XDS 901523E
$6.25

DIAGNOSTIC PROGRAM MANUAL

SIGMA 5
CPU DIAGNOSTIC (AUTO)

PROGRAM NO. 704287E

February 1970

Prepared by
Field Engineering Publications

This publication supersedes XDS 901523D
dated July 1969

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LIST OF EFFECTIVE PAGES

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RELATED PUBLICATIONS

Publication Title	Publication No.
Sigma Symbol and Meta-Symbol Reference Manual, XDS Sigma Computers	900952
Sigma 5 Computer Reference Manual	900959
Sigma 5 Computer Technical Manual	901172
Sigma 5 and 7 Relocatable Diagnostic Program Loader Diagnostic Program Manual	900972

SECTION I
INTRODUCTION

1-1 SCOPE OF MANUAL

This manual describes the Auto CPU diagnostic program designed for the Sigma 5 computer manufactured by Xerox Data Systems, El Segundo, California.

This manual is made up of five sections and two appendices. Section I is a general introduction to the Auto program. Section II contains program operating procedures. Section III is a detailed description of the program operation. Section IV contains the complete symbolic listing of the program as generated by the Sigma metasymbol assembler. Section V is a concordance listing.

1-2 PROGRAM OBJECTIVES

The purpose of the Auto program is to detect and diagnose malfunctions of the Sigma 5 CPU pertaining to major instruction categories, such as load, store, branch, comparison, shift, and fixed-point arithmetic. Provisions are also incorporated for testing instruction interruptibility and I/O compatibility.

1-3 GENERAL SPECIFICATIONS

Table 1-1 lists the general specifications for this program.

Table 1-1. General Specifications

Computer configuration	Any Sigma 5 computer with card reader or paper tape reader for program input
Memory size	8K minimum (8192 words)
Optional equipment	Keyboard printer or line printer for optional printed output

Prerequisite tests are listed in table 1-2.

Table 1-2. Testing Prerequisites

Program	Prerequisite Program
Verify	None
Pattern	Verify
Auto	Verify, Pattern*
Suffix	Auto
Float	Auto
Interrupt	Auto
Memory Protect	Suffix

*For the Auto test to run, the block 0 register must be functioning correctly, as tested by the Pattern program.

```
!!PROC CAL2      RELEASED
!BCKG RESTART
!!LOADED PROC  WATCH
!BCKG USED BY FCD
!
!
!
!!KEY-IN
DM

SIGMA 5/7 DIAG PROG MAG TAPE LIBRARY
-5 AUTO

SIGMA 5   AUTO 704287-E01
REVISION E01
  REVISED TO ADD A SINGLE PURPOSE TEST THAT
CHECKS REGISTER TO REGISTER OPERATION OF
 STORE DOUBLE WORD.
AUTOMATICALLY RESETS THE ERROR COUNTER
   WHEN LAS AND LMS ARE NOT INSTALLED
OR HAVE BEEN DISABLED
```

10/8/79

LAS } NOT
LMS } IMPLEMENTED

```
                                AUTO ERROR DISPLAY
    LIST     ERRORS    PASSES     INST   IDENTIFIER    IS      SHOULD BE
  32401DEE  00000001  000002D9  26C00460  50000001  00000168  00000160
  32401DEE  00000002  000002D9  26C00460  60000000  26C00460  80000000

INSTRUCTIONS LOAD MEMORY STATUS (LMS) AND   LOAD AND SET (LAS) ARE NOT
THEY WILL NOT BE CHECKED FURTHER.

            FLOATING POINT OPTION IS INSTALLED
```

SECTION II
OPERATING INSTRUCTIONS

2-1 GENERAL

The Auto diagnostic program employs a data-gathering technique for its operation. The program consists of a driver or control section, followed by test modules containing from 4 to 20 words of data prescribing a test. The driver program accesses each module in sequence, sets up the prescribed conditions, executes the specified instruction, and then tests the results for possible errors. A report of each test or error may be printed out or displayed on the control panel indicators.

2-2 LOADING PROCEDURE

Table 2-1 shows the control panel switch settings to be used for loading the program. After the switches have been set as indicated, the following must be done:

a. Clear memory by simultaneously pressing the CPU RESET/CLEAR and SYS RESET/CLEAR pushbuttons.

b. Set the UNIT ADDRESS switches to the address of the peripheral input device.

c. Press the LOAD switch.

d. Place the COMPUTE switch to RUN.

Table 2-1. Switch Settings For Program Loading

Switch	Setting
CONTROL MODE	LOCAL
WATCHDOG TIMER	NORMAL
INTERLEAVE SELECT	NORMAL
PARITY ERROR MODE	CONT
AUDIO	ON
CLOCK MODE	CONT
ADDR STOP	Off
SENSE	0

Upon being loaded with the switches set according to table 2-1, the program automatically branches to the starting location and begins running. If SENSE switch 1 is on during loading, a wait occurs at X'291' after the two waits during loading of the loader to permit program or loader relocation (reference XDS publication No. 900972). As a result, the count pulse interrupts are not armed. To continue, reset SS1 and clear the wait. If SSW1 is reset during loading, no waits occur and count pulse interrupts are armed.

2-3 OPERATING PROCEDURES

2-4 SUCCESS INDICATIONS

Provided no errors occur, the program runs continuously through all test modules. After completing the last module, the program starts over, making another pass, first printing out whether the floating point option is installed. A pass counter and error counter are maintained by the program. These may be examined by setting SENSE switch 3. After X'20' error-free passes, a message is output indicating that the real-time clocks are implemented.

After completing each test module, the program reads SS3 and makes a report if the switch is set. Reports are normally made via the keyboard printer, device address 001. However, if no device responds to a TIO to that address and SS4 is off, the program halts at location X'205', with the report information contained in registers 1 through 4. The registers contain the following information:

R1	Present list address
R2	Error count
R3	Pass count (bits 0 through 15), module count (bits 16 through 31)
R4	Instruction tested

Figure 2-1 shows a typical printout from the keyboard printer resulting from setting SS3 after the program has made a number of successful passes.

2-5 ERROR INDICATIONS

When running with the sense switches on 0, the program halts upon detecting an error. Before halting, however, the error is reported via the keyboard printer or line printer. If the printing device does not respond to a TIO, the program merely halts at location X'205' with the alarm on.

A typical error printout is shown in figure 2-2. The halt-on-error feature may be disabled by setting SENSE switch 4. However, if the machine is operating in this mode and

```
FLOATING POINT OPTION IS INSTALLED
REAL TIME CLOCKS IN USE. TO DISABLE, CP INTERRUPT AND CLEAR R5

                                    AUTO ERROR DISPLAY
LIST     ERRORS    PASSES     INST   IDENTIFIER    IS    SHOULD BE    DIFF

32400976 00000000  002100AB  92CE03E0
```

Note: Printouts from A revision of program. Memory locations change on subsequent revisions 901523A.201

Figure 2-1 Sample of Printout Showing No Errors

```
FLOATING POINT OPTION IS INSTALLED
REAL TIME CLOCKS IN USE. TO DISABLE, CP INTERRUPT AND CLEAR R5

                                    AUTO ERROR DISPLAY
LIST     ERRORS    PASSES     INST   IDENTIFIER    IS    SHOULD BE    DIFF

32401102 00000001  0078018R  25C00204  50000001  07300145  47300145  40000000
32401102 00000002  0078018R  25C00204  6000000C  00000000  BCDEF01A  BCDEF01A
```

Note: Printouts from A revision of program. Memory locations change on subsequent revisions 901523A.202

Figure 2-2. Sample of Printout Showing Errors

no printout device is available, there are no error indications except for brief flickers of the alarm indicator (which may be too fast to see when only one or a few modules are failing).

The error indications described in the previous paragraphs occur only for faults that happen as a result of executing the test instruction. If a spurious trap occurs at any other time during the operation of the control program, a wait is executed with the program halting at location X'403'. (See listing for procedure to follow.) If the wait is cleared, the program resumes testing with the current test module.

If a memory parity error occurs, the program is interrupted to location X'56'. The interrupt routine reads the memory fault indicators and leaves the result in register 4. A wait is then executed, causing the program to halt at location X'EE'. If the wait is cleared, the program resumes testing with the current test module.

Table 2-2 summarizes the various wait locations in the program.

Table 2-2. Wait Locations

Location (hex)	Reason for Wait
483	Erroneous trap
291	SS1 on when loading
EE	Memory fault interrupt
FB	Control panel interrupt
205	Report or error

2-6 OPTIONS

Several optional features are incorporated into the Auto program to give the operator a more flexible tool for diagnosing failures while maintaining a quick means of detecting faults with minimal operator intervention.

2-7 Sense Switches

The uses of SS3 and SS4 have already been mentioned; further control is provided through SS1 and SS2, which allow the operator to repeatedly loop on a single test. Table 2-3 summarizes the functions of all four switches.

Table 2-3. Sense Switch Functions

Switch	Function
SS1	Short loop: when SS1 is set, the program continuously repeats the same test module. A minimum of instructions are executed to set up the necessary register and memory areas. No testing of results or other sense switches takes place. If SS1 is on while the program is being loaded the count pulse interrupts are not armed after X'20' error-free passes
SS2	Long loop: when SS2 is set and SS1 reset, the program repeats the same module. All testing of results takes place and other sense switches are read
SS3	Report: when SS3 is set, the program reports at the completion of each test not otherwise reported because of an error
SS4	Suppress error halt and report halt: when SS4 is set, the program does not halt on errors. Errors are still reported via the keyboard printer, if it is available. Printing may be suppressed by turning the device off

2-8 Control Panel Interrupt

The control panel INTERRUPT button may be pressed any time while the program is running to change certain parameters in the program. When the button is pressed, the computer comes to a wait with address X'FB' in the instruction address register. The changes are made by entering information into any or all of the registers described in table 2-4, then reading out the instruction from the instruction address location and returning the COMPUTE switch to RUN.

Table 2-4. Register Contents at Time of Interrupt

Register	Contents
R0	The IOP/device address of the unit used for report or error messages. The address is in bits 16-31 and is initially set to 1 when the program is loaded Device selection: the program tests bit 0 to determine whether to use the keyboard printer or the line printer output routines. This bit is initially set to zero, indicating that the

Table 2-4. Register Contents at Time of Interrupt (Cont.)

Register	Contents
	output device is the keyboard printer. Setting a one in bit 0 changing the address in bits 16-31 causes all messages to be output on the line printer
R1	The memory address of the current or most recently completed test module Test selection: when the machine is returned to RUN, the program begins testing with the module addressed by R1. The first three hex characters must be 324. The last five hex characters are the test module address. The operator may insert any valid module address he wishes and set SS1 or SS2 to loop on that module
R5	Register bits 16-19, used to arm and enable the count pulse interrupts Counts pulse interrupt level selection: normally, the program automatically arms and enables the four count pulse interrupt levels upon making the twentieth pass. If no errors have occurred, the operator may suppress this feature by clearing R5 when the wait occurs for the control panel interrupt, or by loading the program with SS1 on. He may selectively disable only some of the count pulse interrupts if he wishes. He may also reenable the levels later by again interrupting and changing R5 Bits other than 16-19 of R5 have no effect on interrupt

2-9 I/O COMPATIBILITY

Automatically implemented after 35 error-free passes.

2-10 TEST SELECTION

The operator may select any test module to begin running by using the control panel INTERRUPT as described in

paragraph 2-8 and table 2-4. He may likewise loop on a selected test by setting SS1 or SS2 before starting up again.

The operator may also loop on a particular test by setting SS1 or SS2 when that test is being reported either via the keyboard printer or by a report halt or error halt.

2-11 RESTART PROCEDURE

The program may be restarted from location X'100'. When loaded, the program inserts an unconditional branch to that location in address X'26' so that normal restarting is possible by pressing the CPU RESET button and setting the COMPUTE switch to RUN.

SECTION III
PROGRAM DESCRIPTION

3-1 GENERAL

A simplified flow chart is given in figure 3-1 to illustrate the general philosophy of the program's operation. When loaded, the Auto program automatically branches to its starting location and begins running. Initialization takes place where parameters are set up and a branch instruction is inserted in location X'26' to facilitate restarting if the RESET button is pressed.

The program accesses each test module in turn and sets up all the test conditions as prescribed by the module. The instruction contained in the module is executed and then SENSE switch 1 is tested to determine whether the short loop mode is in effect. If SS1 is set, the program repeats a minimum amount of the setup procedure for the same test module and again executes the instruction. No results are examined in the short loop mode.

After 30 error free passes, an automatic short loop is initiated. This allows repetitive execution (100 times) of a test module with minimum setup and limits testing of results to memory, memory + 1, R12 and R13.

If not operating in the short loop (that is, with SS1 reset), the program proceeds to compare the results of the test with the expected results. The resultant contents of all registers and memory operands are prescribed by the test module. Other items are also tested, such as the instruction location, the location following the instruction, the indirect address location, and the program status doubleword.

When an error is detected or if SS3 is set, the program makes a report – normally via the keyboard printer. The reports may be switched over to a line printer if desired (see paragraph 2-8). When no printing device is available, the program makes its reports by executing a wait for the information stored in general registers 1 through 8.

After results have been checked and reports, if any, have been completed, SENSE switch 2 is read. If SS2 is set, the program goes through the entire setup, test, and report procedure for the same test module that it just finished. If SS2 is reset, the module pointer is updated so that a new test is performed on the next cycle.

3-2 TEST MODULE

Refer to location X'444' in the program listing, section IV. Each test module is relocated to the previously cleared table area. The listing describes the meaning of each word. The term program status word 1 (PSW1) is somewhat misleading, since only bits 0 through 11 are used. Bits 12 through 31 are used as a linkage address so that the driver can prepare for any traps resulting from executing instructions.

3-3 OUTPUT MESSAGE ANALYSIS

See figure 3-2 for a sample Auto error printout. The headings on the printout correspond to the register contents after error halts.

Printout Term	Description
LIST	Present list address: 324xxxxx where 324 is LW, 4 and xxxxx is the first memory location of the test module
ERRORS	Total number of errors since initial load or last restart
PASSES	Bits 0-15 contain the number (in hexadecimal) of complete passes. Bits 16-31 contain the number of modules tested in the current pass
INST	Instruction under test
IDENTIFIER	Error identifier and address (see R5, on program listing, section IV)
IS	Erroneous result
SHOULD BE	Predetermined result
DIFF	Result of an exclusive OR of the contents of the erroneous result with the predetermined result

3-4 USE OF PRINTOUT FOR TROUBLESHOOTING

In figure 3-2 more errors are occurring than are shown. Since all the failing instructions (INST) are add word (AW), sufficient data is available to analyze the malfunction. Stop the printout by turning off the keyboard printer or cause a wait by setting SS4 to 0. The first and last digits of the Identifier column show that the majority of incorrect data is found in register C. Two failures of PSW1 occur at list addresses also having failures in register C, but these can be ignored because they result from incorrect condition code settings (see DIFF) which depend on the contents of register C.

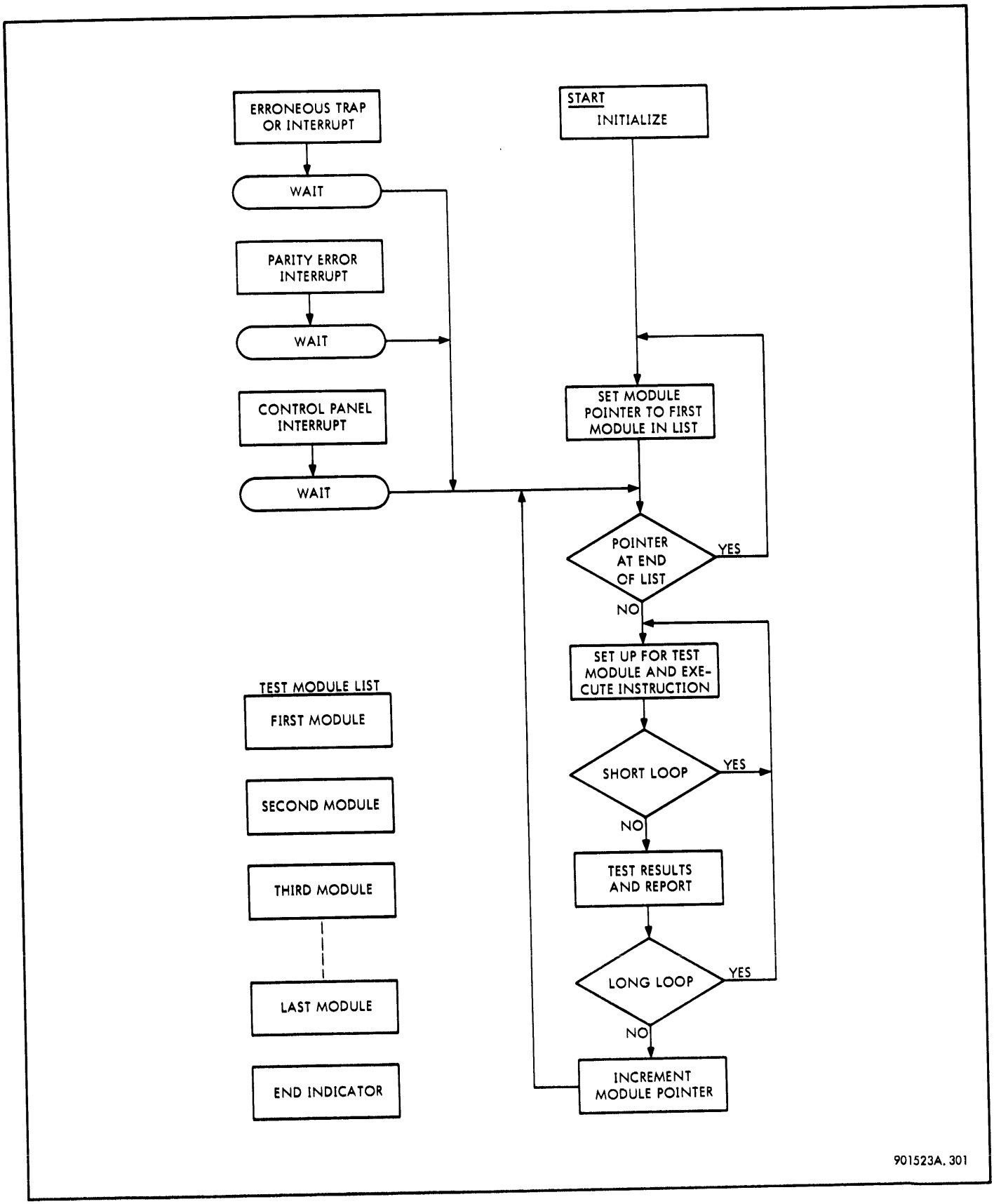

Figure 3-1. Auto Program, Simplified Flow Chart

AUTO ERROR DISPLAY

LIST	ERRORS	PASSES	INST	IDENTIFIER	IS	SHOULD BE	DIFF
3240070C	00000001	00000054	30C00460	6000000C	51555554	55555554	04000000
32400714	00000002	00000055	30C00460	50000001	A7200167	87200167	20000000
32400714	00000003	00000055	30C00460	6000000C	04000000	00000000	04000000
3240071C	00000004	00000056	30C00460	50000001	A7200167	87200167	20000000
3240071C	00000005	00000056	30C00460	6000000C	04000000	00000000	04000000
32400724	00000006	00000057	30C00460	6000000C	FBFFFFFE	FFFFFFFE	04000000
32400734	00000007	00000059	30C00460	6000000C	40444444	44444444	04000000
3240073C	00000008	0000005A	30C00460	6000000C	40444443	44444443	04000000
3240075C	00000009	0000005E	30C00460	6000000C	40444444	44444444	04000000
3240076C	0000000A	00000060	30C00460	6000000C	8C888887	88888887	04000000
32400774	0000000B	00000061	30C00460	6000000C	8C888888	88888888	04000000
3240077C	0000000C	00000062	30C00460	6000000C	8C888888	88888888	04000000
3240078C	0000000D	00000064	30C00460	6000000C	C8CCCCCC	CCCCCCCC	04000000

Figure 3-2. Sample Auto Error Printout

Since the program status word failures can be discounted, the causes of faulty list addresses must be determined. The first failing list (3240070C) is in test module AW05. The Comments column indicates specifically some of the equations being tested by this test module.

Analysis of the Is, Should Be, and Diff columns of the Auto error display of figure 3-2 shows that bit 5 is always different. Any comment in the AW05 program listing concerning bit position 5 should therefore be interpreted as meaningful.

Before going any further, the user should be aware of the logic equations involved in the add word process. The equations for the adder simplify to the following:

General Equation	Application of Equation for Bit 5
$S_n = PR_n \oplus K_n$	$S_5 = PR_5 \oplus K_5$
$PR_n = A_n \oplus D_n$	$PR_5 = A_5 \oplus D_5$
$G_n = A_n \cdot D_n$	$G_5 = A_5 \cdot D_5$

where n = Bit position
S = Sum
PR = Propagate
G = Generate
A = A-register
D = D-register
K = Carry
$\oplus$ = Exclusive OR
. = AND function

On the program listing, K05 is noted in the next to last comment preceding AW05 as being caused by the corresponding term (G06) of the last comment line. Since the numbers being added in this module are both X'AAAAAAAA', both A5 and D5 must be zeros, making PR5 = 0. S5, therefore, should be a one, and the generation of either G6, K5, or NPR5 should be suspect as being faulty.

The above determined, the user should proceed with testing as described in either paragraph 3-5 or 3-6.

3-5 WORK WITH ONE FAILING TEST MODULE

Select a failing test module and then address-stop at location X'164'. An execute instruction is displayed, which executes the add word instruction.

Use the single-clock feature to advance to phase 3 of the AW instruction. Obtain test points from the CPU logic equations and check the three suspected terms.

3-6 EXTENDED ANALYSIS

Analyze the next failing AW test module and prepare a truth table for various inputs. See table 3-1 for a sample truth table.

From the comments of each AW test module, fill in the table. Terms such as KI = 1 are defined preceding the AW01 test module.

After analyzing a few cases, a pattern develops in the truth table. For every failure, K5 should be true. If it were actually false, IS-S5 would be the result in each case. The approach given in paragraph 3-5 can be taken from this point or the logic module for K5 can be replaced.

Table 3-1. Sample Error Analysis Truth Table

	SHOULD BE				IS
CASE	PR5	G6	K5	S5	S5
AW05	0	1	1	1	0
AW06	1	0	1	0	1
AW07	1	0	1	0	1

Table 3-1. Sample Error Analysis Truth Table (Cont.)

	SHOULD BE				IS
AW08	0	1	1	1	0
AW10	0	1	1	1	0

3-7 FLOWCHART

A detailed flowchart of the entire program (excluding test modules) is given in figure 3-3. Application of the flowchart to the program listing in section IV should provide the user with a clear understanding of program operation.

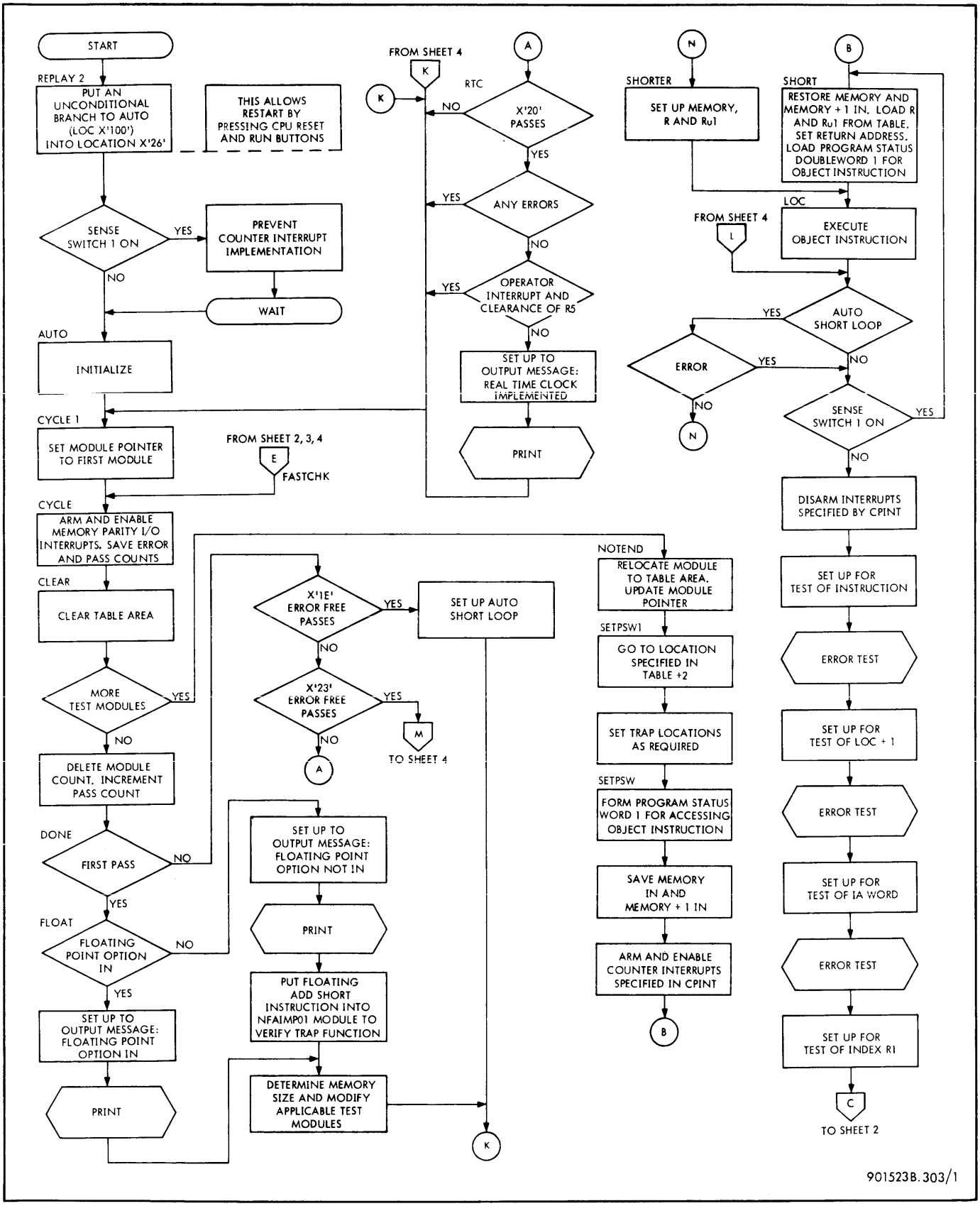

Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 1 of 4)

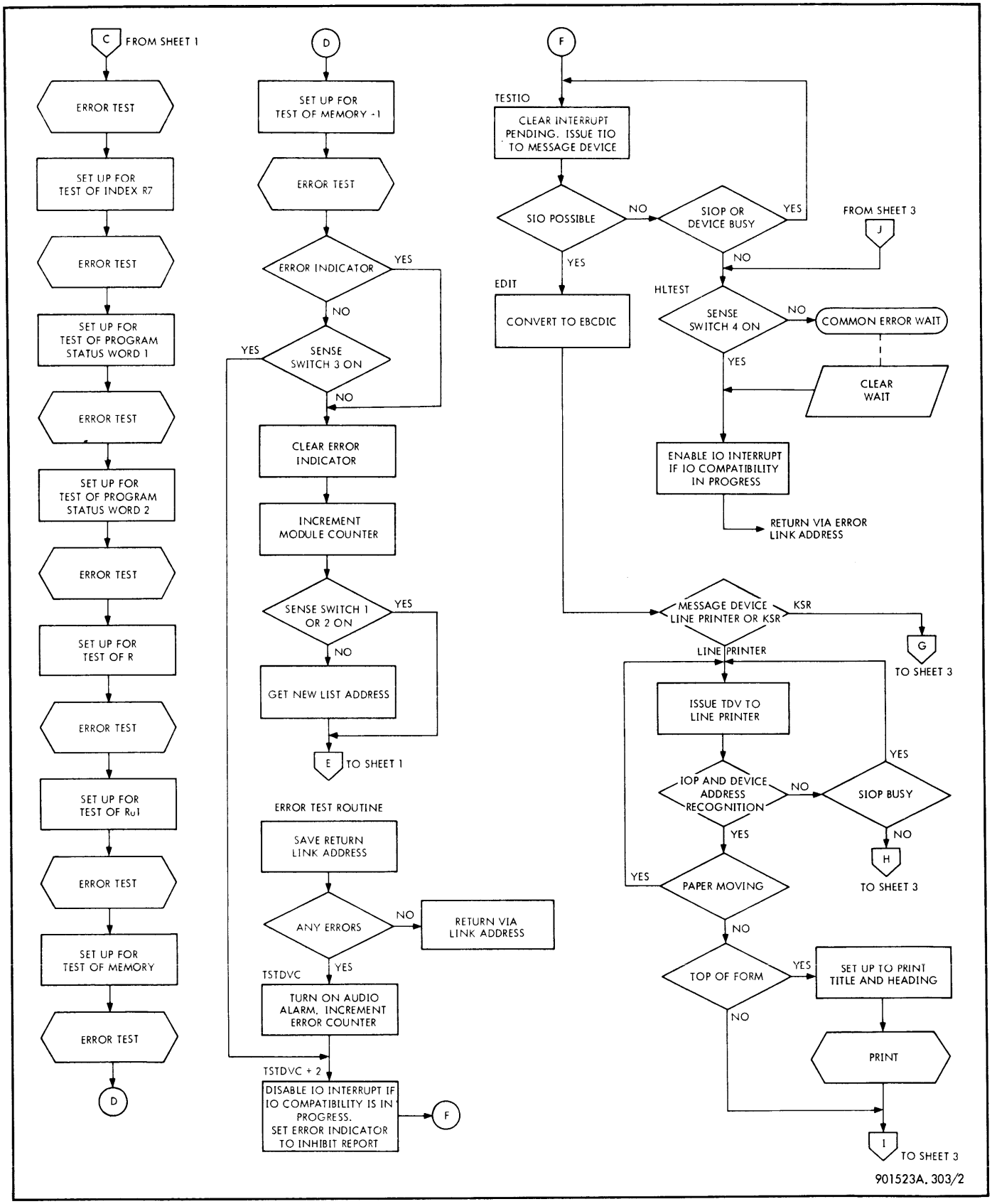

Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 2 of 4)

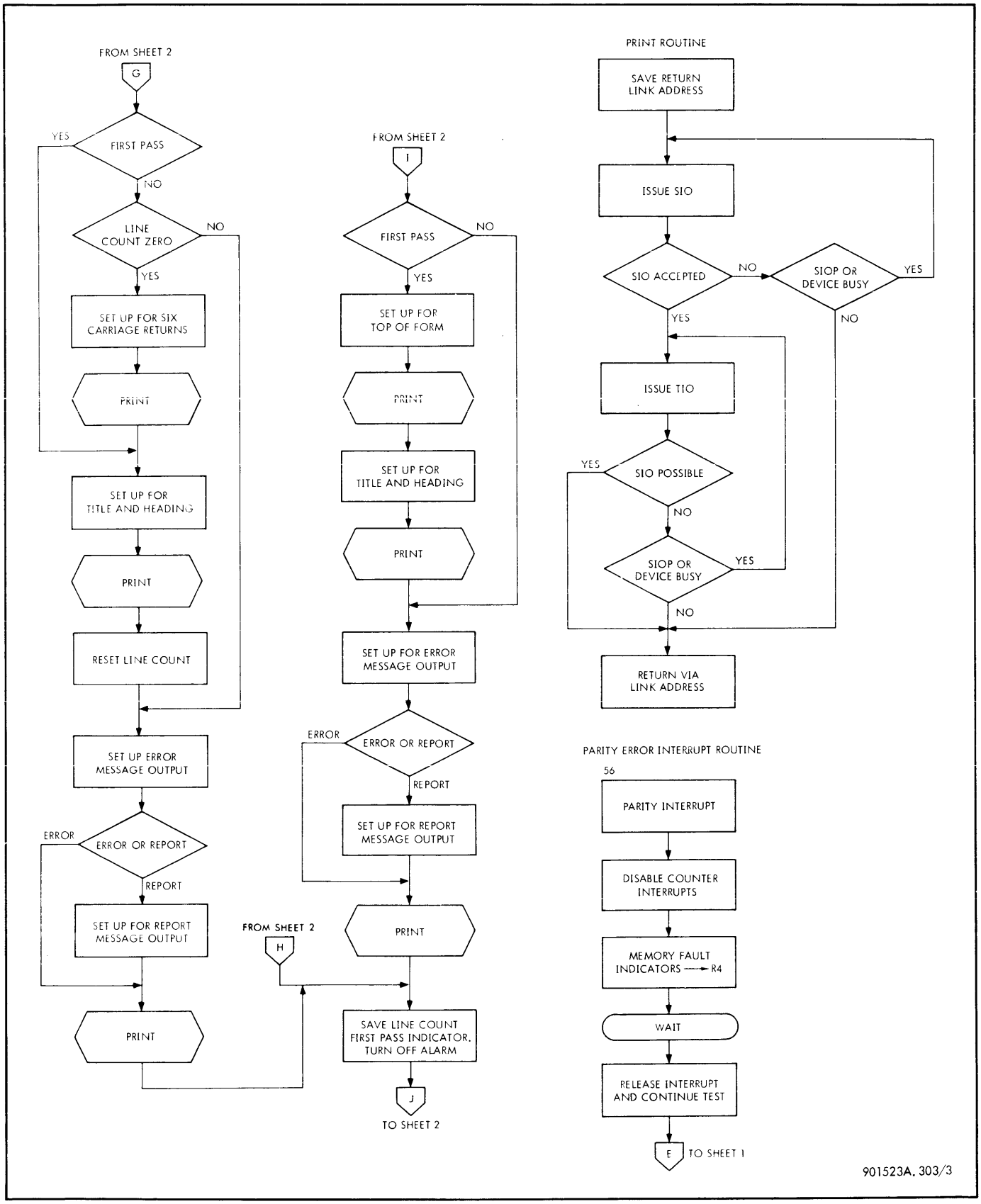

Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 3 of 4)

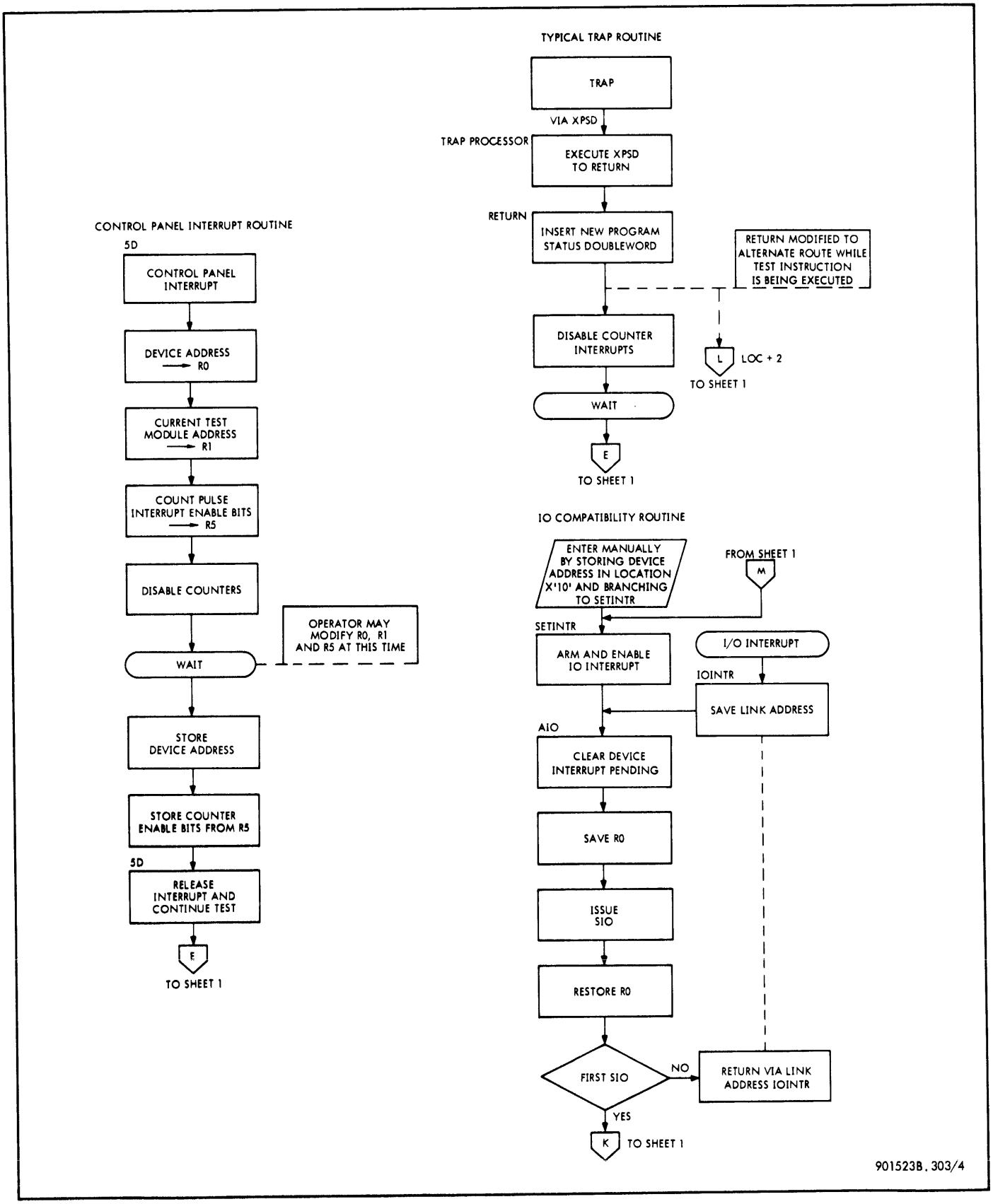

Figure 3-3. Auto Program, Detailed Flow Chart (Sheet 4 of 4)

SECTION IV
PROGRAM LISTING

```
LINE NO. | MEM PROT KEY | MEMORY ADDRESS | MEMORY CONTENTS | ABS OR REL ORIG | LABEL | OPERATION | OPERAND | COMMENTS

                                                SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51E00 -
                                                TITLE 'SIGMA 5 CPU DIAGNOSTIC-AUTO 704287-51E00 SEPT 15,1969'
 1                                             *
 2                                             *
 3                                             * REVISION E00 (12/1/69 ) PROGRAM CHANGES INDICATED IN COLS 71&72 BY  *E
 4                                             * PROGRAM REVISED TO 1. INCORPORATE ADDITIONAL TEST CASES FOR CLM IN. *E
 5                                             *                       STRUCTION                                    *E
 6                                             *                    2. INCORPORATE  LOAD AND SET  AND  LOAD MEMORY  *E
 7                                             *                       STATUS  INSTRUCTIONS SO THEY EXECUTE AND DO  *E
 8                                             *                       NOT TRAP                                     *E
 9                                             *                    3. USE CHECKSUM LOADER INSTEAD OF CPU SPECIAL   *E
10                                             *                       LOADER. SLIGHT CHANGE IN OPERATING PROCEDURE *E
11                                             *                       REQUIRED IF COUNT PULSE INTERRUPTS ARE NOT TO*E
12                                             *                       BE ARMED. REFER TO PARA 2.2 THIS MANUAL AND  *E
13                                             *                       LOADER MANUAL NO. 900972                     *E
14                                             *                                                                    *E
15                                             *
16                                             *
17                                             * REVISION D00 (7/11/69) DOCUMENTATION REFORMATTING CHANGE ONLY       *D
18                                             *
19                                             *
20                                             *
21                                             *
22                                             * REVISION C1 CHANGES NOTED IN COL 71-72 BY . *C                     *C
23                                             *  I/O COMPATIBILITY ROUTINE MODIFIED TO OPERATE ON COMPUTERS WITH   *C
24                                             *  ONLY ONE REGISTER PAGE.                                          *C
25                                             *
26                                             *
27                                             *
28                                             * REVISION B1
29                                             *       A ROUTINE TO AUTOMATICALLY IMPLEMENT THE SHORT LOOP FOR 100
30                                             *       PASSES OF EACH TEST MODULE, A TEST FOR TRAPS CORRECTLY REPORTING
31                                             *       THE LOCATION TRAPPED FROM, ADDITIONAL TEST MODULES, IMPROVEMENT
32                                             *       OF THE INITIALIZE ROUTINE, COMPUTATION OF NON-EXSISTENT MEMORY
33                                             *       TO AVOID REPORTING FALSE ERRORS AND AUTOMATIC IMPLEMENTATION OF
34                                             *       THE I|O COMPATIBILTY TEST (AFTER 35 ERROR FREE PASSES) WERE
35                                             *       THE MAIOR CHANGES INCORPORATED.
36                                             *
37                                             *
38                                             *
39                                             *
40                                             *
41                                             *
42                                             *
43                                             ******* SEE PAGES FOUR THROUGH SIX FOR ********************************
44                                             *******
45                                             ******* LOADING AND OPERATING INSTRUCTIONS ****************************
46                                                     SYSTEM   SIG7FDP
47
48          0000000F                           F          EQU      15
49                                             *
50                                             *       FORMS    THE ADDRESS FIELD SPECIFIECS HOW THE WORD IS DIVIDED AND
51                                             *                HOW MANY BITS THERE WILL BE IN EACH PART OF THE WORD.
52                                             *                EFFECTIVE AT ASSEMBLY TIME ONLY.
53                                             I          FORM     4,28
54                                             *
55                                             K          FORM     4,4,4,20
56                                             *
57                                             *       PROCS                          EFFECTIVE AT ASSEMBLY TIME ONLY
58                                             *
59                                                        OPEN     PAGE               THIS INHIBITS                 *C
60          00000000                           PAGE       CNAME                        PAGE                        *C
61                                                        PROC                          DIRECTIVE                  *C
62                                                        PEND     ,                      TO PERMIT MAX. LINAGE/PAGE  *C
63                                             *
64                                             *
65                                             *
66                                             *       P        SPECIFIES A DOUBLE WORD ADDRESS
67                                             *
68          00000000                           P          CNAME
69                                                        PROC
70                                             LF         GEN,32   DA(AF(1))
71                                                        PEND
72                                             *
```

MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
				*	J	CONVERTS TO BYTE ADDRESS	
	00000000			J	CNAME		
					PROC		
				LF	GEN,8,24	AF(1),BA(AF(2))	
					PEND		
				*			
				*	FILL	FILLS ALL LOCATIONS BETWEEN AF AND $ WITH ZEROS.	
	00000000			FILL	CNAME		
					PROC		
					DO	ABSVAL(AF)-ABSVAL($)	
					GEN,32	0	
					FIN		
					PEND		
				*			
					PAGE		
				*			
					OPEN	LCFI,AI,CI,LI,MI,SF,S,LCF,STCF	
	00000024			SF	CNAME	X'24'	
	00000025			S	CNAME	X'25'	
	00000070			LCF	CNAME	X'70'	
	00000074			STCF	CNAME	X'74'	
	LIST			G1	EQU	1,7,4,3,17	
					PROC		
				LF	GEN,G1	AFA(1),NAME,CF(2),AF(2),AF(1)	
					PEND		
	00000002			LCFI	CNAME	X'2'	
	00000020			AI	CNAME	X'20'	
	00000021			CI	CNAME	X'21'	
	00000022			LI	CNAME	X'22'	
	00000023			MI	CNAME	X'23'	
	LIST			G2	EQU	1,7,4,20	
					PROC		
				LF	GEN,G2	AFA(1),NAME,CF(2),AF(1)	
					PEND		
				*			
				* BIND - CAUSES THE LOCATION COUNTERS TO ADVANCE TO A WORD BOUNDARY THAT			
				* IS SPECIFIED IN THE ARGUMENT FIELD.			
	00000000			BIND	CNAME		
					PROC		
				XP	SET	AF-(ABSVAL($)-((ABSVAL($)/AF)*AF))	*B
					DO	AF-(ABSVAL($)-((ABSVAL($)/AF)*AF))>0	*B
					ORG	ABSVAL($)+XP	
					FIN		
					PEND		
				*			
				*			
01	00040				ORG	X'40'	*B
01	00040						
				*			
				*			
				*************** LOADING OPTIONS			
				* SENSE SW1 SET- BYPASS AUTOMATIC IMPLEMENTATION OF REAL TIME			
				* CLOCKS, PROGRAM WILL COME TO A WAIT. RESET			
				* SENSE SWITCH 1. CLEAR THE WAIT.			
				* RESET- ENABLE RTC'S AFTER X'20' ERROR FREE PASSES			
				*			
				*			
				*			
				*************** I/O COMPATIBILITY			
				* THIS TEST IS DESIGNED TO TEST FOR CONFLICTS BETWEEN THE			
				* INTEGRAL IOP AND THE EXECUTION OF THE AUTO DIAGNOSTIC.			
				* THE TEST IS AUTOMATICALLY INITIATED AFTER 35 ERROR FREE PASSES			*B
				***			*B
				* TO DELETE THE TEST :			*B
				* 1. CP INTERRUPT			*B
				* 2. ENTER A NON-EXSISTENT DEVICE ADDRESS IN LOCATION X'10'.			*B
				* 3. BRANCH TO ZIOAIN. SEE ADDRESS ON NEXT LINE			*B
01	00040	000002D0			DATA	ZIOAIN	*B
				* TO REINTIALIZE THE TEST:			*B
				* 1. CP INTERRUPT			
				* 2. ENTER DEVICE ADDRESS INTO LOCATION X'10'			

MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR ORIG	LABEL	OPERATION	OPERAND	COMMENTS

```
                          *        3. BRANCH TO ZIOAIN. SEE ADDRESS ON NEXT LINE                 *B
01 00041   00000200                DATA       ZIOAIN                                             *B
                          *           (IF THE SELECTED DEVICE DOES NOT GENERATE AN INTERRUPT
                          *            FOR ANY REASON, RESTART BY REPEATING STEP 3 )
                          *
                          *
                          ***************    OPERATING OPTIONS
                          *
                          *          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 AND AFTER REPORT
                          *
                          *************** REGISTER CONTENTS AFTER HALT INITIATED BY:
                          *                  (WAIT AT X'1E8')
                          *                    REPORT
                          *                      OR
                          *                    ERROR
                          *          R1       PRESENT LIST ADDRESS
                          *          R2       ERROR COUNTER
                          *          R3       PASS COUNTER (PASSES=0-15, MODULES=16-31)
                          *          R4       INSTRUCTION
                          *          R5       ERROR IDENTIFIER AND ADDRESS:
                          *                   10000000 = INSTRUCTION
                          *                   20000000 = LOCATION+1 OF THE EXECUTION LOCATION
                          *                   30000000 = INDIRECT ADDRESS
                          *                   4000000X = INDEX REGISTER X: X=1(NORMAL) OR 7(ONE)
                          *                   5000000X = PROGRAM STATUS WORD X: X=1 OR 2
                          *                   6000000X = REGISTER X: X=C(12)OR D(13)
                          *                   7000WXYZ = MEMORY WORD IN LOCATION WXYZ (WXYZ=0-FFFF)
                          *          R6       ERRONEOUS RESULT
                          *          R7       PREDETERMINED RESULT
                          *          R8       DIFFERENCE BETWEEN R6 AND R7
                          *
                          *
                          *************** REGISTER CONTENTS AFTER HALT INITIATED BY:
                          *                    CONTROL PANEL INTERRUPT (WAIT AT X'FB')
                          *                                OR
                          *                    SPURIOUS TRAP (WAIT AT X'403')
                          *
                          ***********************************RO AND OR R5 MAY BE MODIFIED AFTER
                          *                                  THE WAIT FROM CP INTERRUPT. RO WILL
                          *                                  SELECT THE MSG DEVICE AND R5 THE
                          *                                  COUNT PULSE INTERRUPTS
                          *             RO       T0000MSG    T=0 FOR KSR   MSG  DEVICE ADDR
                          *                                  T=8 FOR LINE PRINTER
                          *             R1       3240YYYY          LW,4 OBJECT ADDRESS
                          *             R2       ERROR COUNTER
                          *             R3       XXXXZZZZ    X=PASS COUNT  Z= TEST COUNT
                          *             R5       0000N000    N= ACTIVE COUNTER INTERRUPTS
                          *                      BIT POSITION     ACTIVATES COUNTER
                          *                             16                 1
                          *                             17                 2
                          *                             18                 3
                          *                             19                 4
                          *
                          *
01 00040                            ORG      X'40'                TRAP LOCATIONS
01 00040
                          ****  THE TRAP LOCATIONS WILL NOT ALWAYS CONTAIN THE INSTRUCTION
                          ****  SHOWN IN THIS LISTING.
                          ****  LOCATION 40 USUALLY CONTAINS ::   XPSD,8 RETURN (SAME AS LOC 47)
                          ****  TRAP MODIFICATION IS USUALLY ACCOMPLISHED BY THE LPSD IN LOC 12B
01 00040   0F00005E       NAOTR     XPSD,0   NAO                  NONALLOWED OPERATION
```

