF0     00001538                            J         0,BA(FMT)           R12 IN
1 00BF1     0000153A                            J         0,BA(FMT)+2         R12 OUT
1 00BF2     00000000 A                          PZE                           R0 IN
1 00BF3     00000000 A                          PZE                           R0 OUT
1 00BF4     04001640                            J         4,BA(VMT)           R13 IN
1 00BF5     02001642                            J         2,BA(VMT)+2         R13 OUT
1 00BF6     FFFFFFFF A                          DATA      -1                  R1 IN
1 00BF7     FFFFFFFF A                          DATA      -1                  R1 OUT
1 00BF8     3272045C                            LW,7      MT1+64,1            FMT
1 00BF9     320204E4                            LW,13     MT4+70,1            VMT/VMTR
1 00BFA     00001290                            J         0,BA(MT4)+24        VMTRCH
1 00BFB     00000000 A                          DATA      0                   RC
                                  *                                          CBS-SECOND BYTE DOESN'T COMPARE
1 00BFC     FFFFFFF0 A                          DATA      -16                 COUNT
1 00BFD     60C00000 A                          CBS,12    0                   INSTRUCTION
1 00BFE     30000244                            K         3,0,0,SETPSW        PSW1 IN
1 00BFF     20000276                            K         2,0,0,LOC+2         PSW1 OUT
1 00C00     00001538                            J         0,BA(FMT)           R12 IN
1 00C01     00001539                            J         0,BA(FMT)+1         R12 OUT
1 00C02     FFFFFFFF A                          DATA      -1                  R0 IN
1 00C03     FFFFFFFF A                          DATA      -1                  R0 OUT
1 00C04     04001640                            J         4,BA(VMT)           R13 IN
1 00C05     03001641                            J         3,BA(VMT)+1         R13 OUT
1 00C06     00000000 A                          PZE                           R1 IN
1 00C07     00000000 A                          PZE                           R1 OUT
1 00C08     3272045C                            LW,7      MT1+64,1            FMT
1 00C09     320204E5                            LW,13     MT4+71,1            VMT/VMTR
1 00C0A     00001294                            J         0,BA(MT4)+28        VMTRCH
1 00C0B     00000000 A                          DATA      0                   RC
                                  *                                          CBS-FIRST BYTE DOESN'T COMPARE
1 00C0C     FFFFFFF0 A                          DATA      -16                 COUNT
1 00C0D     60C00000 A                          CBS,12    0                   INSTRUCTION
```

```
                                          SUFFIX(2)
1 000C0E   20000244                      K          2,0,0,SETPSW        PSW1 IN
1 000C0F   20000276                      K          2,0,0,L0C+2         PSW1 0UT
1 00C10    00001538                      J          0,BA(FMT)           R12 IN
1 00C11    00001538                      J          0,BA(FMT)           R12 0UT
1 00C12    00000000 A                    PZE                            R0 IN
1 00C13    00000000 A                    PZE                            R0 0UT
1 00C14    04001640                      J          4,BA(VMT)           R13 IN
1 00C15    04001640                      J          4,BA(VMT)           R13 0UT
1 00C16    FFFFFFFF A                    DATA       -1                  R1 IN
1 00C17    FFFFFFFF A                    DATA       -1                  R1 0UT
1 00C18    3272045C                      LW,7       MT1+64,1            FMT
1 00C19    32D204E6                      LW,13      MT4+72,1            VMT/VMTR
1 00C1A    00001298                      J          0,BA(MT4)+32        VMTRCH
1 00C1B    00000000 A                    DATA       0                   RC
                       *                                               CBS-REGISTER 0
1 00C1C    FFFFFFF0 A                    DATA       -16                 C0UNT
1 00C1D    6000153B                      CBS,0      BA(FMT)+3           INSTRUCTI0N
1 00C1E    F0000244                      K          15,0,0,SETPSW       PSW1 IN
1 00C1F    C0000276                      K          12,0,0,L0C+2        PSW1 0UT
1 00C20    00000000 A                    DATA       0                   R12 IN
1 00C21    00000000 A                    DATA       0                   R12 0UT
1 00C22    00000000 A                    DATA       0                   R0 IN
1 00C23    00000000 A                    DATA       0                   R0 0UT
1 00C24    FFFFFFFF A                    DATA       -1                  R13 IN
1 00C25    FFFFFFFF A                    DATA       -1                  R13 0UT
1 00C26    04001640                      J          4,BA(VMT)           R1 IN
1 00C27    00001644                      J          0,BA(VMT)+4         RU 0UT
1 00C28    3272045C                      LW,7       MT1+64,1            FMT
1 00C29    32D2045C                      LW,13      MT1+64,1            VMT/VMTR
1 00C2A    00000F20                      J          0,BA(TABLE)+64      VMTRCH
1 00C2B    00000000 A                    DATA       0                   MC
                       *                                               CBS-INDIRECT ADDRESSING-TRAP
1 00C2C    FFFFFFF0 A                    DATA       -16                 C0UNT
1 00C2D    E0C002E9 A                    DATA       X'E0C002E9'         INSTRUCTI0N
1 00C2E    07300185                      K          0,7,3,SI9NA0        PSW1 IN
1 00C2F    8730006B                      K          8,7,3,NEIRET+1      PSW1 0UT
1 00C30    00001538                      J          0,BA(FMT)           R12 IN
1 0CC31    00001538                      J          0,BA(FMT)           R12 0UT
```

```
                                         SUFFIX(2)
1 00C32   00000000 A          PZE                            R0 IN
1 00C33   00000000 A          PZE                            R0 ØUT
1 00C34   04001640            J        4,BA(VMT)             R13 IN
1 00C35   04001640            J        4,BA(VMT)             R13 ØUT
1 00C36   FFFFFFFF A          DATA     -1                    R1 IN
1 00C37   FFFFFFFF A          DATA     -1                    R1 ØUT
1 00C38   3272045C            LW,7     MT1+64,1              FMT
1 00C39   32D2045C            LW,13    MT1+64,1              VMT/VMTR
1 00C3A   00001070            J        0,BA(MT1)             VMTRCH
1 00C3B   00000000 A          DATA     0                     MC
                         *                                   CBS-WØRD BØUNDARY-ØVERLAP
1 00C3C   FFFFFFF0 A          DATA     -16                   CØUNT
1 00C3D   60C00008 A          CBS,12   8                     INSTRUCTIØN
1 00C3E   00000244            K        0,0,0,SETPSW          PSW1 IN
1 00C3F   20000276            K        2,0,0,LØC+2           PSW1 ØUT
1 00C40   00001640            J        0,BA(VMT)             R12 IN
1 00C41   00001678            J        0,BA(VMT)+56          R12 ØUT
1 00C42   00000000 A          PZE                            R0 IN
1 00C43   00000000 A          PZE                            R0 ØUT
1 00C44   40001640            J        64,BA(VMT)            R13 IN
1 00C45   08001678            J        8,BA(VMT)+56          R13 ØUT
1 00C46   FFFFFFFF A          DATA     -1                    R1 IN
1 00C47   FFFFFFFF A          DATA     -1                    R1 ØUT
1 00C48   3272045C            LW,7     MT1+64,1              FMT
1 00C49   32D2044C            LW,13    RT3+64,1              VMT/VMTR
1 00C4A   00001030            J        0,BA(RT3)             VMTRCH
1 00C4B   00000000 A          DATA     0                     MC
                         *                                   TBS
1 00C4C   FFFFFFF0 A          DATA     -16                   CØUNT
1 00C4D   41C00000 A          TBS,12   0                     INSTRUCTIØN
1 00C4E   F7300244            K        15,7,3,SETPSW         PSW1 IN
1 00C4F   F7300276            K        15,7,3,LØC+2          PSW1 ØUT
1 00C50   00001538            J        0,BA(FMT)             R12 IN
1 00C51   00001538            J        0,BA(FMT)             R12 ØUT
1 00C52   0F0F0F0F A          DATA     X'F0F0F0F'            R0 IN
1 00C53   0F0F0F0F A          DATA     X'F0F0F0F'            R0 ØUT
1 00C54   FF001640            J        X'FF',BA(VMT)         R13 IN
1 00C55   0000173F            J        0,BA(VMT)+255         R13 ØUT
```