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LINE  MEM PROT  MEMORY    MEMORY      ABS. OR REL ORIG  LABEL    OPERATION  OPERAND     COMMENTS
NO.   KEY       ADDRESS   CONTENTS
213   01        00041     0F000072    A     UIITR    XPSD,0     UII         UNIMPLEMENTED INSTRUCTION
214   01        00042     0F000078    A     SLTR     XPSD,0     SL          STACK LIMIT
215   01        00043     0F00007E    A     FXPOTR   XPSD,0     FXPO        FIXED POINT OVERFLOW
216   01        00044     0F000084    A     FLPFTR   XPSD,0     FLPF        FLOATING POINT FAULT
217   01        00045     0F00008A    A     DFTR     XPSD,0     DF          DECIMAL FAULT
218   01        00046     0F000090    A     WDTRTR   XPSD,0     WDTR        WATCHDOG TIMER RUNOUT
219   01        00047     0F800464    A     BRANCH   XPSD,8     RETURN
220   01        00048     0F000096    A     CAL1TR   XPSD,0     CAL1        CALL ONE
221   01        00049     0F0000AA    A     CAL2TR   XPSD,0     CAL2        CALL TWO
222   01        0004A     0F0000BE    A     CAL3TR   XPSD,0     CAL3        CALL THREE
223   01        0004B     0F0000D2    A     CAL4TR   XPSD,0     CAL4        CALL FOUR
224                                         *                               INTERRUPT LOCATIONS
225   01        0004C     00000000    A                FILL     X'52'
      01        0004D     00000000    A
      01        0004E     00000000    A
      01        0004F     00000000    A
      01        00050     00000000    A
      01        00051     00000000    A
226   01        00052     3310046E    A                MTW,1    CNT1CP
227   01        00053     3310046F    A                MTW,1    CNT2CP
228   01        00054     33100470    A                MTW,1    CNT3CP
229   01        00055     33100471    A                MTW,1    CNT4CP
230   01        00056     0F0000E6    A                XPSD,0   PARITY      MEMORY PARITY
231   01        00057     00000000    A                FILL     X'5C'
      01        00058     00000000    A
      01        00059     00000000    A
      01        0005A     00000000    A
      01        0005B     00000000    A
232                                               PAGE
233   01        0005C     0F8002DC    A                XPSD,8   IOINTR      I/O INTERRUPT LOCATION                    *C
234   01        0005D     0F0000F0    A                XPSD,0   RESET       INTERRUPT BUTTON
235                                         *                               NON-ALLOWED OPERATION TRAP
236                                               BOUND 8
237   01        0005E     00000000    A     NAO        PZE
238   01        0005F     00000000    A                PZE
239   01        00060     00000062    A                PZE,0    $+2
240   01        00061     00000000    A                PZE
241   01        00062     0F000464    A     NAORET     XPSD,0   RETURN      NONALLOWD OPERATION                       I9=
242   01        00063     0F000464    A     MPVRET     XPSD,0   RETURN      MEMORY PROTECT VIOLATION TRACC=1          I9=
243   01        00064     0F000464    A     MVRET      XPSD,0   RETURN      MODE VIOLATION           TRACC=2          I9=
244   01        00065     0F000464    A                XPSD,0   RETURN
245   01        00066     0F000464    A     NEARET     XPSD,0   RETURN      NONEXISTANT ADDRESS      TRACC=4          I9=
246   01        00067     0F000464    A                XPSD,0   RETURN
247   01        00068     0F000464    A                XPSD,0   RETURN
248   01        00069     0F000464    A                XPSD,0   RETURN
249   01        0006A     0F000464    A     NEIRET     XPSD,0   RETURN      NONEXISTANT INSTRUCTION  TRACC=8          I9=
250   01        0006B     0F000464    A                XPSD,0   RETURN
251   01        0006C     0F000464    A                XPSD,0   RETURN
252   01        0006D     0F000464    A                XPSD,0   RETURN
253   01        0006E     0F000464    A                XPSD,0   RETURN
254   01        0006F     0F000464    A                XPSD,0   RETURN
255   01        00070     0F000464    A                XPSD,0   RETURN
256   01        00071     0F000464    A                XPSD,0   RETURN
257                                               PAGE
258                                         *                               UNIMPLIMENTED INSTRUCTION TRAP
259                                               BOUND 8
260   01        00072     00000000    A     UII        PZE
261   01        00073     00000000    A                PZE
262   01        00074     00000076    A                PZE,0    $+2
263   01        00075     00000000    A                PZE
264   01        00076     0F000464    A     UIIRET     XPSD,0   RETURN
265                                         *                               STACK LIMIT REACHED TRAP
266                                               BOUND 8
267   01        00078     00000000    A     SL         PZE
268   01        00079     00000000    A                PZE
269   01        0007A     0000007C    A                PZE,0    $+2
270   01        0007B     00000000    A                PZE
271   01        0007C     0F000464    A     SLRET      XPSD,0   RETURN
272                                               PAGE
273                                         *                               FIXED POINT ARITHMETIC OVERFLOW TRAP
274                                               BOUND 8
```

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
275	01	0007E	00000000	A	FXP8	PZE		
276	01	0007F	00000000	A		PZE		
277	01	00080	00000082			PZE,0	$+2	
278	01	00081	00000000	A		PZE		
279	01	00082	7020007E			LCF,2	FXP8	
280	01	00083	0F000464		FP8RET	XPSD,0	RETURN	
281					*			FLOATING POINT ARITHMETIC FAULT TRAP
282						BOUND 8		
283	01	00084	00000000	A	FLPF	PZE		
284	01	00085	00000000	A		PZE		
285	01	00086	00000088			PZE,0	$+2	
286	01	00087	00000000	A		PZE		
287	01	00088	70200084			LCF,2	FLPF	
288	01	00089	0F000464		FPFRET	XPSD,0	RETURN	
289					*			DECIMAL ARITHMETIC FAULT TRAP
290						BOUND 8		
291	01	0008A	00000000	A	DF	PZE		
292	01	0008B	00000000	A		PZE		
293	01	0008C	0000008E			PZE,0	$+2	
294	01	0008D	00000000	A		PZE		
295	01	0008E	7020008A			LCF,2	DF	
296	01	0008F	0F000464		DFRET	XPSD,0	RETURN	
297					*			WATCHDOG TIMER RUNOUT TRAP
298						BOUND	8	
299	01	00090	00000000	A	WDTR	PZE		
300	01	00091	00000000	A		PZE		
301	01	00092	00000094			PZE,0	$+2	
302	01	00093	00000000	A		PZE		
303	01	00094	0F000464		WDTRET	XPSD,0	RETURN	
304						PAGE		
305					*			CALL 1 TRAP
306						BOUND 8		
307	01	00096	00000000	A	CAL1	PZE		
308	01	00097	00000000	A		PZE		
309	01	00098	0000009A			PZE,0	$+2	
310	01	00099	00000000	A		PZE		
311	01	0009A	0F000464		C1RET	XPSD,0	RETURN	TRACC=0
312	01	0009B	0F000464			XPSD,0	RETURN	TRACC=1 I9=1
313	01	0009C	0F000464			XPSD,0	RETURN	TRACC=2 I9=1
314	01	0009D	0F000464			XPSD,0	RETURN	TRACC=3 I9=1
315	01	0009E	0F000464			XPSD,0	RETURN	TRACC=4 I9=1
316	01	0009F	0F000464			XPSD,0	RETURN	TRACC=5 I9=1
317	01	000A0	0F000464			XPSD,0	RETURN	TRACC=6 I9=1
318	01	000A1	0F000464			XPSD,0	RETURN	TRACC=7 I9=1
319	01	000A2	0F000464			XPSD,0	RETURN	TRACC=8 I9=1
320	01	000A3	0F000464			XPSD,0	RETURN	TRACC=9 I9=1
321	01	000A4	0F000464			XPSD,0	RETURN	TRACC=10 I9=1
322	01	000A5	0F000464			XPSD,0	RETURN	TRACC=11 I9=1
323	01	000A6	0F000464			XPSD,0	RETURN	TRACC=12 I9=1
324	01	000A7	0F000464			XPSD,0	RETURN	TRACC=13 I9=1
325	01	000A8	0F000464			XPSD,0	RETURN	TRACC=14 I9=1
326	01	000A9	0F000464			XPSD,0	RETURN	TRACC=15 I9=1
327						PAGE		
328					*			CALL 2 TRAP
329						BOUND 8		
330	01	000AA	00000000	A	CAL2	PZE		
331	01	000AB	00000000	A		PZE		
332	01	000AC	000000AE			PZE,0	$+2	
333	01	000AD	00000000	A		PZE		
334	01	000AE	0F000464		C2RET	XPSD,0	RETURN	TRACC=0
335	01	000AF	0F000464			XPSD,0	RETURN	TRACC=1 I9=1
336	01	000B0	0F000464			XPSD,0	RETURN	TRACC=2 I9=1
337	01	000B1	0F000464			XPSD,0	RETURN	TRACC=3 I9=1
338	01	000B2	0F000464			XPSD,0	RETURN	TRACC=4 I9=1
339	01	000B3	0F000464			XPSD,0	RETURN	TRACC=5 I9=1
340	01	000B4	0F000464			XPSD,0	RETURN	TRACC=6 I9=1
341	01	000B5	0F000464			XPSD,0	RETURN	TRACC=7 I9=1
342	01	000B6	0F000464			XPSD,0	RETURN	TRACC=8 I9=1
343	01	000B7	0F000464			XPSD,0	RETURN	TRACC=9 I9=1
344	01	000B8	0F000464			XPSD,0	RETURN	TRACC=10 I9=1
345	01	000B9	0F000464			XPSD,0	RETURN	TRACC=11 I9=1

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
346	01	000BA	0F000464			XPSD,0	RETURN	TRACC=12 I9=1
347	01	000BB	0F000464			XPSD,0	RETURN	TRACC=13 I9=1
348	01	000BC	0F000464			XPSD,0	RETURN	TRACC=14 I9=1
349	01	000BD	0F000464			XPSD,0	RETURN	TRACC=15 I9=1
350						PAGE		
351					*			CALL 3 TRAP
352						BOUND 8		
353	01	000BE	00000000	A	CAL3	PZE		
354	01	000BF	00000000	A		PZE		
355	01	000C0	000000C2			PZE,0	$+2	
356	01	000C1	00000000	A		PZE		
357	01	000C2	0F000464		C3RET	XPSD,0	RETURN	TRACC=0
358	01	000C3	0F000464			XPSD,0	RETURN	TRACC=1 I9=1
359	01	000C4	0F000464			XPSD,0	RETURN	TRACC=2 I9=1
360	01	000C5	0F000464			XPSD,0	RETURN	TRACC=3 I9=1
361	01	000C6	0F000464			XPSD,0	RETURN	TRACC=4 I9=1
362	01	000C7	0F000464			XPSD,0	RETURN	TRACC=5 I9=1
363	01	000C8	0F000464			XPSD,0	RETURN	TRACC=6 I9=1
364	01	000C9	0F000464			XPSD,0	RETURN	TRACC=7 I9=1
365	01	000CA	0F000464			XPSD,0	RETURN	TRACC=8 I9=1
366	01	000CB	0F000464			XPSD,0	RETURN	TRACC=9 I9=1
367	01	000CC	0F000464			XPSD,0	RETURN	TRACC=10 I9=1
368	01	000CD	0F000464			XPSD,0	RETURN	TRACC=11 I9=1
369	01	000CE	0F000464			XPSD,0	RETURN	TRACC=12 I9=1
370	01	000CF	0F000464			XPSD,0	RETURN	TRACC=13 I9=1
371	01	000D0	0F000464			XPSD,0	RETURN	TRACC=14 I9=1
372	01	000D1	0F000464			XPSD,0	RETURN	TRACC=15 I9=1
373						PAGE		
374					*			CALL 4 TRAP
375						BOUND 8		
376	01	000D2	00000000	A	CAL4	PZE		
377	01	000D3	00000000	A		PZE		
378	01	000D4	000000D6			PZE,0	$+2	
379	01	000D5	00000000	A		PZE		
380	01	000D6	0F000464		C4RET	XPSD,0	RETURN	TRACC=0
381	01	000D7	0F000464			XPSD,0	RETURN	TRACC=1 I9=1
382	01	000D8	0F000464			XPSD,0	RETURN	TRACC=2 I9=1
383	01	000D9	0F000464			XPSD,0	RETURN	TRACC=3 I9=1
384	01	000DA	0F000464			XPSD,0	RETURN	TRACC=4 I9=1
385	01	000DB	0F000464			XPSD,0	RETURN	TRACC=5 I9=1
386	01	000DC	0F000464			XPSD,0	RETURN	TRACC=6 I9=1
387	01	000DD	0F000464			XPSD,0	RETURN	TRACC=7 I9=1
388	01	000DE	0F000464			XPSD,0	RETURN	TRACC=8 I9=1
389	01	000DF	0F000464			XPSD,0	RETURN	TRACC=9 I9=1
390	01	000E0	0F000464			XPSD,0	RETURN	TRACC=10 I9=1
391	01	000E1	0F000464			XPSD,0	RETURN	TRACC=11 I9=1
392	01	000E2	0F000464			XPSD,0	RETURN	TRACC=12 I9=1
393	01	000E3	0F000464			XPSD,0	RETURN	TRACC=13 I9=1
394	01	000E4	0F000464			XPSD,0	RETURN	TRACC=14 I9=1
395	01	000E5	0F000464			XPSD,0	RETURN	TRACC=15 I9=1
396						PAGE		
397					*			PARITY INTERUPT SERVICE ROUTINE
398						BOUND 8		
399	01	000E6	00000000	A	PARITY	PZE		
400	01	000E7	00000000	A		PZE		
401	01	000E8	000000EA			PZE,0	$+2	
402	01	000E9	00000000	A		PZE		
403	01	000EA	6C400010	A		RD,4	X'10'	RECORD PARITY ERROR PLANS
404	01	000EB	32500371			LW,5	CPINT	COUNT PULSE INTERRUPTS
405	01	000EC	6D501300	A		WD,5	X'1300'	ARM AND DISABLE
406	01	000ED	2E000000	A		WAIT,0	0	
407	01	000EE	0E30046A			LPSD,3	REPEAT	RELEASE PARITY INTERRUPT=REPEAT TEST
408					*			INTERUPT BUTTON SERVICE ROUTINE
409						BOUND 8		
410	01	000F0	00000000	A	RESET	PZE		
411	01	000F1	00000000	A		PZE		
412	01	000F2	000000F4			PZE,0	$+2	
413	01	000F3	07000000	A		DATA	X'07000000'	TURN ON INTERRUPT INHIBIT BITS
414	01	000F4	32500371			LW,5	CPINT	COUNT PULSE INTERRUPTS
415	01	000F5	6D501300	A		WD,5	X'1300'	ARM AND DISABLE
416	01	000F6	32300474			LW,3	PASSES	RESET PASSES TO LAST SETTING

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
417	01	000F7	32200473			LW,2	ERRORS	RESET ERRORS TO LAST SETTING
418	01	000F8	3210011D			LW,1	SAVE	REINITIALIZE LOAD WITH LAST SETTING
419	01	000F9	3200037B			LW,0	TYPE	
420	01	000FA	2E000000	A		WAIT,0	0	
421	01	000FB	4B500391			AND,5	MASK+4	
422	01	000FC	35500371			STW,5	CPINT	
423	01	000FD	3500037B			STW,0	TYPE	DEVICE ADDR IF BIT=0 KSR; =1 LP
424	01	000FE	35500372			STW,5	CPINTM	
425	01	000FF	0E30046A			LPSD,3	REPEAT	RELEASE PANEL INTERRUPT-REPEAT TEST
426						PAGE		
427					*			AUTO-CONTROL
428						FILL	X'100'	
429	01	00100	322003C0		AUTO	LW,2	ZERO	ERRORS
430	01	00101	323003C0			LW,3	ZERO	PASSES
431					* REINITIATE MODULES DEPENDENT ON OPTIONS			*B
432	01	00102	321004E7			LW,1	LW03+1	LW *IA = LEGAL MEMORY ADDRESS *B
433	01	00103	35100D14			STW,1	ANLZ08+6	*B
434	01	00104	35100D15			STW,1	ANLZ08+7	*B
435	01	00105	32100332			LW,1	BEND	INST 'B END' BYPASS TEST MODULE*B
436	01	00106	35100D0F			STW,1	ANLZ08+1	BYPASS TEST MODULE ON FIRST PASS *B
437	01	00107	351008D3			STW,1	BALO5+1	BYPASS TEST MODULE ON FIRST PASS *B
438	01	00108	35101651			STW,1	NFAIMP01+1	BYPASS TEST MODULE ON FIRST PASS *B
439	01	00109	35300371			STW,3	CPINT	CLEAR RTC OPTION *B
440	01	0010A	35300331			STW,3	ITERATE	CLEAR SHORT LOOP *B
441	01	0010B	32100368			LW,1	NEG51	
442	01	0010C	35100369			STW,1	LINE	INITALIZE LINE COUNT
443	01	0010D	32100385			LW,1	NEG2	
444	01	0010E	35100363			STW,1	FIRST	RESET FIRST PASS COUNTER
445	01	0010F	32100356			LW,1	LOAD	INITIALIZE MODULE POINTER, SET C=0
446	01	00110	324003C0		CYCLE	LW,4	ZERO	CLEAR TRANSFER REGISTER
447	01	00111	3510011D			STW,1	SAVE	SAVE OLD POINTER FOR RESET
448	01	00112	3540046D			STW,4	PSW2	INITIALIZE FOR EACH MODULE *B
449	01	00113	3250037C			LW,5	PCPINT	PARITY AND CONTROL PANAL INTERRUPTS
450	01	00114	6D501200	A		WD,5	X'1200'	ARM AND ENABLE
451	01	00115	35200473			STW,2	ERRORS	SAVE ERROR COUNTER IN MEMORY
452	01	00116	35300474			STW,3	PASSES	SAVE PASS COUNTER IM MEMORY
453	01	00117	32500358			LW,5	STORE	PREPARE TO CLEAR THE TABLE, SET I=0
454	01	00118	32600367			LW,6	NEG20	
455	01	00119	3550011A		CLEAR	STW,5	$+1	
456	01	0011A	35400444			STW,4	TABLE+I	STORE 0 INTO TABLE+I, I=0 TO 11
457	01	0011B	6550011C			BIR,5	$+1	I+1 INTO 1
458	01	0011C	65600119			BIR,6	CLEAR	
459						PAGE		
460	01	0011D	32400488		SAVE	LW,4	LIST+C	PICK UP COUNT
461	01	0011E	69300122			BCS,3	NOTEND	TEST FOR MODULE END
462	01	0011F	4B30035C			AND,3	M1Q15	DELETE MODULE COUNT
463	01	00120	20310000	A		AI,3	X'10000'	INCREMENT PASS COUNTER
464	01	00121	680002A0			B	DONE	
465	01	00122	32500358		NOTEND	LW,5	STORE	PREPARE TO SET THE TABLE
466	01	00123	32600004	A		LW,6	4	
467	01	00124	35100126		MOVE	STW,1	FROM	SET LOAD
468	01	00125	35500127			STW,5	TO	SET STORE
469	01	00126	32400488		FROM	LW,4	LIST+C	LOAD VEHICAL
470	01	00127	35400444		TO	STW,4	TABLE+I	STORE VEHICAL
471	01	00128	65100129			BIR,1	$+1	C+1 INTO C
472	01	00129	6550012A			BIR,5	$+1	I+1 INTO I
473	01	0012A	65600124			BIR,6	MOVE	
474	01	0012B	35100126			STW,1	FROM	SET MODULE POINTER = NEXT MODULE
475						PAGE		
476					*			AUTO-EXECUTE
477	01	0012C	32100448			LW,1	TABLE+4	PICK UP INDEX
478	01	0012D	32400047			LW,4	XPSD	PICK UP RETURN VEHICAL
479	01	0012E	35400168			STW,4	LOC+1	SET LOC+1 OF 'EXECUTE INSTRUCTION',
480	01	0012F	35400040			STW,4	NAOTR	SET RETURN FOR SLAVE MODE CASES
481	01	00130	32400446			LW,4	TABLE+2	PSW1I
482	01	00131	4B40035A			AND,4	LINKAD	SELECT LINK ADDRESS AND DELETE MS,MM
483	01	00132	3540046C			STW,4	PSW1	SET UP LINKAGE
484	01	00133	325003C0			LW,5	ZERO	CLEAR R5
485	01	00134	4B40035B			AND,4	COND	CLEAR ADDRESS PORTION OF PSW1
486	01	00135	0E00046C			LPSD,0	PSW1	LINKAGE
487					** LINKAGE IS TO NEXT INSTRUCTION OR TO VARIOUS TRAP SETUP AREAS START.			

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND      COMMENTS
488                                                      **  ING AT L0C 18C
489       01            00136           32400446         SETPSW    LW,4       TABLE+2
490       01            00137           4B40035B                   AND,4      C0ND         CLEAR ADDRESS
491       01            00138           4840033D                   E0R,4      L0CADD       SET ADDRESS T0 L0C
492       01            00139           3540046C                   STW,4      PSW1
493       01            0013A           32400450                   LW,4       TABLE+12
494       01            0013B           3540046D                   STW,4      PSW2
495       01            0013C           22200001  A                LI,2       1
496       01            0013D           32400445                   LW,4       TABLE+1      INSTRUCTI0N
497       01            0013E           35400459                   STW,4      INST
498       01            0013F           3250033B                   LW,5       INDA         INDIRECT ADDRESS
499       01            00140           32700362                   LW,7       0NE          SET HALF W0RD (0DD MEM0RY) INDEX
500       01            00141           3550045A                   STW,5      IA
501       01            00142           3280044B                   LW,8       TABLE+7      ST0RE EXPECTED MEM0RY RESULT *    *B
502       01            00143           3290044F                   LW,9       TABLE+11       INT0 A D0UBLEW0RD B0UNDARY *    *B
503       01            00144           358001B6                   STW,8      MEM0UT         F0R USE IN AUT0MATIC SH0RT *    *B
504       01            00145           359001B7                   STW,9      MEM0UT+1         L00P
505       01            00146           32800449                   LW,8       TABLE+5      PUTS EXPECTED REGISTER *        *B
506       01            00147           3290044D                   LW,9       TABLE+9       RESULTS INT0 AREA F0R *        *B
507       01            00148           358001B8                   STW,8      R0UTPUT        USE 0F AUT0MATIC SH0RT L00P     *B
508       01            00149           359001B9                   STW,9      R0UTPUT+1                                      *B
509       01            0014A           32800448                   LW,8       TABLE+4      REGISTER 0PERANDS ARE *         *B
510       01            0014B           3290044C                   LW,9       TABLE+8        M0VED T0 AN AREA UTILIZED *   *B
511       01            0014C           358001BA                   STW,8      RINPUT         BY THE AUT0MATTIC SH0RT L00P    *B
512       01            0014D           359001BB                   STW,9      RINPUT+1                                       *B
513       01            0014E           32600331                   LW,6       ITERATE      DETERMINES IF AUT0 SH0RT L00P   *B
514       01            0014F           3280044A                   LW,8       TABLE+6      MWI
515       01            00150           3290044E                   LW,9       TABLE+10     MW+1I
516       01            00151           32500371                   LW,5       CPINT        C0UNT PULSE INTERRUPTS
517       01            00152           6D501200  A                WD,5       X'1200'      ARM AND ENABLE
518                                                      PAGE
519                                                      * REGISTER 1 AND REG 7 ARE N0T RESTORED 0N SH0RT L00P
520                                                      *     IF THE ERR0R IDENTIFIER IS = 4 =  THEN THE PR0GRAM SH0ULD
521                                                      *     BE RUN 0N L0NG L00P 0R M0DIFIED T0 RESTORE THE FAILING REGISTER
522       01            00153           35800460         SH0RT     STW,8      MEM0RY
523       01            00154           35900461                   STW,9      MEM0RY+1
524       01            00155           32C00448                   LW,12      TABLE+4      R
525       01            00156           32D0044C                   LW,13      TABLE+8      RU1
526       01            00157           32F0033C                   LW,15      L0C2AD
527       01            00158           35F00466                   STW,15     RETURN+2
528       01            00159           0E00046C         PREL0C    LPSD,0     PSW1                                           *B
529                                                      *                                                                    *E
530       01            0015A           32500445         FASTCHK   LW,5       TABLE+1                                        *E
531       01            0015B           31501DF7                   CW,5       LMS1+1                                         *E
532       01            0015C           6830015F                   BE         FASTCHKA                                       *E
533       01            0015D           11C001B8                   CD,12      R0UTPUT                                        *E
534       01            0015E           6930016A                   BNE        ERREXIT      REP0RT ERR0R VIA N0RMAL PATH      *B
535                                                      *                                                                    *E
536       01            0015F           12C001B6         FASTCHKA  LD,12      MEM0UT                                         *E
537       01            00160           11C00460                   CD,12      MEM0RY                                         *B
538       01            00161           68300164                   BE         SH0RTER      SUCCESSFUL = L00P AGAIN           *B
539       01            00162           12C001B8                   LD,12      R0UTPUT      RESTORE R=RU1 SINCE MEM0RY WAS BAD*B
540       01            00163           6800016A                   B          ERREXIT      REP0RT ERR0R VIA N0RMAL PATH      *B
541       01            00164           15800460         SH0RTER   STD,8      MEM0RY       RESTORE MEM0RY 0PERANDS           *B
542       01            00165           12C001BA                   LD,12      RINPUT       RESTORE REGISTERS                 *B
543       01            00166           0E00046C                   LPSD,0     PSW1         G0 T0 0BJECT INSTRUCTI0N AT L0C   *B
544       01            00167           67000459         L0C       EXU        INST
545       01            00168           0F800464                   XPSD,8     RETURN       G0 T0 L0C+2, ALS0 X=FER 0 INT0 RP
546       01            00169           6460015A                   BDR,6      FASTCHK      TEST RESULTS 0F SH0RTER           *B
547                                                      * THIS INSTRUCTI0N WAS CHANGED T0 ENABLE THE PR0GRAM T0 DETERMIN    *E
548                                                      * WHEATHER LAS AND LMS INSTRUCTI0NS ARE INSTALLED.                  *E
549       01            0016A           6AF01E2A         ERREXIT   BAL,15     LASLMS                                         *E
550       01            0016B           32600331                   LW,6       ITERATE                                        *E
551       01            0016C           6C000000  A                RD,0       0            READ SENSE SWITCHES
552       01            0016D           69800153                   BCS,8      SH0RT        SS1=SH0RT L00P
553       01            0016E           6D501100  A                WD,5       X'1100'      DISARM
554       01            0016F           32200473                   LW,2       ERR0RS
555                                                      PAGE
556                                                      *                                  AUT0-TEST
557       01            00170           35100458                   STW,1      TEST+3         IX
558       01            00171           32100382                   LW,1       0DDBALL      SET RETURN F0R SPURI0US TRAPS
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
559	01	00172	35100466			STW,1	RETURN+2	SET RETURN TO RESET+2
560	01	00173	3570045F			STW,7	TEST+7	SAVE HALF WORD INDEX
561	01	00174	32100110			LW,1	SAVE	PICK UP PRESENT LIST ADDRESS
562	01	00175	35C0045C			STW,12	TEST+4	R
563	01	00176	35D0045D			STW,13	TEST+5	RU1
564	01	00177	3250036A			LW,5	INSTID	PICK UP INSTRUCTION IDENTIFIED
565	01	00178	32600459			LW,6	TEST+1	INST(R)
566	01	00179	32700445			LW,7	TABLE+1	INST(0)
567	01	0017A	0F0001F0			XPSD,0	ERROR	TEST INSTRUCTION
568	01	0017B	3250036B			LW,5	XPSDID	PICK LOCATION+1 IDENTIFIER
569	01	0017C	32600168			LW,6	LOC+1	LOC+1(R)
570	01	0017D	32700047			LW,7	XPSD	LOC+1(0)
571	01	0017E	0F0001F0			XPSD,0	ERROR	TEST LOCATION+1
572	01	0017F	3250036C			LW,5	IAID	PICK UP INDIRECT ADDRESS IDENTIFIER
573	01	00180	3260045A			LW,6	IA	IA(R)
574	01	00181	3270033B			LW,7	INDA	IA(0)
575	01	00182	0F0001F0			XPSD,0	ERROR	TEST INDIRECT ADDRESS WORD
576						PAGE		
577	01	00183	3250036D			LW,5	IXID	PICK UP INDEX IDENTIFIER
578	01	00184	3260045B			LW,6	TEST+3	IX(R)
579	01	00185	32700448			LW,7	TABLE+4	IX(0)
580	01	00186	0F0001F0			XPSD,0	ERROR	TEXT INDEX R1
581	01	00187	48500361			EOR,5	SIX	SET INDEX 7 IDENTIFIER
582	01	00188	3260045F			LW,6	TEST+7	IX7(R)
583	01	00189	32700362			LW,7	ONE	IX7(0)
584	01	0018A	0F0001F0			XPSD,0	ERROR	TEST INDEX R7
585	01	0018B	3250036E			LW,5	PSDWID	PICK UP PROGRAM STATUS IDENTIFIER
586	01	0018C	32600464			LW,6	TEST+12	PSW1(R)
587	01	0018D	32700447			LW,7	TABLE+3	PSW1(0)
588	01	0018E	0F0001F0			XPSD,0	ERROR	TEST PSW1
589	01	0018F	65500190			BIR,5	$+1	INCREMENT PSDW INDENTIFIER
590	01	00190	32600465			LW,6	TEST+13	PSW2(R)
591	01	00191	32700451			LW,7	TABLE+13	PSW2(0)
592	01	00192	0F0001F0			XPSD,0	ERROR	TEST PSW2
593						PAGE		
594	01	00193	3250036F			LW,5	REGID	PICK UP REGISTER IDENTIFIER
595	01	00194	48500360			EOR,5	CEE	SET REGISTER ADDRESS =C(12)
596	01	00195	3260045C			LW,6	TEST+4	R(R)
597	01	00196	32700449			LW,7	TABLE+5	R(0)
598					*			*E
599	01	00197	32500445			LW,5	TABLE+1	*E
600	01	00198	31501DF7			CW,5	LMS1+1	*E
601	01	00199	683001A3			BE	MISSLMS	*E
602	01	0019A	0F0001F0			XPSD,0	ERROR	TEST REGISTER
603	01	0019B	6550019C			BIR,5	$+1	INCREMENT REGISTER IDENTIFIER
604	01	0019C	3260045D			LW,6	TEST+5	RU1(R)
605	01	0019D	3270044D			LW,7	TABLE+9	RU1(0)
606	01	0019E	0F0001F0			XPSD,0	ERROR	TEST REGISTER U 1
607	01	0019F	32500370			LW,5	MEMID	PICK UP MEMORY IDENTIFIER
608	01	001A0	32600460			LW,6	MEMORY	MW(R)
609	01	001A1	32700448			LW,7	TABLE+7	MW(0)
610	01	001A2	0F0001F0			XPSD,0	ERROR	TEST MEMORY WORD
611					*			*E
612	01	001A3	32500370		MISSLMS	LW,5	MEMID	*E
613	01	001A4	32600461			LW,6	MEMORY+1	MW+1(R)
614	01	001A5	3270044F			LW,7	TABLE+11	MW+1(0)
615	01	001A6	0F0001F0			XPSD,0	ERROR	TEST MEMORY WORD + 1
616	01	001A7	325003C0			LW,5	ZERO	SET IDENTIFIER FOR REPORT
617	01	001A8	32600185			LW,6	ERRIND	
618	01	001A9	692001AC			BCS,2	$+3	
619	01	001AA	6C000000	A		RD,0	0	READ SENSE SWITCHES
620	01	001AB	692001FB			BCS,2	ZR	SS3 # REPORT
621	01	001AC	326003C0			LW,6	BYTE	
622	01	001AD	35600185			STW,6	ERRIND	
623	01	001AE	6D000040	A	END	WD,0	X'40'	TURN OFF ALARM
624	01	001AF	32200473			LW,2	ERRORS	C(R2) WOULD EQUAL 1 IF OBJECT INST
625					*			WAS A BRANCH TO END
626	01	001B0	653001B1			BIR,3	$+1	INCREMENT MODULE COUNTER
627	01	001B1	6C000000	A		RD,0	0	READ SENSE SWITCHES
628	01	001B2	69C00110			BCS,12	CYCLE	LOOP ON CURRENT TEST (SS1 OR 2)
629	01	001B3	32100126			LW,1	FROM	RESTORE NEW LIST ADDRESS

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND     COMMENTS
630       01            001B4           0E000046A                         LPSD,0     MODULE      UPDATE POINTER
631       01            001B5           00000000  A      ERRIND    DATA       0
632                                                        PAGE       15
633                                                        BOUND      8           STORAGE OF DATA UTILIZED BY-          *B
634       01            001B6           00000000  A      MEMOUT    DATA       0,0           THE AUTOMATIC SHORT LOOP    *B
          01            001B7           00000000  A
635       01            001B8           00000000  A      ROUTPUT   DATA       0,0                                       *B
          01            001B9           00000000  A
636       01            001BA           00000000  A      RINPUT    DATA       0,0                                       *B
          01            001BB           00000000  A
637                                                        *                              SET XPSD FOR NOA TRAP
638       01            001BC           3250035F         SI9NAO    LW,5       I9           SET I9=1
639       01            001BD           4850034E         RI9NAO    EOR,5      NAOXD        SET I9=0
640       01            001BE           35500040                   STW,5      NAOTR
641       01            001BF           48400346                   EOR,4      NAOAD
642       01            001C0           35400060                   STW,4      NAO+2        SET PSW1 BITS 0-11 FOR NAO TRAP
643       01            001C1           68000136                   BCR,0      SETPSW
644                                                        *                              SET PSW1 BITS 0-11 FOR UII TRAP
645       01            001C2           48400348         UIISW     EOR,4      UIIAD
646       01            001C3           35400074                   STW,4      UII+2
647       01            001C4           68000136                   BCR,0      SETPSW       RETURN TO LONG
648                                                        *                              SET PSW1 BITS 0-11 FOR SL TRAP
649       01            001C5           48400347         SLSW      EOR,4      SLAD
650       01            001C6           3540007A                   STW,4      SL+2
651       01            001C7           68000136                   BCR,0      SETPSW
652                                                        *                              SET PSW1 BITS 0-11 FOR EXP0 TRAP
653                                                        * THIS ROUTINE ALLOWS VERIFICATION OF A TRAP TO THE PROPER LOCATION   *B
654                                                        * AND THE RETURNED COND CODE. IT DOES NOT VERIFY THE ADDRESS OF THE   *B
655                                                        * INSTRUCTION THAT TRAPPED. (SEE THE FOLLOWING ROUTINE)               *B
656       01            001C8           48400344         FXP0SW    EOR,4      FXP0AD
657       01            001C9           35400080                   STW,4      FXP0+2
658       01            001CA           4850038E                   EOR,5      MASK+1       OP CODE FOR XPSD INST        *B
659       01            001CB           485001CE                   EOR,5      FXP0A        CREATES AN INST  XPSD,0 FXP0 *B
660       01            001CC           35500043                   STW,5      FXP0TR       TO TRAP LOCATION             *B
661       01            001CD           68000136                   BCR,0      SETPSW
662       01            001CE           0000007E         FXP0A     DATA       FXP0         ADDRESS OF TRAP PROCESSOR    *B
663                                                        *                              SET PSW1 BITS 0-11 FOR FLPF TRAP
664       01            001CF           48400343         FLPFSW    EOR,4      FLPFAD
665       01            001D0           35400086                   STW,4      FLPF+2
666       01            001D1           680001C3                   BCR,0      UIISW+1
667                                                        * THIS ROUTINE ALLOWS VERIFICATION OF THE PSDW BUT DOES NOT CHECK     *B
668                                                        * THAT THE INST CAUSED THE CORRECT TRAP TO OCCUR. (SEE ABOVE ROUTINE) *B
669       01            001D2           48500047         FXP0PSDW  EOR,5      BRANCH       XPSD,8 RETURN                *B
670       01            001D3           35500043                   STW,5      FXP0TR       TO TRAP LOCATION             *B
671       01            001D4           68000136                   B          SETPSW                                    *B
672                                                        PAGE
673                                                        *                              SET XPSD FOR CAL1
674       01            001D5           3250035F         SI9CL1    LW,5       I9           SET I9=1
675       01            001D6           4850034A         RI9CL1    EOR,5      CAL1XD       SET I9=0
676       01            001D7           35500048                   STW,5      CAL1TR
677       01            001D8           4840033E                   EOR,4      CAL1AD
678       01            001D9           35400098                   STW,4      CAL1+2
679       01            001DA           68000136                   BCR,0      SETPSW
680                                                        *                              SET XPSD FOR CAL2
681       01            001DB           3250035F         SI9CL2    LW,5       I9           SET I9=1
682       01            001DC           4850034B         RI9CL2    EOR,5      CAL2XD       SET I9=0
683       01            001DD           35500049                   STW,5      CAL2TR
684       01            001DE           4840033F                   EOR,4      CAL2AD
685       01            001DF           354000AC                   STW,4      CAL2+2
686       01            001E0           68000136                   BCR,0      SETPSW
687                                                        *                              SET XPSD FOR CAL3
688       01            001E1           3250035F         SI9CL3    LW,5       I9           SET I9=1
689       01            001E2           4850034C         RI9CL3    EOR,5      CAL3XD       SET I9=0
690       01            001E3           3550004A                   STW,5      CAL3TR
691       01            001E4           48400340                   EOR,4      CAL3AD
692       01            001E5           354000C0                   STW,4      CAL3+2
693       01            001E6           68000136                   BCR,0      SETPSW
694                                                        *                              SET XPSD FOR CAL4
695       01            001E7           3250035F         SI9CL4    LW,5       I9
696       01            001E8           4850034D         RI9CL4    EOR,5      CAL4XD       SET I9=1
697       01            001E9           35500048                   STW,5      CAL4TR       SET I9=0
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
698	01	001EA	48400341			EOR,4	CAL4AD	
699	01	001EB	354000C4			STW,4	CAL4+2	
700	01	001EC	68000136			BCR,0	SETPSW	
701					** STORE COND CODE INTO PSW1 IN (TABLE+3)9 THIS IS NECESSARY FOR TEST OF			
702					** FARWD WHICH ALWAYS READS THE SENSE SWITCHES, A FALSE ERROR MAY OCCUR			
703					** IF SENSE SWITCHES ARE CHANGED DURING THIS SETUP.			
704	01	001ED	6C000000	A	FARWD	RD,0	0	READ SENSE SWITCHES
705	01	001EE	74000447			STCF	TABLE+3	
706	01	001EF	68000136			B	SETPSW	
707						PAGE		
708						BOUND	8	
709						PAGE		
710					*			DECIMAL-ERROR
711	01	001F0	00000000	A	ERROR	PZE		
712	01	001F1	00000000	A		PZE		
713	01	001F2	000001F4			PZE,0	$+2	
714	01	001F3	00000000	A		PZE		
715	01	001F4	32800006	A		LW,8	6	PICK UP RESULT
716	01	001F5	48800007	A		EOR,8	7	COMPARE WITH PREDERMINED RESULT
717	01	001F6	693001F8			BCS,3	TSTDVC	DIFF # 0
718	01	001F7	0E0001F0			LPSD,0	ERROR	
719	01	001F8	652001F9		TSTDVC	BIR,2	$+1	INCREMENT ERROR COUNTER
720	01	001F9	35200473			STW,2	ERRORS	KEEP A RUNNING COUNT
721	01	001FA	6D000041	A		WD,0	X'41'	TURN ON AUDIO ALARM
722	01	001FB	32B002E6		ZR	LW,11	IOM	
723					**		IOM HAS IO INTERRUPT BIT IF IO COMPATIBILITY IS IN USE	
724	01	001FC	6DB01500	A		WD,11	X'1500'	DISABLE IO INTERRUPT
725	01	001FD	32B0035D			LW,11	6Q3	
726	01	001FE	35B001B5			STW,11	ERRIND	SET ERROR INDICATOR TO ALLOW RETURN
727					*			TO BYPASS SS 3 SETTING
728	01	001FF	6E000000	A	TESTIO	AIO,0	0	CLEAR INTERRUPT PENDING
729	01	00200	CDB0037B			TIO,11	*TYPE	
730	01	00201	68C0020E			BCR,12	EDIT	GO IF IO ADDR RECOG AND SIO POSSIBLE
731	01	00202	684001FF			BCR,4	TESTIO	REPEAT TIO IF SIOP IS BUSY
732	01	00203	68800205			BCR,8	$+2	SIO NOT CURRENTLY POSSIBLE
733	01	00204	68000208			B	HLTEST	IO ADDRESS NOT RECOGNIZED
734	01	00205	48B0035D			AND,11	6Q3	SAVE OPERATIONAL STATE BITS
735	01	00206	48B0035D			EOR,11	6Q3	
736	01	00207	683001FF			BEZ	TESTIO	DEVICE BUSY
737	01	00208	6C000000	A	HLTEST	RD,0	0	READ SENSE SWITCHES
738	01	00209	6910020B			BCS,1	NOHALT	
739	01	0020A	2E000000	A		WAIT		COMMON ERROR HALT
740	01	0020B	32B002E6		NOHALT	LW,11	IOM	
741	01	0020C	6DB01400	A		WD,11	X'1400'	ENABLE IO INTERRUPT
742	01	0020D	0E0001F0			LPSD,0	ERROR	
743						PAGE		
744					*			EDIT-LEVEL 3
745	01	0020E	32C00359		EDIT	LW,12	STRMG1	SET STORAGE WORD
746	01	0020F	32900365			LW,9	NEG8	
747	01	00210	32A00005	A		LW,10	5	TEST R5=0
748	01	00211	69300213			BCS,3	REPORT+1	DISPLAY
749	01	00212	32900383		REPORT	LW,9	NEG4	
750	01	00213	32A00351			LW,10	LOADR	SET REGISTER PICKUP
751	01	00214	35A00215			STW,10	LDREG	
752	01	00215	32A00001	A	LDREG	LW,10	1	PICK UP REGISTER 1 THRU 8(DIS) OR 4
753	01	00216	35A00476			STW,10	WORD	
754	01	00217	35900472			STW,9	COUNT	
755	01	00218	32F00385			LW,15	NEG2	SET WORD COUNT(M)=2
756	01	00219	32000352			LW,0	LWN	SET N=-4,-4
757	01	0021A	32A00354			LW,10	LWFRM	SET FRAME = F0F0F0F0, F0F0F0F0
758	01	0021B	32B00338			LW,11	ANFR0	SET CHAR POSITIONS 1234,5678
759	01	0021C	48900362			AND,9	ONE	TEST COUNT EVEN
760	01	0021D	69300222			BCS,3	ODD	
761	01	0021E	32F00364		EVEN	LW,15	NEG3	SET WORD COUNT(M)=3
762	01	0021F	32000353			LW,0	LWN2	SET N=-2,-4,-2
763	01	00220	32A00355			LW,10	LWFRM2	SET FRAME=4040F0F0,F0F0F0F0,F0F04040
764	01	00221	32B00339			LW,11	ANFR2	SET CHAR POSITIONS 12,3456,78
765	01	00222	32E0033A		ODD	LW,14	ANMK	SET DIGIT PICK = BITS 0-3, 4-7, ETC.
766	01	00223	35000226		WORDS	STW,0	SETN	SET NUMBER PICK UP
767	01	00224	35A00227			STW,10	SETFRM	SET FRAME PICK UP
768	01	00225	35C00242			STW,12	STRWD	SET STORAGE LOCATION

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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL    OPERATION  OPERAND     COMMENTS
NO.   KEY       ADDRESS   CONTENTS
769   01        00226     32000383                    SETN     LW,0       NUMBER      SET NUMBER
770   01        00227     32D00388                    SETFRM   LW,13      FRAME       SET FRAME (FINAL CHAR+BYTE POSITION)
771   01        00228     35B0023D                    BYTES    STW,11     ANDF        SET FILTER
772   01        00229     35D00475                             STW,13     WK0         SAVE FRAME
773   01        0022A     35E00232                             STW,14     ANDM        SET MASK (ORIGINAL CHAR POSITION)
774   01        0022B     32A0034F                             LW,10      LWBIT       SET BIT PICK UP
775   01        0022C     32C00383                             LW,12      NEG4        SET BIT COUNT
776   01        0022D     32D003C0                             LW,13      ZER0        SET CHAR GENERATOR TO ZERO
777                                                            PAGE
778   01        0022E     35A00230                    BITS     STW,10     LWB
779   01        0022F     35A00235                             STW,10     LWBT
780   01        00230     3290037E                    LWB      LW,9       BIT         PICK UP BIT 1,2,4OR 8
781   01        00231     4B900476                             AND,9      WORD        (BIT)*(WORD)
782   01        00232     4B90038D                    ANDM     AND,9      MASK        (BIT)*(WORD)*(MASK)
783   01        00233     69300235                             BCS,3      LWBT        LWBT IF WORD HAS BIT IN MASK POSITIO
784   01        00234     0E000468                             LPSD,0     BUMP
785   01        00235     3290037E                    LWBT     LW,9       BIT         PICK UP BIT
786   01        00236     48D00009  A                          EOR,13     9           MERGE BIT WITH CHAR BEING CONSTRUCTE
787   01        00237     65A00238                    BUMPER   BIR,10     $+1         INCREMENT BIT PICK UP
788   01        00238     65C0022E                             BIR,12     BITS        CONTINUE CHAR CONSTRUCTION
789   01        00239     4BD00394                             AND,13     MASK+7      PICK OF BINARY 4 BIT CHAR
790   01        0023A     48D00350                             EOR,13     LWBYTE      CONSTRUCT BYTE PICK UP WORD
791   01        0023B     35D0023C                             STW,13     LWBY
792   01        0023C     32D003C0                    LWBY     LW,13      BYTE        PICK UP CONVERTED BYTE
793   01        0023D     4BD00395                    ANDF     AND,13     FILTER      SELECT DESIRED TYTE
794   01        0023E     48D00475                             EOR,13     WK0         MERGE BYTE INTO CONVERTED WORD
795   01        0023F     65B00240                             BIR,11     $+1         INCREMENT CONVERTED BYTE POSITION
796   01        00240     65E00241                             BIR,14     $+1         INCREMENT SELECTED CHAR POSITION
797   01        00241     65000228                             BIR,0      BYTES       TEST FOR N CHAR'S
798   01        00242     35D0042F                    STRWD    STW,13     IMAGE+1     STORE CONVERTED WORD
799   01        00243     32000226                             LW,0       SETN        SET NUMBER PICK UP
800   01        00244     32A00227                             LW,10      SETFRM      SET FRAME PICK UP
801   01        00245     32C00242                             LW,12      STRWD       PICK UP STORE WORD
802   01        00246     65000247                             BIR,0      $+1         INCREMENT NUMBER PICK UP
803   01        00247     65A00248                             BIR,10     $+1         INCREMENT FRAME PICK UP
804   01        00248     65C00249                             BIR,12     $+1         INCREMENT STORE LOCATION
805   01        00249     65F00223                             BIR,15     WORDS       INCREMENT M + BRANCH IF M NOT ZERO
806   01        0024A     32900472                             LW,9       COUNT       SET COUNT
807   01        0024B     32A00215                             LW,10      LDREG       SET REGISTER PICK UP
808   01        0024C     65A0024D                             BIR,10     $+1         INCREMENT REGISTER PICK UP
809   01        0024D     65900214                             BIR,9      LDREG-1     BRANCH TO LDREG IF COUNT NOT ZERO
810                                                            PAGE
811                                                  *                                 OUTPUT-LEVEL 3
812   01        0024E     32F00369                             LW,15      LINE         LINE COUNT (-51)
813   01        0024F     32E00363                             LW,14      FIRST        -2 FIRST TIME
814   01        00250     3200037B                             LW,0       TYPE         TEST FOR OUTPUT DEVICE
815   01        00251     69100266                             BLZ        LP0
816   01        00252     65E00256                             BIR,14     SKIP6        FIRST TIME THRU
817   01        00253     65F0025B                             BIR,15     LINOUT       LINE COUNT NOT ZERO
818   01        00254     320003D0                             LW,0       PSIXCR
819   01        00255     0F00027C                             XPSD,0     PRINT        OUTPUT 6 CAR. RET.
820   01        00256     320003D1                    SKIP6    LW,0       PTITLE
821   01        00257     0F00027C                             XPSD,0     PRINT        NEW PAGE TITLE
822   01        00258     320003D2                             LW,0       PHEAD
823   01        00259     0F00027C                             XPSD,0     PRINT        NEW HEADING
824   01        0025A     32F00368                             LW,15      NEG51        RESET LINE COUNT
825   01        0025B     320003D4                    LINOUT   LW,0       PLONGL       SET UP DISPLAY PRINTOUT
826   01        0025C     32A00005  A                          LW,10      5            PICK UP IDENTIFIER
827   01        0025D     6930025F                             BCS,3      I0
828   01        0025E     320003D3                             LW,0       PSHRTL       SET UP RECORD PRINTOUT
829   01        0025F     0F00027C                    I0       XPSD,0     PRINT
830   01        00260     35F00369                             STW,15     LINE         SAVE NEW LINE COUNT
831   01        00261     35E00363                             STW,14     FIRST        SAVE NEW FIRST PASS INDICATOR
832   01        00262     6D000040  A                          WD,0       X'40'        TURN OFF ALARM
833   01        00263     0E000264                             LPSD,0     GETOUT
834                                                            PAGE
835                                                            BOUND 8
836   01        00264     00300208                    GETOUT   PZE,3      HLTEST
837   01        00265     00000000  A                          PZE
838   01        00266     CEB0037B                    LP0      TDV,11     *TYPE
839   01        00267     68C0026A                             BCR,12     $+3          GO IF IOP AND DEVICE ADDR RECOG
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
840	01	00268	68400266			BCR,4	$+2	GO IF SIOP BUSY
841	01	00269	68000260			B	IO+1	IO OPERATION NOT POSSIBLE
842	01	0026A	35B00377			STW,11	TEMP	
843	01	0026B	4BB00376			AND,11	MOTION	PAPER IS MOVING
844	01	0026C	69300266			BNEZ	LPO	LOOP TILL PAPER STOPS
845	01	0026D	32B00377			LW,11	TEMP	
846	01	0026E	4BB00378			AND,11	TOP	CHECK FOR TOP OF FORM
847	01	0026F	69300278			BNEZ	LPTOP	OUTPUT TITLE AND HEADING
848	01	00270	65E00276			BIR,14	GOTOP	GO TO TOP OF FORM IF FIRST PASS
849	01	00271	320003D7		LPMSG	LW,0	LPERR	ERROR MSG CDA
850	01	00272	32A00005	A		LW,10	5	PICK UP IDENTIFIER
851	01	00273	69300275			BCS,3	$+2	REPORT
852	01	00274	320003D8			LW,0	LPREPORT	REPORT MSG CDA
853	01	00275	6800025F			B	IO	
854	01	00276	320003D5		GOTOP	LW,0	LPGOTOP	GO TO TOP OF FORM
855	01	00277	0F00027C			XPSD,0	PRINT	
856	01	00278	320003D6		LPTOP	LW,0	LPFORMAT	PRITN TITLE AND HEADING
857	01	00279	0F00027C			XPSD,0	PRINT	
858	01	0027A	68000271			B	LPMSG	
859						PAGE		
860					*			PRINT-LEVEL 4
861						BOUND 8		
862	01	0027C	00000000	A	PRINT	PZE		
863	01	0027D	00000000	A		PZE		
864	01	0027E	00000280			PZE,0	$+2	
865	01	0027F	00000000	A		PZE		
866	01	00280	33101E5B			MTW,1	LASLMS2	*E
867	01	00281	CCB0037B		BUSY	SIO,11	*TYPE	OUTPUT MSG
868	01	00282	68C0028A			BCR,12	DONEMSG	SIO ACCEPTED
869	01	00283	68400281			BCR,4	BUSY	SIOP BUSY. REPEAT SIO
870	01	00284	68800286			BCR,8	$+2	GO IF SIO NOT ACCEPTED
871	01	00285	68000292			B	EXITIO	IO ADDR NOT RECOGNIZED
872	01	00286	4BB0035D			AND,11	6Q3	SAVE OPERATIONAL STATE BITS
873	01	00287	48B0035D			EOR,11	6Q3	
874	01	00288	68300281			BEZ	BUSY	DEVICE BUSY. REPEAT SIO
875	01	00289	68000292			B	EXITIO	DEVICE NOT OPERATIONAL OR UNAVAIL
876	01	0028A	CDB0037B		DONEMSG	TIO,11	*TYPE	
877	01	0028B	68C00292			BCR,12	EXITIO	
878	01	0028C	6840028A			BCR,4	DONEMSG	SIOP BUSY
879	01	0028D	6880028F			BCR,8	$+2	ACCEPTABLE SIO NOT CURRENTLY POSS
880	01	0028E	68000292			B	EXITIO	IO ADDR NOT RECOGNIZED
881	01	0028F	4BB0035D			AND,11	6Q3	SAVE OPERATIONAL STATE BITS
882	01	00290	48B0035D			EOR,11	6Q3	
883	01	00291	6830028A			BEZ	DONEMSG	DEVICE BUSY. REPEAT TIO
884	01	00292	0E00027C		EXITIO	LPSD,0	PRINT	
885	01	00293	3220029A		SETRPLY	LW,2	REPLAY	BRANCH TO AUTO IS STORED INTO LOC.26
886	01	00294	35200026	A		STW,2	38	
887	01	00295	6C000000	A		RD,0	0	READ THE SENSE SWITCHES
888	01	00296	68800100			BCR,8	AUTO	GO IF SS_1 IS OFF
889					*****	PREVENT COUNTER INTERRUPT IMPLEMENTATION		******
890	01	00297	2E000000	A		WAIT	0	TURN SENSE SWITCH 1 OFF.
891	01	00298	322003C0			LW,2	ZERO	
892	01	00299	35200372			STW,2	CPINTM	
893	01	0029A	68000100		REPLAY	B	AUTO	
894						BOUND	8	
895						PAGE		
896					** TEST TO SEE IF FLOATING POINT OPTION IS INSTALLED (FIRST PASS ONLY)			
897	01	0029C	00000000	A	FLTRAP	DATA	0,0,FLNIN,0	
	01	0029D	00000000	A				
	01	0029E	000002A8					
	01	0029F	00000000	A				
898	01	002A0	21310000	A	DONE	CI,3	X'10000'	
899	01	002A1	6930032A			BNE	INITIATE	CHECK FOR IMPLEMENTING AUTO SHORT *B
900	01	002A2	320002FA			LW,0	NIMP	SETUP TRAP LOCATION
901	01	002A3	35000041			STW,0	UIITR	
902	01	002A4	32C003C1			LW,12	BYTE+1	
903	01	002A5	3DC003C1		FLOAT	FAS,12	BYTE+1	
904	01	002A6	320002FB			LW,0	PFLOATP	MSG FLOATING POINT OPTION IS IN
905	01	002A7	680002AB			B	FLPRINT	
906	01	002A8	320002A5		FLNIN	LW,0	FLOAT	COMES HERE IF TRAP OCCURRED AT X281
907	01	002A9	35001651			STW,0	NFAIMP01+1	ALLOW TEST OF TRAP EACH TIME

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND          COMMENTS
908       01            002AA           320002FC                          LW,0      PNFLOATP         MSG  FLOATING POINT NOT INSTALLED
909       01            002AB           0F00027C                 FLPRINT  XPSD,0    PRINT            OUTPUT THE SELECTED MSG
910       01            002AC           320002F9                          LW,0      IMP
911       01            002AD           35000041                          STW,0     UIITR            RESTORE ORIG XPSD TO LOC 41
912                                                                * TEST FOR NON-EXSISTENT MEMORY. IF ANY, SETUP BAL AND ANLZ TESTS    *B
913       01            002AE           3200031B                          LW,0      RETADDR          MODIFY RETURN TO ENTER THIS -        *B
914       01            002AF           35000466                          STW,0     RETURN+2          ROUTINE WHEN A TRAP OCCURS          *B
915       01            002B0           22100FFF  A                       LI,1      4095             ADDRESS                              *B
916       01            002B1           B2000001  A                       LW,0      *1               TRY TO FIND NEM                      *B
917       01            002B2           30100333                          AW,1      MINCR            ADD 4096 FOR NEXT 4K                 *B
918       01            002B3           21120FFF  A                       CI,1      X'20FFF'         > POSSIBLE MEMORY SIZE               *B
919       01            002B4           6830010F                          BE        CYCLE-1          NO NON-EXSISTENT MEMORY.             *B
920       01            002B5           680002B1                          B         $-4              TRY NEXT 4K                          *B
921                                                                        PAGE
922                                                                *THE FOLLOWING ROUTINE IMPLEMENTS THE COUNT PULSE INTERRUPTS AFTER X'20
923                                                                *PASSES WITHOUT ERROR
924       01            002B6           31300379                 RTC      CW,3      MAXCNT
925       01            002B7           6930010F                          BNE       CYCLE-1
926       01            002B8           21200000  A                       CI,2      0
927       01            002B9           6930010F                          BNE       CYCLE-1
928       01            002BA           32000372                          LW,0      CPINTM
929       01            002BB           6830010F                          BEZ       CYCLE-1          DO NOT OUTPUT MSG
930       01            002BC           320003D9                          LW,0      PRTCMSG
931       01            002BD           0F00027C                          XPSD,0    PRINT
932       01            002BE           32000391                          LW,0      MASK+4           BITS FOR COUNTER 1,2,3 AND 4
933       01            002BF           35000371                          STW,0     CPINT            STORED INTO CPINT
934       01            002C0           6800010F                 XRTC     B         CYCLE-1          RESUME WITH FIRST MODULE
935                                                                        PAGE
936                                                                **
937                                                                ** ENTER AT THIS POINT TO BEGIN IO COMPATIBILITY TEST
938                                                                ** ENTER THE IO DEVICE ADDRESS IN MEMORY LOCATION X'10'.
939                                                                **
940       01            002D0                                              ORG       X'2D0'                                           *B
          01            002D0
941       01            002D0           680002D1                 ZIOAIN   B         $+1                                              *B
942       01            002D1           32E00010  A                       LW,14     16               DEVICE ADDR IN X'10'            *B
943       01            002D2           35E002D4                          STW,14    ZIOA             SAVE                            *B
944       01            002D3           680002D5                          B         SETINTR                                          *B
945       01            002D4           00000002  A              ZIOA     DATA      2                NORMAL LINE PRINTER ADDR
946       01            002D5           22E00020  A              SETINTR  LI,14     X'20'
947       01            002D6           35E002E6                          STW,14    IOM              PUT IO INTERRUPT BIT IN IOM
948       01            002D7           6DE01200  A                       WD,14     X'1200'          ARM AND ENABLE IO INTERRUPT
949       01            002D8           670002E0                          EXU       AIO              AIO INST TO CLEAR ANY PENDING INTR*B
950       01            002D9           670002E2                          EXU       AIO+2            CDW ADDR                        *B
951       01            002DA           670002E3                          EXU       AIO+3            SIO                             *B
952       01            002DB           6800010F                          B         CYCLE-1          START A NEW PASS                *B
953                                                                        BOUND     8
954       01            002DC           0000010F                 IOINTR   DATA      CYCLE-1,0,AIO,0  ENTRY TO INTERRUPT ROUTINE
          01            002DD           00000000  A
          01            002DE           000002E0
          01            002DF           00000000  A
955       01            002E0           6E000000  A              AIO      AIO,0     0                                                *B
956       01            002E1           350002E8                          STW,0     SAVEO
957       01            002E2           320002E7                          LW,0      PIOCOMP          COMMAND DOUBLEWORD ADDRESS
958                                                                *** CDW SPECIFIES A SIMPLE WRITE ORDER. OPERATOR MAY CHANGE ANY PART OF
959                                                                *** THE CDW PROVIDED THE FIRST 8K OF MEMORY IS NOT DISTURBED BY A READ
960                                                                *** ORDER. CDW IS IN X'2AC' S X'2AD'
961       01            002E3           CC0002D4                          SIO,0     *ZIOA                                            *B
962       01            002E4           320002E8                          LW,0      SAVEO            RESTORE C(RO)
963       01            002E5           0EB002DC                          LPSD,11   IOINTR           RETURN TO PROGRAM                *C
964       01            002E6           00000000  A              IOM      DATA      0                CHANGED TO X'20' FOR IO COMPAT.
965       01            002E7           00000175                 PIOCOMP  P         IOCOMP           CDA
966       01            002E8           00000000  A              SAVEO    DATA      0
967                                                                        PAGE
968                                                                        BOUND     8
969       01            002EA           05000BB1                 IOCOMP   GEN,8,24  5,BA(COMP)+1                                     *B
970       01            002EB           50000031  A                       GEN,4,28  5,49            IBCEZ & ICE + BYTE COUNT         *B
971       01            002EC           31154040  A              COMP     TEXTC     'N                IO COMPATIBILITY TEST IS IN PROGRESS'
          01            002ED           40404040  A
          01            002EE           40404040  A
          01            002EF           4040C9D6  A
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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL     OPERATION  OPERAND          COMMENTS
NO.   KEY       ADDRESS   CONTENTS
      01 002F0  40C3D6D4  A
      01 002F1  D7C1E3C9  A
      01 002F2  C2C9D3C9  A
      01 002F3  E3E840E3  A
      01 002F4  C5E2E340  A
      01 002F5  C9E240C9  A
      01 002F6  D540D7D9  A
      01 002F7  D6C7D9C5  A
      01 002F8  E2E24040  A
 972  01 002F9  0F000072     IMP       XPSD,0     UII
 973  01 002FA  0F00029C     NIMP      XPSD,0     FLTRAP
 974  01 002FB  0000017F     PFLOATP   P          FLOATP
 975  01 002FC  00000186     PNFLOATP  P          NFLOATP
 976                         PAGE
 977                         BOUND     8
 978  01 002FE  05000C01     FLOATP    GEN,8,24   5,BA(FLM)+1                                  *B
 979  01 002FF  0800002F  A           GEN,8,24   8,47                                         *B
 980  01 00300  2F154040  A  FLM       TEXTC      'N              FLOATING POINT OPTION IS INSTALLED'
      01 00301  40404040  A
      01 00302  40404040  A
      01 00303  4040C6D3  A
      01 00304  D6C1E3C9  A
      01 00305  D5C740D7  A
      01 00306  D6C9D5E3  A
      01 00307  40D6D7E3  A
      01 00308  C9D6D540  A
      01 00309  C9E240C9  A
      01 0030A  D5E2E3C1  A
      01 0030B  D3D3C5C4  A
 981                         BOUND     8
 982  01 0030C  05000C39     NFLOATP   GEN,8,24   5,BA(NFLM)+1                                 *B
 983  01 0030D  08000030  A           GEN,8,24   8,48                                         *B
 984  01 0030E  30154040  A  NFLM      TEXTC      'N              FLOATING POINT OPTION NOT INSTALLED'
      01 0030F  40404040  A
      01 00310  40404040  A
      01 00311  4040C6D3  A
      01 00312  D6C1E3C9  A
      01 00313  D5C740D7  A
      01 00314  D6C9D5E3  A
      01 00315  40D6D7E3  A
      01 00316  C9D6D540  A
      01 00317  D5D6E340  A
      01 00318  C9D5E2E3  A
      01 00319  C1D3D3C5  A
      01 0031A  C4404040  A
 985                         BOUND     4
 986  01 0031B  0000031C     RETADDR   DATA       $+1                                          *B
 987                         * TRAP COMES HERE. IMPLEMENT TESTS                               *B
 988  01 0031C  32000382                LW,0       0DDBALL                                      *B
 989  01 0031D  35000466                STW,0      RETURN+2        RESTORE SPURIOUS TRAP CAPABILITY *B
 990  01 0031E  320008B5                LW,0       BAL01+1         BAL,12 BRANCH                *B
 991  01 0031F  49000001  A             OR,0       1               PUT IN NON-EXSISTENT MEMORY REF *B
 992  01 00320  350008D3                STW,0      BAL05+1                                      *B
 993  01 00321  320004E7                LW,0       LW03+1          LW,12 *IA                    *B
 994  01 00322  49000001  A             OR,0       1               PUT IN NON-EXSISTENT MEMORY REF *B
 995  01 00323  35000D14                STW,0      ANLZ08+6        MEMORY IN                    *B
 996  01 00324  35000D15                STW,0      ANLZ08+7        MEMORY OUT                   *B
 997  01 00325  32000D17                LW,0       ANLZ09+1        ANLZ,12 MEMORY               *B
 998  01 00326  35000D0F                STW,0      ANLZ08+1        STORE INTO ANLZ08 TEST       *B
 999  01 00327  6800010F                B          CYCLE-1         NEXT PASS                    *B
1000  01 00328  00230000  A  IOCOUNT    DATA       X'230000'       35 ERROR FREE PASSES
1001  01 00329  001E0000  A             DATA       X'1E0000'       PASS COUNT OF 3              *B
1002  01 0032A  31300329     INITIATE  CW,3       $-1             IMPLEMENT AUTO SHORT IF EQUAL *B
1003  01 0032B  69300334                BNE        COMPAT                                       *B
1004  01 0032C  21200000  A             CI,2       0               CHECK FOR ERRORS             *B
1005  01 0032D  6930010F                BNE        CYCLE-1         START ANOTHER PASS           *B
1006  01 0032E  22100064  A             LI,1       100             ITERATION COUNT              *B
1007  01 0032F  35100331                STW,1      ITERATE                                      *B
1008  01 00330  6800010F                B          CYCLE-1         START A PASS UTILIZING THE AUTO- *B
1009                         *                                     MATIC SHORT LOOP             *B
1010  01 00331  00000000  A  ITERATE    DATA       0               ITERATION COUNT              *B
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1011	01	00332	680001AE		BEND	B	END	USED DURING INITALIZE *B
1012	01	00333	00001000	A	MINCR	DATA	4096	CONSTANT
1013	01	00334	49300002	A	COMPAT	BR,3	2	ERROR COUNT BR'ED WITH PASS COUNT *B
1014	01	00335	31300328			CW,3	IOCOUNT	*B
1015	01	00336	683002D5			BE	SETINTR	IMPLEMENT IO COMPATIBILITY *B
1016	01	00337	680002B6			B	RTC	*B
1017						PAGE		
1018					*			CONSTANTS AND WORKING STORAGE
1019	01	00338	4BD00395		ANFR8	AND,13	FILTER	PICK OFF CONVERTED BYTE
1020	01	00339	4BD00397		ANFR2	AND,13	FILTER+2	
1021	01	0033A	4B90038D		ANMK	AND,9	MASK	PICK OFF CHAR. TO BE CONVERTED
1022	01	0033B	00000460		INDA	PZE,0	MEMORY	INDIRECT ADDRESS
1023	01	0033C	00000169		LOC2AD	PZE,0	LOC+2	
1024	01	0033D	00000167		LOCADD	PZE,0	LOC	
1025	01	0033E	0000009A		CAL1AD	PZE,0	CAL1+4	
1026	01	0033F	000000AE		CAL2AD	PZE,0	CAL2+4	
1027	01	00340	000000C2		CAL3AD	PZE,0	CAL3+4	
1028	01	00341	000000D6		CAL4AD	PZE,0	CAL4+4	
1029	01	00342	0000008E		DFAD	PZE,0	DF+4	
1030	01	00343	00000088		FLPFAD	PZE,0	FLPF+4	
1031	01	00344	00000082		FXPOAD	PZE,0	FXPO+4	
1032	01	00345	00000460		MEMAD	PZE,0	DA(MEMORY)	
1033	01	00346	00000062		NAOAD	PZE,0	NAO+4	
1034	01	00347	0000007C		SLAD	PZE,0	SL+4	
1035	01	00348	00000076		UIIAD	PZE,0	UII+4	
1036	01	00349	00000094		WDTRAD	PZE,0	WDTR+4	
1037	01	0034A	0F000096		CAL1XD	XPSD,0	CAL1	
1038	01	0034B	0F0000AA		CAL2XD	XPSD,0	CAL2	
1039	01	0034C	0F0000BE		CAL3XD	XPSD,0	CAL3	
1040	01	0034D	0F0000D2		CAL4XD	XPSD,0	CAL4	
1041	01	0034E	0F00005E		NAOXD	XPSD,0	NAO	
1042						PAGE		
1043	01	0034F	32900378		LWBIT	LW,9	BIT	PICK UP MARCHING BITS
1044	01	00350	32D003C0		LWBYTE	LW,13	BYTE	SELECT BYTE
1045	01	00351	32A00001	A	LOADR	LW,10	1	PICK UP REGISTERS FOR OUTPUT
1046	01	00352	32000383		LWN	LW,0	NUMBER	PICK UP NUMBERS
1047	01	00353	32000385		LWN2	LW,0	NUMBER+2	
1048	01	00354	32D00388		LWFRM	LW,13	FRAME	PICK UP FRAMES
1049	01	00355	32D0038A		LWFRM2	LW,13	FRAME+2	
1050	01	00356	32400488		LOAD	LW,4	LIST	LOAD TRANSFER VEHICAL WITH DATA MODU
1051	01	00357	0C0001AE		RETEND	PZE,0	END	RETURN TO END
1052	01	00358	35400444		STORE	STW,4	TABLE	SET TABLE
1053	01	00359	35D0042F		STRMG1	STW,13	IMAGE+1	
1054						PAGE		
1055	01	0035A	FF3FFFFF	A	LINKAD	DATA	X'FF3FFFFF'	
1056	01	0035B	FFF00000	A	COND	DATA	X'FFF00000'	
1057	01	0035C	FFFF0000	A	M1Q15	DATA	X'FFFF0000'	
1058	01	0035D	70000000	A	6Q3	GEN,4,28	7,0	CHECKS I/O FOR BUSY OR MANUAL
1059	01	0035E	20000000	A	2Q3	DATA	X'20000000'	
1060	01	0035F	00400000	A	I9	DATA	X'400000'	
1061	01	00360	0000000C	A	CEE	DATA	12	
1062	01	00361	00000006	A	SIX	DATA	6	
1063	01	00362	00000001	A	ONE	DATA	1	
1064	01	00363	FFFFFFFE	A	FIRST	DATA	-2	
1065	01	00364	FFFFFFFD	A	NEG3	DATA	-3	
1066	01	00365	FFFFFFF8	A	NEG8	DATA	-8	
1067	01	00366	FFFFFFF4	A	NEG12	DATA	-12	
1068	01	00367	FFFFFFEC	A	NEG20	DATA	-20	
1069	01	00368	FFFFFFCD	A	NEG51	DATA	-51	
1070	01	00369	FFFFFFCD	A	LINE	DATA	-51	
1071	01	0036A	10000000	A	INSTID	I	1,0	INSTRUCTION
1072	01	0036B	20000168		XPSDID	I	2,LOC+1	LOCATION+1
1073	01	0036C	30000000	A	IAID	I	3,0	INDIRECT ADDRESS
1074	01	0036D	40000001	A	IXID	I	4,1	INDEX
1075	01	0036E	50000001	A	PSDWID	I	5,1	PROGRAM STATUS DOUBLEWORD
1076	01	0036F	60000000	A	REGID	I	6,0	REGISTERS
1077	01	00370	70000460		MEMID	I	7,MEMORY	MEMORY WORDS
1078						PAGE		
1079					*CPINT	BECOMES	0000F000 AFTER X'20' ERROR FREE PASSES (SEE RTC)	
1080	01	00371	00000000	A	CPINT	DATA	0	
1081	01	00372	0000F000	A	CPINTM	DATA	X'F000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1082	01	00373	40404040	A	SPACE	TEXT	' '	12 SPACES
	01	00374	40404040	A				
	01	00375	40404040	A				
1083	01	00376	08000000	A	MOTION	DATA	X'8000000'	
1084	01	00377	00000000	A	TEMP	DATA	0	
1085	01	00378	10000000	A	TOP	DATA	X'10000000'	
1086	01	00379	00200000	A	MAXCNT	DATA	X'200000'	
1087	01	0037A	F1000000	A	PGO	DATA	X'F1000000'	
1088	01	0037B	00000001	A	TYPE	DATA	1	OUTPUT MSG DEVICE ADDR
1089	01	0037C	00000810	A	PCPINT	DATA	X'810'	
1090	01	0037D	00000020	A	IOINT	DATA	X'20'	
1091	01	0037E	11111111	A	BIT	DATA	X'11111111'	
1092	01	0037F	22222222	A		DATA	X'22222222'	
1093	01	00380	44444444	A		DATA	X'44444444'	
1094	01	00381	88888888	A		DATA	X'88888888'	
1095	01	00382	00000477		ODDBALL	DATA	SPURTRAP	
1096						PAGE		
1097	01	00383	FFFFFFFC	A	NUMBER	DATA	-4	
1098	01	00384	FFFFFFFC	A		DATA	-4	
1099	01	00385	FFFFFFFE	A		DATA	-2	
1100	01	00386	FFFFFFFC	A		DATA	-4	
1101	01	00387	FFFFFFFE	A		DATA	-2	
1102	01	00388	F0F0F0F0	A	FRAME	DATA	X'F0F0F0F0'	2 WORDS
1103	01	00389	F0F0F0F0	A		DATA	X'F0F0F0F0'	
1104	01	0038A	4040F0F0	A		DATA	X'4040F0F0'	3 WORDS
1105	01	0038B	F0F0F0F0	A		DATA	X'F0F0F0F0'	
1106	01	0038C	F0F04040	A		DATA	X'F0F04040'	
1107	01	0038D	F0000000	A	MASK	DATA	X'F0000000'	
1108	01	0038E	0F000000	A		DATA	X'F000000'	
1109	01	0038F	00F00000	A		DATA	X'F00000'	
1110	01	00390	000F0000	A		DATA	X'F0000'	
1111	01	00391	0000F000	A		DATA	X'F000'	
1112	01	00392	00000F00	A		DATA	X'F00'	
1113	01	00393	000000F0	A		DATA	X'F0'	
1114	01	00394	0000000F	A		DATA	X'F'	
1115	01	00395	FF000000	A	FILTER	DATA	X'FF000000'	
1116	01	00396	00FF0000	A		DATA	X'FF0000'	
1117	01	00397	0000FF00	A		DATA	X'FF00'	
1118	01	00398	000000FF	A		DATA	X'FF'	
1119	01	00399	FF000000	A		DATA	X'FF000000'	
1120	01	0039A	00FF0000	A		DATA	X'FF0000'	
1121	01	0039B	0000FF00	A		DATA	X'FF00'	
1122	01	0039C	000000FF	A		DATA	X'FF'	
1123	01	0039D	FF000000	A		DATA	X'FF000000'	
1124	01	0039E	00FF0000	A		DATA	X'FF0000'	
1125						BIND	64	TO PROVIDE A 64 WORD BOUNDARY *B
1126					**			REQUIRED FOR THE FORMAT ROUTINE
1127						PAGE		
1128	01	003C0	00000000	A	BYTE	DATA	0	0
1129	01	003C1	01010101	A		DATA	X'01010101'	1
1130	01	003C2	02020202	A		DATA	X'02020202'	2
1131	01	003C3	03030303	A		DATA	X'03030303'	3
1132	01	003C4	04040404	A		DATA	X'04040404'	4
1133	01	003C5	05050505	A		DATA	X'05050505'	5
1134	01	003C6	06060606	A		DATA	X'06060606'	6
1135	01	003C7	07070707	A		DATA	X'07070707'	7
1136	01	003C8	08080808	A		DATA	X'08080808'	8
1137	01	003C9	09090909	A		DATA	X'09090909'	9
1138	01	003CA	31313131	A		DATA	X'31313131'	A
1139	01	003CB	32323232	A		DATA	X'32323232'	B
1140	01	003CC	33333333	A		DATA	X'33333333'	C
1141	01	003CD	34343434	A		DATA	X'34343434'	D
1142	01	003CE	35353535	A		DATA	X'35353535'	E
1143	01	003CF	36363636	A		DATA	X'36363636'	F
1144						PAGE		
1145					*			COMMAND PAIRS
1146	01	003D0	000001ED		PSIXCR	P	SIXCR	
1147	01	003D1	000001EE		PTITLE	P	TITLE	
1148	01	003D2	000001EF		PHEAD	P	HEAD	
1149	01	003D3	000001F0		PSHRTL	P	SHRTL	
1150	01	003D4	000001F1		PLONGL	P	LONGL	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1151	01	003D5	000001F2		LPGØTØP	P	PGØTØP	
1152	01	003D6	000001F7		LPFØRMAT	P	PFØRMAT	
1153	01	003D7	000001F3		LPERR	P	PERR	
1154	01	003D8	000001F5		LPREPØRT	P	PREPØRT	
1155	01	003D9	000001FB		PRTCMSG	P	RTCMSG	
1156						BØUND 8		
1157	01	003DA	0500102C		SIXCR	J	5,TTL	
1158	01	003DB	08000006	A		DATA	X'8000006'	
1159	01	003DC	0500102C		TITLE	J	5,TTL	
1160	01	003DD	08000039	A		DATA	X'8000039'	
1161	01	003DE	05001068		HEAD	J	5,HDG	
1162	01	003DF	08000050	A		DATA	X'8000050'	
1163	01	003E0	050010B8		SHRTL	J	5,IMAGE	
1164	01	003E1	0800002C	A		DATA	X'800002C'	
1165	01	003E2	050010B8		LØNGL	J	5,IMAGE	
1166	01	003E3	08000054	A		DATA	X'8000054'	
1167						PAGE		
1168	01	003E4	03000DE8		PGØTØP	J	3,PGØ	
1169	01	003E5	08000001	A		GEN,8,24	8,1	
1170	01	003E6	01000DCC		PERR	J	1,SPACE	
1171	01	003E7	80000008	A		GEN,4,28	8,8	DC
1172	01	003E8	010010BC			J	1,IMAGE+1	
1173	01	003E9	08000050	A		DATA	X'8000050'	
1174	01	003EA	01000DCC		PREPØRT	J	1,SPACE	
1175	01	003EB	80000008	A		GEN,4,28	8,8	
1176	01	003EC	010010BC			J	1,IMAGE+1	
1177	01	003ED	08000028	A		DATA	X'8000028'	
1178	01	003EE	01000DCC		PFØRMAT	J	1,SPACE	
1179	01	003EF	80000008	A		GEN,4,28	8,8	
1180	01	003F0	01001034			J	1,TTL+2	
1181	01	003F1	20000031	A		GEN,8,24	32,49	CC
1182	01	003F2	01000DCC			J	1,SPACE	
1183	01	003F3	8000000B	A		GEN,4,28	8,11	
1184	01	003F4	0100106C			J	1,HDG+1	
1185	01	003F5	0800004C	A		GEN,8,24	X'8',X'4C'	
1186						PAGE		
1187	01	003F6	05000FE1		RTCMSG	GEN,8,24	5,BA(MSG)+1	*B
1188	01	003F7	0800004B	A		GEN,8,24	8,75	*B
1189					MSG	TEXTC	'N	REAL TIME CLØCKS IN USE. TØ DISABLE,','
1190	01	003F8	4B154040	A		' CP INTERRUPT AND CLEAR R5'		
	01	003F9	40404040	A				
	01	003FA	40404040	A				
	01	003FB	4040D9C5	A				
	01	003FC	C1D340E3	A				
	01	003FD	C9D4C540	A				
	01	003FE	C3D3D6C3	A				
	01	003FF	D2E240C9	A				
	01	00400	D540E4E2	A				
	01	00401	C54B40E3	A				
	01	00402	D640C4C9	A				
	01	00403	E2C1C2D3	A				
	01	00404	C56B40C3	A				
	01	00405	D740C9D5	A				
	01	00406	E3C5D9D9	A				
	01	00407	E4D7E340	A				
	01	00408	C1D5C440	A				
	01	00409	C3D3C5C1	A				
	01	0040A	D940D9F5	A				
1191						BØUND	4	
1192						PAGE		
1193	01	0040B	15151515	A	TTL	DATA	X'15151515'	
1194	01	0040C	15151540	A		DATA	X'15151540'	
1195	01	0040D	40404040	A		DATA	X'40404040'	
1196	01	0040E	40404040	A		DATA	X'40404040'	
1197	01	0040F	40404040	A		DATA	X'40404040'	
1198	01	00410	40404040	A		DATA	X'40404040'	
1199	01	00411	40404040	A		DATA	X'40404040'	
1200	01	00412	40404040	A		DATA	X'40404040'	
1201	01	00413	40404040	A		DATA	X'40404040'	
1202	01	00414	404040C1	A		DATA	X'404040C1'	
1203	01	00415	E4E3D640	A		DATA	X'E4E3D640'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1204	01	00416	C5D9D9D6	A		DATA	X'C5D9D9D6'	
1205	01	00417	D940C4C9	A		DATA	X'D940C4C9'	
1206	01	00418	E2D7D3C1	A		DATA	X'E2D7D3C1'	
1207	01	00419	E8404040	A		DATA	X'E8404040'	
1208						PAGE		
1209	01	0041A	15404040	A	HDG	DATA	X'15404040'	
1210	01	0041B	40D3C9E2	A		DATA	X'40D3C9E2'	
1211	01	0041C	E3404040	A		DATA	X'E3404040'	
1212	01	0041D	4040C5D9	A		DATA	X'4040C5D9'	
1213	01	0041E	D9D6D9E2	A		DATA	X'D9D6D9E2'	
1214	01	0041F	40404040	A		DATA	X'40404040'	
1215	01	00420	D7C1E2E2	A		DATA	X'D7C1E2E2'	
1216	01	00421	C5E24040	A		DATA	X'C5E24040'	
1217	01	00422	404040C9	A		DATA	X'404040C9'	
1218	01	00423	D5E2E340	A		DATA	X'D5E2E340'	
1219	01	00424	4040C9C4	A		DATA	X'4040C9C4'	
1220	01	00425	C5D5E3C9	A		DATA	X'C5D5E3C9'	
1221	01	00426	C6C9C5D9	A		DATA	X'C6C9C5D9'	
1222	01	00427	40404040	A		DATA	X'40404040'	
1223	01	00428	C9E24040	A		DATA	X'C9E24040'	
1224	01	00429	4040E2C8	A		DATA	X'4040E2C8'	
1225	01	0042A	D6E4D3C4	A		DATA	X'D6E4D3C4'	
1226	01	0042B	40C2C540	A		DATA	X'40C2C540'	
1227	01	0042C	404040C4	A		DATA	X'404040C4'	
1228	01	0042D	C9C6C615	A		DATA	X'C9C6C615'	
1229						PAGE		
1230	01	0042E	40404015	A	IMAGE	DATA	X'40404015'	
1231	01	0042F	00000000	A		FILL	$+19	
	01	00430	00000000	A				
	01	00431	00000000	A				
	01	00432	00000000	A				
	01	00433	00000000	A				
	01	00434	00000000	A				
	01	00435	00000000	A				
	01	00436	00000000	A				
	01	00437	00000000	A				
	01	00438	00000000	A				
	01	00439	00000000	A				
	01	0043A	00000000	A				
	01	0043B	00000000	A				
	01	0043C	00000000	A				
	01	0043D	00000000	A				
	01	0043E	00000000	A				
	01	0043F	00000000	A				
	01	00440	00000000	A				
	01	00441	00000000	A				
1232	01	00442	40404040	A	BLANK	DATA	X'40404040'	
1233						PAGE		
1234						BOUND 8		
1235	01	00444			TABLE	RES	0	
1236	01	00444	00000000	A		DATA	0	NEG COUNT OF WORDS IN CURRENT MODULE
1237	01	00445	00000000	A		DATA	0	INSTRUCTION BEING TESTED
1238	01	00446	00000000	A		DATA	0	PSW1 IN
1239	01	00447	00000000	A		DATA	0	PSW1 OUT
1240	01	00448	00000000	A		DATA	0	R IN
1241	01	00449	00000000	A		DATA	0	R OUT
1242	01	0044A	00000000	A		DATA	0	MEMORY IN
1243	01	0044B	00000000	A		DATA	0	MEMORY OUT
1244	01	0044C	00000000	A		DATA	0	RU1 IN
1245	01	0044D	00000000	A		DATA	0	RU1 OUT
1246	01	0044E	00000000	A		DATA	0	MEMORY+1 IN
1247	01	0044F	00000000	A		DATA	0	MEMORY+1 OUT
1248	01	00450	00000000	A		DATA	0	PSW2 IN
1249	01	00451	00000000	A		DATA	0	PSW2 OUT
1250	01	00452	00000000	A		DATA	0	OLD PSW1 * USED ONLY FOR XPSD TEST
1251	01	00453	00000000	A		DATA	0	OLD PSW2 * USED ONLY FOR XPSD TEST
1252	01	00454	00000000	A		DATA	0	NEW PSW2 * USED ONLY FOR XPSD TEST
1253	01	00455	00000000	A		DATA	0	NEW PSW1 * USED ONLY FOR EPSD TEST
1254	01	00456	00000000	A		DATA	0,0	
	01	00457	00000000	A				
1255						PAGE		

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND          COMMENTS
1256      01            00458                           TEST      RES        0
1257      01            00458           00000000 A                FILL       $+12
          01            00459           00000000 A
          01            0045A           00000000 A
          01            0045B           00000000 A
          01            0045C           00000000 A
          01            0045D           00000000 A
          01            0045E           00000000 A
          01            0045F           00000000 A
          01            00460           00000000 A
          01            00461           00000000 A
          01            00462           00000000 A
          01            00463           00000000 A
1258                                                          PAGE
1259      01            00464           00000000 A  RETURN    PZE
1260      01            00465           00000000 A            PZE
1261      01            00466           00000169              PZE,0      L0C+2
1262      01            00467           00000000 A            PZE
1263      01            00468           00000237    BUMP      PZE,0      BUMPER
1264      01            00469           00000000 A            PZE
1265      01            0046A           00000110    REPEAT    PZE,0      CYCLE
1266      01            0046B           00000000 A            PZE
1267      01            0046C           00000000 A  PSW1      PZE
1268      01            0046D           00000000 A  PSW2      PZE
1269      01            0046E           00000000 A  CNT1CP    PZE
1270      01            0046F           00000000 A  CNT2CP    PZE
1271      01            00470           00000000 A  CNT3CP    PZE
1272      01            00471           00000000 A  CNT4CP    PZE
1273      01            00472           00000000 A  C0UNT     PZE
1274      01            00473           00000000 A  ERR0RS    PZE
1275      01            00474           00000000 A  PASSES    PZE
1276      01            00475           00000000 A  WK0       PZE
1277      01            00476           00000000 A  W0RD      PZE
1278                01  003C0                       ZER0      EQU        BYTE
1279                01  00383                       NEG4      EQU        NUMBER
1280                01  00385                       NEG2      EQU        NUMBER+2
1281                01  00047                       XPSD      EQU        BRANCH
1282                00000000                        C         EQU        0
1283                00000000                        I         EQU        0
1284                00000000                        Y         EQU        0
1285                01  00459                       INST      EQU        TEST+1
1286                01  0045A                       IA        EQU        TEST+2
1287                01  00460                       MEM0RY    EQU        TEST+8
1288                01  003C0                       CNT3Z     EQU        ZER0
1289                01  003C0                       CNT4Z     EQU        ZER0
1290                01  0046A                       M0DULE    EQU        REPEAT
1291                01  0046A                       PASS      EQU        REPEAT
1292                                                          PAGE
1293      01  00477      0F000478                  SPURTRAP  XPSD,0     SPUR
1294                                                          B0UND      8
1295      01  00478      00000000 A                SPUR      PZE        0
1296      01  00479      00000000 A                          PZE        0
1297      01  0047A      0000047C                            PZE,0      $+2
1298      01  0047B      07000000 A                          DATA       X'07000000'      TURN 0N INTR INH BITS
1299      01  0047C      32500371                            LW,5       CPINT
1300      01  0047D      6D501300 A                          WD,5       X'1300'          ARM AND DISABLE C0UNT PULSE INTRS.
1301      01  0047E      32300474                            LW,3       PASSES           RESET PASSES T0 LAST SETTING
1302      01  0047F      32200473                            LW,2       ERR0RS           RESET ERR0RS T0 LAST SETTING
1303      01  00480      3210011D                            LW,1       SAVE             M0DULE P0INTER
1304      01  00481      3200037B                            LW,0       TYPE             I/0 ADDR
1305      01  00482      2E000000 A                          WAIT,0     0                ERR0R HALT
1306                                                *
1307      01  00483      00000464                            DATA       RETURN           ADDR F0R F0LL0WING 0CMMENT LINE   *B
1308                                                * CHECK THE C0NTENTS 0F 'RETURN' T0 DETERMINE THE L0CATI0N PLUS 1 0F  *B
1309                                                * THE XPSD THAT WAS EXECUTED AS A RESULT 0F A SPURI0US TRAP.
1310                                                *
1311      01  00483                                            0RG        $-1              EL IMINATE AB0VE DATA STATEMENT   *B
          01  00483
1312      01  00483      4B500391                            AND,5      MASK+4           SAVE 0NLY BITS 16-19
1313      01  00484      35500371                            STW,5      CPINT            SELECTED INTERRUPTS
1314      01  00485      3500037B                            STW,0      TYPE             SELECTED  I/0 ADDR
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1315	01	00486	35500372			STW,5	CPINTM	MASK FOR SELECTED INTERRUPTS
1316	01	00487	0E30046A			LPSD,3	REPEAT	RELEASE PANEL INTERRUPT-REPEAT TEST
1317						PAGE		
1318						BOUND 8		
1319	01	00488			LIST	RES	0	
1320	01	00488	FFFFFFFA	A	EXU01	DATA	-6	EXU LOC+1 XPSD
1321	01	00489	67000168			EXU	LOC+1	
1322	01	0048A	F0000136			K	15,0,0,SETPSW	
1323	01	0048B	F0000168			K	15,0,0,LOC+1	
1324	01	0048C	FFFFFFFF	A		DATA	-1	
1325	01	0048D	FFFFFFFF	A		DATA	-1	
1326	01	0048E	FFFFFFFC	A	EXU02	DATA	-4	EXU BRANCH XPSD
1327	01	0048F	67000047			EXU	BRANCH	
1328	01	00490	00000136			DATA	SETPSW	
1329	01	00491	00000168			DATA	LOC+1	
1330	01	00492	FFFFFFF8	A	EXU03	DATA	-8	EXU MEMORY LW
1331	01	00493	67000460			EXU	MEMORY	
1332	01	00494	93300136			K	9,3,3,SETPSW	
1333	01	00495	A3300169			K	10,3,3,LOC+2	
1334	01	00496	FFFFFFFF	A		DATA	-1	
1335	01	00497	32C00460			LW,12	MEMORY	
1336	01	00498	32C00460			LW,12	MEMORY	
1337	01	00499	32C00460			LW,12	MEMORY	
1338	01	0049A	FFFFFFFA	A	EXU04	DATA	-6	EXU X BRANCH XPSD
1339	01	0049B	67020460			EXU	MEMORY,1	
1340	01	0049C	F7300136			K	15,7,3,SETPSW	
1341	01	0049D	F7300168			K	15,7,3,LOC+1	
1342	01	0049E	FFFFFBE7	A		DATA	BRANCH-MEMORY	
1343	01	0049F	FFFFFBE7	A		DATA	BRANCH-MEMORY	
1344	01	004A0	FFFFFFF8	A	EXU05	DATA	-8	EXU * BRANCH XPSD
1345	01	004A1	E7000460			EXU	*MEMORY	
1346	01	004A2	00000136			K	0,0,0,SETPSW	
1347	01	004A3	00000168			K	0,0,0,LOC+1	
1348	01	004A4	00000001	A		DATA	1	
1349	01	004A5	00000001	A		DATA	1	
1350	01	004A6	00C20047			PZE,12	BRANCH,1	
1351	01	004A7	00C20047			PZE,12	BRANCH,1	
1352						PAGE		
1353	01	004A8	FFFFFFF6	A	EXU06	DATA	-10	EXU *X C_1RET XPSD
1354	01	004A9	E7020460			EXU	*MEMORY,1	
1355	01	004AA	00000136			K	0,0,0,SETPSW	
1356	01	004AB	00000168			K	0,0,0,LOC+1	
1357	01	004AC	0000FACE	A		DATA	X'FACE'	
1358	01	004AD	0000FACE	A		DATA	X'FACE'	
1359	01	004AE	000105CC			PZE,0	C_1RET-X'FACE'	
1360	01	004AF	000105CC			PZE,0	C1RET-X'FACE'	
1361	01	004B0	0000DEAF	A		DATA	X'DEAF'	
1362	01	004B1	0000DEAF	A		DATA	X'DEAF'	
1363	01	004B2	FFFFFFF8	A	EXU07	DATA	-8	EXU XPSD SLAVE MODE
1364	01	004B3	67000460			EXU	MEMORY	MV
1365	01	004B4	078001BC			K	0,7,8,SI9NA0	
1366	01	004B5	27000065			K	2,7,0,MVRET+1	
1367	01	004B6	FFFFFFFF	A		DATA	-1	
1368	01	004B7	FFFFFFFF	A		DATA	-1	
1369	01	004B8	0F000464			XPSD,0	RETURN	
1370	01	004B9	0F000464			XPSD,0	RETURN	
1371	01	004BA	FFFFFFFA	A	EXU08	DATA	-6	EXU NEI SLAVE MODE (NEI=PRIV)
1372	01	004BB	6700000C	A		EXU	12	MV
1373	01	004BC	07B001BC			K	0,7,11,SI9NA0	
1374	01	004BD	A730006D			K	10,7,3,NEIRET+3	
1375	01	004BE	0C000460			K	0,12,0,MEMORY	
1376	01	004BF	0C000460			K	0,12,0,MEMORY	
1377						PAGE		
1378	01	004C0	FFFFFFFC	A	LCF01	DATA	-4	LCF 0 00 INTO F7 = F7 BYTE 0
1379	01	004C1	70000460			LCF,0	MEMORY	
1380	01	004C2	F7300136			K	15,7,3,SETPSW	
1381	01	004C3	F7300169			K	15,7,3,LOC+2	
1382	01	004C4	FFFFFFFC	A	LCF02	DATA	-4	LCF 1 00 INTO F7 = F0 BYTE 0
1383	01	004C5	70100460			LCF,1	MEMORY	
1384	01	004C6	F7200136			K	15,7,2,SETPSW	
1385	01	004C7	F0200169			K	15,0,2,LOC+2	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL   OPERATION  OPERAND              COMMENTS
1386      01            004C8           FFFFFFFC         A                LCF03   DATA       =4                   LCF 2    00 INTØ F7 = 07 BYTE 0
1387      01            004C9           70200460                          LCF,2   MEMØRY
1388      01            004CA           F7100136                          K       15,7,1,SETPSW
1389      01            004CB           07100169                          K       0,7,1,LØC+2
1390      01            004CC           FFFFFFFC         A                LCF04   DATA       =4                   LCF 3    00 INTØ F7 = 00 BYTE 0
1391      01            004CD           70300460                          LCF,3   MEMØRY
1392      01            004CE           F7300136                          K       15,7,3,SETPSW
1393      01            004CF           00300169                          K       0,0,3,LØC+2
1394      01            004D0           FFFFFFF8         A                LCF05   DATA       =8                   LCF 3 *  5D INTØ A2 = 55 BYTE 0
1395      01            004D1           F030045A                          LCF,3   *IA
1396      01            004D2           A2200136                          K       10,2,2,SETPSW
1397      01            004D3           55200169                          K       5,5,2,LØC+2
1398      01            004D4           01234567         A                        DATA       X'01234567'
1399      01            004D5           01234567         A                        DATA       X'01234567'
1400      01            004D6           5D4E6F70         A                        DATA       X'5D4E6F70'
1401      01            004D7           5D4E6F70         A                        DATA       X'5D4E6F70'
1402                                                                       PAGE
1403                                                                       ** TEST THAT =R CAN BE CLEARED. ANSWER ØF ZERØ
1404      01            004D8           FFFFFFFA         A                LWO1    DATA       =6
1405      01            004D9           32C00460                          LW,12   MEMØRY
1406      01            004DA           F7300136                          K       15,7,3,SETPSW
1407      01            004DB           C7300169                          K       12,7,3,LØC+2         CC1 AND 2 UNAFFECTED CC3 AND 4 ZERØ
1408      01            004DC           FFFFFFFF         A                        DATA       =1                   R IN
1409      01            004DD           00000000         A                        DATA       0                    R ØUT
1410                                                                       ** TEST X-FER ØF ØNES TØ ØNES. NEGATIVE RESULT
1411      01            004DE           FFFFFFF8         A                LWO2    DATA       =8
1412      01            004DF           32C00460                          LW,12   MEMØRY
1413      01            004E0           37300136                          K       3,7,3,SETPSW
1414      01            004E1           17300169                          K       1,7,3,LØC+2
1415      01            004E2           FFFFFFFF         A                        DATA       =1                   R IN
1416      01            004E3           FFFFFFFF         A                        DATA       =1                   R ØUT
1417      01            004E4           FFFFFFFF         A                        DATA       =1                   M IN
1418      01            004E5           FFFFFFFF         A                        DATA       =1                    MØUT
1419                                                                       ** CHECK X-FER ØF ØNES TØ ZERØES. INDIRECT ADDRESSING. NEG RESULT
1420                                                                       ** INSURE RU1 NØT AFFECTED
1421      01            004E6           FFFFFFF4         A                LWO3    DATA       =12
1422      01            004E7           B2C0045A                          LW,12   *IA
1423      01            004E8           C6200136                          K       12,6,2,SETPSW
1424      01            004E9           D6200169                          K       13,6,2,LØC+2
1425      01            004EA           00000000         A                        DATA       0
1426      01            004EB           FFFFFFFF         A                        DATA       =1
1427      01            004EC           FFFFFFFF         A                        DATA       =1
1428      01            004ED           FFFFFFFF         A                        DATA       =1
1429      01            004EE           00000000         A                        DATA       0
1430      01            004EF           00000000         A                        DATA       0
1431      01            004F0           FFFFFFFF         A                        DATA       =1
1432      01            004F1           FFFFFFFF         A                        DATA       =1
1433                                                                       PAGE
1434                                                                       ** TEST SGTZ TERM BY LØADING A SINGLE BIT. SEQUENCE FRØM BIT32 TØ BIT01
1435      01            004F2           FFFFFFF8         A                LWO4    DATA       =8
1436      01            004F3           32C00460                          LW,12   MEMØRY
1437      01            004F4           30000136                          K       3,0,0,SETPSW
1438      01            004F5           20000169                          K       2,0,0,LØC+2
1439      01            004F6           00000000         A                        DATA       0
1440      01            004F7           00000001         A                        DATA       1
1441      01            004F8           00000001         A                        DATA       1
1442      01            004F9           00000001         A                        DATA       1
1443      01            004FA           FFFFFFF8         A                LWO5    DATA       =8
1444      01            004FB           32C00460                          LW,12   MEMØRY
1445      01            004FC           10000136                          K       1,0,0,SETPSW
1446      01            004FD           20000169                          K       2,0,0,LØC+2
1447      01            004FE           00000000         A                        DATA       0
1448      01            004FF           00000002         A                        DATA       2
1449      01            00500           00000002         A                        DATA       2
1450      01            00501           00000002         A                        DATA       2
1451      01            00502           FFFFFFF8         A                LWO6    DATA       =8
1452      01            00503           32C00460                          LW,12   MEMØRY
1453      01            00504           10000136                          K       1,0,0,SETPSW
1454      01            00505           20000169                          K       2,0,0,LØC+2
1455      01            00506           00000000         A                        DATA       0
1456      01            00507           00000004         A                        DATA       4
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1457	01	00508	00000004	A		DATA	4	
1458	01	00509	00000004	A		DATA	4	
1459	01	0050A	FFFFFFF8	A	LW07	DATA	-8	
1460	01	0050B	32C00460			LW,12	MEMORY	
1461	01	0050C	10000136			K	1,0,0,SETPSW	
1462	01	0050D	20000169			K	2,0,0,L0C+2	
1463	01	0050E	00000000	A		DATA	0	
1464	01	0050F	00000008	A		DATA	8	
1465	01	00510	00000008	A		DATA	8	
1466	01	00511	00000008	A		DATA	8	
1467						PAGE		
1468	01	00512	FFFFFFF8	A	LW08	DATA	-8	
1469	01	00513	32C00460			LW,12	MEMORY	
1470	01	00514	10000136			K	1,0,0,SETPSW	
1471	01	00515	20000169			K	2,0,0,L0C+2	
1472	01	00516	00000000	A		DATA	0	
1473	01	00517	00000010	A		DATA	X'10'	
1474	01	00518	00000010	A		DATA	X'10'	
1475	01	00519	00000010	A		DATA	X'10'	
1476	01	0051A	FFFFFFF8	A	LW09	DATA	-8	
1477	01	0051B	32C00460			LW,12	MEMORY	
1478	01	0051C	10000136			K	1,0,0,SETPSW	
1479	01	0051D	20000169			K	2,0,0,L0C+2	
1480	01	0051E	00000000	A		DATA	0	
1481	01	0051F	00000020	A		DATA	X'20'	
1482	01	00520	00000020	A		DATA	X'20'	
1483	01	00521	00000020	A		DATA	X'20'	
1484	01	00522	FFFFFFF8	A	LW10	DATA	-8	
1485	01	00523	32C00460			LW,12	MEMORY	
1486	01	00524	10000136			K	1,0,0,SETPSW	
1487	01	00525	20000169			K	2,0,0,L0C+2	
1488	01	00526	00000000	A		DATA	0	
1489	01	00527	00000040	A		DATA	X'40'	
1490	01	00528	00000040	A		DATA	X'40'	
1491	01	00529	00000040	A		DATA	X'40'	
1492	01	0052A	FFFFFFF8	A	LW11	DATA	-8	
1493	01	0052B	32C00460			LW,12	MEMORY	
1494	01	0052C	10000136			K	1,0,0,SETPSW	
1495	01	0052D	20000169			K	2,0,0,L0C+2	
1496	01	0052E	00000000	A		DATA	0	
1497	01	0052F	00000080	A		DATA	X'80'	
1498	01	00530	00000080	A		DATA	X'80'	
1499	01	00531	00000080	A		DATA	X'80'	
1500						PAGE		
1501	01	00532	FFFFFFF8	A	LW12	DATA	-8	
1502	01	00533	32C00460			LW,12	MEMORY	
1503	01	00534	10000136			K	1,0,0,SETPSW	
1504	01	00535	20000169			K	2,0,0,L0C+2	
1505	01	00536	00000000	A		DATA	0	
1506	01	00537	00000100	A		DATA	X'100'	
1507	01	00538	00000100	A		DATA	X'100'	
1508	01	00539	00000100	A		DATA	X'100'	
1509	01	0053A	FFFFFFF8	A	LW13	DATA	-8	
1510	01	0053B	32C00460			LW,12	MEMORY	
1511	01	0053C	10000136			K	1,0,0,SETPSW	
1512	01	0053D	20000169			K	2,0,0,L0C+2	
1513	01	0053E	00000000	A		DATA	0	
1514	01	0053F	00000200	A		DATA	X'200'	
1515	01	00540	00000200	A		DATA	X'200'	
1516	01	00541	00000200	A		DATA	X'200'	
1517	01	00542	FFFFFFF8	A	LW14	DATA	-8	
1518	01	00543	32C00460			LW,12	MEMORY	
1519	01	00544	10000136			K	1,0,0,SETPSW	
1520	01	00545	20000169			K	2,0,0,L0C+2	
1521	01	00546	00000000	A		DATA	0	
1522	01	00547	00000400	A		DATA	X'400'	
1523	01	00548	00000400	A		DATA	X'400'	
1524	01	00549	00000400	A		DATA	X'400'	
1525	01	0054A	FFFFFFF8	A	LW15	DATA	-8	
1526	01	0054B	32C00460			LW,12	MEMORY	
1527	01	0054C	10000136			K	1,0,0,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1528	01	0054D	20000169			K	2,0,0,L8C+2	
1529	01	0054E	00000000	A		DATA	0	
1530	01	0054F	00000800	A		DATA	X'800'	
1531	01	00550	00000800	A		DATA	X'800'	
1532	01	00551	00000800	A		DATA	X'800'	
1533						PAGE		
1534	01	00552	FFFFFFF8	A	LW16	DATA	-8	
1535	01	00553	32C00460			LW,12	MEMORY	
1536	01	00554	10000136			K	1,0,0,SETPSW	
1537	01	00555	20000169			K	2,0,0,L8C+2	
1538	01	00556	00000000	A		DATA	0	
1539	01	00557	00001000	A		DATA	X'1000'	
1540	01	00558	00001000	A		DATA	X'1000'	
1541	01	00559	00001000	A		DATA	X'1000'	
1542	01	0055A	FFFFFFF8	A	LW17	DATA	-8	
1543	01	0055B	32C00460			LW,12	MEMORY	
1544	01	0055C	10000136			K	1,0,0,SETPSW	
1545	01	0055D	20000169			K	2,0,0,L8C+2	
1546	01	0055E	00000000	A		DATA	0	
1547	01	0055F	00002000	A		DATA	X'2000'	
1548	01	00560	00002000	A		DATA	X'2000'	
1549	01	00561	00002000	A		DATA	X'2000'	
1550	01	00562	FFFFFFF8	A	LW18	DATA	-8	
1551	01	00563	32C00460			LW,12	MEMORY	
1552	01	00564	10000136			K	1,0,0,SETPSW	
1553	01	00565	20000169			K	2,0,0,L8C+2	
1554	01	00566	00000000	A		DATA	0	
1555	01	00567	00004000	A		DATA	X'4000'	
1556	01	00568	00004000	A		DATA	X'4000'	
1557	01	00569	00004000	A		DATA	X'4000'	
1558	01	0056A	FFFFFFF8	A	LW19	DATA	-8	
1559	01	0056B	32C00460			LW,12	MEMORY	
1560	01	0056C	10000136			K	1,0,0,SETPSW	
1561	01	0056D	20000169			K	2,0,0,L8C+2	
1562	01	0056E	00000000	A		DATA	0	
1563	01	0056F	00008000	A		DATA	X'8000'	
1564	01	00570	00008000	A		DATA	X'8000'	
1565	01	00571	00008000	A		DATA	X'8000'	
1566						PAGE		
1567	01	00572	FFFFFFF8	A	LW20	DATA	-8	
1568	01	00573	32C00460			LW,12	MEMORY	
1569	01	00574	10000136			K	1,0,0,SETPSW	
1570	01	00575	20000169			K	2,0,0,L8C+2	
1571	01	00576	00000000	A		DATA	0	
1572	01	00577	00010000	A		DATA	X'10000'	
1573	01	00578	00010000	A		DATA	X'10000'	
1574	01	00579	00010000	A		DATA	X'10000'	
1575	01	0057A	FFFFFFF8	A	LW21	DATA	-8	
1576	01	0057B	32C00460			LW,12	MEMORY	
1577	01	0057C	10000136			K	1,0,0,SETPSW	
1578	01	0057D	20000169			K	2,0,0,L8C+2	
1579	01	0057E	00000000	A		DATA	0	
1580	01	0057F	00020000	A		DATA	X'20000'	
1581	01	00580	00020000	A		DATA	X'20000'	