```
2820    1 00C56    F0F0F0F0 A
2821    1 00C57    F0F0F0F0 A
2822    1 00C58    3272045C
2823    1 00C59    32D204EC
2824    1 00C5A    00001070
2825    1 00C5B    000000FF A
2826
2827    1 00C5C    FFFFFFF0 A
2828    1 00C5D    41C00000 A
2829    1 00C5E    A3000244
2830    1 00C5F    A3000276
2831    1 00C60    00001538
2832    1 00C61    00001538
2833    1 00C62    00000000 A
2834    1 00C63    00000000 A
2835    1 00C64    00001640
2836    1 00C65    00001640
2837    1 00C66    FFFFFFFF A
2838    1 00C67    FFFFFFFF A
2839    1 00C68    3272045C
2840    1 00C69    32D204EC
2841    1 00C6A    00001070
2842    1 00C6B    00000000 A
2843
2844    1 00C6C    FFFFFFF0 A
2845    1 00C6D    41C00020 A
2846    1 00C6E    50300244
2847    1 00C6F    50300276
2848    1 00C70    00001518
2849    1 00C71    00001518
2850    1 00C72    FFFFFFFF A
2851    1 00C73    FFFFFFFF A
2852    1 00C74    01C01640
2853    1 00C75    00001641
2854    1 00C76    00000000 A
2855    1 00C77    00000000 A
2856    1 00C78    3272045C
2857    1 00C79    32D204EC
```

```
 SUFFIX(2)
DATA      X'F0F0F0F0'          R1 IN
DATA      X'F0F0F0F0'          R1 OUT
LW,7      MT1+64,1             FMT
LW,13     MT3+64,1             VMT/VMTR
J         0,BA(MT1)            VMTRCH
DATA      255                  MC
                          TBS-TRANSLATE ZERO BYTES
DATA      -16                  COUNT
TBS,12    0                    INSTRUCTION
K         10,3,0,SETPSW        PSW1 IN
K         10,3,0,LOC+2         PSW1 OUT
J         0,BA(FMT)            R12 IN
J         0,BA(FMT)            R12 OUT
PZE                            R0 IN
PZE                            R0 OUT
J         0,BA(VMT)            R13 IN
J         0,BA(VMT)            R13 OUT
DATA      -1                   R1 IN
DATA      -1                   R1 OUT
LW,7      MT1+64,1             FMT
LW,13     MT3+64,1             VMT/VMTR
J         0,BA(MT1)            VMTRCH
DATA      0                    MC
                          TBS-TRANSLATE ONE BYTE
DATA      -16                  COUNT
TBS,12    32                   INSTRUCTION
K         5,0,3,SETPSW         PSW1 IN
K         5,0,3,LOC+2          PSW1 OUT
J         0,BA(FMT)-32         R12 IN
J         0,BA(FMT)-32         R12 OUT
DATA      -1                   R0 IN
DATA      -1                   R0 OUT
J         1,BA(VMT)            R13 IN
J         0,BA(VMT)+1          R13 OUT
PZE                            R1 IN
PZE                            R1 OUT
LW,7      MT1+64,1             FMT
LW,13     MT3+64,1             VMT/VMTR
```

```
                                      SUFFIX(2)
 1 00C7A    00001070                  J         0,BA(MT1)         VMTRCH
 1 00C7B    00000001 A                DATA      1                 MC
                                 *                               TBS-TRANSLATE TWO BYTES
 1 00C7C    FFFFFFF0 A                DATA      -16               COUNT
 1 00C7D    41CFFFFA A                TBS,12    -6                INSTRUCTION
 1 00C7E    02200244                  K         0,2,2,SETPSW      PSW1 IN
 1 00C7F    02200276                  K         0,2,2,LOC+2       PSW1 OUT
 1 00C80    0000153E                  J         0,BA(FMT)+6       R12 IN
 1 00C81    0000153E                  J         0,BA(FMT)+6       R12 OUT
 1 00C82    00000000 A                PZE                         RO IN
 1 00C83    00000000 A                PZE                         RO OUT
 1 00C84    02001640                  J         2,BA(VMT)         R13 IN
 1 00C85    00001642                  J         0,BA(VMT)+2       R13 OUT
 1 00C86    FFFFFFFF A                DATA      -1                R1 IN
 1 00C87    FFFFFFFF A                DATA      -1                R1 OUT
 1 00C88    3272045C                  LW,7      MT1+64,1          FMT
 1 00C89    32D204EC                  LW,13     MT3+64,1          VMT/VMTR
 1 00C8A    00001070                  J         0,BA(MT1)         VMTRCH
 1 00C8B    00000002 A                DATA      2                 MC
                                 *                               TBS-TRANSLATE THREE BYTES
 1 00C8C    FFFFFFF0 A                DATA      -16               COUNT
 1 00C8D    41C00000 A                TBS,12    0                 INSTRUCTION
 1 00C8E    01100244                  K         0,1,1,SETPSW      PSW1 IN
 1 00C8F    01100276                  K         0,1,1,LOC+2       PSW1 OUT
 1 00C90    00001538                  J         0,BA(FMT)         R12 IN
 1 00C91    00001538                  J         0,BA(FMT)         R12 OUT
 1 00C92    FFFFFFFF A                DATA      -1                RO IN
 1 00C93    FFFFFFFF A                DATA      -1                RO OUT
 1 00C94    03001640                  J         3,BA(VMT)         R13 IN
 1 00C95    00001643                  J         0,BA(VMT)+3       R13 OUT
 1 00C96    00000000 A                PZE                         R1 IN
 1 00C97    00000000 A                PZE                         R1 OUT
 1 00C98    3272045C                  LW,7      MT1+64,1          FMT
 1 00C99    32D204EC                  LW,13     MT3+64,1          VMT/VMTR
 1 00C9A    00001070                  J         0,BA(MT1)         VMTRCH
 1 00C9B    00000003 A                DATA      3                 MC
                                 *                               TBS- TRANSLATE FOURBYTES
 1 00C9C    FFFFFFF0 A                DATA      -16               COUNT
```