1582	01	00581	00020000	A		DATA	X'20000'	
1583	01	00582	FFFFFFF8	A	LW22	DATA	-8	
1584	01	00583	32C00460			LW,12	MEMORY	
1585	01	00584	10000136			K	1,0,0,SETPSW	
1586	01	00585	20000169			K	2,0,0,L8C+2	
1587	01	00586	00000000	A		DATA	0	
1588	01	00587	00040000	A		DATA	X'40000'	
1589	01	00588	00040000	A		DATA	X'40000'	
1590	01	00589	00040000	A		DATA	X'40000'	
1591	01	0058A	FFFFFFF8	A	LW23	DATA	-8	
1592	01	0058B	32C00460			LW,12	MEMORY	
1593	01	0058C	10000136			K	1,0,0,SETPSW	
1594	01	0058D	20000169			K	2,0,0,L8C+2	
1595	01	0058E	00000000	A		DATA	0	
1596	01	0058F	00080000	A		DATA	X'80000'	
1597	01	00590	00080000	A		DATA	X'80000'	
1598	01	00591	00080000	A		DATA	X'80000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1599						PAGE		
1600	01	00592	FFFFFFF8	A	LW24	DATA	-8	
1601	01	00593	32C00460			LW,12	MEMORY	
1602	01	00594	10000136			K	1,0,0,SETPSW	
1603	01	00595	20000169			K	2,0,0,L8C+2	
1604	01	00596	00000000	A		DATA	0	
1605	01	00597	00100000	A		DATA	X'100000'	
1606	01	00598	00100000	A		DATA	X'100000'	
1607	01	00599	00100000	A		DATA	X'100000'	
1608	01	0059A	FFFFFFF8	A	LW25	DATA	-8	
1609	01	0059B	32C00460			LW,12	MEMORY	
1610	01	0059C	10000136			K	1,0,0,SETPSW	
1611	01	0059D	20000169			K	2,0,0,L8C+2	
1612	01	0059E	00000000	A		DATA	0	
1613	01	0059F	00200000	A		DATA	X'200000'	
1614	01	005A0	00200000	A		DATA	X'200000'	
1615	01	005A1	00200000	A		DATA	X'200000'	
1616	01	005A2	FFFFFFF8	A	LW26	DATA	-8	
1617	01	005A3	32C00460			LW,12	MEMORY	
1618	01	005A4	10000136			K	1,0,0,SETPSW	
1619	01	005A5	20000169			K	2,0,0,L8C+2	
1620	01	005A6	00000000	A		DATA	0	
1621	01	005A7	00400000	A		DATA	X'400000'	
1622	01	005A8	00400000	A		DATA	X'400000'	
1623	01	005A9	00400000	A		DATA	X'400000'	
1624	01	005AA	FFFFFFF8	A	LW27	DATA	-8	
1625	01	005AB	32C00460			LW,12	MEMORY	
1626	01	005AC	10000136			K	1,0,0,SETPSW	
1627	01	005AD	20000169			K	2,0,0,L8C+2	
1628	01	005AE	00000000	A		DATA	0	
1629	01	005AF	00800000	A		DATA	X'800000'	
1630	01	005B0	00800000	A		DATA	X'800000'	
1631	01	005B1	00800000	A		DATA	X'800000'	
1632						PAGE		
1633	01	005B2	FFFFFFF8	A	LW28	DATA	-8	
1634	01	005B3	32C00460			LW,12	MEMORY	
1635	01	005B4	10000136			K	1,0,0,SETPSW	
1636	01	005B5	20000169			K	2,0,0,L8C+2	
1637	01	005B6	00000000	A		DATA	0	
1638	01	005B7	01000000	A		DATA	X'1000000'	
1639	01	005B8	01000000	A		DATA	X'1000000'	
1640	01	005B9	01000000	A		DATA	X'1000000'	
1641	01	005BA	FFFFFFF8	A	LW29	DATA	-8	
1642	01	005BB	32C00460			LW,12	MEMORY	
1643	01	005BC	10000136			K	1,0,0,SETPSW	
1644	01	005BD	20000169			K	2,0,0,L8C+2	
1645	01	005BE	00000000	A		DATA	0	
1646	01	005BF	02000000	A		DATA	X'2000000'	
1647	01	005C0	02000000	A		DATA	X'2000000'	
1648	01	005C1	02000000	A		DATA	X'2000000'	
1649	01	005C2	FFFFFFF8	A	LW30	DATA	-8	
1650	01	005C3	32C00460			LW,12	MEMORY	
1651	01	005C4	10000136			K	1,0,0,SETPSW	
1652	01	005C5	20000169			K	2,0,0,L8C+2	
1653	01	005C6	00000000	A		DATA	0	
1654	01	005C7	04000000	A		DATA	X'4000000'	
1655	01	005C8	04000000	A		DATA	X'4000000'	
1656	01	005C9	04000000	A		DATA	X'4000000'	
1657	01	005CA	FFFFFFF8	A	LW31	DATA	-8	
1658	01	005CB	32C00460			LW,12	MEMORY	
1659	01	005CC	10000136			K	1,0,0,SETPSW	
1660	01	005CD	20000169			K	2,0,0,L8C+2	
1661	01	005CE	00000000	A		DATA	0	
1662	01	005CF	08000000	A		DATA	X'8000000',X'8000000',X'8000000'	
	01	005D0	08000000	A				
	01	005D1	08000000	A				
1663						PAGE		
1664	01	005D2	FFFFFFF8	A	LW32	DATA	-8	
1665	01	005D3	32C00460			LW,12	MEMORY	
1666	01	005D4	10000136			K	1,0,0,SETPSW	
1667	01	005D5	20000169			K	2,0,0,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
1668	01	005D6	00000000	A		DATA	0	
1669	01	005D7	10000000	A		DATA	X'10000000',X'10000000',X'10000000'	
	01	005D8	10000000	A				
	01	005D9	10000000	A				
1670	01	005DA	FFFFFFF8	A	LW33	DATA	-8	
1671	01	005DB	32C00460			LW,12	MEMORY	
1672	01	005DC	10000136			K	1,0,0,SETPSW	
1673	01	005DD	20000169			K	2,0,0,LOC+2	
1674	01	005DE	00000000	A		DATA	0	
1675	01	005DF	20000000	A		DATA	X'20000000',X'20000000',X'20000000'	
	01	005E0	20000000	A				
	01	005E1	20000000	A				
1676	01	005E2	FFFFFFF8	A	LW34	DATA	-8	
1677	01	005E3	32C00460			LW,12	MEMORY	
1678	01	005E4	10000136			K	1,0,0,SETPSW	
1679	01	005E5	20000169			K	2,0,0,LOC+2	
1680	01	005E6	00000000	A		DATA	0	
1681	01	005E7	40000000	A		DATA	X'40000000',X'40000000',X'40000000'	
	01	005E8	40000000	A				
	01	005E9	40000000	A				
1682					** TEST THAT BIT0 WILL INHIBIT SGTZ			
1683	01	005EA	FFFFFFF8	A	LW35	DATA	-8	
1684	01	005EB	32C00460			LW,12	MEMORY	
1685	01	005EC	30000136			K	3,0,0,SETPSW	
1686	01	005ED	10000169			K	1,0,0,LOC+2	
1687	01	005EE	00000000	A		DATA	0	
1688	01	005EF	80000000	A		DATA	X'80000000'	
1689	01	005F0	80000000	A		DATA	X'80000000'	
1690	01	005F1	80000000	A		DATA	X'80000000'	
1691						PAGE		
1692					** CONDITION CODE SETTINGS FOR 'OR'			
1693					** CC3 CC4 RESULT IN R			
1694					** 0 0 ZERO			
1695					** 0 1 NEGATIVE			
1696					** 1 0 POSITIVE			
1697	01	005F2	FFFFFFFC	A	OR01	DATA	-4	OR 0!0. RESULT = 0
1698	01	005F3	49C00460			OR,12	MEMORY	
1699	01	005F4	37300136			K	3,7,3,SETPSW	
1700	01	005F5	07300169			K	0,7,3,LOC+2	
1701	01	005F6	FFFFFFF8	A	OR02	DATA	-8	OR A0!0A RESULT =AA (EACH BYTE)
1702	01	005F7	49C00460			OR,12	MEMORY	
1703	01	005F8	07300136			K	0,7,3,SETPSW	
1704	01	005F9	17300169			K	1,7,3,LOC+2	
1705	01	005FA	A0A0A0A0	A		DATA	X'A0A0A0A0'	
1706	01	005FB	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1707	01	005FC	0A0A0A0A	A		DATA	X'0A0A0A0A'	
1708	01	005FD	0A0A0A0A	A		DATA	X'0A0A0A0A'	
1709	01	005FE	FFFFFFF8	A	OR03	DATA	-8	OR 0A!A0. RESULT = AA (EACH BYTE)
1710	01	005FF	49C00460			OR,12	MEMORY	
1711	01	00600	F7300136			K	15,7,3,SETPSW	
1712	01	00601	D7300169			K	13,7,3,LOC+2	
1713	01	00602	0A0A0A0A	A		DATA	X'0A0A0A0A'	
1714	01	00603	AAAAAAAA	A		DATA	X'AAAAAAAA'	
1715	01	00604	A0A0A0A0	A		DATA	X'A0A0A0A0'	
1716	01	00605	A0A0A0A0	A		DATA	X'A0A0A0A0'	
1717						PAGE		
1718	01	00606	FFFFFFF8	A	OR04	DATA	-8	OR 05!50. RESULT = 55 (EACH BYTE)
1719	01	00607	49C00460			OR,12	MEMORY	
1720	01	00608	07300136			K	0,7,3,SETPSW	
1721	01	00609	27300169			K	2,7,3,LOC+2	
1722	01	0060A	05050505	A		DATA	X'05050505'	
1723	01	0060B	55555555	A		DATA	X'55555555'	
1724	01	0060C	50505050	A		DATA	X'50505050'	
1725	01	0060D	50505050	A		DATA	X'50505050'	
1726	01	0060E	FFFFFFF8	A	OR05	DATA	-8	OR 50!05. RESULT = 55 (EACH BYTE)
1727	01	0060F	49C00460			OR,12	MEMORY	
1728	01	00610	17300136			K	1,7,3,SETPSW	
1729	01	00611	27300169			K	2,7,3,LOC+2	
1730	01	00612	50505050	A		DATA	X'50505050'	
1731	01	00613	55555555	A		DATA	X'55555555'	
1732	01	00614	05050505	A		DATA	X'05050505'	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND              COMMENTS
1733      01            00615           05050505         A                DATA     X'05050505'
1734      01            00616           FFFFFFF8         A       BR06     DATA     -8                   BR FF:FF, RESULT = FF (EACH BYTE)
1735      01            00617           49C00460                         BR,12    MEMBRY
1736      01            00618           27300136                         K        2,7,3,SETPSW
1737      01            00619           17300169                         K        1,7,3,LBC+2
1738      01            0061A           FFFFFFFF         A               DATA     -1
1739      01            0061B           FFFFFFFF         A               DATA     -1
1740      01            0061C           FFFFFFFF         A               DATA     -1
1741      01            0061D           FFFFFFFF         A               DATA     -1
1742                                                                      PAGE
1743      01            0061E           FFFFFFF8         A       STW01    DATA     -8                   STBRE  -1
1744      01            0061F           35C00460                         STW,12   MEMBRY
1745      01            00620           07300136                         K        0,7,3,SETPSW
1746      01            00621           07300169                         K        0,7,3,LBC+2
1747      01            00622           FFFFFFFF         A               DATA     -1
1748      01            00623           FFFFFFFF         A               DATA     -1
1749      01            00624           00000000         A               DATA     0
1750      01            00625           FFFFFFFF         A               DATA     -1
1751      01            00626           FFFFFFF8         A       STW02    DATA     -8                   STBRE 0
1752      01            00627           35C00460                         STW,12   MEMBRY
1753      01            00628           F7300136                         K        F,7,3,SETPSW
1754      01            00629           F7300169                         K        F,7,3,LBC+2
1755      01            0062A           00000000         A               DATA     0
1756      01            0062B           00000000         A               DATA     0
1757      01            0062C           FFFFFFFF         A               DATA     -1
1758      01            0062D           00000000         A               DATA     0
1759                                                                      PAGE
1760                                                       ** CBND;TIBN CBDE SETTINGS FBR AND  INSTRUCTIBN
1761                                                       **  CC3  CC4  RESULT IN R
1762                                                       **   0    0      ZERB
1763                                                       **   0    1      NEGATIVE
1764                                                       **   1    0      PBSITIVE
1765      01            0062E           FFFFFFFC         A       AND01    DATA     -4                   AND 0:0 RESULT = 0
1766      01            0062F           4BC00460                         AND,12   MEMBRY
1767      01            00630           F7300136                         K        15,7,3,SETPSW
1768      01            00631           C7300169                         K        12,7,3,LBC+2
1769      01            00632           FFFFFFF8         A       AND02    DATA     -8                   AND C:A, RESULT = 8 (EACH HEX CHAR)
1770      01            00633           4BC00460                         AND,12   MEMBRY
1771      01            00634           77300136                         K        7,7,3,SETPSW
1772      01            00635           57300169                         K        5,7,3,LBC+2
1773      01            00636           CCCCCCCC         A               DATA     X'CCCCCCCC'
1774      01            00637           88888888         A               DATA     X'88888888'
1775      01            00638           AAAAAAAA         A               DATA     X'AAAAAAAA'
1776      01            00639           AAAAAAAA         A               DATA     X'AAAAAAAA'
1777      01            0063A           FFFFFFF8         A       AND03    DATA     -8                   AND 9:5, RESULT = 1 (EACH HEX CHAR)
1778      01            0063B           4BC00460                         AND,12   MEMBRY
1779      01            0063C           07300136                         K        0,7,3,SETPSW
1780      01            0063D           27300169                         K        2,7,3,LBC+2
1781      01            0063E           99999999         A               DATA     X'99999999'
1782      01            0063F           11111111         A               DATA     X'11111111'
1783      01            00640           55555555         A               DATA     X'55555555'
1784      01            00641           55555555         A               DATA     X'55555555'
1785                                                                      PAGE
1786      01            00642           FFFFFFF8         A       AND04    DATA     -8                   AND 3:A, RESULT = 2 (EACH HEX CHAR)
1787      01            00643           4BC00460                         AND,12   MEMBRY
1788      01            00644           37300136                         K        3,7,3,SETPSW
1789      01            00645           27300169                         K        2,7,3,LBC+2
1790      01            00646           33333333         A               DATA     X'33333333'
1791      01            00647           22222222         A               DATA     X'22222222'
1792      01            00648           AAAAAAAA         A               DATA     X'AAAAAAAA'
1793      01            00649           AAAAAAAA         A               DATA     X'AAAAAAAA'
1794      01            0064A           FFFFFFF8         A       AND05    DATA     -8                   AND 6:5, RESULT = 4 (EACH HEX CHAR)
1795      01            0064B           4BC00460                         AND,12   MEMBRY
1796      01            0064C           F7300136                         K        15,7,3,SETPSW
1797      01            0064D           E7300169                         K        14,7,3,LBC+2
1798      01            0064E           66666666         A               DATA     X'66666666'
1799      01            0064F           44444444         A               DATA     X'44444444'
1800      01            00650           55555555         A               DATA     X'55555555'
1801      01            00651           55555555         A               DATA     X'55555555'
1802      01            00652           FFFFFFFA         A       AND06    DATA     -6                   AND C(R) WITH ITSELF, C(R) UNCHANGED
1803      01            00653           4BC0000C         A               AND,12   12
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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND          COMMENTS
1804      01            00654           73300136                          K          7,3,3,SETPSW
1805      01            00655           53300169                          K          5,3,3,L0C+2
1806      01            00656           84214812  A                       DATA       X'84214812'
1807      01            00657           84214812  A                       DATA       X'84214812'
1808                                                                       PAGE
1809                                                         ** CONDITION CODE SETTINGS FOR E0R
1810                                                         **  CC3   CC4  RESULT IN R
1811                                                         **   0     0     ZERO
1812                                                         **   0     1     NEGATIVE
1813                                                         **   1     0     POSITIVE
1814      01            00658           FFFFFFF8  A         E0R01     DATA       =8               E0R C:9. RESULT = 5 (EACH HEX CHAR)
1815      01            00659           48C00460                          E0R,12     MEMORY
1816      01            0065A           B7300136                          K          11,7,3,SETPSW
1817      01            0065B           A7300169                          K          10,7,3,L0C+2
1818      01            0065C           CCCCCCCC  A                       DATA       X'CCCCCCCC'
1819      01            0065D           55555555  A                       DATA       X'55555555'
1820      01            0065E           99999999  A                       DATA       X'99999999'
1821      01            0065F           99999999  A                       DATA       X'99999999'
1822      01            00660           FFFFFFF8  A         E0R02     DATA       =8               E0R 9:7. RESULT = E (EACH HEX CHAR)
1823      01            00661           48C00460                          E0R,12     MEMORY
1824      01            00662           B7300136                          K          11,7,3,SETPSW
1825      01            00663           97300169                          K          9,7,3,L0C+2
1826      01            00664           99999999  A                       DATA       X'99999999'
1827      01            00665           EEEEEEEE  A                       DATA       X'EEEEEEEE'
1828      01            00666           77777777  A                       DATA       X'77777777'
1829      01            00667           77777777  A                       DATA       X'77777777'
1830                                                                       PAGE
1831      01            00668           FFFFFFF8  A         E0R03     DATA       =8               E0R 3:A. RESULT = 9 (EACH HEX CHAR)
1832      01            00669           48C00460                          E0R,12     MEMORY
1833      01            0066A           37300136                          K          3,7,3,SETPSW
1834      01            0066B           17300169                          K          1,7,3,L0C+2
1835      01            0066C           33333333  A                       DATA       X'33333333'
1836      01            0066D           99999999  A                       DATA       X'99999999'
1837      01            0066E           AAAAAAAA  A                       DATA       X'AAAAAAAA'
1838      01            0066F           AAAAAAAA  A                       DATA       X'AAAAAAAA'
1839      01            00670           FFFFFFF8  A         E0R04     DATA       =8               E0R 6:4. RESULT = 2 (EACH HEX CHAR)
1840      01            00671           48C00460                          E0R,12     MEMORY
1841      01            00672           17300136                          K          1,7,3,SETPSW
1842      01            00673           27300169                          K          2,7,3,L0C+2
1843      01            00674           66666666  A                       DATA       X'66666666'
1844      01            00675           22222222  A                       DATA       X'22222222'
1845      01            00676           44444444  A                       DATA       X'44444444'
1846      01            00677           44444444  A                       DATA       X'44444444'
1847                                                                       PAGE
1848                                                         ** RP SHOULD NOT CHANGE. INTERRUPT INHIBITS SHOULD REMAIN SET
1849      01            00678           FFFFFFEE  A         FAPSD01   DATA       =18
1850      01            00679           0F000452                          XPSD,0     TABLE+14
1851      01            0067A           F7300136                          K          15,7,3,SETPSW    PSW1 IN
1852      01            0067B           00000169                          K          0,0,0,L0C+2      PSW1 OUT
1853      01            0067C           00000000  A                       DATA       0
1854      01            0067D           00000000  A                       DATA       0
1855      01            0067E           00000000  A                       DATA       0
1856      01            0067F           00000000  A                       DATA       0
1857      01            00680           00000000  A                       DATA       0
1858      01            00681           00000000  A                       DATA       0
1859      01            00682           00000000  A                       DATA       0
1860      01            00683           00000000  A                       DATA       0
1861      01            00684           07000000  A                       DATA       X'7000000'       PSW2 IN
1862      01            00685           07000000  A                       DATA       X'7000000'       PSW2 OUT
1863      01            00686           00000000  A                       DATA       0                TABLE+14
1864      01            00687           00000000  A                       DATA       0                TABLE+15
1865      01            00688           00000168                          K          0,0,0,L0C+1      TABLE+16  LOADED INTO PSW1 BY XPSD
1866      01            00689           000000F0  A                       DATA       X'F0'            TABLE+17
1867                                                                       PAGE
1868                                                         ** CHANGE RP AND INTERRUPT INHIBITS
1869      01            0068A           FFFFFFF2  A         FAPSD02   DATA       =14
1870      01            0068B           0E800460                          LPSD,8     MEMORY
1871      01            0068C           30000136                          K          3,0,0,SETPSW     PSW1 IN
1872      01            0068D           C7300169                          K          12,7,3,L0C+2     PSW1 OUT
1873      01            0068E           00000000  A                       DATA       0
1874      01            0068F           00000000  A                       DATA       0
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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND              COMMENTS
1875      01            00690           C7300168                          K         12,7,3,L0C+1         MEMORY: LOADED INTO PSW1 BY LPSD
1876      01            00691           C7300168                          K         12,7,3,L0C+1
1877      01            00692           00000000         A                DATA      0
1878      01            00693           00000000         A                DATA      0
1879      01            00694           020000A0         A                DATA      X'020000A0'          MEMORY+1 : LOADED INTO PSW2 BY LPSD
1880      01            00695           020000A0         A                DATA      X'020000A0'
1881      01            00696           05000000         A                DATA      X'05000000'          PSW2 IN
1882      01            00697           020000A0         A                DATA      X'020000A0'          PSW2 OUT
1883                                                                      ** CHANGE RP AND INTERRUPT INHIBITS
1884      01            00698           FFFFFFF2         A   FAPSD03      DATA      -14
1885      01            00699           0E800460                          LPSD,8    MEMORY
1886      01            0069A           C5100136                          K         12,5,1,SETPSW
1887      01            0069B           32200169                          K         3,2,2,L0C+2
1888      01            0069C           00000000         A                DATA      0
1889      01            0069D           00000000         A                DATA      0
1890      01            0069E           32200168                          K         3,2,2,L0C+1          LOADED INTO PSW1 BY LPSD
1891      01            0069F           32200168                          K         3,2,2,L0C+1
1892      01            006A0           00000000         A                DATA      0
1893      01            006A1           00000000         A                DATA      0
1894      01            006A2           05000050         A                DATA      X'05000050'          LOADED INTO PSW2 BY LPSD
1895      01            006A3           05000050         A                DATA      X'05000050'
1896      01            006A4           020000A0         A                DATA      X'020000A0'          PSW2 IN
1897      01            006A5           05000050         A                DATA      X'05000050'          PSW2 OUT
1898                                                                      PAGE
1899                                                                      ** LOAD FIVE INTO RP
1900      01            006A6           FFFFFFF2         A   LRP01        DATA      -14
1901      01            006A7           2F000460                          LRP       MEMORY
1902      01            006A8           00000136                          K         0,0,0,SETPSW
1903      01            006A9           00000169                          K         0,0,0,L0C+2
1904      01            006AA           00000000         A                DATA      0
1905      01            006AB           00000000         A                DATA      0
1906      01            006AC           00000050         A                DATA      X'50'
1907      01            006AD           00000050         A                DATA      X'50'
1908      01            006AE           00000000         A                DATA      0
1909      01            006AF           00000000         A                DATA      0
1910      01            006B0           00000000         A                DATA      0
1911      01            006B1           00000000         A                DATA      0
1912      01            006B2           000000A0         A                DATA      X'A0'                PSW2 IN
1913      01            006B3           00000050         A                DATA      X'50'                PSW2 OUT
1914                                                                      ** LOAD A INTO REG POINTER FROM REG
1915      01            006B4           FFFFFFF2         A   LRP02        DATA      -14
1916      01            006B5           2F00000C         A                LRP       12
1917      01            006B6           F7300136                          K         15,7,3,SETPSW
1918      01            006B7           F7300169                          K         15,7,3,L0C+2
1919      01            006B8           000000A0         A                DATA      X'A0'
1920      01            006B9           000000A0         A                DATA      X'A0'
1921      01            006BA           00000000         A                DATA      0
1922      01            006BB           00000000         A                DATA      0
1923      01            006BC           00000000         A                DATA      0
1924      01            006BD           00000000         A                DATA      0
1925      01            006BE           00000000         A                DATA      0
1926      01            006BF           00000000         A                DATA      0
1927      01            006C0           00000050         A                DATA      X'50'                PSW2 IN
1928      01            006C1           000000A0         A                DATA      X'A0'                PSW2 OUT
1929                                                                      PAGE
1930                                                                      ** INSURE THAT (R,CC) IS FALSE WHEN R28=31 ARE ONES AND CC1=4 ARE ZEROES
1931      01            006C2           FFFFFFF8         A   BCR01        DATA      -8                   BRANCH  R FIELD=F  CC=0
1932      01            006C3           68F00460                          BCR,15    MEMORY
1933      01            006C4           07300136                          K         0,7,3,SETPSW
1934      01            006C5           07300461                          K         0,7,3,MEMORY+1
1935      01            006C6           00000000         A                DATA      0
1936      01            006C7           00000000         A                DATA      0
1937      01            006C8           0F000464                          XPSD,0    RETURN
1938      01            006C9           0F000464                          XPSD,0    RETURN
1939                                                                      ** INSURE THAT (R,CC) IS FALSE WHEN R28=31 ARE ZEROES AND CC1=4 ARE ONES
1940      01            006CA           FFFFFFFA         A   BCR02        DATA      -6                   BRANCH  R FIELD=0  CC=F
1941      01            006CB           6800000C         A                BCR,0     12
1942      01            006CC           F0000136                          K         15,0,0,SETPSW
1943      01            006CD           F000000D         A                K         15,0,0,13
1944      01            006CE           0F000464                          XPSD,0    RETURN
1945      01            006CF           0F000464                          XPSD,0    RETURN
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MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
				* CHECK	(R•CC)=	R28•CC1	
01	006D0	FFFFFFFC	A	BCR03	DATA	-4	NBRANCH R=CC= 8
01	006D1	68800047			BCR,8	BRANCH	
01	006D2	80000136			K	8,0,0,SETPSW	
01	006D3	80000169			K	8,0,0,LOC+2	
					PAGE		
				* CHECK	(R•CC)=	R29•CC2	
01	006D4	FFFFFFFC	A	BCR04	DATA	-4	NBRANCH R=CC= 4
01	006D5	68400047			BCR,4	BRANCH	
01	006D6	40000136			K	4,0,0,SETPSW	
01	006D7	40000169			K	4,0,0,LOC+2	
				* CHECK	(R•CC)=	R30•CC3	
01	006D8	FFFFFFFC	A	BCR05	DATA	-4	NBRANCH R=CC= 2
01	006D9	68200047			BCR,2	BRANCH	
01	006DA	20000136			K	2,0,0,SETPSW	
01	006DB	20000169			K	2,0,0,LOC+2	
				* CHECK	(R•CC)=	R31•CC4	
01	006DC	FFFFFFFC	A	BCR06	DATA	-4	NBRANCH R=CC= 1
01	006DD	68100047			BCR,1	BRANCH	
01	006DE	10000136			K	1,0,0,SETPSW	
01	006DF	10000169			K	1,0,0,LOC+2	
					PAGE		
				** CHECK	THAT CC3 OR 4 IS NOT SHORTED TO CC1 OR 2 ALSO		
				** CHECK	THAT R28 OR 29 IS NOT SHORTED TO R30 OR 31		
01	006E0	FFFFFFFC	A	BCS01	DATA	-4	N BRANCH R FIELD = C CC= 3
01	006E1	69C00047			BCS,12	BRANCH	
01	006E2	30000136			K	3,0,0,SETPSW	
01	006E3	30000169			K	3,0,0,LOC+2	
				** CHECK	THAT CC2 OR 4 IS NOT SHORTED TO CC1 OR 3 ALSO		
				** CHECK	THAT R28 OR 30 IS NOT SHORTED TO R29 OR 31		
01	006E4	FFFFFFFC	A	BCS02	DATA	-4	NBRANCH R FIELD = A CC= 5
01	006E5	69A00047			BCS,10	BRANCH	
01	006E6	50000136			K	5,0,0,SETPSW	
01	006E7	50000169			K	5,0,0,LOC+2	
				** CHECK	THAT A BRANCH CONDITION WILL OCCUR		
01	006E8	FFFFFFF8	A	BCS03	DATA	-8	
01	006E9	69800460			BCS,8	MEMORY	
01	006EA	80000136			K	8,0,0,SETPSW	
01	006EB	80000461			K	8,0,0,MEMORY+1	
01	006EC	00000000	A		DATA	0	
01	006ED	00000000	A		DATA	0	
01	006EE	0F000464			XPSD,0	RETURN	
01	006EF	0F000464			XPSD,0	RETURN	
					PAGE		
				*			
				*			PRI=PROPHGATE THRU ITH BIT POSITION
				*			GI = GENERATE FROM THE ITH BIT
				*			KI =CARRY INTO THE ITH BIT
				*			I = BIT POSITIONS 0 THRU 31
				*			J=0,4,8,12,16,20,24,28
				*			K=1,5,9,13,17,21,25,29
				*			L=2,6,10,14,18,22,26,30
				*			M=3,7,11,15,19,23,27,31(31 OPTIONAL)
01	006F0	FFFFFFFC	A	AW01	DATA	-4	AW KI=0,GI=0,RRI=0,AI=0,DI=0
01	006F1	30C00460			AW,12	MEMORY	
01	006F2	F7200136			K	15,7,2,SETPSW	
01	006F3	07200169			K	0,7,2,LOC+2	
01	006F4	FFFFFFF8	A	AW02	DATA	-8	AW * KI=0,GI=0,PRI=1,AI=1,DI=0
01	006F5	B0C0045A			AW,12	*IA	
01	006F6	E7200136			K	14,7,2,SETPSW	
01	006F7	17200169			K	1,7,2,LOC+2	
01	006F8	FFFFFFFF	A		DATA	-1	
01	006F9	FFFFFFFF	A		DATA	-1	
01	006FA	00000000	A		DATA	0	
01	006FB	00000000	A		DATA	0	
01	006FC	FFFFFFF8	A	AW03	DATA	-8	AW KI=0,GI=0,PRI=1,AI=0,DI=1
01	006FD	30C00460			AW,12	MEMORY	
01	006FE	07200136			K	0,7,2,SETPSW	
01	006FF	17200169			K	1,7,2,LOC+2	
01	00700	00000000	A		DATA	0	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL  OPERATION  OPERAND                  COMMENTS
2017      01            00701           FFFFFFFF         A                      DATA       -1
2018      01            00702           FFFFFFFF         A                      DATA       -1
2019      01            00703           FFFFFFFF         A                      DATA       -1
2020                                                                            PAGE
2021                                                                  ** AW04 TESTS: K(EVEN BIT POSITION) = G(ODD BIT POSITION)
2022                                                                  **  EXAMPLE   K04= G05
2023      01            00704           FFFFFFF8         A          AW04        DATA       -8                    AW  X  KJ=1 GJ=0,PRI=0
2024      01            00705           30C2AF0B                                AW,12      MEMORY-X'15555',1     KK=0,GK=1
2025      01            00706           97200136                                K          9,7,2,SETPSW          KL=1,GL=0
2026      01            00707           57200169                                K          5,7,2,L0C+2           KM=0,GM=1
2027      01            00708           55555555         A                      DATA       X'55555555'
2028      01            00709           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2029      01            0070A           55555555         A                      DATA       X'55555555'
2030      01            0070B           55555555         A                      DATA       X'55555555'
2031                                                                  ** AW05 TESTS THE FOLLOWING TERMS: G0003= G00, G0407= G04, G0811 = G08
2032                                                                  ** G12=15 = G12, G1619= G16, G2023= G20, G2427=G24, G2831=G28, K00=G003
2033                                                                  ** K03= G0407, K07= G0811, K11= G1215, K15=G1619, K19=G2023, K23=G2427
2034                                                                  ** K27= G2831,
2035                                                                  ** K01, 05, 09, 13, 17, 21, 25, 29, (EQUALS GEN TERM ON NEXT LINE)
2036                                                                  ** G02, 06, 10, 14, 18, 22, 26, 30
2037      01            0070C           FFFFFFF8         A          AW05        DATA       -8                    AW     KJ=0,GJ=1,PRI=0
2038      01            0070D           30C00460                                AW,12      MEMORY                KK=1,GK=0
2039      01            0070E           172001C8                                K          1,7,2,FXP0SW          KL=0,GL=1
2040      01            0070F           E7200169                                K          14,7,2,L0C+2          KM=1,GM=0
2041      01            00710           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2042      01            00711           55555554         A                      DATA       X'55555554'
2043      01            00712           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2044      01            00713           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2045                                                                            PAGE
2046                                                                  ** AW06 TESTS: G2831= G31•PR28•PR29•PR30, K00= PR00•PR15•K15
2047                                                                  ** K03= PR04•PR15•K15, K07= PR08•PR15•K15, K11= PR1215•K15
2048                                                                  ** K15= PR16•27•G2831, K19= PR20•27•G2831, K23= PR2427•G2831
2049                                                                  ** K04=PR05•PR06•PR07•K07, K05= PR06•PR07•K07, K06= PR07•K07
2050                                                                  ** K08= PR09•PR10•PR11•K11, K09= PR10•PR11•K11, K10= PR11•K11
2051                                                                  ** K12= PR13,PR14•PR15•K15, K13= PR14•PR15•K15, K14= PR15•K15
2052                                                                  ** K18= PR19•K19
2053                                                                  ** K20= PR21•PR22•PR23•K23, K21= PR22•PR23•K23, K22= PR23•K23
2054                                                                  ** K24= PR25•PR26•PR27•K27, K25= PR26•PR27•K27, K26= PR27•K27
2055                                                                  ** K28= PR29•PR30•G31, K29= PR30•G31
2056      01            00714           FFFFFFF8         A          AW06        DATA       -8                    AW     KI=1,GI=0,PRI=1(EXCEPT I=31)
2057      01            00715           30C00460                                AW,12      MEMORY
2058      01            00716           772001C8                                K          7,7,2,FXP0SW
2059      01            00717           87200169                                K          8,7,2,L0C+2
2060      01            00718           FFFFFFFF         A                      DATA       -1
2061      01            00719           00000000         A                      DATA       0
2062      01            0071A           00000001         A                      DATA       1
2063      01            0071B           00000001         A                      DATA       1
2064      01            0071C           FFFFFFF8         A          AW07        DATA       -8                    AW     KI=1,GI=0,PRI=1(EXCEPT I=31)
2065      01            0071D           30C00460                                AW,12      MEMORY
2066      01            0071E           072001C8                                K          0,7,2,FXP0SW
2067      01            0071F           87200169                                K          8,7,2,L0C+2
2068      01            00720           00000001         A                      DATA       1
2069      01            00721           00000000         A                      DATA       0
2070      01            00722           FFFFFFFF         A                      DATA       -1
2071      01            00723           FFFFFFFF         A                      DATA       -1
2072                                                                            PAGE
2073      01            00724           FFFFFFF8         A          AW08        DATA       -8                    AW     KI=1,GI=1,PRI=0(K31=0)
2074      01            00725           30C00460                                AW,12      MEMORY
2075      01            00726           072001C8                                K          0,7,2,FXP0SW
2076      01            00727           97200169                                K          9,7,2,L0C+2
2077      01            00728           FFFFFFFF         A                      DATA       -1
2078      01            00729           FFFFFFFE         A                      DATA       -2
2079      01            0072A           FFFFFFFF         A                      DATA       -1
2080      01            0072B           FFFFFFFF         A                      DATA       -1
2081      01            0072C           FFFFFFF8         A          AW09        DATA       -8                    AW     KI=0,GI=0,PRI=1
2082      01            0072D           30C00460                                AW,12      MEMORY
2083      01            0072E           972001C8                                K          9,7,2,FXP0SW
2084      01            0072F           17200169                                K          1,7,2,L0C+2
2085      01            00730           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2086      01            00731           FFFFFFFF         A                      DATA       -1
2087      01            00732           55555555         A                      DATA       X'55555555'
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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL  OPERATION  OPERAND                COMMENTS
2088      01            00733           55555555         A                      DATA       X'55555555'
2089      01            00734           FFFFFFF8         A        AW10          DATA       -8                     AW     KJ=0,GJ=0,PRI=0
2090      01            00735           30C00460                                AW,12      MEMORY                 KK=1,GK=0
2091      01            00736           072001C8                                K          0,7,2,FXP0SW           KL=0,GL=1,
2092      01            00737           27200169                                K          2,7,2,L0C+2            KM=0,GM=0,
2093      01            00738           22222222         A                      DATA       X'22222222'
2094      01            00739           44444444         A                      DATA       X'44444444'
2095      01            0073A           22222222         A                      DATA       X'22222222'
2096      01            0073B           22222222         A                      DATA       X'22222222'
2097      01            0073C           FFFFFFF8         A        AW11          DATA       -8                     AW     KI=0,GJ=1,PRJ=0
2098      01            0073D           30C00460                                AW,12      MEMORY                 KK=1,GK=0,PRK=0
2099      01            0073E           F72001C8                                K          15,7,2,FXP0SW          KL=1,GL=0,PRL=1
2100      01            0073F           E7200169                                K          14,7,2,L0C+2           KM=1,GM=0,PRM=1
2101      01            00740           BBBBBBBB         A                      DATA       X'BBBBBBBB'
2102      01            00741           44444443         A                      DATA       X'44444443'
2103      01            00742           88888888         A                      DATA       X'88888888'
2104      01            00743           88888888         A                      DATA       X'88888888'
2105                                                                            PAGE
2106      01            00744           FFFFFFF8         A        AW12          DATA       -8                     AW     KI=0,GJ=1,PRK=0
2107      01            00745           30C00460                                AW,12      MEMORY                 KK=0,GK=0,PRK=1
2108      01            00746           072001C8                                K          0,7,2,FXP0SW           KL=1,GL=0,PRK=0
2109      01            00747           E7200169                                K          14,7,2,L0C+2           KM=1,GM=0,PRK=1
2110      01            00748           DDDDDDDD         A                      DATA       X'DDDDDDDD'
2111      01            00749           66666665         A                      DATA       X'66666665'
2112      01            0074A           88888888         A                      DATA       X'88888888'
2113      01            0074B           88888888         A                      DATA       X'88888888'
2114      01            0074C           FFFFFFF8         A        AW13          DATA       -8                     AW     KJ=0,GJ=1,PRJ=0
2115      01            0074D           30C00460                                AW,12      MEMORY                 KK=0,GK=0,PRK=1
2116      01            0074E           F72001C8                                K          15,7,2,FXP0SW          KL=0,GL=0,PRL=1
2117      01            0074F           E7200169                                K          14,7,2,L0C+2           KM=1,GM=0,PRM=0
2118      01            00750           CCCCCCCC         A                      DATA       X'CCCCCCCC'
2119      01            00751           77777776         A                      DATA       X'77777776'
2120      01            00752           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2121      01            00753           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2122      01            00754           FFFFFFF8         A        AW14          DATA       -8                     AW     KI=0,GI=0,PRJ=0
2123      01            00755           30C00460                                AW,12      MEMORY                 PRK=1
2124      01            00756           772001C8                                K          7,7,2,FXP0SW           PRK=1
2125      01            00757           27200169                                K          2,7,2,L0C+2            PRK=1
2126      01            00758           22222222         A                      DATA       X'22222222'
2127      01            00759           77777777         A                      DATA       X'77777777'
2128      01            0075A           55555555         A                      DATA       X'55555555'
2129      01            0075B           55555555         A                      DATA       X'55555555'
2130      01            0075C           FFFFFFF8         A        AW15          DATA       -8                     AW     KJ=0,GJ=0,PRJ=0
2131      01            0075D           30C00460                                AW,12      MEMORY                 KK=1,GK=0,PRK=0
2132      01            0075E           772001C8                                K          7,7,2,FXP0SW           KL=1,GL=0,PRL=1
2133      01            0075F           27200169                                K          2,7,2,L0C+2            KM=0,GM=1,PRM=0
2134      01            00760           33333333         A                      DATA       X'33333333'
2135      01            00761           44444444         A                      DATA       X'44444444'
2136      01            00762           11111111         A                      DATA       X'11111111'
2137      01            00763           11111111         A                      DATA       X'11111111'
2138                                                                            PAGE
2139      01            00764           FFFFFFF8         A        AW16          DATA       -8                     AW     KJ=0,GJ=0,PRJ=0
2140      01            00765           30C00460                                AW,12      MEMORY                 KK=0,GK=0,PRK=1
2141      01            00766           072001C8                                K          0,7,2,FXP0SW           KL=1,GL=0,PRL=0
2142      01            00767           27200169                                K          2,7,2,L0C+2            KM=0,GM=1,PRM=0
2143      01            00768           11111111         A                      DATA       X'11111111'
2144      01            00769           66666666         A                      DATA       X'66666666'
2145      01            0076A           55555555         A                      DATA       X'55555555'
2146      01            0076B           55555555         A                      DATA       X'55555555'
2147      01            0076C           FFFFFFF8         A        AW17          DATA       -8                     AW     KI=1,GJ=1,PRJ=0 (K31=0)
2148      01            0076D           30C00460                                AW,12      MEMORY                 GK=0 PRK=1
2149      01            0076E           772001C8                                K          7,7,2,FXP0SW           GL=0,PRL=1
2150      01            0076F           97200169                                K          9,7,2,L0C+2            GM=0,PRM=1
2151      01            00770           DDDDDDDD         A                      DATA       X'DDDDDDDD'
2152      01            00771           88888887         A                      DATA       X'88888887'
2153      01            00772           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2154      01            00773           AAAAAAAA         A                      DATA       X'AAAAAAAA'
2155      01            00774           FFFFFFF8         A        AW18          DATA       -8                     AW     KJ=1,GJ=0,PRJ=0
2156      01            00775           30C00460                                AW,12      MEMORY                 KK=1,GK=0,PRK=1
2157      01            00776           F72001C8                                K          15,7,2,FXP0SW          KL=1,GL=0,PRL=1
2158      01            00777           57200169                                K          5,7,2,L0C+2            KM=0,GM=1,PRM=1
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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL   OPERATION  OPERAND                COMMENTS
2159      01            00778           55555555         A                DATA    X'55555555'
2160      01            00779           88888888         A                DATA    X'88888888'
2161      01            0077A           33333333         A                DATA    X'33333333'
2162      01            0077B           33333333         A                DATA    X'33333333'
2163      01            0077C           FFFFFFF8         A       AW19     DATA    -8                     AW     KJ=1,GJ=0,PRJ=0
2164      01            0077D           30C00460                         AW,12   MEMORY                 KK=1,GK=0,PK=01
2165      01            0077E           072001C8                         K       0,7,2,FXP0SW           KL=0,GL=1,PL=00
2166      01            0077F           57200169                         K       5,7,2,L0C+2            KM=0,GM=0,PM=00
2167      01            00780           66666666         A                DATA    X'66666666'
2168      01            00781           88888888         A                DATA    X'88888888'
2169      01            00782           22222222         A                DATA    X'22222222'
2170      01            00783           22222222         A                DATA    X'22222222'
2171                                                                       PAGE
2172      01            00784           FFFFFFF8         A       AW20     DATA    -8                     AW     KI=1,GJ=0,PRI=0
2173      01            00785           30C00460                         AW,12   MEMORY                 KK=0,GK=1
2174      01            00786           272001C8                         K       2,7,2,FXP0SW           KL=0,GL=0
2175      01            00787           57200169                         K       5,7,2,L0C+2            KM=0,GM=0
2176      01            00788           44444444         A                DATA    X'44444444'
2177      01            00789           88888888         A                DATA    X'88888888'
2178      01            0078A           44444444         A                DATA    X'44444444'
2179      01            0078B           44444444         A                DATA    X'44444444'
2180      01            0078C           FFFFFFF8         A       AW21     DATA    -8                     AW     KK=1,GM=1,PR5=1
2181      01            0078D           30C00460                         AW,12   MEMORY                 KL=1     PRL=1
2182      01            0078E           072001C8                         K       0,7,2,FXP0SW
2183      01            0078F           17200169                         K       1,7,2,L0C+2
2184      01            00790           BBBBBBBB         A                DATA    X'BBBBBBBB'
2185      01            00791           CCCCCCCC         A                DATA    X'CCCCCCCC'
2186      01            00792           11111111         A                DATA    X'11111111'
2187      01            00793           11111111         A                DATA    X'11111111'
2188      01            00794           FFFFFFF8         A       AW22     DATA    -8                     AW     KL=1,GM=1,PRJ=1
2189      01            00795           30C00460                         AW,12   MEMORY                 PRK=1
2190      01            00796           072001C8                         K       0,7,2,FXP0SW
2191      01            00797           17200169                         K       1,7,2,L0C+2
2192      01            00798           DDDDDDDD         A                DATA    X'DDDDDDDD'
2193      01            00799           EEEEEEEE         A                DATA    X'EEEEEEEE'
2194      01            0079A           11111111         A                DATA    X'11111111'
2195      01            0079B           11111111         A                DATA    X'11111111'
2196      01            0079C           FFFFFFF8         A       AW23     DATA    -8                     AW     KI=0,GI=0,PRJ=1
2197      01            0079D           30C00460                         AW,12   MEMORY                 PRK=1
2198      01            0079E           072001C8                         K       0,7,2,FXP0SW           PRL=1
2199      01            0079F           17200169                         K       1,7,2,L0C+2
2200      01            007A0           88888888         A                DATA    X'88888888'
2201      01            007A1           EEEEEEEE         A                DATA    X'EEEEEEEE'
2202      01            007A2           66666666         A                DATA    X'66666666'
2203      01            007A3           66666666         A                DATA    X'66666666'
2204                                                                       PAGE
2205      01            007A4           FFFFFFF8         A       AW24     DATA    -8                     AW     KK=1,GL=1,PRJ=1
2206      01            007A5           30C00460                         AW,12   MEMORY
2207      01            007A6           072001C8                         K       0,7,2,FXP0SW
2208      01            007A7           17200169                         K       1,7,2,L0C+2
2209      01            007A8           AAAAAAAA         A                DATA    X'AAAAAAAA'
2210      01            007A9           CCCCCCCC         A                DATA    X'CCCCCCCC'
2211      01            007AA           22222222         A                DATA    X'22222222'
2212      01            007AB           22222222         A                DATA    X'22222222'
2213      01            007AC           FFFFFFF8         A       AW25     DATA    -8                     AW     KI=0,GI=0,PRJ=1
2214      01            007AD           30C00460                         AW,12   MEMORY                 PRK=1
2215      01            007AE           072001C8                         K       0,7,2,FXP0SW
2216      01            007AF           17200169                         K       1,7,2,L0C+2
2217      01            007B0           88888888         A                DATA    X'88888888'
2218      01            007B1           CCCCCCCC         A                DATA    X'CCCCCCCC'
2219      01            007B2           44444444         A                DATA    X'44444444'
2220      01            007B3           44444444         A                DATA    X'44444444'
2221                                                       ** AW26 TESTS:  G1215= G14•PR12,PR13, G2831= G30•PR28,PR29
2222                                                       ** K00= PR00•11•G1215, K03=PR04•11•G1215, K07= PR0811•G1215
2223                                                       ** K0=  PR01,PR02,PR03,K03, K01= PR02,PR03,K03, K02= PR03,K03
2224                                                       ** K12= PR13•G14, K16= PR17•PR18•PR19•K19, K17= PR18•PR19•K19
2225                                                       ** K28= PR29,G30
2226      01            007B4           FFFFFFF8         A       AW26     DATA    -8                     AW     KI=1(EXCEPT K14,K30,K31)
2227      01            007B5           30C00460                         AW,12   MEMORY                 TEST ALL CARRY(K) TERMS GATED
2228      01            007B6           072001C8                         K       0,7,2,FXP0SW           BY G14 AND G30.
2229      01            007B7           A7200169                         K       10,7,2,L0C+2
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2230	01	007B8	FFFEFFFE	A		DATA	X'FFFEFFFE'	
2231	01	007B9	00010000	A		DATA	X'10000'	
2232	01	007BA	00020002	A		DATA	X'20002'	
2233	01	007BB	00020002	A		DATA	X'20002'	
2234						PAGE		
2235					** AW27	TESTS:	G1215= G13•PR12, G2831= G29•PR28	
2236	01	007BC	FFFFFFF8	A	AW27	DATA	=8	AW KI=1(EXCEPT K13,K29-K31)
2237	01	007BD	30C00460			AW,12	MEMORY	TEST ALL G13,G29 TERMS
2238	01	007BE	F72001C8			K	15,7,2,FXP0SW	
2239	01	007BF	A7200169			K	10,7,2,L0C+2	
2240	01	007C0	FFFDFFFC	A		DATA	X'FFFDFFFC'	
2241	01	007C1	00020000	A		DATA	X'20000'	
2242	01	007C2	00040004	A		DATA	X'40004'	
2243	01	007C3	00040004	A		DATA	X'40004'	
2244						PAGE		
2245	01	007C4	FFFFFFF8	A	AW28	DATA	=8	AW KI=1(EXCEPT K12,K28-K31)
2246	01	007C5	30C00460			AW,12	MEMORY	TEST G12,G28 TERMS
2247	01	007C6	F72001C8			K	15,7,2,FXP0SW	
2248	01	007C7	A7200169			K	10,7,2,L0C+2	
2249	01	007C8	FFFBFFF8	A		DATA	X'FFFBFFF8'	
2250	01	007C9	00040000	A		DATA	X'40000'	
2251	01	007CA	00080008	A		DATA	X'80008'	
2252	01	007CB	00080008	A		DATA	X'80008'	
2253					** AW29	TESTS:	G0811= G11•PR08•PR09•PR10, G2427= G27•PR24•PR25•PR26	
2254					** K00=		PR00-PR07•G0811, K03= PR0407•G0811, K15= PR16-23•G2427	
2255					** K19=		PR2023•G2427, K08= PR09•PR10•G11, K09= PR10•G11	
2256					** K24=		PR25•PR26•G27, K25= PR26•G27	
2257	01	007CC	FFFFFFF8	A	AW29	DATA	=8	AW 29=1,(EXCEPT K11,K27-K31
2258	01	007CD	30C00460			AW,12	MEMORY	TEST G11,G27 TERMS
2259	01	007CE	F72001C8			K	15,7,2,FXP0SW	
2260	01	007CF	A7200169			K	10,7,2,L0C+2	
2261	01	007D0	FFF7FFF0	A		DATA	X'FFF7FFF0'	
2262	01	007D1	00080000	A		DATA	X'80000'	
2263	01	007D2	00100010	A		DATA	X'100010'	
2264	01	007D3	00100010	A		DATA	X'100010'	
2265						PAGE		
2266					** AW30	TESTS:	G0811= G10•PR08•PR09, G2427= G24•PR24•PR25, K24=PR25•G26	
2267	01	007D4	FFFFFFF8	A	AW30	DATA	=8	AW KI=1(EXCEPT K10,K26-K31)
2268	01	007D5	30C00460			AW,12	MEMORY	TEST G10,G26
2269	01	007D6	F72001C8			K	15,7,2,FXP0SW	
2270	01	007D7	A7200169			K	10,7,2,L0C+2	
2271	01	007D8	FFEFFFE0	A		DATA	X'FFEFFFE0'	
2272	01	007D9	00100000	A		DATA	X'100000'	
2273	01	007DA	00200020	A		DATA	X'200020'	
2274	01	007DB	00200020	A		DATA	X'200020'	
2275					** AW31	TESTS:	G0811= G09•PR08, G2427= G25•PR24	
2276	01	007DC	FFFFFFF8	A	AW31	DATA	=8	AW KI=1(EXCEPT K9,K25-K31)
2277	01	007DD	30C00460			AW,12	MEMORY	TEST G9,G25
2278	01	007DE	072001C8			K	0,7,2,FXP0SW	
2279	01	007DF	A7200169			K	10,7,2,L0C+2	
2280	01	007E0	FFDFFFC0	A		DATA	X'FFDFFFC0'	
2281	01	007E1	00200000	A		DATA	X'200000'	
2282	01	007E2	00400040	A		DATA	X'400040'	
2283	01	007E3	00400040	A		DATA	X'400040'	
2284						PAGE		
2285	01	007E4	FFFFFFF8	A	AW32	DATA	=8	AW KI=1(EXCEPT K8,K24-K31)
2286	01	007E5	30C00460			AW,12	MEMORY	TEST G8,G24
2287	01	007E6	F72001C8			K	15,7,2,FXP0SW	
2288	01	007E7	A7200169			K	10,7,2,L0C+2	
2289	01	007E8	FFBFFF80	A		DATA	X'FFBFFF80'	
2290	01	007E9	00400000	A		DATA	X'400000'	
2291	01	007EA	00800080	A		DATA	X'800080'	
2292	01	007EB	00800080	A		DATA	X'800080'	
2293					** AW33	TESTS:	G0407= G07•PR04•PR05•PR06, G2023= G23•PR20•PR21•PR22	
2294					** K00=		PR0003•G0407, K15= PR1619•G2023, K4= PR05•PR06•G07, K5=PR06•G07	
2295					** K20=		PR21•PR22•G23, K21= PR22•G23	
2296	01	007EC	FFFFFFF8	A	AW33	DATA	=8	AW KI=1(EXCEPT K7,K23-K31)
2297	01	007ED	30C00460			AW,12	MEMORY	TEST G7,G23
2298	01	007EE	672001C8			K	6,7,2,FXP0SW	
2299	01	007EF	A7200169			K	10,7,2,L0C+2	
2300	01	007F0	FF7FFF00	A		DATA	X'FF7FFF00'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2301	01	007F1	00800000	A		DATA	X'800000'	
2302	01	007F2	01000100	A		DATA	X'1000100'	
2303	01	007F3	01000100	A		DATA	X'1000100'	
2304					** AW34 TESTS: G0407= G06•PR04•PR05, G2023= G22•PR20•PR21, K4=PR05•G06			
2305					** K20= G22•PR21			
2306	01	007F4	FFFFFFF8	A	AW34	DATA	-8	AW * KI=1(EXCEPT K6,K22=K31)
2307	01	007F5	B0C0045A			AW,12	*IA	TEST G6,G22
2308	01	007F6	572001C8			K	5,7,2,FXP0SW	
2309	01	007F7	A7200169			K	10,7,2,L0C+2	
2310	01	007F8	FEFFFE00	A		DATA	X'FEFFFE00'	
2311	01	007F9	01000000	A		DATA	X'1000000'	
2312	01	007FA	02000200	A		DATA	X'2000200'	
2313	01	007FB	02000200	A		DATA	X'2000200'	
2314						PAGE		
2315					** AW35 TESTS: G0407= G05•PR04, G2023= PR20•G21			
2316	01	007FC	FFFFFFF8	A	AW35	DATA	-8	AW KI=1(EXCEPT K5,K21=K31)
2317	01	007FD	30C00460			AW,12	MEMORY	TEST G5,G21
2318	01	007FE	472001C8			K	4,7,2,FXP0SW	
2319	01	007FF	A7200169			K	10,7,2,L0C+2	
2320	01	00800	FDFFFC00	A		DATA	X'FDFFFC00'	
2321	01	00801	02000000	A		DATA	X'2000000'	
2322	01	00802	04000400	A		DATA	X'4000400'	
2323	01	00803	04000400	A		DATA	X'4000400'	
2324	01	00804	FFFFFFF8	A	AW36	DATA	-8	AW KI=1(EXCEPT K4,K20=K31)
2325	01	00805	30C00460			AW,12	MEMORY	TEST G4,G20
2326	01	00806	072001C8			K	0,7,2,FXP0SW	
2327	01	00807	A7200169			K	10,7,2,L0C+2	
2328	01	00808	F8FFF800	A		DATA	X'F8FFF800'	
2329	01	00809	04000000	A		DATA	X'4000000'	
2330	01	0080A	08000800	A		DATA	X'8000800'	
2331	01	0080B	08000800	A		DATA	X'8000800'	
2332					** AW37 TESTS: G1619= G19•PR16•PR17•PR18, K16= PR17•PR18•G19			
2333					** K17= PR18•G19			
2334	01	0080C	FFFFFFF8	A	AW37	DATA	-8	AW K15,K16,K17,K18=1
2335	01	0080D	30C00460			AW,12	MEMORY	TEST G19
2336	01	0080E	B72001C8			K	11,7,2,FXP0SW	
2337	01	0080F	27200169			K	2,7,2,L0C+2	
2338	01	00810	0000F000	A		DATA	X'F000'	
2339	01	00811	00010000	A		DATA	X'10000'	
2340	01	00812	00001000	A		DATA	X'1000'	
2341	01	00813	00001000	A		DATA	X'1000'	
2342						PAGE		
2343					** AW38 TESTS: G1619= G18•PR16•PR17, K16= PR17•G18			
2344	01	00814	FFFFFFF8	A	AW38	DATA	-8	AW K15,K16,K17=1
2345	01	00815	30C00460			AW,12	MEMORY	TEST G18
2346	01	00816	F72001C8			K	15,7,2,FXP0SW	
2347	01	00817	27200169			K	2,7,2,L0C+2	
2348	01	00818	0000E000	A		DATA	X'E000'	
2349	01	00819	00010000	A		DATA	X'10000'	
2350	01	0081A	00002000	A		DATA	X'2000'	
2351	01	0081B	00002000	A		DATA	X'2000'	
2352					** AW39 TESTS: G1619= PR16•G17			
2353	01	0081C	FFFFFFF8	A	AW39	DATA	-8	AW K15,K16=1
2354	01	0081D	30C00460			AW,12	MEMORY	TEST G17
2355	01	0081E	072001C8			K	0,7,2,FXP0SW	
2356	01	0081F	27200169			K	2,7,2,L0C+2	
2357	01	00820	0000C000	A		DATA	X'C000'	
2358	01	00821	00010000	A		DATA	X'10000'	
2359	01	00822	00004000	A		DATA	X'4000'	
2360	01	00823	00004000	A		DATA	X'4000'	
2361						PAGE		
2362					** AW40 TESTS: G1215= G15•PR12•PR13•PR14, K12= G15•PR13•PR14			
2363					** K13= G15•PR14			
2364	01	00824	FFFFFFF8	A	AW40	DATA	-8	AW TEST G15
2365	01	00825	30C00460			AW,12	MEMORY	
2366	01	00826	072001C8			K	0,7,2,FXP0SW	
2367	01	00827	27200169			K	2,7,2,L0C+2	
2368	01	00828	0FFF0000	A		DATA	X'FFF0000'	
2369	01	00829	10000000	A		DATA	X'10000000'	
2370	01	0082A	00010000	A		DATA	X'10000'	
2371	01	0082B	00010000	A		DATA	X'10000'	

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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL    OPERATION  OPERAND                  COMMENTS
NO.   KEY       ADDRESS   CONTENTS
2372  01 0082C  FFFFFFF8  A          AW41     DATA       -8                       AW   TEST OVERFLOW TRAP - T0 +
2373  01 0082D  30C00460               AW,12    MEMORY
2374  01 0082E  073001C8               K        0,7,3,FXP0SW
2375  01 0082F  E7300084               K        14,7,3,FP0RET+1
2376  01 00830  89ABEF17  A            DATA     X'89ABEF17'
2377  01 00831  70FF0579  A            DATA     X'70FF0579'
2378  01 00832  E7531662  A            DATA     X'E7531662'
2379  01 00833  E7531662  A            DATA     X'E7531662'
2380  01 00834  FFFFFFF8  A          AW42     DATA       -8                       AW   TEST OVERFLOW TRAP + T0 -
2381  01 00835  30C00460               AW,12    MEMORY
2382  01 00836  073001D2               K        0,7,3,FXP0PSDW           CHECK RETURNED PSDW                  *B
2383  01 00837  57300167               K        5,7,3,L0C                                                     *B
2384  01 00838  61754221  A            DATA     X'61754221'
2385  01 00839  80000000  A            DATA     X'80000000'
2386  01 0083A  1E8ABDDF  A            DATA     X'1E8ABDDF'
2387  01 0083B  1E8ABDDF  A            DATA     X'1E8ABDDF'
2388                                   PAGE
2389                                 ** TEST G00=03=G03•PR00•PR01•PR02 ,K0=PR01•PR02•G3, <1=PR02•G03
2390  01 0083C  FFFFFFF4  A          AW43     DATA       -12
2391  01 0083D  30C00460               AW,12    MEMORY
2392  01 0083E  77300136               K        7,7,3,SETPSW
2393  01 0083F  87300169               K        8,7,3,L0C+2
2394  01 00840  F0000000  A            DATA     X'F0000000'
2395  01 00841  00000000  A            DATA     0
2396  01 00842  10000000  A            DATA     X'10000000'
2397  01 00843  10000000  A            DATA     X'10000000'
2398  01 00844  FFFFFFFF  A            DATA     -1,-1,100,100
      01 00845  FFFFFFFF  A
      01 00846  00000064  A
      01 00847  00000064  A
2399                                 ** N0 OVERFLOW (-)+(+) T0 (+)
2400                                 ** TEST G0003= G02•PR00•PR01, K0=PR01•G02
2401  01 00848  FFFFFFF4  A          AW44     DATA       -12
2402  01 00849  30C00461               AW,12    MEMORY+1
2403  01 0084A  07300136               K        0,7,3,SETPSW
2404  01 0084B  87300169               K        8,7,3,L0C+2
2405  01 0084C  E0000000  A            DATA     X'E0000000'
2406  01 0084D  00000000  A            DATA     0
2407  01 0084E  00000000  A            DATA     0,0,8,8,X'20000000',X'20000000'
      01 0084F  00000000  A
      01 00850  00000008  A
      01 00851  00000008  A
      01 00852  20000000  A
      01 00853  20000000  A
2408                                   PAGE
2409                                 ** TEST G0003= G01•PR00  N0 OVERFLOW (+)+(-) T0 (+)
2410  01 00854  FFFFFFF4  A          AW45     DATA       -12
2411  01 00855  30D00461               AW,13    MEMORY+1
2412  01 00856  07300136               K        0,7,3,SETPSW
2413  01 00857  87300169               K        8,7,3,L0C+2
2414  01 00858  00000001  A            DATA     1,1,100,100,X'40000000',0,X'C0000000',X'C0000000'
      01 00859  00000001  A
      01 0085A  00000064  A
      01 0085B  00000064  A
      01 0085C  40000000  A
      01 0085D  00000000  A
      01 0085E  C0000000  A
      01 0085F  C0000000  A
2415                                 ** TEST N0 OVERFLOW  (-)+(+) T0 (-)
2416  01 00860  FFFFFFF8  A          AW46     DATA       -8
2417  01 00861  30C00460               AW,12    MEMORY
2418  01 00862  07300136               K        0,7,3,SETPSW
2419  01 00863  17300169               K        1,7,3,L0C+2
2420  01 00864  FFFFFF9C  A            DATA     -100,-90,10,10
      01 00865  FFFFFFA6  A
      01 00866  0000000A  A
      01 00867  0000000A  A
2421                                 ** TEST N0 OVERFLOW (+)+(-) T0 (-)
2422  01 00868  FFFFFFF8  A          AW47     DATA       -8
2423  01 00869  30C00460               AW,12    MEMORY
2424  01 0086A  07300136               K        0,7,3,SETPSW
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2425	01	0086B	17300169			K	1,7,3,L0C+2	
2426	01	0086C	0000000A	A		DATA	10,-90,-100,-100	
	01	0086D	FFFFFFA6	A				
	01	0086E	FFFFFF9C	A				
	01	0086F	FFFFFF9C	A				
2427						PAGE		
2428	01	00870	FFFFFFF8	A	SW01	DATA	-8	SW
2429	01	00871	38C00460			SW,12	MEMORY	
2430	01	00872	77300136			K	7,7,3,SETPSW	
2431	01	00873	87300169			K	8,7,3,L0C+2	
2432	01	00874	FFFFFFFF	A		DATA	-1	
2433	01	00875	00000000	A		DATA	0	
2434	01	00876	FFFFFFFF	A		DATA	-1	
2435	01	00877	FFFFFFFF	A		DATA	-1	
2436	01	00878	FFFFFFFC	A	SW02	DATA	-4	SW *
2437	01	00879	B8C0045A			SW,12	*IA	
2438	01	0087A	F73001C8			K	15,7,3,FXP0SW	
2439	01	0087B	87300169			K	8,7,3,L0C+2	
2440	01	0087C	FFFFFFF8	A	SW03	DATA	-8	SW
2441	01	0087D	38C00460			SW,12	MEMORY	
2442	01	0087E	273001C8			K	2,7,3,FXP0SW	
2443	01	0087F	57300084			K	5,7,3,FP0RET+1	
2444	01	00880	7FFFFFFF	A		DATA	X'7FFFFFFF'	
2445	01	00881	80000000	A		DATA	X'80000000'	
2446	01	00882	FFFFFFFF	A		DATA	-1	
2447	01	00883	FFFFFFFF	A		DATA	-1	
2448						PAGE		
2449	01	00884	FFFFFFFA	A	SW04	DATA	-6	SW
2450	01	00885	38C0000C	A		SW,12	12	
2451	01	00886	773001C8			K	7,7,3,FXP0SW	
2452	01	00887	87300169			K	8,7,3,L0C+2	
2453	01	00888	80000000	A		DATA	X'80000000'	
2454	01	00889	00000000	A		DATA	0	
2455	01	0088A	FFFFFFF8	A	SW05	DATA	-8	SW PRI=1
2456	01	0088B	38C00460			SW,12	MEMORY	TEST KM=1
2457	01	0088C	00000136			K	0,0,0,SETPSW	
2458	01	0088D	50000169			K	5,0,0,L0C+2	
2459	01	0088E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
2460	01	0088F	80000000	A		DATA	X'80000000'	
2461	01	00890	FFFFFFFF	A		DATA	-1	
2462	01	00891	FFFFFFFF	A		DATA	-1	
2463						PAGE		
2464	01	00892	FFFFFFF8	A	SW06	DATA	-8	SW TEST K31 WITH RR16=PR31
2465	01	00893	38C00460			SW,12	MEMORY	
2466	01	00894	073001C8			K	0,7,3,FXP0SW	
2467	01	00895	27300169			K	2,7,3,L0C+2	
2468	01	00896	0000FFFF	A		DATA	X'FFFF'	
2469	01	00897	00010000	A		DATA	X'10000'	
2470	01	00898	FFFFFFFF	A		DATA	-1	
2471	01	00899	FFFFFFFF	A		DATA	-1	
2472						PAGE		
2473					** S/PH10 = FUBIR.PH1.NBRPH9; BRPH9 = FUBIR.PH1.NS0; S0=1 THUS S/PH10 =1			
2474	01	0089A	FFFFFFF8	A	BIR01	DATA	-8	BRANCH
2475	01	0089B	65C00460			BIR,12	MEMORY	
2476	01	0089C	F7300136			K	15,7,3,SETPSW	
2477	01	0089D	F7300461			K	15,7,3,MEMORY+1	
2478	01	0089E	FFFFFFFE	A		DATA	-2	
2479	01	0089F	FFFFFFFF	A		DATA	-1	
2480	01	008A0	0F000464			XPSD,0	RETURN	
2481	01	008A1	0F000464			XPSD,0	RETURN	
2482					** S0=0 THUS BRPH9 IS TRUE			
2483	01	008A2	FFFFFFFA	A	BIR02	DATA	-6	NBRANCH
2484	01	008A3	65C00047			BIR,12	BRANCH	
2485	01	008A4	00000136			K	0,0,0,SETPSW	
2486	01	008A5	00000169			K	0,0,0,L0C+2	
2487	01	008A6	FFFFFFFF	A		DATA	-1	
2488	01	008A7	00000000	A		DATA	0	
2489						PAGE		
2490					** S/PH10 IS TRUE FROM FUBDR.PH1.SGTZ			
2491	01	008A8	FFFFFFFA	A	BDR01	DATA	-6	BRANCH
2492	01	008A9	64C00047			BDR,12	BRANCH	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND          COMMENTS
2493      01            008AA          00000136                          K          0,0,0,SETPSW
2494      01            008AB          00000048                          K          0,0,0,BRANCH+1
2495      01            008AC          00000002         A                DATA       2
2496      01            008AD          00000001         A                DATA       1
2497                                                                      ** S/PH10 IS FALSE BECAUSE SGTZ IS FALSE
2498      01            008AE          FFFFFFFA         A       BDR02    DATA       -6               NBRANCH
2499      01            008AF          64C00047                          BDR,12     BRANCH
2500      01            008B0          00000136                          K          0,0,0,SETPSW
2501      01            008B1          00000169                          K          0,0,0,L8C+2
2502      01            008B2          FFFFFFFF         A                DATA       -1
2503      01            008B3          FFFFFFFE         A                DATA       -2
2504                                                                      PAGE
2505      01            008B4          FFFFFFFA         A       BAL01    DATA       -6               BAL C     BRANCH
2506      01            008B5          6AC00047                          BAL,12     BRANCH
2507      01            008B6          F7300136                          K          15,7,3,SETPSW
2508      01            008B7          F7300048                          K          15,7,3,BRANCH+1
2509      01            008B8          08C00000         A                K          0,8,12,0
2510      01            008B9          00000168                          DATA       L8C+1
2511      01            008BA          FFFFFFF6         A       BAL02    DATA       -10              BAL D  X  MEMORY
2512      01            008BB          6AD325B3                          BAL,13     MEMORY-X'DEAD',1
2513      01            008BC          01300136                          K          0,1,3,SETPSW
2514      01            008BD          01300461                          K          0,1,3,MEMORY+1
2515      01            008BE          0000DEAD         A                DATA       X'DEAD'
2516      01            008BF          0000DEAD         A                DATA       X'DEAD'
2517      01            008C0          0F000464                          XPSD,0     RETURN
2518      01            008C1          0F000464                          XPSD,0     RETURN
2519      01            008C2          11112222         A                DATA       X'11112222'
2520      01            008C3          00000168                          DATA       L8C+1
2521      01            008C4          FFFFFFF8         A       BAL03    DATA       -8               BAL D  *  MEMORY
2522      01            008C5          EAC0045A                          BAL,12     *IA
2523      01            008C6          00000136                          DATA       SETPSW
2524      01            008C7          00000461                          DATA       MEMORY+1
2525      01            008C8          FFFFFFFF         A                DATA       -1
2526      01            008C9          00000168                          DATA       L8C+1
2527      01            008CA          0F000464                          XPSD,0     RETURN
2528      01            008CB          0F000464                          XPSD,0     RETURN
2529      01            008CC          FFFFFFFA         A       BAL04    DATA       -6               BAL C  *X BRANCH
2530      01            008CD          EAC20460                          BAL,12     *MEMORY,1
2531      01            008CE          F7300136                          K          15,7,3,SETPSW
2532      01            008CF          F7300048                          K          15,7,3,BRANCH+1
2533      01            008D0          00000047                          DATA       BRANCH
2534      01            008D1          00000168                          DATA       L8C+1
2535                                                                      PAGE
2536                                                                      ** BAL T8 N8NEXSISTENT MEMORY. C(R) WILL BE M8DIFIED AND TRAP WILL 8CCUR
2537                                                                      *  8N FIRST PASS  THE INST IS  B  END.  IF N8N-EXSISTENT MEMORY IS    *B
2538                                                                      *  PRESENT A  BAL,12  -----  WILL BE INSERTED.                        *B
2539      01            008D2          FFFFFFFA         A       BAL05    DATA       -6
2540      01            008D3          6AC1FFFF         A                BAL,12     X'1FFFF'
2541      01            008D4          B0000188                          K          11,0,0,SI9NA8
2542      01            008D5          F0000067                          K          15,0,0,NEARET+1
2543      01            008D6          00000000         A                DATA       0
2544      01            008D7          00000168                          DATA       L8C+1
2545                                                                      PAGE
2546      01            008D8          FFFFFFF8         A       LH01     DATA       -8               LH    HW 0    SE=1 1=1,1=0
2547      01            008D9          52C00460                          LH,12      MEMORY
2548      01            008DA          70200136                          K          7,0,2,SETPSW
2549      01            008DB          50200169                          K          5,0,2,L8C+2
2550      01            008DC          FFFF0000         A                DATA       X'FFFF0000'
2551      01            008DD          FFFFFFFF         A                DATA       -1
2552      01            008DE          FFFF3210         A                DATA       X'FFFF3210'
2553      01            008DF          FFFF3210         A                DATA       X'FFFF3210'
2554      01            008E0          FFFFFFF8         A       LH02     DATA       -8               LH    HW 0    SE=1 1=0,0=1
2555      01            008E1          52C00460                          LH,12      MEMORY
2556      01            008E2          E0300136                          K          14,0,3,SETPSW
2557      01            008E3          D0300169                          K          13,0,3,L8C+2
2558      01            008E4          00007FFF         A                DATA       X'7FFF'
2559      01            008E5          FFFF8000         A                DATA       X'FFFF8000'
2560      01            008E6          80000000         A                DATA       X'80000000'
2561      01            008E7          80000000         A                DATA       X'80000000'
2562      01            008E8          FFFFFFF8         A       LH03     DATA       -8               LH *  HW 0    SE=0 0=1,1=1
2563      01            008E9          D2C0045A                          LH,12      *IA
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2564	01	008EA	F7300136			K	15,7,3,SETPSW	
2565	01	008EB	E7300169			K	14,7,3,L8C+2	
2566	01	008EC	FFFFFFFF	A		DATA	-1	
2567	01	008ED	00007FFF	A		DATA	X'7FFF'	
2568	01	008EE	7FFF0000	A		DATA	X'7FFF0000'	
2569	01	008EF	7FFF0000	A		DATA	X'7FFF0000'	
2570						PAGE		
2571	01	008F0	FFFFFFFA	A	LH04	DATA	-6	LH HW 0 SE=0 0=0,0=1
2572	01	008F1	52C0000C	A		LH,12	12	
2573	01	008F2	30300136			K	3,0,3,SETPSW	
2574	01	008F3	00300169			K	0,0,3,L8C+2	
2575	01	008F4	0000FFFF	A		DATA	X'FFFF'	
2576	01	008F5	00000000	A		DATA	0	
2577	01	008F6	FFFFFFFA	A	LH05	DATA	-6	LH X HW 1 SE=0 0=1,0=0
2578	01	008F7	52CE000C	A		LH,12	12,7	
2579	01	008F8	77300136			K	7,7,3,SETPSW	
2580	01	008F9	67300169			K	6,7,3,L8C+2	
2581	01	008FA	FFFE0001	A		DATA	X'FFFE0001'	
2582	01	008FB	00000001	A		DATA	1	
2583						PAGE		
2584	01	008FC	FFFFFFF8	A	LH06	DATA	-8	LH X HW 1 SE=0 0=0,1=1
2585	01	008FD	52C30461			LH,12	MEMORY=X'FFFF',1	
2586	01	008FE	70300136			K	7,0,3,SETPSW	
2587	01	008FF	60300169			K	6,0,3,L8C+2	
2588	01	00900	0001FFFF	A		DATA	X'1FFFF'	
2589	01	00901	00007FFF	A		DATA	X'7FFF'	
2590	01	00902	00007FFF	A		DATA	X'7FFF'	
2591	01	00903	00007FFF	A		DATA	X'7FFF'	
2592	01	00904	FFFFFFF4	A	LH07	DATA	-12	LH *X HW=1 SE=1 1=1,0=1
2593	01	00905	D2D20460			LH,13	*MEMORY,1	
2594	01	00906	F7300136			K	15,7,3,SETPSW	
2595	01	00907	D7300169			K	13,7,3,L8C+2	
2596	01	00908	000006A3	A		DATA	2*(MEMORY-CYCLE)+3	
2597	01	00909	000006A3	A		DATA	2*(MEMORY-CYCLE)+3	
2598	01	0090A	00000110			DATA	CYCLE	
2599	01	0090B	00000110			DATA	CYCLE	
2600	01	0090C	FFFFFFFF	A		DATA	-1	
2601	01	0090D	FFFF8000	A		DATA	X'FFFF8000'	
2602	01	0090E	00008000	A		DATA	X'8000'	
2603	01	0090F	00008000	A		DATA	X'8000'	
2604	01	00910	FFFFFFF4	A	LH08	DATA	-12	LH *X HW=1 SE=1 1=0,1=0
2605	01	00911	D2D20460			LH,13	*MEMORY,1	
2606	01	00912	03300136			K	0,3,3,SETPSW	
2607	01	00913	13300169			K	1,3,3,L8C+2	
2608	01	00914	00000235			DATA	HA(CLEAR)+3	
2609	01	00915	00000235			DATA	HA(CLEAR)+3	
2610	01	00916	00000347	A		DATA	MEMORY-CLEAR	
2611	01	00917	00000347	A		DATA	MEMORY-CLEAR	
2612	01	00918	00000000	A		DATA	0	
2613	01	00919	FFFFFFFF	A		DATA	-1	
2614	01	0091A	1234FFFF	A		DATA	X'1234FFFF'	
2615	01	0091B	1234FFFF	A		DATA	X'1234FFFF'	
2616						PAGE		
2617	01	0091C	FFFFFFF8	A	LB01	DATA	-8	LB B 0 0=0,1=0
2618	01	0091D	72C00460			LB,12	MEMORY	
2619	01	0091E	F7200136			K	15,7,2,SETPSW	
2620	01	0091F	E7200169			K	14,7,2,L8C+2	
2621	01	00920	00000000	A		DATA	0	
2622	01	00921	000000FF	A		DATA	X'FF'	
2623	01	00922	FF000000	A		DATA	X'FF000000'	
2624	01	00923	FF000000	A		DATA	X'FF000000'	
2625	01	00924	FFFFFFF8	A	LB02	DATA	-8	LB B 0 0=0,0=1
2626	01	00925	72C00460			LB,12	MEMORY	
2627	01	00926	F7300136			K	15,7,3,SETPSW	
2628	01	00927	C7300169			K	12,7,3,L8C+2	
2629	01	00928	000000FF	A		DATA	X'FF'	
2630	01	00929	00000000	A		DATA	0	
2631	01	0092A	00FFFFFF	A		DATA	X'FFFFFF'	
2632	01	0092B	00FFFFFF	A		DATA	X'FFFFFF'	
2633	01	0092C	FFFFFFF8	A	LB03	DATA	-8	LB X B 0 0=1,0=0
2634	01	0092D	72C20480			LB,12	MEMORY+X'20',1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2635	01	0092E	F7300136			K	15,7,3,SETPSW	
2636	01	0092F	C7300169			K	12,7,3,LBC+2	
2637	01	00930	FFFFFF80	A		DATA	X'FFFFFF80'	
2638	01	00931	00000000	A		DATA	0	
2639	01	00932	00FFFFFF	A		DATA	X'FFFFFF'	
2640	01	00933	00FFFFFF	A		DATA	X'FFFFFF'	
2641	01	00934	FFFFFFF8	A	LB04	DATA	-8	LB * BYTE 0-1,1-1
2642	01	00935	F2C0045A			LB,12	*IA	
2643	01	00936	00200136			K	0,0,2,SETPSW	
2644	01	00937	20200169			K	2,0,2,LBC+2	
2645	01	00938	FFFFFFFF	A		DATA	-1	
2646	01	00939	000000FF	A		DATA	X'FF'	
2647	01	0093A	FF000000	A		DATA	X'FF000000'	
2648	01	0093B	FF000000	A		DATA	X'FF000000'	
2649						PAGE		
2650	01	0093C	FFFFFFF8	A	LB05	DATA	-8	LB * B 0 0-1,0-1,1-1
2651	01	0093D	F2C0045A			LB,12	*IA	
2652	01	0093E	37300136			K	3,7,3,SETPSW	
2653	01	0093F	27300169			K	2,7,3,LBC+2	
2654	01	00940	FFFFFFFF	A		DATA	-1	
2655	01	00941	000000A2	A		DATA	X'A2'	
2656	01	00942	A2FFFFFF	A		DATA	X'A2FFFFFF'	
2657	01	00943	A2FFFFFF	A		DATA	X'A2FFFFFF'	
2658	01	00944	FFFFFFF6	A	LB06	DATA	-10	LB X B 2
2659	01	00945	72D2046A			LB,13	PASS,1	
2660	01	00946	50300136			K	5,0,3,SETPSW	
2661	01	00947	60300169			K	6,0,3,LBC+2	
2662	01	00948	FFFFFFDA	A		DATA	4*(MEMORY-PASS)+2	
2663	01	00949	FFFFFFDA	A		DATA	4*(MEMORY-PASS)+2	
2664	01	0094A	FFFF89FF	A		DATA	X'FFFF89FF'	
2665	01	0094B	FFFF89FF	A		DATA	X'FFFF89FF'	
2666	01	0094C	FFFFFFFF	A		DATA	-1	
2667	01	0094D	00000089	A		DATA	X'89'	
2668	01	0094E	FFFFFFFA	A	LB07	DATA	-6	LB X B 1
2669	01	0094F	72C3800D	A		LB,12	12+X'18001',1	
2670	01	00950	15200136			K	1,5,2,SETPSW	
2671	01	00951	25200169			K	2,5,2,LBC+2	
2672	01	00952	FF99FFFD	A		DATA	X'FF99FFFD'	
2673	01	00953	00000099	A		DATA	X'99'	
2674	01	00954	FFFFFFF8	A	LB08	DATA	-8	LB X B 3
2675	01	00955	72C20460			LB,12	MEMORY,1	
2676	01	00956	01300136			K	0,1,3,SETPSW	
2677	01	00957	21300169			K	2,1,3,LBC+2	
2678	01	00958	00000003	A		DATA	3	
2679	01	00959	000000FF	A		DATA	X'FF'	
2680	01	0095A	FFFFFFFF	A		DATA	-1	
2681	01	0095B	FFFFFFFF	A		DATA	-1	
2682						PAGE		
2683	01	0095C	FFFFFFF4	A	LB09	DATA	-12	LB *,IX
2684	01	0095D	F2CE0460			LB,12	*MEMORY,7	
2685	01	0095E	10000136			K	1,0,0,SETPSW	
2686	01	0095F	20000169			K	2,0,0,LBC+2	
2687	01	00960	FFFFFFFF	A		DATA	-1,X'27',MEMORY+1,MEMORY+1,X'F027F2F3',X'F027F2F3'	
	01	00961	00000027	A				
	01	00962	00000461					
	01	00963	00000461					
	01	00964	F027F2F3	A				
	01	00965	F027F2F3	A				
2688	01	00966	F027F2F3	A		DATA	X'F027F2F3',X'F027F2F3'	
	01	00967	F027F2F3	A				
2689						PAGE		
2690	01	00968	FFFFFFF6	A	LD01	DATA	-10	LD RE ME
2691	01	00969	12C00460			LD,12	MEMORY	
2692	01	0096A	F7300136			K	15,7,3,SETPSW	
2693	01	0096B	C7300169			K	12,7,3,LBC+2	
2694	01	0096C	FFFFFFFF	A		DATA	-1	
2695	01	0096D	00000000	A		DATA	0	
2696	01	0096E	00000000	A		DATA	0	
2697	01	0096F	00000000	A		DATA	0	
2698	01	00970	FFFFFFFF	A		DATA	-1	
2699	01	00971	00000000	A		DATA	0	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2700	01	00972	FFFFFFF4	A	LD02	DATA	-12	LD * RE ME
2701	01	00973	92C0045A			LD,12	*1A	
2702	01	00974	77300136			K	7,7,3,SETPSW	
2703	01	00975	57300169			K	5,7,3,L0C+2	
2704	01	00976	00000000	A		DATA	0	
2705	01	00977	FFFFFFFF	A		DATA	-1	
2706	01	00978	FFFFFFFF	A		DATA	-1	
2707	01	00979	FFFFFFFF	A		DATA	-1	
2708	01	0097A	00000000	A		DATA	0	
2709	01	0097B	FFFFFFFF	A		DATA	-1	
2710	01	0097C	FFFFFFFF	A		DATA	-1	
2711	01	0097D	FFFFFFFF	A		DATA	-1	
2712	01	0097E	FFFFFFF4	A	LD03	DATA	-12	LD X RE ME
2713	01	0097F	12C20048			LD,12	BRANCH+1,1	
2714	01	00980	07300136			K	0,7,3,SETPSW	
2715	01	00981	27300169			K	2,7,3,L0C+2	
2716	01	00982	0000020C	A		DATA	(MEM0RY-BRANCH-1)/2	
2717	01	00983	00000000	A		DATA	0	
2718	01	00984	00000000	A		DATA	0	
2719	01	00985	00000000	A		DATA	0	
2720	01	00986	ACEBEDAD	A		DATA	X'ACEBEDAD'	
2721	01	00987	BEADFADE	A		DATA	X'BEADFADE'	
2722	01	00988	BEADFADE	A		DATA	X'BEADFADE'	
2723	01	00989	BEADFADE	A		DATA	X'BEADFADE'	
2724						PAGE		
2725	01	0098A	FFFFFFF4	A	LD04	DATA	-12	LD * RE ME
2726	01	0098B	92C0045A			LD,12	*1A	
2727	01	0098C	F7300136			K	15,7,3,SETPSW	
2728	01	0098D	D7300169			K	13,7,3,L0C+2	
2729	01	0098E	0000020C	A		DATA	(MEM0RY-BRANCH-1)/2	
2730	01	0098F	F234ABCD	A		DATA	X'F234ABCD'	
2731	01	00990	F234ABCD	A		DATA	X'F234ABCD'	
2732	01	00991	F234ABCD	A		DATA	X'F234ABCD'	
2733	01	00992	F2397572	A		DATA	X'F2397572'	
2734	01	00993	1E2783F9	A		DATA	X'1E2783F9'	
2735	01	00994	1E2783F9	A		DATA	X'1E2783F9'	
2736	01	00995	1E2783F9	A		DATA	X'1E2783F9'	
2737	01	00996	FFFFFFF4	A	LD05	DATA	-12	LD R0 M0
2738	01	00997	12D00461			LD,13	MEM0RY+1	
2739	01	00998	D7300136			K	13,7,3,SETPSW	
2740	01	00999	E7300169			K	14,7,3,L0C+2	
2741	01	0099A	ABCDEF01	A		DATA	X'ABCDEF01'	
2742	01	0099B	ABCDEF01	A		DATA	X'ABCDEF01'	
2743	01	0099C	543210FE	A		DATA	X'543210FE'	
2744	01	0099D	543210FE	A		DATA	X'543210FE'	
2745	01	0099E	12345678	A		DATA	X'12345678'	
2746	01	0099F	543210FE	A		DATA	X'543210FE'	
2747	01	009A0	EDCBA987	A		DATA	X'EDCBA987'	
2748	01	009A1	EDCBA987	A		DATA	X'EDCBA987'	
2749						PAGE		
2750	01	009A2	FFFFFFF4	A	LD06	DATA	-12	LD X R0 ME
2751	01	009A3	12D2CCA2			LD,13	MEM0RY-2*X'9BDF',1	
2752	01	009A4	27300136			K	2,7,3,SETPSW	
2753	01	009A5	17300169			K	1,7,3,L0C+2	
2754	01	009A6	13579BDF	A		DATA	X'13579BDF'	
2755	01	009A7	13579BDF	A		DATA	X'13579BDF'	
2756	01	009A8	ECA86420	A		DATA	X'ECA86420'	
2757	01	009A9	ECA86420	A		DATA	X'ECA86420'	
2758	01	009AA	2468ACE0	A		DATA	X'2468ACE0'	
2759	01	009AB	ECA86420	A		DATA	X'ECA86420'	
2760	01	009AC	DB97531F	A		DATA	X'DB97531F'	
2761	01	009AD	DB97531F	A		DATA	X'DB97531F'	
2762	01	009AE	FFFFFFF4	A	LD07	DATA	-12	LD * R0 ME
2763	01	009AF	92D0045A			LD,13	*1A	
2764	01	009B0	07300136			K	0,7,3,SETPSW	
2765	01	009B1	27300169			K	2,7,3,L0C+2	
2766	01	009B2	FFFFFFFD	A		DATA	-3	
2767	01	009B3	FFFFFFFD	A		DATA	-3	
2768	01	009B4	00000000	A		DATA	0	
2769	01	009B5	00000000	A		DATA	0	
2770	01	009B6	FFFFFFFF	A		DATA	-1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2771	01	009B7	00000000	A		DATA	0	
2772	01	009B8	00000001	A		DATA	1	
2773	01	009B9	00000001	A		DATA	1	
2774						PAGE		
2775	01	009BA	FFFFFFF4	A	LD08	DATA	-12	LD MØ
2776	01	009BB	12C00461			LD,12	MEMØRY+1	
2777	01	009BC	97300136			K	9,7,3,SETPSW	
2778	01	009BD	A7300169			K	10,7,3,LØC+2	
2779	01	009BE	EDCBA987	A		DATA	X'EDCBA987'	
2780	01	009BF	12345678	A		DATA	X'12345678'	
2781	01	009C0	12345678	A		DATA	X'12345678'	
2782	01	009C1	12345678	A		DATA	X'12345678'	
2783	01	009C2	6543210F	A		DATA	X'6543210F'	
2784	01	009C3	9ABCDEFØ	A		DATA	X'9ABCDEFØ'	
2785	01	009C4	9ABCDEFØ	A		DATA	X'9ABCDEFØ'	
2786	01	009C5	9ABCDEFØ	A		DATA	X'9ABCDEFØ'	
2787	01	009C6	FFFFFFF4	A	LD09	DATA	-12	LD RE RE
2788	01	009C7	12C00008	A		LD,12	8	
2789	01	009C8	70000136			K	7,0,0,SETPSW	
2790	01	009C9	60000169			K	6,0,0,LØC+2	
2791	01	009CA	12345678	A		DATA	X'12345678'	
2792	01	009CB	0FEDCBA9	A		DATA	X'0FEDCBA9'	
2793	01	009CC	0FEDCBA9	A		DATA	X'0FEDCBA9'	
2794	01	009CD	0FEDCBA9	A		DATA	X'0FEDCBA9'	
2795	01	009CE	9ABCDEFØ	A		DATA	X'9ABCDEFØ'	
2796	01	009CF	87654321	A		DATA	X'87654321'	
2797	01	009D0	87654321	A		DATA	X'87654321'	
2798	01	009D1	87654321	A		DATA	X'87654321'	
2799						PAGE		
2800	01	009D2	FFFFFFF4	A	LD10	DATA	-12	LD RØ RE
2801	01	009D3	12D00008	A		LD,13	8	
2802	01	009D4	10000136			K	1,0,0,SETPSW	
2803	01	009D5	20000169			K	2,0,0,LØC+2	
2804	01	009D6	13579BDF	A		DATA	X'13579BDF'	
2805	01	009D7	13579BDF	A		DATA	X'13579BDF'	
2806	01	009D8	02468ACE	A		DATA	X'02468ACE'	
2807	01	009D9	02468ACE	A		DATA	X'02468ACE'	
2808	01	009DA	ECA86420	A		DATA	X'ECA86420'	
2809	01	009DB	02468ACE	A		DATA	X'02468ACE'	
2810	01	009DC	ECA86420	A		DATA	X'ECA86420'	
2811	01	009DD	ECA86420	A		DATA	X'ECA86420'	
2812	01	009DE	FFFFFFF4	A	LD11	DATA	-12	LD RE RØ
2813	01	009DF	12C00009	A		LD,12	9	
2814	01	009E0	10000136			K	1,0,0,SETPSW	
2815	01	009E1	20000169			K	2,0,0,LØC+2	
2816	01	009E2	ABCDEF01	A		DATA	X'ABCDEF01'	
2817	01	009E3	12347956	A		DATA	X'12347956'	
2818	01	009E4	12347956	A		DATA	X'12347956'	
2819	01	009E5	12347956	A		DATA	X'12347956'	
2820	01	009E6	10345768	A		DATA	X'10345768'	
2821	01	009E7	ACDEFB29	A		DATA	X'ACDEFB29'	
2822	01	009E8	ACDEFB29	A		DATA	X'ACDEFB29'	
2823	01	009E9	ACDEFB29	A		DATA	X'ACDEFB29'	
2824						PAGE		
2825	01	009EA	FFFFFFF4	A	LD12	DATA	-12	LD RØ RØ
2826	01	009EB	12D00009	A		LD,13	9	
2827	01	009EC	00000136			K	0,0,0,SETPSW	
2828	01	009ED	20000169			K	2,0,0,LØC+2	
2829	01	009EE	11111111	A		DATA	X'11111111'	
2830	01	009EF	11111111	A		DATA	X'11111111'	
2831	01	009F0	5AB91233	A		DATA	X'5AB91233'	
2832	01	009F1	5AB91233	A		DATA	X'5AB91233'	
2833	01	009F2	33445566	A		DATA	X'33445566'	
2834	01	009F3	5AB91233	A		DATA	X'5AB91233'	
2835	01	009F4	FFFFFFFF	A		DATA	-1	
2836	01	009F5	FFFFFFFF	A		DATA	-1	
2837	01	009F6	FFFFFFF4	A	LD13	DATA	-12	LD *,IX
2838	01	009F7	92CE0460			LD,12	*MEMØRY,7	
2839	01	009F8	00000136			K	0,0,0,SETPSW	
2840	01	009F9	20000169			K	2,0,0,LØC+2	
2841	01	009FA	FFFFFFFF	A		DATA	-1,MEMØRY-1,MEMØRY-1,MEMØRY-1,-1,-16,-16,-16	

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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL    OPERATION  OPERAND                  COMMENTS
NO.   KEY       ADDRESS   CONTENTS
        01 009FB  0000045F
        01 009FC  0000045F
        01 009FD  0000045F
        01 009FE  FFFFFFFF  A
        01 009FF  FFFFFFF0  A
        01 00A00  FFFFFFF0  A
        01 00A01  FFFFFFF0  A
2842                                        PAGE
2843                                ** LW WITH INDEXING
2844    01 00A02  FFFFFFF4  A       LWIX    DATA       -12
2845    01 00A03  32CE000C  A               LW,12      12,7
2846    01 00A04  00000136                  K          0,0,0,SETPSW
2847    01 00A05  10000169                  K          1,0,0,L8C+2
2848    01 00A06  00000000  A               DATA       0,-1,1,1,-1,-1,MEM8RY,MEM8RY
        01 00A07  FFFFFFFF  A
        01 00A08  00000001  A
        01 00A09  00000001  A
        01 00A0A  FFFFFFFF  A
        01 00A0B  FFFFFFFF  A
        01 00A0C  00000460
        01 00A0D  00000460
2849                                ** LW WITH INDEXING AND IA
2850    01 00A0E  FFFFFFF4  A       LWIXIA  DATA       -12
2851    01 00A0F  B2D2045A                  LW,13      *IA,1
2852    01 00A10  0C000136                  K          0,0,0,SETPSW
2853    01 00A11  20000169                  K          2,0,0,L8C+2
2854    01 00A12  00000001  A               DATA       1,1,0,0,-1,4,4,4
        01 00A13  00000001  A
        01 00A14  00000000  A
        01 00A15  00000000  A
        01 00A16  FFFFFFFF  A
        01 00A17  00000004  A
        01 00A18  00000004  A
        01 00A19  00000004  A
2855                                        PAGE
2856    01 00A1A  FFFFFFFA  A       LI01    DATA       -6              LI      SE=1  1=0,1=0
2857    01 00A1B  22C9FFFF  A               LI,12      X'9FFFF'
2858    01 00A1C  F7300136                  K          15,7,3,SETPSW
2859    01 00A1D  D7300169                  K          13,7,3,L8C+2
2860    01 00A1E  00000000  A               DATA       0
2861    01 00A1F  FFF9FFFF  A               DATA       X'FFF9FFFF'
2862    01 00A20  FFFFFFFA  A       LI02    DATA       -6              LI      SE=0  0=1,0=1
2863    01 00A21  22C40001  A               LI,12      X'40001'
2864    01 00A22  07300136                  K          0,7,3,SETPSW
2865    01 00A23  27300169                  K          2,7,3,L8C+2
2866    01 00A24  FFFFFFFF  A               DATA       -1
2867    01 00A25  00040001  A               DATA       X'40001'
2868    01 00A26  FFFFFFFA  A       LI03    DATA       -6              LI      SE=1  1=1,0=0
2869    01 00A27  22C80000  A               LI,12      X'80000'
2870    01 00A28  F7300136                  K          15,7,3,SETPSW
2871    01 00A29  D7300169                  K          13,7,3,L8C+2
2872    01 00A2A  FFF00000  A               DATA       X'FFF00000'
2873    01 00A2B  FFF80000  A               DATA       X'FFF80000'
2874    01 00A2C  FFFFFFFA  A       LI04    DATA       -6              LI      SE=0  0=0 1=1
2875    01 00A2D  22C7FFFF  A               LI,12      X'7FFFF'
2876    01 00A2E  F7300136                  K          15,7,3,SETPSW
2877    01 00A2F  E7300169                  K          14,7,3,L8C+2
2878    01 00A30  000FFFFF  A               DATA       X'FFFFF'
2879    01 00A31  0007FFFF  A               DATA       X'7FFFF'
2880    01 00A32  FFFFFFFA  A       LI05    DATA       -6              LI *
2881    01 00A33  A2C00460                  LI,12      *MEM8RY
2882    01 00A34  173001BC                  K          1,7,3,SI9NA8
2883    01 00A35  97300068                  K          9,7,3,NEIRET+1
2884    01 00A36  FFFFFFFF  A               DATA       -1
2885    01 00A37  FFFFFFFF  A               DATA       -1
2886                                        PAGE
2887    01 00A38  FFFFFFF6  A       LS01    DATA       -10
2888    01 00A39  4AC00460                  LS,12      MEM8RY           PH1 : C(S)= EW*RU1  = 18181818
2889    01 00A3A  F7300136                  K          15,7,3,SETPSW
2890    01 00A3B  D7300169                  K          13,7,3,L8C+2     PH3 : C(S)= R*NRU1  = 81818181
2891    01 00A3C  C3C3C3C3  A               DATA       X'C3C3C3C3'
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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL   OPERATION  OPERAND                  COMMENTS
NO.   KEY       ADDRESS   CONTENTS
2892  01 00A3D  99999999  A                           DATA       X'99999999'          PH4 : C(S)= PH1+PH3 = 99999999
2893  01 00A3E  3C3C3C3C  A                           DATA       X'3C3C3C3C'
2894  01 00A3F  3C3C3C3C  A                           DATA       X'3C3C3C3C'
2895  01 00A40  5A5A5A5A  A                           DATA       X'5A5A5A5A'
2896  01 00A41  5A5A5A5A  A                           DATA       X'5A5A5A5A'
2897  01 00A42  FFFFFFF6  A           LS02            DATA       -10
2898  01 00A43  4AC00460              LS,12           MEMORY               PH1 : C(S)= EW*RU1  = 81818181
2899  01 00A44  07300136              K               0,7,3,SETPSW
2900  01 00A45  17300169              K               1,7,3,L0C+2          PH3 : C(S)= R*NRU1  = 18181818
2901  01 00A46  3C3C3C3C  A                           DATA       X'3C3C3C3C'
2902  01 00A47  99999999  A                           DATA       X'99999999'          PH4 : C(S)= PH1+PH3 =99999999
2903  01 00A48  C3C3C3C3  A                           DATA       X'C3C3C3C3'
2904  01 00A49  C3C3C3C3  A                           DATA       X'C3C3C3C3'
2905  01 00A4A  A5A5A5A5  A                           DATA       X'A5A5A5A5'
2906  01 00A4B  A5A5A5A5  A                           DATA       X'A5A5A5A5'
2907  01 00A4C  FFFFFFF6  A           LS03            DATA       -10
2908  01 00A4D  4AC00460              LS,12           MEMORY               PH1 : C(S)= EW*RU1  = 24242424
2909  01 00A4E  F7300136              K               15,7,3,SETPSW
2910  01 00A4F  E7300169              K               14,7,3,L0C+2         PH3 : C(S)= R*NRU1  = 42424242
2911  01 00A50  5A5A5A5A  A                           DATA       X'5A5A5A5A'
2912  01 00A51  66666666  A                           DATA       X'66666666'          PH4 : C(S)= PH1+PH3 = 66666666
2913  01 00A52  A5A5A5A5  A                           DATA       X'A5A5A5A5'
2914  01 00A53  A5A5A5A5  A                           DATA       X'A5A5A5A5'
2915  01 00A54  3C3C3C3C  A                           DATA       X'3C3C3C3C'
2916  01 00A55  3C3C3C3C  A                           DATA       X'3C3C3C3C'
2917                                                  PAGE
2918  01 00A56  FFFFFFF6  A           LS04            DATA       -10
2919  01 00A57  4AC00460              LS,12           MEMORY               PH1 : C(S)= EW*RU1  = 42424242
2920  01 00A58  07300136              K               0,7,3,SETPSW
2921  01 00A59  27300169              K               2,7,3,L0C+2          PH3 : C(S)= R*NRU1  = 24242424
2922  01 00A5A  A5A5A5A5  A                           DATA       X'A5A5A5A5'
2923  01 00A5B  66666666  A                           DATA       X'66666666'          PH4 : C(S)= PH1+PH3 = 66666666
2924  01 00A5C  5A5A5A5A  A                           DATA       X'5A5A5A5A'
2925  01 00A5D  5A5A5A5A  A                           DATA       X'5A5A5A5A'
2926  01 00A5E  C3C3C3C3  A                           DATA       X'C3C3C3C3'
2927  01 00A5F  C3C3C3C3  A                           DATA       X'C3C3C3C3'
2928                                  ** ODD R FIELD CAUSING R AND RU1 TO BE THE SAME. ALS9 USES R AS EW
2929  01 00A60  FFFFFFFA  A           LS05            DATA       -6
2930  01 00A61  4AD0000C  A                           LS,13      12                PH1 : C(S)= EW*RU1  = 0
2931  01 00A62  37300136              K               3,7,3,SETPSW
2932  01 00A63  07300169              K               0,7,3,L0C+2          PH3 : C(S)= R*NRU1  = 0
2933  01 00A64  FFFFFFFF  A                           DATA       -1
2934  01 00A65  FFFFFFFF  A                           DATA       -1                PH4 : C(S)= PH1+PH3 = 0
2935                                                  PAGE
2936  01 00A66  FFFFFFFA  A           LCF06           DATA       -6                LCF 3  X 10 INTO E7 = 10 BYTE 1
2937  01 00A67  70320041              LCF,3           BRANCH=6,1
2938  01 00A68  E7300136              K               14,7,3,SETPSW
2939  01 00A69  17300169              K               1,7,3,L0C+2
2940  01 00A6A  1117FF2D  A                           DATA       X'1117FF2D'
2941  01 00A6B  1117FF2D  A                           DATA       X'1117FF2D'
2942  01 00A6C  FFFFFFF4  A           LCF07           DATA       -12               LCF 3 *X FF INTO 00 = F7 BYTE 3
2943  01 00A6D  F0320460              LCF,3           *MEMORY,1
2944  01 00A6E  00300136              K               0,0,3,SETPSW
2945  01 00A6F  F7300169              K               15,7,3,L0C+2
2946  01 00A70  00000123                              DATA       BA(BRANCH)+7
2947  01 00A71  00000123                              DATA       BA(BRANCH)+7
2948  01 00A72  00000419  A                           DATA       MEMORY*BRANCH
2949  01 00A73  00000419  A                           DATA       MEMORY*BRANCH
2950  01 00A74  4537FE21  A                           DATA       X'4537FE21'
2951  01 00A75  4537FE21  A                           DATA       X'4537FE21'
2952  01 00A76  000000FF  A                           DATA       X'FF'
2953  01 00A77  000000FF  A                           DATA       X'FF'
2954  01 00A78  FFFFFFF8  A           LCF08           DATA       -8                LCF 3  X 56 INTO A1 = 56 BYTE 2
2955  01 00A79  70320119              LCF,3           CLEAR,1
2956  01 00A7A  A1300136              K               10,1,3,SETPSW
2957  01 00A7B  56300169              K               5,6,3,L0C+2
2958  01 00A7C  00000D1E  A                           DATA       4*(MEMORY*CLEAR)+2
2959  01 00A7D  00000D1E  A                           DATA       4*(MEMORY*CLEAR)+2
2960  01 00A7E  12345678  A                           DATA       X'12345678'
2961  01 00A7F  12345678  A                           DATA       X'12345678'
2962  01 00A80  FFFFFFF8  A           LCF09           DATA       -8
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
2963	01	00A81	7CC00460			LCF,12	MEMORY	
2964	01	00A82	00000136			K	0,0,0,SETPSW	
2965	01	00A83	00000169			K	0,0,0,L0C+2	
2966	01	00A84	00000000	A		DATA	0,0,-1,-1	
	01	00A85	00000000	A				
	01	00A86	FFFFFFFF	A				
	01	00A87	FFFFFFFF	A				
2967						PAGE		
2968	01	00A88	FFFFFFFC	A	LCFI01	DATA	-4	LCFI 0 FF INT0 00 IS 00
2969	01	00A89	020000FF	A		LCFI,0	X'FF'	
2970	01	00A8A	00000136			DATA	SETPSW	
2971	01	00A8B	00000169			DATA	L0C+2	
2972	01	00A8C	FFFFFFFC	A	LCFI02	DATA	-4	LCFI 3 00 INT0 F7 IS 00
2973	01	00A8D	02300000	A		LCFI,3	0	
2974	01	00A8E	F7300136			K	15,7,3,SETPSW	
2975	01	00A8F	00300169			K	0,0,3,L0C+2	
2976	01	00A90	FFFFFFFC	A	LCFI03	DATA	-4	LCFI 2 57 INT0 A0 IS 50
2977	01	00A91	02200057	A		LCFI,2	X'57'	
2978	01	00A92	A0200136			K	10,0,2,SETPSW	
2979	01	00A93	50200169			K	5,0,2,L0C+2	
2980	01	00A94	FFFFFFFC	A	LCFI04	DATA	-4	LCFI 1 D9 INT0 26 IS 21
2981	01	00A95	02100009	A		LCFI,1	X'D9'	
2982	01	00A96	26100136			K	2,6,1,SETPSW	
2983	01	00A97	21100169			K	2,1,1,L0C+2	
2984	01	00A98	FFFFFFF8	A	LCFI05	DATA	-8	LCFI 3 FF INT0 00 IS FF INDEX
2985	01	00A99	023000FF	A		LCFI,3	X'FF',1	
2986	01	00A9A	00000136			DATA	SETPSW	
2987	01	00A9B	F7000169			K	15,7,0,L0C+2	
2988	01	00A9C	12345678	A		DATA	X'12345678'	
2989	01	00A9D	12345678	A		DATA	X'12345678'	
2990	01	00A9E	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2991	01	00A9F	9ABCDEF0	A		DATA	X'9ABCDEF0'	
2992	01	00AA0	FFFFFFFC	A	LCFI06	DATA	-4	LCFI *
2993	01	00AA1	82300460			LCFI,3	*MEMORY	
2994	01	00AA2	773001BC			K	7,7,3,SI9NA0	
2995	01	00AA3	F730006B			K	15,7,3,NEIRET+1	
2996	01	00AA4	FFFFFFFC	A	LCFI07	DATA	-4	
2997	01	00AA5	02120011	A		LCFI,1	X'20011'	
2998	01	00AA6	80000136			K	8,0,0,SETPSW	
2999	01	00AA7	81000169			K	8,1,0,L0C+2	
3000						PAGE		
3001	01	00AA8	FFFFFFF8	A	LAW01	DATA	-8	LAW
3002	01	00AA9	3BC00460			LAW,12	MEMORY	
3003	01	00AAA	F7300136			K	15,7,3,SETPSW	
3004	01	00AAB	87300169			K	8,7,3,L0C+2	
3005	01	00AAC	FFFFFFFF	A		DATA	-1	
3006	01	00AAD	00000000	A		DATA	0	
3007	01	00AAE	00000000	A		DATA	0	
3008	01	00AAF	00000000	A		DATA	0	
3009	01	00AB0	FFFFFFF8	A	LAW02	DATA	-8	LAW X
3010	01	00AB1	3BC20461			LAW,12	MEMORY+1,1	
3011	01	00AB2	17300136			K	1,7,3,SETPSW	
3012	01	00AB3	27300169			K	2,7,3,L0C+2	
3013	01	00AB4	FFFFFFFF	A		DATA	-1	
3014	01	00AB5	00000001	A		DATA	1	
3015	01	00AB6	FFFFFFFF	A		DATA	-1	
3016	01	00AB7	FFFFFFFF	A		DATA	-1	
3017	01	00AB8	FFFFFFF8	A	LAW03	DATA	-8	LAW * 0F NTRAP
3018	01	00AB9	BBC0045A			LAW,12	*IA	
3019	01	00ABA	37200136			K	3,7,2,SETPSW	
3020	01	00ABB	57200169			K	5,7,2,L0C+2	
3021	01	00ABC	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3022	01	00ABD	80000000	A		DATA	X'80000000'	
3023	01	00ABE	80000000	A		DATA	X'80000000'	
3024	01	00ABF	80000000	A		DATA	X'80000000'	
3025						PAGE		
3026	01	00AC0	FFFFFFF4	A	LAW04	DATA	-12	LAW *X 0F TRAP
3027	01	00AC1	BBD20461			LAW,13	*MEMORY+1,1	
3028	01	00AC2	F73001C8			K	15,7,3,FXP0SW	
3029	01	00AC3	07300084			K	13,7,3,FP0RET+1	
3030	01	00AC4	0000046A			DATA	REPEAT	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3031	01	00AC5	0000046A			DATA	REPEAT	
3032	01	00AC6	80000000	A		DATA	X'80000000'	
3033	01	00AC7	80000000	A		DATA	X'80000000'	
3034	01	00AC8	FDBCA972	A		DATA	X'FDBCA972'	
3035	01	00AC9	80000000	A		DATA	X'80000000'	
3036	01	00ACA	FFFFFFF6	A		DATA	MEMORY-REPEAT	
3037	01	00ACB	FFFFFFF6	A		DATA	MEMORY-REPEAT	
3038	01	00ACC	FFFFFFF8	A	LAW05	DATA	-8	LAW
3039	01	00ACD	3BC00460			LAW,12	MEMORY	
3040	01	00ACE	07300136			K	0,7,3,SETPSW	
3041	01	00ACF	27300169			K	2,7,3,LOC+2	
3042	01	00AD0	00000000	A		DATA	0	
3043	01	00AD1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3044	01	00AD2	80000001	A		DATA	X'80000001'	
3045	01	00AD3	80000001	A		DATA	X'80000001'	
3046						PAGE		
3047					** INSURE THAT PROBEOVER/H IS DISABLED BY FAMT			
3048	01	00AD4	FFFFFFF8	A	LAH01	DATA	-8	LAH
3049	01	00AD5	5BC00460			LAH,12	MEMORY	
3050	01	00AD6	07300136			K	0,7,3,SETPSW	
3051	01	00AD7	27300169			K	2,7,3,LOC+2	
3052	01	00AD8	FFFFFFFF	A		DATA	-1	
3053	01	00AD9	00008000	A		DATA	X'8000'	
3054	01	00ADA	8000FFFF	A		DATA	X'8000FFFF'	
3055	01	00ADB	8000FFFF	A		DATA	X'8000FFFF'	
3056	01	00ADC	FFFFFFF8	A	LAH02	DATA	-8	LAH X
3057	01	00ADD	5BC3FFF6	A		LAH,12	MEMORY-REPEAT,1	
3058	01	00ADE	37300136			K	3,7,3,SETPSW	
3059	01	00ADF	07300169			K	0,7,3,LOC+2	
3060	01	00AE0	000008D5			DATA	HA(REPEAT)+1	
3061	01	00AE1	00000000	A		DATA	0	
3062	01	00AE2	FFFF0000	A		DATA	X'FFFF0000'	
3063	01	00AE3	FFFF0000	A		DATA	X'FFFF0000'	
3064	01	00AE4	FFFFFFF8	A	LAH03	DATA	-8	LAH 8
3065	01	00AE5	DBC0045A			LAH,12	*IA	
3066	01	00AE6	17300136			K	1,7,3,SETPSW	
3067	01	00AE7	27300169			K	2,7,3,LOC+2	
3068	01	00AE8	FFFFFFFF	A		DATA	-1	
3069	01	00AE9	00000001	A		DATA	1	
3070	01	00AEA	FFFF0000	A		DATA	X'FFFF0000'	
3071	01	00AEB	FFFF0000	A		DATA	X'FFFF0000'	
3072						PAGE		
3073	01	00AEC	FFFFFFF4	A	LAD01	DATA	-12	LAD RE
3074	01	00AED	1BC00460			LAD,12	MEMORY	
3075	01	00AEE	17300136			K	1,7,3,SETPSW	
3076	01	00AEF	27300169			K	2,7,3,LOC+2	
3077	01	00AF0	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3078	01	00AF1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3079	01	00AF2	80000000	A		DATA	X'80000000'	
3080	01	00AF3	80000000	A		DATA	X'80000000'	
3081	01	00AF4	12345678	A		DATA	X'12345678'	
3082	01	00AF5	FFFFFFFF	A		DATA	-1	
3083	01	00AF6	00000001	A		DATA	1	
3084	01	00AF7	00000001	A		DATA	1	
3085	01	00AF8	FFFFFFF4	A	LAD02	DATA	-12	LAD MB RE
3086	01	00AF9	1BC00461			LAD,12	MEMORY+1	
3087	01	00AFA	37300136			K	3,7,3,SETPSW	
3088	01	00AFB	07300169			K	0,7,3,LOC+2	
3089	01	00AFC	FFFFFFFF	A		DATA	-1	
3090	01	00AFD	00000000	A		DATA	0	
3091	01	00AFE	00000000	A		DATA	0	
3092	01	00AFF	00000000	A		DATA	0	
3093	01	00B00	FFFFFFFF	A		DATA	-1	
3094	01	00B01	00000000	A		DATA	0	
3095	01	00B02	00000000	A		DATA	0	
3096	01	00B03	00000000	A		DATA	0	
3097						PAGE		
3098	01	00B04	FFFFFFF4	A	LAD03	DATA	-12	LAD X RE
3099	01	00B05	1BC2046A			LAD,12	REPEAT,1	
3100	01	00B06	37300136			K	3,7,3,SETPSW	
3101	01	00B07	27300169			K	2,7,3,LOC+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3102	01	00B08	FFFFFFF8	A		DATA	(MEMORY*REPEAT)/2	
3103	01	00B09	6789ABCD	A		DATA	X'6789ABCD'	
3104	01	00B0A	98765432	A		DATA	X'98765432'	
3105	01	00B0B	98765432	A		DATA	X'98765432'	
3106	01	00B0C	FFFFFFFF	A		DATA	-1	
3107	01	00B0D	EF012346	A		DATA	X'EF012346'	
3108	01	00B0E	10FEDCBA	A		DATA	X'10FEDCBA'	
3109	01	00B0F	10FEDCBA	A		DATA	X'10FEDCBA'	
3110	01	00B10	FFFFFFF4	A	LAD04	DATA	-12	LAD * RE OF NTRAP
3111	01	00B11	9BC0045A			LAD,12	*1A	
3112	01	00B12	27200136			K	2,7,2,SETPSW	
3113	01	00B13	57200169			K	5,7,2,L0C+2	
3114	01	00B14	76543210	A		DATA	X'76543210'	
3115	01	00B15	80000000	A		DATA	X'80000000'	
3116	01	00B16	80000000	A		DATA	X'80000000'	
3117	01	00B17	80000000	A		DATA	X'80000000'	
3118	01	00B18	12345678	A		DATA	X'12345678'	
3119	01	00B19	00000000	A		DATA	0	
3120	01	00B1A	00000000	A		DATA	0	
3121	01	00B1B	00000000	A		DATA	0	
3122						PAGE		
3123	01	00B1C	FFFFFFF4	A	LAD05	DATA	-12	LAD RE OF TRAP
3124	01	00B1D	1BC00460			LAD,12	MEMORY	
3125	01	00B1E	073001C8			K	0,7,3,FXPOSW	
3126	01	00B1F	573000B4			K	5,7,3,FPORET+1	
3127	01	00B20	00000000	A		DATA	0	
3128	01	00B21	80000000	A		DATA	X'80000000'	
3129	01	00B22	80000000	A		DATA	X'80000000'	
3130	01	00B23	80000000	A		DATA	X'80000000'	
3131	01	00B24	FFFFFFFF	A		DATA	-1	
3132	01	00B25	00000000	A		DATA	0	
3133	01	00B26	00000000	A		DATA	0	
3134	01	00B27	00000000	A		DATA	0	
3135	01	00B28	FFFFFFF4	A	LAD06	DATA	-12	LAD R0
3136	01	00B29	1BD00460			LAD,13	MEMORY	
3137	01	00B2A	B7300136			K	11,7,3,SETPSW	
3138	01	00B2B	A7300169			K	10,7,3,L0C+2	
3139	01	00B2C	92345678	A		DATA	X'92345678'	
3140	01	00B2D	92345678	A		DATA	X'92345678'	
3141	01	00B2E	80000000	A		DATA	X'80000000'	
3142	01	00B2F	80000000	A		DATA	X'80000000'	
3143	01	00B30	00BADBED	A		DATA	X'BADBED'	
3144	01	00B31	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3145	01	00B32	00000001	A		DATA	1	
3146	01	00B33	00000001	A		DATA	1	
3147						PAGE		
3148	01	00B34	FFFFFFF4	A	LAD07	DATA	-12	LAD R0
3149	01	00B35	1BD00460			LAD,13	MEMORY	
3150	01	00B36	A7300136			K	10,7,3,SETPSW	
3151	01	00B37	A7300169			K	10,7,3,L0C+2	
3152	01	00B38	CCCCCCCC	A		DATA	X'CCCCCCCC'	
3153	01	00B39	CCCCCCCC	A		DATA	X'CCCCCCCC'	
3154	01	00B3A	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3155	01	00B3B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3156	01	00B3C	BCDEFA98	A		DATA	X'BCDEFA98'	
3157	01	00B3D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3158	01	00B3E	FFFFFFFF	A		DATA	-1	
3159	01	00B3F	FFFFFFFF	A		DATA	-1	
3160						PAGE		
3161	01	00B40	FFFFFFF8	A	LCW01	DATA	-8	LCW
3162	01	00B41	3AC00460			LCW,12	MEMORY	
3163	01	00B42	87300136			K	8,7,3,SETPSW	
3164	01	00B43	97300169			K	9,7,3,L0C+2	
3165	01	00B44	12345678	A		DATA	X'12345678'	
3166	01	00B45	E8CD431E	A		DATA	X'E8CD431E'	
3167	01	00B46	1732BCE2	A		DATA	X'1732BCE2'	
3168	01	00B47	1732BCE2	A		DATA	X'1732BCE2'	
3169	01	00B48	FFFFFFF8	A	LCW02	DATA	-8	LCW OF NTRAP
3170	01	00B49	3AC00460			LCW,12	MEMORY	
3171	01	00B4A	07200136			K	0,7,2,SETPSW	
3172	01	00B4B	57200169			K	5,7,2,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3173	01	00B4C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3174	01	00B4D	80000000	A		DATA	X'80000000'	
3175	01	00B4E	80000000	A		DATA	X'80000000'	
3176	01	00B4F	80000000	A		DATA	X'80000000'	
3177	01	00B50	FFFFFFFA	A	LCW03	DATA	-6	LCW ' REGISTER TO REGISTER
3178	01	00B51	3AC0000C	A		LCW,12	12	
3179	01	00B52	27300136			K	2,7,3,SETPSW	
3180	01	00B53	17300169			K	1,7,3,L0C+2	
3181	01	00B54	12345678	A		DATA	X'12345678'	
3182	01	00B55	EDCBA988	A		DATA	X'EDCBA988'	
3183	01	00B56	FFFFFFF8	A	LCW04	DATA	-8	LCW X 0F TRAP
3184	01	00B57	3AC20464			LCW,12	RETURN,1	
3185	01	00B58	F73001C8			K	15,7,3,FXP0SW	
3186	01	00B59	D7300084			K	13,7,3,FP0RET+1	
3187	01	00B5A	FFFFFFFC	A		DATA	MEM0RY-RETURN	
3188	01	00B5B	80000000	A		DATA	X'80000000'	
3189	01	00B5C	80000000	A		DATA	X'80000000'	
3190	01	00B5D	80000000	A		DATA	X'80000000'	
3191						PAGE		
3192	01	00B5E	FFFFFFF8	A	LCW05	DATA	-8	LCW * ZER0
3193	01	00B5F	BAC0045A			LCW,12	*IA	
3194	01	00B60	77300136			K	7,7,3,SETPSW	
3195	01	00B61	07300169			K	0,7,3,L0C+2	
3196	01	00B62	FFFFFFFF	A		DATA	-1	
3197	01	00B63	00000000	A		DATA	0	
3198	01	00B64	00000000	A		DATA	0	
3199	01	00B65	00000000	A		DATA	0	
3200	01	00B66	FFFFFFF8	A	LCW06	DATA	-8	LCW
3201	01	00B67	3AC00460			LCW,12	MEM0RY	
3202	01	00B68	07300136			K	0,7,3,SETPSW	
3203	01	00B69	27300169			K	2,7,3,L0C+2	
3204	01	00B6A	00000000	A		DATA	0	
3205	01	00B6B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3206	01	00B6C	80000001	A		DATA	X'80000001'	
3207	01	00B6D	80000001	A		DATA	X'80000001'	
3208						PAGE		
3209	01	00B6E	FFFFFFF8	A	LCH01	DATA	-8	LCH ME
3210	01	00B6F	5AC00460			LCH,12	MEM0RY	
3211	01	00B70	07300136			K	0,7,3,SETPSW	
3212	01	00B71	17300169			K	1,7,3,L0C+2	
3213	01	00B72	FFFFFFFF	A		DATA	-1	
3214	01	00B73	FFFFEDCC	A		DATA	X'FFFFEDCC'	
3215	01	00B74	12345678	A		DATA	X'12345678'	
3216	01	00B75	12345678	A		DATA	X'12345678'	
3217	01	00B76	FFFFFFF8	A	LCH02	DATA	-8	LCH X ME
3218	01	00B77	5AC2046A			LCH,12	REPEAT,1	
3219	01	00B78	07300136			K	0,7,3,SETPSW	
3220	01	00B79	27300169			K	2,7,3,L0C+2	
3221	01	00B7A	FFFFFFEC	A		DATA	2*(MEM0RY-REPEAT)	
3222	01	00B7B	00007898	A		DATA	X'7898'	
3223	01	00B7C	87654321	A		DATA	X'87654321'	
3224	01	00B7D	87654321	A		DATA	X'87654321'	
3225	01	00B7E	FFFFFFF8	A	LCH03	DATA	-8	LCH * ME
3226	01	00B7F	DAC0045A			LCH,12	*IA	
3227	01	00B80	37300136			K	3,7,3,SETPSW	
3228	01	00B81	07300169			K	0,7,3,L0C+2	
3229	01	00B82	FFFFFFFF	A		DATA	-1	
3230	01	00B83	00000000	A		DATA	0	
3231	01	00B84	0000FFFF	A		DATA	X'FFFF'	
3232	01	00B85	0000FFFF	A		DATA	X'FFFF'	
3233	01	00B86	FFFFFFF8	A	LCH04	DATA	-8	LCH X M0
3234	01	00B87	5AC20047			LCH,12	BRANCH,1	
3235	01	00B88	37300136			K	3,7,3,SETPSW	
3236	01	00B89	17300169			K	1,7,3,L0C+2	
3237	01	00B8A	00000833	A		DATA	2*(MEM0RY-BRANCH)+1	
3238	01	00B8B	FFFF89AC	A		DATA	X'FFFF89AC'	
3239	01	00B8C	FFFF7654	A		DATA	X'FFFF7654'	
3240	01	00B8D	FFFF7654	A		DATA	X'FFFF7654'	
3241						PAGE		
3242	01	00B8E	FFFFFFF8	A	LCH05	DATA	-8	LCH X M0
3243	01	00B8F	5AC2046A			LCH,12	REPEAT,1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3244	01	00B90	37300136			K	3,7,3,SETPSW	
3245	01	00B91	27300169			K	2,7,3,L0C+2	
3246	01	00B92	FFFFFFED	A		DATA	2*(MEM0RY-REPEAT)+1	
3247	01	00B93	00007FFF	A		DATA	X'7FFF'	
3248	01	00B94	00008001	A		DATA	X'8001'	
3249	01	00B95	00008001	A		DATA	X'8001'	
3250						PAGE		
3251	01	00B96	FFFFFFF4	A	LCD01	DATA	-12	LCD RE
3252	01	00B97	1AC00460			LCD,12	MEM0RY	
3253	01	00B98	17300136			K	1,7,3,SETPSW	
3254	01	00B99	27300169			K	2,7,3,L0C+2	
3255	01	00B9A	BBBBBBBB	A		DATA	X'BBBBBBBB'	
3256	01	00B9B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3257	01	00B9C	80000000	A		DATA	X'80000000'	
3258	01	00B9D	80000000	A		DATA	X'80000000'	
3259	01	00B9E	CCCCCCCC	A		DATA	X'CCCCCCCC'	
3260	01	00B9F	FFFFFFFF	A		DATA	-1	
3261	01	00BA0	00000001	A		DATA	1	
3262	01	00BA1	00000001	A		DATA	1	
3263	01	00BA2	FFFFFFF4	A	LCD02	DATA	-12	LCD X RE
3264	01	00BA3	1AC2046A			LCD,12	REPEAT,1	
3265	01	00BA4	27300136			K	2,7,3,SETPSW	
3266	01	00BA5	17300169			K	1,7,3,L0C+2	
3267	01	00BA6	FFFFFFFB	A		DATA	(MEM0RY-REPEAT)/2	
3268	01	00BA7	80000000	A		DATA	X'80000000'	
3269	01	00BA8	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3270	01	00BA9	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3271	01	00BAA	23476B9E	A		DATA	X'23476B9E'	
3272	01	00BAB	00000001	A		DATA	1	
3273	01	00BAC	FFFFFFFF	A		DATA	-1	
3274	01	00BAD	FFFFFFFF	A		DATA	-1	
3275						PAGE		
3276	01	00BAE	FFFFFFF4	A	LCD03	DATA	-12	LCD * RE
3277	01	00BAF	9AC0045A			LCD,12	*1A	
3278	01	00BB0	37300136			K	3,7,3,SETPSW	
3279	01	00BB1	07300169			K	0,7,3,L0C+2	
3280	01	00BB2	FFFFFFFF	A		DATA	-1	
3281	01	00BB3	00000000	A		DATA	0	
3282	01	00BB4	00000000	A		DATA	0	
3283	01	00BB5	00000000	A		DATA	0	
3284	01	00BB6	FFFFFFFF	A		DATA	-1	
3285	01	00BB7	00000000	A		DATA	0	
3286	01	00BB8	00000000	A		DATA	0	
3287	01	00BB9	00000000	A		DATA	0	
3288						PAGE		
3289	01	00BBA	FFFFFFF4	A	LCD04	DATA	-12	LCD RE 0F NTRAP
3290	01	00BBB	1AC00460			LCD,12	MEM0RY	
3291	01	00BBC	27200136			K	2,7,2,SETPSW	
3292	01	00BBD	57200169			K	5,7,2,L0C+2	
3293	01	00BBE	FFFFFFFF	A		DATA	-1	
3294	01	00BBF	80000000	A		DATA	X'80000000'	
3295	01	00BC0	80000000	A		DATA	X'80000000'	
3296	01	00BC1	80000000	A		DATA	X'80000000'	
3297	01	00BC2	FFFFFFFF	A		DATA	-1	
3298	01	00BC3	00000000	A		DATA	0	
3299	01	00BC4	00000000	A		DATA	0	
3300	01	00BC5	00000000	A		DATA	0	
3301	01	00BC6	FFFFFFF4	A	LCD05	DATA	-12	LCD R0 0F TRAP
3302	01	00BC7	1AD00460			LCD,13	MEM0RY	
3303	01	00BC8	973001C8			K	9,7,3,FXP0SW	
3304	01	00BC9	D7300084			K	13,7,3,FP0RET+1	
3305	01	00BCA	FEEDBEAD	A		DATA	X'FEEDBEAD'	
3306	01	00BCB	FEEDBEAD	A		DATA	X'FEEDBEAD'	
3307	01	00BCC	80000000	A		DATA	X'80000000'	
3308	01	00BCD	80000000	A		DATA	X'80000000'	
3309	01	00BCE	FFFFFFFF	A		DATA	-1	
3310	01	00BCF	80000000	A		DATA	X'80000000'	
3311	01	00BD0	00000000	A		DATA	0	
3312	01	00BD1	00000000	A		DATA	0	
3313	01	00BD2	FFFFFFF6	A	LCD06	DATA	-10	LCD REGISTER T0 REGISTER
3314	01	00BD3	1AC0000C	A		LCD,12	12	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3315	01	00BD4	F7300136			K	15,7,3,SETPSW	
3316	01	00BD5	A7300169			K	10,7,3,L0C+2	
3317	01	00BD6	FFFFFFFF	A		DATA	-1	
3318	01	00BD7	00000000	A		DATA	0	
3319	01	00BD8	00000000	A		DATA	0	
3320	01	00BD9	00000000	A		DATA	0	
3321	01	00BDA	FFFFFFFF	A		DATA	-1	
3322	01	00BDB	00000001	A		DATA	1	
3323						PAGE		
3324	01	00BDC	FFFFFFF8	A	STH01	DATA	-8	STH
3325	01	00BDD	55C00460			STH,12	MEMORY	
3326	01	00BDE	F7300136			K	15,7,3,SETPSW	
3327	01	00BDF	B7300169			K	11,7,3,L0C+2	
3328	01	00BE0	FFFF8000	A		DATA	X'FFFF8000'	
3329	01	00BE1	FFFF8000	A		DATA	X'FFFF8000'	
3330	01	00BE2	FFFFFFFF	A		DATA	-1	
3331	01	00BE3	8000FFFF	A		DATA	X'8000FFFF'	
3332	01	00BE4	FFFFFFF8	A	STH02	DATA	-8	STH X
3333	01	00BE5	55C3C461			STH,12	MEMORY-X'3FFF',1	
3334	01	00BE6	67300136			K	6,7,3,SETPSW	
3335	01	00BE7	27300169			K	2,7,3,L0C+2	
3336	01	00BE8	00007FFF	A		DATA	X'7FFF'	
3337	01	00BE9	00007FFF	A		DATA	X'7FFF'	
3338	01	00BEA	12345678	A		DATA	X'12345678'	
3339	01	00BEB	12347FFF	A		DATA	X'12347FFF'	
3340	01	00BEC	FFFFFFF8	A	STH03	DATA	-8	STH *
3341	01	00BED	D5C0045A			STH,12	*IA	
3342	01	00BEE	A7300136			K	10,7,3,SETPSW	
3343	01	00BEF	E7300169			K	14,7,3,L0C+2	
3344	01	00BF0	0000FFFF	A		DATA	X'FFFF'	
3345	01	00BF1	0000FFFF	A		DATA	X'FFFF'	
3346	01	00BF2	00000000	A		DATA	0	
3347	01	00BF3	FFFF0000	A		DATA	X'FFFF0000'	
3348	01	00BF4	FFFFFFF8	A	STH04	DATA	-8	STH
3349	01	00BF5	55C00460			STH,12	MEMORY	
3350	01	00BF6	37300136			K	3,7,3,SETPSW	
3351	01	00BF7	77300169			K	7,7,3,L0C+2	
3352	01	00BF8	80001234	A		DATA	X'80001234'	
3353	01	00BF9	80001234	A		DATA	X'80001234'	
3354	01	00BFA	56781234	A		DATA	X'56781234'	
3355	01	00BFB	12341234	A		DATA	X'12341234'	
3356						PAGE		
3357	01	00BFC	FFFFFFF8	A	STH05	DATA	-8	STH
3358	01	00BFD	55CE0460			STH,12	MEMORY,7	
3359	01	00BFE	97300136			K	9,7,3,SETPSW	
3360	01	00BFF	D7300169			K	13,7,3,L0C+2	
3361	01	00C00	FFFEF379	A		DATA	X'FFFEF379'	
3362	01	00C01	FFFEF379	A		DATA	X'FFFEF379'	
3363	01	00C02	67921113	A		DATA	X'67921113'	
3364	01	00C03	6792F379	A		DATA	X'6792F379'	
3365	01	00C04	FFFFFFF8	A	STH06	DATA	-8	STH
3366	01	00C05	55C00460			STH,12	MEMORY	
3367	01	00C06	07300136			K	0,7,3,SETPSW	
3368	01	00C07	47300169			K	4,7,3,L0C+2	
3369	01	00C08	7FFF1692	A		DATA	X'7FFF1692'	
3370	01	00C09	7FFF1692	A		DATA	X'7FFF1692'	
3371	01	00C0A	00000000	A		DATA	0	
3372	01	00C0B	16920000	A		DATA	X'16920000'	
3373						PAGE		
3374	01	00C0C	FFFFFFF8	A	STB01	DATA	-8	STB BYTE 0
3375	01	00C0D	75C00460			STB,12	MEMORY	
3376	01	00C0E	F7300136			K	15,7,3,SETPSW	
3377	01	00C0F	F7300169			K	15,7,3,L0C+2	
3378	01	00C10	12345678	A		DATA	X'12345678'	
3379	01	00C11	12345678	A		DATA	X'12345678'	
3380	01	00C12	FFFFFFFF	A		DATA	-1	
3381	01	00C13	78FFFFFF	A		DATA	X'78FFFFFF'	
3382	01	00C14	FFFFFFF8	A	STB02	DATA	-8	STB X BYTE 1
3383	01	00C15	75C20440			STB,12	MEMORY-X'20',1	
3384	01	00C16	E7300136			K	14,7,3,SETPSW	
3385	01	00C17	E7300169			K	14,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3386	01	00C18	00000081	A		DATA	X'81'	
3387	01	00C19	00000081	A		DATA	X'81'	
3388	01	00C1A	FFFFFFFF	A		DATA	-1	
3389	01	00C1B	FF81FFFF	A		DATA	X'FF81FFFF'	
3390	01	00C1C	FFFFFFFA	A	STB03	DATA	-6	STB X BYTE 2
3391	01	00C1D	75C20048	A		STB,12	12-X'1FFC4',1	
3392	01	00C1E	D7300136			K	13,7,3,SETPSW	
3393	01	00C1F	D7300169			K	13,7,3,L0C+2	
3394	01	00C20	FFFFFF12	A		DATA	X'FFFFFF12'	
3395	01	00C21	FFFF1212	A		DATA	X'FFFF1212'	
3396	01	00C22	FFFFFFF8	A	STB04	DATA	-8	STB BYTE 3
3397	01	00C23	75C28FCB			STB,12	MEMORY-X'17495',1	
3398	01	00C24	C7300136			K	12,7,3,SETPSW	
3399	01	00C25	C7300169			K	12,7,3,L0C+2	
3400	01	00C26	6375D257	A		DATA	X'6375D257'	
3401	01	00C27	6375D257	A		DATA	X'6375D257'	
3402	01	00C28	FFFFFFFF	A		DATA	-1	
3403	01	00C29	FFFFFF57	A		DATA	X'FFFFFF57'	
3404						PAGE		
3405	01	00C2A	FFFFFFF8	A	STB05	DATA	-8	STB BYTE 0 ZER0
3406	01	00C2B	F5C0045A			STB,12	*IA	
3407	01	00C2C	F7300136			K	15,7,3,SETPSW	
3408	01	00C2D	F7300169			K	15,7,3,L0C+2	
3409	01	00C2E	000000FF	A		DATA	X'FF'	
3410	01	00C2F	000000FF	A		DATA	X'FF'	
3411	01	00C30	00000000	A		DATA	0	
3412	01	00C31	FF000000	A		DATA	X'FF000000'	
3413						PAGE		
3414	01	00C32	FFFFFFF4	A	STD01	DATA	-12	STD
3415	01	00C33	15C00460			STD,12	MEMORY	
3416	01	00C34	B7300136			K	11,7,3,SETPSW	
3417	01	00C35	B7300169			K	11,7,3,L0C+2	
3418	01	00C36	80000000	A		DATA	X'80000000'	
3419	01	00C37	80000000	A		DATA	X'80000000'	
3420	01	00C38	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3421	01	00C39	80000000	A		DATA	X'80000000'	
3422	01	00C3A	00000000	A		DATA	0	
3423	01	00C3B	00000000	A		DATA	0	
3424	01	00C3C	FFFFFFFF	A		DATA	-1	
3425	01	00C3D	00000000	A		DATA	0	
3426	01	00C3E	FFFFFFF4	A	STD02	DATA	-12	STD X
3427	01	00C3F	15C2023C			STD,12	MEMORY-548,1	
3428	01	00C40	A7300136			K	10,7,3,SETPSW	
3429	01	00C41	A7300169			K	10,7,3,L0C+2	
3430	01	00C42	00000112	A		DATA	274	
3431	01	00C43	00000112	A		DATA	274	
3432	01	00C44	FFFFFFFF	A		DATA	-1	
3433	01	00C45	00000112	A		DATA	274	
3434	01	00C46	FFFFFFFF	A		DATA	-1	
3435	01	00C47	FFFFFFFF	A		DATA	-1	
3436	01	00C48	00000000	A		DATA	0	
3437	01	00C49	FFFFFFFF	A		DATA	-1	
3438						PAGE		
3439	01	00C4A	FFFFFFF4	A	STD03	DATA	-12	STD * R0
3440	01	00C4B	95D0045A			STD,13	*IA	
3441	01	00C4C	97300136			K	9,7,3,SETPSW	
3442	01	00C4D	97300169			K	9,7,3,L0C+2	
3443	01	00C4E	12345678	A		DATA	X'12345678'	
3444	01	00C4F	12345678	A		DATA	X'12345678'	
3445	01	00C50	ECBD129E	A		DATA	X'ECBD129E'	
3446	01	00C51	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3447	01	00C52	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3448	01	00C53	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3449	01	00C54	56782349	A		DATA	X'56782349'	
3450	01	00C55	9ABCDEF0	A		DATA	X'9ABCDEF0'	
3451	01	00C56	FFFFFFF4	A	STD04	DATA	-12	STD M0
3452	01	00C57	15C00461			STD,12	MEMORY+1	
3453	01	00C58	87300136			K	8,7,3,SETPSW	
3454	01	00C59	87300169			K	8,7,3,L0C+2	
3455	01	00C5A	00000000	A		DATA	0	
3456	01	00C5B	00000000	A		DATA	0	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND                COMMENTS
3457      01            00C5C          FFFFFFFF         A                 DATA       -1
3458      01            00C5D          00000000         A                 DATA       0
3459      01            00C5E          00000001         A                 DATA       1
3460      01            00C5F          00000001         A                 DATA       1
3461      01            00C60          FFFFFFFE         A                 DATA       -2
3462      01            00C61          00000001         A                 DATA       1
3463                                                                       PAGE
3464      01            00C62          FFFFFFF6         A       STS01     DATA       -10
3465      01            00C63          47C00460         A                 STS,12     MEMORY                 PH1:C(S) = EW.NRJ1   = FFFF0000
3466      01            00C64          F7300136         A                 K          15,7,3,SETPSW
3467      01            00C65          F7300169         A                 K          15,7,3,L0C+2           PH3:C(S) = RR.RJ1    = 0000FFFF
3468      01            00C66          0000FFFF         A                 DATA       X'FFFF'
3469      01            00C67          0000FFFF         A                 DATA       X'FFFF'                PH4:C(S) = PH1+PH3   = FFFFFFFF
3470      01            00C68          FFFF0000         A                 DATA       X'FFFF0000'
3471      01            00C69          FFFFFFFF         A                 DATA       -1
3472      01            00C6A          0000FFFF         A                 DATA       X'FFFF'
3473      01            00C6B          0000FFFF         A                 DATA       X'FFFF'
3474                                                                 ** USE ODD R FIELD AND EVEN R AS THE EW
3475      01            00C6C          FFFFFFF6         A       STS02     DATA       -10
3476      01            00C6D          47D0000C         A                 STS,13     12                     PH1:C(S) = EW.NRJ1   = 0000FFFF
3477      01            00C6E          07300136         A                 K          0,7,3,SETPSW
3478      01            00C6F          07300169         A                 K          0,7,3,L0C+2            PH3:C(S) = RR.RJ1    = FFFF0000
3479      01            00C70          0000FFFF         A                 DATA       X'FFFF'
3480      01            00C71          FFFFFFFF         A                 DATA       -1                     PH4:C(S) = PH1+PH3   = FFFFFFFF
3481      01            00C72          00000000         A                 DATA       0
3482      01            00C73          00000000         A                 DATA       0
3483      01            00C74          FFFF0000         A                 DATA       X'FFFF0000'
3484      01            00C75          FFFF0000         A                 DATA       X'FFFF0000'
3485                                                                       PAGE
3486      01            00C76          FFFFFFF8         A       STCF01    DATA       -8                     STFC       BYTE 0
3487      01            00C77          74000460         A                 STCF,0     MEMORY
3488      01            00C78          F7300136         A                 K          15,7,3,SETPSW
3489      01            00C79          F7300169         A                 K          15,7,3,L0C+2
3490      01            00C7A          00000000         A                 DATA       0
3491      01            00C7B          00000000         A                 DATA       0
3492      01            00C7C          00000000         A                 DATA       0
3493      01            00C7D          F7000000         A                 DATA       X'F7000000'
3494      01            00C7E          FFFFFFF8         A       STCF02    DATA       -8                     STFC  X    BYTE 1
3495      01            00C7F          74F2006A         A                 STCF,15    NEIRET,1
3496      01            00C80          E6200136         A                 K          14,6,2,SETPSW
3497      01            00C81          E6200169         A                 K          14,6,2,L0C+2
3498      01            00C82          00000FD9         A                 DATA       4*(MEMORY-NEIRET)+1
3499      01            00C83          00000FD9         A                 DATA       4*(MEMORY-NEIRET)+1
3500      01            00C84          00000000         A                 DATA       0
3501      01            00C85          00E60000         A                 DATA       X'E60000'
3502      01            00C86          FFFFFFF8         A       STCF03    DATA       -8                     STFC *X    BYTE 2
3503      01            00C87          F432045A         A                 STCF,3     *IA,1
3504      01            00C88          D5300136         A                 K          13,5,3,SETPSW
3505      01            00C89          D5300169         A                 K          13,5,3,L0C+2
3506      01            00C8A          00000002         A                 DATA       2
3507      01            00C8B          00000002         A                 DATA       2
3508      01            00C8C          FFFFFFFF         A                 DATA       -1
3509      01            00C8D          FFFFD5FF         A                 DATA       X'FFFFD5FF'
3510      01            00C8E          FFFFFFF8         A       STCF04    DATA       -8                     STCF X     BYTE 3
3511      01            00C8F          74120460         A                 STCF,1     MEMORY,1
3512      01            00C90          34300136         A                 K          3,4,3,SETPSW
3513      01            00C91          34300169         A                 K          3,4,3,L0C+2
3514      01            00C92          00000003         A                 DATA       3
3515      01            00C93          00000003         A                 DATA       3
3516      01            00C94          FFFFFFFF         A                 DATA       -1
3517      01            00C95          FFFFFF34         A                 DATA       X'FFFFFF34'
3518                                                                       PAGE
3519      01            00C96          FFFFFFF8         A       XW01      DATA       -8                     XW  RESULT IN R IS ZERO
3520      01            00C97          46C00460         A                 XW,12      MEMORY
3521      01            00C98          F7300136         A                 K          15,7,3,SETPSW
3522      01            00C99          C7300169         A                 K          12,7,3,L0C+2
3523      01            00C9A          FFFFFFFF         A                 DATA       -1
3524      01            00C9B          00000000         A                 DATA       0
3525      01            00C9C          00000000         A                 DATA       0
3526      01            00C9D          FFFFFFFF         A                 DATA       -1
3527      01            00C9E          FFFFFFF8         A       XW02      DATA       -8                     XW  RESULT IN R IS POS
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3528	01	00C9F	46C00460			XW,12	MEMORY	
3529	01	00CA0	37300136			K	3,7,3,SETPSW	
3530	01	00CA1	27300169			K	2,7,3,L0C+2	
3531	01	00CA2	FFFFFFF6	A		DATA	MEMORY-REPEAT	
3532	01	00CA3	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3533	01	00CA4	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3534	01	00CA5	FFFFFFF6	A		DATA	MEMORY-REPEAT	
3535	01	00CA6	FFFFFFF8	A	XW03	DATA	-8	XW RESULT IN R IS NEG
3536	01	00CA7	46C00460			XW,12	MEMORY	
3537	01	00CA8	27300136			K	2,7,3,SETPSW	
3538	01	00CA9	17300169			K	1,7,3,L0C+2	
3539	01	00CAA	00000000	A		DATA	0	
3540	01	00CAB	FFFFFFFF	A		DATA	-1	
3541	01	00CAC	FFFFFFFF	A		DATA	-1	
3542	01	00CAD	00000000	A		DATA	0	
3543	01	00CAE	FFFFFFF6	A	XW04	DATA	-10	XW REGISTER T0 REGISTER, RESULT NEG.
3544	01	00CAF	46C0000D	A		XW,12	13	
3545	01	00CB0	07300136			K	0,7,3,SETPSW	
3546	01	00CB1	17300169			K	1,7,3,L0C+2	
3547	01	00CB2	00000001	A		DATA	1	
3548	01	00CB3	FFFFFFFF	A		DATA	-1	
3549	01	00CB4	00000000	A		DATA	0	
3550	01	00CB5	00000000	A		DATA	0	
3551	01	00CB6	FFFFFFFF	A		DATA	-1	
3552	01	00CB7	00000001	A		DATA	1	
3553						PAGE		
3554	01	00CB8	FFFFFFF6	A	INT01	DATA	-10	INT
3555	01	00CB9	6BC00460			INT,12	MEMORY	
3556	01	00CBA	77300136			K	7,7,3,SETPSW	
3557	01	00CBB	17300169			K	1,7,3,L0C+2	
3558	01	00CBC	FFFFFFFF	A		DATA	-1	
3559	01	00CBD	00000234	A		DATA	X'234'	
3560	01	00CBE	12345678	A		DATA	X'12345678'	
3561	01	00CBF	12345678	A		DATA	X'12345678'	
3562	01	00CC0	FFFFFFFF	A		DATA	-1	
3563	01	00CC1	00005678	A		DATA	X'5678'	
3564	01	00CC2	FFFFFFF6	A	INT02	DATA	-10	INT
3565	01	00CC3	6BC00460			INT,12	MEMORY	
3566	01	00CC4	07300136			K	0,7,3,SETPSW	
3567	01	00CC5	F7300169			K	15,7,3,L0C+2	
3568	01	00CC6	000002B2	A		DATA	MEMORY-END	
3569	01	00CC7	00000EDC	A		DATA	X'EDC'	
3570	01	00CC8	FEDCBA98	A		DATA	X'FEDCBA98'	
3571	01	00CC9	FEDCBA98	A		DATA	X'FEDCBA98'	
3572	01	00CCA	12345678	A		DATA	X'12345678'	
3573	01	00CCB	0000BA98	A		DATA	X'BA98'	
3574	01	00CCC	FFFFFFF6	A	INT03	DATA	-10	INT ODD REG
3575	01	00CCD	6BD00460			INT,13	MEMORY	
3576	01	00CCE	77300136			K	7,7,3,SETPSW	
3577	01	00CCF	87300169			K	8,7,3,L0C+2	
3578	01	00CD0	FFFFFFFF	A		DATA	-1	
3579	01	00CD1	FFFFFFFF	A		DATA	-1	
3580	01	00CD2	89ABCDEF	A		DATA	X'89ABCDEF'	
3581	01	00CD3	89ABCDEF	A		DATA	X'89ABCDEF'	
3582	01	00CD4	FFFFFFFF	A		DATA	-1	
3583	01	00CD5	0000CDEF	A		DATA	X'CDEF'	
3584						PAGE		
3585	01	00CD6	FFFFFFF8	A	ANLZ01	DATA	-8	ANLZ HALFW0RD *X
3586	01	00CD7	44C00460			ANLZ,12	MEMORY	PXS= FAS10,NFAIM,NANLZ,PRE3
3587					*			S/MRQ/2 = PRE0PER,PRE/12
3588					*			PRE0PER IS QUALIFIED WITH NANLZ
3589					*			BRPH5= ANLZ,PRE3
3590	01	00CD8	F7300136			K	15,7,3,SETPSW	
3591	01	00CD9	67300169			K	6,7,3,L0C+2	
3592	01	00CDA	0000035D			DATA	HA(END)+1	
3593	01	00CDB	0000057D	A		DATA	ABSVAL(HA(CYCLE))+ABSVAL(HA(END)+1)	
3594	01	00CDC	D2F2046A			LH,15	*REPEAT,1	
3595	01	00CDD	D2F2046A			LH,15	*REPEAT,1	
3596	01	00CDE	FFFFFFF8	A	ANLZ02	DATA	-8	ANLZ X W0RD *
3597	01	00CDF	44C2046A			ANLZ,12	REPEAT,1	
3598	01	00CE0	77300136			K	7,7,3,SETPSW	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND                  COMMENTS
3599      01            00CE1          A7300169                          K          10,7,3,L0C+2
3600      01            00CE2          FFFFFFF6         A                DATA       MEM0RY-REPEAT
3601      01            00CE3          00000460                          DATA       MEM0RY
3602      01            00CE4          B530045A                          STW,3      *IA
3603      01            00CE5          B530045A                          STW,3      *IA
3604      01            00CE6          FFFFFFF8         A       ANLZ03   DATA       -8                       ANLZ *       BYTE *X
3605      01            00CE7          C4C0045A                          ANLZ,12    *IA
3606      01            00CE8          77300136                          K          7,7,3,SETPSW
3607      01            00CE9          27300169                          K          2,7,3,L0C+2
3608      01            00CEA          00000143         A                DATA       X'143'
3609      01            00CEB          000012C3                          DATA       BA(MEM0RY)+X'143'
3610      01            00CEC          F102045A                          CB,0       *IA,1
3611      01            00CED          F102045A                          CB,0       *IA,1
3612      01            00CEE          FFFFFFF8         A       ANLZ04   DATA       -8                       ANLZ  D0UBLEW0RD  X
3613      01            00CEF          44C00460                          ANLZ,12    MEM0RY
3614      01            00CF0          07300136                          K          0,7,3,SETPSW
3615      01            00CF1          C7300169                          K          12,7,3,L0C+2
3616      01            00CF2          00000725         A                DATA       X'725'
3617      01            00CF3          00000955                          DATA       DA(MEM0RY+1)+X'725'
3618      01            00CF4          1B420461                          LAD,4      MEM0RY+1,1
3619      01            00CF5          1B420461                          LAD,4      MEM0RY+1,1
3620                                                                     PAGE
3621      01            00CF6          FFFFFFF8         A       ANLZ05   DATA       -8                       ANLZ  IMMED W0RD *X
3622      01            00CF7          44C00460                          ANLZ,12    MEM0RY
3623      01            00CF8          07300136                          K          0,7,3,SETPSW
3624      01            00CF9          B7300169                          K          11,7,3,L0C+2
3625      01            00CFA          00001234         A                DATA       X'1234'
3626      01            00CFB          00001234         A                DATA       X'1234'
3627      01            00CFC          A2C0045A                          LI,12      *IA,1
3628      01            00CFD          A2C0045A                          LI,12      *IA,1
3629                                                     *  S/PRETR = PRE1.NANLZ
3630      01            00CFE          FFFFFFF8         A       ANLZ06   DATA       -8                       ANLZ ILLEGAL FAMILY (IMMEDIATE-BYTE)
3631      01            00CFF          44C00460                          ANLZ,12    MEM0RY
3632      01            00D00          07300136                          K          0,7,3,SETPSW
3633      01            00D01          17300169                          K          1,7,3,L0C+2
3634      01            00D02          FFFFFFFF         A                DATA       -1
3635      01            00D03          FFFFFFFF         A                DATA       -1
3636      01            00D04          61700752         A                MBS,7      X'752'
3637      01            00D05          61700752         A                MBS,7      X'752'
3638      01            00D06          FFFFFFF8         A       ANLZ07   DATA       -8                       ANLZ PRIV INST IN SLAVE M0DE
3639      01            00D07          44C00460                          ANLZ,12    MEM0RY                   D0UBLEW0RD, DIRECT ADDRESSING
3640      01            00D08          07900136                          K          0,7,9,SETPSW
3641      01            00D09          C7900168                          K          12,7,9,L0C+1
3642      01            00D0A          00000000         A                DATA       0
3643      01            00D0B          00000232                          GEN        DA(RETURN)
3644      01            00D0C          0F000464                          XPSD,0     RETURN
3645      01            00D0D          0F000464                          XPSD,0     RETURN
3646                                                                     PAGE
3647                                                     *  0N FIRST PASS  THE INST IS  B  END.  IF N0N-EXSISTENT MEM0RY IS     *B
3648                                                     *  PRESENT AN  ANLZ,12 MEM0RY INSTRUCTI0N WILL BE INSERTED             *B
3649      01            00D0E          FFFFFFF8         A       ANLZ08   DATA       -8
3650      01            00D0F          44C00460                          ANLZ,12    MEM0RY
3651      01            00D10          07300136                          K          0,7,3,SETPSW
3652      01            00D11          07300167                          K          0,7,3,L0C
3653      01            00D12          00000000         A                DATA       0
3654      01            00D13          00000000         A                DATA       0
3655      01            00D14          B2C00000         A                LW,12      *0                       CHANGED T0 LW,12  *(N0N-EXSISTENT,*B
3656      01            00D15          B2C00000         A                LW,12      *0                         MEMEM0RY) AFTER 0NE PASS          *B
3657                                                     *  S/MRQ/1 = FABRANCH.PRE/12.NANLZ
3658                                                     *  S/RW =  FUBDR.PRE3.NANLZ
3659      01            00D16          FFFFFFF6         A       ANLZ09   DATA       -10                      ANALYZE A BRANCH THAT WILL BRANCH
3660      01            00D17          44C00460                          ANLZ,12    MEM0RY
3661      01            00D18          00000136                          K          0,0,0,SETPSW
3662      01            00D19          A0000169                          K          10,0,0,L0C+2
3663      01            00D1A          00000002         A                DATA       2
3664      01            00D1B          00001001         A                DATA       X'1001'
3665      01            00D1C          E4CE000D         A                DATA       X'E4CE000D'              BDR,12 *13,7
3666      01            00D1D          E4CE000D         A                DATA       X'E4CE000D'
3667      01            00D1E          00001000         A                DATA       X'1000'
3668      01            00D1F          00001000         A                DATA       X'1000'
3669      01            00D20          FFFFFFF8         A       ANLZ10   DATA       -8                       ANALYZE A BRANCH THAT W0NT BRANCH
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3670	01	00D21	44C00460			ANLZ,12	MEMORY	
3671	01	00D22	00000136			K	0,0,0,SETPSW	
3672	01	00D23	A0000169			K	10,0,0,L8C+2	
3673	01	00D24	00000000	A		DATA	0,1	
	01	00D25	00000001	A				
3674	01	00D26	E4CE000C	A		DATA	X'E4CE000C'	BDR,12 *12,7
3675	01	00D27	E4CE000C	A		DATA	X'E4CE000C'	
3676						PAGE		
3677					** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,			
3678					** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS			
3679					* PXS = FASEL.PRE3.N8L7.NANLZ			
3680	01	00D28	FFFFFFF4	A	ANLZ11	DATA	-12	
3681	01	00D29	44C00460			ANLZ,12	MEMORY	
3682	01	00D2A	F7300136			K	15,7,3,SETPSW	
3683	01	00D2B	87300169			K	8,7,3,L8C+2	
3684	01	00D2C	00000000	A		DATA	0	
3685	01	00D2D	00000466			DATA	RETURN+2	
3686	01	00D2E	4AC00466			LS,12	RETURN+2	
3687	01	00D2F	4AC00466			LS,12	RETURN+2	
3688	01	00D30	FFFFFFFF	A		DATA	-1	
3689	01	00D31	FFFFFFFF	A		DATA	-1	
3690	01	00D32	0F000464			XPSD,0	RETURN	
3691	01	00D33	0F000464			XPSD,0	RETURN	
3692					** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,			
3693					** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS			
3694					* PXS = FUEXU.PRE3.NANLZ			
3695					* BRP10 =FUEXU.PRE3.NANLZ			
3696	01	00D34	FFFFFFF4	A	ANLZ12	DATA	-12	
3697	01	00D35	44C00460			ANLZ,12	MEMORY	
3698	01	00D36	00000136			K	0,0,0,SETPSW	
3699	01	00D37	80000169			K	8,0,0,L8C+2	
3700	01	00D38	00000000	A		DATA	0	
3701	01	00D39	00000460			DATA	MEMORY	
3702	01	00D3A	67000460			EXU	MEMORY	
3703	01	00D3B	67000460			EXU	MEMORY	
3704	01	00D3C	FFFFFFFF	A		DATA	-1,-1	
	01	00D3D	FFFFFFFF	A				
3705	01	00D3E	0F000464			XPSD,0	RETURN	
3706	01	00D3F	0F000464			XPSD,0	RETURN	
3707						PAGE		
3708					** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,			
3709					** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS			
3710					* PXS = FARWD.PRE3.NANLZ			
3711	01	00D40	FFFFFFF4	A	ANLZ13	DATA	-12	
3712	01	00D41	44C00460			ANLZ,12	MEMORY	
3713	01	00D42	00000136			K	0,0,0,SETPSW	
3714	01	00D43	80000169			K	8,0,0,L8C+2	
3715	01	00D44	FFFFFFFF	A		DATA	-1	
3716	01	00D45	00000041	A		DATA	X'41'	
3717	01	00D46	6DC00041	A		WD,12	X'41'	
3718	01	00D47	6DC00041	A		WD,12	X'41'	
3719	01	00D48	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3720	01	00D49	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3721	01	00D4A	0F000464			XPSD,0	RETURN	
3722	01	00D4B	0F000464			XPSD,0	RETURN	
3723					** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,			
3724					** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS			
3725					* PXS = FAMDS.PRE3.NANLZ.NFAIM			
3726					* BRPH3 =FAMDS.PRE/34.NBRPH5.NANLZ			
3727	01	00D4C	FFFFFFF4	A	ANLZ14	DATA	-12	
3728	01	00D4D	44C00460			ANLZ,12	MEMORY	
3729	01	00D4E	00000136			K	0,0,0,SETPSW	
3730	01	00D4F	80000169			K	8,0,0,L8C+2	
3731	01	00D50	00000000	A		DATA	0	
3732	01	00D51	00000047			DATA	BRANCH	
3733	01	00D52	37C00047			MW,12	BRANCH	
3734	01	00D53	37C00047			MW,12	BRANCH	
3735	01	00D54	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3736	01	00D55	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3737	01	00D56	0F000464			XPSD,0	RETURN	
3738	01	00D57	0F000464			XPSD,0	RETURN	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3739						PAGE		
3740								** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3741								** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3742								* S/RW = FUXW.PRE3.NANLZ
3743	01	00D58	FFFFFFF4	A	ANLZ15	DATA	-12	
3744	01	00D59	44C00460			ANLZ,12	MEMORY	
3745	01	00D5A	00000136			K	0,0,0,SETPSW	
3746	01	00D5B	80000169			K	8,0,0,L8C+2	
3747	01	00D5C	FFFFFC18	A		DATA	-1000	
3748	01	00D5D	00000460			DATA	MEMORY	
3749	01	00D5E	46D00460			XW,13	MEMORY	
3750	01	00D5F	46D00460			XW,13	MEMORY	
3751	01	00D60	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3752	01	00D61	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3753	01	00D62	0F000464			XPSD,0	RETURN	
3754	01	00D63	0F000464			XPSD,0	RETURN	
3755								
3756								** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3757								** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3758	01	00D64	FFFFFFF4	A				* S/RW = FUBAL.PRE3.NANLZ
3759	01	00D65	44C00460		ANLZ16	DATA	-12	
3760	01	00D66	00000136			ANLZ,12	MEMORY	
3761	01	00D67	80000169			K	0,0,0,SETPSW	
3762	01	00D68	000003E8	A		K	8,0,0,L8C+2	
3763	01	00D69	00000047			DATA	1000	
3764	01	00D6A	6AD00047			DATA	BRANCH	
3765	01	00D6B	6AD00047			BAL,13	BRANCH	
3766	01	00D6C	5A5A5A5A	A		BAL,13	BRANCH	
3767	01	00D6D	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3768	01	00D6E	0F000464			DATA	X'5A5A5A5A'	
3769	01	00D6F	0F000464			XPSD,0	RETURN	
3770						XPSD,0	RETURN	
3771						PAGE		
3772								** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3773								** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3774								* ANALYZE A BIR THAT WILL BRANCH
3775	01	00D70	FFFFFFF4	A				* S/RW = FUBIR.PRE3.NANLZ
3776	01	00D71	44C00460		ANLZ17	DATA	-12	
3777	01	00D72	00000136			ANLZ,12	MEMORY	
3778	01	00D73	80000169			K	0,0,0,SETPSW	
3779	01	00D74	FFFFFFFE	A		K	8,0,0,L8C+2	
3780	01	00D75	00000047			DATA	-2	
3781	01	00D76	65C00047			DATA	BRANCH	
3782	01	00D77	65C00047			BIR,12	BRANCH	
3783	01	00D78	5A5A5A5A	A		BIR,12	BRANCH	
3784	01	00D79	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3785	01	00D7A	0F000464			DATA	X'5A5A5A5A'	
3786	01	00D7B	0F000464			XPSD,0	RETURN	
3787						XPSD,0	RETURN	
3788								** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3789								** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3790	01	00D7C	FFFFFFF4	A				* ANALYZE A BIR THAT WILL NOT BRANCH
3791	01	00D7D	44C00460		ANLZ18	DATA	-12	
3792	01	00D7E	00000136			ANLZ,12	MEMORY	
3793	01	00D7F	80000169			K	0,0,0,SETPSW	
3794	01	00D80	00000001	A		K	8,0,0,L8C+2	
3795	01	00D81	00000047			DATA	1	
3796	01	00D82	65C00047			DATA	BRANCH	
3797	01	00D83	65C00047			BIR,12	BRANCH	
3798	01	00D84	5A5A5A5A	A		BIR,12	BRANCH	
3799	01	00D85	5A5A5A5A	A		DATA	X'5A5A5A5A'	
3800	01	00D86	0F000464			DATA	X'5A5A5A5A'	
3801	01	00D87	0F000464			XPSD,0	RETURN	
3802						XPSD,0	RETURN	
3803						PAGE		
3804								** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3805								** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3806	01	00D88	FFFFFFF4	A				* BRPH3 = FUSF.PRE3.NANLZ.D23
3807	01	00D89	44C00460		ANLZ19	DATA	-12	
3808	01	00D8A	00000136			ANLZ,12	MEMORY	
3809	01	00D8B	80000169			K	0,0,0,SETPSW	
						K	8,0,0,L8C+2	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND          COMMENTS
3810      01            00D8C           00000064         A                DATA       100
3811      01            00D8D           00000177         A                DATA       X'177'
3812      01            00D8E           24D00177         A                SF,13      X'177'
3813      01            00D8F           24D00177         A                SF,13      X'177'
3814      01            00D90           5A5A5A5A         A                DATA       X'5A5A5A5A'
3815      01            00D91           5A5A5A5A         A                DATA       X'5A5A5A5A'
3816      01            00D92           0F000464                          XPSD,0     RETURN
3817      01            00D93           0F000464                          XPSD,0     RETURN
3818                                                                  ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3819                                                                  ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3820                                                                  * BRPH3 = FAPSD.PRE3.NANLZ.N07
3821      01            00D94           FFFFFFF4         A           ANLZ20   DATA       -12
3822      01            00D95           44C00460                             ANLZ,12    MEMORY
3823      01            00D96           00000136                             K          0,0,0,SETPSW
3824      01            00D97           C0000169                             K          12,0,0,L0C+2
3825      01            00D98           00000168                             DATA       L0C+1
3826      01            00D99           00000006         A                   DATA       6
3827      01            00D9A           0E00000C         A                   LPSD,0     12
3828      01            00D9B           0E00000C         A                   LPSD,0     12
3829      01            00D9C           00000000         A                   DATA       0
3830      01            00D9D           00000000         A                   DATA       0
3831      01            00D9E           0F000464                             XPSD,0     RETURN
3832      01            00D9F           0F000464                             XPSD,0     RETURN
3833                                                                           PAGE
3834                                                                  ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3835                                                                  ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3836                                                                  * PXS    = FAMDS.NFAIM.PRE3.NANLZ
3837      01            00DA0           FFFFFFF4         A           ANLZ21   DATA       -12
3838      01            00DA1           44C00460                             ANLZ,12    MEMORY
3839      01            00DA2           00000136                             K          0,0,0,SETPSW
3840      01            00DA3           A0000169                             K          10,0,0,L0C+2
3841      01            00DA4           FFFFFFFF         A                   DATA       -1
3842      01            00DA5           0001FFFF         A                   DATA       X'1FFFF'
3843      01            00DA6           A5D0000C         A                   S,13       *12
3844      01            00DA7           A5D0000C         A                   S,13       *12
3845      01            00DA8           5A5A5A5A         A                   DATA       X'5A5A5A5A'
3846      01            00DA9           5A5A5A5A         A                   DATA       X'5A5A5A5A'
3847      01            00DAA           0F000464                             XPSD,0     RETURN
3848      01            00DAB           0F000464                             XPSD,0     RETURN
3849                                                                  ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3850                                                                  ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3851                                                                  * BRPH6 = FAST/M.PRE3.N0U0.NANLZ
3852      01            00DAC           FFFFFFF4         A           ANLZ22   DATA       -12
3853      01            00DAD           44C00460                             ANLZ,12    MEMORY
3854      01            00DAE           10000136                             K          1,0,0,SETPSW
3855      01            00DAF           80000169                             K          8,0,0,L0C+2
3856      01            00DB0           00000000         A                   DATA       0
3857      01            00DB1           00000047                             DATA       BRANCH
3858      01            00DB2           2AD00047                             LM,13      BRANCH
3859      01            00DB3           2AD00047                             LM,13      BRANCH
3860      01            00DB4           00000000         A                   DATA       0,0
          01            00DB5           00000000         A
3861      01            00DB6           0F000464                             XPSD,0     RETURN
3862      01            00DB7           0F000464                             XPSD,0     RETURN
3863                                                                           PAGE
3864                                                                  ** ANLZ11 THROUGH ANLZ23 TEST NUMEROUS PRE PHASE TERMS: PXS, S/RW,
3865                                                                  ** BRPH3, BRPH6, AND BRPH10. REFERENCE PHASE SEQUENCE CHARTS
3866                                                                  * PXS = FUWAIT.PRE3.NANLZ
3867      01            00DB8           FFFFFFF4         A           ANLZ23   DATA       -12
3868      01            00DB9           44C00460                             ANLZ,12    MEMORY
3869      01            00DBA           73300136                             K          7,3,3,SETPSW
3870      01            00DBB           83300169                             K          8,3,3,L0C+2
3871      01            00DBC           00000000         A                   DATA       0,100
          01            00DBD           00000064         A
3872      01            00DBE           2E000064         A                   WAIT       100
3873      01            00DBF           2E000064         A                   WAIT       100
3874      01            00DC0           FFFFFFFF         A                   DATA       -1,-1
          01            00DC1           FFFFFFFF         A
3875      01            00DC2           0F000464                             XPSD,0     RETURN
3876      01            00DC3           0F000464                             XPSD,0     RETURN
3877                                                                  *                BRPRE4 = (LI+LCFI).PREL1.NANLZ.NC0
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3878	01	00DC4	FFFFFFF8	A	ANLZ24	DATA	-8	
3879	01	00DC5	44C00460			ANLZ,12	MEMORY	
3880	01	00DC6	07300136			K	0,7,3,SETPSW	
3881	01	00DC7	97300169			K	9,7,3,L0C+2	
3882	01	00DC8	00000001	A		DATA	1	
3883	01	00DC9	00000001	A		DATA	1	
3884	01	00DCA	023000FF	A		LCFI,3	X'FF'	
3885	01	00DCB	023000FF	A		LCFI,3	X'FF'	
3886						PAGE		
3887					** CONDITION CODE SETTINGS FOR CI,CB,CH,CW			
3888					** CC2 CC3 CC4			
3889					** - 0 0		OPERANDS EQUAL	
3890					** - 0 1		REGISTER WORD < EFFECTIVE WORD	
3891					** - 1 0		REGISTER WORD > EFFECTIVE WORD	
3892					** 0 - -		LOGICAL PRODUCT OF THE TWO OPERANDS IS ZERO	
3893					** 1 - -		LOGICAL PRODUCT OF THE TWO OPERANDS IS NONZERO	
3894					** COMPARE C(R) > C(EW). LOGIC PROD ZERO			
3895					** CHECK THAT SO.NFACOMP DOES NOT INHIBIT SGTZ (S_1CC3) ALSO			
3896					** CHECK THAT SO.NFACOMP DOES NOT S/CC4			
3897	01	00DCC	FFFFFFF8	A	CW01	DATA	-8	
3898	01	00DCD	31C00460			CW,12	MEMORY	
3899	01	00DCE	F7300136			K	15,7,3,SETPSW	
3900	01	00DCF	A7300169			K	10,7,3,L0C+2	
3901	01	00DD0	40000000	A		DATA	X'40000000'	
3902	01	00DD1	40000000	A		DATA	X'40000000'	
3903	01	00DD2	BFFFFFFF	A		DATA	X'BFFFFFFF'	
3904	01	00DD3	BFFFFFFF	A		DATA	X'BFFFFFFF'	
3905					** COMPARE C(R) < C(EW). LOGIC PROD NEZ			
3906					** CHECK THAT SOO.FACOMP HOLD SGTZ FALSE INHIBITING SETTING CC_3			
3907					** CHECK THAT SOO.FACOMP CAUSES S/CC4			
3908	01	00DD4	FFFFFFF8	A	CW02	DATA	-8	
3909	01	00DD5	31C00460			CW,12	MEMORY	
391C	01	00DD6	07300136			K	0,7,3,SETPSW	
3911	01	00DD7	57300169			K	5,7,3,L0C+2	
3912	01	00DD8	FFFFFFFE	A		DATA	-2	
3913	01	00DD9	FFFFFFFE	A		DATA	-2	
3914	01	00DDA	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3915	01	00DDB	7FFFFFFF	A		DATA	X'7FFFFFFF'	
3916					** COMPARE EQUALS. LOGIC PRODUCT ZERO (OPERANDS BOTH ZERO)			
3917	01	00DDC	FFFFFFFC	A	CW03	DATA	-4	
3918	01	00DDD	31C00460			CW,12	MEMORY	
3919	01	00DDE	F7300136			K	15,7,3,SETPSW	
3920	01	00DDF	87300169			K	8,7,3,L0C+2	
3921						PAGE		
3922					** R > EW. HALFWORD ZERO BEING COMPARED. LOGICAL PRODUCT NEZ			
3923	01	00DE0	FFFFFFF8	A	CH01	DATA	-8	CH
3924	01	00DE1	51C00460			CH,12	MEMORY	
3925	01	00DE2	F7300136			K	15,7,3,SETPSW	
3926	01	00DE3	C7300169			K	12,7,3,L0C+2	
3927	01	00DE4	FFFF8000	A		DATA	X'FFFF8000'	
3928	01	00DE5	FFFF8000	A		DATA	X'FFFF8000'	
3929	01	00DE6	8000F739	A		DATA	X'8000F739'	
3930	01	00DE7	8000F739	A		DATA	X'8000F739'	
3931					** R=EW HALFWORD ONE BEING COMPARED. LOGICAL PRODUCT NEZ			
3932	01	00DE8	FFFFFFF8	A	CH02	DATA	-8	CH X
3933	01	00DE9	51CE0460			CH,12	MEMORY,7	
3934	01	00DEA	77300136			K	7,7,3,SETPSW	
3935	01	00DEB	47300169			K	4,7,3,L0C+2	
3936	01	00DEC	00007F32	A		DATA	X'7F32'	
3937	01	00DED	00007F32	A		DATA	X'7F32'	
3938	01	00DEE	123E7F32	A		DATA	X'123E7F32'	
3939	01	00DEF	123E7F32	A		DATA	X'123E7F32'	
3940					** EW > R. HW ZERO BEING COMPARED. LOGICAL PRODUCT EZ			
3941	01	00DF0	FFFFFFF8	A	CH03	DATA	-8	
3942	01	00DF1	51C00460			CH,12	MEMORY	
3943	01	00DF2	07300136			K	0,7,3,SETPSW	
3944	01	00DF3	27300169			K	2,7,3,L0C+2	
3945	01	00DF4	42008200	A		DATA	X'42008200'	
3946	01	00DF5	42008200	A		DATA	X'42008200'	
3947	01	00DF6	71140200	A		DATA	X'71140200'	
3948	01	00DF7	71140200	A		DATA	X'71140200'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
3949						PAGE		
3950	01	00DF8	FFFFFFF8	A	CB01	DATA	-8	CB BYTE 0
3951	01	00DF9	71C00460			CB,12	MEMORY	
3952	01	00DFA	77300136			K	7,7,3,SETPSW	
3953	01	00DFB	07300169			K	0,7,3,L0C+2	
3954	01	00DFC	FFFFFF00	A		DATA	X'FFFFFF00'	
3955	01	00DFD	FFFFFF00	A		DATA	X'FFFFFF00'	
3956	01	00DFE	00FFFFFF	A		DATA	X'FFFFFF'	
3957	01	00DFF	00FFFFFF	A		DATA	X'FFFFFF'	
3958	01	00E00	FFFFFFF8	A	CB02	DATA	-8	CB BYTE 1
3959	01	00E01	71C20440			CB,12	MEMORY-X'20',1	
3960	01	00E02	77300136			K	7,7,3,SETPSW	
3961	01	00E03	57300169			K	5,7,3,L0C+2	
3962	01	00E04	00000081	A		DATA	X'81'	
3963	01	00E05	00000081	A		DATA	X'81'	
3964	01	00E06	FFFEFFFF	A		DATA	X'FFFEFFFF'	
3965	01	00E07	FFFEFFFF	A		DATA	X'FFFEFFFF'	
3966	01	00E08	FFFFFFF8	A	CB03	DATA	-8	CB BYTE 0
3967	01	00E09	71C00460			CB,12	MEMORY	
3968	01	00E0A	37300136			K	3,7,3,SETPSW	
3969	01	00E0B	47300169			K	4,7,3,L0C+2	
3970	01	00E0C	000000FF	A		DATA	X'FF'	
3971	01	00E0D	000000FF	A		DATA	X'FF'	
3972	01	00E0E	FFEECCDD	A		DATA	X'FFEECCDD'	
3973	01	00E0F	FFEECCDD	A		DATA	X'FFEECCDD'	
3974	01	00E10	FFFFFFF8	A	CB04	DATA	-8	CB X BYTE 1
3975	01	00E11	71C2EEC2			CB,12	MEMORY-X'1159E',1	
3976	01	00E12	F7300136			K	15,7,3,SETPSW	
3977	01	00E13	C7300169			K	12,7,3,L0C+2	
3978	01	00E14	12345679	A		DATA	X'12345679'	
3979	01	00E15	12345679	A		DATA	X'12345679'	
3980	01	00E16	26793355	A		DATA	X'26793355'	
3981	01	00E17	26793355	A		DATA	X'26793355'	
3982						PAGE		
3983	01	00E18	FFFFFFF8	A	CB05	DATA	-8	CB *X BYTE 2
3984	01	00E19	F1C2045A			CB,12	*IA,1	
3985	01	00E1A	07300136			K	0,7,3,SETPSW	
3986	01	00E1B	47300169			K	4,7,3,L0C+2	
3987	01	00E1C	00000002	A		DATA	2	
3988	01	00E1D	00000002	A		DATA	2	
3989	01	00E1E	FFFF02FF	A		DATA	X'FFFF02FF'	
3990	01	00E1F	FFFF02FF	A		DATA	X'FFFF02FF'	
3991	01	00E20	FFFFFFF8	A	CB06	DATA	-8	CB BYTE 3
3992	01	00E21	71C22B10			CB,12	MEMORY-X'1D950',1	
3993	01	00E22	07300136			K	0,7,3,SETPSW	
3994	01	00E23	47300169			K	4,7,3,L0C+2	
3995	01	00E24	ABC76543	A		DATA	X'ABC76543'	
3996	01	00E25	ABC76543	A		DATA	X'ABC76543'	
3997	01	00E26	54389A43	A		DATA	X'54389A43'	
3998	01	00E27	54389A43	A		DATA	X'54389A43'	
3999	01	00E28	FFFFFFF8	A	CB07	DATA	-8	CB BYTE 2
4000	01	00E29	71CE0460			CB,12	MEMORY,7	
4001	01	00E2A	77300136			K	7,7,3,SETPSW	
4002	01	00E2B	17300169			K	1,7,3,L0C+2	
4003	01	00E2C	00000059	A		DATA	X'59'	
4004	01	00E2D	00000059	A		DATA	X'59'	
4005	01	00E2E	58A65754	A		DATA	X'58A65754'	
4006	01	00E2F	58A65754	A		DATA	X'58A65754'	
4007	01	00E30	FFFFFFF8	A	CB08	DATA	-8	CB BYTE 0
4008	01	00E31	71C00460			CB,12	MEMORY	
4009	01	00E32	77300136			K	7,7,3,SETPSW	
4010	01	00E33	27300169			K	2,7,3,L0C+2	
4011	01	00E34	FFFFFFBC	A		DATA	X'FFFFFFBC'	
4012	01	00E35	FFFFFFBC	A		DATA	X'FFFFFFBC'	
4013	01	00E36	43210567	A		DATA	X'43210567'	
4014	01	00E37	43210567	A		DATA	X'43210567'	
4015						PAGE		
4016					** SIGN EXTEND '0' C(R)> EW, L0GIC PR0DUCT NEZ			
4017	01	00E38	FFFFFFFA	A	CI01	DATA	-6	
4018	01	00E39	21C7FFFD	A		CI,12	X'7FFFD'	
4019	01	00E3A	07300136			K	0,7,3,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4020	01	00E3B	67300169			K	6,7,3,LOC+2	
4021	01	00E3C	0007FFFE	A		DATA	X'7FFFE'	
4022	01	00E3D	0007FFFE	A		DATA	X'7FFFE'	
4023					** SIGN EXTEND '1' C(R) < EW, LP = ZERO			
4024	01	00E3E	FFFFFFFA	A	CI02	DATA	-6	
4025	01	00E3F	21C80000	A		CI,12	X'80000'	
4026	01	00E40	F7300136			K	15,7,3,SETPSW	
4027	01	00E41	A7300169			K	10,7,3,LOC+2	
4028	01	00E42	0007FFFF	A		DATA	X'7FFFF'	
4029	01	00E43	0007FFFF	A		DATA	X'7FFFF'	
4030						PAGE		
4031	01	00E44	FFFFFFF4	A	CD01	DATA	-12	CD
4032	01	00E45	11C00460			CD,12	MEMORY	
4033	01	00E46	F7300136			K	15,7,3,SETPSW	
4034	01	00E47	C7300169			K	12,7,3,LOC+2	
4035	01	00E48	12345678	A		DATA	X'12345678'	
4036	01	00E49	12345678	A		DATA	X'12345678'	
4037	01	00E4A	12345678	A		DATA	X'12345678'	
4038	01	00E4B	12345678	A		DATA	X'12345678'	
4039	01	00E4C	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4040	01	00E4D	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4041	01	00E4E	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4042	01	00E4F	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4043	01	00E50	FFFFFFF4	A	CD02	DATA	-12	CD X
4044	01	00E51	11C35770			CD,12	MEMORY-X'ACF0',1	
4045	01	00E52	07300136			K	0,7,3,SETPSW	
4046	01	00E53	27300169			K	2,7,3,LOC+2	
4047	01	00E54	12345678	A		DATA	X'12345678'	
4048	01	00E55	12345678	A		DATA	X'12345678'	
4049	01	00E56	12345678	A		DATA	X'12345678'	
4050	01	00E57	12345678	A		DATA	X'12345678'	
4051	01	00E58	9ABCDEF1	A		DATA	X'9ABCDEF1'	
4052	01	00E59	9ABCDEF1	A		DATA	X'9ABCDEF1'	
4053	01	00E5A	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4054	01	00E5B	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4055						PAGE		
4056	01	00E5C	FFFFFFF4	A	CD03	DATA	-12	CD *
4057	01	00E5D	91C0045A			CD,12	*IA	
4058	01	00E5E	77300136			K	7,7,3,SETPSW	
4059	01	00E5F	57300169			K	5,7,3,LOC+2	
4060	01	00E60	76543210	A		DATA	X'76543210'	
4061	01	00E61	76543210	A		DATA	X'76543210'	
4062	01	00E62	76543210	A		DATA	X'76543210'	
4063	01	00E63	76543210	A		DATA	X'76543210'	
4064	01	00E64	FDECBA98	A		DATA	X'FDECBA98'	
4065	01	00E65	FDECBA98	A		DATA	X'FDECBA98'	
4066	01	00E66	FDECBA99	A		DATA	X'FDECBA99'	
4067	01	00E67	FDECBA99	A		DATA	X'FDECBA99'	
4068	01	00E68	FFFFFFF4	A	CD04	DATA	-12	CD
4069	01	00E69	11D00460			CD,13	MEMORY	
4070	01	00E6A	F7300136			K	15,7,3,SETPSW	
4071	01	00E6B	D7300169			K	13,7,3,LOC+2	
4072	01	00E6C	ADDEBCAD	A		DATA	X'ADDEBCAD'	
4073	01	00E6D	ADDEBCAD	A		DATA	X'ADDEBCAD'	
4074	01	00E6E	76543210	A		DATA	X'76543210'	
4075	01	00E6F	76543210	A		DATA	X'76543210'	
4076	01	00E70	76543210	A		DATA	X'76543210'	
4077	01	00E71	76543210	A		DATA	X'76543210'	
4078	01	00E72	76543211	A		DATA	X'76543211'	
4079	01	00E73	76543211	A		DATA	X'76543211'	
4080						PAGE		
4081					** OPERANDS EQUAL			
4082	01	00E74	FFFFFFF6	A	CS01	DATA	-10	
4083	01	00E75	45C00460			CS,12	MEMORY	PH1: C(S)= EW*RJ1 = A5A5A5A5
4084	01	00E76	F7300136			K	15,7,3,SETPSW	
4085	01	00E77	C7300169			K	12,7,3,LOC+2	PH3: C(S)= R*RU1 = A5A5A5A5
4086	01	00E78	A5A5A5A5	A		DATA	X'A5A5A5A5'	
4087	01	00E79	A5A5A5A5	A		DATA	X'A5A5A5A5'	PH4: C(S)= PH3*PH1 = 00000000
4088	01	00E7A	FFFFFFFF	A		DATA	-1	
4089	01	00E7B	FFFFFFFF	A		DATA	-1	
4090	01	00E7C	A5A5A5A5	A		DATA	X'A5A5A5A5'	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL    OPERATION  OPERAND          COMMENTS
4091      01            00E7D          A5A5A5A5         A                 DATA     X'A5A5A5A5'
4092                                                                  ** R < EW
4093      01            00E7E          FFFFFFF6         A       CS02      DATA     -10
4094      01            00E7F          45C00460                         CS,12    MEMORY           PH1: C(S)= EW.RU1  = A5A5A5A5
4095      01            00E80          07300136                         K        0,7,3,SETPSW
4096      01            00E81          17300169                         K        1,7,3,L0C+2
4097      01            00E82          5A5A5A5A         A               DATA     X'5A5A5A5A'
4098      01            00E83          5A5A5A5A         A               DATA     X'5A5A5A5A'      PH4: C(S)= PH3-PH1 = B4B4B4B5
4099      01            00E84.         A5A5A5A5         A               DATA     X'A5A5A5A5'
4100      01            00E85          A5A5A5A5         A               DATA     X'A5A5A5A5'
4101      01            00E86          FFFFFFFF         A               DATA     -1
4102      01            00E87          FFFFFFFF         A               DATA     -1
4103                                                                  ** R > EW
4104      01            00E88          FFFFFFF6         A       CS03      DATA     -10
4105      01            00E89          45C00460                         CS,12    MEMORY           PH1: C(S)= EW.RU1  = 5A5A0000
4106      01            00E8A          07300136                         K        0,7,3,SETPSW
4107      01            00E8B          27300169                         K        2,7,3,L0C+2      PH3: C(S)= R.RU1   = A5A50000
4108      01            00E8C          A5A5A5A5         A               DATA     X'A5A5A5A5'
4109      01            00E8D          A5A5A5A5         A               DATA     X'A5A5A5A5'      PH4: C(S)= PH3-PH1 = 4B4B0000
4110      01            00E8E          5A5A5A5A         A               DATA     X'5A5A5A5A'
4111      01            00E8F          5A5A5A5A         A               DATA     X'5A5A5A5A'
4112      01            00E90          FFFF0000         A               DATA     X'FFFF0000'
4113      01            00E91          FFFF0000         A               DATA     X'FFFF0000'
4114                                                                     PAGE
4115                                                                  ** C(R) < EW. C(RU1)=EW
4116      01            00E92          FFFFFFF6         A       CLR01     DATA     -10
4117      01            00E93          39C00460                         CLR,12   MEMORY
4118      01            00E94          F7300136                         K        15,7,3,SETPSW
4119      01            00E95          47300169                         K        4,7,3,L0C+2
4120      01            00E96          00000000         A               DATA     0
4121      01            00E97          00000000         A               DATA     0
4122      01            00E98          00000000         A               DATA     0
4123      01            00E99          00000000         A               DATA     0
4124      01            00E9A          FFFFFFFF         A               DATA     -1
4125      01            00E9B          FFFFFFFF         A               DATA     -1
4126                                                                  ** C(R)=EW. C(RU1)< EW
4127      01            00E9C          FFFFFFFA         A       CLR02     DATA     -6
4128      01            00E9D          39C00460                         CLR,12   MEMORY
4129      01            00E9E          F7300136                         K        15,7,3,SETPSW
4130      01            00E9F          17300169                         K        1,7,3,L0C+2
4131      01            00EA0          FFFFFFFF         A               DATA     -1
4132      01            00EA1          FFFFFFFF         A               DATA     -1
4133                                                                  ** C(R) > EW. C(RU1) < EW.
4134      01            00EA2          FFFFFFF6         A       CLR03     DATA     -10
4135      01            00EA3          39C00460                         CLR,12   MEMORY
4136      01            00EA4          07300136                         K        0,7,3,SETPSW
4137      01            00EA5          67300169                         K        6,7,3,L0C+2
4138      01            00EA6          00000001         A               DATA     1
4139      01            00EA7          00000001         A               DATA     1
4140      01            00EA8          00000000         A               DATA     0
4141      01            00EA9          00000000         A               DATA     0
4142      01            00EAA          FFFFFFFF         A               DATA     -1
4143      01            00EAB          FFFFFFFF         A               DATA     -1
4144                                                                     PAGE
4145                                                                  ** C(R) <EW. C(RU1) > EW.
4146      01            00EAC          FFFFFFF6         A       CLR04     DATA     -10
4147      01            00EAD          39C00460                         CLR,12   MEMORY
4148      01            00EAE          07300136                         K        0,7,3,SETPSW
4149      01            00EAF          97300169                         K        9,7,3,L0C+2
4150      01            00EB0          FFFFFFFF         A               DATA     -1
4151      01            00EB1          FFFFFFFF         A               DATA     -1
4152      01            00EB2          00000000         A               DATA     0
4153      01            00EB3          00000000         A               DATA     0
4154      01            00EB4          00000001         A               DATA     1
4155      01            00EB5          00000001         A               DATA     1
4156                                                                  ** USE 0DD R FIELD. C(R)=C(RU1)>EW.
4157      01            00EB6          FFFFFFF6         A       CLR05     DATA     -10
4158      01            00EB7          39D00460                         CLR,13   MEMORY
4159      01            00EB8          07300136                         K        0,7,3,SETPSW
4160      01            00EB9          A7300169                         K        10,7,3,L0C+2
4161      01            00EBA          FFFFFFFF         A               DATA     -1
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LINE NO. MEM PROT KEY MEMORY ADDRESS MEMORY CONTENTS ABS OR REL ORIG LABEL OPERATION OPERAND COMMENTS
4162 01 00EBB FFFFFFFF A DATA -1
4163 01 00EBC 00000000 A DATA 0
4164 01 00EBD 00000000 A DATA 0
4165 01 00EBE 00000001 A DATA 1
4166 01 00EBF 00000001 A DATA 1
4167 PAGE
4168 ** R > M+1. R < M
4169 01 00EC0 FFFFFFF4 A CLM01 DATA -12
4170 01 00EC1 19C00460 CLM,12 MEMORY
4171 01 00EC2 07300136 K 0,7,3,SETPSW
4172 01 00EC3 97300169 K 9,7,3,L0C+2
4173 01 00EC4 00000000 A DATA 0
4174 01 00EC5 00000000 A DATA 0
4175 01 00EC6 00000001 A DATA 1
4176 01 00EC7 00000001 A DATA 1
4177 01 00EC8 FFFFFFFF A DATA -1
4178 01 00EC9 FFFFFFFF A DATA -1
4179 01 00ECA FFFFFFFF A DATA -1
4180 01 00ECB FFFFFFFF A DATA -1
4181 ** USE 0DD MEMORY L0C. SH0ULD STILL FETCH EVEN L0C AND 0DD L0C
4182 ** R < M+1. R > M
4183 01 00ECC FFFFFFF4 A CLM02 DATA -12
4184 01 00ECD 19D00461 CLM,13 MEM0RY+1
4185 01 00ECE 97300136 K 9,7,3,SETPSW
4186 01 00ECF 67300169 K 6,7,3,L0C+2
4187 01 00ED0 FFFFFFFF A DATA -1
4188 01 00ED1 FFFFFFFF A DATA -1
4189 01 00ED2 FFFFFFFF A DATA -1
4190 01 00ED3 FFFFFFFF A DATA -1
4191 01 00ED4 00000000 A DATA 0
4192 01 00ED5 00000000 A DATA 0
4193 01 00ED6 00000001 A DATA 1
4194 01 00ED7 00000001 A DATA 1
4195 *
4196 ** R = M+1. R=M *E
4197 01 00ED8 FFFFFFF4 A CLM03 DATA -12 *E
4198 01 00ED9 19C00460 CLM,12 MEMORY
4199 01 00EDA F7300136 K F,7,3,SETPSW *E
4200 01 00EDB 07300169 K 0,7,3,L0C+2 *E
4201 01 00EDC 25252525 A DATA X'25252525' *E
4202 01 00EDD 25252525 A DATA X'25252525' *E
4203 01 00EDE 25252525 A DATA X'25252525' *E
4204 01 00EDF 25252525 A DATA X'25252525' *E
4205 01 00EE0 FFFFFFFF A DATA -1 *E
4206 01 00EE1 FFFFFFFF A DATA -1 *E
4207 01 00EE2 25252525 A DATA X'25252525' *E
4208 01 00EE3 25252525 A DATA X'25252525' *E
4209 *
4210 *
4211 ** R<M. R<M+1. *E
4212 01 00EE4 FFFFFFF4 A CLM04 DATA -12 *E
4213 01 00EE5 19C00460 CLM,12 MEMORY *E
4214 01 00EE6 07300136 K 0,7,3,SETPSW *E
4215 01 00EE7 57300169 K 5,7,3,L0C+2 *E
4216 01 00EE8 80000000 A DATA X'80000000' *E
4217 01 00EE9 80000000 A DATA X'80000000' *E
4218 01 00EEA 80000001 A DATA X'80000001' *E
4219 01 00EEB 80000001 A DATA X'80000001' *E
4220 01 00EEC 00000000 A DATA 0 *E
4221 01 00EED 00000000 A DATA 0 *E
4222 01 00EEE FFFFFFFF A DATA -1 *E
4223 01 00EEF FFFFFFFF A DATA -1 *E
4224 * *E
4225 ** R>M. R>M+1
4226 01 00EF0 FFFFFFF4 A CLM05 DATA -12 *E
4227 01 00EF1 19D2ACC6 CLM,13 MEMORY-2*X'ABCD',1 *E
4228 01 00EF2 07300136 K 0,7,3,SETPSW *E
4229 01 00EF3 A73C0169 K 10,7,3,L0C+2 *E
4230 01 00EF4 6789ABCD A DATA X'6789ABCD' *E
4231 01 00EF5 6789ABCD A DATA X'6789ABCD' *E
4232 01 00EF6 7FFFFFFE A DATA X'7FFFFFFE' *E
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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND                  COMMENTS
4233      01            00EF7           7FFFFFFE         A                DATA      X'7FFFFFFE'                        *E
4234      01            00EF8           7FFFFFFF         A                DATA      X'7FFFFFFF'                        *E
4235      01            00EF9           7FFFFFFF         A                DATA      X'7FFFFFFF'                        *E
4236      01            00EFA           FFFFFFFF         A                DATA      -1                                 *E
4237      01            00EFB           FFFFFFFF         A                DATA      -1                                 *E
4238                                                                       *
4239                                                                       ** R = M.R > M+1                           *E
4240      01            00EFC           FFFFFFF4         A      CLM06     DATA      -12                                *E
4241      01            00EFD           19C00461                        CLM,12    MEMORY+1                           *E
4242      01            00EFE           77300136                        K         7,7,3,SETPSW                       *E
4243      01            00EFF           87300169                        K         8,7,3,LOC+2                        *E
4244      01            00F00           02345678         A              DATA      X'2345678'                         *E
4245      01            00F01           02345678         A              DATA      X'2345678'                         *E
4246      01            00F02           02345678         A              DATA      X'2345678'                         *E
4247      01            00F03           02345678         A              DATA      X'2345678'                         *E
4248      01            00F04           00000000         A              DATA      0                                  *E
4249      01            00F05           00000000         A              DATA      0                                  *E
4250      01            00F06           02345677         A              DATA      X'2345677'                         *E
4251      01            00F07           02345677         A              DATA      X'2345677'                         *E
4252                                                                       ** CHECK OVERFLOW NO TRAP
4253      01            00F08           FFFFFFFA         A      MTW01     DATA      -6                 MTW
4254      01            00F09           33F0000C         A              MTW,15    12
4255      01            00F0A           072001C8                        K         0,7,2,FXPOSW
4256      01            00F0B           E7200169                        K         14,7,2,LOC+2
4257      01            00F0C           80000000         A              DATA      X'80000000'
4258      01            00F0D           7FFFFFFF         A              DATA      X'7FFFFFFF'
4259      01            00F0E           FFFFFFFA         A      MTW02     DATA      -6                 MTW
4260      01            00F0F           3300000C         A              MTW,0     12
4261      01            00F10           07300136                        K         0,7,3,SETPSW
4262      01            00F11           17300169                        K         1,7,3,LOC+2
4263      01            00F12           80000000         A              DATA      X'80000000'
4264      01            00F13           80000000         A              DATA      X'80000000'
4265      01            00F14           FFFFFFF8         A      MTW03     DATA      -8                 MTW  X
4266      01            00F15           33D211EA                        MTW,13    MEMORY=X'1F276',1
4267      01            00F16           77300136                        K         7,7,3,SETPSW
4268      01            00F17           87300169                        K         8,7,3,LOC+2
4269      01            00F18           0001F276         A              DATA      X'1F276'
4270      01            00F19           0001F276         A              DATA      X'1F276'
4271      01            00F1A           00000003         A              DATA      3
4272      01            00F1B           00000000         A              DATA      0
4273                                                                       PAGE
4274                                                                       ** CHECK OVERFLOW TRAP
4275      01            00F1C           FFFFFFF8         A      MTW04     DATA      -8                 MTW *
4276      01            00F1D           B310045A                        MTW,1     *IA
4277      01            00F1E           073001C8                        K         0,7,3,FXPOSW
4278      01            00F1F           57300084                        K         5,7,3,FPORET+1
4279      01            00F20           00000000         A              DATA      0
4280      01            00F21           00000000         A              DATA      0
4281      01            00F22           7FFFFFFF         A              DATA      X'7FFFFFFF'
4282      01            00F23           80000000         A              DATA      X'80000000'
4283      01            00F24           FFFFFFF8         A      MTW05     DATA      -8                 MTW
4284      01            00F25           33700460                        MTW,7     MEMORY
4285      01            00F26           F7300136                        K         15,7,3,SETPSW
4286      01            00F27           17300169                        K         1,7,3,LOC+2
4287      01            00F28           FFFFFFFF         A              DATA      -1
4288      01            00F29           FFFFFFFF         A              DATA      -1
4289      01            00F2A           FFFFFFF8         A              DATA      X'FFFFFFF8'
4290      01            00F2B           FFFFFFFF         A              DATA      -1
4291                                                                       PAGE
4292      01            00F2C           FFFFFFFA         A      MTH01     DATA      -6                 MTH
4293      01            00F2D           5300000C         A              MTH,0     12
4294      01            00F2E           07300136                        K         0,7,3,SETPSW
4295      01            00F2F           27300169                        K         2,7,3,LOC+2
4296      01            00F30           00010000         A              DATA      X'10000'
4297      01            00F31           00010000         A              DATA      X'10000'
4298      01            00F32           FFFFFFF8         A      MTH02     DATA      -8                 MTH  X
4299      01            00F33           5323C01C                        MTH,2     MEMORY=X'4444',1
4300      01            00F34           77300136                        K         7,7,3,SETPSW
4301      01            00F35           87300169                        K         8,7,3,LOC+2
4302      01            00F36           00008889         A              DATA      X'8889'
4303      01            00F37           00008889         A              DATA      X'8889'
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4304	01	00F38	7FFFFFFE	A		DATA	X'7FFFFFFE'	
4305	01	00F39	7FFF0000	A		DATA	X'7FFF0000'	
4306					** CHECK	ØVERFLØW	NØ TRAP	
4307	01	00F3A	FFFFFFF8	A	MTH03	DATA	-8	MTH *
4308	01	00F3B	D3E2045A			MTH,14	*IA,1	
4309	01	00F3C	172001C8			K	1,7,2,FXPØSW	
4310	01	00F3D	E7200169			K	14,7,2,LØC+2	
4311	01	00F3E	00000001	A		DATA	1	
4312	01	00F3F	00000001	A		DATA	1	
4313	01	00F40	FFFF8000	A		DATA	X'FFFF8000'	
4314	01	00F41	FFFF7FFE	A		DATA	X'FFFF7FFE'	
4315					** CHECK	ØVERFLØW	TRAP	
4316	01	00F42	FFFFFFF8	A	MTH04	DATA	-8	MTH X
4317	01	00F43	53320460			MTH,3	MEMØRY,1	
4318	01	00F44	273001C8			K	2,7,3,FXPØSW	
4319	01	00F45	57300084			K	5,7,3,FPØRET+1	
4320	01	00F46	00000001	A		DATA	1	
4321	01	00F47	00000001	A		DATA	1	
4322	01	00F48	7FFF7FFF	A		DATA	X'7FFF7FFF'	
4323	01	00F49	7FFF8002	A		DATA	X'7FFF8002'	
4324						PAGE		
4325	01	00F4A	FFFFFFF8	A	MTH05	DATA	-8	MTH X(X=0)
4326	01	00F4B	53920460			MTH,9	MEMØRY,1	
4327	01	00F4C	F7300136			K	15,7,3,SETPSW	
4328	01	00F4D	97300169			K	9,7,3,LØC+2	
4329	01	00F4E	00000000	A		DATA	0	
4330	01	00F4F	00000000	A		DATA	0	
4331	01	00F50	FFF979AB	A		DATA	X'FFF979AB'	
4332	01	00F51	FFF279AB	A		DATA	X'FFF279AB'	
4333						PAGE		
4334	01	00F52	FFFFFFF8	A	MTB01	DATA	-8	MTB BYTE 0
4335	01	00F53	73000460			MTB,0	MEMØRY	
4336	01	00F54	F7300136			K	15,7,3,SETPSW	
4337	01	00F55	07300169			K	0,7,3,LØC+2	
4338	01	00F56	00000000	A		DATA	0	
4339	01	00F57	00000000	A		DATA	0	
4340	01	00F58	00FFFFFF	A		DATA	X'FFFFFF'	
4341	01	00F59	00FFFFFF	A		DATA	X'FFFFFF'	
4342	01	00F5A	FFFFFFF8	A	MTB02	DATA	-8	MTB X BYTE 1
4343	01	00F5B	73C20460			MTB,12	MEMØRY,1	
4344	01	00F5C	F7300136			K	15,7,3,SETPSW	
4345	01	00F5D	A7300169			K	10,7,3,LØC+2	
4346	01	00F5E	00000001	A		DATA	1	
4347	01	00F5F	00000001	A		DATA	1	
4348	01	00F60	F0F5F300	A		DATA	X'F0F5F300'	
4349	01	00F61	F0F1F300	A		DATA	X'F0F1F300'	
4350	01	00F62	FFFFFFF8	A	MTB03	DATA	-8	MTB *X BYTE 2
4351	01	00F63	F342045A			MTB,4	*IA,1	
4352	01	00F64	07300136			K	0,7,3,SETPSW	
4353	01	00F65	A7300169			K	10,7,3,LØC+2	
4354	01	00F66	00000002	A		DATA	2	
4355	01	00F67	00000002	A		DATA	2	
4356	01	00F68	F0F9FF03	A		DATA	X'F0F9FF03'	
4357	01	00F69	F0F90303	A		DATA	X'F0F90303'	
4358	01	00F6A	FFFFFFF8	A	MTB04	DATA	-8	MTH X BYTE 3
4359	01	00F6B	73B20460			MTB,11	MEMØRY,1	
4360	01	00F6C	77300136			K	7,7,3,SETPSW	
4361	01	00F6D	87300169			K	8,7,3,LØC+2	
4362	01	00F6E	00000003	A		DATA	3	
4363	01	00F6F	00000003	A		DATA	3	
4364	01	00F70	FFFFFF05	A		DATA	X'FFFFFF05'	
4365	01	00F71	FFFFFF00	A		DATA	-256	
4366						PAGE		
4367	01	00F72	FFFFFFFA	A	MTB05	DATA	-6	MTB BYTE 1
4368	01	00F73	738E000C	A		MTB,8	12,7	
4369	01	00F74	77300136			K	7,7,3,SETPSW	
4370	01	00F75	87300169			K	8,7,3,LØC+2	
4371	01	00F76	FF08FFFF	A		DATA	X'FF08FFFF'	
4372	01	00F77	FF00FFFF	A		DATA	X'FF00FFFF'	
4373	01	00F78	FFFFFFFA	A	MTB06	DATA	-6	MTB BYTE 2
4374	01	00F79	7352014C	A		MTB,5	12-X'1FEC0',1	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4375	01	00F7A	07300136			K	0,7,3,SETPSW	
4376	01	00F7B	87300169			K	8,7,3,L8C+2	
4377	01	00F7C	FFFFFB02	A		DATA	X'FFFFFB02'	
4378	01	00F7D	FFFF0002	A		DATA	X'FFFF0002'	
4379	01	00F7E	FFFFFFFA	A	MTB07	DATA	-6	MTB BYTE 0
4380	01	00F7F	73A0000C	A		MTB,10	12	
4381	01	00F80	37300136			K	3,7,3,SETPSW	
4382	01	00F81	87300169			K	8,7,3,L8C+2	
4383	01	00F82	06123457	A		DATA	X'6123457'	
4384	01	00F83	00123457	A		DATA	X'123457'	
4385	01	00F84	FFFFFFFA	A	MTB08	DATA	-6	
4386	01	00F85	7360000C	A		MTB,6	12	
4387	01	00F86	57300136			K	5,7,3,SETPSW	
4388	01	00F87	27300169			K	2,7,3,L8C+2	
4389	01	00F88	00000000	A		DATA	0	
4390	01	00F89	06000000	A		DATA	X'6000000'	
4391						PAGE		
4392	01	00F8A	FFFFFFF8	A	AH01	DATA	-8	AH
4393	01	00F8B	50C00460			AH,12	MEM8RY	
4394	01	00F8C	673001C8			K	6,7,3,FXP8SW	
4395	01	00F8D	97300169			K	9,7,3,L8C+2	
4396	01	00F8E	FFFF7654	A		DATA	X'FFFF7654'	
4397	01	00F8F	FFFEFFFF	A		DATA	X'FFFEFFFF'	
4398	01	00F90	89AB0000	A		DATA	X'89AB0000'	
4399	01	00F91	89AB0000	A		DATA	X'89AB0000'	
4400	01	00F92	FFFFFFF8	A	AH02	DATA	-8	AH X
4401	01	00F93	50CE0460			AH,12	MEM8RY,7	
4402	01	00F94	573001C8			K	5,7,3,FXP8SW	
4403	01	00F95	27300169			K	2,7,3,L8C+2	
4404	01	00F96	7FFFDC8B	A		DATA	X'7FFFDC8B'	
4405	01	00F97	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4406	01	00F98	23452344	A		DATA	X'23452344'	
4407	01	00F99	23452344	A		DATA	X'23452344'	
4408	01	00F9A	FFFFFFF8	A	AH03	DATA	-8	AH *
4409	01	00F9B	D0CE045A			AH,12	*IA,7	
4410	01	00F9C	072001C8			K	0,7,2,FXP8SW	
4411	01	00F9D	E7200169			K	14,7,2,L8C+2	
4412	01	00F9E	80000000	A		DATA	X'80000000'	
4413	01	00F9F	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4414	01	00FA0	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4415	01	00FA1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4416	01	00FA2	FFFFFFFA	A	AH04	DATA	-6	AH
4417	01	00FA3	50C0000C	A		AH,12	12	
4418	01	00FA4	273001C8			K	2,7,3,FXP8SW	
4419	01	00FA5	573000B4			K	5,7,3,FP8RET+1	
4420	01	00FA6	7FFF8001	A		DATA	X'7FFF8001'	
4421	01	00FA7	80000000	A		DATA	X'80000000'	
4422						PAGE		
4423	01	00FA8	FFFFFFFA	A	AI01	DATA	-6	AI
4424	01	00FA9	20C70000	A		AI,12	X'70000'	
4425	01	00FAA	773001C8			K	7,7,3,FXP8SW	
4426	01	00FAB	17300169			K	1,7,3,L8C+2	
4427	01	00FAC	80000000	A		DATA	X'80000000'	
4428	01	00FAD	80070000	A		DATA	X'80070000'	
4429	01	00FAE	FFFFFFFA	A	AI02	DATA	-6	AI
4430	01	00FAF	20C80000	A		AI,12	X'80000'	
4431	01	00FB0	173001C8			K	1,7,3,FXP8SW	
4432	01	00FB1	E7300084			K	14,7,3,FP8RET+1	
4433	01	00FB2	80000000	A		DATA	X'80000000'	
4434	01	00FB3	7FF80000	A		DATA	X'7FF80000'	
4435	01	00FB4	FFFFFFFC	A	AI03	DATA	-4	AI *
4436	01	00FB5	A0C0045A			AI,12	*IA	
4437	01	00FB6	173001BD			K	1,7,3,RI9NA8	
4438	01	00FB7	973000B3			K	9,7,3,NA8RET+1	
4439						PAGE		
4440	01	00FB8	FFFFFFF4	A	AD01	DATA	-12	AD
4441	01	00FB9	10C0046C			AD,12	MEM8RY	
4442	01	00FBA	773001C8			K	7,7,3,FXP8SW	
4443	01	00FBB	87300169			K	8,7,3,L8C+2	
4444	01	00FBC	FFFFFFFF	A		DATA	-1	
4445	01	00FBD	00000000	A		DATA	0	

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL   OPERATION  OPERAND                          COMMENTS
4446      01            00FBE           00000000         A                DATA       0
4447      01            00FBF           00000000         A                DATA       0
4448      01            00FC0           FFFFFFFF         A                DATA       -1
4449      01            00FC1           00000000         A                DATA       0
4450      01            00FC2           00000001         A                DATA       1
4451      01            00FC3           00000001         A                DATA       1
4452      01            00FC4           FFFFFFF4         A       AD02     DATA       -12                AD  X     0F   TRAP
4453      01            00FC5           10C20462                          AD,12      MEM0RY+2,1
4454      01            00FC6           27300108                          K          2,7,3,FXP0SW
4455      01            00FC7           57300084                          K          5,7,3,FP0RET+1
4456      01            00FC8           7FFFFFFF         A                DATA       X'7FFFFFFF'
4457      01            00FC9           80000000         A                DATA       X'80000000'
4458      01            00FCA           00000000         A                DATA       0
4459      01            00FCB           00000000         A                DATA       0
4460      01            00FCC           FFFFFFFF         A                DATA       -1
4461      01            00FCD           00000000         A                DATA       0
4462      01            00FCE           00000001         A                DATA       1
4463      01            00FCF           00000001         A                DATA       1
4464                                                                       PAGE
4465      01            00FD0           FFFFFFF4         A       AD03     DATA       -12                AD  *     0F   NTRAP
4466      01            00FD1           90C0045A                          AD,12      *1A
4467      01            00FD2           172001C8                          K          1,7,2,FXP0SW
4468      01            00FD3           E7200169                          K          14,7,2,L0C+2
4469      01            00FD4           87654321         A                DATA       X'87654321'
4470      01            00FD5           7FFFFFFF         A                DATA       X'7FFFFFFF'
4471      01            00FD6           F89ABCDE         A                DATA       X'F89ABCDE'
4472      01            00FD7           F89ABCDE         A                DATA       X'F89ABCDE'
4473      01            00FD8           0FEDCBA9         A                DATA       X'0FEDCBA9'
4474      01            00FD9           FFFFFFFF         A                DATA       -1
4475      01            00FDA           F0123456         A                DATA       X'F0123456'
4476      01            00FDB           F0123456         A                DATA       X'F0123456'
4477                                                                       PAGE
4478      01            00FDC           FFFFFFF4         A       AD04     DATA       -12                AD     M0     TRAP
4479      01            00FDD           10C00461                          AD,12      MEM0RY+1
4480      01            00FDE           F73001C8                          K          15,7,3,FXP0SW
4481      01            00FDF           17300169                          K          1,7,3,L0C+2
4482      01            00FE0           83759624         A                DATA       X'83759624'
4483      01            00FE1           F5D02CDA         A                DATA       X'F5D02CDA'
4484      01            00FE2           725A9685         A                DATA       X'725A9685'
4485      01            00FE3           725A96B5         A                DATA       X'725A96B5'
4486      01            00FE4           F65219AC         A                DATA       X'F65219AC'
4487      01            00FE5           2FA47D20         A                DATA       X'2FA47D20'
4488      01            00FE6           39526374         A                DATA       X'39526374'
4489      01            00FE7           39526374         A                DATA       X'39526374'
4490                                                       ** CHECK THAT 0VERFL0W 0F LSW D0ES N0T CAUSE AN 0VERFL0W
4491      01            00FE8           FFFFFFF4         A       AD05     DATA       -12
4492      01            00FE9           10C00460                          AD,12      MEM0RY
4493      01            00FEA           07300136                          K          0,7,3,SETPSW
4494      01            00FEB           27300169                          K          2,7,3,L0C+2
4495      01            00FEC           00000000         A                DATA       0,0,0,0,X'40000000',X'80000000'
          01            00FED           00000000         A
          01            00FEE           00000000         A
          01            00FEF           00000000         A
          01            00FF0           40000000         A
          01            00FF1           80000000         A
4496      01            00FF2           40000000         A                DATA       X'40000000',X'40000000'
          01            00FF3           40000000         A
4497                                                                       PAGE
4498                                                       ** CHECK  K15= PR16-31.K31, K19= PR20-31.K31, K23=PR24-31.K31
4499                                                       ** K27 = PR2831.K31
4500      01            00FF4           FFFFFFF4         A       AD06     DATA       -12
4501      01            00FF5           10C00460                          AD,12      MEM0RY
4502      01            00FF6           07300136                          K          0,7,3,SETPSW
4503      01            00FF7           27300169                          K          2,7,3,L0C+2