```
                                    SUFFIX(2)
1 00C9D   41C00000 A          TBS,12     0                  INSTRUCTION
1 00C9E   F0000244            K          15,0,0,SETPSW      PSW1 IN
1 00C9F   F0000276            K          15,0,0,LOC+2       PSW1 OUT
1 00CA0   00001538            J          0,BA(FMT)          R12 IN
1 00CA1   00001538            J          0,BA(FMT)          R12 OUT
1 00CA2   00000000 A          PZE                           R0 IN
1 00CA3   00000000 A          PZE                           R0 OUT
1 00CA4   04001640            J          4,BA(VMT)          R13 IN
1 00CA5   00001644            J          0,BA(VMT)+4        R13 OUT
1 00CA6   FFFFFFFF A          DATA       -1                 R1 IN
1 00CA7   FFFFFFFF A          DATA       -1                 R1 OUT
1 00CA8   3272045C            LW,7       MT1+64,1           FMT
1 00CA9   32D204EC            LW,13      MT3+64,1           VMT/VMTR
1 00CAA   00001070            J          0,BA(MT1)          VMTRCH
1 00CAB   00000004 A          DATA       4                  MC
                        *                                  TBS-TRANSLATE FIVE BYTES
1 00CAC   FFFFFFF0 A          DATA       -16                COUNT
1 00CAD   41C00000 A          TBS,12     0                  INSTRUCTION
1 00CAE   10000244            K          1,0,0,SETPSW       PSW1 IN
1 00CAF   10000276            K          1,0,0,LOC+2        PSW1 OUT
1 00CB0   00001538            J          0,BA(FMT)          R12 IN
1 00CB1   00001538            J          0,BA(FMT)          R12 OUT
1 00CB2   FFFFFFFF A          DATA       -1                 R0 IN
1 00CB3   FFFFFFFF A          DATA       -1                 R0 OUT
1 00CB4   05001640            J          5,BA(VMT)          R13 IN
1 00CB5   00001645            J          0,BA(VMT)+5        R13 OUT
1 00CB6   00000000 A          PZE                           R1 IN
1 00CB7   00000000 A          PZE                           R1 OUT
1 00CB8   3272045C            LW,7       MT1+64,1           FMT
1 00CB9   32D204EC            LW,13      MT3+64,1           VMT/VMTR
1 00CBA   00001070            J          0,BA(MT1)          VMTRCH
1 00CBB   00000005 A          DATA       5                  MC
                        *                                  TBS-TRANSLATE SIX BYTES
1 00CBC   FFFFFFF0 A          DATA       -16                COUNT
1 00CBD   41C00000 A          TBS,12     0                  INSTRUCTION
1 00CBE   20000244            K          2,0,0,SETPSW       PSW1 IN
1 00CBF   20000276            K          2,0,0,LOC+2        PSW1 OUT
1 00CC0   00001538            J          0,BA(FMT)          R12 IN
```

```
2934    1 00CC1    00001538        J       0,BA(FMT)       R12 OUT
2935    1 00CC2    00000000 A      PZE                     R0 IN
2936    1 00CC3    00000000 A      PZE                     R0 OUT
2937    1 00CC4    06001640        J       6,BA(VMT)       R13 IN
2938    1 00CC5    00001646        J       0,BA(VMT)+6     R13 OUT
2939    1 00CC6    FFFFFFFF A      DATA    -1              R1 IN
2940    1 00CC7    FFFFFFFF A      DATA    -1              R1 OUT
2941    1 00CC8    3272045C        LW,7    MT1+64,1        FMT
2942    1 00CC9    32D204EC        LW,13   MT3+64,1        VMT/VMTR
2943    1 00CCA    00001070        J       0,BA(MT1)       VMTRCH
2944    1 00CCB    00000006 A      DATA    6               MC
2945                               *                       TBS-TRANSLATE SEVEN BYTES
2946    1 00CCC    FFFFFFF0 A      DATA    -16             COUNT
2947    1 00CCD    41C00000 A      TBS,12  0               INSTRUCTION
2948    1 00CCE    40000244        K       4,0,0,SETPSW    PSW1 IN
2949    1 00CCF    40000276        K       4,0,0,LOC+2     PSW1 OUT
2950    1 00CD0    00001538        J       0,BA(FMT)       R12 IN
2951    1 00CD1    00001538        J       0,BA(FMT)       R12 OUT
2952    1 00CD2    FFFFFFFF A      DATA    -1              R0 IN
2953    1 00CD3    FFFFFFFF A      DATA    -1              R0 OUT
2954    1 00CD4    07001640        J       7,BA(VMT)       R13 IN
2955    1 00CD5    00001647        J       0,BA(VMT)+7     R13 OUT
2956    1 00CD6    00000000 A      PZE                     R1 IN
2957    1 00CD7    00000000 A      PZE                     R1 OUT
2958    1 00CD8    3272045C        LW,7    MT1+64,1        FMT
2959    1 00CD9    32D204EC        LW,13   MT3+64,1        VMT/VMTR
2960    1 00CDA    00001070        J       0,BA(MT1)       VMTRCH
2961    1 00CDB    00000007 A      DATA    7               MC
2962                               *                       TBS-TRANSLATE EIGHT BYTES
2963    1 00CDC    FFFFFFF0 A      DATA    -16             COUNT
2964    1 00CDD    41C00000 A      TBS,12  0
2965    1 00CDE    80000244        K       8,0,0,SETPSW    PSW1 IN
2966    1 00CDF    80000276        K       8,0,0,LOC+2     PSW1 OUT
2967    1 00CE0    00001538        J       0,BA(FMT)       R12 IN
2968    1 00CE1    00001538        J       0,BA(FMT)       R12 OUT
2969    1 00CE2    00000000 A      PZE                     R0 IN
2970    1 00CE3    00000000 A      PZE                     R0 OUT
2971    1 00CE4    08001640        J       8,BA(VMT)       R13 IN
```