4504      01            00FF8           0C000000         A                DATA       0,X'10000',X'FFFF',X'FFFF'
          01            00FF9           0C010000         A
          01            00FFA           0000FFFF         A
          01            00FFB           0C00FFFF         A
4505      01            00FFC           80000000         A                DATA       X'80000000',0,X'80000000',X'80000000'
          01            00FFD           00000000         A
          01            00FFE           80000000         A
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	01	00FFF	80000000	A				
4506						PAGE		
4507					** CHECK	THAT AWM GENERATES PROBEOVER TO CHECK FOR OVERFLOW AND CAUSE		
4508					** A TRAP			
4509	01	01000	FFFFFFF8	A	AWM01	DATA	-8	AWM OF TRAP
4510	01	01001	66C00460			AWM,12	MEMORY	
4511	01	01002	273001C8			K	2,7,3,FXPOSW	
4512	01	01003	57300084			K	5,7,3,FPORET+1	
4513	01	01004	2375694B	A		DATA	X'2375694B'	
4514	01	01005	2375694B	A		DATA	X'2375694B'	
4515	01	01006	7235641C	A		DATA	X'7235641C'	
4516	01	01007	95AACD67	A		DATA	X'95AACD67'	
4517	01	01008	FFFFFFF8	A	AWM02	DATA	-8	AWM X
4518	01	01009	66C26DEB			AWM,12	MEMORY-X'19675',1	
4519	01	0100A	F73001C8			K	15,7,3,FXPOSW	
4520	01	0100B	A7300169			K	10,7,3,LOC+2	
4521	01	0100C	F3219675	A		DATA	X'F3219675'	
4522	01	0100D	F3219675	A		DATA	X'F3219675'	
4523	01	0100E	691ABCDE	A		DATA	X'691ABCDE'	
4524	01	0100F	5C3C5353	A		DATA	X'5C3C5353'	
4525	01	01010	FFFFFFF8	A	AWM03	DATA	-8	AWM *
4526	01	01011	E6C0045A			AWM,12	*IA	
4527	01	01012	773001C8			K	7,7,3,FXPOSW	
4528	01	01013	87300169			K	8,7,3,LOC+2	
4529	01	01014	00000007	A		DATA	7	
4530	01	01015	00000007	A		DATA	7	
4531	01	01016	FFFFFFF9	A		DATA	-7	
4532	01	01017	00000000	A		DATA	0	
4533						PAGE		
4534					** AWM WITH IX AND IA			
4535	01	01018	FFFFFFF4	A	AWM04	DATA	-12	
4536	01	01019	E6CE045A			AWM,12	*IA,7	
4537	01	0101A	F0000136			K	15,0,0,SETPSW	
4538	01	0101B	20000169			K	2,0,0,LOC+2	
4539	01	0101C	00000007	A		DATA	7,7,MEMORY,MEMORY,-1,-1,1,8	
	01	0101D	00000007	A				
	01	0101E	00000460					
	01	0101F	00000460					
	01	01020	FFFFFFFF	A				
	01	01021	FFFFFFFF	A				
	01	01022	00000001	A				
	01	01023	00000008	A				
4540						PAGE		
4541	01	01024	FFFFFFF8	A	SH01	DATA	-8	SH OF NTRAP
4542	01	01025	58C00460			SH,12	MEMORY	
4543	01	01026	072001C8			K	0,7,2,FXPOSW	
4544	01	01027	E7200169			K	14,7,2,LOC+2	
4545	01	01028	80003946	A		DATA	X'80003946'	
4546	01	01029	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4547	01	0102A	3947F261	A		DATA	X'3947F261'	
4548	01	0102B	3947F261	A		DATA	X'3947F261'	
4549	01	0102C	FFFFFFF8	A	SH02	DATA	-8	SH X OF TRAP
4550	01	0102D	58CE0460			SH,12	MEMORY,7	
4551	01	0102E	773001C8			K	7,7,3,FXPOSW	
4552	01	0102F	57300084			K	5,7,3,FPORET+1	
4553	01	01030	7FFFB375	A		DATA	X'7FFFB375'	
4554	01	01031	80002B34	A		DATA	X'80002B34'	
4555	01	01032	7FFF8841	A		DATA	X'7FFF8841'	
4556	01	01033	7FFF8841	A		DATA	X'7FFF8841'	
4557	01	01034	FFFFFFF8	A	SH03	DATA	-8	SH *X
4558	01	01035	D8CE045A			SH,12	*IA,7	
4559	01	01036	07300136			K	0,7,3,SETPSW	
4560	01	01037	87300169			K	8,7,3,LOC+2	
4561	01	01038	00000000	A		DATA	0	
4562	01	01039	00000000	A		DATA	0	
4563	01	0103A	FFFF0000	A		DATA	X'FFFF0000'	
4564	01	0103B	FFFF0000	A		DATA	X'FFFF0000'	
4565						PAGE		
4566	01	0103C	FFFFFFF4	A	SD01	DATA	-12	SD
4567	01	0103D	18C00460			SD,12	MEMORY	
4568	01	0103E	07300136			K	0,7,3,SETPSW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4569	01	0103F	17300169			K	1,7,3,LOC+2	
4570	01	01040	37562981	A		DATA	X'37562981'	
4571	01	01041	FFFFFFFF	A		DATA	-1	
4572	01	01042	37562981	A		DATA	X'37562981'	
4573	01	01043	37562981	A		DATA	X'37562981'	
4574	01	01044	854BA76C	A		DATA	X'854BA76C'	
4575	01	01045	FFFFFFFF	A		DATA	-1	
4576	01	01046	854BA76D	A		DATA	X'854BA76D'	
4577	01	01047	854BA76D	A		DATA	X'854BA76D'	
4578	01	01048	FFFFFFF4	A	SD02	DATA	-12	SD * OF TRAP
4579	01	01049	98C0045A			SD,12	*IA	
4580	01	0104A	173001C8			K	1,7,3,FXPOSW	
4581	01	0104B	E7300084			K	14,7,3,FPORET+1	
4582	01	0104C	80000000	A		DATA	X'80000000'	
4583	01	0104D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
4584	01	0104E	00000000	A		DATA	0	
4585	01	0104F	00000000	A		DATA	0	
4586	01	01050	00000000	A		DATA	0	
4587	01	01051	FFFFFFFF	A		DATA	-1	
4588	01	01052	00000001	A		DATA	1	
4589	01	01053	00000001	A		DATA	1	
4590						PAGE		
4591	01	01054	FFFFFFF4	A	SD03	DATA	-12	SD X
4592	01	01055	18C35770			SD,12	MEMORY-X'ACF0',1	
4593	01	01056	573001C8			K	5,7,3,FXPOSW	
4594	01	01057	A7300169			K	10,7,3,LOC+2	
4595	01	01058	12345678	A		DATA	X'12345678'	
4596	01	01059	00000000	A		DATA	0	
4597	01	0105A	12345678	A		DATA	X'12345678'	
4598	01	0105B	12345678	A		DATA	X'12345678'	
4599	01	0105C	9ABCDEF1	A		DATA	X'9ABCDEF1'	
4600	01	0105D	00000001	A		DATA	1	
4601	01	0105E	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4602	01	0105F	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4603	01	01060	FFFFFFF4	A	SD04	DATA	-12	SD MO OF TRAP
4604	01	01061	18C00461			SD,12	MEMORY+1	
4605	01	01062	F73001C8			K	15,7,3,FXPOSW	
4606	01	01063	57300084			K	5,7,3,FPORET+1	
4607	01	01064	798436AB	A		DATA	X'798436AB'	
4608	01	01065	F54ABF33	A		DATA	X'F54ABF33'	
4609	01	01066	84397777	A		DATA	X'84397777'	
4610	01	01067	84397777	A		DATA	X'84397777'	
4611	01	01068	E319C566	A		DATA	X'E319C566'	
4612	01	01069	EC87B211	A		DATA	X'EC87B211'	
4613	01	0106A	F6921355	A		DATA	X'F6921355'	
4614	01	0106B	F6921355	A		DATA	X'F6921355'	
4615						PAGE		
4616					** LOGICAL SHIFT LEFT OF 31. CHECKS THAT ALL SET AND RESET INPUTS			
4617					** EXCEPTING BIT 0 AND 31 WORK PROPERLY			
4618	01	0106C	FFFFFFF6	A	S001	DATA	-10	
4619	01	0106D	25C0001F	A		S,12	31	
4620	01	0106E	F7300136			K	15,7,3,SETPSW	
4621	01	0106F	77300169			K	7,7,3,LOC+2	
4622	01	01070	00000001	A		DATA	1,X'80000000',-1,-1,-1,-1	
	01	01071	80000000	A				
	01	01072	FFFFFFFF	A				
	01	01073	FFFFFFFF	A				
	01	01074	FFFFFFFF	A				
	01	01075	FFFFFFFF	A				
4623					** ARITH SHIFT LEFT. VERIFIES BIT 0 AND EVEN PARITY. SHIFT OF 8			
4624	01	01076	FFFFFFF6	A	S002	DATA	-10	
4625	01	01077	25C00408	A		S,12	X'408'	
4626	01	01078	80000136			K	8,0,0,SETPSW	
4627	01	01079	40000169			K	4,0,0,LOC+2	
4628	01	0107A	C3A53C5A	A		DATA	X'C3A53C5A',X'A53C5A00',0,0,-1,-1	
	01	0107B	A53C5A00	A				
	01	0107C	00000000	A				
	01	0107D	00000000	A				
	01	0107E	FFFFFFFF	A				
	01	0107F	FFFFFFFF	A				
4629					** LOGICAL SHIFT LEFT DOUBLE. CHECK B REG INPUTS. SHIFT OF 33 BITS			

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4630	01	01080	FFFFFFF6	A	S003	DATA	-10	
4631	01	01081	25C00121	A		S,12	X'121'	
4632	01	01082	C0000136			K	12,0,0,SETPSW	
4633	01	01083	00000169			K	0,0,0,L0C+2	
4634	01	01084	00000000	A		DATA	0,2,-1,-1,1,0	
	01	01085	00000002	A				
	01	01086	FFFFFFFF	A				
	01	01087	FFFFFFFF	A				
	01	01088	00000001	A				
	01	01089	00000000	A				
4635						PAGE		
4636						** LOGICAL SHIFT LEFT DOUBLE. PARITY ODD. SHIFT OF 12 BITS		
4637	01	0108A	FFFFFFF6	A	S004	DATA	-10	
4638	01	0108B	25C0010C	A		S,12	X'10C'	
4639	01	0108C	07300136			K	0,7,3,SETPSW	
4640	01	0108D	C7300169			K	12,7,3,L0C+2	
4641	01	0108E	B5C35A3C	A		DATA	X'B5C35A3C',X'35A3C3CA',0,0,X'3CA5C35A',X'5C35A000'	
	01	0108F	35A3C3CA	A				
	01	01090	00000000	A				
	01	01091	00000000	A				
	01	01092	3CA5C35A	A				
	01	01093	5C35A000	A				
4642						** CYCLICAL SHIFT LEFT SINGLE. SHIFT 16 BITS		
4643	01	01094	FFFFFFF6	A	S005	DATA	-10	
4644	01	01095	25C00210	A		S,12	X'210'	
4645	01	01096	00000136			K	0,0,0,SETPSW	
4646	01	01097	40000169			K	4,0,0,L0C+2	
4647	01	01098	3CA5C35A	A		DATA	X'3CA5C35A',X'C35A3CA5',0,0,X'FFFF',X'FFFF'	
	01	01099	C35A3CA5	A				
	01	0109A	00000000	A				
	01	0109B	00000000	A				
	01	0109C	0000FFFF	A				
	01	0109D	0000FFFF	A				
4648						** CYCLICAL SHIFT LEFT SINGLE. ODD REGISTER. SHIFT 16 BITS		
4649	01	0109E	FFFFFFF6	A	S006	DATA	-10	
4650	01	0109F	25D00210	A		S,13	X'210'	
4651	01	010A0	00000136			K	0,0,0,SETPSW	
4652	01	010A1	40000169			K	4,0,0,L0C+2	
4653	01	010A2	A5A5C3C3	A		DATA	X'A5A5C3C3',X'A5A5C3C3',-1,-1,X'C53AA3C5',X'A3C5C53A'	
	01	010A3	A5A5C3C3	A				
	01	010A4	FFFFFFFF	A				
	01	010A5	FFFFFFFF	A				
	01	010A6	C53AA3C5	A				
	01	010A7	A3C5C53A	A				
4654						PAGE		
4655						** CYCLICAL LEFT SHIFT DOUBLE. SWAP R WITH RU_1 (32_8 BIT SHIFT)		
4656	01	010A8	FFFFFFF6	A	S007	DATA	-10	
4657	01	010A9	25C00320	A		S,12	X'320'	
4658	01	010AA	F7300136			K	15,7,3,SETPSW	
4659	01	010AB	77300169			K	7,7,3,L0C+2	
4660	01	010AC	EDB77BDE	A		DATA	X'EDB77BDE',X'A53C5AC3',0,0,X'A53C5AC3',X'EDB77BDE'	
	01	010AD	A53C5AC3	A				
	01	010AE	00000000	A				
	01	010AF	00000000	A				
	01	010B0	A53C5AC3	A				
	01	010B1	EDB77BDE	A				
4661						** CYCLICAL LEFT SHIFT DOUBLE. SHIFT OF MAX COUNT (EQUIVALENT TO SHIFT		
4662						** RIGHT CYCLICAL BY 1 BIT)		
4663	01	010B2	FFFFFFF6	A	S008	DATA	-10	
4664	01	010B3	25C0033F	A		S,12	X'33F'	
4665	01	010B4	07300136			K	0,7,3,SETPSW	
4666	01	010B5	47300169			K	4,7,3,L0C+2	
4667	01	010B6	5A5A5A5A	A		DATA	X'5A5A5A5A',X'2D2D2D2D',0,0,X'5A5A5A5A',X'2D2D2D2D'	
	01	010B7	2D2D2D2D	A				
	01	010B8	00000000	A				
	01	010B9	00000000	A				
	01	010BA	5A5A5A5A	A				
	01	010BB	2D2D2D2D	A				
4668						PAGE		
4669						** LOGICAL SHIFT RIGHT. ODD REGISTER. TEST SET OF ODD BITS. SHIFT OF 31		
4670	01	010BC	FFFFFFF6	A	S009	DATA	-10	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4671	01	010BD	25D00061	A		S,13	X'61'	
4672	01	010BE	F7300136			K	15,7,3,SETPSW	
4673	01	010BF	37300169			K	3,7,3,LOC+2	
4674	01	010C0	00000000	A		DATA	0,0,0,0,X'80000000',1	
	01	010C1	00000000	A				
	01	010C2	00000000	A				
	01	010C3	00000000	A				
	01	010C4	80000000	A				
	01	010C5	00000001	A				
4675					** LOGICAL SHIFT RIGHT, TEST SET OF EVEN BIT POSITIONS, SHIFT OF 30			
4676	01	010C6	FFFFFFFA	A	S010	DATA	-6	
4677	01	010C7	25C00062	A		S,12	X'62'	
4678	01	010C8	00000136			K	0,0,0,SETPSW	
4679	01	010C9	00000169			K	0,0,0,LOC+2	
4680	01	010CA	80000000	A		DATA	X'80000000',2	
	01	010CB	00000002	A				
4681					** ARITH SHIFT RIGHT, FILL WITH ONES, SHIFT OF 12 BITS			
4682	01	010CC	FFFFFFFA	A	S011	DATA	-6	
4683	01	010CD	25C00474	A		S,12	X'474'	
4684	01	010CE	00000136			DATA	SETPSW,LOC+2,X'A5A5A5A5',X'FFFA5A5A'	
	01	010CF	00000169					
	01	010D0	A5A5A5A5	A				
	01	010D1	FFFA5A5A	A				
4685						PAGE		
4686					** ARITH SHIFT RIGHT, FILL WITH ZEROES, DOUBLE REG, SHIFT OF 34 BITS			
4687					** CHECKS SET OF ODD B REG BITS			
4688	01	010D2	FFFFFFF6	A	S012	DATA	-10	
4689	01	010D3	25C0055E	A		S,12	X'55E'	
4690	01	010D4	00000136			DATA	SETPSW,LOC+2,5,0,7,7,0,1	
	01	010D5	00000169					
	01	010D6	00000005	A				
	01	010D7	00000000	A				
	01	010D8	00000007	A				
	01	010D9	00000007	A				
	01	010DA	00000000	A				
	01	010DB	00000001	A				
4691					** ARITH SHIFT RIGHT, FILL WITH ONES, DOUBLE REG, SHIFT OF 31 BITS			
4692	01	010DC	FFFFFFF6	A	S013	DATA	-10	
4693	01	010DD	25C00561	A		S,12	X'561'	
4694	01	010DE	00000136			DATA	SETPSW,LOC+2,X'C3C3C3C3',-1,0,0,X'80005AC3'	
	01	010DF	00000169					
	01	010E0	C3C3C3C3	A				
	01	010E1	FFFFFFFF	A				
	01	010E2	00000000	A				
	01	010E3	00000000	A				
	01	010E4	80005AC3	A				
4695	01	010E5	87878787	A		DATA	X'87878787'	
4696					** CIRCULAR RIGHT SHIFT SINGLE REG, 13 BITS			
4697	01	010E6	FFFFFFFA	A	S014	DATA	-6	
4698	01	010E7	25C00273	A		S,12	X'273'	
4699	01	010E8	00000136			DATA	SETPSW,LOC+2,X'A5A5A5A5',X'2D2D2D2D'	
	01	010E9	00000169					
	01	010EA	A5A5A5A5	A				
	01	010EB	2D2D2D2D	A				
4700						PAGE		
4701					** CIRCULAR RIGHT SHIFT SINGLE REGISTER, 13 BITS			
4702	01	010EC	FFFFFFFA	A	S015	DATA	-6	
4703	01	010ED	25C00273	A		S,12	X'273'	
4704	01	010EE	00000136			DATA	SETPSW,LOC+2,X'5A5A5A5A',X'D2D2D2D2'	
	01	010EF	00000169					
	01	010F0	5A5A5A5A	A				
	01	010F1	D2D2D2D2	A				
4705					** CIRCULAR RIGHT SHIFT DOUBLE REGISTER 13 BITS			
4706	01	010F2	FFFFFFF6	A	S016	DATA	-10	
4707	01	010F3	25C00373	A		S,12	X'373'	
4708	01	010F4	00000136			DATA	SETPSW,LOC+2,X'CA35CA35',X'2D2E51AE',0,0	
	01	010F5	00000169					
	01	010F6	CA35CA35	A				
	01	010F7	2D2E51AE	A				
	01	010F8	00000000	A				
	01	010F9	00000000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4709	01	010FA	A5A5A5A5	A		DATA	X'A5A5A5A5',X'51AD2D2D'	
	01	010FB	51AD2D2D	A				
4710					** CIRCULAR RIGHT SHIFT DOUBLE REGISTER. 13 BITS			
4711	01	010FC	FFFFFFF6	A	S017	DATA	-10	
4712	01	010FD	25C00373	A		S,12	X'373'	
4713	01	010FE	00000136			DATA	SETPSW,L0C+2,X'5C3A35AC',X'D2D2E1D1',0,0	
	01	010FF	00000169					
	01	01100	5C3A35AC	A				
	01	01101	D2D2E1D1	A				
	01	01102	00000000	A				
	01	01103	00000000	A				
4714	01	01104	5A5A5A5A	A		DATA	X'5A5A5A5A',X'AD62D2D2'	
	01	01105	AD62D2D2	A				
4715						PAGE		
4716					** CIRCULAR RIGHT SHIFT. IA. ODD REG. MAX SHIFT COUNT OF 64			
4717	01	01106	FFFFFFF6	A	S018	DATA	-10	
4718	01	01107	A5D00460			S,13	*MEMORY	
4719	01	01108	00000136			DATA	SETPSW,L0C+2,-1,-1,X'340',X'340',1,1	
	01	01109	00000169					
	01	0110A	FFFFFFFF	A				
	01	0110B	FFFFFFFF	A				
	01	0110C	00000340	A				
	01	0110D	00000340	A				
	01	0110E	00000001	A				
	01	0110F	00000001	A				
4720					** ARITH RIGHT SHIFT. INDEXING. SHIFT OF 1			
4721	01	01110	FFFFFFF8	A	S019	DATA	-8	
4722	01	01111	25C2FFCF	A		S,12	X'FFCF',1	
4723	01	01112	00000136			DATA	SETPSW,L0C+2	
	01	01113	00000169					
4724	01	01114	00000430	A		DATA	X'430',X'218',X'FFF4F',X'FFF4F'	
	01	01115	00000218	A				
	01	01116	000FFF4F	A				
	01	01117	000FFF4F	A				
4725					** ARITH LEFT SHIFT. IA AND IX. SHIFT OF 0			
4726	01	01118	FFFFFFF8	A	S020	DATA	-8	
4727	01	01119	A5CE000C	A		S,12	*12,7	
4728	01	0111A	00000136			DATA	SETPSW,L0C+2,X'47F',X'47F',1,1	
	01	0111B	00000169					
	01	0111C	0000047F	A				
	01	0111D	0000047F	A				
	01	0111E	00000001	A				
	01	0111F	00000001	A				
4729						PAGE		
4730					**** THE REMAINING SHIFT TESTS ARE REDUNDANT BUT MAY AID IN UNCOVERING			
4731					**** PATTERN SENSITIVE FAILURE MODES			
4732	01	01120	FFFFFFFA	A	S01	DATA	-6	ALS 1 OF SL1 ALT 1'S + 0'S
4733	01	01121	25C00401	A		S,12	X'401'	0 INTO A31
4734	01	01122	073001C8			K	0,7,3,FXPOSW	OVF 01
4735	01	01123	473001C9			K	4,7,3,L0C+2	
4736	01	01124	55555555	A		DATA	X'55555555'	
4737	01	01125	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4738	01	01126	FFFFFFFA	A	S02	DATA	-6	ALS 1
4739	01	01127	25C00401	A		S,12	X'401'	
4740	01	01128	373001C8			K	3,7,3,FXPOSW	
4741	01	01129	F73001C9			K	15,7,3,L0C+2	
4742	01	0112A	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4743	01	0112B	55555554	A		DATA	X'55555554'	
4744	01	0112C	FFFFFFFA	A	S03	DATA	-6	ALS 4 SL4 ALT 1'S + 0'S
4745	01	0112D	25C00404	A		S,12	X'404'	PARITY 1111
4746	01	0112E	373001C8			K	3,7,3,FXPOSW	OVF 10
4747	01	0112F	773001C9			K	7,7,3,L0C+2	
4748	01	01130	F0F0F0F0	A		DATA	X'F0F0F0F0'	
4749	01	01131	0F0F0F00	A		DATA	X'0F0F0F00'	
4750	01	01132	FFFFFFFA	A	S04	DATA	-6	ALS 4
4751	01	01133	25C00404	A		S,12	X'404'	PARITY 0000
4752	01	01134	F73001C8			K	15,7,3,FXPOSW	
4753	01	01135	773001C9			K	7,7,3,L0C+2	
4754	01	01136	0F0F0F0F	A		DATA	X'0F0F0F0F'	
4755	01	01137	F0F0F0F0	A		DATA	X'F0F0F0F0'	
4756	01	01138	FFFFFFFA	A	S05	DATA	-6	ALS 0 SUIFT 0

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4757	01	01139	25C00400	A		S,12	X'400'	
4758	01	0113A	F7300136			K	15,7,3,SETPSW	
4759	01	0113B	37300169			K	3,7,3,L0C+2	
4760	01	0113C	40000000	A		DATA	X'40000000'	
4761	01	0113D	40000000	A		DATA	X'40000000'	
4762						PAGE		
4763	01	0113E	FFFFFFFA	A	S06	DATA	-6	ALS 2 2-SL1
4764	01	0113F	25C00402	A		S,12	X'402'	
4765	01	01140	07300136			K	0,7,3,SETPSW	
4766	01	01141	47300169			K	4,7,3,L0C+2	
4767	01	01142	D2345678	A		DATA	X'D2345678'	
4768	01	01143	48D159E0	A		DATA	X'48D159E0'	
4769						PAGE		
4770	01	01144	FFFFFFF8	A	S07	DATA	-8	ALS 3 * 3-SL1
4771	01	01145	A5C00460			S,12	*MEMORY	
4772	01	01146	37300136			K	3,7,3,SETPSW	
4773	01	01147	B7300169			K	11,7,3,L0C+2	
4774	01	01148	F2345678	A		DATA	X'F2345678'	
4775	01	01149	91A2B3C0	A		DATA	X'91A2B3C0'	
4776	01	0114A	00000403	A		DATA	X'403'	
4777	01	0114B	00000403	A		DATA	X'403'	
4778	01	0114C	FFFFFFFA	A	S08	DATA	-6	ALS 29
4779	01	0114D	25C0041D	A		S,12	X'41D'	
4780	01	0114E	07300136			K	0,7,3,SETPSW	
4781	01	0114F	47300169			K	4,7,3,L0C+2	
4782	01	01150	12345674	A		DATA	X'12345674'	
4783	01	01151	80000000	A		DATA	X'80000000'	
4784	01	01152	FFFFFFFA	A	S09	DATA	-6	ALS 27 X
4785	01	01153	25C20425	A		S,12	X'42B',1	
4786	01	01154	07300136			K	0,7,3,SETPSW	
4787	01	01155	87300169			K	8,7,3,L0C+2	
4788	01	01156	FFFFFFF0	A		DATA	-16	
4789	01	01157	80000000	A		DATA	X'80000000'	
4790	01	01158	FFFFFFFA	A	S10	DATA	-6	LLS 1
4791	01	01159	25C00001	A		S,12	1	0 INT0 A31
4792	01	0115A	77300136			K	7,7,3,SETPSW	0VF 00
4793	01	0115B	37300169			K	3,7,3,L0C+2	
4794	01	0115C	3C3C3C3C	A		DATA	X'3C3C3C3C'	
4795	01	0115D	78787878	A		DATA	X'78787878'	
4796	01	0115E	FFFFFFFA	A	S11	DATA	-6	LLS 1 X
4797	01	0115F	25C203BE	A		S,12	X'3BE',1	
4798	01	01160	87300136			K	8,7,3,SETPSW	0VF 11
4799	01	01161	87300169			K	8,7,3,L0C+2	
4800	01	01162	C3C3C3C3	A		DATA	X'C3C3C3C3'	
4801	01	01163	87878786	A		DATA	X'87878786'	
4802						PAGE		
4803	01	01164	FFFFFFF8	A	S12	DATA	-8	LLS 4
4804	01	01165	A5C00460			S,12	*MEMORY	
4805	01	01166	07300136			K	0,7,3,SETPSW	
4806	01	01167	C7300169			K	12,7,3,L0C+2	
4807	01	01168	23456789	A		DATA	X'23456789'	
4808	01	01169	34567890	A		DATA	X'34567890'	
4809	01	0116A	00000004	A		DATA	4	
4810	01	0116B	00000004	A		DATA	4	
4811	01	0116C	FFFFFFFA	A	S13	DATA	-6	LLS 4
4812	01	0116D	25C00004	A		S,12	4	PARITY 0001
4813	01	0116E	F7300136			K	15,7,3,SETPSW	
4814	01	0116F	F7300169			K	15,7,3,L0C+2	
4815	01	01170	12345678	A		DATA	X'12345678'	
4816	01	01171	23456780	A		DATA	X'23456780'	
4817	01	01172	FFFFFFFA	A	S14	DATA	-6	LLS 4
4818	01	01173	25C00004	A		S,12	4	PARITY 0011
4819	01	01174	07300136			K	0,7,3,SETPSW	
4820	01	01175	47300169			K	4,7,3,L0C+2	
4821	01	01176	3456789A	A		DATA	X'3456789A'	
4822	01	01177	456789A0	A		DATA	X'456789A0'	
4823	01	01178	FFFFFFFA	A	S15	DATA	-6	LLS 4
4824	01	01179	25C00004	A		S,12	4	PARITY 0100
4825	01	0117A	07300136			K	0,7,3,SETPSW	
4826	01	0117B	C7300169			K	12,7,3,L0C+2	
4827	01	0117C	456789AB	A		DATA	X'456789AB'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4828	01	0117D	56789AB0	A		DATA	X'56789AB0'	
4829	01	0117E	FFFFFFFA	A	S16	DATA	-6	LLS 4
4830	01	0117F	25C00004	A		S,12	4	PARITY 0101
4831	01	01180	37300136			K	3,7,3,SETPSW	
4832	01	01181	77300169			K	7,7,3,L0C+2	
4833	01	01182	56789ABC	A		DATA	X'56789ABC'	
4834	01	01183	6789ABC0	A		DATA	X'6789ABC0'	
4835						PAGE		
4836	01	01184	FFFFFFFA	A	S17	DATA	-6	LLS 4
4837	01	01185	25C00004	A		S,12	4	PARITY 0110
4838	01	01186	07300136			K	0,7,3,SETPSW	
4839	01	01187	47300169			K	4,7,3,L0C+2	
4840	01	01188	6789ABCD	A		DATA	X'6789ABCD'	
4841	01	01189	789ABCD0	A		DATA	X'789ABCD0'	
4842	01	0118A	FFFFFFFA	A	S18	DATA	-6	LLS 4
4843	01	0118B	25C00004	A		S,12	4	PARITY 0111
4844	01	0118C	A7300136			K	10,7,3,SETPSW	
4845	01	0118D	E7300169			K	14,7,3,L0C+2	
4846	01	0118E	789ABCDE	A		DATA	X'789ABCDE'	
4847	01	0118F	89ABCDE0	A		DATA	X'89ABCDE0'	
4848	01	01190	FFFFFFFA	A	S19	DATA	-6	LLS 32
4849	01	01191	25C00020	A		S,12	X'20'	
4850	01	01192	07300136			K	0,7,3,SETPSW	
4851	01	01193	C7300169			K	12,7,3,L0C+2	
4852	01	01194	00000001	A		DATA	1	
4853	01	01195	00000000	A		DATA	0	
4854	01	01196	FFFFFFFA	A	S20	DATA	-6	LLS 30
4855	01	01197	25C0001E	A		S,12	X'1E'	
4856	01	01198	37300136			K	3,7,3,SETPSW	
4857	01	01199	F7300169			K	15,7,3,L0C+2	
4858	01	0119A	89ABCDE7	A		DATA	X'89ABCDE7'	
4859	01	0119B	C0000000	A		DATA	X'C0000000'	
4860	01	0119C	FFFFFFFA	A	S21	DATA	-6	CLS 1
4861	01	0119D	25C00201	A		S,12	X'201'	A0(1) INT0 $A3_1$
4862	01	0119E	07300136			K	0,7,3,SETPSW	
4863	01	0119F	C7300169			K	12,7,3,L0C+2	A0•A1(10)INT0 $A3_0$ $A3_1$
4864	01	011A0	89ABCDE0	A		DATA	X'89ABCDE0'	
4865	01	011A1	13579BC1	A		DATA	X'13579BC1'	
4866						PAGE		
4867	01	011A2	FFFFFFFA	A	S22	DATA	-6	CLS 2 X
4868	01	011A3	25C20222	A		S,12	X'222',1	
4869	01	011A4	F7300136			K	15,7,3,SETPSW	
4870	01	011A5	F7300169			K	15,7,3,L0C+2	
4871	01	011A6	91234560	A		DATA	X'91234560'	
4872	01	011A7	448D1582	A		DATA	X'448D1582'	
4873	01	011A8	FFFFFFFA	A	S23	DATA	-6	CLS 3 3=SL1
4874	01	011A9	25C00203	A		S,12	X'203'	
4875	01	011AA	37300136			K	3,7,3,SETPSW	
4876	01	011AB	77300169			K	7,7,3,L0C+2	
4877	01	011AC	76543210	A		DATA	X'76543210'	
4878	01	011AD	B2A19083	A		DATA	X'B2A19083'	
4879	01	011AE	FFFFFFFA	A	S24	DATA	-6	CLS 4
4880	01	011AF	25C00204	A		S,12	X'204'	PARITY 1000
4881	01	011B0	F7300136			K	15,7,3,SETPSW	
4882	01	011B1	F7300169			K	15,7,3,L0C+2	
4883	01	011B2	89ABCDEF	A		DATA	X'89ABCDEF'	
4884	01	011B3	9ABCDEF8	A		DATA	X'9ABCDEF8'	
4885	01	011B4	FFFFFFFA	A	S25	DATA	-6	CLS 4
4886	01	011B5	25C00204	A		S,12	X'204'	PARITY 1001
4887	01	011B6	07300136			K	0,7,3,SETPSW	
4888	01	011B7	47300169			K	4,7,3,L0C+2	
4889	01	011B8	9ABCDEF0	A		DATA	X'9ABCDEF0'	
4890	01	011B9	ABCDEF09	A		DATA	X'ABCDEF09'	
4891	01	011BA	FFFFFFFA	A	S26	DATA	-6	CLS 4
4892	01	011BB	25C00204	A		S,12	X'204'	PARITY 1010
4893	01	011BC	07300136			K	0,7,3,SETPSW	
4894	01	011BD	47300169			K	4,7,3,L0C+2	
4895	01	011BE	ABCDEF01	A		DATA	X'ABCDEF01'	
4896	01	011BF	BCDEF01A	A		DATA	X'BCDEF01A'	
4897						PAGE		
4898	01	011C0	FFFFFFFA	A	S27	DATA	-6	CLS 4

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4899	01	011C1	25C00204	A		S,12	X'204'	PARITY 1011
4900	01	011C2	07300136			K	0,7,3,SETPSW	
4901	01	011C3	C7300169			K	12,7,3,L8C+2	
4902	01	011C4	BCDEF012	A		DATA	X'BCDEF012'	
4903	01	011C5	CDEF012B	A		DATA	X'CDEF012B'	
4904	01	011C6	FFFFFFFA	A	S28	DATA	-6	CLS 4
4905	01	011C7	25C00204	A		S,12	X'204'	PARITY 1100
4906	01	011C8	07300136			K	0,7,3,SETPSW	
4907	01	011C9	47300169			K	4,7,3,L8C+2	
4908	01	011CA	CDEF0123	A		DATA	X'CDEF0123'	
4909	01	011CB	DEF0123C	A		DATA	X'DEF0123C'	
4910						PAGE		
4911	01	011CC	FFFFFFFA	A	S29	DATA	-6	CLS 4
4912	01	011CD	25C00204	A		S,12	X'204'	PARITY 1101
4913	01	011CE	07300136			K	0,7,3,SETPSW	
4914	01	011CF	C7300169			K	12,7,3,L8C+2	
4915	01	011D0	DEF01234	A		DATA	X'DEF01234'	
4916	01	011D1	EF01234D	A		DATA	X'EF01234D'	
4917	01	011D2	FFFFFFFA	A	S30	DATA	-6	CLS 4
4918	01	011D3	25C00204	A		S,12	X'204'	PARITY 1110
4919	01	011D4	37300136			K	3,7,3,SETPSW	
4920	01	011D5	F7300169			K	15,7,3,L8C+2	
4921	01	011D6	EF012345	A		DATA	X'EF012345'	
4922	01	011D7	F012345E	A		DATA	X'F012345E'	
4923	01	011D8	FFFFFFFA	A	S31	DATA	-6	CLS 63
4924	01	011D9	25C0023F	A		S,12	X'23F'	
4925	01	011DA	07300136			K	0,7,3,SETPSW	
4926	01	011DB	C7300169			K	12,7,3,L8C+2	
4927	01	011DC	76543211	A		DATA	X'76543211'	
4928	01	011DD	BB2A1908	A		DATA	X'BB2A1908'	
4929	01	011DE	FFFFFFFA	A	S32	DATA	-6	CLS 31
4930	01	011DF	25C0023F	A		S,12	X'23F'	
4931	01	011E0	07300136			K	0,7,3,SETPSW	
4932	01	011E1	C7300169			K	12,7,3,L8C+2	
4933	01	011E2	76543211	A		DATA	X'76543211'	
4934	01	011E3	BB2A1908	A		DATA	X'BB2A1908'	
4935	01	011E4	FFFFFFF6	A	S33	DATA	-10	ALD 1 B0(0) INT8 A31
4936	01	011E5	25C00501	A		S,12	X'501'	(0) INT8 B31
4937	01	011E6	07300136			K	0,7,3,SETPSW	
4938	01	011E7	07300169			K	0,7,3,L8C+2	
4939	01	011E8	12345679	A		DATA	X'12345679'	
4940	01	011E9	2468ACF2	A		DATA	X'2468ACF2'	
4941	01	011EA	00000000	A		DATA	0	
4942	01	011EB	00000000	A		DATA	0	
4943	01	011EC	55555555	A		DATA	X'55555555'	
4944	01	011ED	AAAAAAAA	A		DATA	X'AAAAAAAA'	
4945						PAGE		
4946	01	011EE	FFFFFFF6	A	S34	DATA	-10	ALD 1 B0(1) INT8 A31
4947	01	011EF	25C00501	A		S,12	X'501'	
4948	01	011F0	07300136			K	0,7,3,SETPSW	
4949	01	011F1	07300169			K	0,7,3,L8C+2	
4950	01	011F2	12345678	A		DATA	X'12345678'	
4951	01	011F3	2468ACF1	A		DATA	X'2468ACF1'	
4952	01	011F4	00000000	A		DATA	0	
4953	01	011F5	00000000	A		DATA	0	
4954	01	011F6	AAAAAAAB	A		DATA	X'AAAAAAAB'	
4955	01	011F7	55555556	A		DATA	X'55555556'	
4956	01	011F8	FFFFFFF6	A	S35	DATA	-10	ALD 35 *
4957	01	011F9	A5C00460			S,12	*MEM8RY	
4958	01	011FA	07300136			K	0,7,3,SETPSW	
4959	01	011FB	47300169			K	4,7,3,L8C+2	
4960	01	011FC	CABBEDED	A		DATA	X'CABBEDED'	
4961	01	011FD	91A2B3C0	A		DATA	X'91A2B3C0'	
4962	01	011FE	00000523	A		DATA	X'523'	
4963	01	011FF	00000523	A		DATA	X'523'	
4964	01	01200	12345678	A		DATA	X'12345678'	
4965	01	01201	00000000	A		DATA	0	
4966	01	01202	FFFFFFF6	A	S36	DATA	-10	ALD 17 X R8
4967	01	01203	25D20547	A		S,13	X'547',1	
4968	01	01204	07300136			K	0,7,3,SETPSW	
4969	01	01205	47300169			K	4,7,3,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
4970	01	01206	1728394A	A		DATA	X'1728394A'	
4971	01	01207	1728394A	A		DATA	X'1728394A'	
4972	01	01208	00000000	A		DATA	0	
4973	01	01209	00000000	A		DATA	0	
4974	01	0120A	92345678	A		DATA	X'92345678'	
4975	01	0120B	ACF12468	A		DATA	X'ACF12468'	
4976						PAGE		
4977	01	0120C	FFFFFFF6	A	S37	DATA	-10	LLD 63
4978	01	0120D	25C0013F	A		S,12	X'13F'	
4979	01	0120E	07300136			K	0,7,3,SETPSW	
4980	01	0120F	87300169			K	8,7,3,L0C+2	
4981	01	01210	FFFFFFFF	A		DATA	-1	
4982	01	01211	80000000	A		DATA	X'80000000'	
4983	01	01212	00000000	A		DATA	0	
4984	01	01213	00000000	A		DATA	0	
4985	01	01214	FFFFFFFF	A		DATA	-1	
4986	01	01215	00000000	A		DATA	0	
4987	01	01216	FFFFFFF6	A	S38	DATA	-10	LLD 47 X R8
4988	01	01217	25D20107	A		S,13	X'107',1	
4989	01	01218	07300136			K	0,7,3,SETPSW	
4990	01	01219	C7300169			K	12,7,3,L0C+2	
4991	01	0121A	5B4A3928	A		DATA	X'5B4A3928'	
4992	01	0121B	5B4A3928	A		DATA	X'5B4A3928'	
4993	01	0121C	00000000	A		DATA	0	
4994	01	0121D	00000000	A		DATA	0	
4995	01	0121E	23456789	A		DATA	X'23456789'	
4996	01	0121F	B3C48000	A		DATA	X'B3C48000'	
4997	01	01220	FFFFFFF6	A	S39	DATA	-10	CLD 19
4998	01	01221	25C00313	A		S,12	X'313'	
4999	01	01222	07300136			K	0,7,3,SETPSW	
5000	01	01223	47300169			K	4,7,3,L0C+2	
5001	01	01224	12345678	A		DATA	X'12345678'	
5002	01	01225	B3C4D5E6	A		DATA	X'B3C4D5E6'	
5003	01	01226	00000000	A		DATA	0	
5004	01	01227	0C000000	A		DATA	0	
5005	01	01228	9ABCDEF0	A		DATA	X'9ABCDEF0'	
5006	01	01229	F78091A2	A		DATA	X'F78091A2'	
5007						PAGE		
5008	01	0122A	FFFFFFFA	A	S40	DATA	-6	ARS 2
5009	01	0122B	25C0047E	A		S,12	X'47E'	
5010	01	0122C	F73001C8			K	15,7,3,FXPBSW	
5011	01	0122D	37300169			K	3,7,3,L0C+2	
5012	01	0122E	CCCCCCCC	A		DATA	X'CCCCCCCC'	
5013	01	0122F	F3333333	A		DATA	X'F3333333'	
5014	01	01230	FFFFFFFA	A	S41	DATA	-6	ARS 2
5015	01	01231	25C0047E	A		S,12	X'47E'	
5016	01	01232	0C000136			DATA	SETPSW	
5017	01	01233	00000169			DATA	L0C+2	
5018	01	01234	33333333	A		DATA	X'33333333'	
5019	01	01235	0CCCCCCC	A		DATA	X'0CCCCCCC'	
5020	01	01236	FFFFFFFA	A	S42	DATA	-6	ARS 1
5021	01	01237	25C0047F	A		S,12	X'47F'	
5022	01	01238	00000136			DATA	SETPSW	
5023	01	01239	00000169			DATA	L0C+2	
5024	01	0123A	AAAAAAAA	A		DATA	X'AAAAAAAA'	
5025	01	0123B	D5555555	A		DATA	X'D5555555'	
5026	01	0123C	FFFFFFFA	A	S43	DATA	-6	ARS 1
5027	01	0123D	25C0047F	A		S,12	X'47F'	
5028	01	0123E	00000136			DATA	SETPSW	
5029	01	0123F	00000169			DATA	L0C+2	
5030	01	01240	55555555	A		DATA	X'55555555'	
5031	01	01241	2AAAAAAA	A		DATA	X'2AAAAAAA'	
5032	01	01242	FFFFFFFA	A	S44	DATA	-6	ARS 28 X
5033	01	01243	25C20471	A		S,12	X'471',1	
5034	01	01244	00000136			DATA	SETPSW	
5035	01	01245	00000169			DATA	L0C+2	
5036	01	01246	800000F3	A		DATA	X'800000F3'	
5037	01	01247	FFFFFFF8	A		DATA	-8	
5038						PAGE		
5039	01	01248	FFFFFFFA	A	S45	DATA	-6	LRS 13
5040	01	01249	25C00073	A		S,12	X'73'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5041	01	0124A	F73001C8			K	15,7,3,FXP0SW	
5042	01	0124B	37300169			K	3,7,3,L0C+2	
5043	01	0124C	87654321	A		DATA	X'87654321'	
5044	01	0124D	00043B2A	A		DATA	X'43B2A'	
5045	01	0124E	FFFFFFFA	A	S46	DATA	-6	CRS 11
5046	01	0124F	25C00275	A		S,12	X'275'	
5047	01	01250	F73001C8			K	15,7,3,FXP0SW	
5048	01	01251	37300169			K	3,7,3,L0C+2	
5049	01	01252	ABCDEF89	A		DATA	X'ABCDEF89'	
5050	01	01253	F13579BD	A		DATA	X'F13579BD'	
5051	01	01254	FFFFFFFA	A	S47	DATA	-6	CRS 64
5052	01	01255	25C00240	A		S,12	X'240'	
5053	01	01256	00000136			DATA	SETPSW	
5054	01	01257	00000169			DATA	L0C+2	
5055	01	01258	99999999	A		DATA	X'99999999'	
5056	01	01259	99999999	A		DATA	X'99999999'	
5057						PAGE		
5058	01	0125A	FFFFFFF6	A	S48	DATA	-10	ARD 33
5059	01	0125B	25C0055F	A		S,12	X'55F'	
5060	01	0125C	F73001C8			K	15,7,3,FXP0SW	
5061	01	0125D	37300169			K	3,7,3,L0C+2	
5062	01	0125E	87654321	A		DATA	X'87654321'	
5063	01	0125F	FFFFFFFF	A		DATA	-1	
5064	01	01260	00000000	A		DATA	0	
5065	01	01261	00000000	A		DATA	0	
5066	01	01262	0FEDCBA9	A		DATA	X'0FEDCBA9'	
5067	01	01263	C3B2A190	A		DATA	X'C3B2A190'	
5068	01	01264	FFFFFFF6	A	S49	DATA	-10	ARD 15 *
5069	01	01265	A5D00460			S,13	*MEM0RY	
5070	01	01266	00000136			DATA	SETPSW	
5071	01	01267	00000169			DATA	L0C+2	
5072	01	01268	789ABCDE	A		DATA	X'789ABCDE'	
5073	01	01269	789ABCDE	A		DATA	X'789ABCDE'	
5074	01	0126A	00000571	A		DATA	X'571'	
5075	01	0126B	00000571	A		DATA	X'571'	
5076	01	0126C	F0123456	A		DATA	X'F0123456'	
5077	01	0126D	FFFFE024	A		DATA	X'FFFFE024'	
5078	01	0126E	FFFFFFF6	A	S50	DATA	-10	LRD 54
5079	01	0126F	25C0014A	A		S,12	X'14A'	
5080	01	01270	F73001C8			K	15,7,3,FXP0SW	
5081	01	01271	37300169			K	3,7,3,L0C+2	
5082	01	01272	87654321	A		DATA	X'87654321'	
5083	01	01273	00000000	A		DATA	0	
5084	01	01274	00000000	A		DATA	0	
5085	01	01275	00000000	A		DATA	0	
5086	01	01276	ABCDEF01	A		DATA	X'ABCDEF01'	
5087	01	01277	0000021D	A		DATA	X'21D'	
5088						PAGE		
5089	01	01278	FFFFFFF6	A	S51	DATA	-10	LRD 36 R0
5090	01	01279	25D0015C	A		S,13	X'15C'	
5091	01	0127A	00000136			DATA.	SETPSW	
5092	01	0127B	00000169			DATA	L0C+2	
5093	01	0127C	12345678	A		DATA	X'12345678'	
5094	01	0127D	12345678	A		DATA	X'12345678'	
5095	01	0127E	00000000	A		DATA	0	
5096	01	0127F	00000000	A		DATA	0	
5097	01	01280	9ABCDEF0	A		DATA	X'9ABCDEF0'	
5098	01	01281	00000000	A		DATA	0	
5099	01	01282	FFFFFFF6	A	S52	DATA	-10	CRD 62 *
5100	01	01283	A5C00460			S,12	*MEM0RY	
5101	01	01284	00000136			DATA	SETPSW	
5102	01	01285	00000169			DATA	L0C+2	
5103	01	01286	99999999	A		DATA	X'99999999'	
5104	01	01287	66666666	A		DATA	X'66666666'	
5105	01	01288	00000342	A		DATA	X'342'	
5106	01	01289	00000342	A		DATA	X'342'	
5107	01	0128A	99999999	A		DATA	X'99999999'	
5108	01	0128B	66666666	A		DATA	X'66666666'	
5109	01	0128C	FFFFFFF6	A	S53	DATA	-10	CRD 31 *X R0
5110	01	0128D	A5D20460			S,13	*MEM0RY,1	
5111	01	0128E	F73001C8			K	15,7,3,FXP0SW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5112	01	0128F	37300169			K	3,7,3,L0C+2	
5113	01	01290	22222222	A		DATA	X'22222222'	
5114	01	01291	22222222	A		DATA	X'22222222'	
5115	01	01292	000003BF	A		DATA	X'3BF'	
5116	01	01293	000003BF	A		DATA	X'3BF'	
5117	01	01294	7BDE7BDE	A		DATA	X'7BDE7BDE'	
5118	01	01295	F7BCF7BC	A		DATA	X'F7BCF7BC'	
5119						PAGE		
5120					** NUMBER ALREADY NORMALIZED			
5121	01	01296	FFFFFFFA	A	SF001	DATA	-6	
5122	01	01297	24C0000F	A		SF,12	15	
5123	01	01298	F7300136			K	15,7,3,SETPSW	
5124	01	01299	A7300169			K	10,7,3,L0C+2	
5125	01	0129A	0F100000	A		DATA	X'F100000',X'F100000'	
	01	0129B	0F100000	A				
5126					** NORMALIZED WHEN COUNT EQUALS ZERO			
5127	01	0129C	FFFFFFF6	A	SF002	DATA	-10	
5128	01	0129D	24C00104	A		SF,12	X'104'	
5129	01	0129E	07300136			K	0,7,3,SETPSW	
5130	01	0129F	A7300169			K	10,7,3,L0C+2	
5131	01	012A0	0F00002F	A		DATA	X'F00002F',X'B2FFFFF',0,0,-1,X'FFFF0000'	
	01	012A1	0B2FFFFF	A				
	01	012A2	00000000	A				
	01	012A3	00000000	A				
	01	012A4	FFFFFFFF	A				
	01	012A5	FFFF0000	A				
5132					** NORMALIZED BEFORE COUNT EQUALS ZERO			
5133	01	012A6	FFFFFFFA	A	SF003	DATA	-6	
5134	01	012A7	24C00104	A		SF,12	X'104'	
5135	01	012A8	70000136			K	7,0,0,SETPSW	
5136	01	012A9	A0000169			K	10,0,0,L0C+2	
5137	01	012AA	0F004FFF	A		DATA	X'CF004FFF',X'D4FFF00'	
	01	012AB	0D4FFF00	A				
5138						PAGE		
5139					** UNDERFLOW, NOT NORMALIZED COUNT NOT EQUAL ZERO S/CC2 IN PH6			
5140	01	012AC	FFFFFFF6	A	SF004	DATA	-10	
5141	01	012AD	24C0013F	A		SF,12	X'13F'	
5142	01	012AE	97300136			K	9,7,3,SETPSW	
5143	01	012AF	67300169			K	6,7,3,L0C+2	
5144	01	012B0	04000000	A		DATA	X'4000000',X'7F0F0000',0,0,X'F0000000',0	
	01	012B1	7F0F0000	A				
	01	012B2	00000000	A				
	01	012B3	00000000	A				
	01	012B4	F0000000	A				
	01	012B5	00000000	A				
5145					** UNDERFLOW, NORMALIZED. COUNT EQUAL ZERO. S/CC2 IN PH7			
5146	01	012B6	FFFFFFFA	A	SF005	DATA	-6	
5147	01	012B7	24C00005	A		SF,12	5	
5148	01	012B8	17300136			K	1,7,3,SETPSW	
5149	01	012B9	E7300169			K	14,7,3,L0C+2	
5150	01	012BA	04000008	A		DATA	X'04000008',X'7F800000'	
	01	012BB	7F800000	A				
5151					** COUNT EQUALS ZERO. NOT NORMALIZED			
5152	01	012BC	FFFFFFFA	A	SF006	DATA	-6	
5153	01	012BD	24C00004	A		SF,12	4	
5154	01	012BE	D7300136			K	13,7,3,SETPSW	
5155	01	012BF	27300169			K	2,7,3,L0C+2	
5156	01	012C0	0F000001	A		DATA	X'F000001',X'0B010000'	
	01	012C1	0B010000	A				
5157						PAGE		
5158					** TRUE ZERO S/FL3 IN PH6			
5159	01	012C2	FFFFFFF6	A	SF007	DATA	-10	
5160	01	012C3	24C00004	A		SF,12	4	
5161	01	012C4	70300136			K	7,0,3,SETPSW	
5162	01	012C5	80300169			K	8,0,3,L0C+2	
5163	01	012C6	03000000	A		DATA	X'3000000',0,0,0,-1,-1	
	01	012C7	00000000	A				
	01	012C8	00000000	A				
	01	012C9	00000000	A				
	01	012CA	FFFFFFFF	A				
	01	012CB	FFFFFFFF	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL OR ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5164					** NEGATIVE CHARACTERISTIC			
5165	01	012CC	FFFFFFF6	A	SF008	DATA	-10	
5166	01	012CD	24C00004	A		SF,12	4	
5167	01	012CE	E7000136			K	14,7,0,SETPSW	
5168	01	012CF	17000169			K	1,7,0,LOC+2	
5169	01	012D0	F0FFFFF1	A		DATA	X'F0FFFFF1',X'F4F10000',0,0,-1,-1	
	01	012D1	F4F10000	A				
	01	012D2	00000000	A				
	01	012D3	00000000	A				
	01	012D4	FFFFFFFF	A				
	01	012D5	FFFFFFFF	A				
5170					** NEG CHAR. UNDERFLOW ODD REG NORMALIZED			
5171	01	012D6	FFFFFFFA	A	SF009	DATA	-6	
5172	01	012D7	24C00004	A		SF,12	4	
5173	01	012D8	27300136			K	2,7,3,SETPSW	
5174	01	012D9	D7300169			K	13,7,3,LOC+2	
5175	01	012DA	FEFFEFFF	A		DATA	X'FEFFEFFF',X'80EFFF00'	
	01	012DB	80EFFF00	A				
5176						PAGE		
5177					** NEG CHAR TO CHECK NK00 IN PH4 AND PH9			
5178	01	012DC	FFFFFFF6	A	SF010	DATA	-10	
5179	01	012DD	24C00102	A		SF,12	X'102'	
5180	01	012DE	00000136			K	0,0,0,SETPSW	
5181	01	012DF	90000169			K	9,0,0,LOC+2	
5182	01	012E0	F0FF4321	A		DATA	X'F0FF4321',X'F24321FF',0,0,-1,X'FFFFFF00'	
	01	012E1	F24321FF	A				
	01	012E2	00000000	A				
	01	012E3	00000000	A				
	01	012E4	FFFFFFFF	A				
	01	012E5	FFFFFF00	A				
5183					** NEG CHAR TO CHECK K00 IN PH4 AND PH9			
5184	01	012E6	FFFFFFFA	A	SF011	DATA	-6	
5185	01	012E7	24C00102	A		SF,12	X'102'	
5186	01	012E8	63100136			K	6,3,1,SETPSW	
5187	01	012E9	93100169			K	9,3,1,LOC+2	
5188	01	012EA	F0FF4320	A		DATA	X'F0FF4320',X'F2432000'	
	01	012EB	F2432000	A				
5189					** TEST THAT MAX COUNT W/O NORMALIZING IS OK			
5190	01	012EC	FFFFFFF6	A	SF012	DATA	-10	
5191	01	012ED	24C0010C	A		SF,12	X'10C'	
5192	01	012EE	55100136			K	5,5,1,SETPSW	
5193	01	012EF	25100169			K	2,5,1,LOC+2	
5194	01	012F0	7F000000	A		DATA	X'7F000000',X'73010000',0,0,1,0	
	01	012F1	73010000	A				
	01	012F2	00000000	A				
	01	012F3	00000000	A				
	01	012F4	00000001	A				
	01	012F5	00000000	A				
5195						PAGE		
5196					** RIGHT SHIFT. TRUE ZERO BEFORE COUNT DONE. S/FL3 IN PH6			
5197	01	012F6	FFFFFFF6	A	SF013	DATA	-10	
5198	01	012F7	24D0007B	A		SF,13	X'7B'	
5199	01	012F8	F7300136			K	15,7,3,SETPSW	
5200	01	012F9	07300169			K	0,7,3,LOC+2	
5201	01	012FA	04800000	A		DATA	X'04800000',X'04800000',0,0,X'20000100',0	
	01	012FB	04800000	A				
	01	012FC	00000000	A				
	01	012FD	00000000	A				
	01	012FE	20000100	A				
	01	012FF	00000000	A				
5202					** RIGHT SHIFT OVERFLOW AT COUNT DONE. S/CC2 IN PH7			
5203	01	01300	FFFFFFF6	A	SF014	DATA	-10	
5204	01	01301	24C0017F	A		SF,12	X'17F'	
5205	01	01302	07300136			K	0,7,3,SETPSW	
5206	01	01303	67300169			K	6,7,3,LOC+2	
5207	01	01304	7F453210	A		DATA	X'7F453210',X'00045321',0,0,-1,X'FFFFFFF'	
	01	01305	00045321	A				
	01	01306	00000000	A				
	01	01307	00000000	A				
	01	01308	FFFFFFFF	A				
	01	01309	0FFFFFFF	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5208					** RIGHT SHIFT. OVERFLOW BEFORE COUNT DONE. S/CC2 IN PH6			
5209	01	0130A	FFFFFFF6	A	SF015	DATA	-10	
5210	01	0130B	24C00170	A		SF,12	X'170'	
5211	01	0130C	F0000136			K	15,0,0,SETPSW	
5212	01	0130D	50000169			K	5,0,0,LOC+2	
5213	01	0130E	81FFFFFF	A		DATA	X'81FFFFFF',-1,0,0,X'FFFFF222',X'FFFFFFF3'	
	01	0130F	FFFFFFFF	A				
	01	01310	00000000	A				
	01	01311	00000000	A				
	01	01312	FFFFF222	A				
	01	01313	FFFFFFF3	A				
5214						PAGE		
5215					** RIGHT SHIFT. OVERFLOW AND TRUE ZERO. AT COUNT DONE. S/FL3 IN PH7			
5216	01	01314	FFFFFFF6	A	SF016	DATA	-10	
5217	01	01315	24C0017F	A		SF,12	X'17F'	
5218	01	01316	00000136			DATA	SETPSW,LOC+2,X'7F000000',0,0,0,1,0	
	01	01317	00000169					
	01	01318	7F000000	A				
	01	01319	00000000	A				
	01	0131A	00000000	A				
	01	0131B	00000000	A				
	01	0131C	00000001	A				
	01	0131D	00000000	A				
5219					** RIGHT SHIFT COUNT DONE. MAX COUNT W/O OVERFLOW OR TRUE ZERO			
5220	01	0131E	FFFFFFF6	A	SF017	DATA	-10	
5221	01	0131F	24C00173	A		SF,12	X'173'	
5222	01	01320	00000136			DATA	SETPSW	
5223	01	01321	20000169			K	2,0,0,LOC+2	
5224	01	01322	0125AC31	A		DATA	X'0125AC31',X'0E000000',0,0,X'95A3C195',2	
	01	01323	0E000000	A				
	01	01324	00000000	A				
	01	01325	00000000	A				
	01	01326	95A3C195	A				
	01	01327	00000002	A				
5225						PAGE		
5226					** THE NEXT 16 TESTS ARE LEFT SHIFTS WITH THE COUNT GOING TO ZERO			
5227					** EACH TEST LEAVES A SINGLE BIT IN REG B TO VERIFY EACH BIT POSITION			
5228					** WILL CAUSE BO031Z TO BE FALSE. CHARACTERISTICS ARE CHOSEN TO VERIFY			
5229					** THAT THE A DOWN COUNT LOGIC IS FUNCTIONING			
5230	01	01328	FFFFFFF6	A	SF018	DATA	-10	B00
5231	01	01329	A4C00460			SF,12	*MEMORY	
5232	01	0132A	00000136			DATA	SETPSW	
5233	01	0132B	20000169			K	2,0,0,LOC+2	
5234	01	0132C	73000000	A		DATA	X'73000000',X'71000000',X'102',X'102',X'800000'	
	01	0132D	71000000	A				
	01	0132E	00000102	A				
	01	0132F	00000102	A				
	01	01330	00800000	A				
5235	01	01331	80000000	A		DATA	X'80000000'	
5236	01	01332	FFFFFFF6	A	SF019	DATA	-10	B01
5237	01	01333	24CE0100	A		SF,12	X'100',7	IX ADD 1 TO COUNT
5238	01	01334	00000136			DATA	SETPSW	
5239	01	01335	20000169			K	2,0,0,LOC+2	
5240	01	01336	70000000	A		DATA	X'70000000',X'6F000000',0,0,X'4000000',X'40000000'	
	01	01337	6F000000	A				
	01	01338	00000000	A				
	01	01339	00000000	A				
	01	0133A	04000000	A				
	01	0133B	40000000	A				
5241	01	0133C	FFFFFFF6	A	SF020	DATA	-10	B02
5242	01	0133D	A4CE0460			SF,12	*MEMORY,7	
5243	01	0133E	00000136			DATA	SETPSW	
5244	01	0133F	20000169			K	2,0,0,LOC+2	
5245	01	01340	60000000	A		DATA	X'60000000',X'5F000000',X'100',X'100',X'2000000'	
	01	01341	5F000000	A				
	01	01342	00000100	A				
	01	01343	00000100	A				
	01	01344	02000000	A				
5246	01	01345	20000000	A		DATA	X'20000000'	
5247						PAGE		
5248	01	01346	FFFFFFF6	A	SF021	DATA	-10	B03

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5249	01	01347	24C00101	A		SF,12	X'101'	
5250	01	01348	00000136			DATA	SETPSW	
5251	01	01349	20000169			K	2,0,0,LOC+2	
5252	01	0134A	50000000	A		DATA	X'50000000',X'4F000000',0,0,X'1000000',X'10000000'	
	01	0134B	4F000000	A				
	01	0134C	00000000	A				
	01	0134D	00000000	A				
	01	0134E	01000000	A				
	01	0134F	10000000	A				
5253	01	01350	FFFFFFF6	A	SF022	DATA	-10	B04
5254	01	01351	24C00101	A		SF,12	X'101'	
5255	01	01352	00000136			DATA	SETPSW	
5256	01	01353	20000169			K	2,0,0,LOC+2	
5257	01	01354	40000000	A		DATA	X'40000000',X'3F000000',0,0,X'800000',X'8000000'	
	01	01355	3F000000	A				
	01	01356	00000000	A				
	01	01357	00000000	A				
	01	01358	00800000	A				
	01	01359	08000000	A				
5258	01	0135A	FFFFFFF6	A	SF023	DATA	-10	B05
5259	01	0135B	24C00101	A		SF,12	X'101'	
5260	01	0135C	00000136			DATA	SETPSW	
5261	01	0135D	20000169			K	2,0,0,LOC+2	
5262	01	0135E	30000000	A		DATA	X'30000000',X'2F000000',0,0,X'400000',X'4000000'	
	01	0135F	2F000000	A				
	01	01360	00000000	A				
	01	01361	00000000	A				
	01	01362	00400000	A				
	01	01363	04000000	A				
5263						PAGE		
5264	01	01364	FFFFFFF6	A	SF024	DATA	-10	B06
5265	01	01365	24C00101	A		SF,12	X'101'	
5266	01	01366	00000136			DATA	SETPSW	
5267	01	01367	20000169			K	2,0,0,LOC+2	
5268	01	01368	20000000	A		DATA	X'20000000',X'1F000000',0,0,X'200000',X'2000000'	
	01	01369	1F000000	A				
	01	0136A	00000000	A				
	01	0136B	00000000	A				
	01	0136C	00200000	A				
	01	0136D	02000000	A				
5269	01	0136E	FFFFFFF6	A	SF025	DATA	-10	B07
5270	01	0136F	24C00101	A		SF,12	X'101'	
5271	01	01370	00000136			DATA	SETPSW	
5272	01	01371	20000169			K	2,0,0,LOC+2	
5273	01	01372	10000000	A		DATA	X'10000000',X'0F000000',0,0,X'100000',X'1000000'	
	01	01373	0F000000	A				
	01	01374	00000000	A				
	01	01375	00000000	A				
	01	01376	00100000	A				
	01	01377	01000000	A				
5274	01	01378	FFFFFFF6	A	SF026	DATA	-10	B08
5275	01	01379	24C00101	A		SF,12	X'101'	
5276	01	0137A	00000136			DATA	SETPSW	
5277	01	0137B	20000169			K	2,0,0,LOC+2	
5278	01	0137C	71000000	A		DATA	X'71000000',X'70000000',0,0,X'80000',X'800000'	
	01	0137D	70000000	A				
	01	0137E	00000000	A				
	01	0137F	00000000	A				
	01	01380	00080000	A				
	01	01381	00800000	A				
5279						PAGE		
5280	01	01382	FFFFFFF6	A	SF027	DATA	-10	B09
5281	01	01383	24C00101	A		SF,12	X'101'	
5282	01	01384	00000136			DATA	SETPSW	
5283	01	01385	20000169			K	2,0,0,LOC+2	
5284	01	01386	61000000	A		DATA	X'61000000',X'60000000',0,0,X'40000',X'400000'	
	01	01387	60000000	A				
	01	01388	00000000	A				
	01	01389	00000000	A				
	01	0138A	00040000	A				
	01	0138B	00400000	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5285	01	0138C	FFFFFFF6	A	SF028	DATA	-10	B10
5286	01	0138D	24C00101	A		SF,12	X'101'	
5287	01	0138E	00000136			DATA	SETPSW	
5288	01	0138F	20000169			K	2,0,0,L0C+2	
5289	01	01390	51000000	A		DATA	X'51000000',X'50000000',0,0,X'20000',X'200000'	
	01	01391	50000000	A				
	01	01392	00000000	A				
	01	01393	00000000	A				
	01	01394	00020000	A				
	01	01395	00200000	A				
5290	01	01396	FFFFFFF6	A	SF029	DATA	-10	B11
5291	01	01397	24C00101	A		SF,12	X'101'	
5292	01	01398	00000136			DATA	SETPSW	
5293	01	01399	20000169			K	2,0,0,L0C+2	
5294	01	0139A	41000000	A		DATA	X'41000000',X'40000000',0,0,X'10000',X'100000'	
	01	0139B	40000000	A				
	01	0139C	00000000	A				
	01	0139D	00000000	A				
	01	0139E	00010000	A				
	01	0139F	00100000	A				
5295						PAGE		
5296	01	013A0	FFFFFFF6	A	SF030	DATA	-10	B12
5297	01	013A1	24C00101	A		SF,12	X'101'	
5298	01	013A2	00000136			DATA	SETPSW	
5299	01	013A3	20000169			K	2,0,0,L0C+2	
5300	01	013A4	31000000	A		DATA	X'31000000',X'30000000',0,0,X'8000',X'80000'	
	01	013A5	30000000	A				
	01	013A6	00000000	A				
	01	013A7	00000000	A				
	01	013A8	00008000	A				
	01	013A9	00080000	A				
5301	01	013AA	FFFFFFF6	A	SF031	DATA	-10	B13
5302	01	013AB	24C00101	A		SF,12	X'101'	
5303	01	013AC	00000136			DATA	SETPSW	
5304	01	013AD	20000169			K	2,0,0,L0C+2	
5305	01	013AE	21000000	A		DATA	X'21000000',X'20000000',0,0,X'4000',X'40000'	
	01	013AF	20000000	A				
	01	013B0	00000000	A				
	01	013B1	00000000	A				
	01	013B2	00004000	A				
	01	013B3	00040000	A				
5306						PAGE		
5307	01	013B4	FFFFFFF6	A	SF032	DATA	-10	B14
5308	01	013B5	24C00101	A		SF,12	X'101'	
5309	01	013B6	00000136			DATA	SETPSW	
5310	01	013B7	20000169			K	2,0,0,L0C+2	
5311	01	013B8	11000000	A		DATA	X'11000000',X'10000000',0,0,X'2000',X'20000'	
	01	013B9	10000000	A				
	01	013BA	00000000	A				
	01	013BB	00000000	A				
	01	013BC	00002000	A				
	01	013BD	00020000	A				
5312	01	013BE	FFFFFFF6	A	SF033	DATA	-10	B15
5313	01	013BF	24C00101	A		SF,12	X'101'	
5314	01	013C0	00000136			DATA	SETPSW	
5315	01	013C1	20000169			K	2,0,0,L0C+2	
5316	01	013C2	01000000	A		DATA	X'01000000',0,0,0,X'1000',X'10000'	
	01	013C3	00000000	A				
	01	013C4	00000000	A				
	01	013C5	00000000	A				
	01	013C6	00001000	A				
	01	013C7	00010000	A				
5317						PAGE		
5318					** THE NEXT 16 TESTS COMPLETE THE TEST 0F B0031Z AND CHECK THE A UP			
5319					** C0UNT L0GIC.			
5320	01	013C8	FFFFFFF6	A	SF034	DATA	-10	B31
5321	01	013C9	24C0017F	A		SF,12	X'17F'	
5322	01	013CA	00000136			DATA	SETPSW	
5323	01	013CB	20000169			K	2,0,0,L0C+2	
5324	01	013CC	0F000000	A		DATA	X'0F000000',X'10000000',0,0,16,1	
	01	013CD	10000000	A				

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LINE  MEM PROT  MEMORY    MEMORY     ABS OR REL ORIG  LABEL   OPERATION  OPERAND                                          COMMENTS
NO.   KEY       ADDRESS   CONTENTS
                01 013CE  00000000 A
                01 013CF  00000000 A
                01 013D0  00000010 A
                01 013D1  00000001 A
5325            01 013D2  FFFFFFF6 A  SF035   DATA       *10                                              B30
5326            01 013D3  24C0017F A          SF,12      X'17F'
5327            01 013D4  00000136            DATA       SETPSW
5328            01 013D5  20000169            K          2,0,0,L8C+2
5329            01 013D6  1F000000 A          DATA       X'1F000000',X'20000000',0,0,32,2
                01 013D7  20000000 A
                01 013D8  00000000 A
                01 013D9  00000000 A
                01 013DA  00000020 A
                01 013DB  00000002 A
5330            01 013DC  FFFFFFF6 A  SF036   DATA       *10                                              B29
5331            01 013DD  24C0017F A          SF,12      X'17F'
5332            01 013DE  00000136            DATA       SETPSW
5333            01 013DF  20000169            K          2,0,0,L8C+2
5334            01 013E0  2F000000 A          DATA       X'2F000000',X'30000000',0,0,64,4
                01 013E1  30000000 A
                01 013E2  00000000 A
                01 013E3  00000000 A
                01 013E4  00000040 A
                01 013E5  00000004 A
5335                                          PAGE
5336            01 013E6  FFFFFFF6 A  SF037   DATA       *10                                              B28
5337            01 013E7  24C0017F A          SF,12      X'17F'
5338            01 013E8  00000136            DATA       SETPSW
5339            01 013E9  20000169            K          2,0,0,L8C+2
5340            01 013EA  3F000000 A          DATA       X'3F000000',X'40000000',0,0,128,8
                01 013EB  40000000 A
                01 013EC  00000000 A
                01 013ED  00000000 A
                01 013EE  00000080 A
                01 013EF  00000008 A
5341            01 013F0  FFFFFFF6 A  SF038   DATA       *10                                              B27
5342            01 013F1  24C0017F A          SF,12      X'17F'
5343            01 013F2  00000136            DATA       SETPSW
5344            01 013F3  20000169            K          2,0,0,L8C+2
5345            01 013F4  4F000000 A          DATA       X'4F000000',X'50000000',0,0,256,16
                01 013F5  50000000 A
                01 013F6  00000000 A
                01 013F7  00000000 A
                01 013F8  00000100 A
                01 013F9  00000010 A
5346            01 013FA  FFFFFFF6 A  SF039   DATA       *10                                              B26
5347            01 013FB  24C0017F A          SF,12      X'17F'
5348            01 013FC  00000136            DATA       SETPSW
5349            01 013FD  20000169            K          2,0,0,L8C+2
5350            01 013FE  5F000000 A          DATA       X'5F000000',X'60000000',0,0,512,32
                01 013FF  60000000 A
                01 01400  00000000 A
                01 01401  00000000 A
                01 01402  00000200 A
                01 01403  00000020 A
5351                                          PAGE
5352            01 01404  FFFFFFF6 A  SF040   DATA       *10                                              B25
5353            01 01405  24C0017F A          SF,12      X'17F'
5354            01 01406  00000136            DATA       SETPSW
5355            01 01407  20000169            K          2,0,0,L8C+2
5356            01 01408  6F000000 A          DATA       X'6F000000',X'70000000',0,0,1024,64
                01 01409  70000000 A
                01 0140A  00000000 A
                01 0140B  00000000 A
                01 0140C  00000400 A
                01 0140D  00000040 A
5357            01 0140E  FFFFFFF6 A  SF041   DATA       *10                                              B24
5358            01 0140F  24C0017F A          SF,12      X'17F'
5359            01 01410  00000136            DATA       SETPSW
5360            01 01411  20000169            K          2,0,0,L8C+2
5361            01 01412  06000000 A          DATA       X'60000000',X'70000000',0,0,2048,128
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	01	01413	07000000	A				
	01	01414	00000000	A				
	01	01415	00000000	A				
	01	01416	00000800	A				
	01	01417	00000080	A				
5362	01	01418	FFFFFFF6	A	SF042	DATA	-10	B23
5363	01	01419	24C0017F	A		SF,12	X'17F'	
5364	01	0141A	00000136			DATA	SETPSW	
5365	01	0141B	20000169			K	2,0,0,L8C+2	
5366	01	0141C	70000000	A		DATA	X'70000000',X'71000000',0,0,4096,256	
	01	0141D	71000000	A				
	01	0141E	00000000	A				
	01	0141F	00000000	A				
	01	01420	00001000	A				
	01	01421	00000100	A				
5367						PAGE		
5368	01	01422	FFFFFFF6	A	SF043	DATA	-10	B22
5369	01	01423	24C0017F	A		SF,12	X'17F'	
5370	01	01424	00000136			DATA	SETPSW	
5371	01	01425	20000169			K	2,0,0,L8C+2	
5372	01	01426	60000000	A		DATA	X'60000000',X'61000000',0,0,8192,512	
	01	01427	61000000	A				
	01	01428	00000000	A				
	01	01429	00000000	A				
	01	0142A	00002000	A				
	01	0142B	00000200	A				
5373	01	0142C	FFFFFFF6	A	SF044	DATA	-10	B21
5374	01	0142D	24C0017F	A		SF,12	X'17F'	
5375	01	0142E	00000136			DATA	SETPSW	
5376	01	0142F	20000169			K	2,0,0,L8C+2	
5377	01	01430	50000000	A		DATA	X'50000000',X'51000000',0,0,16384,1024	
	01	01431	51000000	A				
	01	01432	00000000	A				
	01	01433	00000000	A				
	01	01434	00004000	A				
	01	01435	00000400	A				
5378	01	01436	FFFFFFF6	A	SF045	DATA	-10	B20
5379	01	01437	24C0017F	A		SF,12	X'17F'	
5380	01	01438	00000136			DATA	SETPSW	
5381	01	01439	20000169			K	2,0,0,L8C+2	
5382	01	0143A	40000000	A		DATA	X'40000000',X'41000000',0,0,32768,2048	
	01	0143B	41000000	A				
	01	0143C	00000000	A				
	01	0143D	00000000	A				
	01	0143E	00008000	A				
	01	0143F	00000800	A				
5383						PAGE		
5384	01	01440	FFFFFFF6	A	SF046	DATA	-10	B19
5385	01	01441	24C0017F	A		SF,12	X'17F'	
5386	01	01442	00000136			DATA	SETPSW	
5387	01	01443	20000169			K	2,0,0,L8C+2	
5388	01	01444	30000000	A		DATA	X'30000000',X'31000000',0,0,65536,4096	
	01	01445	31000000	A				
	01	01446	00000000	A				
	01	01447	00000000	A				
	01	01448	00010000	A				
	01	01449	00001000	A				
5389	01	0144A	FFFFFFF6	A	SF047	DATA	-10	B18
5390	01	0144B	24C0017F	A		SF,12	X'17F'	
5391	01	0144C	00000136			DATA	SETPSW	
5392	01	0144D	20000169			K	2,0,0,L8C+2	
5393	01	0144E	20000000	A		DATA	X'20000000',X'21000000',0,0,131072,8192	
	01	0144F	21000000	A				
	01	01450	00000000	A				
	01	01451	00000000	A				
	01	01452	00020000	A				
	01	01453	00002000	A				
5394	01	01454	FFFFFFF6	A	SF048	DATA	-10	B17
5395	01	01455	24C0017F	A		SF,12	X'17F'	
5396	01	01456	00000136			DATA	SETPSW	
5397	01	01457	20000169			K	2,0,0,L8C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5398	01	01458	10000000	A		DATA	X'10000000',X'11000000',0,0,262144,16384	
	01	01459	11000000	A				
	01	0145A	00000000	A				
	01	0145B	00000000	A				
	01	0145C	00040000	A				
	01	0145D	00004000	A				
5399						PAGE		
5400	01	0145E	FFFFFFF6	A	SF049	DATA	-10	B16
5401	01	0145F	24C0017F	A		SF,12	X'17F'	
5402	01	01460	00000136			DATA	SETPSW	
5403	01	01461	20000169			K	2,0,0,L8C+2	
5404	01	01462	00000000	A		DATA	0,X'1000000',0,0,524288,32768	
	01	01463	01000000	A				
	01	01464	00000000	A				
	01	01465	00000000	A				
	01	01466	00080000	A				
	01	01467	00008000	A				
5405						** CHECK THAT UNUSED BITS IN ADDRESS FIELD HAVE NO EFFECT		
5406						** ALSO THAT INDEXING WILL CHANGE A + COUNT TO A + COUNT		
5407	01	01468	FFFFFFF4	A	SF050	DATA	-12	
5408	01	01469	A4C20460			SF,12	*MEMORY,1	
5409	01	0146A	00000136			K	0,0,0,SETPSW	
5410	01	0146B	20000169			K	2,0,0,L8C+2	
5411	01	0146C	04000011	A		DATA	X'04000011',X'03000110',X'FFFFFEF0',X'FFFFFEF0',-9,-9	
	01	0146D	03000110	A				
	01	0146E	FFFFFEF0	A				
	01	0146F	FFFFFEF0	A				
	01	01470	FFFFFFF7	A				
	01	01471	FFFFFFF7	A				
5412	01	01472	00000008	A		DATA	8,8	
	01	01473	00000008	A				
5413						PAGE		
5414	01	01474	FFFFFFF4	A	SF01	DATA	-12	SF
5415	01	01475	24C00101	A		SF,12	X'101'	
5416	01	01476	073001CF			K	0,7,3,FLPFSW	
5417	01	01477	A7300169			K	10,7,3,L8C+2	
5418	01	01478	010F0F0F	A		DATA	X'010F0F0F'	
5419	01	01479	00F0F0F0	A		DATA	X'00F0F0F0'	
5420	01	0147A	00000000	A		DATA	X'0'	
5421	01	0147B	00000000	A		DATA	X'0'	
5422	01	0147C	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5423	01	0147D	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5424	01	0147E	00000000	A		DATA	X'0'	
5425	01	0147F	00000000	A		DATA	X'0'	
5426	01	01480	FFFFFFF4	A	SF02	DATA	-12	SF
5427	01	01481	24C00101	A		SF,12	X'101'	
5428	01	01482	073001CF			K	0,7,3,FLPFSW	
5429	01	01483	27300169			K	2,7,3,L8C+2	
5430	01	01484	0300F0F0	A		DATA	X'0300F0F0'	
5431	01	01485	020F0F0F	A		DATA	X'020F0F0F'	
5432	01	01486	00000000	A		DATA	X'0'	
5433	01	01487	00000000	A		DATA	X'0'	
5434	01	01488	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5435	01	01489	0F0F0F00	A		DATA	X'0F0F0F00'	
5436	01	0148A	00000000	A		DATA	X'0'	
5437	01	0148B	00000000	A		DATA	X'0'	
5438						PAGE		
5439	01	0148C	FFFFFFF4	A	SF03	DATA	-12	SF
5440	01	0148D	24C0017F	A		SF,12	X'17F'	
5441	01	0148E	073001CF			K	0,7,3,FLPFSW	
5442	01	0148F	27300169			K	2,7,3,L8C+2	
5443	01	01490	010F0F0F	A		DATA	X'010F0F0F'	
5444	01	01491	0200F0F0	A		DATA	X'0200F0F0'	
5445	01	01492	00000000	A		DATA	X'0'	
5446	01	01493	00000000	A		DATA	X'0'	
5447	01	01494	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5448	01	01495	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5449	01	01496	00000000	A		DATA	X'0'	
5450	01	01497	00000000	A		DATA	X'0'	
5451						PAGE		
5452	01	01498	FFFFFFF4	A	SF04	DATA	-12	SF

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5453	01	01499	24C0017F	A		SF,12	X'17F'	
5454	01	0149A	073001CF			K	0,7,3,FLPFSW	
5455	01	0149B	27300169			K	2,7,3,L8C+2	
5456	01	0149C	03F0F0F0	A		DATA	X'03F0F0F0'	
5457	01	0149D	040F0F0F	A		DATA	X'040F0F0F'	
5458	01	0149E	00000000	A		DATA	X'0'	
5459	01	0149F	00000000	A		DATA	X'0'	
5460	01	014A0	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5461	01	014A1	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5462	01	014A2	00000000	A		DATA	X'0'	
5463	01	014A3	00000000	A		DATA	X'0'	
5464	01	014A4	FFFFFFF4	A	SF05	DATA	-12	SF
5465	01	014A5	24C00101	A		SF,12	X'101'	
5466	01	014A6	073001CF			K	0,7,3,FLPFSW	
5467	01	014A7	87300169			K	8,7,3,L8C+2	
5468	01	014A8	7F000000	A		DATA	X'7F000000'	
5469	01	014A9	00000000	A		DATA	X'0'	
5470	01	014AA	00000000	A		DATA	X'0'	
5471	01	014AB	00000000	A		DATA	X'0'	
5472	01	014AC	00000000	A		DATA	X'0'	
5473	01	014AD	00000000	A		DATA	X'0'	
5474	01	014AE	00000000	A		DATA	X'0'	
5475	01	014AF	00000000	A		DATA	X'0'	
5476						PAGE		
5477	01	01480	FFFFFFF4	A	SF06	DATA	-12	SF
5478	01	01481	24C00041	A		SF,12	X'041'	
5479	01	01482	073001CF			K	0,7,3,FLPFSW	
5480	01	01483	07300169			K	0,7,3,L8C+2	
5481	01	01484	7F000000	A		DATA	X'7F000000'	
5482	01	01485	00000000	A		DATA	X'0'	
5483	01	01486	00000000	A		DATA	X'0'	
5484	01	01487	00000000	A		DATA	X'0'	
5485	01	01488	00000000	A		DATA	X'0'	
5486	01	01489	00000000	A		DATA	X'0'	
5487	01	0148A	00000000	A		DATA	X'0'	
5488	01	0148B	00000000	A		DATA	X'0'	
5489	01	0148C	FFFFFFF4	A	SF07	DATA	-12	SF
5490	01	0148D	24C00101	A		SF,12	X'101'	
5491	01	0148E	073001CF			K	0,7,3,FLPFSW	
5492	01	0148F	57300169			K	5,7,3,L8C+2	
5493	01	014C0	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5494	01	014C1	80FFFFF0	A		DATA	X'80FFFFF0'	
5495	01	014C2	00000000	A		DATA	X'0'	
5496	01	014C3	00000000	A		DATA	X'0'	
5497	01	014C4	00000000	A		DATA	X'0'	
5498	01	014C5	00000000	A		DATA	X'0'	
5499	01	014C6	00000000	A		DATA	X'0'	
5500	01	014C7	00000000	A		DATA	X'0'	
5501						PAGE		
5502	01	014C8	FFFFFFF4	A	SF08	DATA	-12	SF
5503	01	014C9	24C00141	A		SF,12	X'141'	
5504	01	014CA	073001CF			K	0,7,3,FLPFSW	
5505	01	014CB	07300169			K	0,7,3,L8C+2	
5506	01	014CC	00FFFFFF	A		DATA	X'00FFFFFF'	
5507	01	014CD	00000000	A		DATA	X'0'	
5508	01	014CE	00000000	A		DATA	X'0'	
5509	01	014CF	00000000	A		DATA	X'0'	
5510	01	014D0	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5511	01	014D1	00000000	A		DATA	X'0'	
5512	01	014D2	00000000	A		DATA	X'0'	
5513	01	014D3	00000000	A		DATA	X'0'	
5514	01	014D4	FFFFFFF4	A	SF09	DATA	-12	SF
5515	01	014D5	24C00173	A		SF,12	X'173'	
5516	01	014D6	073001CF			K	0,7,3,FLPFSW	
5517	01	014D7	27300169			K	2,7,3,L8C+2	
5518	01	014D8	72F00000	A		DATA	X'72F00000'	
5519	01	014D9	7F000000	A		DATA	X'7F000000'	
5520	01	014DA	00000000	A		DATA	X'0'	
5521	01	014DB	00000000	A		DATA	X'0'	
5522	01	014DC	00000000	A		DATA	X'0'	
5523	01	014DD	0000000F	A		DATA	X'0000000F'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5524	01	014DE	00000000	A		DATA	X'0'	
5525	01	014DF	00000000	A		DATA	X'0'	
5526						PAGE		
5527	01	014E0	FFFFFFF4	A	SF10	DATA	-12	SF
5528	01	014E1	24C0013F	A		SF,12	X'13F'	
5529	01	014E2	073001CF			K	0,7,3,FLPFSW	
5530	01	014E3	A7300169			K	10,7,3,L8C+2	
5531	01	014E4	07080000	A		DATA	X'07080000'	
5532	01	014E5	06800000	A		DATA	X'06800000'	
5533	01	014E6	00000000	A		DATA	X'0'	
5534	01	014E7	00000000	A		DATA	X'0'	
5535	01	014E8	00000000	A		DATA	X'0'	
5536	01	014E9	00000000	A		DATA	X'0'	
5537	01	014EA	00000000	A		DATA	X'0'	
5538	01	014EB	00000000	A		DATA	X'0'	
5539	01	014EC	FFFFFFF4	A	SF11	DATA	-12	SF
5540	01	014ED	24C00172	A		SF,12	X'172'	
5541	01	014EE	073001CF			K	0,7,3,FLPFSW	
5542	01	014EF	07300169			K	0,7,3,L8C+2	
5543	01	014F0	72FFFFFF	A		DATA	X'72FFFFFF'	
5544	01	014F1	00000000	A		DATA	X'0'	
5545	01	014F2	00000000	A		DATA	X'0'	
5546	01	014F3	00000000	A		DATA	X'0'	
5547	01	014F4	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5548	01	014F5	00000000	A		DATA	X'0'	
5549	01	014F6	00000000	A		DATA	X'0'	
5550	01	014F7	00000000	A		DATA	X'0'	
5551						PAGE		
5552	01	014F8	FFFFFFF4	A	SF12	DATA	-12	SF
5553	01	014F9	24C0010D	A		SF,12	X'10D'	
5554	01	014FA	073001CF			K	0,7,3,FLPFSW	
5555	01	014FB	A7300169			K	10,7,3,L8C+2	
5556	01	014FC	73000000	A		DATA	X'73000000'	
5557	01	014FD	66100000	A		DATA	X'66100000'	
5558	01	014FE	00000000	A		DATA	X'0'	
5559	01	014FF	00000000	A		DATA	X'0'	
5560	01	01500	00000001	A		DATA	X'00000001'	
5561	01	01501	00000000	A		DATA	X'0'	
5562	01	01502	00000000	A		DATA	X'0'	
5563	01	01503	00000000	A		DATA	X'0'	
5564	01	01504	FFFFFFF4	A	SF13	DATA	-12	SF
5565	01	01505	24C0017E	A		SF,12	X'17E'	
5566	01	01506	073001CF			K	0,7,3,FLPFSW	
5567	01	01507	67300169			K	6,7,3,L8C+2	
5568	01	01508	7FF00000	A		DATA	X'7FF00000'	
5569	01	01509	000F0000	A		DATA	X'000F0000'	
5570	01	0150A	00000000	A		DATA	X'0'	
5571	01	0150B	00000000	A		DATA	X'0'	
5572	01	0150C	0000000F	A		DATA	X'0000000F'	
5573	01	0150D	00000000	A		DATA	X'0'	
5574	01	0150E	00000000	A		DATA	X'0'	
5575	01	0150F	00000000	A		DATA	X'0'	
5576						PAGE		
5577	01	01510	FFFFFFF4	A	SF14	DATA	-12	SF
5578	01	01511	24C00000	A		SF,12	X'000'	
5579	01	01512	073001CF			K	0,7,3,FLPFSW	
5580	01	01513	A7300169			K	10,7,3,L8C+2	
5581	01	01514	7F555555	A		DATA	X'7F555555'	
5582	01	01515	7F555555	A		DATA	X'7F555555'	
5583	01	01516	00000000	A		DATA	X'0'	
5584	01	01517	00000000	A		DATA	X'0'	
5585	01	01518	00000000	A		DATA	X'0'	
5586	01	01519	00000000	A		DATA	X'0'	
5587	01	0151A	00000000	A		DATA	X'0'	
5588	01	0151B	00000000	A		DATA	X'0'	
5589						PAGE		
5590	01	0151C	FFFFFFF4	A	SF15	DATA	-12	SF
5591	01	0151D	24C00101	A		SF,12	X'101'	
5592	01	0151E	073C01CF			K	0,7,3,FLPFSW	
5593	01	0151F	97300169			K	9,7,3,L8C+2	
5594	01	01520	FE000000	A		DATA	X'FE000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5595	01	01521	FE000000	A		DATA	X'FE000000'	
5596	01	01522	00000000	A		DATA	X'0'	
5597	01	01523	00000000	A		DATA	X'0'	
5598	01	01524	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5599	01	01525	FFFFFFFF	A		DATA	X'FFFFFFFF'	
5600	01	01526	00000000	A		DATA	X'0'	
5601	01	01527	00000000	A		DATA	X'0'	
5602	01	01528	FFFFFFF4	A	SF16	DATA	*12	SF
5603	01	01529	24D0017E	A		SF,13	X'17E'	
5604	01	0152A	073001CF			K	0,7,3,FLPFSW	
5605	01	0152B	27300169			K	2,7,3,L0C+2	
5606	01	0152C	7FAAAAAA	A		DATA	X'7FAAAAAA'	
5607	01	0152D	7FAAAAAA	A		DATA	X'7FAAAAAA'	
5608	01	0152E	00000000	A		DATA	X'0'	
5609	01	0152F	00000000	A		DATA	X'0'	
5610	01	01530	40555555	A		DATA	X'40555555'	
5611	01	01531	42005555	A		DATA	X'42005555'	
5612	01	01532	00000000	A		DATA	X'0'	
5613	01	01533	00000000	A		DATA	X'0'	
5614						PAGE		
5615	01	01534	FFFFFFF4	A	SF17	DATA	*12	SF
5616	01	01535	24D00104	A		SF,13	X'104'	
5617	01	01536	073001CF			K	0,7,3,FLPFSW	
5618	01	01537	A7300169			K	10,7,3,L0C+2	
5619	01	01538	00000001	A		DATA	X'00000001'	
5620	01	01539	00000001	A		DATA	X'1'	
5621	01	0153A	00000000	A		DATA	X'0'	
5622	01	0153B	00000000	A		DATA	X'0'	
5623	01	0153C	40000FFF	A		DATA	X'40000FFF'	
5624	01	0153D	3DFFF400	A		DATA	X'3DFFF400'	
5625	01	0153E	00000000	A		DATA	X'0'	
5626	01	0153F	00000000	A		DATA	X'0'	
5627	01	01540	FFFFFFF4	A	SF18	DATA	*12	SF
5628	01	01541	24C0007D	A		SF,12	X'07D'	
5629	01	01542	073001CF			K	0,7,3,FLPFSW	
5630	01	01543	07300169			K	0,7,3,L0C+2	
5631	01	01544	FF000000	A		DATA	X'FF000000'	
5632	01	01545	00000000	A		DATA	X'0'	
5633	01	01546	00000000	A		DATA	X'0'	
5634	01	01547	00000000	A		DATA	X'0'	
5635	01	01548	00000000	A		DATA	X'0'	
5636	01	01549	00000000	A		DATA	X'0'	
5637	01	0154A	00000000	A		DATA	X'0'	
5638	01	0154B	00000000	A		DATA	X'0'	
5639						PAGE		
5640	01	0154C	FFFFFFF4	A	SF19	DATA	*12	SF
5641	01	0154D	24D00001	A		SF,13	X'001'	
5642	01	0154E	073001CF			K	0,7,3,FLPFSW	
5643	01	0154F	A7300169			K	10,7,3,L0C+2	
5644	01	01550	00000000	A		DATA	X'0'	
5645	01	01551	00000000	A		DATA	X'0'	
5646	01	01552	00000000	A		DATA	X'0'	
5647	01	01553	00000000	A		DATA	X'0'	
5648	01	01554	080F0F0F	A		DATA	X'080F0F0F'	
5649	01	01555	07F0F0F0	A		DATA	X'07F0F0F0'	
5650	01	01556	00000000	A		DATA	X'0'	
5651	01	01557	00000000	A		DATA	X'0'	
5652	01	01558	FFFFFFF4	A	SF20	DATA	*12	SF
5653	01	01559	24D0007F	A		SF,13	X'07F'	
5654	01	0155A	073001CF			K	0,7,3,FLPFSW	
5655	01	0155B	27300169			K	2,7,3,L0C+2	
5656	01	0155C	00000000	A		DATA	X'0'	
5657	01	0155D	00000000	A		DATA	X'0'	
5658	01	0155E	00000000	A		DATA	X'0'	
5659	01	0155F	00000000	A		DATA	X'0'	
5660	01	01560	07F0F0F0	A		DATA	X'07F0F0F0'	
5661	01	01561	080F0F0F	A		DATA	X'080F0F0F'	
5662	01	01562	00000000	A		DATA	X'0'	
5663	01	01563	00000000	A		DATA	X'0'	
5664						PAGE		
5665	01	01564	FFFFFFF4	A	SF21	DATA	*12	SF

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5666	01	01565	A4C00460			SF,12	*MEMORY	
5667	01	01566	073001CF			K	0,7,3,FLPFSW	
5668	01	01567	A7300169			K	10,7,3,L0C+2	
5669	01	01568	010F0F0F	A		DATA	X'010F0F0F'	
5670	01	01569	00F0F0F0	A		DATA	X'00F0F0F0'	
5671	01	0156A	00000101	A		DATA	X'101'	
5672	01	0156B	00000101	A		DATA	X'101'	
5673	01	0156C	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5674	01	0156D	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5675	01	0156E	00000000	A		DATA	X'0'	
5676	01	0156F	00000000	A		DATA	X'0'	
5677						PAGE		
5678	01	01570	FFFFFFF4	A	SF22	DATA	-12	SF
5679	01	01571	24CE0101	A		SF,12	X'101',7	
5680	01	01572	073001CF			K	0,7,3,FLPFSW	
5681	01	01573	A7300169			K	10,7,3,L0C+2	
5682	01	01574	010F0F0F	A		DATA	X'010F0F0F'	
5683	01	01575	00F0F0F0	A		DATA	X'00F0F0F0'	
5684	01	01576	00000000	A		DATA	X'0'	
5685	01	01577	00000000	A		DATA	X'0'	
5686	01	01578	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5687	01	01579	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5688	01	0157A	00000000	A		DATA	X'0'	
5689	01	0157B	00000000	A		DATA	X'0'	
5690	01	0157C	FFFFFFF4	A	SF23	DATA	-12	SF
5691	01	0157D	A4CE0460			SF,12	*MEMORY,7	
5692	01	0157E	073001CF			K	0,7,3,FLPFSW	
5693	01	0157F	A7300169			K	10,7,3,L0C+2	
5694	01	01580	010F0F0F	A		DATA	X'010F0F0F'	
5695	01	01581	00F0F0F0	A		DATA	X'00F0F0F0'	
5696	01	01582	00000100	A		DATA	X'100'	
5697	01	01583	00000100	A		DATA	X'100'	
5698	01	01584	0F0F0F0F	A		DATA	X'0F0F0F0F'	
5699	01	01585	F0F0F0F0	A		DATA	X'F0F0F0F0'	
5700	01	01586	00000000	A		DATA	X'0'	
5701	01	01587	00000000	A		DATA	X'0'	
5702						PAGE		
5703					** CHECK	C0ND C0DE	SETTINGS AND TRAP L0CATI0NS. I9 SET F0R FIRST SIX	
5704	01	01588	FFFFFFFC	A	CAL01	DATA	-4	
5705	01	01589	04301589			CAL1,3	$	
5706	01	0158A	079001D5			K	0,7,9,SI9CL1	SLAVE M0DE
5707	01	0158B	3710009E			K	3,7,1,C1RET+4	
5708	01	0158C	FFFFFFFC	A	CAL02	DATA	-4	
5709	01	0158D	05C0158D			CAL2,12	$	
5710	01	0158E	073001DB			K	0,7,3,SI9CL2	MASTER M0DE
5711	01	0158F	C73000B8			K	12,7,3,C2RET+13	
5712	01	01590	FFFFFFFC	A	CAL03	DATA	-4	
5713	01	01591	06A01591			CAL3,10	$	
5714	01	01592	008001E1			K	0,0,8,SI9CL3	SLAVE
5715	01	01593	A00000CD			K	10,0,0,C3RET+11	
5716	01	01594	FFFFFFFC	A	CAL04	DATA	-4	
5717	01	01595	07501595			CAL4,5	$	
5718	01	01596	000001E7			K	0,0,0,SI9CL4	MASTER
5719	01	01597	500000DC			K	5,0,0,C4RET+6	
5720						PAGE		
5721					** CHECK	THAT IA	AND IX HAS N0 EFFECT	
5722	01	01598	FFFFFFF8	A	CAL05	DATA	-8	
5723	01	01599	870E0460			CAL4,0	*MEM0RY,7	
5724	01	0159A	F08001E7			K	15,0,8,SI9CL4	SLAVE
5725	01	0159B	F00000D7			K	15,0,0,C4RET+1	
5726	01	0159C	00000000	A		DATA	0	
5727	01	0159D	00000000	A		DATA	0	
5728	01	0159E	00000460			DATA	MEM0RY	
5729	01	0159F	00000460			DATA	MEM0RY	
5730	01	015A0	FFFFFFFC	A	CAL06	DATA	-4	
5731	01	015A1	07FC15A1			CAL4,F	$	
5732	01	015A2	000001F7			K	0,0,0,SI9CL4	MASTER
5733	01	015A3	F00000E6			K	15,0,0,C4RET+16	
5734					** I9 RESET			
5735	01	015A4	FFFFFFFC	A	CAL07	DATA	-4	
5736	01	015A5	07F015A5			CAL4,F	$	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5737	01	015A6	000001E8			K	0,0,0,R19CL4	MASTER
5738	01	015A7	F00000D7			K	15,0,0,C4RET+1	
5739						PAGE		
5740					***			
5741					***	CAUTIØN		
5742					***			
5743					***	PSW1 ØUT IS DEPENDENT UPØN THE SENSE SWITCH SETTING WHEN EXECUTING		
5744					***	FARWD INSTRUCTIØNS, A FALSE ERRØR CAULD ØCCUR IF SWITCHES ARE		
5745					***	ØPERATED.		
5746					***	TØ RECØVER USE THE CP INTERRUPT SET THE SENSE SWITCHES, ENTER		
5747					***	THE MØDULE LØCATIØN IN R1, DISPLAY THE IA AND RUN.		
5748	01	015A8	FFFFFFF2	A	FARWD01	DATA	-14	
5749	01	015A9	6DC00037	A		WD,12	X'37'	SET ALL INTERRPUT INHIBITS IN PSW2
5750	01	015AA	000001ED			DATA	FARWD	
5751	01	015AB	00000169			DATA	LØC+2	
5752	01	015AC	00000000	A		DATA	0,0,0,0,0,0,0,0,0,X'7000000'	
	01	015AD	00000000	A				
	01	015AE	00000000	A				
	01	015AF	00000000	A				
	01	015B0	00000000	A				
	01	015B1	00000000	A				
	01	015B2	00000000	A				
	01	015B3	00000000	A				
	01	015B4	00000000	A				
	01	015B5	07000000	A				
5753	01	015B6	FFFFFFF2	A	FARWD02	DATA	-14	INTERRUPT INHIBIT TEST *B
5754	01	015B7	6DC00030	A		WD,12	X'30'	TRY TØ SET W/Ø SPECIFYING ANY BITS*B
5755	01	015B8	000001ED			DATA	FARWD	
5756	01	015B9	00000169			DATA	LØC+2	
5757	01	015BA	FFFFFFFF	A		DATA	-1,-1,-1,-1,-1,-1,-1,-1,0,0	PSW2 IN=0 PSW2 ØUT=0 *B
	01	015BB	FFFFFFFF	A				
	01	015BC	FFFFFFFF	A				
	01	015BD	FFFFFFFF	A				
	01	015BE	FFFFFFFF	A				
	01	015BF	FFFFFFFF	A				
	01	015C0	FFFFFFFF	A				
	01	015C1	FFFFFFFF	A				
	01	015C2	00000000	A				
	01	015C3	00000000	A				
5758						PAGE		
5759	01	015C4	FFFFFFF2	A	FARWD03	DATA	-14	INTERRUPT INHIBIT TEST *B
5760	01	015C5	6DC00027	A		WD,12	X'27'	RESET ALL BITS *B
5761	01	015C6	000001ED			DATA	FARWD	*B
5762	01	015C7	00000169			DATA	LØC+2	*B
5763	01	015C8	00000000	A		DATA	0,0,0,0,0,0,0,0	*B
	01	015C9	00000000	A				
	01	015CA	00000000	A				
	01	015CB	00000000	A				
	01	015CC	00000000	A				
	01	015CD	00000000	A				
	01	015CE	00000000	A				
	01	015CF	00000000	A				
5764	01	015D0	07000000	A		GEN,8,24	7,0	PSW2 IN
5765	01	015D1	00000000	A		DATA	0	PSW2 ØUT
5766	01	015D2	FFFFFFF2	A	FARWD04	DATA	-14	INTERRUPT INHIBIT TEST *B
5767	01	015D3	6DC00020	A		WD,12	X'20'	TRY TØ RESET W/Ø SPECIFYING BITS *B
5768	01	015D4	000001ED			DATA	FARWD	
5769	01	015D5	00000169			DATA	LØC+2	
5770	01	015D6	00000000	A		DATA	0,0,0,0,0,0,0,0	
	01	015D7	00000000	A				
	01	015D8	00000000	A				
	01	015D9	00000000	A				
	01	015DA	00000000	A				
	01	015DB	00000000	A				
	01	015DC	00000000	A				
	01	015DD	00000000	A				
5771	01	015DE	07000000	A		GEN,8,24,8,24	7,0,7,0	PSW2 IN AND ØUT
			07000000					
5772						PAGE		
5773	01	015E0	FFFFFFF2	A	FARWD05	DATA	-14	INTERRUPT INHIBIT TEST *B
5774	01	015E1	6CC00037	A		RD,12	X'37'	ØNLY WD SHØULD SET BITS *B

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LINE NO.  MEM PROT KEY  MEMORY ADDRESS  MEMORY CONTENTS  ABS OR REL ORIG  LABEL     OPERATION  OPERAND                  COMMENTS
5775      01            015E2           000001ED                          DATA       FARWD,L0C+2                                *B
          01            015E3           00000169
5776      01            015E4           FFFFFFFF  A                       DATA       -1,0,0,0,0,0,0,0,0,0                       *B
          01            015E5           00000000  A
          01            015E6           00000000  A
          01            015E7           00000000  A
          01            015E8           00000000  A
          01            015E9           00000000  A
          01            015EA           00000000  A
          01            015EB           00000000  A
          01            015EC           00000000  A
          01            015ED           00000000  A
5777                                                          PAGE
5778                                                ** CHECK THAT INDX=C4 C14
5779                                                ** INDEXING ALIGNMENT IS CHECKED BY THE BYTE, HALF AND DOUBLEWORD MODULE
5780      01            015EE           FFFFFFF8  A IX01      DATA       -8
5781      01            015EF           48C3EE72  A           EOR,12     MEMORY-IX01,1
5782      01            015F0           00000136              DATA       SETPSW,L0C+2
          01            015F1           00000169
5783      01            015F2           000015EE              DATA       IX01,0,IX01,IX01
          01            015F3           00000000  A
          01            015F4           000015EE
          01            015F5           000015EE
5784                                                ** CHECK THAT INDX=C3,C12
5785      01            015F6           FFFFFFF8  A IX02      DATA       -8
5786      01            015F7           30C80004  A           AW,12      4,4                  EFF ADDR IS 8, CONTENTS OF MEM IN 8
5787      01            015F8           00000136              DATA       SETPSW
5788      01            015F9           20000169              K          2,0,0,L0C+2
5789      01            015FA           00000064  A           DATA       100,300,200,200
          01            015FB           0000012C  A
          01            015FC           000000C8  A
          01            015FD           000000C8  A
5790                                                ** CHECK THAT INDX= C5,C13
5791      01            015FE           FFFFFFF6  A IX03      DATA       -10
5792      01            015FF           24C40002  A           SF,12      2,2                  IX2 CONTAINS A 1, CAUSING LS OF 3.
5793      01            01600           00000136              K          0,0,0,SETPSW
5794      01            01601           A0000169              K          10,0,0,L0C+2
5795      01            01602           14000100  A           DATA       X'14000100'
5796      01            01603           11100000  A           DATA       X'11100000'
5797      01            01604           00000000  A           DATA       0
5798      01            01605           00000000  A           DATA       0
5799      01            01606           FFFFFFFF  A           DATA       -1
5800      01            01607           FFFFFFFF  A           DATA       -1
5801                                                          PAGE
5802                                                ** TEST THAT A PRIVLEGED INSTRUCTION TRAPS IN SLAVE MODE
5803      01            01608           FFFFFFFC  A FAPRIV01  DATA       -4
5804      01            01609           0F000464              XPSD,0     RETURN
5805      01            0160A           F7B001BC              K          15,7,11,SI9NA0       I9=1 CAUSING TRACC2 ADDITION TO ADDR
5806      01            0160B           F7300065              K          F,7,3,MVRET+1
5807                                                ** TEST THAT FAPRIV IS FALSE WHEN B5 IS FALSE
5808      01            0160C           FFFFFFFC  A FAPRIV02  DATA       -4
5809      01            0160D           48C00460              EOR,12     MEMORY
5810      01            0160E           F7B00136              K          15,7,11,SETPSW
5811      01            0160F           C7B00168              K          12,7,11,L0C+1
5812                                                ** TEST THAT FAPRIV IS FALSE WHEN B4 IS FALSE
5813      01            01610           FFFFFFFC  A FAPRIV03  DATA       -4
5814      01            01611           66C00460              AWM,12     MEMORY
5815      01            01612           F7B00136              K          15,7,11,SETPSW
5816      01            01613           07B00168              K          0,7,11,L0C+1
5817                                                ** TEST THAT FAPRIV IS FALSE WHEN B3 IS TRUE, NON-EXSISTENT TRAP SHOULD
5818                                                ** OCCUR. A RETURN FROM NEIRET+2 INDICATES FAPRIV BECAME TRUE.
5819      01            01614           FFFFFFFC  A FAPRIV04  DATA       -4
5820      01            01615           7E000460              DL,0       MEMORY
5821      01            01616           F7B001BC              K          15,7,11,SI9NA0
5822      01            01617           F73006B               K          15,7,3,NEIRET+1
5823                                                          PAGE
5824                                                ** THE FOLLOWING ROUTINES CHECK THAT ALL TERMS FOR FAILL (FAM ILLEGAL)
5825                                                ** ARE OPERATING PROPERLY. ALL CASES SHOULD TRAP TO 40.
5826                                                ** CHECK  INPUT  IA,FAIM
5827      01            01618           FFFFFFF8  A FAILL01   DATA       -8
5828      01            01619           A2C0045A  N           GEN,16,16  X'A2C0',IA           LI,C *IA
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LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5829	01	0161A	000001BC			DATA	SI9NA0	
5830	01	0161B	8000006B			K	8,0,0,NEIRET+1	
5831	01	0161C	00000000	A		DATA	0	R IN
5832	01	0161D	00000000	A		DATA	0	R 0UT
5833	01	0161E	00000100	A		DATA	X'100'	M IN
5834	01	0161F	00000100	A		DATA	X'100'	M 0UT
5835					** CHECK	INPUT	0U1•N04•05•06-1	
5836	01	01620	FFFFFFFC	A	FAILL02	DATA	-4	
5837	01	01621	16000000	A		DATA	X'16000000'	ILLEGAL INST
5838	01	01622	000001BC			DATA	SI9NA0	
5839	01	01623	8000006B			K	8,0,0,NEIRET+1	
5840					** CHECK	INPUT	FUMMC.N(ND12.ND13•D14) WITH D12 TRUE	
5841	01	01624	FFFFFFFC	A	FAILL03	DATA	-4	
5842	01	01625	6FCA0000	A		DATA	X'6FCA0000'	MMC,12 5
5843	01	01626	000001BC			DATA	SI9NA0	
5844	01	01627	8000006B			K	8,0,0,NEIRET+1	
5845					** CHECK	INPUT	FUMMC.N(ND12.ND13•D14) WITH D13 TRUE	
5846	01	01628	FFFFFFFC	A	FAILL04	DATA	-4	
5847	01	01629	6FC60000	A		DATA	X'6FC60000'	MMC,12 3
5848	01	0162A	000001BC			DATA	SI9NA0	
5849	01	0162B	8000006B			K	8,0,0,NEIRET+1	
5850					** CHECK	INPUT	FUMMC.N(ND12.ND13•D14) WITH ND14 TRUE	
5851	01	0162C	FFFFFFFC	A	FAILL05	DATA	-4	
5852	01	0162D	6FC00000	A		DATA	X'6FC00000'	MMC,12 0
5853	01	0162E	000001BC			DATA	SI9NA0	
5854	01	0162F	8000006B			K	8,0,0,NEIRET+1	
5855						PAGE		
5856					** CHECK	INPUT	0U2•04•N05•N06	
5857	01	01630	FFFFFFFC	A	FAILL06	DATA	-4	
5858	01	01631	28C00460			CVS,12	MEM0RY	
5859	01	01632	000001BC			DATA	SI9NA0	
5860	01	01633	8000006B			K	8,0,0,NEIRET+1	
5861					** CHECK	INPUT	0U7•M04•05•06	
5862	01	01634	FFFFFFFC	A	FAILL07	DATA	-4	
5863	01	01635	76C00460			PACK,12	MEM0RY	
5864	01	01636	000001BC			DATA	SI9NA0	
5865	01	01637	8000006B			K	8,0,0,NEIRET+1	
5866					** CHECK	INPUT	0U7•04	
5867	01	01638	FFFFFFFC	A	FAILL08	DATA	-4	
5868	01	01639	7FC00460			DST,12	MEM0RY	
5869	01	0163A	000001BC			DATA	SI9NA0	
5870	01	0163B	8000006B			K	8,0,0,NEIRET+1	
5871					** CHECK	INPUT	01•N03•N04•N05	
5872	01	0163C	FFFFFFFC	A	FAILL09	DATA	-4	
5873	01	0163D	41C00460			TBS,12	MEM0RY	
5874	01	0163E	000001BC			DATA	SI9NA0	
5875	01	0163F	8000006B			K	8,0,0,NEIRET+1	
5876					** CHECK	INPUT	0U5•0L9	
5877	01	01640	FFFFFFFC	A	FAILL10	DATA	-4	
5878	01	01641	59000000	A		DATA	X'59000000'	
5879	01	01642	000001BC			DATA	SI9NA0	
5880	01	01643	8000006B			K	8,0,0,NEIRET+1	
5881					** CHECK	INPUT	0L4•03•NFABYTE	
5882	01	01644	FFFFFFFC	A	FAILL11	DATA	-4	
5883	01	01645	34000000	A		DATA	X'34000000'	
5884	01	01646	000001BC			DATA	SI9NA0	
5885	01	01647	8000006B			K	8,0,0,NEIRET+1	
5886						PAGE		
5887					** CHECK	INPUT	04•05•01•03	
5888	01	01648	FFFFFFFC	A	FAILL12	DATA	-4	
5889	01	01649	7C000460			DSA	MEM0RY	
5890	01	0164A	000001BC			DATA	SI9NA0	
5891	01	0164B	8000006B			K	8,0,0,NEIRET+1	
5892					** CHECK	INPUT	04•05•N01•N03•N06	
5893	01	0164C	FFFFFFFC	A	FAILL13	DATA	-4	
5894	01	0164D	0C000000	A		DATA	X'C0000000'	
5895	01	0164E	000001BC			DATA	SI9NA0	
5896	01	0164F	8000006B			K	8,0,0,NEIRET+1	
5897					** THIS TEST IS BYPASSED IF FLOATING P0INT IS INSTALLED. IF N0T			
5898					** INSTALLED, THIS TESTS NFAIMP = FAFL.NFP0PTI0N			
5899	01	01650	FFFFFFFC	A	NFAIMP01	DATA	-4	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5900	01	01651	680001AE			B	END	BECOMES F,S,12MEMORY IF NFPOPTION
5901	01	01652	000001C2			K	0,0,0,UIISW	
5902	01	01653	00000077			K	0,0,0,UIIRET+1	
5903						PAGE		
5904	01	01654	FFFFFFF6	A	MW01	DATA	-10	MW
5905	01	01655	37C00460			MW,12	MEMORY	
5906	01	01656	073001C8			K	00,7,3,FXP0SW	
5907	01	01657	57300169			K	5,7,3,L0C+2	
5908	01	01658	55555555	A		DATA	X'55555555'	
5909	01	01659	D58E3546	A		DATA	X'D58E3546'	
5910	01	0165A	55555555	A		DATA	X'55555555'	
5911	01	0165B	55555555	A		DATA	X'55555555'	
5912	01	0165C	80AA9FD4	A		DATA	X'80AA9FD4'	
5913	01	0165D	D51C7564	A		DATA	X'D51C7564'	
5914	01	0165E	FFFFFFF6	A	MW02	DATA	-10	MW
5915	01	0165F	37C00460			MW,12	MEMORY	
5916	01	01660	073001C8			K	00,7,3,FXP0SW	
5917	01	01661	57300169			K	5,7,3,L0C+2	
5918	01	01662	00000000	A		DATA	X'00000000'	
5919	01	01663	FE40CB5E	A		DATA	X'FE40CB5E'	
5920	01	01664	FC7CF1CC	A		DATA	X'FC7CF1CC'	
5921	01	01665	FC7CF1CC	A		DATA	X'FC7CF1CC'	
5922	01	01666	7F56BA80	A		DATA	X'7F56BA80'	
5923	01	01667	74AF1E00	A		DATA	X'74AF1E00'	
5924	01	01668	FFFFFFF6	A	MW03	DATA	-10	MW
5925	01	01669	37C00460			MW,12	MEMORY	
5926	01	0166A	073001C8			K	00,7,3,FXP0SW	
5927	01	0166B	67300169			K	6,7,3,L0C+2	
5928	01	0166C	00000000	A		DATA	X'00000000'	
5929	01	0166D	15BB908B	A		DATA	X'15BB908B'	
5930	01	0166E	59C61C18	A		DATA	X'59C61C18'	
5931	01	0166F	59C61C18	A		DATA	X'59C61C18'	
5932	01	01670	3DF91CF8	A		DATA	X'3DF91CF8'	
5933	01	01671	AE55D740	A		DATA	X'AE55D740'	
5934						PAGE		
5935	01	01672	FFFFFFF6	A	MW04	DATA	-10	MW
5936	01	01673	37C00460			MW,12	MEMORY	
5937	01	01674	073001C8			K	00,7,3,FXP0SW	
5938	01	01675	57300169			K	5,7,3,L0C+2	
5939	01	01676	00000000	A		DATA	X'00000000'	
5940	01	01677	FAE49435	A		DATA	X'FAE49435'	
5941	01	01678	F1C3C731	A		DATA	X'F1C3C731'	
5942	01	01679	F1C3C731	A		DATA	X'F1C3C731'	
5943	01	0167A	5BD80E1D	A		DATA	X'5BD80E1D'	
5944	01	0167B	946A3E8D	A		DATA	X'946A3E8D'	
5945	01	0167C	FFFFFFF6	A	MW05	DATA	-10	MW
5946	01	0167D	37C00460			MW,12	MEMORY	
5947	01	0167E	073001C8			K	00,7,3,FXP0SW	
5948	01	0167F	67300169			K	6,7,3,L0C+2	
5949	01	01680	00000000	A		DATA	X'00000000'	
5950	01	01681	1EC17468	A		DATA	X'1EC17468'	
5951	01	01682	3F01FC03	A		DATA	X'3F01FC03'	
5952	01	01683	3F01FC03	A		DATA	X'3F01FC03'	
5953	01	01684	7CF5C8E1	A		DATA	X'7CF5C8E1'	
5954	01	01685	907FD6A3	A		DATA	X'907FD6A3'	
5955	01	01686	FFFFFFF6	A	MW06	DATA	-10	MW
5956	01	01687	37C00460			MW,12	MEMORY	
5957	01	01688	073001C8			K	00,7,3,FXP0SW	
5958	01	01689	57300169			K	5,7,3,L0C+2	
5959	01	0168A	00000000	A		DATA	X'00000000'	
5960	01	0168B	CD4A4EA5	A		DATA	X'CD4A4EA5'	
5961	01	0168C	70000000	A		DATA	X'70000000'	
5962	01	0168D	70000000	A		DATA	X'70000000'	
5963	01	0168E	8C178F32	A		DATA	X'8C178F32'	
5964	01	0168F	E0000000	A		DATA	X'E0000000'	
5965						PAGE		
5966	01	01690	FFFFFFF6	A	MW07	DATA	-10	MW
5967	01	01691	37C00460			MW,12	MEMORY	
5968	01	01692	073001C8			K	00,7,3,FXP0SW	
5969	01	01693	57300169			K	5,7,3,L0C+2	
5970	01	01694	00000000	A		DATA	X'00000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
5971	01	01695	EC7E668F	A		DATA	X'EC7E668F'	
5972	01	01696	CDB53C70	A		DATA	X'CDB53C70'	
5973	01	01697	CDB53C70	A		DATA	X'CDB53C70'	
5974	01	01698	634AC271	A		DATA	X'634AC271'	
5975	01	01699	ED2C8D70	A		DATA	X'ED2C8D70'	
5976	01	0169A	FFFFFFF6	A	MW08	DATA	-10	MW
5977	01	0169B	37C00460			MW,12	MEMORY	
5978	01	0169C	073001C8			K	00,7,3,FXP0SW	
5979	01	0169D	57300169			K	5,7,3,L0C+2	
5980	01	0169E	00000000	A		DATA	X'00000000'	
5981	01	0169F	FAA8C9D1	A		DATA	X'FAA8C9D1'	
5982	01	016A0	31C3C1F0	A		DATA	X'31C3C1F0'	
5983	01	016A1	31C3C1F0	A		DATA	X'31C3C1F0'	
5984	01	016A2	E486C662	A		DATA	X'E486C662'	
5985	01	016A3	B88FDDE0	A		DATA	X'B88FDDE0'	
5986	01	016A4	FFFFFFF6	A	MW09	DATA	-10	MW
5987	01	016A5	37C00460			MW,12	MEMORY	
5988	01	016A6	073001C8			K	00,7,3,FXP0SW	
5989	01	016A7	57300169			K	5,7,3,L0C+2	
5990	01	016A8	00000000	A		DATA	X'00000000'	
5991	01	016A9	F47642A4	A		DATA	X'F47642A4'	
5992	01	016AA	DF4F3C70	A		DATA	X'DF4F3C70'	
5993	01	016AB	DF4F3C70	A		DATA	X'DF4F3C70'	
5994	01	016AC	5A5ACF3B	A		DATA	X'5A5ACF3B'	
5995	01	016AD	28817DD0	A		DATA	X'28817DD0'	
5996						PAGE		
5997	01	016AE	FFFFFFF6	A	MW10	DATA	-10	MW
5998	01	016AF	37C00460			MW,12	MEMORY	
5999	01	016B0	073001C8			K	00,7,3,FXP0SW	
6000	01	016B1	17300169			K	1,7,3,L0C+2	
6001	01	016B2	00000000	A		DATA	X'00000000'	
6002	01	016B3	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6003	01	016B4	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6004	01	016B5	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6005	01	016B6	55555551	A		DATA	X'55555551'	
6006	01	016B7	AAAAAAAF	A		DATA	X'AAAAAAAF'	
6007	01	016B8	FFFFFFF6	A	MW11	DATA	-10	MW
6008	01	016B9	37C00460			MW,12	MEMORY	
6009	01	016BA	073001C8			K	00,7,3,FXP0SW	
6010	01	016BB	17300169			K	1,7,3,L0C+2	
6011	01	016BC	00000000	A		DATA	X'00000000'	
6012	01	016BD	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6013	01	016BE	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6014	01	016BF	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6015	01	016C0	00000005	A		DATA	X'00000005'	
6016	01	016C1	FFFFFFFB	A		DATA	X'FFFFFFFB'	
6017	01	016C2	FFFFFFF6	A	MW12	DATA	-10	MW
6018	01	016C3	37C00460			MW,12	MEMORY	
6019	01	016C4	073001C8			K	00,7,3,FXP0SW	
6020	01	016C5	67300169			K	6,7,3,L0C+2	
6021	01	016C6	00000000	A		DATA	X'00000000'	
6022	01	016C7	06D3A075	A		DATA	X'06D3A075'	
6023	01	016C8	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6024	01	016C9	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6025	01	016CA	99999922	A		DATA	X'99999922'	
6026	01	016CB	92C5F99C	A		DATA	X'92C5F99C'	
6027						PAGE		
6028	01	016CC	FFFFFFF6	A	MW13	DATA	-10	MW
6029	01	016CD	37C00460			MW,12	MEMORY	
6030	01	016CE	073001C8			K	00,7,3,FXP0SW	
6031	01	016CF	07300169			K	0,7,3,L0C+2	
6032	01	016D0	00000000	A		DATA	X'00000000'	
6033	01	016D1	00000000	A		DATA	X'00000000'	
6034	01	016D2	00000000	A		DATA	X'00000000'	
6035	01	016D3	00000000	A		DATA	X'00000000'	
6036	01	016D4	B3333334	A		DATA	X'B3333334'	
6037	01	016D5	00000000	A		DATA	X'00000000'	
6038	01	016D6	FFFFFFF6	A	MW14	DATA	-10	MW
6039	01	016D7	37C00460			MW,12	MEMORY	
6040	01	016D8	073001C8			K	00,7,3,FXP0SW	
6041	01	016D9	67300169			K	6,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6042	01	016DA	00000000	A		DATA	X'00000000'	
6043	01	016DB	0EB851EA	A		DATA	X'0EB851EA'	
6044	01	016DC	CCCCCCCC	A		DATA	X'CCCCCCCC'	
6045	01	016DD	CCCCCCCC	A		DATA	X'CCCCCCCC'	
6046	01	016DE	B666666E	A		DATA	X'B666666E'	
6047	01	016DF	3AE147A8	A		DATA	X'3AE147A8'	
6048	01	016E0	FFFFFFF6	A	MW15	DATA	-10	MW
6049	01	016E1	37C00460			MW,12	MEMORY	
6050	01	016E2	073001C8			K	00,7,3,FXP0SW	
6051	01	016E3	57300169			K	5,7,3,L0C+2	
6052	01	016E4	00000000	A		DATA	X'00000000'	
6053	01	016E5	F58F28C2	A		DATA	X'F58F28C2'	
6054	01	016E6	33333333	A		DATA	X'33333333'	
6055	01	016E7	33333333	A		DATA	X'33333333'	
6056	01	016E8	CBCBCBCB	A		DATA	X'CBCBCBCB'	
6057	01	016E9	3DA40A71	A		DATA	X'3DA40A71'	
6058						PAGE		
6059	01	016EA	FFFFFFF6	A	MW16	DATA	-10	MW
6060	01	016EB	37C00460			MW,12	MEMORY	
6061	01	016EC	073001C8			K	00,7,3,FXP0SW	
6062	01	016ED	67300169			K	6,7,3,L0C+2	
6063	01	016EE	00000000	A		DATA	X'00000000'	
6064	01	016EF	36A45B36	A		DATA	X'36A45B36'	
6065	01	016F0	6DB6DB6D	A		DATA	X'6DB6DB6D'	
6066	01	016F1	6DB6DB6D	A		DATA	X'6DB6DB6D'	
6067	01	016F2	7F7F7F7F	A		DATA	X'7F7F7F7F'	
6068	01	016F3	12A4EE13	A		DATA	X'12A4EE13'	
6069	01	016F4	FFFFFFF6	A	MW17	DATA	-10	MW
6070	01	016F5	37C00460			MW,12	MEMORY	
6071	01	016F6	073001C8			K	00,7,3,FXP0SW	
6072	01	016F7	57300169			K	5,7,3,L0C+2	
6073	01	016F8	00000000	A		DATA	X'00000000'	
6074	01	016F9	FEFF1010	A		DATA	X'FEFF1010'	
6075	01	016FA	DDDDDDDD	A		DATA	X'DDDDDDDD'	
6076	01	016FB	DDDDDDDD	A		DATA	X'DDDDDDDD'	
6077	01	016FC	07870787	A		DATA	X'07870787'	
6078	01	016FD	1B9C0A8B	A		DATA	X'1B9C0A8B'	
6079	01	016FE	FFFFFFF6	A	MW18	DATA	-10	MW
6080	01	016FF	37C00460			MW,12	MEMORY	
6081	01	01700	073001C8			K	00,7,3,FXP0SW	
6082	01	01701	17300169			K	1,7,3,L0C+2	
6083	01	01702	00000000	A		DATA	X'00000000'	
6084	01	01703	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6085	01	01704	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6086	01	01705	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6087	01	01706	6B6D36D9	A		DATA	X'6B6D36D9'	
6088	01	01707	9492C927	A		DATA	X'9492C927'	
6089						PAGE		
6090	01	01708	FFFFFFF6	A	MW19	DATA	-10	MW
6091	01	01709	37C00460			MW,12	MEMORY	
6092	01	0170A	073001C8			K	00,7,3,FXP0SW	
6093	01	0170B	57300169			K	5,7,3,L0C+2	
6094	01	0170C	00000000	A		DATA	X'00000000'	
6095	01	0170D	FB0DB4B6	A		DATA	X'FB0DB4B6'	
6096	01	0170E	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6097	01	0170F	EEEEEEEE	A		DATA	X'EEEEEEEE'	
6098	01	01710	4A32694C	A		DATA	X'4A32694C'	
6099	01	01711	656A8CA8	A		DATA	X'656A8CA8'	
6100	01	01712	FFFFFFF6	A	MW20	DATA	-10	MW
6101	01	01713	37C00460			MW,12	MEMORY	
6102	01	01714	073001C8			K	00,7,3,FXP0SW	
6103	01	01715	67300169			K	6,7,3,L0C+2	
6104	01	01716	00000000	A		DATA	X'00000000'	
6105	01	01717	15555552	A		DATA	X'15555552'	
6106	01	01718	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6107	01	01719	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6108	01	0171A	2AAAAAA6	A		DATA	X'2AAAAAA6'	
6109	01	0171B	D555555A	A		DATA	X'D555555A'	
6110	01	0171C	FFFFFFF6	A	MW21	DATA	-10	MW
6111	01	0171D	37C00460			MW,12	MEMORY	
6112	01	0171E	073001C8			K	00,7,3,FXP0SW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6113	01	0171F	67300169			K	6,7,3,L0C+2	
6114	01	01720	00000000	A		DATA	X'00000000'	
6115	01	01721	00000000	A		DATA	X'00000000'	
6116	01	01722	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6117	01	01723	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6118	01	01724	80000000	A		DATA	X'80000000'	
6119	01	01725	80000000	A		DATA	X'80000000'	
6120						PAGE		
6121	01	01726	FFFFFFF6	A	MW22	DATA	-10	MW
6122	01	01727	37C00460			MW,12	MEMORY	
6123	01	01728	073001C8			K	00,7,3,FXP0SW	
6124	01	01729	67300169			K	6,7,3,L0C+2	
6125	01	0172A	00000000	A		DATA	X'00000000'	
6126	01	0172B	3FFFFFFF	A		DATA	X'3FFFFFFF'	
6127	01	0172C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6128	01	0172D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6129	01	0172E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6130	01	0172F	00000001	A		DATA	X'00000001'	
6131	01	01730	FFFFFFF6	A	MW23	DATA	-10	MW
6132	01	01731	37C00460			MW,12	MEMORY	
6133	01	01732	073001C8			K	00,7,3,FXP0SW	
6134	01	01733	67300169			K	6,7,3,L0C+2	
6135	01	01734	00000000	A		DATA	X'00000000'	
6136	01	01735	40000000	A		DATA	X'40000000'	
6137	01	01736	80000000	A		DATA	X'80000000'	
6138	01	01737	80000000	A		DATA	X'80000000'	
6139	01	01738	80000000	A		DATA	X'80000000'	
6140	01	01739	00000000	A		DATA	X'00000000'	
6141	01	0173A	FFFFFFF6	A	MW24	DATA	-10	MW
6142	01	0173B	37C00460			MW,12	MEMORY	
6143	01	0173C	073001C8			K	00,7,3,FXP0SW	
6144	01	0173D	17300169			K	1,7,3,L0C+2	
6145	01	0173E	00000000	A		DATA	X'00000000'	
6146	01	0173F	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6147	01	01740	00000001	A		DATA	X'00000001'	
6148	01	01741	00000001	A		DATA	X'00000001'	
6149	01	01742	80000000	A		DATA	X'80000000'	
6150	01	01743	80000000	A		DATA	X'80000000'	
6151						PAGE		
6152	01	01744	FFFFFFF6	A	MW25	DATA	-10	MW
6153	01	01745	37C00460			MW,12	MEMORY	
6154	01	01746	073001C8			K	00,7,3,FXP0SW	
6155	01	01747	17300169			K	1,7,3,L0C+2	
6156	01	01748	00000000	A		DATA	X'00000000'	
6157	01	01749	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6158	01	0174A	80000000	A		DATA	X'80000000'	
6159	01	0174B	80000000	A		DATA	X'80000000'	
6160	01	0174C	00000001	A		DATA	X'00000001'	
6161	01	0174D	80000000	A		DATA	X'80000000'	
6162	01	0174E	FFFFFFF6	A	MW26	DATA	-10	MW
6163	01	0174F	37C00460			MW,12	MEMORY	
6164	01	01750	073001C8			K	00,7,3,FXP0SW	
6165	01	01751	27300169			K	2,7,3,L0C+2	
6166	01	01752	00000000	A		DATA	X'00000000'	
6167	01	01753	00000000	A		DATA	X'00000000'	
6168	01	01754	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6169	01	01755	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6170	01	01756	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6171	01	01757	00000001	A		DATA	X'00000001'	
6172	01	01758	FFFFFFF6	A	MW27	DATA	-10	MW
6173	01	01759	37C00460			MW,12	MEMORY	
6174	01	0175A	073001C8			K	00,7,3,FXP0SW	
6175	01	0175B	07300169			K	0,7,3,L0C+2	
6176	01	0175C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6177	01	0175D	00000000	A		DATA	X'00000000'	
6178	01	0175E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6179	01	0175F	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6180	01	01760	00000000	A		DATA	X'00000000'	
6181	01	01761	00000000	A		DATA	X'00000000'	
6182						PAGE		
6183	01	01762	FFFFFFF6	A	MW28	DATA	-10	MW

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6184	01	01763	37C00460			MW,12	MEMORY	
6185	01	01764	073001C8			K	00,7,3,FXP0SW	
6186	01	01765	07300169			K	0,7,3,L0C+2	
6187	01	01766	00000000	A		DATA	X'00000000'	
6188	01	01767	00000000	A		DATA	X'00000000'	
6189	01	01768	00000000	A		DATA	X'00000000'	
6190	01	01769	00000000	A		DATA	X'00000000'	
6191	01	0176A	00000000	A		DATA	0	
6192	01	0176B	00000000	A		DATA	X'00000000'	
6193	01	0176C	FFFFFFF6	A	MW29	DATA	-10	MW
6194	01	0176D	37C00460			MW,12	MEMORY	
6195	01	0176E	073001C8			K	00,7,3,FXP0SW	
6196	01	0176F	67300169			K	6,7,3,L0C+2	
6197	01	01770	00000000	A		DATA	X'00000000'	
6198	01	01771	17A36285	A		DATA	X'17A36285'	
6199	01	01772	79999999	A		DATA	X'79999999'	
6200	01	01773	79999999	A		DATA	X'79999999'	
6201	01	01774	31C3C1F0	A		DATA	X'31C3C1F0'	
6202	01	01775	15575870	A		DATA	X'15575870'	
6203	01	01776	FFFFFFF6	A	MW30	DATA	-10	MW
6204	01	01777	37C00460			MW,12	MEMORY	
6205	01	01778	073001C8			K	00,7,3,FXP0SW	
6206	01	01779	57300169			K	5,7,3,L0C+2	
6207	01	0177A	00000000	A		DATA	X'00000000'	
6208	01	0177B	D3DC7674	A		DATA	X'D3DC7674'	
6209	01	0177C	59C61C18	A		DATA	X'59C61C18'	
6210	01	0177D	59C61C18	A		DATA	X'59C61C18'	
6211	01	0177E	82222222	A		DATA	X'82222222'	
6212	01	0177F	273AEB30	A		DATA	X'273AEB30'	
6213						PAGE		
6214	01	01780	FFFFFFF6	A	MW31	DATA	-10	MW
6215	01	01781	37C00460			MW,12	MEMORY	
6216	01	01782	073001C8			K	00,7,3,FXP0SW	
6217	01	01783	57300169			K	5,7,3,L0C+2	
6218	01	01784	00000000	A		DATA	X'00000000'	
6219	01	01785	FF036C81	A		DATA	X'FF036C81'	
6220	01	01786	87777777	A		DATA	X'87777777'	
6221	01	01787	87777777	A		DATA	X'87777777'	
6222	01	01788	021871E7	A		DATA	X'021871E7'	
6223	01	01789	19B05361	A		DATA	X'19B05361'	
6224	01	0178A	FFFFFFF6	A	MW32	DATA	-10	MW
6225	01	0178B	37C00460			MW,12	MEMORY	
6226	01	0178C	073001C8			K	00,7,3,FXP0SW	
6227	01	0178D	67300169			K	6,7,3,L0C+2	
6228	01	0178E	00000000	A		DATA	X'00000000'	
6229	01	0178F	012BAF66	A		DATA	X'012BAF66'	
6230	01	01790	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6231	01	01791	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6232	01	01792	AAAAAAAA	A		DATA	X'AAAAAAAA'	
6233	01	01793	AD020978	A		DATA	X'AD020978'	
6234	01	01794	FFFFFFF6	A	MW33	DATA	-10	MW
6235	01	01795	37C00460			MW,12	MEMORY	
6236	01	01796	073001C8			K	00,7,3,FXP0SW	
6237	01	01797	57300169			K	5,7,3,L0C+2	
6238	01	01798	00000000	A		DATA	X'00000000'	
6239	01	01799	FBC79A5E	A		DATA	X'FBC79A5E'	
6240	01	0179A	15555555	A		DATA	X'15555555'	
6241	01	0179B	15555555	A		DATA	X'15555555'	
6242	01	0179C	CD5B3C70	A		DATA	X'CD5B3C70'	
6243	01	0179D	BB8C4130	A		DATA	X'BB8C4130'	
6244						PAGE		
6245	01	0179E	FFFFFFF6	A	MW34	DATA	-10	MW
6246	01	0179F	37C00460			MW,12	MEMORY	
6247	01	017A0	073001C8			K	00,7,3,FXP0SW	
6248	01	017A1	67300169			K	6,7,3,L0C+2	
6249	01	017A2	00000000	A		DATA	X'00000000'	
6250	01	017A3	00345678	A		DATA	X'00345678'	
6251	01	017A4	03111111	A		DATA	X'31111111'	
6252	01	017A5	03111111	A		DATA	X'31111111'	
6253	01	017A6	11111111	A		DATA	X'11111111'	
6254	01	017A7	99654321	A		DATA	X'99654321'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6255	01	017A8	FFFFFFF6	A	MW35	DATA	-10	MW
6256	01	017A9	37C00460			MW,12	MEMORY	
6257	01	017AA	073001C8			K	00,7,3,FXPOSW	
6258	01	017AB	57300169			K	5,7,3,L0C+2	
6259	01	017AC	00000000	A		DATA	X'00000000'	
6260	01	017AD	D5D5D5D8	A		DATA	X'D5D5D5D8'	
6261	01	017AE	66666666	A		DATA	X'66666666'	
6262	01	017AF	66666666	A		DATA	X'66666666'	
6263	01	017B0	9696969D	A		DATA	X'9696969D'	
6264	01	017B1	90909C8E	A		DATA	X'9090908E'	
6265	01	017B2	FFFFFFF6	A	MW36	DATA	-10	MW
6266	01	017B3	37C00460			MW,12	MEMORY	
6267	01	017B4	073001C8			K	00,7,3,FXPOSW	
6268	01	017B5	57300169			K	5,7,3,L0C+2	
6269	01	017B6	00000000	A		DATA	X'00000000'	
6270	01	017B7	E06D3A06	A		DATA	X'E06D3A06'	
6271	01	017B8	44444444	A		DATA	X'44444444'	
6272	01	017B9	44444444	A		DATA	X'44444444'	
6273	01	017BA	89999999	A		DATA	X'89999999'	
6274	01	017BB	CA3D70A4	A		DATA	X'CA3D70A4'	
6275						PAGE		
6276	01	017BC	FFFFFFF6	A	MW37	DATA	-10	MW
6277	01	017BD	37C00460			MW,12	MEMORY	
6278	01	017BE	073001C8			K	00,7,3,FXPOSW	
6279	01	017BF	67300169			K	6,7,3,L0C+2	
6280	01	017C0	00000000	A		DATA	X'00000000'	
6281	01	017C1	080FCAE0	A		DATA	X'080FCAE0'	
6282	01	017C2	E1C4C737	A		DATA	X'E1C4C737'	
6283	01	017C3	E1C4C737	A		DATA	X'E1C4C737'	
6284	01	017C4	BBBBBBBB	A		DATA	X'BBBBBBBB'	
6285	01	017C5	5A6FB22D	A		DATA	X'5A6FB22D'	
6286	01	017C6	FFFFFFF6	A	MW38	DATA	-10	MW
6287	01	017C7	37C00460			MW,12	MEMORY	
6288	01	017C8	073001C8			K	00,7,3,FXPOSW	
6289	01	017C9	67300169			K	6,7,3,L0C+2	
6290	01	017CA	00000000	A		DATA	X'00000000'	
6291	01	017CB	00000000	A		DATA	X'00000000'	
6292	01	017CC	80000000	A		DATA	X'80000000'	
6293	01	017CD	80000000	A		DATA	X'80000000'	
6294	01	017CE	FFFFFFFF	A		DATA	X'FFFFFFFF'	
6295	01	017CF	80000000	A		DATA	X'80000000'	
6296	01	017D0	FFFFFFF6	A	MW39	DATA	-10	MW
6297	01	017D1	37C00460			MW,12	MEMORY	
6298	01	017D2	073001C8			K	00,7,3,FXPOSW	
6299	01	017D3	67300169			K	6,7,3,L0C+2	
6300	01	017D4	00000000	A		DATA	X'00000000'	
6301	01	017D5	004B6827	A		DATA	X'004B6827'	
6302	01	017D6	42468ACE	A		DATA	X'42468ACE'	
6303	01	017D7	42468ACE	A		DATA	X'42468ACE'	
6304	01	017D8	01234567	A		DATA	X'01234567'	
6305	01	017D9	75F55EE2	A		DATA	X'75F55EE2'	
6306						PAGE		
6307	01	017DA	FFFFFFF6	A	MW40	DATA	-10	MW
6308	01	017DB	37C00460			MW,12	MEMORY	
6309	01	017DC	073001C8			K	00,7,3,FXPOSW	
6310	01	017DD	57300169			K	5,7,3,L0C+2	
6311	01	017DE	00000000	A		DATA	X'00000000'	
6312	01	017DF	EEA535DC	A		DATA	X'EEA535DC'	
6313	01	017E0	258BCDEF	A		DATA	X'258BCDEF'	
6314	01	017E1	258BCDEF	A		DATA	X'258BCDEF'	
6315	01	017E2	89ABCDEF	A		DATA	X'89ABCDEF'	
6316	01	017E3	7712A521	A		DATA	X'7712A521'	
6317	01	017E4	FFFFFFF6	A	MW41	DATA	-10	MW
6318	01	017E5	37C00460			MW,12	MEMORY	
6319	01	017E6	073001C8			K	00,7,3,FXPOSW	
6320	01	017E7	67300169			K	6,7,3,L0C+2	
6321	01	017E8	00000000	A		DATA	X'00000000'	
6322	01	017E9	0CB68AEE	A		DATA	X'0CB68AEE'	
6323	01	017EA	56AE37BF	A		DATA	X'56AE37BF'	
6324	01	017EB	56AE37BF	A		DATA	X'56AE37BF'	
6325	01	017EC	258BE147	A		DATA	X'258BE147'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6326	01	017ED	090554F9	A		DATA	X'090554F9'	
6327	01	017EE	FFFFFFF6	A	MW42	DATA	-10	MW
6328	01	017EF	37C00460			MW,12	MEMORY	
6329	01	017F0	073001C8			K	00,7,3,FXPOSW	
6330	01	017F1	67300169			K	6,7,3,L0C+2	
6331	01	017F2	00000000	A		DATA	X'00000000'	
6332	01	017F3	0AAC4A2C	A		DATA	X'0AAC4A2C'	
6333	01	017F4	DF1357BD	A		DATA	X'DF1357BD'	
6334	01	017F5	DF1357BD	A		DATA	X'DF1357BD'	
6335	01	017F6	AD0369CF	A		DATA	X'AD0369CF'	
6336	01	017F7	0FD776D3	A		DATA	X'0FD776D3'	
6337						PAGE		
6338	01	017F8	FFFFFFF6	A	MW43	DATA	-10	MW
6339	01	017F9	37C00460			MW,12	MEMORY	
6340	01	017FA	073001C8			K	00,7,3,FXPOSW	
6341	01	017FB	67300169			K	6,7,3,L0C+2	
6342	01	017FC	00000000	A		DATA	X'00000000'	
6343	01	017FD	00CAFFF1	A		DATA	X'00CAFFF1'	
6344	01	017FE	F2468ACE	A		DATA	X'F2468ACE'	
6345	01	017FF	F2468ACE	A		DATA	X'F2468ACE'	
6346	01	01800	F13579BD	A		DATA	X'F13579BD'	
6347	01	01801	E055D816	A		DATA	X'E055D816'	
6348	01	01802	FFFFFFF6	A	MW44	DATA	-10	MW
6349	01	01803	37C00460			MW,12	MEMORY	
6350	01	01804	073001C8			K	00,7,3,FXPOSW	
6351	01	01805	67300169			K	6,7,3,L0C+2	
6352	01	01806	00000000	A		DATA	X'00000000'	
6353	01	01807	01B37451	A		DATA	X'01B37451'	
6354	01	01808	F147AD03	A		DATA	X'F147AD03'	
6355	01	01809	F147AD03	A		DATA	X'F147AD03'	
6356	01	0180A	E26AE38D	A		DATA	X'E26AE38D'	
6357	01	0180B	BC21F3A7	A		DATA	X'BC21F3A7'	
6358	01	0180C	FFFFFFF6	A	MW45	DATA	-10	MW
6359	01	0180D	37C00460			MW,12	MEMORY	
6360	01	0180E	073001C8			K	00,7,3,FXPOSW	
6361	01	0180F	67300169			K	6,7,3,L0C+2	
6362	01	01810	00000000	A		DATA	X'00000000'	
6363	01	01811	0330D831	A		DATA	X'0330D831'	
6364	01	01812	148BF37B	A		DATA	X'148BF37B'	
6365	01	01813	148BF37B	A		DATA	X'148BF37B'	
6366	01	01814	27C16B05	A		DATA	X'27C16B05'	
6367	01	01815	323B2A67	A		DATA	X'323B2A67'	
6368						PAGE		
6369	01	01816	FFFFFFF6	A	MW46	DATA	-10	MW
6370	01	01817	37C00460			MW,12	MEMORY	
6371	01	01818	073001C8			K	00,7,3,FXPOSW	
6372	01	01819	67300169			K	6,7,3,L0C+2	
6373	01	0181A	00000000	A		DATA	X'00000000'	
6374	01	0181B	01723EB3	A		DATA	X'01723EB3'	
6375	01	0181C	F37BF49E	A		DATA	X'F37BF49E'	
6376	01	0181D	F37BF49E	A		DATA	X'F37BF49E'	
6377	01	0181E	E26AF49F	A		DATA	X'E26AF49F'	
6378	01	0181F	248F8622	A		DATA	X'248F8622'	
6379	01	01820	FFFFFFF6	A	MW47	DATA	-10	MW
6380	01	01821	37C00460			MW,12	MEMORY	
6381	01	01822	073001C8			K	00,7,3,FXPOSW	
6382	01	01823	57300169			K	5,7,3,L0C+2	
6383	01	01824	00000000	A		DATA	X'00000000'	
6384	01	01825	FBB2877E	A		DATA	X'FBB2877E'	
6385	01	01826	457AE39F	A		DATA	X'457AE39F'	
6386	01	01827	457AE39F	A		DATA	X'457AE39F'	
6387	01	01828	F0259E49	A		DATA	X'F0259E49'	
6388	01	01829	9E820A57	A		DATA	X'9E820A57'	
6389	01	0182A	FFFFFFF6	A	MW48	DATA	-10	MW
6390	01	0182B	37C00460			MW,12	MEMORY	
6391	01	0182C	073001C8			K	00,7,3,FXPOSW	
6392	01	0182D	57300169			K	5,7,3,L0C+2	
6393	01	0182E	00000000	A		DATA	X'00000000'	
6394	01	0182F	DDF466A3	A		DATA	X'DDF466A3'	
6395	01	01830	679C05B2	A		DATA	X'679C05B2'	
6396	01	01831	679C05B2	A		DATA	X'679C05B2'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6397	01	01832	ABE159F0	A		DATA	X'ABE159F0'	
6398	01	01833	47B238E0	A		DATA	X'47B238E0'	
6399						PAGE		
6400	01	01834	FFFFFFF6	A	MW49	DATA	-10	MW
6401	01	01835	37C00460			MW,12	MEMORY	
6402	01	01836	073001C8			K	00,7,3,FXP0SW	
6403	01	01837	67300169			K	6,7,3,L0C+2	
6404	01	01838	00000000	A		DATA	X'00000000'	
6405	01	01839	0D5BB3FB	A		DATA	X'0D5BB3FB'	
6406	01	0183A	59D73C28	A		DATA	X'59D73C28'	
6407	01	0183B	59D73C28	A		DATA	X'59D73C28'	
6408	01	0183C	26106573	A		DATA	X'26106573'	
6409	01	0183D	F8EBCDF8	A		DATA	X'F8EBCDF8'	
6410	01	0183E	FFFFFFF6	A	MW50	DATA	-10	MW
6411	01	0183F	37C00460			MW,12	MEMORY	
6412	01	01840	073001C8			K	00,7,3,FXP0SW	
6413	01	01841	67300169			K	6,7,3,L0C+2	
6414	01	01842	00000000	A		DATA	X'00000000'	
6415	01	01843	02DA0095	A		DATA	X'02DA0095'	
6416	01	01844	CD2A3C71	A		DATA	X'CD2A3C71'	
6417	01	01845	CD2A3C71	A		DATA	X'CD2A3C71'	
6418	01	01846	F1A3C842	A		DATA	X'F1A3C842'	
6419	01	01847	C10EDD22	A		DATA	X'C10EDD22'	
6420	01	01848	FFFFFFF6	A	MW51	DATA	-10	MW
6421	01	01849	37C00460			MW,12	MEMORY	
6422	01	0184A	073001C8			K	00,7,3,FXP0SW	
6423	01	0184B	57300169			K	5,7,3,L0C+2	
6424	01	0184C	00000000	A		DATA	X'00000000'	
6425	01	0184D	FF1737FC	A		DATA	X'FF1737FC'	
6426	01	0184E	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6427	01	0184F	FC7CF1CC	A		DATA	X'FC7CF1CC'	
6428	01	01850	42486CEA	A		DATA	X'42486CEA'	
6429	01	01851	19971478	A		DATA	X'19971478'	
6430						PAGE		
6431	01	01852	FFFFFFF6	A	MW52	DATA	-10	MW
6432	01	01853	37C00460			MW,12	MEMORY	
6433	01	01854	073001C8			K	00,7,3,FXP0SW	
6434	01	01855	67300169			K	6,7,3,L0C+2	
6435	01	01856	00000000	A		DATA	X'00000000'	
6436	01	01857	0C654900	A		DATA	X'0C654900'	
6437	01	01858	475E3AF9	A		DATA	X'475E3AF9'	
6438	01	01859	475E3AF9	A		DATA	X'475E3AF9'	
6439	01	0185A	2C76B150	A		DATA	X'2C76B150'	
6440	01	0185B	6EFE96D0	A		DATA	X'6EFE96D0'	
6441	01	0185C	FFFFFFF6	A	MW53	DATA	-10	MW
6442	01	0185D	37C00460			MW,12	MEMORY	
6443	01	0185E	073001C8			K	00,7,3,FXP0SW	
6444	01	0185F	57300169			K	5,7,3,L0C+2	
6445	01	01860	00000000	A		DATA	X'00000000'	
6446	01	01861	F5C7652C	A		DATA	X'F5C7652C'	
6447	01	01862	38D27C16	A		DATA	X'38D27C16'	
6448	01	01863	38D27C16	A		DATA	X'38D27C16'	
6449	01	01864	D1F375DB	A		DATA	X'D1F375DB'	
6450	01	01865	8DA834D2	A		DATA	X'8DA834D2'	
6451	01	01866	FFFFFFF6	A	MW54	DATA	-10	MW
6452	01	01867	37C00460			MW,12	MEMORY	
6453	01	01868	073001C8			K	00,7,3,FXP0SW	
6454	01	01869	67300169			K	6,7,3,L0C+2	
6455	01	0186A	00000000	A		DATA	X'00000000'	
6456	01	0186B	36F57A5C	A		DATA	X'36F57A5C'	
6457	01	0186C	8067CB91	A		DATA	X'8067CB91'	
6458	01	0186D	8067CB91	A		DATA	X'8067CB91'	
6459	01	0186E	91BBA0E5	A		DATA	X'91BBA0E5'	
6460	01	0186F	8FFEB8B5	A		DATA	X'8FFEB8B5'	
6461						PAGE		
6462	01	01870	FFFFFFF6	A	MW55	DATA	-10	MW
6463	01	01871	37C00460			MW,12	MEMORY	
6464	01	01872	073001C8			K	00,7,3,FXP0SW	
6465	01	01873	67300169			K	6,7,3,L0C+2	
6466	01	01874	00000000	A		DATA	X'00000000'	
6467	01	01875	1F5F1EB5	A		DATA	X'1F5F1EB5'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6468	01	01876	66E91F2E	A		DATA	X'66E91F2E'	
6469	01	01877	66E91F2E	A		DATA	X'66E91F2E'	
6470	01	01878	4E0A2D09	A		DATA	X'4E0A2D09'	
6471	01	01879	D4792E9E	A		DATA	X'D4792E9E'	
6472	01	0187A	FFFFFFF6	A	MW56	DATA	-10	MW
6473	01	0187B	37C00460			MW,12	MEMORY	
6474	01	0187C	073001C8			K	00,7,3,FXP0SW	
6475	01	0187D	67300169			K	6,7,3,L0C+2	
6476	01	0187E	00000000	A		DATA	X'00000000'	
6477	01	0187F	2C6421FF	A		DATA	X'2C6421FF'	
6478	01	01880	9D289043	A		DATA	X'9D289043'	
6479	01	01881	9D289043	A		DATA	X'9D289043'	
6480	01	01882	8D06D9F2	A		DATA	X'8D06D9F2'	
6481	01	01883	3B332A56	A		DATA	X'3B332A56'	
6482	01	01884	FFFFFFF6	A	MW57	DATA	-10	MW
6483	01	01885	37C00460			MW,12	MEMORY	
6484	01	01886	073001C8			K	00,7,3,FXP0SW	
6485	01	01887	67300169			K	6,7,3,L0C+2	
6486	01	01888	00000000	A		DATA	X'00000000'	
6487	01	01889	1176E78B	A		DATA	X'1176E78B'	
6488	01	0188A	266C684E	A		DATA	X'266C684E'	
6489	01	0188B	266C684F	A		DATA	X'266C684E'	
6490	01	0188C	745BD382	A		DATA	X'745BD382'	
6491	01	0188D	48BF419C	A		DATA	X'48BF419C'	
6492						PAGE		
6493	01	0188E	FFFFFFF6	A	MW58	DATA	-10	MW
6494	01	0188F	37C00460			MW,12	MEMORY	
6495	01	01890	073001C8			K	00,7,3,FXP0SW	
6496	01	01891	67300169			K	6,7,3,L0C+2	
6497	01	01892	00000000	A		DATA	X'00000000'	
6498	01	01893	0F673E9E	A		DATA	X'0F673E9E'	
6499	01	01894	CC1FC7CF	A		DATA	X'CC1FC7CF'	
6500	01	01895	CC1FC7CF	A		DATA	X'CC1FC7CF'	
6501	01	01896	B3FCA5A5	A		DATA	X'B3FCA5A5'	
6502	01	01897	79083368	A		DATA	X'79083368'	
6503	01	01898	FFFFFFF6	A	MW59	DATA	-10	MW
6504	01	01899	37C00460			MW,12	MEMORY	
6505	01	0189A	073001C8			K	00,7,3,FXP0SW	
6506	01	0189B	27300169			K	2,7,3,L0C+2	
6507	01	0189C	00000000	A		DATA	X'00000000'	
6508	01	0189D	00000000	A		DATA	X'00000000'	
6509	01	0189E	00000001	A		DATA	X'00000001'	
6510	01	0189F	00000001	A		DATA	X'00000001'	
6511	01	018A0	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6512	01	018A1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6513	01	018A2	FFFFFFF6	A	MW60	DATA	-10	MW
6514	01	018A3	37C00460			MW,12	MEMORY	
6515	01	018A4	073001C8			K	00,7,3,FXP0SW	
6516	01	018A5	27300169			K	2,7,3,L0C+2	
6517	01	018A6	00000000	A		DATA	X'00000000'	
6518	01	018A7	00000000	A		DATA	X'00000000'	
6519	01	018A8	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6520	01	018A9	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6521	01	018AA	00000001	A		DATA	X'00000001'	
6522	01	018AB	7FFFFFFF	A		DATA	X'7FFFFFFF'	
6523						PAGE		
6524	01	018AC	FFFFFFF6	A	MW61	DATA	-10	MW
6525	01	018AD	37C00460			MW,12	MEMORY	
6526	01	018AE	073001C8			K	00,7,3,FXP0SW	
6527	01	018AF	67300169			K	6,7,3,L0C+2	
6528	01	018B0	00000000	A		DATA	X'00000000'	
6529	01	018B1	0ADAA050	A		DATA	X'0ADAA050'	
6530	01	018B2	B5631AF2	A		DATA	X'B5631AF2'	
6531	01	018B3	B5631AF2	A		DATA	X'B5631AF2'	
6532	01	018B4	DAC269A5	A		DATA	X'DAC269A5'	
6533	01	018B5	0E519FFA	A		DATA	X'0E519FFA'	
6534	01	018B6	FFFFFFF6	A	MW62	DATA	-10	MW
6535	01	018B7	37C00460			MW,12	MEMORY	
6536	01	018B8	073001C8			K	00,7,3,FXP0SW	
6537	01	018B9	57300169			K	5,7,3,L0C+2	
6538	01	018BA	00000000	A		DATA	X'00000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6539	01	018BB	E8549FA9	A		DATA	X'E8549FA9'	
6540	01	018BC	C7B51894	A		DATA	X'C7B51894'	
6541	01	018BD	C7B51894	A		DATA	X'C7B51894'	
6542	01	018BE	6BA40763	A		DATA	X'6BA40763'	
6543	01	018BF	C9848D3C	A		DATA	X'C9848D3C'	
6544	01	018C0	FFFFFFF6	A	MW63	DATA	-10	MW
6545	01	018C1	37C00460			MW,12	MEMORY	
6546	01	018C2	073001C8			K	00,7,3,FXPOSW	
6547	01	018C3	57300169			K	5,7,3,LOC+2	
6548	01	018C4	00000000	A		DATA	0	
6549	01	018C5	FE179952	A		DATA	X'FE179952'	
6550	01	018C6	E9D73A96	A		DATA	X'E9D73A96'	
6551	01	018C7	E9D73A96	A		DATA	X'E9D73A96'	
6552	01	018C8	160A5DC9	A		DATA	X'160A5DC9'	
6553	01	018C9	F8217DC6	A		DATA	X'F8217DC6'	
6554						PAGE		
6555	01	018CA	FFFFFFF6	A	MW64	DATA	-10	MW
6556	01	018CB	37C00460			MW,12	MEMORY	
6557	01	018CC	073001C8			K	00,7,3,FXPOSW	
6558	01	018CD	67300169			K	6,7,3,LOC+2	
6559	01	018CE	00000000	A		DATA	X'00000000'	
6560	01	018CF	275BDC20	A		DATA	X'275BDC20'	
6561	01	018D0	84F82DDE	A		DATA	X'84F82DDE'	
6562	01	018D1	84F82DDE	A		DATA	X'84F82DDE'	
6563	01	018D2	AE1A4FE0	A		DATA	X'AE1A4FE0'	
6564	01	018D3	7BDBA440	A		DATA	X'7BDBA440'	
6565	01	018D4	FFFFFFF6	A	MW65	DATA	-10	MW
6566	01	018D5	37C00460			MW,12	MEMORY	
6567	01	018D6	073001C8			K	00,7,3,FXPOSW	
6568	01	018D7	67300169			K	6,7,3,LOC+2	
6569	01	018D8	00000000	A		DATA	X'00000000'	
6570	01	018D9	02F12C68	A		DATA	X'02F12C68'	
6571	01	018DA	136AF5B2	A		DATA	X'136AF5B2'	
6572	01	018DB	136AF5B2	A		DATA	X'136AF5B2'	
6573	01	018DC	26C9AAD5	A		DATA	X'26C9AAD5'	
6574	01	018DD	83E8A11A	A		DATA	X'83E8A11A'	
6575	01	018DE	FFFFFFF6	A	MW66	DATA	-10	MW
6576	01	018DF	37C00460			MW,12	MEMORY	
6577	01	018E0	073001C8			K	00,7,3,FXPOSW	
6578	01	018E1	67300169			K	6,7,3,LOC+2	
6579	01	018E2	00000000	A		DATA	X'00000000'	
6580	01	018E3	00651680	A		DATA	X'00651680'	
6581	01	018E4	15B897C4	A		DATA	X'15B897C4'	
6582	01	018E5	15B897C4	A		DATA	X'15B897C4'	
6583	01	018E6	04A766B3	A		DATA	X'04A766B3'	
6584	01	018E7	CD66360C	A		DATA	X'CD66360C'	
6585						PAGE		
6586	01	018E8	FFFFFFF6	A	MW67	DATA	-10	MW
6587	01	018E9	37C00460			MW,12	MEMORY	
6588	01	018EA	073001C8			K	00,7,3,FXPOSW	
6589	01	018EB	67300169			K	6,7,3,LOC+2	
6590	01	018EC	00000000	A		DATA	X'00000000'	
6591	01	018ED	13A5DB6D	A		DATA	X'13A5DB6D'	
6592	01	018EE	37DA99E6	A		DATA	X'37DA99E6'	
6593	01	018EF	37DA99E6	A		DATA	X'37DA99E6'	
6594	01	018F0	5A0DC619	A		DATA	X'5A0DC619'	
6595	01	018F1	340EEB76	A		DATA	X'340EEB76'	
6596	01	018F2	FFFFFFF6	A	MW68	DATA	-10	MW
6597	01	018F3	37C00460			MW,12	MEMORY	
6598	01	018F4	073001C8			K	00,7,3,FXPOSW	
6599	01	018F5	67300169			K	6,7,3,LOC+2	
6600	01	018F6	00000000	A		DATA	X'00000000'	
6601	01	018F7	0BDE7CCB	A		DATA	X'0BDE7CCB'	
6602	01	018F8	28FDD84E	A		DATA	X'28FDD84E'	
6603	01	018F9	28FDD84E	A		DATA	X'28FDD84E'	
6604	01	018FA	4A1FEA60	A		DATA	X'4A1FEA60'	
6605	01	018FB	245A6940	A		DATA	X'245A6940'	
6606	01	018FC	FFFFFFF6	A	MW69	DATA	-10	MW
6607	01	018FD	37C00460			MW,12	MEMORY	
6608	01	018FE	073001C8			K	00,7,3,FXPOSW	
6609	01	018FF	57300169			K	5,7,3,LOC+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6610	01	01900	00000000	A		DATA	X'00000000'	
6611	01	01901	DFCF32C1	A		DATA	X'DFCF32C1'	
6612	01	01902	8508753F	A		DATA	X'8508753F'	
6613	01	01903	8508753F	A		DATA	X'8508753F'	
6614	01	01904	43043218	A		DATA	X'43043218'	
6615	01	01905	71AD4BE8	A		DATA	X'71AD4BE8'	
6616						PAGE		
6617	01	01906	FFFFFFF6	A	MW70	DATA	-10	MW
6618	01	01907	37C00460			MW,12	MEMORY	
6619	01	01908	073001C8			K	00,7,3,FXP0SW	
6620	01	01909	67300169			K	6,7,3,L0C+2	
6621	01	0190A	00000000	A		DATA	X'00000000'	
6622	01	0190B	0FDED2C2	A		DATA	X'0FDED2C2'	
6623	01	0190C	2B5FA631	A		DATA	X'2B5FA631'	
6624	01	0190D	2B5FA631	A		DATA	X'2B5FA631'	
6625	01	0190E	5DAB9C62	A		DATA	X'5DAB9C62'	
6626	01	0190F	B39E7AC2	A		DATA	X'B39E7AC2'	
6627	01	01910	FFFFFFF6	A	MW71	DATA	-10	MW
6628	01	01911	37C00460			MW,12	MEMORY	
6629	01	01912	073001C8			K	00,7,3,FXP0SW	
6630	01	01913	67300169			K	6,7,3,L0C+2	
6631	01	01914	00000000	A		DATA	X'00000000'	
6632	01	01915	11BEA00E	A		DATA	X'11BEA00E'	
6633	01	01916	4C798B51	A		DATA	X'4C798B51'	
6634	01	01917	4C798B51	A		DATA	X'4C798B51'	
6635	01	01918	3B667A40	A		DATA	X'3B667A40'	
6636	01	01919	380D6E40	A		DATA	X'380D6E40'	
6637	01	0191A	FFFFFFF6	A	MW72	DATA	-10	MW
6638	01	0191B	37C00460			MW,12	MEMORY	
6639	01	0191C	073001C8			K	00,7,3,FXP0SW	
6640	01	0191D	57300169			K	5,7,3,L0C+2	
6641	01	0191E	00000000	A		DATA	X'00000000'	
6642	01	0191F	D03A60C4	A		DATA	X'D03A60C4'	
6643	01	01920	6E99AD73	A		DATA	X'6E99AD73'	
6644	01	01921	6F99AD73	A		DATA	X'6E99AD73'	
6645	01	01922	916CD0A5	A		DATA	X'916CD0A5'	
6646	01	01923	757E3B1F	A		DATA	X'757E3B1F'	
6647						PAGE		
6648	01	01924	FFFFFFF6	A	MW73	DATA	-10	MW
6649	01	01925	37C00460			MW,12	MEMORY	
6650	01	01926	073001C8			K	00,7,3,FXP0SW	
6651	01	01927	57300169			K	5,7,3,L0C+2	
6652	01	01928	00000000	A		DATA	X'00000000'	
6653	01	01929	FF4891C2	A		DATA	X'FF4891C2'	
6654	01	0192A	E48DDF82	A		DATA	X'E48DDF82'	
6655	01	0192B	E48DDF82	A		DATA	X'E48DDF82'	
6656	01	0192C	06AEF1A4	A		DATA	X'06AEF1A4'	
6657	01	0192D	F0A89148	A		DATA	X'F0A89148'	
6658	01	0192E	FFFFFFF6	A	MW74	DATA	-10	MW
6659	01	0192F	37C00460			MW,12	MEMORY	
6660	01	01930	073001C8			K	00,7,3,FXP0SW	
6661	01	01931	67300169			K	6,7,3,L0C+2	
6662	01	01932	00000000	A		DATA	X'00000000'	
6663	01	01933	0645D91E	A		DATA	X'0645D91E'	
6664	01	01934	F3578058	A		DATA	X'F3578058'	
6665	01	01935	F3578058	A		DATA	X'F3578058'	
6666	01	01936	81234034	A		DATA	X'81234034'	
6667	01	01937	31E411E0	A		DATA	X'31E411E0'	
6668	01	01938	FFFFFFF6	A	MW75	DATA	-10	MW
6669	01	01939	37C00460			MW,12	MEMORY	
6670	01	0193A	073001C8			K	00,7,3,FXP0SW	
6671	01	0193B	67300169			K	6,7,3,L0C+2	
6672	01	0193C	00000000	A		DATA	X'00000000'	
6673	01	0193D	0925E650	A		DATA	X'0925E650'	
6674	01	0193E	BF6125A3	A		DATA	X'BF6125A3'	
6675	01	0193F	BF6125A3	A		DATA	X'BF6125A3'	
6676	01	01940	DBC25A96	A		DATA	X'DBC25A96'	
6677	01	01941	40AD5B82	A		DATA	X'40AD5B82'	
6678						PAGE		
6679	01	01942	FFFFFFF6	A	MW76	DATA	-10	MW
6680	01	01943	37C00460			MW,12	MEMORY	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6681	01	01944	073001C8			K	00,7,3,FXP0SW	
6682	01	01945	67300169			K	6,7,3,L0C+2	
6683	01	01946	00000000	A		DATA	X'00000000'	
6684	01	01947	0F90C493	A		DATA	X'0F90C493'	
6685	01	01948	C9B14785	A		DATA	X'C9B14785'	
6686	01	01949	C9B14785	A		DATA	X'C9B14785'	
6687	01	0194A	B6A03674	A		DATA	X'B6A03674'	
6688	01	0194B	0A8A7644	A		DATA	X'0A8A7644'	
6689	01	0194C	FFFFFFF6	A	MW77	DATA	*10	MW
6690	01	0194D	37C00460			MW,12	MEMORY	
6691	01	0194E	073001C8			K	00,7,3,FXP0SW	
6692	01	0194F	57300169			K	5,7,3,L0C+2	
6693	01	01950	00000000	A		DATA	X'00000000'	
6694	01	01951	FD92A39E	A		DATA	X'FD92A39E'	
6695	01	01952	E9D369A7	A		DATA	X'E9D369A7'	
6696	01	01953	E9D369A7	A		DATA	X'E9D369A7'	
6697	01	01954	1C0596DA	A		DATA	X'1C0596DA'	
6698	01	01955	5232D236	A		DATA	X'5232D236'	
6699	01	01956	FFFFFFF6	A	MW78	DATA	*10	MW
6700	01	01957	37C00460			MW,12	MEMORY	
6701	01	01958	073001C8			K	00,7,3,FXP0SW	
6702	01	01959	67300169			K	6,7,3,L0C+2	
6703	01	0195A	00000000	A		DATA	X'00000000'	
6704	01	0195B	21847A5E	A		DATA	X'21847A5E'	
6705	01	0195C	4DF2E8D8	A		DATA	X'4DF2E8D8'	
6706	01	0195D	4DF2E8D8	A		DATA	X'4DF2E8D8'	
6707	01	0195E	6E140AFA	A		DATA	X'6E140AFA'	
6708	01	0195F	9D2FD2F0	A		DATA	X'9D2FD2F0'	
6709						PAGE		
6710	01	01960	FFFFFFF6	A	MW79	DATA	*10	MW *
6711	01	01961	B7C0045A			MW,12	*IA	
6712	01	01962	073001C8			K	00,7,3,FXP0SW	
6713	01	01963	67300169			K	6,7,3,L0C+2	
6714	01	01964	00000000	A		DATA	X'00000000'	
6715	01	01965	0416A25D	A		DATA	X'0416A25D'	
6716	01	01966	3708F585	A		DATA	X'3708F585'	
6717	01	01967	3708F585	A		DATA	X'3708F585'	
6718	01	01968	13048243	A		DATA	X'13048243'	
6719	01	01969	A919CBCF	A		DATA	X'A919CBCF'	
6720	01	0196A	FFFFFFF6	A	MW80	DATA	*10	MW X
6721	01	0196B	37C3E067			MW,12	MEMORY=X'23F9',1	
6722	01	0196C	073001C8			K	00,7,3,FXP0SW	
6723	01	0196D	67300169			K	6,7,3,L0C+2	
6724	01	0196E	000023F9	A		DATA	X'23F9'	
6725	01	0196F	23CDBD6A	A		DATA	X'23CDBD6A'	
6726	01	01970	A56F321B	A		DATA	X'A56F321B'	
6727	01	01971	A56F321B	A		DATA	X'A56F321B'	
6728	01	01972	9ACB652D	A		DATA	X'9ACB652D'	
6729	01	01973	ECB975BF	A		DATA	X'ECB975BF'	
6730	01	01974	FFFFFFF6	A	MW81	DATA	*10	MW0
6731	01	01975	37D00460			MW,13	MEMORY	
6732	01	01976	073001C8			K	00,7,3,FXP0SW	
6733	01	01977	67300169			K	6,7,3,L0C+2	
6734	01	01978	00000000	A		DATA	X'00000000'	
6735	01	01979	00000000	A		DATA	0	
6736	01	0197A	DFA08A94	A		DATA	X'DFA08A94'	
6737	01	0197B	DFA08A94	A		DATA	X'DFA08A94'	
6738	01	0197C	C1C7FCFC	A		DATA	X'C1C7FCFC'	
6739	01	0197D	777E19B0	A		DATA	X'777E19B0'	
6740						PAGE		
6741	01	0197E	FFFFFFF6	A	MW82	DATA	*10	MW
6742	01	0197F	37D00460			MW,13	MEMORY	
6743	01	01980	073001C8			K	00,7,3,FXP0SW	
6744	01	01981	57300169			K	5,7,3,L0C+2	
6745	01	01982	00000000	A		DATA	X'00000000'	
6746	01	01983	00000000	A		DATA	X'00000000'	
6747	01	01984	8A5F76B0	A		DATA	X'8A5F76B0'	
6748	01	01985	8A5F76B0	A		DATA	X'8A5F76B0'	
6749	01	01986	1CC95618	A		DATA	X'1CC95618'	
6750	01	01987	7B024080	A		DATA	X'7B024080'	
6751	01	01988	FFFFFFF6	A	MW83	DATA	*10	MW

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6752	01	01989	37D00460			MW,13	MEMORY	
6753	01	0198A	073001C8			K	00,7,3,FXPOSW	
6754	01	0198B	57300169			K	5,7,3,L0C+2	
6755	01	0198C	00000000	A		DATA	X'00000000'	
6756	01	0198D	00000000	A		DATA	X'00000000'	
6757	01	0198E	FCFD3918	A		DATA	X'FCFD3918'	
6758	01	0198F	FCFD3918	A		DATA	X'FCFD3918'	
6759	01	01990	37C1F3C1	A		DATA	X'37C1F3C1'	
6760	01	01991	4B31D318	A		DATA	X'4B31D318'	
6761	01	01992	FFFFFFF6	A	MW84	DATA	-10	MW
6762	01	01993	37D00460			MW,13	MEMORY	
6763	01	01994	073001C8			K	00,7,3,FXPOSW	
6764	01	01995	67300169			K	6,7,3,L0C+2	
6765	01	01996	00000000	A		DATA	X'00000000'	
6766	01	01997	00000000	A		DATA	X'00000000'	
6767	01	01998	1EDB580D	A		DATA	X'1EDB580D'	
6768	01	01999	1EDB580D	A		DATA	X'1EDB580D'	
6769	01	0199A	0C1031F3	A		DATA	X'0C1031F3'	
6770	01	0199B	62DF1157	A		DATA	X'62DF1157'	
6771						PAGE		
6772	01	0199C	FFFFFFF6	A	MW85	DATA	-10	MW
6773	01	0199D	37D00460			MW,13	MEMORY	
6774	01	0199E	073001C8			K	00,7,3,FXPOSW	
6775	01	0199F	57300169			K	5,7,3,L0C+2	
6776	01	019A0	00000000	A		DATA	X'00000000'	
6777	01	019A1	00000000	A		DATA	X'00000000'	
6778	01	019A2	E8FC75C1	A		DATA	X'E8FC75C1'	
6779	01	019A3	E8FC75C1	A		DATA	X'E8FC75C1'	
6780	01	019A4	3F1C8782	A		DATA	X'3F1C8782'	
6781	01	019A5	D2689302	A		DATA	X'D2689302'	
6782	01	019A6	FFFFFFF6	A	MW86	DATA	-10	MW
6783	01	019A7	37D00460			MW,13	MEMORY	
6784	01	019A8	073001C8			K	00,7,3,FXPOSW	
6785	01	019A9	67300169			K	6,7,3,L0C+2	
6786	01	019AA	00000000	A		DATA	X'00000000'	
6787	01	019AB	00000000	A		DATA	X'00000000'	
6788	01	019AC	7CBDC530	A		DATA	X'7CBDC530'	
6789	01	019AD	7CBDC530	A		DATA	X'7CBDC530'	
6790	01	019AE	72436AC1	A		DATA	X'72436AC1'	
6791	01	019AF	9A478930	A		DATA	X'9A478930'	
6792	01	019B0	FFFFFFF6	A	MW87	DATA	-10	MW
6793	01	019B1	37D00460			MW,13	MEMORY	
6794	01	019B2	073001C8			K	00,7,3,FXPOSW	
6795	01	019B3	57300169			K	5,7,3,L0C+2	
6796	01	019B4	00000000	A		DATA	X'00000000'	
6797	01	019B5	00000000	A		DATA	X'00000000'	
6798	01	019B6	F1C133C0	A		DATA	X'F1C133C0'	
6799	01	019B7	F1C133C0	A		DATA	X'F1C133C0'	
6800	01	019B8	6684E6C2	A		DATA	X'6684E6C2'	
6801	01	019B9	F7E7B780	A		DATA	X'F7E7B780'	
6802						PAGE		
6803	01	019BA	FFFFFFF6	A	MW88	DATA	-10	MW
6804	01	019BB	37D00460			MW,13	MEMORY	
6805	01	019BC	073001C8			K	00,7,3,FXPOSW	
6806	01	019BD	67300169			K	6,7,3,L0C+2	
6807	01	019BE	00000000	A		DATA	X'00000000'	
6808	01	019BF	00000000	A		DATA	X'00000000'	
6809	01	019C0	7CF4DF30	A		DATA	X'7CF4DF30'	
6810	01	019C1	7CF4DF30	A		DATA	X'7CF4DF30'	
6811	01	019C2	3F5A5AC8	A		DATA	X'3F5A5AC8'	
6812	01	019C3	7383DB10	A		DATA	X'7383DB10'	
6813	01	019C4	FFFFFFF6	A	MW89	DATA	-10	MW
6814	01	019C5	37D00460			MW,13	MEMORY	
6815	01	019C6	073001C8			K	00,7,3,FXPOSW	
6816	01	019C7	67300169			K	6,7,3,L0C+2	
6817	01	019C8	00000000	A		DATA	X'00000000'	
6818	01	019C9	00000000	A		DATA	X'00000000'	
6819	01	019CA	366B6D39	A		DATA	X'366B6D39'	
6820	01	019CB	366B6D39	A		DATA	X'366B6D39'	
6821	01	019CC	493A426C	A		DATA	X'493A426C'	
6822	01	019CD	A764C60C	A		DATA	X'A764C60C'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6823	01	019CE	FFFFFFF6	A	MW90	DATA	-10	MW
6824	01	019CF	37D00460			MW,13	MEMORY	
6825	01	019D0	073001C8			K	00,7,3,FXPOSW	
6826	01	019D1	57300169			K	5,7,3,LOC+2	
6827	01	019D2	00000000	A		DATA	X'00000000'	
6828	01	019D3	00000000	A		DATA	0	
6829	01	019D4	F1C133C0	A		DATA	X'F1C133C0'	
6830	01	019D5	F1C133C0	A		DATA	X'F1C133C0'	
6831	01	019D6	1CC95618	A		DATA	X'1CC95618'	
6832	01	019D7	333F5A00	A		DATA	X'333F5A00'	
6833						PAGE		
6834	01	019D8	FFFFFFF6	A	MH01	DATA	-10	MH
6835	01	019D9	57C00460			MH,12	MEMORY	
6836	01	019DA	073001C8			K	00,7,3,FXPOSW	
6837	01	019DB	17300169			K	1,7,3,LOC+2	
6838	01	019DC	0000FC7C	A		DATA	X'0000FC7C'	
6839	01	019DD	0000FC7C	A		DATA	X'0000FC7C'	
6840	01	019DE	37BF0000	A		DATA	X'37BF0000'	
6841	01	019DF	37BF0000	A		DATA	X'37BF0000'	
6842	01	019E0	00000000	A		DATA	X'00000000'	
6843	01	019E1	FF3C0484	A		DATA	X'FF3C0484'	
6844	01	019E2	FFFFFFF6	A	MH02	DATA	-10	MH
6845	01	019E3	57C00460			MH,12	MEMORY	
6846	01	019E4	073001C8			K	00,7,3,FXPOSW	
6847	01	019E5	17300169			K	1,7,3,LOC+2	
6848	01	019E6	00000383	A		DATA	X'00000383'	
6849	01	019E7	00000383	A		DATA	X'00000383'	
6850	01	019E8	C8400000	A		DATA	X'C8400000'	
6851	01	019E9	C8400000	A		DATA	X'C8400000'	
6852	01	019EA	00000000	A		DATA	X'00000000'	
6853	01	019EB	FF3C38C0	A		DATA	X'FF3C38C0'	
6854	01	019EC	FFFFFFF6	A	MH03	DATA	-10	MH X
6855	01	019ED	57CE0460			MH,12	MEMORY,7	
6856	01	019EE	073001C8			K	00,7,3,FXPOSW	
6857	01	019EF	17300169			K	1,7,3,LOC+2	
6858	01	019F0	0000E159	A		DATA	X'0000E159'	
6859	01	019F1	0000E159	A		DATA	X'0000E159'	
6860	01	019F2	000027C1	A		DATA	X'000027C1'	
6861	01	019F3	000027C1	A		DATA	X'000027C1'	
6862	01	019F4	00000000	A		DATA	X'00000000'	
6863	01	019F5	FB3D7319	A		DATA	X'FB3D7319'	
6864						PAGE		
6865	01	019F6	FFFFFFF6	A	MH04	DATA	-10	MH X
6866	01	019F7	57CE0460			MH,12	MEMORY,7	
6867	01	019F8	073001C8			K	00,7,3,FXPOSW	
6868	01	019F9	17300169			K	1,7,3,LOC+2	
6869	01	019FA	00001EA6	A		DATA	X'00001EA6'	
6870	01	019FB	00001EA6	A		DATA	X'00001EA6'	
6871	01	019FC	0000D83E	A		DATA	X'0000D83E'	
6872	01	019FD	0000D83E	A		DATA	X'0000D83E'	
6873	01	019FE	00000000	A		DATA	X'00000000'	
6874	01	019FF	FB3D7C34	A		DATA	X'FB3D7C34'	
6875	01	01A00	FFFFFFF6	A	MH05	DATA	-10	MH0
6876	01	01A01	57D00460			MH,13	MEMORY	
6877	01	01A02	073001C8			K	00,7,3,FXPOSW	
6878	01	01A03	27300169			K	2,7,3,LOC+2	
6879	01	01A04	00000000	A		DATA	X'00000000'	
6880	01	01A05	00000000	A		DATA	X'00000000'	
6881	01	01A06	30C90000	A		DATA	X'30C90000'	
6882	01	01A07	30C90000	A		DATA	X'30C90000'	
6883	01	01A08	000048C1	A		DATA	X'000048C1'	
6884	01	01A09	0DDD4F89	A		DATA	X'0DDD4F89'	
6885	01	01A0A	FFFFFFF6	A	MH06	DATA	-10	MH
6886	01	01A0B	57D00460			MH,13	MEMORY	
6887	01	01A0C	073001C8			K	00,7,3,FXPOSW	
6888	01	01A0D	27300169			K	2,7,3,LOC+2	
6889	01	01A0E	00000000	A		DATA	X'00000000'	
6890	01	01A0F	00000000	A		DATA	X'00000000'	
6891	01	01A10	C7360000	A		DATA	X'C7360000'	
6892	01	01A11	C7360000	A		DATA	X'C7360000'	
6893	01	01A12	0000B73E	A		DATA	X'0000B73E'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6894	01	01A13	1023D914	A		DATA	X'1023D914'	
6895						PAGE		
6896	01	01A14	FFFFFFF6	A	MH07	DATA	-10	MH X
6897	01	01A15	57DE0460			MH,13	MEMORY,7	
6898	01	01A16	073001C8			K	00,7,3,FXP0SW	
6899	01	01A17	27300169			K	2,7,3,L0C+2	
6900	01	01A18	00000000	A		DATA	X'00000000'	
6901	01	01A19	00000000	A		DATA	X'00000000'	
6902	01	01A1A	00005AF4	A		DATA	X'00005AF4'	
6903	01	01A1B	00005AF4	A		DATA	X'00005AF4'	
6904	01	01A1C	FFFF62EA	A		DATA	X'FFFF62EA'	
6905	01	01A1D	23248B08	A		DATA	X'23248B08'	
6906	01	01A1E	FFFFFFF6	A	MH08	DATA	-10	MH *X
6907	01	01A1F	D7D2045A			MH,13	*IA,1	
6908	01	01A20	073001C8			K	00,7,3,FXP0SW	
6909	01	01A21	27300169			K	2,7,3,L0C+2	
6910	01	01A22	00000001	A		DATA	1	
6911	01	01A23	00000001	A		DATA	1	
6912	01	01A24	0000A50B	A		DATA	X'0000A50B'	
6913	01	01A25	0000A50B	A		DATA	X'0000A50B'	
6914	01	01A26	00009D15	A		DATA	X'00009D15'	
6915	01	01A27	232548E7	A		DATA	X'232548E7'	
6916						PAGE		
6917	01	01A28	FFFFFFF6	A	MI01	DATA	-10	MI
6918	01	01A29	23C42EFD	A		MI,12	X'42EFD'	
6919	01	01A2A	073001C8			K	00,7,3,FXP0SW	
6920	01	01A2B	57300169			K	5,7,3,L0C+2	
6921	01	01A2C	00000000	A		DATA	X'00000000'	
6922	01	01A2D	FFFFE994	A		DATA	X'FFFFE994'	
6923	01	01A2E	00000000	A		DATA	X'00000000'	
6924	01	01A2F	00000000	A		DATA	X'00000000'	
6925	01	01A30	FAA401EB	A		DATA	X'FAA401EB'	
6926	01	01A31	341A1F3F	A		DATA	X'341A1F3F'	
6927	01	01A32	FFFFFFF6	A	MI02	DATA	-10	MI
6928	01	01A33	23C6590D	A		MI,12	X'6590D'	
6929	01	01A34	073001C8			K	00,7,3,FXP0SW	
6930	01	01A35	67300169			K	6,7,3,L0C+2	
6931	01	01A36	00000000	A		DATA	X'00000000'	
6932	01	01A37	00015C36	A		DATA	X'00015C36'	
6933	01	01A38	00000000	A		DATA	X'00000000'	
6934	01	01A39	00000000	A		DATA	X'00000000'	
6935	01	01A3A	36DAE799	A		DATA	X'36DAE799'	
6936	01	01A3B	5137F3C5	A		DATA	X'5137F3C5'	
6937	01	01A3C	FFFFFFF6	A	MI03	DATA	-10	MI
6938	01	01A3D	23DA7646	A		MI,13	X'A7646'	
6939	01	01A3E	F73001C8			K	15,7,3,FXP0SW	
6940	01	01A3F	E7300169			K	14,7,3,L0C+2	
6941	01	01A40	00000000	A		DATA	X'00000000'	
6942	01	01A41	00000000	A		DATA	0	
6943	01	01A42	00000000	A		DATA	X'00000000'	
6944	01	01A43	00000000	A		DATA	X'00000000'	
6945	01	01A44	C59714B8	A		DATA	X'C59714B8'	
6946	01	01A45	2E8C7A50	A		DATA	X'2E8C7A50'	
6947						PAGE		
6948	01	01A46	FFFFFFF6	A	MI04	DATA	-10	MI
6949	01	01A47	23D5C9D2	A		MI,13	X'5C9D2'	
6950	01	01A48	F73001C8			K	15,7,3,FXP0SW	
6951	01	01A49	E7300169			K	14,7,3,L0C+2	
6952	01	01A4A	00000000	A		DATA	X'00000000'	
6953	01	01A4B	00000000	A		DATA	0	
6954	01	01A4C	00000000	A		DATA	X'00000000'	
6955	01	01A4D	00000000	A		DATA	X'00000000'	
6956	01	01A4E	26AB3F51	A		DATA	X'26AB3F51'	
6957	01	01A4F	69C58972	A		DATA	X'69C58972'	
6958	01	01A50	FFFFFFF6	A	MI05	DATA	-10	MI0
6959	01	01A51	23C44133	A		MI,12	X'44133'	
6960	01	01A52	F73001C8			K	15,7,3,FXP0SW	
6961	01	01A53	D7300169			K	13,7,3,L0C+2	
6962	01	01A54	00000000	A		DATA	X'00000000'	
6963	01	01A55	FFFE0253	A		DATA	X'FFFE0253'	
6964	01	01A56	00000000	A		DATA	X'00000000'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
6965	01	01A57	00000000	A		DATA	X'00000000'	
6966	01	01A58	88357F05	A		DATA	X'88357F05'	
6967	01	01A59	B3FC92FF	A		DATA	X'B3FC92FF'	
6968	01	01A5A	FFFFFFF6	A	MI06	DATA	-10	MI
6969	01	01A5B	23CAE01A	A		MI,12	X'AE01A'	
6970	01	01A5C	F73001C8			K	15,7,3,FXP0SW	
6971	01	01A5D	E7300169			K	14,7,3,L0C+2	
6972	01	01A5E	00000000	A		DATA	X'00000000'	
6973	01	01A5F	00024888	A		DATA	X'00024888'	
6974	01	01A60	00000000	A		DATA	X'00000000'	
6975	01	01A61	00000000	A		DATA	X'00000000'	
6976	01	01A62	8DEF82D4	A		DATA	X'8DEF82D4'	
6977	01	01A63	EBD4C988	A		DATA	X'EBD4C988'	
6978						PAGE		
6979	01	01A64	FFFFFFF6	A	MI07	DATA	-10	MI
6980	01	01A65	23D065D1	A		MI,13	X'065D1'	
6981	01	01A66	F73001C8			K	15,7,3,FXP0SW	
6982	01	01A67	D7300169			K	13,7,3,L0C+2	
6983	01	01A68	00000000	A		DATA	X'00000000'	
6984	01	01A69	00000000	A		DATA	0	
6985	01	01A6A	00000000	A		DATA	X'00000000'	
6986	01	01A6B	00000000	A		DATA	X'00000000'	
6987	01	01A6C	D93AE796	A		DATA	X'D93AE796'	
6988	01	01A6D	96753F76	A		DATA	X'96753F76'	
6989	01	01A6E	FFFFFFF6	A	MI08	DATA	-10	MI
6990	01	01A6F	23D7B463	A		MI,13	X'7B463'	
6991	01	01A70	F73001C8			K	15,7,3,FXP0SW	
6992	01	01A71	D7300169			K	13,7,3,L0C+2	
6993	01	01A72	00000000	A		DATA	X'00000000'	
6994	01	01A73	00000000	A		DATA	0	
6995	01	01A74	00000000	A		DATA	X'00000000'	
6996	01	01A75	00000000	A		DATA	X'00000000'	
6997	01	01A76	8C594B71	A		DATA	X'8C594B71'	
6998	01	01A77	1FAAA0B3	A		DATA	X'1FAAA0B3'	
6999	01	01A78	FFFFFFFA	A	MI09	DATA	-6	MI *
7000	01	01A79	A3C0045A			MI,12	*IA	
7001	01	01A7A	173001BC			K	1,7,3,SI9NA0	
7002	01	01A7B	97300068			K	9,7,3,NEIRET+1	
7003	01	01A7C	12345678	A		DATA	X'12345678'	
7004	01	01A7D	12345678	A		DATA	X'12345678'	
7005						PAGE		
7006	01	01A7E	FFFFFFF6	A	DW01	DATA	-10	ND0,RN * 0VERFL0W
7007	01	01A7F	36C00460			DW,12	MEM0RY	
7008	01	01A80	072001C8			K	0,7,2,FXP0SW	
7009	01	01A81	47200169			K	4,7,2,L0C+2	
7010	01	01A82	CF999999	A		DATA	X'CF999999'	
7011	01	01A83	CF999999	A		DATA	X'CF999999'	
7012	01	01A84	60000000	A		DATA	X'60000000'	
7013	01	01A85	60000000	A		DATA	X'60000000'	
7014	01	01A86	00000000	A		DATA	X'00000000'	
7015	01	01A87	00000000	A		DATA	X'00000000'	
7016	01	01A88	FFFFFFF6	A	DW02	DATA	-10	D0•NRN•NAZ•BWZ * 0VERFL0W
7017	01	01A89	36C00460			DW,12	MEM0RY	
7018	01	01A8A	F73001C8			K	15,7,3,FXP0SW	
7019	01	01A8B	F7300084			K	15,7,3,FP0RET+1	
7020	01	01A8C	60000000	A		DATA	X'60000000'	
7021	01	01A8D	60000000	A		DATA	X'60000000'	
7022	01	01A8E	BFFFFFFE	A		DATA	X'BFFFFFFE'	
7023	01	01A8F	BFFFFFFE	A		DATA	X'BFFFFFFE'	
7024	01	01A90	80000000	A		DATA	X'80000000'	
7025	01	01A91	80000000	A		DATA	X'80000000'	
7026	01	01A92	FFFFFFF6	A	DW03	DATA	-10	D0•NRN•NAZ•NBWZ * 0VERFL0W
7027	01	01A93	36C00460			DW,12	MEM0RY	
7028	01	01A94	F73001C8			K	15,7,3,FXP0SW	
7029	01	01A95	F7300084			K	15,7,3,FP0RET+1	
7030	01	01A96	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7031	01	01A97	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7032	01	01A98	7FFFFFFD	A		DATA	X'7FFFFFFD'	
7033	01	01A99	7FFFFFFD	A		DATA	X'7FFFFFFD'	
7034	01	01A9A	00000001	A		DATA	X'00000001'	
7035	01	01A9B	00000001	A		DATA	X'00000001'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7036						PAGE		
7037	01	01A9C	FFFFFFF6	A	DW04	DATA	-10	DO•AZ•BWZ•MWN,RN = 0VERFL0W
7038	01	01A9D	36C00460			DW,12	MEM0RY	
7039	01	01A9E	F73001C8			K	15,7,3,FXP0SW	
7040	01	01A9F	F7300084			K	15,7,3,FP0RET+1	
7041	01	01AA0	C0000000	A		DATA	X'C0000000'	
7042	01	01AA1	C0000000	A		DATA	X'C0000000'	
7043	01	01AA2	80000000	A		DATA	X'80000000'	
7044	01	01AA3	80000000	A		DATA	X'80000000'	
7045	01	01AA4	00000000	A		DATA	X'00000000'	
7046	01	01AA5	00000000	A		DATA	X'00000000'	
7047	01	01AA6	FFFFFFF6	A	DW05	DATA	-10	DO•AZ•BWZ•NMWN,NRN = 0VERFL0W
7048	01	01AA7	36C00460			DW,12	MEM0RY	
7049	01	01AA8	F73001C8			K	15,7,3,FXP0SW	
7050	01	01AA9	F7300084			K	15,7,3,FP0RET+1	
7051	01	01AAA	40000000	A		DATA	X'40000000'	
7052	01	01AAB	40000000	A		DATA	X'40000000'	
7053	01	01AAC	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7054	01	01AAD	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7055	01	01AAE	80000000	A		DATA	X'80000000'	
7056	01	01AAF	80000000	A		DATA	X'80000000'	
7057	01	01AB0	FFFFFFF6	A	DW06	DATA	-10	DW
7058	01	01AB1	36C00460			DW,12	MEM0RY	
7059	01	01AB2	F73001C8			K	15,7,3,FXP0SW	
7060	01	01AB3	A7300169			K	10,7,3,L0C+2	
7061	01	01AB4	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7062	01	01AB5	00000000	A		DATA	X'00000000'	
7063	01	01AB6	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7064	01	01AB7	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7065	01	01AB8	00000001	A		DATA	X'00000001'	
7066	01	01AB9	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7067						PAGE		
7068	01	01ABA	FFFFFFF6	A	DW07	DATA	-10	DW
7069	01	01ABB	36C00460			DW,12	MEM0RY	
7070	01	01ABC	F73001C8			K	15,7,3,FXP0SW	
7071	01	01ABD	97300169			K	9,7,3,L0C+2	
7072	01	01ABE	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7073	01	01ABF	00000000	A		DATA	X'00000000'	
7074	01	01AC0	80000001	A		DATA	X'80000001'	
7075	01	01AC1	80000001	A		DATA	X'80000001'	
7076	01	01AC2	00000001	A		DATA	X'00000001'	
7077	01	01AC3	80000001	A		DATA	X'80000001'	
7078	01	01AC4	FFFFFFF6	A	DW08	DATA	-10	DW
7079	01	01AC5	36C00460			DW,12	MEM0RY	
7080	01	01AC6	F73001C8			K	15,7,3,FXP0SW	
7081	01	01AC7	97300169			K	9,7,3,L0C+2	
7082	01	01AC8	E0000000	A		DATA	X'E0000000'	
7083	01	01AC9	C0000001	A		DATA	X'C0000001'	
7084	01	01ACA	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7085	01	01ACB	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7086	01	01ACC	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7087	01	01ACD	C0000002	A		DATA	X'C0000002'	
7088	01	01ACE	FFFFFFF6	A	DW09	DATA	-10	DW
7089	01	01ACF	36C00460			DW,12	MEM0RY	
7090	01	01AD0	F73001C8			K	15,7,3,FXP0SW	
7091	01	01AD1	A7300169			K	10,7,3,L0C+2	
7092	01	01AD2	C0000000	A		DATA	X'C0000000'	
7093	01	01AD3	00000000	A		DATA	X'00000000'	
7094	01	01AD4	80000001	A		DATA	X'80000001'	
7095	01	01AD5	80000001	A		DATA	X'80000001'	
7096	01	01AD6	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7097	01	01AD7	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7098						PAGE		
7099	01	01AD8	FFFFFFF6	A	DW10	DATA	-10	DW
7100	01	01AD9	36C00460			DW,12	MEM0RY	
7101	01	01ADA	F73001C8			K	15,7,3,FXP0SW	
7102	01	01ADB	A7300169			K	10,7,3,L0C+2	
7103	01	01ADC	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7104	01	01ADD	FFFFFFFD	A		DATA	X'FFFFFFFD'	
7105	01	01ADE	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7106	01	01ADF	FFFFFFFC	A		DATA	X'FFFFFFFC'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7107	01	01AE0	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7108	01	01AE1	00000007	A		DATA	X'00000007'	
7109	01	01AE2	FFFFFFF6	A	DW11	DATA	-10	DW
7110	01	01AE3	36C00460			DW,12	MEMORY	
7111	01	01AE4	F73001C8			K	15,7,3,FXP0SW	
7112	01	01AE5	A7300169			K	10,7,3,L0C+2	
7113	01	01AE6	00000000	A		DATA	X'00000000'	
7114	01	01AE7	00000000	A		DATA	X'00000000'	
7115	01	01AE8	00000004	A		DATA	X'00000004'	
7116	01	01AE9	00000004	A		DATA	X'00000004'	
7117	01	01AEA	00000020	A		DATA	X'00000020'	
7118	01	01AEB	00000008	A		DATA	X'00000008'	
7119	01	01AEC	FFFFFFF6	A	DW12	DATA	-10	DW
7120	01	01AED	36C00460			DW,12	MEMORY	
7121	01	01AEE	F73001C8			K	15,7,3,FXP0SW	
7122	01	01AEF	97300169			K	9,7,3,L0C+2	
7123	01	01AF0	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7124	01	01AF1	00000000	A		DATA	X'00000000'	
7125	01	01AF2	00000004	A		DATA	X'00000004'	
7126	01	01AF3	00000004	A		DATA	X'00000004'	
7127	01	01AF4	FFFFFFE0	A		DATA	X'FFFFFFE0'	
7128	01	01AF5	FFFFFFF8	A		DATA	X'FFFFFFF8'	
7129						PAGE		
7130	01	01AF6	FFFFFFF6	A	DW13	DATA	-10	DW
7131	01	01AF7	36C00460			DW,12	MEMORY	
7132	01	01AF8	F73001C8			K	15,7,3,FXP0SW	
7133	01	01AF9	A7300169			K	10,7,3,L0C+2	
7134	01	01AFA	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7135	01	01AFB	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7136	01	01AFC	FFFFFFFB	A		DATA	X'FFFFFFFB'	
7137	01	01AFD	FFFFFFFB	A		DATA	X'FFFFFFFB'	
7138	01	01AFE	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7139	01	01AFF	00000006	A		DATA	X'00000006'	
7140	01	01B00	FFFFFFF6	A	DW14	DATA	-10	DW
7141	01	01B01	36C00460			DW,12	MEMORY	
7142	01	01B02	F73001C8			K	15,7,3,FXP0SW	
7143	01	01B03	97300169			K	9,7,3,L0C+2	
7144	01	01B04	00000000	A		DATA	X'00000000'	
7145	01	01B05	00000000	A		DATA	X'00000000'	
7146	01	01B06	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7147	01	01B07	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7148	01	01B08	00000020	A		DATA	X'00000020'	
7149	01	01B09	FFFFFFF8	A		DATA	X'FFFFFFF8'	
7150	01	01B0A	FFFFFFF6	A	DW15	DATA	-10	DW
7151	01	01B0B	36C00460			DW,12	MEMORY	
7152	01	01B0C	F73001C8			K	15,7,3,FXP0SW	
7153	01	01B0D	97300169			K	9,7,3,L0C+2	
7154	01	01B0E	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7155	01	01B0F	FFFFFFFD	A		DATA	X'FFFFFFFD'	
7156	01	01B10	00000004	A		DATA	X'00000004'	
7157	01	01B11	00000004	A		DATA	X'00000004'	
7158	01	01B12	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7159	01	01B13	FFFFFFF9	A		DATA	X'FFFFFFF9'	
7160						PAGE		
7161	01	01B14	FFFFFFF6	A	DW16	DATA	-10	DW
7162	01	01B15	36C00460			DW,12	MEMORY	
7163	01	01B16	F73001C8			K	15,7,3,FXP0SW	
7164	01	01B17	A7300169			K	10,7,3,L0C+2	
7165	01	01B18	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7166	01	01B19	00000000	A		DATA	X'00000000'	
7167	01	01B1A	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7168	01	01B1B	FFFFFFFC	A		DATA	X'FFFFFFFC'	
7169	01	01B1C	FFFFFFE0	A		DATA	X'FFFFFFE0'	
7170	01	01B1D	00000008	A		DATA	X'00000008'	
7171	01	01B1E	FFFFFFF6	A	DW17	DATA	-10	DW
7172	01	01B1F	36C00460			DW,12	MEMORY	
7173	01	01B20	F73001C8			K	15,7,3,FXP0SW	
7174	01	01B21	A7300169			K	10,7,3,L0C+2	
7175	01	01B22	00000000	A		DATA	X'00000000'	
7176	01	01B23	00000003	A		DATA	X'00000003'	
7177	01	01B24	00000004	A		DATA	X'00000004'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7178	01	01B25	00000004	A		DATA	X'00000004'	
7179	01	01B26	0000001F	A		DATA	X'0000001F'	
7180	01	01B27	00000007	A		DATA	X'00000007'	
7181	01	01B28	FFFFFFF6	A	DW18	DATA	-10	DW
7182	01	01B29	36C00460			DW,12	MEMORY	
7183	01	01B2A	F73001C8			K	15,7,3,FXP0SW	
7184	01	01B2B	A7300169			K	10,7,3,L0C+2	
7185	01	01B2C	15555555	A		DATA	X'15555555'	
7186	01	01B2D	00000000	A		DATA	X'00000000'	
7187	01	01B2E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7188	01	01B2F	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7189	01	01B30	55555555	A		DATA	X'55555555'	
7190	01	01B31	2AAAAAAB	A		DATA	X'2AAAAAAB'	
7191						PAGE		
7192	01	01B32	FFFFFFF6	A	DW19	DATA	-10	DW
7193	01	01B33	36C00460			DW,12	MEMORY	
7194	01	01B34	F73001C8			K	15,7,3,FXP0SW	
7195	01	01B35	A7300169			K	10,7,3,L0C+2	
7196	01	01B36	31C3C1F0	A		DATA	X'31C3C1F0'	
7197	01	01B37	3CBA3128	A		DATA	X'3CBA3128'	
7198	01	01B38	79999999	A		DATA	X'79999999'	
7199	01	01B39	79999999	A		DATA	X'79999999'	
7200	01	01B3A	11111111	A		DATA	X'11111111'	
7201	01	01B3B	68C48AD1	A		DATA	X'68C48AD1'	
7202	01	01B3C	FFFFFFF6	A	DW20	DATA	-10	DW
7203	01	01B3D	36C00460			DW,12	MEMORY	
7204	01	01B3E	F73001C8			K	15,7,3,FXP0SW	
7205	01	01B3F	97300169			K	9,7,3,L0C+2	
7206	01	01B40	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7207	01	01B41	FAAAAAAA	A		DATA	X'FAAAAAAA'	
7208	01	01B42	70000000	A		DATA	X'70000000'	
7209	01	01B43	70000000	A		DATA	X'70000000'	
7210	01	01B44	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7211	01	01B45	F7F9041D	A		DATA	X'F7F9041D'	
7212	01	01B46	FFFFFFF6	A	DW21	DATA	-10	DW
7213	01	01B47	36C00460			DW,12	MEMORY	
7214	01	01B48	F73001C8			K	15,7,3,FXP0SW	
7215	01	01B49	97300169			K	9,7,3,L0C+2	
7216	01	01B4A	31111111	A		DATA	X'31111111'	
7217	01	01B4B	584D7750	A		DATA	X'584D7750'	
7218	01	01B4C	84444444	A		DATA	X'84444444'	
7219	01	01B4D	84444444	A		DATA	X'84444444'	
7220	01	01B4E	59C61C18	A		DATA	X'59C61C18'	
7221	01	01B4F	9A7B9612	A		DATA	X'9A7B9612'	
7222						PAGE		
7223	01	01B50	FFFFFFF6	A	DW22	DATA	-10	DW
7224	01	01B51	36C00460			DW,12	MEMORY	
7225	01	01B52	F73001C8			K	15,7,3,FXP0SW	
7226	01	01B53	97300169			K	9,7,3,L0C+2	
7227	01	01B54	D6666666	A		DATA	X'D6666666'	
7228	01	01B55	BE7E7E7E	A		DATA	X'BE7E7E7E'	
7229	01	01B56	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7230	01	01B57	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7231	01	01B58	66666666	A		DATA	X'66666666'	
7232	01	01B59	AC19D0AC	A		DATA	X'AC19D0AC'	
7233	01	01B5A	FFFFFFF6	A	DW23	DATA	-10	DW
7234	01	01B5B	36C00460			DW,12	MEMORY	
7235	01	01B5C	F73001C8			K	15,7,3,FXP0SW	
7236	01	01B5D	A7300169			K	10,7,3,L0C+2	
7237	01	01B5E	F1C3C731	A		DATA	X'F1C3C731'	
7238	01	01B5F	ED42FD57	A		DATA	X'ED42FD57'	
7239	01	01B60	84444444	A		DATA	X'84444444'	
7240	01	01B61	84444444	A		DATA	X'84444444'	
7241	01	01B62	3F01FC03	A		DATA	X'3F01FC03'	
7242	01	01B63	1D73C4FB	A		DATA	X'1D73C4FB'	
7243	01	01B64	FFFFFFF6	A	DW24	DATA	-10	DW
7244	01	01B65	36C00460			DW,12	MEMORY	
7245	01	01B66	F73001C8			K	15,7,3,FXP0SW	
7246	01	01B67	A7300169			K	10,7,3,L0C+2	
7247	01	01B68	36666666	A		DATA	X'36666666'	
7248	01	01B69	75555555	A		DATA	X'75555555'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7249	01	01B6A	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7250	01	01B6B	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7251	01	01B6C	99999999	A		DATA	X'99999999'	
7252	01	01B6D	6DB6DB6E	A		DATA	X'6DB6DB6E'	
7253						PAGE		
7254	01	01B6E	FFFFFFF6	A	DW25	DATA	-10	DW
7255	01	01B6F	36C00460			DW,12	MEMORY	
7256	01	01B70	F73001C8			K	15,7,3,FXP0SW	
7257	01	01B71	A7300169			K	10,7,3,L0C+2	
7258	01	01B72	27777777	A		DATA	X'27777777'	
7259	01	01B73	6DB53C70	A		DATA	X'6DB53C70'	
7260	01	01B74	70000000	A		DATA	X'70000000'	
7261	01	01B75	70000000	A		DATA	X'70000000'	
7262	01	01B76	CDB53C70	A		DATA	X'CDB53C70'	
7263	01	01B77	5A35A35A	A		DATA	X'5A35A35A'	
7264	01	01B78	FFFFFFF6	A	DW26	DATA	-10	DW
7265	01	01B79	36C00460			DW,12	MEMORY	
7266	01	01B7A	F73001C8			K	15,7,3,FXP0SW	
7267	01	01B7B	97300169			K	9,7,3,L0C+2	
7268	01	01B7C	31C3C1F0	A		DATA	X'31C3C1F0'	
7269	01	01B7D	44D906D0	A		DATA	X'44D906D0'	
7270	01	01B7E	85555555	A		DATA	X'85555555'	
7271	01	01B7F	85555555	A		DATA	X'85555555'	
7272	01	01B80	77777777	A		DATA	X'77777777'	
7273	01	01B81	9824AE0B	A		DATA	X'9824AE0B'	
7274	01	01B82	FFFFFFF6	A	DW27	DATA	-10	DW
7275	01	01B83	36C00460			DW,12	MEMORY	
7276	01	01B84	F73001C8			K	15,7,3,FXP0SW	
7277	01	01B85	97300169			K	9,7,3,L0C+2	
7278	01	01B86	D6666666	A		DATA	X'D6666666'	
7279	01	01B87	C45CB5B4	A		DATA	X'C45CB5B4'	
7280	01	01B88	79999999	A		DATA	X'79999999'	
7281	01	01B89	79999999	A		DATA	X'79999999'	
7282	01	01B8A	DF4F3C70	A		DATA	X'DF4F3C70'	
7283	01	01B8B	A86BCA1C	A		DATA	X'A86BCA1C'	
7284						PAGE		
7285	01	01B8C	FFFFFFF6	A	DW28	DATA	-10	DW
7286	01	01B8D	36C00460			DW,12	MEMORY	
7287	01	01B8E	F73001C8			K	15,7,3,FXP0SW	
7288	01	01B8F	97300169			K	9,7,3,L0C+2	
7289	01	01B90	15555555	A		DATA	X'15555555'	
7290	01	01B91	4FB8CDB4	A		DATA	X'4FB8CDB4'	
7291	01	01B92	82222222	A		DATA	X'82222222'	
7292	01	01B93	82222222	A		DATA	X'82222222'	
7293	01	01B94	59C61C18	A		DATA	X'59C61C18'	
7294	01	01B95	D49C3412	A		DATA	X'D49C3412'	
7295	01	01B96	FFFFFFF6	A	DW29	DATA	-10	DW
7296	01	01B97	36C00460			DW,12	MEMORY	
7297	01	01B98	F73001C8			K	15,7,3,FXP0SW	
7298	01	01B99	97300169			K	9,7,3,L0C+2	
7299	01	01B9A	021871E7	A		DATA	X'021871E7'	
7300	01	01B9B	09CE9631	A		DATA	X'09CE9631'	
7301	01	01B9C	83333333	A		DATA	X'83333333'	
7302	01	01B9D	83333333	A		DATA	X'83333333'	
7303	01	01B9E	77777777	A		DATA	X'77777777'	
7304	01	01B9F	FBB399A2	A		DATA	X'FBB399A2'	
7305	01	01BA0	FFFFFFF6	A	DW30	DATA	-10	DW
7306	01	01BA1	36C00460			DW,12	MEMORY	
7307	01	01BA2	F73001C8			K	15,7,3,FXP0SW	
7308	01	01BA3	A7300169			K	10,7,3,L0C+2	
7309	01	01BA4	E1111111	A		DATA	X'E1111111'	
7310	01	01BA5	BA64966C	A		DATA	X'BA64966C'	
7311	01	01BA6	87777777	A		DATA	X'87777777'	
7312	01	01BA7	87777777	A		DATA	X'87777777'	
7313	01	01BA8	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7314	01	01BA9	41B2F932	A		DATA	X'41B2F932'	
7315						PAGE		
7316	01	01BAA	FFFFFFF6	A	DW31	DATA	-10	DW
7317	01	01BAB	36C00460			DW,12	MEMORY	
7318	01	01BAC	F73001C8			K	15,7,3,FXP0SW	
7319	01	01BAD	97300169			K	9,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7320	01	01BAE	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7321	01	01BAF	88E1079C	A		DATA	X'88E1079C'	
7322	01	01BB0	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7323	01	01BB1	7EEEEEEE	A		DATA	X'7EEEEEEE'	
7324	01	01BB2	CD5B3C70	A		DATA	X'CD5B3C70'	
7325	01	01BB3	F8EAC766	A		DATA	X'F8EAC766'	
7326	01	01BB4	FFFFFFF6	A	DW32	DATA	-10	DW *
7327	01	01BB5	B6C0045A			DW,12	*IA	
7328	01	01BB6	F73001C8			K	15,7,3,FXP0SW	
7329	01	01BB7	A7300169			K	10,7,3,L0C+2	
7330	01	01BB8	15555555	A		DATA	X'15555555'	
7331	01	01BB9	11111111	A		DATA	X'11111111'	
7332	01	01BBA	70000000	A		DATA	X'70000000'	
7333	01	01BBB	70000000	A		DATA	X'70000000'	
7334	01	01BBC	11111111	A		DATA	X'11111111'	
7335	01	01BBD	30C30C30	A		DATA	X'30C30C30'	
7336	01	01BBE	FFFFFFF6	A	DW33	DATA	-10	DW X
7337	01	01BBF	36C2F34F			DW,12	MEM0RY-X'11111',1	
7338	01	01BC0	F73001C8			K	15,7,3,FXP0SW	
7339	01	01BC1	97300169			K	9,7,3,L0C+2	
7340	01	01BC2	31111111	A		DATA	X'31111111'	
7341	01	01BC3	1E4D06CC	A		DATA	X'1E4D06CC'	
7342	01	01BC4	87777777	A		DATA	X'87777777'	
7343	01	01BC5	87777777	A		DATA	X'87777777'	
7344	01	01BC6	22222222	A		DATA	X'22222222'	
7345	01	01BC7	97C9A0DA	A		DATA	X'97C9A0DA'	
7346						PAGE		
7347	01	01BC8	FFFFFFF6	A	DW34	DATA	-10	DW
7348	01	01BC9	36C00460			DW,12	MEM0RY	
7349	01	01BCA	F73001C8			K	15,7,3,FXP0SW	
7350	01	01BCB	97300169			K	9,7,3,L0C+2	
7351	01	01BCC	D6666666	A		DATA	X'D6666666'	
7352	01	01BCD	93521CFB	A		DATA	X'93521CFB'	
7353	01	01BCE	71111111	A		DATA	X'71111111'	
7354	01	01BCF	71111111	A		DATA	X'71111111'	
7355	01	01BD0	33333333	A		DATA	X'33333333'	
7356	01	01BD1	A1CFB2B8	A		DATA	X'A1CFB2B8'	
7357	01	01BD2	FFFFFFF6	A	DW35	DATA	-10	DW
7358	01	01BD3	36C00460			DW,12	MEM0RY	
7359	01	01BD4	F73001C8			K	15,7,3,FXP0SW	
7360	01	01BD5	97300169			K	9,7,3,L0C+2	
7361	01	01BD6	36666666	A		DATA	X'36666666'	
7362	01	01BD7	274B2F83	A		DATA	X'274B2F83'	
7363	01	01BD8	89999999	A		DATA	X'89999999'	
7364	01	01BD9	89999999	A		DATA	X'89999999'	
7365	01	01BDA	44444444	A		DATA	X'44444444'	
7366	01	01BDB	8A60DD69	A		DATA	X'8A60DD69'	
7367	01	01BDC	FFFFFFF6	A	DW36	DATA	-10	DW
7368	01	01BDD	36C00460			DW,12	MEM0RY	
7369	01	01BDE	F73001C8			K	15,7,3,FXP0SW	
7370	01	01BDF	A7300169			K	10,7,3,L0C+2	
7371	01	01BE0	021871E7	A		DATA	X'021871E7'	
7372	01	01BE1	48888888	A		DATA	X'48888888'	
7373	01	01BE2	70000000	A		DATA	X'70000000'	
7374	01	01BE3	70000000	A		DATA	X'70000000'	
7375	01	01BE4	88888888	A		DATA	X'88888888'	
7376	01	01BE5	04CA28EC	A		DATA	X'04CA28EC'	
7377						PAGE		
7378	01	01BE6	FFFFFFF6	A	DW37	DATA	-10	DW
7379	01	01BE7	36C00460			DW,12	MEM0RY	
7380	01	01BE8	F73001C8			K	15,7,3,FXP0SW	
7381	01	01BE9	A7300169			K	10,7,3,L0C+2	
7382	01	01BEA	E1111111	A		DATA	X'E1111111'	
7383	01	01BEB	CB75A77D	A		DATA	X'CB75A77D'	
7384	01	01BEC	87777777	A		DATA	X'87777777'	
7385	01	01BED	87777777	A		DATA	X'87777777'	
7386	01	01BEE	BBBBBBBB	A		DATA	X'BBBBBBBB'	
7387	01	01BEF	4182F932	A		DATA	X'4182F932'	
7388	01	01BF0	FFFFFFF6	A	DW38	DATA	-10	DW
7389	01	01BF1	36C00460			DW,12	MEM0RY	
7390	01	01BF2	F73001C8			K	15,7,3,FXP0SW	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7391	01	01BF3	97300169			K	9,7,3,L0C+2	
7392	01	01BF4	F1C3C731	A		DATA	X'F1C3C731'	
7393	01	01BF5	E79E5F51	A		DATA	X'E79E5F51'	
7394	01	01BF6	79999999	A		DATA	X'79999999'	
7395	01	01BF7	79999999	A		DATA	X'79999999'	
7396	01	01BF8	CCCCCCCC	A		DATA	X'CCCCCCCC'	
7397	01	01BF9	E207F433	A		DATA	X'E207F433'	
7398	01	01BFA	FFFFFFF6	A	DW39	DATA	-10	DW
7399	01	01BFB	36C00460			DW,12	MEMORY	
7400	01	01BFC	F73001C8			K	15,7,3,FXP0SW	
7401	01	01BFD	A7300169			K	10,7,3,L0C+2	
7402	01	01BFE	00000000	A		DATA	X'00000000'	
7403	01	01BFF	00000000	A		DATA	X'00000000'	
7404	01	01C00	00000001	A		DATA	X'00000001'	
7405	01	01C01	00000001	A		DATA	X'00000001'	
7406	01	01C02	00000002	A		DATA	X'00000002'	
7407	01	01C03	00000002	A		DATA	X'00000002'	
7408						PAGE		
7409	01	01C04	FFFFFFF6	A	DW40	DATA	-10	DW
7410	01	01C05	36C00460			DW,12	MEMORY	
7411	01	01C06	F73001C8			K	15,7,3,FXP0SW	
7412	01	01C07	A7300169			K	10,7,3,L0C+2	
7413	01	01C08	00000000	A		DATA	X'00000000'	
7414	01	01C09	00000000	A		DATA	X'00000000'	
7415	01	01C0A	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7416	01	01C0B	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7417	01	01C0C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7418	01	01C0D	00000001	A		DATA	X'00000001'	
7419	01	01C0E	FFFFFFF6	A	DW41	DATA	-10	DW
7420	01	01C0F	36C00460			DW,12	MEMORY	
7421	01	01C10	F73001C8			K	15,7,3,FXP0SW	
7422	01	01C11	A7300169			K	10,7,3,L0C+2	
7423	01	01C12	00000000	A		DATA	X'00000000'	
7424	01	01C13	00000000	A		DATA	X'00000000'	
7425	01	01C14	00000001	A		DATA	X'00000001'	
7426	01	01C15	00000001	A		DATA	X'00000001'	
7427	01	01C16	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7428	01	01C17	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7429	01	01C18	FFFFFFF6	A	DW42	DATA	-10	DW
7430	01	01C19	36C00460			DW,12	MEMORY	
7431	01	01C1A	F73001C8			K	15,7,3,FXP0SW	
7432	01	01C1B	A7300169			K	10,7,3,L0C+2	
7433	01	01C1C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7434	01	01C1D	00000000	A		DATA	X'00000000'	
7435	01	01C1E	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7436	01	01C1F	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7437	01	01C20	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7438	01	01C21	00000002	A		DATA	X'00000002'	
7439						PAGE		
7440	01	01C22	FFFFFFF6	A	DW43	DATA	-10	DW
7441	01	01C23	36C00460			DW,12	MEMORY	
7442	01	01C24	F73001C8			K	15,7,3,FXP0SW	
7443	01	01C25	A7300169			K	10,7,3,L0C+2	
7444	01	01C26	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7445	01	01C27	00000000	A		DATA	X'00000000'	
7446	01	01C28	80000001	A		DATA	X'80000001'	
7447	01	01C29	80000001	A		DATA	X'80000001'	
7448	01	01C2A	80000001	A		DATA	X'80000001'	
7449	01	01C2B	00000001	A		DATA	X'00000001'	
7450	01	01C2C	FFFFFFF6	A	DW44	DATA	-10	DW
7451	01	01C2D	36C00460			DW,12	MEMORY	
7452	01	01C2E	F73001C8			K	15,7,3,FXP0SW	
7453	01	01C2F	A7300169			K	10,7,3,L0C+2	
7454	01	01C30	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7455	01	01C31	00000000	A		DATA	X'00000000'	
7456	01	01C32	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7457	01	01C33	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7458	01	01C34	80000001	A		DATA	X'80000001'	
7459	01	01C35	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7460	01	01C36	FFFFFFF6	A	DW45	DATA	-10	DW
7461	01	01C37	36C00460			DW,12	MEMORY	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7462	01	01C38	F73001C8			K	15,7,3,FXP0SW	
7463	01	01C39	97300169			K	9,7,3,L0C+2	
7464	01	01C3A	00000000	A		DATA	X'00000000'	
7465	01	01C3B	00000000	A		DATA	X'00000000'	
7466	01	01C3C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7467	01	01C3D	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7468	01	01C3E	00000002	A		DATA	X'00000002'	
7469	01	01C3F	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7470						PAGE		
7471	01	01C40	FFFFFFF6	A	DW46	DATA	-10	DW
7472	01	01C41	36C00460			DW,12	MEMORY	
7473	01	01C42	F73001C8			K	15,7,3,FXP0SW	
7474	01	01C43	97300169			K	9,7,3,L0C+2	
7475	01	01C44	00000000	A		DATA	X'00000000'	
7476	01	01C45	00000000	A		DATA	X'00000000'	
7477	01	01C46	80000001	A		DATA	X'80000001'	
7478	01	01C47	80000001	A		DATA	X'80000001'	
7479	01	01C48	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7480	01	01C49	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7481	01	01C4A	FFFFFFF6	A	DW47	DATA	-10	DW
7482	01	01C4B	36C00460			DW,12	MEMORY	
7483	01	01C4C	F73001C8			K	15,7,3,FXP0SW	
7484	01	01C4D	97300169			K	9,7,3,L0C+2	
7485	01	01C4E	00000000	A		DATA	X'00000000'	
7486	01	01C4F	00000000	A		DATA	X'00000000'	
7487	01	01C50	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7488	01	01C51	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7489	01	01C52	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7490	01	01C53	80000001	A		DATA	X'80000001'	
7491	01	01C54	FFFFFFF6	A	DW48	DATA	-10	DW
7492	01	01C55	36C00460			DW,12	MEMORY	
7493	01	01C56	F73001C8			K	15,7,3,FXP0SW	
7494	01	01C57	97300169			K	9,7,3,L0C+2	
7495	01	01C58	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7496	01	01C59	00000000	A		DATA	X'00000000'	
7497	01	01C5A	00000001	A		DATA	X'00000001'	
7498	01	01C5B	00000001	A		DATA	X'00000001'	
7499	01	01C5C	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7500	01	01C5D	FFFFFFFE	A		DATA	X'FFFFFFFE'	
7501						PAGE		
7502	01	01C5E	FFFFFFF6	A	DW49	DATA	-10	DW
7503	01	01C5F	36C00460			DW,12	MEMORY	
7504	01	01C60	F73001C8			K	15,7,3,FXP0SW	
7505	01	01C61	97300169			K	9,7,3,L0C+2	
7506	01	01C62	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7507	01	01C63	00000000	A		DATA	X'00000000'	
7508	01	01C64	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7509	01	01C65	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7510	01	01C66	80000001	A		DATA	X'80000001'	
7511	01	01C67	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7512	01	01C68	FFFFFFF6	A	DW50	DATA	-10	DW
7513	01	01C69	36C00460			DW,12	MEMORY	
7514	01	01C6A	F73001C8			K	15,7,3,FXP0SW	
7515	01	01C6B	97300169			K	9,7,3,L0C+2	
7516	01	01C6C	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7517	01	01C6D	00000000	A		DATA	X'00000000'	
7518	01	01C6E	00000001	A		DATA	X'00000001'	
7519	01	01C6F	00000001	A		DATA	X'00000001'	
7520	01	01C70	80000001	A		DATA	X'80000001'	
7521	01	01C71	80000001	A		DATA	X'80000001'	
7522	01	01C72	FFFFFFF6	A	DW51	DATA	-10	DW
7523	01	01C73	36C00460			DW,12	MEMORY	
7524	01	01C74	F73001C8			K	15,7,3,FXP0SW	
7525	01	01C75	A7300169			K	10,7,3,L0C+2	
7526	01	01C76	01234567	A		DATA	X'01234567'	
7527	01	01C77	0DD441AF	A		DATA	X'0DD441AF'	
7528	01	01C78	42468ACE	A		DATA	X'42468ACE'	
7529	01	01C79	42468ACE	A		DATA	X'42468ACE'	
7530	01	01C7A	89ABCDEF	A		DATA	X'89ABCDEF'	
7531	01	01C7B	046514E0	A		DATA	X'046514E0'	
7532						PAGE		

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7533	01	01C7C	FFFFFFF6	A	DW52	DATA	-10	DW
7534	01	01C7D	36C00460			DW,12	MEMORY	
7535	01	01C7E	F73001C8			K	15,7,3,FXP0SW	
7536	01	01C7F	A7300169			K	10,7,3,L0C+2	
7537	01	01C80	258BE147	A		DATA	X'258BE147'	
7538	01	01C81	55A20A6F	A		DATA	X'55A20A6F'	
7539	01	01C82	56AE37BF	A		DATA	X'56AE37BF'	
7540	01	01C83	56AE37BF	A		DATA	X'56AE37BF'	
7541	01	01C84	AD0369CF	A		DATA	X'AD0369CF'	
7542	01	01C85	6EE378A0	A		DATA	X'6EE378A0'	
7543	01	01C86	FFFFFFF6	A	DW53	DATA	-10	DW
7544	01	01C87	36C00460			DW,12	MEMORY	
7545	01	01C88	F73001C8			K	15,7,3,FXP0SW	
7546	01	01C89	F7300084			K	15,7,3,FP0RET+1	
7547	01	01C8A	DF1357BD	A		DATA	X'DF1357BD'	
7548	01	01C8B	DF1357BD	A		DATA	X'DF1357BD'	
7549	01	01C8C	E13579BD	A		DATA	X'E13579BD'	
7550	01	01C8D	E13579BD	A		DATA	X'E13579BD'	
7551	01	01C8E	F2468ACE	A		DATA	X'F2468ACE'	
7552	01	01C8F	F2468ACE	A		DATA	X'F2468ACE'	
7553	01	01C90	FFFFFFF6	A	DW54	DATA	-10	DW
7554	01	01C91	36C00460			DW,12	MEMORY	
7555	01	01C92	F73001C8			K	15,7,3,FXP0SW	
7556	01	01C93	A7300169			K	10,7,3,L0C+2	
7557	01	01C94	E26AE38D	A		DATA	X'E26AE38D'	
7558	01	01C95	92D13AE2	A		DATA	X'92D13AE2'	
7559	01	01C96	8147AD03	A		DATA	X'8147AD03'	
7560	01	01C97	8147AD03	A		DATA	X'8147AD03'	
7561	01	01C98	27C16B05	A		DATA	X'27C16B05'	
7562	01	01C99	3BC33661	A		DATA	X'3BC33661'	
7563						PAGE		
7564	01	01C9A	FFFFFFF6	A	DW55	DATA	-10	DW
7565	01	01C9B	36C00460			DW,12	MEMORY	
7566	01	01C9C	F73001C8			K	15,7,3,FXP0SW	
7567	01	01C9D	F7300084			K	15,7,3,FP0RET+1	
7568	01	01C9E	148BF37B	A		DATA	X'148BF37B'	
7569	01	01C9F	148BF37B	A		DATA	X'148BF37B'	
7570	01	01CA0	E26AF49F	A		DATA	X'E26AF49F'	
7571	01	01CA1	E26AF49F	A		DATA	X'E26AF49F'	
7572	01	01CA2	F37BF49E	A		DATA	X'F37BF49E'	
7573	01	01CA3	F37BF49E	A		DATA	X'F37BF49E'	
7574	01	01CA4	FFFFFFF6	A	DW56	DATA	-10	DW
7575	01	01CA5	36C00460			DW,12	MEMORY	
7576	01	01CA6	F73001C8			K	15,7,3,FXP0SW	
7577	01	01CA7	97300169			K	9,7,3,L0C+2	
7578	01	01CA8	F0259E49	A		DATA	X'F0259E49'	
7579	01	01CA9	DBE59C60	A		DATA	X'DBE59C60'	
7580	01	01CAA	457AE39F	A		DATA	X'457AE39F'	
7581	01	01CAB	457AE39F	A		DATA	X'457AE39F'	
7582	01	01CAC	ABE159F0	A		DATA	X'ABE159F0'	
7583	01	01CAD	C596D870	A		DATA	X'C596D870'	
7584	01	01CAE	FFFFFFF6	A	DW57	DATA	-10	DW
7585	01	01CAF	36C00460			DW,12	MEMORY	
7586	01	01CB0	F73001C8			K	15,7,3,FXP0SW	
7587	01	01CB1	97300169			K	9,7,3,L0C+2	
7588	01	01CB2	00000000	A		DATA	X'00000000'	
7589	01	01CB3	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7590	01	01CB4	80000000	A		DATA	X'80000000'	
7591	01	01CB5	80000000	A		DATA	X'80000000'	
7592	01	01CB6	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7593	01	01CB7	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7594						PAGE		
7595	01	01CB8	FFFFFFF6	A	DW58	DATA	-10	DW
7596	01	01CB9	36C00460			DW,12	MEMORY	
7597	01	01CBA	F73001C8			K	15,7,3,FXP0SW	
7598	01	01CBB	A7300169			K	10,7,3,L0C+2	
7599	01	01CBC	C0000000	A		DATA	X'C0000000'	
7600	01	01CBD	80000001	A		DATA	X'80000001'	
7601	01	01CBE	80000000	A		DATA	X'80000000'	
7602	01	01CBF	80000000	A		DATA	X'80000000'	
7603	01	01CC0	00000001	A		DATA	X'00000001'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7604	01	01CC1	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7605	01	01CC2	FFFFFFF6	A	DW59	DATA	-10	DW
7606	01	01CC3	36C00460			DW,12	MEMORY	
7607	01	01CC4	F73001C8			K	15,7,3,FXP0SW	
7608	01	01CC5	A7300169			K	10,7,3,L0C+2	
7609	01	01CC6	F0000000	A		DATA	X'F0000000'	
7610	01	01CC7	00000000	A		DATA	X'00000000'	
7611	01	01CC8	80000000	A		DATA	X'80000000'	
7612	01	01CC9	80000000	A		DATA	X'80000000'	
7613	01	01CCA	00000000	A		DATA	X'00000000'	
7614	01	01CCB	20000000	A		DATA	X'20000000'	
7615	01	01CCC	FFFFFFF6	A	DW60	DATA	-10	DW
7616	01	01CCD	36C00460			DW,12	MEMORY	
7617	01	01CCE	B73001C8			K	11,7,3,FXP0SW	
7618	01	01CCF	F7300084			K	15,7,3,FP0RET+1	
7619	01	01CD0	30000000	A		DATA	X'30000000'	
7620	01	01CD1	30000000	A		DATA	X'30000000'	
7621	01	01CD2	A0000000	A		DATA	X'A0000000'	
7622	01	01CD3	A0000000	A		DATA	X'A0000000'	
7623	01	01CD4	00000001	A		DATA	X'00000001'	
7624	01	01CD5	00000001	A		DATA	X'00000001'	
7625						PAGE		
7626	01	01CD6	FFFFFFF6	A	DW61	DATA	-10	DW
7627	01	01CD7	36C00460			DW,12	MEMORY	
7628	01	01CD8	F73001C8			K	15,7,3,FXP0SW	
7629	01	01CD9	97300169			K	9,7,3,L0C+2	
7630	01	01CDA	28CE5BDF	A		DATA	X'28CE5BDF'	
7631	01	01CDB	006C9928	A		DATA	X'006C9928'	
7632	01	01CDC	8ACE9FBD	A		DATA	X'8ACE9FBD'	
7633	01	01CDD	8ACE9FBD	A		DATA	X'8ACE9FBD'	
7634	01	01CDE	5A3E6E7F	A		DATA	X'5A3E6E7F'	
7635	01	01CDF	A6DCA0A3	A		DATA	X'A6DCA0A3'	
7636	01	01CE0	FFFFFFF6	A	DW62	DATA	-10	DW
7637	01	01CE1	36C00460			DW,12	MEMORY	
7638	01	01CE2	F73001C8			K	15,7,3,FXP0SW	
7639	01	01CE3	97300169			K	9,7,3,L0C+2	
7640	01	01CE4	28E45B17	A		DATA	X'28E45B17'	
7641	01	01CE5	4F57573B	A		DATA	X'4F57573B'	
7642	01	01CE6	A13BF37D	A		DATA	X'A13BF37D'	
7643	01	01CE7	A13BF37D	A		DATA	X'A13BF37D'	
7644	01	01CE8	A09CD39F	A		DATA	X'A09CD39F'	
7645	01	01CE9	9188D334	A		DATA	X'9188D334'	
7646	01	01CEA	FFFFFFF6	A	DW63	DATA	-10	DW
7647	01	01CEB	36C00460			DW,12	MEMORY	
7648	01	01CEC	F73001C8			K	15,7,3,FXP0SW	
7649	01	01CED	A7300169			K	10,7,3,L0C+2	
7650	01	01CEE	FE8C26AE	A		DATA	X'FE8C26AE'	
7651	01	01CEF	F86A5FFC	A		DATA	X'F86A5FFC'	
7652	01	01CF0	F67B159D	A		DATA	X'F67B159D'	
7653	01	01CF1	F67B159D	A		DATA	X'F67B159D'	
7654	01	01CF2	F4A017D3	A		DATA	X'F4A017D3'	
7655	01	01CF3	27102303	A		DATA	X'27102303'	
7656						PAGE		
7657	01	01CF4	FFFFFFF6	A	DW64	DATA	-10	DW
7658	01	01CF5	36C00460			DW,12	MEMORY	
7659	01	01CF6	F73001C8			K	15,7,3,FXP0SW	
7660	01	01CF7	97300169			K	9,7,3,L0C+2	
7661	01	01CF8	E6E82A3D	A		DATA	X'E6E82A3D'	
7662	01	01CF9	C0DD5EE4	A		DATA	X'C0DD5EE4'	
7663	01	01CFA	78F74B3B	A		DATA	X'78F74B3B'	
7664	01	01CFB	78F74B3B	A		DATA	X'78F74B3B'	
7665	01	01CFC	2C6071B5	A		DATA	X'2C6071B5'	
7666	01	01CFD	CAE54163	A		DATA	X'CAE54163'	
7667	01	01CFE	FFFFFFF6	A	DW65	DATA	-10	DW
7668	01	01CFF	36C00460			DW,12	MEMORY	
7669	01	01D00	F73001C8			K	15,7,3,FXP0SW	
7670	01	01D01	A7300169			K	10,7,3,L0C+2	
7671	01	01D02	F7F93B4E	A		DATA	X'F7F93B4E'	
7672	01	01D03	F2D2BD30	A		DATA	X'F2D2BD30'	
7673	01	01D04	E6F22A4F	A		DATA	X'E6F22A4F'	
7674	01	01D05	E6F22A4F	A		DATA	X'E6F22A4F'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7675	01	01D06	47E95A3F	A		DATA	X'47E95A3F'	
7676	01	01D07	52037141	A		DATA	X'52037141'	
7677	01	01D08	FFFFFFF6	A	DW66	DATA	-10	DW
7678	01	01D09	36C00460			DW,12	MEMORY	
7679	01	01D0A	F73001C8			K	15,7,3,FXP0SW	
7680	01	01D0B	97300169			K	9,7,3,L0C+2	
7681	01	01D0C	F29405E9	A		DATA	X'F29405E9'	
7682	01	01D0D	EDA31B94	A		DATA	X'EDA31B94'	
7683	01	01D0E	690B7C52	A		DATA	X'690B7C52'	
7684	01	01D0F	690B7C52	A		DATA	X'690B7C52'	
7685	01	01D10	AE58B190	A		DATA	X'AE58B190'	
7686	01	01D11	DF4A56CE	A		DATA	X'DF4A56CE'	
7687						PAGE		
7688	01	01D12	FFFFFFF6	A	DW67	DATA	-10	DW
7689	01	01D13	36C00460			DW,12	MEMORY	
7690	01	01D14	F73001C8			K	15,7,3,FXP0SW	
7691	01	01D15	A7300169			K	10,7,3,L0C+2	
7692	01	01D16	2D3297C8	A		DATA	X'2D3297C8'	
7693	01	01D17	1F22516F	A		DATA	X'1F22516F'	
7694	01	01D18	77532167	A		DATA	X'77532167'	
7695	01	01D19	77532167	A		DATA	X'77532167'	
7696	01	01D1A	C237DAC1	A		DATA	X'C237DAC1'	
7697	01	01D1B	60F79EDE	A		DATA	X'60F79EDE'	
7698	01	01D1C	FFFFFFF6	A	DW68	DATA	-10	DW
7699	01	01D1D	36C00460			DW,12	MEMORY	
7700	01	01D1E	F73001C8			K	15,7,3,FXP0SW	
7701	01	01D1F	A7300169			K	10,7,3,L0C+2	
7702	01	01D20	FAC41382	A		DATA	X'FAC41382'	
7703	01	01D21	EAC346BA	A		DATA	X'EAC346BA'	
7704	01	01D22	E0FC7F1C	A		DATA	X'E0FC7F1C'	
7705	01	01D23	E0FC7F1C	A		DATA	X'E0FC7F1C'	
7706	01	01D24	446E28CA	A		DATA	X'446E28CA'	
7707	01	01D25	2B344B5C	A		DATA	X'2B344B5C'	
7708	01	01D26	FFFFFFF6	A	DW69	DATA	-10	DW
7709	01	01D27	36C00460			DW,12	MEMORY	
7710	01	01D28	F73001C8			K	15,7,3,FXP0SW	
7711	01	01D29	A7300169			K	10,7,3,L0C+2	
7712	01	01D2A	253F7EA9	A		DATA	X'253F7EA9'	
7713	01	01D2B	57824166	A		DATA	X'57824166'	
7714	01	01D2C	67B5C610	A		DATA	X'67B5C610'	
7715	01	01D2D	67B5C610	A		DATA	X'67B5C610'	
7716	01	01D2E	3D7182C6	A		DATA	X'3D7182C6'	
7717	01	01D2F	5BF19BD6	A		DATA	X'5BF19BD6'	
7718						PAGE		
7719	01	01D30	FFFFFFF6	A	DW70	DATA	-10	DW
7720	01	01D31	36C00460			DW,12	MEMORY	
7721	01	01D32	F73001C8			K	15,7,3,FXP0SW	
7722	01	01D33	A7300169			K	10,7,3,L0C+2	
7723	01	01D34	135BDF7D	A		DATA	X'135BDF7D'	
7724	01	01D35	19C47069	A		DATA	X'19C47069'	
7725	01	01D36	67B980C1	A		DATA	X'67B980C1'	
7726	01	01D37	67B980C1	A		DATA	X'67B980C1'	
7727	01	01D38	9BAE1B05	A		DATA	X'9BAE1B05'	
7728	01	01D39	2FC7759C	A		DATA	X'2FC7759C'	
7729	01	01D3A	FFFFFFF6	A	DW71	DATA	-10	DW0
7730	01	01D3B	36D00460			DW,13	MEMORY	
7731	01	01D3C	F73001C8			K	15,7,3,FXP0SW	
7732	01	01D3D	A7300169			K	10,7,3,L0C+2	
7733	01	01D3E	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7734	01	01D3F	FFFFFFFF	A		DATA	-1	
7735	01	01D40	26106573	A		DATA	X'26106573'	
7736	01	01D41	26106573	A		DATA	X'26106573'	
7737	01	01D42	59D73C28	A		DATA	X'59D73C28'	
7738	01	01D43	00000002	A		DATA	X'00000002'	
7739	01	01D44	FFFFFFF6	A	DW72	DATA	-10	DW
7740	01	01D45	36D00460			DW,13	MEMORY	
7741	01	01D46	F73001C8			K	15,7,3,FXP0SW	
7742	01	01D47	A7300169			K	10,7,3,L0C+2	
7743	01	01D48	00000000	A		DATA	X'00000000'	
7744	01	01D49	00000000	A		DATA	X'00000000'	
7745	01	01D4A	F1A3C842	A		DATA	X'F1A3C842'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7746	01	01D4B	F1A3C842	A		DATA	X'F1A3C842'	
7747	01	01D4C	CD2A3C71	A		DATA	X'CD2A3C71'	
7748	01	01D4D	00000003	A		DATA	X'00000003'	
7749						PAGE		
7750	01	01D4E	FFFFFFF6	A	DW73	DATA	-10	DW
7751	01	01D4F	36D00460			DW,13	MEMORY	
7752	01	01D50	F73001C8			K	15,7,3,FXPSW	
7753	01	01D51	A7300169			K	10,7,3,LOC+2	
7754	01	01D52	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7755	01	01D53	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7756	01	01D54	00000002	A		DATA	X'00000002'	
7757	01	01D55	00000002	A		DATA	X'00000002'	
7758	01	01D56	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7759	01	01D57	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7760	01	01D58	FFFFFFF6	A	DW74	DATA	-10	DW
7761	01	01D59	36D00460			DW,13	MEMORY	
7762	01	01D5A	F73001C8			K	15,7,3,FXPSW	
7763	01	01D5B	87300169			K	8,7,3,LOC+2	
7764	01	01D5C	00000000	A		DATA	X'00000000'	
7765	01	01D5D	00000000	A		DATA	X'00000000'	
7766	01	01D5E	42486CEA	A		DATA	X'42486CEA'	
7767	01	01D5F	42486CEA	A		DATA	X'42486CEA'	
7768	01	01D60	FC7CF1CC	A		DATA	X'FC7CF1CC'	
7769	01	01D61	00000000	A		DATA	X'00000000'	
7770	01	01D62	FFFFFFF6	A	DW75	DATA	-10	DW
7771	01	01D63	36D00460			DW,13	MEMORY	
7772	01	01D64	F73001C8			K	15,7,3,FXPSW	
7773	01	01D65	A7300169			K	10,7,3,LOC+2	
7774	01	01D66	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7775	01	01D67	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7776	01	01D68	2C76B150	A		DATA	X'2C76B150'	
7777	01	01D69	2C76B150	A		DATA	X'2C76B150'	
7778	01	01D6A	475E3AF9	A		DATA	X'475E3AF9'	
7779	01	01D6B	00000001	A		DATA	X'00000001'	
7780						PAGE		
7781	01	01D6C	FFFFFFF6	A	DW76	DATA	-10	DW
7782	01	01D6D	36D00460			DW,13	MEMORY	
7783	01	01D6E	F73001C8			K	15,7,3,FXPSW	
7784	01	01D6F	97300169			K	9,7,3,LOC+2	
7785	01	01D70	00000000	A		DATA	X'00000000'	
7786	01	01D71	00000000	A		DATA	X'00000000'	
7787	01	01D72	00004444	A		DATA	X'00004444'	
7788	01	01D73	00004444	A		DATA	X'00004444'	
7789	01	01D74	D1F375DB	A		DATA	X'D1F375DB'	
7790	01	01D75	FFFF5351	A		DATA	X'FFFF5351'	
7791	01	01D76	FFFFFFF6	A	DW77	DATA	-10	DW
7792	01	01D77	36D00460			DW,13	MEMORY	
7793	01	01D78	F73001C8			K	15,7,3,FXPSW	
7794	01	01D79	A7300169			K	10,7,3,LOC+2	
7795	01	01D7A	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7796	01	01D7B	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7797	01	01D7C	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7798	01	01D7D	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7799	01	01D7E	7FFFFFFF	A		DATA	X'7FFFFFFF'	
7800	01	01D7F	00000001	A		DATA	X'00000001'	
7801	01	01D80	FFFFFFF6	A	DW78	DATA	-10	DW
7802	01	01D81	36D00460			DW,13	MEMORY	
7803	01	01D82	F73001C8			K	15,7,3,FXPSW	
7804	01	01D83	97300169			K	9,7,3,LOC+2	
7805	01	01D84	00000000	A		DATA	X'00000000'	
7806	01	01D85	00000000	A		DATA	X'00000000'	
7807	01	01D86	00000004	A		DATA	X'00000004'	
7808	01	01D87	00000004	A		DATA	X'00000004'	
7809	01	01D88	FFFFFFE1	A		DATA	X'FFFFFFE1'	
7810	01	01D89	FFFFFFF9	A		DATA	X'FFFFFFF9'	
7811						PAGE		
7812	01	01D8A	FFFFFFF6	A	DW79	DATA	-10	DW
7813	01	01D8B	36D00460			DW,13	MEMORY	
7814	01	01D8C	F73001C8			K	15,7,3,FXPSW	
7815	01	01D8D	87300169			K	8,7,3,LOC+2	
7816	01	01D8E	FFFFFFFF	A		DATA	X'FFFFFFFF'	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7817	01	01D8F	FFFFFFFF	A		DATA	X'FFFFFFFF'	
7818	01	01D90	55555555	A		DATA	X'55555555'	
7819	01	01D91	55555555	A		DATA	X'55555555'	
7820	01	01D92	0D0396FC	A		DATA	X'0D0396FC'	
7821	01	01D93	00000000	A		DATA	X'00000000'	
7822	01	01D94	FFFFFFF6	A	DW80	DATA	-10	DW
7823	01	01D95	36D00460			DW,13	MEMORY	
7824	01	01D96	F73001C8			K	15,7,3,FXP0SW	
7825	01	01D97	A7300169			K	10,7,3,L0C+2	
7826	01	01D98	00000000	A		DATA	X'00000000'	
7827	01	01D99	00000000	A		DATA	X'00000000'	
7828	01	01D9A	FFFFFFFA	A		DATA	X'FFFFFFFA'	
7829	01	01D9B	FFFFFFFA	A		DATA	X'FFFFFFFA'	
7830	01	01D9C	80000001	A		DATA	X'80000001'	
7831	01	01D9D	15555555	A		DATA	X'15555555'	
7832						PAGE		
7833	01	01D9E	FFFFFFF6	A	DH01	DATA	-10	DH
7834	01	01D9F	56C00460			DH,12	MEMORY	
7835	01	01DA0	F73001C8			K	15,7,3,FXP0SW	
7836	01	01DA1	A7300169			K	10,7,3,L0C+2	
7837	01	01DA2	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7838	01	01DA3	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7839	01	01DA4	00010000	A		DATA	X'00010000'	
7840	01	01DA5	00010000	A		DATA	X'00010000'	
7841	01	01DA6	00000000	A		DATA	X'00000000'	
7842	01	01DA7	00000000	A		DATA	X'00000000'	
7843	01	01DA8	FFFFFFF6	A	DH02	DATA	-10	DH
7844	01	01DA9	56C00460			DH,12	MEMORY	
7845	01	01DAA	F73001C8			K	15,7,3,FXP0SW	
7846	01	01DAB	A7300169			K	10,7,3,L0C+2	
7847	01	01DAC	C0000000	A		DATA	X'C0000000'	
7848	01	01DAD	20000000	A		DATA	X'20000000'	
7849	01	01DAE	FFFE0000	A		DATA	X'FFFE0000'	
7850	01	01DAF	FFFE0000	A		DATA	X'FFFE0000'	
7851	01	01DB0	00000000	A		DATA	X'00000000'	
7852	01	01DB1	00000000	A		DATA	X'00000000'	
7853	01	01DB2	FFFFFFF6	A	DH03	DATA	-10	DH X
7854	01	01DB3	56CE0460			DH,12	MEMORY,7	
7855	01	01DB4	F73001C8			K	15,7,3,FXP0SW	
7856	01	01DB5	97300169			K	9,7,3,L0C+2	
7857	01	01DB6	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7858	01	01DB7	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7859	01	01DB8	00000001	A		DATA	X'00000001'	
7860	01	01DB9	00000001	A		DATA	X'00000001'	
7861	01	01DBA	00000000	A		DATA	X'00000000'	
7862	01	01DBB	00000000	A		DATA	X'00000000'	
7863						PAGE		
7864	01	01DBC	FFFFFFF6	A	DH04	DATA	-10	DH X
7865	01	01DBD	56CE0460			DH,12	MEMORY,7	
7866	01	01DBE	F73001C8			K	15,7,3,FXP0SW	
7867	01	01DBF	97300169			K	9,7,3,L0C+2	
7868	01	01DC0	25555555	A		DATA	X'25555555'	
7869	01	01DC1	ED555556	A		DATA	X'ED555556'	
7870	01	01DC2	0000FFFE	A		DATA	X'0000FFFE'	
7871	01	01DC3	0000FFFE	A		DATA	X'0000FFFE'	
7872	01	01DC4	00000000	A		DATA	X'00000000'	
7873	01	01DC5	00000000	A		DATA	X'00000000'	
7874	01	01DC6	FFFFFFF6	A	DH05	DATA	-10	DH0
7875	01	01DC7	56D00460			DH,13	MEMORY	
7876	01	01DC8	F73001C8			K	15,7,3,FXP0SW	
7877	01	01DC9	A7300169			K	10,7,3,L0C+2	
7878	01	01DCA	00000000	A		DATA	X'00000000'	
7879	01	01DCB	00000000	A		DATA	X'00000000'	
7880	01	01DCC	40000000	A		DATA	X'40000000'	
7881	01	01DCD	40000000	A		DATA	X'40000000'	
7882	01	01DCE	3FFFFFFF	A		DATA	X'3FFFFFFF'	
7883	01	01DCF	0000FFFF	A		DATA	X'0000FFFF'	
7884	01	01DD0	FFFFFFF6	A	DH06	DATA	-10	DH
7885	01	01DD1	56D00460			DH,13	MEMORY	
7886	01	01DD2	F73001C8			K	15,7,3,FXP0SW	
7887	01	01DD3	A7300169			K	10,7,3,L0C+2	

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7888	01	01DD4	00000000	A		DATA	X'00000000'	
7889	01	01DD5	00000000	A		DATA	X'00000000'	
7890	01	01DD6	B7770000	A		DATA	X'B7770000'	
7891	01	01DD7	B7770000	A		DATA	X'B7770000'	
7892	01	01DD8	C0000000	A		DATA	X'C0000000'	
7893	01	01DD9	0000E1E0	A		DATA	X'0000E1E0'	
7894						PAGE		
7895	01	01DDA	FFFFFFF6	A	DH07	DATA	-10	DH X
7896	01	01DDB	56DE0460			DH,13	MEMORY,7	
7897	01	01DDC	F73001C8			K	15,7,3,FXPSW	
7898	01	01DDD	97300169			K	9,7,3,LOC+2	
7899	01	01DDE	00000000	A		DATA	X'00000000'	
7900	01	01DDF	00000000	A		DATA	X'00000000'	
7901	01	01DE0	00004000	A		DATA	X'00004000'	
7902	01	01DE1	00004000	A		DATA	X'00004000'	
7903	01	01DE2	AAAAAAAA	A		DATA	X'AAAAAAAA'	
7904	01	01DE3	FFFEAAAB	A		DATA	X'FFFEAAAB'	
7905	01	01DE4	FFFFFFF6	A	DH08	DATA	-10	DH *X
7906	01	01DE5	D6D2045A	/		DH,13	*IA,1	
7907	01	01DE6	F73001C8			K	15,7,3,FXPSW	
7908	01	01DE7	97300169			K	9,7,3,LOC+2	
7909	01	01DE8	00000001	A		DATA	1	
7910	01	01DE9	00000001	A		DATA	1	
7911	01	01DEA	0000B777	A		DATA	X'0000B777'	
7912	01	01DEB	0000B777	A		DATA	X'0000B777'	
7913	01	01DEC	25555555	A		DATA	X'25555555'	
7914	01	01DED	FFFF7C3E	A		DATA	X'FFFF7C3E'	
7915					*			*E
7916					*	CHECK THAT LAS DOES NOT TRAP		*E
7917					*	EXPECTED RESULT WITH OLD MEMORY IS LW		*E
7918					*			*E
7919	01	01DEE	FFFFFFF8	A	LAS1	DATA	-8	*E
7920	01	01DEF	26C00460			K	2,6,X'C',MEMORY	*E
7921	01	01DF0	00000136			DATA	SETPSW	*E
7922	01	01DF1	00000169			DATA	LOC+2	*E
7923	01	01DF2	00000000	A		DATA	0	*E
7924	01	01DF3	80000000	A		DATA	X'80000000'	*E
7925	01	01DF4	80000000	A		DATA	X'80000000'	*E
7926	01	01DF5	80000000	A		DATA	X'80000000'	*E
7927					*			*E
7928					*	CHECK THAT LMS DOES NOT TRAP		*E
7929					*	EXPECTED RESULT OLD MEMORY ISLOAD OF INSTRUCTION INTO R		*E
7930					*			*E
7931	01	01DF6	FFFFFFFA	A	LMS1	DATA	-6	*E
7932	01	01DF7	2DC00460			K	2,X'D',X'C',MEMORY	*E
7933	01	01DF8	00000136			DATA	SETPSW	*E
7934	01	01DF9	00000169			DATA	LOC+2	*E
7935	01	01DFA	00000000	A		DATA	0	*E
7936	01	01DFB	2DC00460			K	2,X'D',X'C',MEMORY	*E
7937					*			*E
7938					*			*E
7939					*			*E
7940					*			*E
7941					EOMSG1	TEXT	'NINSTRUCTIONS LOAD MEMORY STATUS (LMS) AND',;	*E
7942							'NLOAD AND SET (LAS) ARE NOT INSTALLED AND ',;	*E
7943	01	01DFC	15C9D5E2	A			'WILL NOT BE CHECKED FURTHER '	*E
	01	01DFD	E3D9E4C3	A				
	01	01DFE	E3C9D6D5	A				
	01	01DFF	E240D3D6	A				
	01	01E00	C1C440D4	A				
	01	01E01	C5D4D6D9	A				
	01	01E02	E840E2E3	A				
	01	01F03	C1E3E4E2	A				
	01	01E04	404DD3D4	A				
	01	01E05	E25D40C1	A				
	01	01E06	D5C415D3	A				
	01	01E07	D6C1C440	A				
	01	01E08	C1D5C440	A				
	01	01E09	E2C5E340	A				
	01	01E0A	4DD3C1E2	A				
	01	01E0B	5D40C1D9	A				

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
	01	01E0C	C540D5D6	A				
	01	01E0D	E340C9D5	A				
	01	01E0E	E2E3C1D3	A				
	01	01E0F	D3C5C440	A				
	01	01E10	C1D5C440	A				
	01	01E11	E6C9D3D3	A				
	01	01E12	40D5D6E3	A				
	01	01E13	40C2C540	A				
	01	01E14	C3C8C5C3	A				
	01	01E15	D2C5C440	A				
	01	01E16	C6E4D9E3	A				
	01	01E17	C8C5D940	A				
7944						TEXT	'NDISREGARD THE NEXT ERRØR LINE, IT WILL BE',;	*E
7945	01	01E18	15C4C9E2	A			'FØR INSTRUCTIØN LMS'	*E
	01	01E19	D9C5C7C1	A				
	01	01E1A	D9C440E3	A				
	01	01E1B	C8C540D5	A				
	01	01E1C	C5E7E340	A				
	01	01E1D	C5D9D9D6	A				
	01	01E1E	D940D3C9	A				
	01	01E1F	D5C56B40	A				
	01	01E20	C9E340E6	A				
	01	01E21	C9D3D340	A				
	01	01E22	C2C5C6D6	A				
	01	01E23	D940C9D5	A				
	01	01E24	E2E3D9E4	A				
	01	01E25	C3E3C9D6	A				
	01	01E26	D540D3D4	A				
	01	01E27	E2404040	A				
7946		01 01E28			EØMSG2	EQU	$	*E
7947						BØUND	8	*E
7948	01	01E28	050077F0 080000B0	N	EØMSG3	GEN,8,24,8,24 5,BA(EØMSG1),8,4*(EØMSG2-EØMSG1)		*E
7949					**			*E
7950					**			*E
7951					**			*E
7952					** THIS RØUTINE DETEMINS IF LAS AND LMS ARE INSTALLED			*E
7953					**			*E
7954					**			*E
7955					**			*E
7956	01	01E2A	02200000	A	LASLMS	LCI	0	*E
7957	01	01E2B	28001E47			STM,0	REGTEMP	SAVE ALL REGISTERS *E
7958	01	01E2C	32400445			LW,4	TABLE+1	*E
7959	01	01E2D	31401DEF			CW,4	LAS1+1	*E
7960	01	01E2E	68301E32			BE	LASLMS5	*E
7961	01	01E2F	31401DF7			CW,4	LMS1+1	*E
7962	01	01E30	68301E35			BE	LASLMS7	*E
7963	01	01E31	68001E44			B	LASLMS3	*E
7964	01	01E32	33101E5A		LASLMS5	MTW,1	LAS	*E
7965	01	01E33	69101E44			BLZ	LASLMS3	*E
7966	01	01E34	68001E37			B	LASLMS6	*E
7967	01	01E35	33101E59		LASLMS7	MTW,1	LMS	*E
7968	01	01E36	68001E37			B	LASLMS6	*E
7969	01	01E37	32401E59		LASLMS6	LW,4	LMS	*E
7970	01	01E38	31401E5A			CW,4	LAS	*E
7971	01	01E39	68301E3B			BE	LASLMS8	*E
7972	01	01E3A	68001E44			B	LASLMS3	*E
7973	01	01E3B	32601E58		LASLMS8	LW,6	RESTØRE	*E
7974	01	01E3C	3560016A			STW,6	ERREXIT	*E
7975	01	01E3D	32401E5B			LW,4	LASLMS2	*E
7976	01	01E3E	68201E44			BLEZ	LASLMS3	*E
7977	01	01E3F	32001F57			LW,0	PEØMSG1	*E
7978	01	01E40	0F00027C			XPSD,0	PRINT	*E
7979	01	01E41	22400000	A		LI,4	0	*E
7980	01	01E42	35401DEE			STW,4	LAS1	*E
7981	01	01E43	68001E44			B	LASLMS3	*E
7982	01	01E44	02200000	A	LASLMS3	LCI	0	*E
7983	01	01E45	2A001E47			LM,0	REGTEMP	RESTØRE REGISTERS *E
7984	01	01E46	E800000F	A		B	*15	*E
7985	01	01E47			REGTEMP	RES	16	*E
7986	01	01E57	00000F14		PEØMSG1	DATA	DA(EØMSG3)	*E

LINE NO.	MEM PROT KEY	MEMORY ADDRESS	MEMORY CONTENTS	ABS OR REL ORIG	LABEL	OPERATION	OPERAND	COMMENTS
7987	01	01E58	6800016B		RESTORE	B	ERREXIT+1	*E
7988	01	01E59	FFFFFFFF	A	LMS	DATA	-1	*E
7989	01	01E5A	FFFFFFFF	A	LAS	DATA	-1	*E
7990	01	01E5B	FFFFFFFE	A	LASLMS2	DATA	-2	*E
7991	01	01E5C	00000000	A		DATA	0	
7992		01	00293			END	SETRPLY	

CONTROL SECTION SUMMARY: 01 01E5D PT C

SECTION V
CONCORDANCE LISTING

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SIGMA 5 AUTO DIAG. 704287-51E00
ABSVAL
        82/D0          82/D0          112/SET        112/SET        113/D0         113/D0         114/ORG
      3593/DATA      3593/DATA
AD01
      4440-DATA
AD02
      4452-DATA
AD03
      4465-DATA
AD04
      4478-DATA
AD05
      4491-DATA
AD06
      4500-DATA
AF
        70/GEN         76/GEN         76/GEN         82/D0          96/GEN         96/GEN        105/GEN
       112/SET        112/SET        112/SET        113/D0         113/D0         113/D0
AFA
        96/GEN        105/GEN
AH01
      4392-DATA
AH02
      4400-DATA
AH03
      4408-DATA
AH04
      4416-DATA
AI
        89/OPEN
AI
        89/OPEN        99-CNAME
AIO
       949/EXU        950/EXU        951/EXU        954/DATA       955-AIO
AI01
      4423-DATA
AI02
      4429-DATA
AI03
      4435-DATA
ANDF
       771/STW        793-AND
ANDM
       773/STW        782-AND
AND01
      1765-DATA
AND02
      1769-DATA
AND03
      1777-DATA
AND04
      1786-DATA
AND05
      1794-DATA
AND06
      1802-DATA
ANFR0
       758/LW        1019-AND
ANFR2
       764/LW        1020-AND
ANLZ01
      3585-DATA
ANLZ02
      3596-DATA
ANLZ03
      3604-DATA
ANLZ04
      3612-DATA
ANLZ05
      3621-DATA
ANLZ06
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        3630*DATA
ANLZ07
        3638*DATA
ANLZ08
         433/STW        434/STW        436/STW        995/STW        996/STW        998/STW      3649*DATA
ANLZ09
         997/LW         3659*DATA
ANLZ10
        3669*DATA
ANLZ11
        3680*DATA
ANLZ12
        3696*DATA
ANLZ13
        3711*DATA
ANLZ14
        3727*DATA
ANLZ15
        3743*DATA
ANLZ16
        3758*DATA
ANLZ17
        3775*DATA
ANLZ18
        3790*DATA
ANLZ19
        3806*DATA
ANLZ20
        3821*DATA
ANLZ21
        3837*DATA
ANLZ22
        3852*DATA
ANLZ23
        3867*DATA
ANLZ24
        3878*DATA
ANMK
         765/LW         1021*AND
AUTO
         429*LW         888/BCR        893/B
AWM01
        4509*DATA
AWM02
        4517*DATA
AWM03
        4525*DATA
AWM04
        4535*DATA
AW01
        2000*DATA
AW02
        2004*DATA
AW03
        2012*DATA
AW04
        2023*DATA
AW05
        2037*DATA
AW06
        2056*DATA
AW07
        2064*DATA
AW08
        2073*DATA
AW09
        2081*DATA
AW10
        2089*DATA
AW11
        2097*DATA
```

```
AW12
        2106*DATA
AW13
        2114*DATA
AW14
        2122*DATA
AW15
        2130*DATA
AW16
        2139*DATA
AW17
        2147*DATA
AW18
        2155*DATA
AW19
        2163*DATA
AW20
        2172*DATA
AW21
        2180*DATA
AW22
        2188*DATA
AW23
        2196*DATA
AW24
        2205*DATA
AW25
        2213*DATA
AW26
        2226*DATA
AW27
        2236*DATA
AW28
        2245*DATA
AW29
        2257*DATA
AW30
        2267*DATA
AW31
        2276*DATA
AW32
        2285*DATA
AW33
        2296*DATA
AW34
        2306*DATA
AW35
        2316*DATA
AW36
        2324*DATA
AW37
        2334*DATA
AW38
        2344*DATA
AW39
        2353*DATA
AW40
        2364*DATA
AW41
        2372*DATA
AW42
        2380*DATA
AW43
        2390*DATA
AW44
        2401*DATA
AW45
        2410*DATA
AW46
        2416*DATA
AW47
```

```
        5704*DATA
CAL02
        5708*DATA
CAL03
        5712*DATA
CAL04
        5716*DATA
CAL05
        5722*DATA
CAL06
        5730*DATA
CAL07
        5735*DATA
CAL1     220/XPSD      307*PZE       678/STW       1025/PZE      1037/XPSD
CAL1AD   677/E0R       1025*PZE
CAL1TR   220*XPSD      676/STW
CAL1XD   675/E0R       1037*XPSD
CAL2     221/XPSD      330*PZE       685/STW       1026/PZE      1038/XPSD
CAL2AD   684/E0R       1026*PZE
CAL2TR   221*XPSD      683/STW
CAL2XD   682/E0R       1038*XPSD
CAL3     222/XPSD      353*PZE       692/STW       1027/PZE      1039/XPSD
CAL3AD   691/E0R       1027*PZE
CAL3TR   222*XPSD      690/STW
CAL3XD   689/E0R       1039*XPSD
CAL4     223/XPSD      376*PZE       699/STW       1028/PZE      1040/XPSD
CAL4AD   698/E0R       1028*PZE
CAL4TR   223*XPSD      697/STW
CAL4XD   696/E0R       1040*XPSD
CB01
        3950*DATA
CB02
        3958*DATA
CB03
        3966*DATA
CB04
        3974*DATA
CB05
        3983*DATA
CB06
        3991*DATA
CB07
        3999*DATA
CB08
        4007*DATA
CD01
        4031*DATA
CD02
        4043*DATA
CD03
        4056*DATA
CD04
        4068*DATA
CEE      595/E0R       1061*DATA
```

```
CF
        96/GEN          105/GEN
CH01
       3923*DATA
CH02
       3932*DATA
CH03
       3941*DATA
CI
        89/BPEN
CI
        89/BPEN         100*CNAME
CI01
       4017*DATA
CI02
       4024*DATA
CLEAR
        455*STW         458/BIR         2608/DATA       2609/DATA       2610/DATA       2611/DATA       2955/LCF
       2958/DATA       2959/DATA
CLM01
       4169*DATA
CLM02
       4183*DATA
CLM03
       4197*DATA
CLM04
       4212*DATA
CLM05
       4226*DATA
CLM06
       4240*DATA
CLR01
       4116*DATA
CLR02
       4127*DATA
CLR03
       4134*DATA
CLR04
       4146*DATA
CLR05
       4157*DATA
CNT1CP
        226/MTW         1269*PZE
CNT2CP
        227/MTW         1270*PZE
CNT3CP
        228/MTW         1271*PZE
CNT3Z
       1288*EQU
CNT4CP
        229/MTW         1272*PZE
CNT4Z
       1289*EQU
COMP
        969/GEN         971*TEXTC
COMPAT
       1003/BNE        1013*BR
COND
        485/AND         490/AND         1056*DATA
COUNT
        754/STW         806/LW          1273*PZE
CPINT
        404/LW          414/LW          422/STW         439/STW         516/LW          933/STW         1080*DATA
       1299/LW         1313/STW
CPINTM
        424/STW         892/STW         928/LW          1081*DATA       1315/STW
CS01
       4082*DATA
CS02
       4093*DATA
CS03
```

```
        4104*DATA
CW01
        3897*DATA
CW02
        3908*DATA
CW03
        3917*DATA
CYCLE
         446*LW      628/BCS     919/BE      925/BNE     927/BNE     929/BEZ     934/B
         952/B       954/DATA    999/B      1005/BNE    1008/B      1265/PZE    2596/DATA
        2597/DATA   2598/DATA   2599/DATA   3593/DATA
C1RET
         311*XPSD   1359/PZE    1360/PZE    5707/K
C2RET
         334*XPSD   5711/K
C3RET
         357*XPSD   5715/K
C4RET
         380*XPSD   5719/K      5725/K      5733/K      5738/K
DA
          70/GEN    1032/PZE    3617/DATA   3643/GEN    7986/DATA
DF
         217/XPSD    291*PZE     295/LCF    1029/PZE
DFAD
        1029*PZE
DFRET
         296*XPSD
DFTR
         217*XPSD
DH01
        7833*DATA
DH02
        7843*DATA
DH03
        7853*DATA
DH04
        7864*DATA
DH05
        7874*DATA
DH06
        7884*DATA
DH07
        7895*DATA
DH08
        7905*DATA
DONE
         464/B      898*CI
DONEMSG
         868/BCR    876*TIO     878/BCR     883/BEZ
DW01
        7006*DATA
DW02
        7016*DATA
DW03
        7026*DATA
DW04
        7037*DATA
DW05
        7047*DATA
DW06
        7057*DATA
DW07
        7068*DATA
DW08
        7078*DATA
DW09
        7088*DATA
DW10
        7099*DATA
DW11
        7109*DATA
```

```
DW12
        7119*DATA
DW13
        7130*DATA
DW14
        7140*DATA
DW15
        7150*DATA
DW16
        7161*DATA
DW17
        7171*DATA
DW18
        7181*DATA
DW19
        7192*DATA
DW20
        7202*DATA
DW21
        7212*DATA
DW22
        7223*DATA
DW23
        7233*DATA
DW24
        7243*DATA
DW25
        7254*DATA
DW26
        7264*DATA
DW27
        7274*DATA
DW28
        7285*DATA
DW29
        7295*DATA
DW30
        7305*DATA
DW31
        7316*DATA
DW32
        7326*DATA
DW33
        7336*DATA
DW34
        7347*DATA
DW35
        7357*DATA
DW36
        7367*DATA
DW37
        7378*DATA
DW38
        7388*DATA
DW39
        7398*DATA
DW40
        7409*DATA
DW41
        7419*DATA
DW42
        7429*DATA
DW43
        7440*DATA
DW44
        7450*DATA
DW45
        7460*DATA
DW46
        7471*DATA
DW47
```

```
        7481*DATA
DW48
        7491*DATA
DW49
        7502*DATA
DW50
        7512*DATA
DW51
        7522*DATA
DW52
        7533*DATA
DW53
        7543*DATA
DW54
        7553*DATA
DW55
        7564*DATA
DW56
        7574*DATA
DW57
        7584*DATA
DW58
        7595*DATA
DW59
        7605*DATA
DW60
        7615*DATA
DW61
        7626*DATA
DW62
        7636*DATA
DW63
        7646*DATA
DW64
        7657*DATA
DW65
        7667*DATA
DW66
        7677*DATA
DW67
        7688*DATA
DW68
        7698*DATA
DW69
        7708*DATA
DW70
        7719*DATA
DW71
        7729*DATA
DW72
        7739*DATA
DW73
        7750*DATA
DW74
        7760*DATA
DW75
        7770*DATA
DW76
        7781*DATA
DW77
        7791*DATA
DW78
        7801*DATA
DW79
        7812*DATA
DW80
        7822*DATA
EDIT
         730/BCR        745*LW
END
         623*WD         1011/B         1051/PZE       3568/DATA      3592/DATA      3593/DATA      5900/B
```

```
E0MSG1
        7941*TEXT       7948/GEN        7948/GEN
E0MSG2
        7946*EQU        7948/GEN
E0MSG3
        7948*GEN        7986/DATA
E0R01
        1814*DATA
E0R02
        1822*DATA
E0R03
        1831*DATA
E0R04
        1839*DATA
ERREXIT
         534/BNE         540/B           549*BAL         7974/STW        7987/B
ERRIND
         617/LW          622/STW         631*DATA        726/STW
ERR0R
         567/XPSD        571/XPSD        575/XPSD        580/XPSD        584/XPSD        588/XPSD        592/XPSD
         602/XPSD        606/XPSD        610/XPSD        615/XPSD        711*PZE         718/LPSD        742/LPSD
ERR0RS
         417/LW          451/STW         554/LW          624/LW          720/STW         1274*PZE        1302/LW
EVEN
         761*LW
EXITI0
         871/B           875/B           877/BCR         880/B           884*LPSD
EXU01
        1320*DATA
EXU02
        1326*DATA
EXU03
        1330*DATA
EXU04
        1338*DATA
EXU05
        1344*DATA
EXU06
        1353*DATA
EXU07
        1363*DATA
EXU08
        1371*DATA
F
          48*EQU        1753/K          1754/K          4199/K          5731/CAL4       5736/CAL4       5806/K
FAILL01
        5827*DATA
FAILL02
        5836*DATA
FAILL03
        5841*DATA
FAILL04
        5846*DATA
FAILL05
        5851*DATA
FAILL06
        5857*DATA
FAILL07
        5862*DATA
FAILL08
        5867*DATA
FAILL09
        5872*DATA
FAILL10
        5877*DATA
FAILL11
        5882*DATA
FAILL12
        5888*DATA
FAILL13
        5893*DATA
```

```
FAPRIVC1
       5803=DATA
FAPRIVC4
       5819=DATA
FAPRIVC3
       5813=DATA
FAPRIVC2
       5808=DATA
FAPSDC1
       1849=DATA
FAPSDC2
       1869=DATA
FAPSDC3
       1884=DATA
FARWD
        704=RD          5750/DATA       5755/DATA       5761/DATA       5768/DATA       5775/DATA
FARWDC1
       5748=DATA
FARWDC2
       5753=DATA
FARWDC3
       5759=DATA
FARWDC4
       5766=DATA
FARWDC5
       5773=DATA
FASTCHK
        530=LW          546/BDR
FASTCHKA
        532/BE          536=LD
FILL
         80=CNAME
FILTER
        793/AND         1019/AND        1020/AND        1115=DATA
FIRST
        444/STW         813/LW          831/STW         1064=DATA
FLM
        978/GEN         980=TEXTC
FLNIN
        897/DATA        906=LW
FLOAT
        903=FAS         906/LW
FLOATP
        974/F           978=GEN
FLPF
        216/XPSD        283=PZE         287/LCF         665/STW         1030/PZE
FLPFAD
        664/EOR         1030=PZE
FLPFSW
        664=EOR         5416/K          5428/K          5441/K          5454/K          5466/K          5479/K
       5491/K          5504/K          5516/K          5529/K          5541/K          5554/K          5566/K
       5579/K          5592/K          5604/K          5617/K          5629/K          5642/K          5654/K
       5667/K          5680/K          5692/K
FLPFTR
        216=XPSD
FLPRINT
        905/B           909=XPSD
FLTRAP
        897=DATA        973/XPSD
FPFRET
        288=XPSD
FPORET
        280=XPSD        2375/K          2443/K          3029/K          3126/K          3186/K          3304/K
       4278/K          4319/K          4419/K          4432/K          4455/K          4512/K          4552/K
       4581/K          4606/K          7019/K          7029/K          7040/K          7050/K          7546/K
       7567/K          7618/K
FRAME
        770/LW          1048/LW         1049/LW         1102=DATA
FROM
        467/STW         469=LW          474/STW         629/LW
FXPO
```

```
LAH03
        3064=DATA
LAS
        7964/MTW        7970/CW         7989=DATA
LASLMS
         549/BAL        7956=LCI
LASLMS2
         866/MTW        7975/LW         7990=DATA
LASLMS3
        7963/B          7965/BLZ        7972/B          7976/BLEZ       7981/B          7982=LCI
LASLMS5
        7960/BE         7964=MTW
LASLMS6
        7966/B          7968/B          7969=LW
LASLMS7
        7962/BE         7967=MTW
LASLMS8
        7971/BE         7973=LW
LAS1
        7919=DATA       7959/CW         7980/STW
LAW01
        3001=DATA
LAW02
        3009=DATA
LAW03
        3017=DATA
LAW04
        3026=DATA
LAW05
        3038=DATA
LB01
        2617=DATA
LB02
        2625=DATA
LB03
        2633=DATA
LB04
        2641=DATA
LB05
        2650=DATA
LB06
        2658=DATA
LB07
        2668=DATA
LB08
        2674=DATA
LB09
        2683=DATA
LCD01
        3251=DATA
LCD02
        3263=DATA
LCD03
        3276=DATA
LCD04
        3289=DATA
LCD05
        3301=DATA
LCD06
        3313=DATA
LCF
          89/BPEN
LCF
          89/BPEN       92=CNAME
LCFI
          89/BPEN
LCFI
          89/BPEN       98=CNAME
LCFI01
        2968=DATA
LCFI02
```

```
        2972*DATA
LCFI03
        2976*DATA
LCFI04
        2980*DATA
LCFI05
        2984*DATA
LCFI06
        2992*DATA
LCFI07
        2996*DATA
LCF01
        1378*DATA
LCF02
        1382*DATA
LCF03
        1386*DATA
LCF04
        1390*DATA
LCF05
        1394*DATA
LCF06
        2936*DATA
LCF07
        2942*DATA
LCF08
        2954*DATA
LCF09
        2962*DATA
LCH01
        3209*DATA
LCH02
        3217*DATA
LCH03
        3225*DATA
LCH04
        3233*DATA
LCH05
        3242*DATA
LCW01
        3161*DATA
LCW02
        3169*DATA
LCW03
        3177*DATA
LCW04
        3183*DATA
LCW05
        3192*DATA
LCW06
        3200*DATA
LDREG
         751/STW        752*LW         807/LW         809/BIR
LD01
        2690*DATA
LD02
        2700*DATA
LD03
        2712*DATA
LD04
        2725*DATA
LD05
        2737*DATA
LD06
        2750*DATA
LD07
        2762*DATA
LD08
        2775*DATA
LD09
        2787*DATA
```

```
LD10
        2800-DATA
LD11
        2812-DATA
LD12
        2825-DATA
LD13
        2837-DATA
LF
          70-GEN          76-GEN          96-GEN          105-GEN
LH01
        2546-DATA
LH02
        2554-DATA
LH03
        2562-DATA
LH04
        2571-DATA
LH05
        2577-DATA
LH06
        2584-DATA
LH07
        2592-DATA
LH08
        2604-DATA
LI
          89/BPEN
LI
          89/BPEN         101-CNAME
LINE
         442/STW          812/LW          830/STW         1070-DATA
LINKAD
         482/AND         1055-DATA
LINOUT
         817/BIR          825-LW
LIST
         460/LW           469/LW         1050/LW          1319-RES
LI01
        2856-DATA
LI02
        2862-DATA
LI03
        2868-DATA
LI04
        2874-DATA
LI05
        2880-DATA
LMS
        7967/MTW         7969/LW         7988-DATA
LMS1
         531/CW           600/CW         7931-DATA        7961/CW
LOAD
         445/LW          1050-LW
LOADR
         750/LW          1045-LW
LOC
         479/STW          544-EXU         569/LW         1023/PZE        1024/PZE        1072/I          1261/PZE
        1321/EXU        1323/K          1329/DATA       1333/K          1341/K          1347/K          1356/K
        1381/K          1385/K          1389/K          1393/K          1397/K          1407/K          1414/K
        1424/K          1438/K          1446/K          1454/K          1462/K          1471/K          1479/K
        1487/K          1495/K          1504/K          1512/K          1520/K          1528/K          1537/K
        1545/K          1553/K          1561/K          1570/K          1578/K          1586/K          1594/K
        1603/K          1611/K          1619/K          1627/K          1636/K          1644/K          1652/K
        1660/K          1667/K          1673/K          1679/K          1686/K          1700/K          1704/K
        1712/K          1721/K          1729/K          1737/K          1746/K          1754/K          1768/K
        1772/K          1780/K          1789/K          1797/K          1805/K          1817/K          1825/K
        1834/K          1842/K          1852/K          1865/K          1872/K          1875/K          1876/K
        1887/K          1890/K          1891/K          1903/K          1918/K          1950/K          1956/K
        1961/K          1966/K          1973/K          1979/K          2003/K          2007/K          2015/K
        2026/K          2040/K          2059/K          2067/K          2076/K          2084/K          2092/K
```