```
                                       SUFFIX(2)
 1 00CE5    00001648                  J         O,BA(VMT)+8        R13 OUT
 1 00CE6    FFFFFFFF  A               DATA      -1                 R1 IN
 1 00CE7    FFFFFFFF  A               DATA      -1                 R1 OUT
 1 00CE8    3272045C                  LW,7      MT1+64,1           FMT
 1 00CE9    32D204EC                  LW,13     MT3+64,1           VMT/VMTR
 1 00CEA    00001070                  J         O,BA(MT1)          MVTRCH
 1 00CEB    00000008  A               DATA      8                  MC
                             *                                    TBS-REGISTER O
 1 00CEC    FFFFFFF0  A               DATA      -16                COUNT
 1 00CED    41001538                  TBS,O     BA(FMT)            INSTRUCTION
 1 00CEE    00000244                  K         O,O,O,SETPSW       PSW1 IN
 1 00CEF    00000276                  K         O,O,O,LOC+2        PSW1 OUT
 1 00CF0    F0F0F0F0  A               DATA      X'F0F0F0F0'        R12 IN
 1 00CF1    F0F0F0F0  A               DATA      X'F0F0F0F0'        R12 OUT
 1 00CF2    F0F0F0F0  A               DATA      X'F0F0F0F0'        RO IN
 1 00CF3    F0F0F0F0  A               DATA      X'F0F0F0F0'        RO OUT
 1 00CF4    0F0F0F0F  A               DATA      X'F0F0F0F'         R13 IN
 1 00CF5    0F0F0F0F  A               DATA      X'F0F0F0F'         R13 OUT
 1 00CF6    FF001640                  J         X'FF',BA(VMT)      R1 IN
 1 00CF7    0000173F                  J         O,BA(VMT)+255      R1 OUT
 1 00CF8    3272045C                  LW,7      MT1+64,1           FMT
 1 00CF9    32D204EC                  LW,13     MT3+64,1           VMT/VMTR
 1 00CFA    00001070                  J         O,BA(MT1)          VMTRCH
 1 00CFB    000000FF  A               DATA      255                MC
                             *                                    TBS-INDIRECT ADDRESSING-TRAP
 1 00CFC    FFFFFFF0  A               DATA      -16                COUNT
 1 00CFD    C1C002E9  A               DATA      X'C1C002E9'        INSTRUCTION
 1 00CFE    07300185                  K         O,7,3,SI9NAO       PSW1 IN
 1 00CFF    8730006B                  K         8,7,3,NEIRET+1     PSW1 OUT
 1 00D00    00001538                  J         O,BA(FMT)          R12 IN
 1 00D01    00001538                  J         O,BA(FMT)          R12 OUT
 1 00D02    F0F0F0F0  A               DATA      X'F0F0F0F0'        RO IN
 1 00D03    F0F0F0F0  A               DATA      X'F0F0F0F0'        RO OUT
 1 00D04    00001640                  J         O,BA(VMT)          R13 IN
 1 00D05    00001640                  J         O,BA(VMT)          R13 OUT
 1 00D06    0F0F0F0F  A               DATA      X'F0F0F0F'         R1 IN
 1 00D07    0F0F0F0F  A               DATA      X'F0F0F0F'         R1 OUT
 1 00D08    3272045C                  LW,7      MT1+64,1           FMT
```

```
1 00D09    32D204EC        LW,13     MT3+64,1            VMT/VMTR
1 00D0A    00001070        J         0,BA(MT1)           VMTRCH
1 00D0B    00000000 A      DATA      0                   MC
                        *                               TTBS
1 00D0C    FFFFFFF0 A      DATA      -16                  COUNT
1 00D0D    40C00000 A      TTBS,12   0                    INSTRUCTION
1 00D0E    27300244        K         2,7,3,SETPSW         PSW1 IN
1 00D0F    27300276        K         2,7,3,LOC+2          PSW1 OUT
1 00D10    00001538        J         0,BA(FMT)            R12 IN
1 00D11    00001538        J         0,BA(FMT)            R12 OUT
1 00D12    00000000 A      PZE                            R0 IN
1 00D13    00000000 A      PZE                            R0 OUT
1 00D14    FF001640        J         X'FF',BA(VMT)        R13 IN
1 00D15    0000173F        J         0,BA(VMT)+255        R13 OUT
1 00D16    FFFFFFFF A      DATA      -1                   R1 IN
1 00D17    FFFFFFFF A      DATA      -1                   R1 OUT
1 00D18    3272045C        LW,7      MT1+64,1             FMT
1 00D19    32D204EC        LW,13     MT3+64,1             VMT/VMTR
1 00D1A    000012B0        J         0,BA(MT3)            VMTRCH
1 00D1B    00000000 A      DATA      0
                        *                               TTBS-REGISTER ZERO
1 00D1C    FFFFFFF0 A      DATA      -16                  COUNT
1 00D1D    40001538        TTBS,0    BA(FMT)              INSTRUCTION
1 00D1E    F0300244        K         15,0,3,SETPSW        PSW1 IN
1 00D1F    E0300276        K         14,0,3,LOC+2         PSW1 OUT
1 00D20    F0F0F0F0 A      DATA      X'F0F0F0F0'          R12 IN
1 00D21    F0F0F0F0 A      DATA      X'F0F0F0F0'          R12 OUT
1 00D22    0F0F0F0F A      DATA      X'F0F0F0F'           R0 IN
1 00D23    0F0F0F0F A      DATA      X'F0F0F0F'           R0 OUT
1 00D24    0F0F0F0F A      DATA      X'F0F0F0F'           R13 IN
1 00D25    0F0F0F0F A      DATA      X'F0F0F0F'           R13 OUT
1 00D26    FF001640        J         X'FF',BA(VMT)        R1 IN
1 00D27    0000173F        J         0,BA(VMT)+255        R1 OUT
1 00D28    22700000 A      LI,7      0                    FMT
1 00D29    32D204EC        LW,13     MT3+64,1             VMT/VMTR
1 00D2A    000012B0        J         0,BA(MT3)            VMTRCH
1 00D2B    00000000 A      DATA      0                    MC
                        *                               TTBS-REGISTER ZERO
```