2100/K	2109/K	2117/K	2125/K	2133/K	2142/K	2150/K
2158/K	2166/K	2175/K	2183/K	2191/K	2199/K	2208/K
2216/K	2229/K	2239/K	2248/K	2260/K	2270/K	2279/K
2288/K	2299/K	2309/K	2319/K	2327/K	2337/K	2347/K
2356/K	2367/K	2383/K	2393/K	2404/K	2413/K	2419/K
2425/K	2431/K	2439/K	2452/K	2458/K	2467/K	2486/K
2501/K	2510/DATA	2520/DATA	2526/DATA	2534/DATA	2544/DATA	2549/K
2557/K	2565/K	2574/K	2580/K	2587/K	2595/K	2607/K
2620/K	2628/K	2636/K	2644/K	2653/K	2661/K	2671/K
2677/K	2686/K	2693/K	2703/K	2715/K	2728/K	2740/K
2753/K	2765/K	2778/K	2790/K	2803/K	2815/K	2828/K
2840/K	2847/K	2853/K	2859/K	2865/K	2871/K	2877/K
2890/K	2900/K	2910/K	2921/K	2932/K	2939/K	2945/K
2957/K	2965/K	2971/DATA	2975/K	2979/K	2983/K	2987/K
2999/K	3004/K	3012/K	3020/K	3041/K	3051/K	3059/K
3067/K	3076/K	3088/K	3101/K	3113/K	3138/K	3151/K
3164/K	3172/K	3180/K	3195/K	3203/K	3212/K	3220/K
3228/K	3236/K	3245/K	3254/K	3266/K	3279/K	3292/K
3316/K	3327/K	3335/K	3343/K	3351/K	3360/K	3368/K
3377/K	3385/K	3393/K	3399/K	3408/K	3417/K	3429/K
3442/K	3454/K	3467/K	3478/K	3489/K	3497/K	3505/K
3513/K	3522/K	3530/K	3538/K	3546/K	3557/K	3567/K
3577/K	3591/K	3599/K	3607/K	3615/K	3624/K	3633/K
3641/K	3652/K	3662/K	3672/K	3683/K	3699/K	3714/K
3730/K	3746/K	3761/K	3778/K	3793/K	3809/K	3824/K
3825/DATA	3840/K	3855/K	3870/K	3881/K	3900/K	3911/K
3920/K	3926/K	3935/K	3944/K	3953/K	3961/K	3969/K
3977/K	3986/K	3994/K	4002/K	4010/K	4020/K	4027/K
4034/K	4046/K	4059/K	4071/K	4085/K	4096/K	4107/K
4119/K	4130/K	4137/K	4149/K	4160/K	4172/K	4186/K
4200/K	4215/K	4229/K	4243/K	4256/K	4262/K	4268/K
4286/K	4295/K	4301/K	4310/K	4328/K	4337/K	4345/K
4353/K	4361/K	4370/K	4376/K	4382/K	4388/K	4395/K
4403/K	4411/K	4426/K	4443/K	4468/K	4481/K	4494/K
4503/K	4520/K	4528/K	4538/K	4544/K	4560/K	4569/K
4594/K	4621/K	4627/K	4633/K	4640/K	4646/K	4652/K
4659/K	4666/K	4673/K	4679/K	4684/DATA	4690/DATA	4694/DATA
4699/DATA	4704/DATA	4708/DATA	4713/DATA	4719/DATA	4723/DATA	4728/DATA
4735/K	4741/K	4747/K	4753/K	4759/K	4766/K	4773/K
4781/K	4787/K	4793/K	4799/K	4806/K	4814/K	4820/K
4826/K	4832/K	4839/K	4845/K	4851/K	4857/K	4863/K
4870/K	4876/K	4882/K	4888/K	4894/K	4901/K	4907/K
4914/K	4920/K	4926/K	4932/K	4938/K	4949/K	4959/K
4969/K	4980/K	4990/K	5000/K	5011/K	5017/DATA	5023/DATA
5029/DATA	5035/DATA	5042/K	5048/K	5054/DATA	5061/K	5071/DATA
5081/K	5092/DATA	5102/DATA	5112/K	5124/K	5130/K	5136/K
5143/K	5149/K	5155/K	5162/K	5168/K	5174/K	5181/K
5187/K	5193/K	5200/K	5206/K	5212/K	5218/DATA	5223/K
5233/K	5239/K	5244/K	5251/K	5256/K	5261/K	5267/K
5272/K	5277/K	5283/K	5288/K	5293/K	5299/K	5304/K
5310/K	5315/K	5323/K	5328/K	5333/K	5339/K	5344/K
5349/K	5355/K	5360/K	5365/K	5371/K	5376/K	5381/K
5387/K	5392/K	5397/K	5403/K	5410/K	5417/K	5429/K
5442/K	5455/K	5467/K	5480/K	5492/K	5505/K	5517/K
5530/K	5542/K	5555/K	5567/K	5580/K	5593/K	5605/K
5618/K	5630/K	5643/K	5655/K	5668/K	5681/K	5693/K
5751/DATA	5756/DATA	5762/DATA	5769/DATA	5775/DATA	5782/DATA	5788/K
5794/K	5811/K	5816/K	5907/K	5917/K	5927/K	5938/K
5948/K	5958/K	5969/K	5979/K	5989/K	6000/K	6010/K
6020/K	6031/K	6041/K	6051/K	6062/K	6072/K	6082/K
6093/K	6103/K	6113/K	6124/K	6134/K	6144/K	6155/K
6165/K	6175/K	6186/K	6196/K	6206/K	6217/K	6227/K
6237/K	6248/K	6258/K	6268/K	6279/K	6289/K	6299/K
6310/K	6320/K	6330/K	6341/K	6351/K	6361/K	6372/K
6382/K	6392/K	6403/K	6413/K	6423/K	6434/K	6444/K
6454/K	6465/K	6475/K	6485/K	6496/K	6506/K	6516/K
6527/K	6537/K	6547/K	6558/K	6568/K	6578/K	6589/K
6599/K	6609/K	6620/K	6630/K	6640/K	6651/K	6661/K
6671/K	6682/K	6692/K	6702/K	6713/K	6723/K	6733/K
6744/K	6754/K	6764/K	6775/K	6785/K	6795/K	6806/K
6816/K	6826/K	6837/K	6847/K	6857/K	6868/K	6878/K

```
        6888/K          6899/K          6909/K          6920/K          6930/K          6940/K          6951/K
        6961/K          6971/K          6982/K          6992/K          7009/K          7060/K          7071/K
        7081/K          7091/K          7102/K          7112/K          7122/K          7133/K          7143/K
        7153/K          7164/K          7174/K          7184/K          7195/K          7205/K          7215/K
        7226/K          7236/K          7246/K          7257/K          7267/K          7277/K          7288/K
        7298/K          7308/K          7319/K          7329/K          7339/K          7350/K          7360/K
        7370/K          7381/K          7391/K          7401/K          7412/K          7422/K          7432/K
        7443/K          7453/K          7463/K          7474/K          7484/K          7494/K          7505/K
        7515/K          7525/K          7536/K          7556/K          7577/K          7587/K          7598/K
        7608/K          7629/K          7639/K          7649/K          7660/K          7670/K          7680/K
        7691/K          7701/K          7711/K          7722/K          7732/K          7742/K          7753/K
        7763/K          7773/K          7784/K          7794/K          7804/K          7815/K          7825/K
        7836/K          7846/K          7856/K          7867/K          7877/K          7887/K          7898/K
        7908/K          7922/DATA       7934/DATA
L0CADD
        491/E0R         1024=PZE
L0C2AD
        526/LW          1023=PZE
L0NGL
        1150/P          1165=J
LPERR
        849/LW          1153=P
LPF0RMAT
        856/LW          1152=P
LPG0T0P
        854/LW          1151=P
LPMSG
        849=LW          858/B
LP0
        815/BLZ         838=TDV         844/BNEZ
LPREP0RT
        852/LW          1154=P
LPT0P
        847/BNEZ        856=LW
LRP01
        1900=DATA
LRP02
        1915=DATA
LS01
        2887=DATA
LS02
        2897=DATA
LS03
        2907=DATA
LS04
        2918=DATA
LS05
        2929=DATA
LWB
        778/STW         780=LW
LWBIT
        774/LW          1043=LW
LWBT
        779/STW         783/BCS         785=LW
LWBY
        791/STW         792=LW
LWBYTE
        790/E0R         1044=LW
LWFRM
        757/LW          1048=LW
LWFRM2
        763/LW          1049=LW
LWIX
        2844=DATA
LWIXIA
        2850=DATA
LWN
        756/LW          1046=LW
LWN2
        762/LW          1047=LW
LW01
```