```
                                    SUFFIX(2)
1 00D2C   FFFFFFF0 A         DATA      -16                 COUNT
1 00D2D   40001538           TTBS,0    BA(FMT)             INSTRUCTION
1 00D2E   E7200244           K         14,7,2,SETPSW       PSW1 IN
1 00D2F   F7200276           K         15,7,2,LOC+2        PSW1 OUT
1 00D30   FFFFFFFF A         DATA      -1                  R12 IN
1 00D31   FFFFFFFF A         DATA      -1                  R12 OUT
1 00D32   00000000 A         PZE                           R0 IN
1 00D33   00000000 A         PZE                           R0 OUT
1 00D34   00000000 A         PZE                           R13 IN
1 00D35   00000000 A         PZE                           R13 OUT
1 00D36   FF001640           J         X'FF',BA(VMT)       R1 IN
1 00D37   FC001643           J         X'FC',BA(VMT)+3     R1 OUT
1 00D38   227000FF A         LI,7      X'FF'               FMT
1 00D39   32D204EC           LW,13     MT3+64,1            VMT/VMTR
1 00D3A   000012B0           J         0,BA(MT3)           MVTRCH
1 00D3B   00000000 A         DATA      0                   MC
                       *                                   TTBS-BIT 31 COMPARES-FIRST WORD
1 00D3C   FFFFFFF0 A         DATA      -16                 COUNT
1 00D3D   40C0000A A         TTBS,12   10                  INSTRUCTION
1 00D3E   03100244           K         0,3,1,SETPSW        PSW1 IN
1 00D3F   13100276           K         1,3,1,LOC+2         PSW1 OUT
1 00D40   FF00152E           J         X'FF',BA(FMT)-10    R12 IN
1 00D41   0100152E           J         1,BA(FMT)-10        R12 OUT
1 00D42   FFFFFFFF A         DATA      -1                  R0 IN
1 00D43   FFFFFFFF A         DATA      -1                  R0 OUT
1 00D44   04001640           J         4,BA(VMT)           R13 IN
1 00D45   01001643           J         1,BA(VMT)+3         R13 OUT
1 00D46   00000000 A         PZE                           R1 IN
1 00D47   00000000 A         PZE                           R1 OUT
1 00D48   3272049C           LW,7      MT2+64,1            FMT
1 00D49   32D204EC           LW,13     MT3+64,1            VMT/VMTR
1 00D4A   000012B0           J         0,BA(MT3)           VMTRCH
1 00D4B   00000000 A         DATA      0                   MC
                       *                                   TTBS-BIT 30 COMPARES-SECOND WORD
1 00D4C   FFFFFFF0 A         DATA      -16                 COUNT
1 00D4D   40C00000 A         TTBS,12   0                   INSTRUCTION
1 00D4E   11100244           K         1,1,1,SETPSW        PSW1 IN
1 00D4F   11100276           K         1,1,1,LOC+2         PSW1 OUT
```

```
3086    1 00D50    FE001538
3087    1 00D51    02C01538
3088    1 00D52    00000000 A
3089    1 00D53    00000000 A
3090    1 00D54    08001640
3091    1 00D55    01C01647
3092    1 00D56    FFFFFFFF A
3093    1 00D57    FFFFFFFF A
3094    1 00D58    3272049C
3095    1 00D59    32D204EC
3096    1 00D5A    00001280
3097    1 00D5B    00000000 A
3098                        *
3099    1 00D5C    FFFFFFF0 A
3100    1 00D5D    40C00000 A
3101    1 00D5E    00000244
3102    1 00D5F    10000276
3103    1 00D60    FC001538
3104    1 00D61    04001538
3105    1 00D62    FFFFFFFF A
3106    1 00D63    FFFFFFFF A
3107    1 00D64    0C001640
3108    1 00D65    01C0164B
3109    1 00D66    00C00000 A
3110    1 00D67    00000000 A
3111    1 00D68    3272049C
3112    1 00D69    32D204EC
3113    1 00D6A    00001280
3114    1 00D6B    00000000 A
3115                        *
3116    1 00D6C    FFFFFFF0 A
3117    1 00D6D    40C00000 A
3118    1 00D6E    F0000244
3119    1 00D6F    F0000276
3120    1 00D70    58001538
3121    1 00D71    08001538
3122    1 00D72    00000000 A
3123    1 00D73    00000000 A
```

```
 SUFFIX(2)
J         X'FE',BA(FMT)      R12 IN
J         2,BA(FMT)          R12 OUT
PZE                          R0 IN
PZE                          R0 OUT
J         8,BA(VMT)          R13 IN
J         1,BA(VMT)+7        R13 OUT
DATA      -1                 R1 IN
DATA      -1                 R1 OUT
LW,7      MT2+64,1           FMT
LW,13     MT3+64,1           VMT/VMTR
J         0,BA(MT3)          VMTRCH
DATA      0                  MC
                            TTBS-BIT 29 COMPARES-THIRD WORD
DATA      -16                COUNT
TTBS,12   0                  INSTRUCTION
K         0,0,0,SETPSW       PSW1 IN
K         1,0,0,LOC+2        PSW1 OUT
J         X'FC',BA(FMT)      R12 IN
J         4,BA(FMT)          R12 OUT
DATA      -1                 R0 IN
DATA      -1                 R0 OUT
J         12,BA(VMT)         R13 IN
J         1,BA(VMT)+11       R13 OUT
PZE                          R1 IN
PZE                          R1 OUT
LW,7      MT2+64,1           FMT
LW,13     MT3+64,1           VMT/VMTR
J         0,BA(MT3)          VMTRCH
DATA      0                  MC
                            TTBS-BIT 28 COMPARES-FOURTH WORD
DATA      -16                COUNT
TTBS,12   0                  INSTRUCTION
K         15,0,0,SETPSW      PSW1 IN
K         15,0,0,LOC+2       PSW1 OUT
J         X'58',BA(FMT)      R12 IN
J         8,BA(FMT)          R12 OUT
PZE                          R0 IN
PZE                          R0 OUT
```

```
3124    1 00D74    10001640        J       16,BA(VMT)          R13 IN
3125    1 00D75    0100164F        J       1,BA(VMT)+15        R13 OUT
3126    1 00D76    FFFFFFFF A      DATA    -1                  R1 IN
3127    1 00D77    FFFFFFFF A      DATA    -1                  R1 OUT
3128    1 00D78    3272049C        LW,7    MT2+64,1            FMT
3129    1 00D79    32D204EC        LW,13   MT3+64,1            VMT/VMTR
3130    1 00D7A    00001280        J       0,BA(MT3)           VMTRCH
3131    1 00D7B    00000000 A      DATA    0                   MC
3132                            *                           TTBS-BIT 27 COMPARES-FIFTH WORD
3133    1 00D7C    FFFFFFF0 A      DATA    -16                 COUNT
3134    1 00D7D    40C00000 A      TTBS,12 0                   INSTRUCTION
3135    1 00D7E    00000244        K       0,0,0,SETPSW        PSW1 IN
3136    1 00D7F    10000276        K       1,0,0,LOC+2         PSW1 OUT
3137    1 00D80    F0001538        J       X'F0',BA(FMT)       R12 IN
3138    1 00D81    10001538        J       16,BA(FMT)          R12 OUT
3139    1 00D82    FFFFFFFF A      DATA    -1                  R0 IN
3140    1 00D83    FFFFFFFF A      DATA    -1                  R0 OUT
3141    1 00D84    14001640        J       20,BA(VMT)          R13 IN
3142    1 00D85    01001653        J       1,BA(VMT)+19        R13 OUT
3143    1 00D86    00000000 A      PZE                         R1 IN
3144    1 00D87    00000000 A      PZE                         R1 OUT
3145    1 00D88    3272049C        LW,7    MT2+64,1            FMT
3146    1 00D89    32D204EC        LW,13   MT3+64,1            VMT/VMTR
3147    1 00D8A    00001280        J       0,BA(MT3)           VMTRCH
3148    1 00D8B    00000000 A      DATA    0                   MC
3149                            *                           TTES-BIT 26 COMPARES-SIXTH WORD
3150    1 00D8C    FFFFFFF0 A      DATA    -16                 COUNT
3151    1 00D8D    40C00000 A      TTBS,12 0                   INSTRUCTION
3152    1 00D8E    00CC0244        K       0,0,0,SETPSW        PSW1 IN
3153    1 00D8F    10000276        K       1,0,0,LOC+2         PSW1 OUT
3154    1 00D90    E0001538        J       X'E0',BA(FMT)       R12 IN
3155    1 00D91    20001538        J       X'20',BA(FMT)       R12 OUT
3156    1 00D92    00000000 A      PZE                         R0 IN
3157    1 00D93    00000000 A      PZE                         R0 OUT
3158    1 00D94    18001640        J       24,BA(VMT)          R13 IN
3159    1 00D95    01001657        J       1,BA(VMT)+23        R13 OUT
3160    1 00D96    FFFFFFFF A      DATA    -1                  R1 IN
3161    1 00D97    FFFFFFFF A      DATA    -1                  R1 OUT
```

```
3162    1 00D98  3272049C          LW,7     MT2+64,1        FMT
3163    1 00D99  32D204EC          LW,13    MT3+64,1        VMT/VMTR
3164    1 00D9A  00001280          J        0,BA(MT3)       VMTRCH
3165    1 00D9B  00000000 A        DATA     0               MC
3166                             *                          TTBS-BIT 25 COMPARES-SEVENTH WORD
3167    1 00D9C  FFFFFFF0 A        DATA     -16             COUNT
3168    1 00D9D  40C00000 A        TTBS,12  0               INSTRUCTION
3169    1 00D9E  F0000244          K        15,0,0,SETPSW   PSW1 IN
3170    1 00D9F  F0000276          K        15,0,0,LOC+2    PSW1 OUT
3171    1 00DA0  C0001538          J        X'C0',BA(FMT)   R12 IN
3172    1 00DA1  40001538          J        X'40',BA(FMT)   R12 OUT
3173    1 00DA2  FFFFFFFF A        DATA     -1              R0 IN
3174    1 00DA3  FFFFFFFF A        DATA     -1              R0 OUT
3175    1 00DA4  1C001640          J        28,BA(VMT)      R13 IN
3176    1 00DA5  0100165B          J        1,BA(VMT)+27    R13 OUT
3177    1 00DA6  00000000 A        PZE                      R1 IN
3178    1 00DA7  00000000 A        PZE                      R1 OUT
3179    1 00DA8  3272049C          LW,7     MT2+64,1        FMT
3180    1 00DA9  32D204EC          LW,13    MT3+64,1        VMT/VMTR
3181    1 00DAA  00001280          J        0,BA(MT3)       VMTRCH
3182    1 00DAB  00000000 A        DATA     0               MC
3183                             *                          TTBS-BIT 24 COMPARES-EIGHTH WORD
3184    1 00DAC  FFFFFFF0 A        DATA     -16             COUNT
3185    1 00DAD  40C00000 A        TTBS,12  0               INSTRUCTION
3186    1 00DAE  00000244          K        0,0,0,SETPSW    PSW1 IN
3187    1 00DAF  10000276          K        1,0,0,LOC+2     PSW1 OUT
3188    1 00DB0  80001538          J        X'80',BA(FMT)   R12 IN
3189    1 00DB1  80001538          J        X'80',BA(FMT)   R12 OUT
3190    1 00DB2  00000000 A        PZE                      P0 IN
3191    1 00DB3  00000000 A        PZE                      R0 OUT
3192    1 00DB4  20001640          J        32,BA(VMT)      R13 IN
3193    1 00DB5  0100165F          J        1,BA(VMT)+31    R13 OUT
3194    1 00DB6  FFFFFFFF A        DATA     -1              R1 IN
3195    1 00DB7  FFFFFFFF A        DATA     -1              R1 OUT
3196    1 00DB8  3272049C          LW,7     MT2+64,1        FMT
3197    1 00DB9  32D204EC          LW,13    MT3+64,1        VMT/VMTR
3198    1 00DBA  00001280          J        0,BA(MT3)       VMTRCH
3199    1 00DBB  00000000 A        DATA     0               MC
```

```
                            *                              TTBS-BIT 23 COMPARES-FIRST WORD
1 00DBC   FFFFFFF0 A             DATA     -16                COUNT
1 00DBD   40C00000 A             TTBS,12  0                  INSTRUCTION
1 00DBE   E0000244               K        14,0,0,SETPSW      PSW1 IN
1 00DBF   F0000276               K        15,0,0,LOC+2       PSW1 OUT
1 00DC0   01001558               J        1,BA(FMT)+32       R12 IN
1 00DC1   01001558               J        1,BA(FMT)+32       R12 OUT
1 00DC2   FFFFFFFF A             DATA     -1                 R0 IN
1 00DC3   FFFFFFFF A             DATA     -1                 R0 OUT
1 00DC4   08001640               J        8,BA(VMT)          R13 IN
1 00DC5   06001642               J        6,BA(VMT)+2        RU3 OUT
1 00DC6   00000000 A             PZE                         R1 IN
1 00DC7   00000000 A             PZE                         R1 OUT
1 00DC8   3272049C               LW,7     MT2+64,1           FMT
1 00DC9   32D204EC               LW,13    MT3+64,1           VMT/VMTR
1 00DCA   000012B0               J        0,BA(MT3)          VMTRCH
1 00DCB   00000000 A             DATA     0                  MC
                            *                              TTBS-BIT 22 COMPARES-SECOND WORD
1 00DCC   FFFFFFF0 A             DATA     -16                COUNT
1 00DCD   40C00000 A             TTBS,12  0                  INSTRUCTION
1 00DCE   F0000244               K        15,0,0,SETPSW      PSW1 IN
1 00DCF   F0000276               K        15,0,0,LOC+2       PSW1 OUT
1 00DD0   02001558               J        2,BA(FMT)+32       R12 IN
1 00DD1   02001558               J        2,BA(FMT)+32       R12 OUT
1 00DD2   00000000 A             PZE                         R0 IN
1 00DD3   00000000 A             PZE                         R0 OUT
1 00DD4   08001640               J        8,BA(VMT)          R13 IN
1 00DD5   02001646               J        2,BA(VMT)+6        R13 OUT
1 00DD6   FFFFFFFF A             DATA     -1                 R1 IN
1 00DD7   FFFFFFFF A             DATA     -1                 R1 OUT
1 00DD8   3272049C               LW,7     MT2+64,1           FMT
1 00DD9   32D204EC               LW,13    MT3+64,1           VMT/VMTR
1 00DDA   000012B0               J        0,BA(MT3)          VMTRCH
1 00DDB   00000000 A             DATA     0                  MC
                            *                              TTBS-BIT 21 COMPARES-THIRD WORD
1 00DDC   FFFFFFF0 A             DATA     -16                COUNT
1 00DDD   40C00000 A             TTBS,12  0                  INSTRUCTION
1 00DDE   00000244               K        0,0,0,SETPSW       PSW1 IN
```

```
3238    1 00DDF    10000276
3239    1 00DE0    04001558
3240    1 00DE1    04001553
3241    1 00DE2    FFFFFFFF A
3242    1 00DE3    FFFFFFFF A
3243    1 00DE4    0C001640
3244    1 00DE5    0200164A
3245    1 00DE6    00000000 A
3246    1 00DE7    00000000 A
3247    1 00DE8    3272049C
3248    1 00DE9    32D204EC
3249    1 00DEA    00001280
3250    1 00DEB    00000000 A
3251                          *
3252    1 00DEC    FFFFFFF0 A
3253    1 00DED    40C00000 A
3254    1 00DEE    E0000244
3255    1 00DEF    F0000276
3256    1 00DF0    08001553
3257    1 00DF1    08001558
3258    1 00DF2    00000000 A
3259    1 00DF3    00000000 A
3260    1 00DF4    10001640
3261    1 00DF5    0200164E
3262    1 00DF6    FFFFFFFF A
3263    1 00DF7    FFFFFFFF A
3264    1 00DF8    3272049C
3265    1 00DF9    32D204EC
3266    1 00DFA    00001280
3267    1 00DFB    00000000 A
3268                          *
3269    1 00DFC    FFFFFFF0 A
3270    1 00DFD    40C00000 A
3271    1 00DFE    10000244
3272    1 00DFF    10000276
3273    1 00E00    10001558
3274    1 00E01    10001558
3275    1 00E02    FFFFFFFF A
```

```
 SUFFIX(2)
K         1,0,0,L0C+2      PSW1 0UT
J         4,BA(FMT)+32     R12 IN
J         4,BA(FMT)+32
DATA      -1               R0 IN
DATA      -1               R0 0UT
J         12,BA(VMT)       R13 IN
J         2,BA(VMT)+10     R13 0UT
PZE                        R1 IN
PZE                        R1 0UT
LW,7      MT2+64,1         FMT
LW,13     MT3+64,1         VMT/VMTR
J         0,BA(MT3)        VMTRCH
DATA      0                MC
                          TTBS-BIT 20 C0MPARES-F0URTH W0RD
DATA      -16              C0UNT
TTBS,12   0                INSTRUCTI0N
K         14,0,0,SETPSW    PSW1 IN
K         15,0,0,L0C+2     PSW1 0UT
J         8,BA(FMT)+32     R12 IN
J         8,BA(FMT)+32     R12 0UT
PZE                        R0 IN
PZE                        R0 0UT
J         16,BA(VMT)       R13 IN
J         2,BA(VMT)+14
DATA      -1               R1 IN
DATA      -1               R1 0UT
LW,7      MT2+64,1         FMT
LW,13     MT3+64,1         VMT/VMTR
J         0,BA(MT3)        VMTRCH
DATA      0                MC
                          TTBS-BIT 19 C0MPARES-FIFTH W0RD
DATA      -16              C0UNT
TTBS,12   0                INSTRUCTI0N
K         1,0,0,SETPSW     PSW1 IN
K         1,0,0,L0C+2      PSW1 0UT
J         16,BA(FMT)+32    R12 IN
J         16,BA(FMT)+32    R12 0UT
DATA      -1               R0 IN
```

```
                                        SUFFIX(2)
1 00E03    FFFFFFFF A                  DATA      -1                  R0 OUT
1 00E04    140C1640                    J         20,BA(VMT)          R13 IN
1 00E05    02001652                    J         2,BA(VMT)+18        R13 OUT
1 00E06    00000000 A                  PZE                           R1 IN
1 00E07    00000000 A                  PZE                           R1 OUT
1 00E08    3272049C                    LW,7      MT2+64,1            FMT
1 00E09    320204EC                    LW,13     MT3+64,1            VMT/VMTR
1 00E0A    000012B0                    J         0,BA(MT3)           VMTRCH
1 00E0B    00000000 A                  DATA      0                   MC
                            *                                        TTBS-BIT 18 COMPARES-SIXTH WORD
1 00E0C    FFFFFFF0 A                  DATA      -16                 COUNT
1 00E0D    40C00000 A                  TTBS,12   0                   INSTRUCTION
1 00E0E    00000244                    K         0,0,0,SETPSW        PSW1 IN
1 00E0F    10000276                    K         1,0,0,LOC+2         PSW1 OUT
1 00E10    20001558                    J         32,BA(FMT)+32       R12 IN
1 00E11    20001558                    J         32,BA(FMT)+32
1 00E12    00000000 A                  PZE                           R0 IN
1 00E13    00000000 A                  PZE                           R0 OUT
1 00E14    18001640                    J         24,BA(VMT)          R13 IN
1 00E15    02001656                    J         2,BA(VMT)+22        R13 OUT
1 00E16    FFFFFFFF A                  DATA      -1                  R1 IN
1 00E17    FFFFFFFF A                  DATA      -1                  R1 OUT
1 00E18    3272049C                    LW,7      MT2+64,1            FMT
1 00E19    320204EC                    LW,13     MT3+64,1            VMT/VMTR
1 00E1A    000012B0                    J         0,BA(MT3)           VMTRCH
1 00E1B    00000000 A                  DATA      0                   MC
                            *                                        TTBS-17 COMPARES-SEVENTH WORD
1 00E1C    FFFFFFF0 A                  DATA      -16                 COUNT
1 00E1D    40C00000 A                  TTBS,12   0                   INSTRUCTION
1 00E1E    E0000244                    K         14,0,0,SETPSW       PSW1 IN
1 00E1F    F0000276                    K         15,0,0,LOC+2        PSW1 OUT
1 00E20    40001558                    J         64,BA(FMT)+32       R12 IN
1 00E21    40001558                    J         64,BA(FMT)+32       R12 OUT
1 00E22    FFFFFFFF A                  DATA      -1                  R0 IN
1 00E23    FFFFFFFF A                  DATA      -1                  R0 OUT
1 00E24    1C001640                    J         28,BA(VMT)          R13 IN
1 00E25    0200165A                    J         2,BA(VMT)+26        R13 OUT
1 00E26    00000000 A                  PZE                           R1 IN
```

```
                                     SUFFIX(2)
1 00E27    00000000 A                PZE                            R1 θUT
1 00E28    3272049C                  LW,7       MT2+64,1            FMT
1 00E29    32D204EC                  LW,13      MT3+64,1            VMT/VMTR
1 00E2A    000012B0                  J          0,BA(MT3)           VMTRCH
1 00E2B    00000000 A                DATA       0                   MC
                            *                                       TTBS-BIT 16 CθMPARES-EIGHTH WθRD
1 00E2C    FFFFFFF0 A                DATA       -16                 CθUNT
1 00E2D    40C00000 A                TTBS,12    0                   INSTRUCTIθN
1 00E2E    10000244                  K          1,0,0,SETPSW        PSW1 IN
1 00E2F    10000276                  K          1,0,0,LθC+2         PSW1 θUT
1 00E30    80001558                  J          128,BA(FMT)+32      R12 IN
1 00E31    80001558                  J          128,BA(FMT)+32      R12 3UT
1 00E32    00000000 A                PZE                            R0 IN
1 00E33    00000000 A                PZE                            R0 θUT
1 00E34    20001640                  J          32,BA(VMT)          R13 IN
1 00E35    0200165E                  J          2,BA(VMT)+30        R13 3UT
1 00E36    FFFFFFFF A                DATA       -1                  R1 IN
1 00E37    FFFFFFFF A                DATA       -1                  R1 θUT
1 00E38    3272049C                  LW,7       MT2+64,1            FMT
1 00E39    32D204EC                  LW,13      MT3+64,1            VMT/VMTR
1 00E3A    000012B0                  J          0,BA(MT3)           VMTRCH
1 00E3B    00000000 A                DATA       0                   MC
                            *                                       TTBS-BITS 10 AND 15 CθMPARE
1 00E3C    FFFFFFF0 A                DATA       -16                 CθUNT
1 00E3D    40C00000 A                TTBS,12    0                   INSTRUCTIθN
1 00E3E    00000244                  K          0,0,0,SETPSW        PSW1 IN
1 00E3F    10000276                  K          1,0,0,LθC+2         PSW1 θUT
1 00E40    FF001538                  J          X'FF',BA(FMT)       R12 IN
1 00E41    21001538                  J          X'21',BA(FMT)       RU2 θUT
1 00E42    FFFFFFFF A                DATA       -1                  R0 IN
1 00E43    FFFFFFFF A                DATA       -1                  R0 θUT
1 00E44    04001640                  J          4,BA(VMT)           R13 IN
1 00E45    03001641                  J          3,BA(VMT)+1         R13 θUT
1 00E46    00000000 A                PZE                            R1 IN
1 00E47    00000000 A                PZE                            R1 θUT
1 00E48    3272052C                  LW,7       EPI+64,1            FMT
1 00E49    32D204EC                  LW,13      MT3+64,1            VMT/VMTR
1 00E4A    000012B0                  J          0,BA(MT3)           VMTRCH
```

```
3352    1 00E4B    00000000 A          SUFFIX(2)
3353                                   DATA     0          MC
3354    1 00E4C    FFFFFFF0 A  *                          TTBS-BITS 0-3 COMPARE
3355    1 00E4D    40C00000 A          DATA     -16        COUNT
3356    1 00E4E    E0000244            TTBS,12  0          INSTRUCTION
3357    1 00E4F    F0000276            K        14,0,0,SETPSW  PSW1 IN
3358    1 00E50    FF001538            K        15,0,0,LOC+2   PSW1 OUT
3359    1 00E51    F0001538            J        X'FF',BA(FMT)  R12 IN
3360    1 00E52    00000000 A          J        X'F0',BA(FMT)  R12 OUT
3361    1 00E53    00000000 A          PZE                     R0 IN
3362    1 00E54    04001640            PZE                     R0 OUT
3363    1 00E55    04001640            J        4,BA(VMT)      R13 IN
3364    1 00E56    FFFFFFFF A          J        4,BA(VMT)      R13 OUT
3365    1 00E57    FFFFFFFF A          DATA     -1             R1 IN
3366    1 00E58    3272045C            DATA     -1             R1 OUT
3367    1 00E59    32D204EC            LW,7     MT1+64,1       FMT
3368    1 00E5A    000012B0            LW,13    MT3+64,1       VMT/VMTR
3369    1 00E5B    00000000 A          J        0,BA(MT3)      VMTRCH
3370                                   DATA     0              MC
3371    1 00E5C    FFFFFFF0 A  *                          TTBS-BITS 4-7 COMPARE
3372    1 00E5D    40C00000 A          DATA     -16            COUNT
3373    1 00E5E    10C00244            TTBS,12  0              INSTRUCTION
3374    1 00E5F    10000276            K        1,0,0,SETPSW   PSW1 IN
3375    1 00F60    FF001538            K        1,0,0,LOC+2    PSW1 OUT
3376    1 00E61    0F001538            J        X'FF',BA(FMT)  R12 IN
3377    1 00E62    FFFFFFFF A          J        X'F',BA(FMT)   R12 OUT
3378    1 00E63    FFFFFFFF A          DATA     -1             R0 IN
3379    1 00E64    04001640            DATA     -1             R0 OUT
3380    1 00E65    04001640            J        4,BA(VMT)      R13 IN
3381    1 00E66    00000000 A          J        4,BA(VMT)      R13 OUT
3382    1 00E67    00000000 A          PZE                     R1 IN
3383    1 00E68    3272045D            PZE                     R1 OUT
3384    1 00E69    32D204EC            LW,7     MT1+65,1       FMT
3385    1 00E6A    000012B0            LW,13    MT3+64,1       VMT/VMTR
3386    1 00E6B    00000000 A          J        0,BA(MT3)      VMTRCH
3387                                   DATA     0              MC
3388    1 00E6C    FFFFFFF0 A  *                          TTBS-INDIRECT ADDRESSING-TRAP
3389    1 00E6D    C0C002E9 A          DATA     -16            COUNT
                                       DATA     X'C0C002E9'    INSTRUCTION
```

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                                    SUFFIX(2)
1 00E6E   77300185                  K       7,7,3,SI9NAØ        PSW1 IN
1 00E6F   F730006B                  K       15,7,3,NEIRET+1     PSW1 ØUT
1 00E70   FF001538                  J       X'FF',BA(FMT)       R12 IN
1 00E71   FF001538                  J       X'FF',BA(FMT)       R12 ØUT
1 00E72   00000000 A                PZE                         R0 IN
1 00E73   00000000 A                PZE                         R0 ØUT
1 00E74   04001640                  J       4,BA(VMT)           R13 IN
1 00E75   04001640                  J       4,BA(VMT)           R13 ØUT
1 00E76   00000000 A                PZE                         R1 IN
1 00E77   00000000 A                PZE                         R1 ØUT
1 00E78   3272045C                  LW,7    MT1+64,1            FMT
1 00E79   320204EC                  LW,13   MT3+64,1            VMT/VMTR
1 00E7A   000012B0                  J       0,BA(MT3)           VMTRCH
1 00E7B   00000000 A                DATA    0                   MC
1 00E7C   00000000 A                DATA    0
```