	1404=DATA						
LW02	1411=DATA						
LW03	432/LW	993/LW	1421=DATA				
LW04	1435=DATA						
LW05	1443=DATA						
LW06	1451=DATA						
LW07	1459=DATA						
LW08	1468=DATA						
LW09	1476=DATA						
LW10	1484=DATA						
LW11	1492=DATA						
LW12	1501=DATA						
LW13	1509=DATA						
LW14	1517=DATA						
LW15	1525=DATA						
LW16	1534=DATA						
LW17	1542=DATA						
LW18	1550=DATA						
LW19	1558=DATA						
LW20	1567=DATA						
LW21	1575=DATA						
LW22	1583=DATA						
LW23	1591=DATA						
LW24	1600=DATA						
LW25	1608=DATA						
LW26	1616=DATA						
LW27	1624=DATA						
LW28	1633=DATA						
LW29	1641=DATA						
LW30	1649=DATA						
LW31	1657=DATA						
LW32	1664=DATA						
LW33	1670=DATA						
LW34	1676=DATA						
LW35	1683=DATA						
MASK	421/AND	658/EOR	782/AND	789/AND	932/LW	1021/AND	1107=DATA

```
        1312/AND
MAXCNT
         924/CW          1086*DATA
MEMAD
        1032*PZE
MEMID
         607/LW          612/LW          1077*I
MEMORY
         522/STW         523/STW         537/CD          541/STD         608/LW          613/LW          1022/PZE
        1032/PZE        1077/I          1287*EQU        1331/EXU        1335/LW         1336/LW         1337/LW
        1339/EXU        1342/DATA       1343/DATA       1345/EXU*       1354/EXU*       1364/EXU        1375/K
        1376/K          1379/LCF        1383/LCF        1387/LCF        1391/LCF        1405/LW         1412/LW
        1436/LW         1444/LW         1452/LW         1460/LW         1469/LW         1477/LW         1485/LW
        1493/LW         1502/LW         1510/LW         1518/LW         1526/LW         1535/LW         1543/LW
        1551/LW         1559/LW         1568/LW         1576/LW         1584/LW         1592/LW         1601/LW
        1609/LW         1617/LW         1625/LW         1634/LW         1642/LW         1650/LW         1658/LW
        1665/LW         1671/LW         1677/LW         1684/LW         1698/0R         1702/0R         1710/0R
        1719/0R         1727/0R         1735/0R         1744/STW        1752/STW        1766/AND        1770/AND
        1778/AND        1787/AND        1795/AND        1815/E0R        1823/E0R        1832/E0R        1840/E0R
        1870/LPSD       1885/LPSD       1901/LRP        1932/BCR        1934/K          1982/BCS        1984/K
        2001/AW         2013/AW         2024/AW         2038/AW         2057/AW         2065/AW         2074/AW
        2082/AW         2090/AW         2098/AW         2107/AW         2115/AW         2123/AW         2131/AW
        2140/AW         2148/AW         2156/AW         2164/AW         2173/AW         2181/AW         2189/AW
        2197/AW         2206/AW         2214/AW         2227/AW         2237/AW         2246/AW         2258/AW
        2268/AW         2277/AW         2286/AW         2297/AW         2317/AW         2325/AW         2335/AW
        2345/AW         2354/AW         2365/AW         2373/AW         2381/AW         2391/AW         2402/AW
        2411/AW         2417/AW         2423/AW         2429/SW         2441/SW         2456/SW         2465/SW
        2475/BIR        2477/K          2512/BAL        2514/K          2524/DATA       2530/BAL*       2547/LH
        2555/LH         2585/LH         2593/LH*        2596/DATA       2597/DATA       2605/LH*        2610/DATA
        2611/DATA       2618/LB         2626/LB         2634/LB         2662/DATA       2663/DATA       2675/LB
        2684/LB*        2687/DATA       2687/DATA       2691/LD         2716/DATA       2729/DATA       2738/LD
        2751/LD         2776/LD         2838/LD*        2841/DATA       2841/DATA       2841/DATA       2848/DATA
        2848/DATA       2881/LI*        2888/LS         2898/LS         2908/LS         2919/LS         2943/LCF*
        2948/DATA       2949/DATA       2958/DATA       2959/DATA       2963/LCF        2993/LCFI*      3002/LAW
        3010/LAW        3027/LAW*       3036/DATA       3037/DATA       3039/LAW        3049/LAH        3057/LAH
        3074/LAD        3086/LAD        3102/DATA       3124/LAD        3136/LAD        3149/LAD        3162/LCW
        3170/LCW        3187/DATA       3201/LCW        3210/LCH        3221/DATA       3237/DATA       3246/DATA
        3252/LCD        3267/DATA       3290/LCD        3302/LCD        3325/STH        3333/STH        3349/STH
        3358/STH        3366/STH        3375/STB        3383/STB        3397/STB        3415/STD        3427/STD
        3452/STD        3465/STS        3487/STCF       3498/DATA       3499/DATA       3511/STCF       3520/XW
        3528/XW         3531/DATA       3534/DATA       3536/XW         3555/INT        3565/INT        3568/DATA
        3575/INT        3586/ANLZ       3600/DATA       3601/DATA       3609/DATA       3613/ANLZ       3617/DATA
        3618/LAD        3619/LAD        3622/ANLZ       3631/ANLZ       3639/ANLZ       3650/ANLZ       3660/ANLZ
        3670/ANLZ       3681/ANLZ       3697/ANLZ       3701/DATA       3702/EXU        3703/EXU        3712/ANLZ
        3728/ANLZ       3744/ANLZ       3748/DATA       3749/XW         3750/XW         3759/ANLZ       3776/ANLZ
        3791/ANLZ       3807/ANLZ       3822/ANLZ       3838/ANLZ       3853/ANLZ       3868/ANLZ       3879/ANLZ
        3898/CW         3909/CW         3918/CW         3924/CH         3933/CH         3942/CH         3951/CB
        3959/CB         3967/CB         3975/CB         3992/CB         4000/CB         4008/CB         4032/CD
        4044/CD         4069/CD         4083/CS         4094/CS         4105/CS         4117/CLR        4128/CLR
        4135/CLR        4147/CLR        4158/CLR        4170/CLM        4184/CLM        4198/CLM        4213/CLM
        4227/CLM        4241/CLM        4266/MTW        4284/MTW        4299/MTH        4317/MTH        4326/MTH
        4335/MTB        4343/MTB        4359/MTB        4393/AH         4401/AH         4441/AD         4453/AD
        4479/AD         4492/AD         4501/AD         4510/AWM        4518/AWM        4539/DATA       4539/DATA
        4542/SH         4550/SH         4567/SD         4592/SD         4604/SD         4718/S*         4771/S*
        4804/S*         4957/S*         5069/S*         5100/S*         5110/S*         5231/SF*        5242/SF*
        5408/SF*        5666/SF*        5691/SF*        5723/CAL4*      5728/DATA       5729/DATA       5781/E0R
        5809/E0R        5814/AWM        5820/DL         5858/CVS        5863/PACK       5868/DST        5873/TBS
        5889/DSA        5905/MW         5915/MW         5925/MW         5936/MW         5946/MW         5956/MW
        5967/MW         5977/MW         5987/MW         5998/MW         6008/MW         6018/MW         6029/MW
        6039/MW         6049/MW         6060/MW         6070/MW         6080/MW         6091/MW         6101/MW
        6111/MW         6122/MW         6132/MW         6142/MW         6153/MW         6163/MW         6173/MW
        6184/MW         6194/MW         6204/MW         6215/MW         6225/MW         6235/MW         6246/MW
        6256/MW         6266/MW         6277/MW         6287/MW         6297/MW         6308/MW         6318/MW
        6328/MW         6339/MW         6349/MW         6359/MW         6370/MW         6380/MW         6390/MW
        6401/MW         6411/MW         6421/MW         6432/MW         6442/MW         6452/MW         6463/MW
        6473/MW         6483/MW         6494/MW         6504/MW         6514/MW         6525/MW         6535/MW
        6545/MW         6556/MW         6566/MW         6576/MW         6587/MW         6597/MW         6607/MW
        6618/MW         6628/MW         6638/MW         6649/MW         6659/MW         6669/MW         6680/MW
        6690/MW         6700/MW         6721/MW         6731/MW         6742/MW         6752/MW         6762/MW
        6773/MW         6783/MW         6793/MW         6804/MW         6814/MW         6824/MW         6835/MH
        6845/MH         6855/MH         6866/MH         6876/MH         6886/MH         6897/MH         7007/DW
```

```
MTB03
        4350-DATA
MTB04
        4358-DATA
MTB05
        4367-DATA
MTB06
        4373-DATA
MTB07
        4379-DATA
MTB08
        4385-DATA
MTH01
        4292-DATA
MTH02
        4298-DATA
MTH03
        4307-DATA
MTH04
        4316-DATA
MTH05
        4325-DATA
MTW01
        4253-DATA
MTW02
        4259-DATA
MTW03
        4265-DATA
MTW04
        4275-DATA
MTW05
        4283-DATA
MVRET
         243-XPSD       1366/K          5806/K
MW01
        5904-DATA
MW02
        5914-DATA
MW03
        5924-DATA
MW04
        5935-DATA
MW05
        5945-DATA
MW06
        5955-DATA
MW07
        5966-DATA
MW08
        5976-DATA
MW09
        5986-DATA
MW10
        5997-DATA
MW11
        6007-DATA
MW12
        6017-DATA
MW13
        6028-DATA
MW14
        6038-DATA
MW15
        6048-DATA
MW16
        6059-DATA
MW17
        6069-DATA
MW18
        6079-DATA
MW19
```

```
        6090=DATA
MW20
        6100=DATA
MW21
        6110=DATA
MW22
        6121=DATA
MW23
        6131=DATA
MW24
        6141=DATA
MW25
        6152=DATA
MW26
        6162=DATA
MW27
        6172=DATA
MW28
        6183=DATA
MW29
        6193=DATA
MW30
        6203=DATA
MW31
        6214=DATA
MW32
        6224=DATA
MW33
        6234=DATA
MW34
        6245=DATA
MW35
        6255=DATA
MW36
        6265=DATA
MW37
        6276=DATA
MW38
        6286=DATA
MW39
        6296=DATA
MW40
        6307=DATA
MW41
        6317=DATA
MW42
        6327=DATA
MW43
        6338=DATA
MW44
        6348=DATA
MW45
        6358=DATA
MW46
        6369=DATA
MW47
        6379=DATA
MW48
        6389=DATA
MW49
        6400=DATA
MW50
        6410=DATA
MW51
        6420=DATA
MW52
        6431=DATA
MW53
        6441=DATA
MW54
        6451=DATA
```

```
MW55
        6462=DATA
MW56
        6472=DATA
MW57
        6482=DATA
MW58
        6493=DATA
MW59
        6503=DATA
MW60
        6513=DATA
MW61
        6524=DATA
MW62
        6534=DATA
MW63
        6544=DATA
MW64
        6555=DATA
MW65
        6565=DATA
MW66
        6575=DATA
MW67
        6586=DATA
MW68
        6596=DATA
MW69
        6606=DATA
MW70
        6617=DATA
MW71
        6627=DATA
MW72
        6637=DATA
MW73
        6648=DATA
MW74
        6658=DATA
MW75
        6668=DATA
MW76
        6679=DATA
MW77
        6689=DATA
MW78
        6699=DATA
MW79
        6710=DATA
MW80
        6720=DATA
MW81
        6730=DATA
MW82
        6741=DATA
MW83
        6751=DATA
MW84
        6761=DATA
MW85
        6772=DATA
MW86
        6782=DATA
MW87
        6792=DATA
MW88
        6803=DATA
MW89
        6813=DATA
MW90
```

```
        6823*DATA
M1Q15
        462/AND         1057*DATA
NAME
         96/GEN          105/GEN
NA0
        212/XPSD         237*PZE         642/STW         1033/PZE        1041/XPSD
NA0AD
        641/E0R         1033*PZE
NA0RET
        241*XPSD        4438/K
NA0TR
        212*XPSD         480/STW         640/STW
NA0XD
        639/E0R         1041*XPSD
NEARET
        245*XPSD        2542/K
NEG12
       1067*DATA
NEG2
        443/LW           755/LW         1280*EQU
NEG20
        454/LW          1068*DATA
NEG3
        761/LW          1065*DATA
NEG4
        749/LW           775/LW         1279*EQU
NEG51
        441/LW           824/LW         1069*DATA
NEG8
        746/LW          1066*DATA
NEIRET
        249*XPSD        1374/K          2883/K          2995/K          3495/STCF       3498/DATA       3499/DATA
       5822/K          5830/K          5839/K          5844/K          5849/K          5854/K          5860/K
       5865/K          5870/K          5875/K          5880/K          5885/K          5891/K          5896/K
       7002/K
NFAIMP01
        438/STW          907/STW        5899*DATA
NFLM
        982/GEN          984*TEXTC
NFL0ATP
        975/P            982*GEN
NIMP
        900/LW           973*XPSD
N0HALT
        738/BCS          740*LW
N0TEND
        461/BCS          465*LW
NUMBER
        769/LW          1046/LW         1047/LW         1097*DATA       1279/EQU        1280/EQU
0DD
        760/BCS          765*LW
0DDBALL
        558/LW           988/LW         1095*DATA
0NE
        499/LW           583/LW          759/AND        1063*DATA
0R01
       1697*DATA
0R02
       1701*DATA
0R03
       1709*DATA
0R04
       1718*DATA
0R05
       1726*DATA
0R06
       1734*DATA
P
         68*CNAME
PAGE
```

```
        1577/K          1585/K          1593/K          1602/K          1610/K          1618/K          1626/K
        1635/K          1643/K          1651/K          1659/K          1666/K          1672/K          1678/K
        1685/K          1699/K          1703/K          1711/K          1720/K          1728/K          1736/K
        1745/K          1753/K          1767/K          1771/K          1779/K          1788/K          1796/K
        1804/K          1816/K          1824/K          1833/K          1841/K          1851/K          1871/K
        1886/K          1902/K          1917/K          1933/K          1942/K          1949/K          1955/K
        1960/K          1965/K          1972/K          1978/K          1983/K          2002/K          2006/K
        2014/K          2025/K          2392/K          2403/K          2412/K          2418/K          2424/K
        2430/K          2457/K          2476/K          2485/K          2493/K          2500/K          2507/K
        2513/K          2523/DATA       2531/K          2548/K          2556/K          2564/K          2573/K
        2579/K          2586/K          2594/K          2606/K          2619/K          2627/K          2635/K
        2643/K          2652/K          2660/K          2670/K          2676/K          2685/K          2692/K
        2702/K          2714/K          2727/K          2739/K          2752/K          2764/K          2777/K
        2789/K          2802/K          2814/K          2827/K          2839/K          2846/K          2852/K
        2858/K          2864/K          2870/K          2876/K          2889/K          2899/K          2909/K
        2920/K          2931/K          2938/K          2944/K          2956/K          2964/K          2970/DATA
        2974/K          2978/K          2982/K          2986/DATA       2998/K          3003/K          3011/K
        3019/K          3040/K          3050/K          3058/K          3066/K          3075/K          3087/K
        3100/K          3112/K          3137/K          3150/K          3163/K          3171/K          3179/K
        3194/K          3202/K          3211/K          3219/K          3227/K          3235/K          3244/K
        3253/K          3265/K          3278/K          3291/K          3315/K          3326/K          3334/K
        3342/K          3350/K          3359/K          3367/K          3376/K          3384/K          3392/K
        3398/K          3407/K          3416/K          3428/K          3441/K          3453/K          3466/K
        3477/K          3488/K          3496/K          3504/K          3512/K          3521/K          3529/K
        3537/K          3545/K          3556/K          3566/K          3576/K          3590/K          3598/K
        3606/K          3614/K          3623/K          3632/K          3640/K          3651/K          3661/K
        3671/K          3682/K          3698/K          3713/K          3729/K          3745/K          3760/K
        3777/K          3792/K          3808/K          3823/K          3839/K          3854/K          3869/K
        3880/K          3899/K          3910/K          3919/K          3925/K          3934/K          3943/K
        3952/K          3960/K          3968/K          3976/K          3985/K          3993/K          4001/K
        4009/K          4019/K          4026/K          4033/K          4045/K          4058/K          4070/K
        4084/K          4095/K          4106/K          4118/K          4129/K          4136/K          4148/K
        4159/K          4171/K          4185/K          4199/K          4214/K          4228/K          4242/K
        4261/K          4267/K          4285/K          4294/K          4300/K          4327/K          4336/K
        4344/K          4352/K          4360/K          4369/K          4375/K          4381/K          4387/K
        4493/K          4502/K          4537/K          4559/K          4568/K          4620/K          4626/K
        4632/K          4639/K          4645/K          4651/K          4658/K          4665/K          4672/K
        4678/K          4684/DATA       4690/DATA       4694/DATA       4699/DATA       4704/DATA       4708/DATA
        4713/DATA       4719/DATA       4723/DATA       4728/DATA       4758/K          4765/K          4772/K
        4780/K          4786/K          4792/K          4798/K          4805/K          4813/K          4819/K
        4825/K          4831/K          4838/K          4844/K          4850/K          4856/K          4862/K
        4869/K          4875/K          4881/K          4887/K          4893/K          4900/K          4906/K
        4913/K          4919/K          4925/K          4931/K          4937/K          4948/K          4958/K
        4968/K          4979/K          4989/K          4999/K          5016/DATA       5022/DATA       5028/DATA
        5034/DATA       5053/DATA       5070/DATA       5091/DATA       5101/DATA       5123/K          5129/K
        5135/K          5142/K          5148/K          5154/K          5161/K          5167/K          5173/K
        5180/K          5186/K          5192/K          5199/K          5205/K          5211/K          5218/DATA
        5222/DATA       5232/DATA       5238/DATA       5243/DATA       5250/DATA       5255/DATA       5260/DATA
        5266/DATA       5271/DATA       5276/DATA       5282/DATA       5287/DATA       5292/DATA       5298/DATA
        5303/DATA       5309/DATA       5314/DATA       5322/DATA       5327/DATA       5332/DATA       5338/DATA
        5343/DATA       5348/DATA       5354/DATA       5359/DATA       5364/DATA       5370/DATA       5375/DATA
        5380/DATA       5386/DATA       5391/DATA       5396/DATA       5402/DATA       5409/K          5782/DATA
        5787/DATA       5793/K          5810/K          5815/K          7921/DATA       7933/DATA
SETRPLY
        885=LW          7992/END
SF
         89/0PEN
SF
         89/0PEN          90=CNAME
SF001
        5121=DATA
SF002
        5127=DATA
SF003
        5133=DATA
SF004
        5140=DATA
SF005
        5146=DATA
SF006
        5152=DATA
```

```
SF007
        5159*DATA
SF008
        5165*DATA
SF009
        5171*DATA
SF01
        5414*DATA
SF010
        5178*DATA
SF011
        5184*DATA
SF012
        5190*DATA
SF013
        5197*DATA
SF014
        5203*DATA
SF015
        5209*DATA
SF016
        5216*DATA
SF017
        5220*DATA
SF018
        5230*DATA
SF019
        5236*DATA
SF02
        5426*DATA
SF020
        5241*DATA
SF021
        5248*DATA
SF022
        5253*DATA
SF023
        5258*DATA
SF024
        5264*DATA
SF025
        5269*DATA
SF026
        5274*DATA
SF027
        5280*DATA
SF028
        5285*DATA
SF029
        5290*DATA
SF03
        5439*DATA
SF030
        5296*DATA
SF031
        5301*DATA
SF032
        5307*DATA
SF033
        5312*DATA
SF034
        5320*DATA
SF035
        5325*DATA
SF036
        5330*DATA
SF037
        5336*DATA
SF038
        5341*DATA
SF039
```

```
        5346-DATA
SF04
        5452-DATA
SF040
        5352-DATA
SF041
        5357-DATA
SF042
        5362-DATA
SF043
        5368-DATA
SF044
        5373-DATA
SF045
        5378-DATA
SF046
        5384-DATA
SF047
        5389-DATA
SF048
        5394-DATA
SF049
        5400-DATA
SF05
        5464-DATA
SF050
        5407-DATA
SF06
        5477-DATA
SF07
        5489-DATA
SF08
        5502-DATA
SF09
        5514-DATA
SF10
        5527-DATA
SF11
        5539-DATA
SF12
        5552-DATA
SF13
        5564-DATA
SF14
        5577-DATA
SF15
        5590-DATA
SF16
        5602-DATA
SF17
        5615-DATA
SF18
        5627-DATA
SF19
        5640-DATA
SF20
        5652-DATA
SF21
        5665-DATA
SF22
        5678-DATA
SF23
        5690-DATA
SHORT
        522-STD         552/BCS
SHORTEN
        538/PE          541-STD
SHRTL
        1143/P          1163-J
SHC1
        4541-DATA
```

```
SH02
        4549*DATA
SH03
        4557*DATA
SIX
         581/E0R        1062*DATA
SIXCR
        1146/P          1157*J
SI9CL1
         674*LW         5706/K
SI9CL2
         681*LW         5710/K
SI9CL3
         688*LW         5714/K
SI9CL4
         695*LW         5718/K          5724/K          5732/K
SI9NA0
         638*LW         1365/K          1373/K          2541/K          2882/K          2994/K          5805/K
        5821/K          5829/DATA       5838/DATA       5843/DATA       5848/DATA       5853/DATA       5859/DATA
        5864/DATA       5869/DATA       5874/DATA       5879/DATA       5884/DATA       5890/DATA       5895/DATA
        7001/K
SKIP6
         816/BIR         820*LW
SL
         214/XPSD        267*PZE         650/STW         1034/PZE
SLAD
         649/E0R        1034*PZE
SLRET
         271*XPSD
SLSW
         649*E0R
SLTR
         214*XPSD
SPACE
        1082*TEXT       1170/J          1174/J          1178/J          1182/J
SPUR
        1293/XPSD       1295*PZE
SPURTRAP
        1095/DATA       1293*XPSD
STB01
        3374*DATA
STB02
        3382*DATA
STB03
        3390*DATA
STB04
        3396*DATA
STB05
        3405*DATA
STCF
          89/0PEN
STCF
          89/0PEN         93*CNAME
STCF01
        3486*DATA
STCF02
        3494*DATA
STCF03
        3502*DATA
STCF04
        3510*DATA
STD01
        3414*DATA
STD02
        3426*DATA
STD03
        3439*DATA
STD04
        3451*DATA
STH01
        3324*DATA
```

```
STH02
        3332-DATA
STH03
        3340-DATA
STH04
        3348-DATA
STH05
        3357-DATA
STH06
        3365-DATA
STRE
         453/LW          465/LW          1052-STW
STRMG1
         745/LW          1053-STW
STRWD
         768/STW         798-STW         801/LW
STS01
        3464-DATA
STS02
        3475-DATA
STW01
        1743-DATA
ST[illegible]
        1751-DATA
SW01
        [illegible]-DATA
SW02
        2436-DATA
SW03
        [illegible]-DATA
SW04
        2448-DATA
SW[illegible]
        245[illegible]-DATA
SW[illegible]
        2464-DATA
S00[illegible]
        4614-DATA
S00[illegible]
        4624-DATA
S00[illegible]
        4634-DATA
S00[illegible]
        4637-DATA
S00[illegible]
        4643-DATA
S00[illegible]
        4640-DATA
S007
        465[illegible]-DATA
S00[illegible]
        4663-DATA
S009
        4670-DATA
S01
        4732-DATA
S010
        4676-DATA
S011
        4682-DATA
S012
        4688-DATA
S013
        4692-DATA
S014
        4697-DATA
S015
        4702-DATA
S016
        470[illegible]-DATA
S017
```

```
        4711=DATA
S018
        4717=DATA
S019
        4721=DATA
S02
        4738=DATA
S020
        4726=DATA
S03
        4744=DATA
S04
        4750=DATA
S05
        4756=DATA
S06
        4763=DATA
S07
        4770=DATA
S08
        4778=DATA
S09
        4784=DATA
S10
        4790=DATA
S11
        4796=DATA
S12
        4803=DATA
S13
        4811=DATA
S14
        4817=DATA
S15
        4823=DATA
S16
        4829=DATA
S17
        4836=DATA
S18
        4842=DATA
S19
        4848=DATA
S20
        4854=DATA
S21
        4860=DATA
S22
        4867=DATA
S23
        4873=DATA
S24
        4879=DATA
S25
        4885=DATA
S26
        4891=DATA
S27
        4898=DATA
S28
        4904=DATA
S29
        4911=DATA
S30
        4917=DATA
S31
        4923=DATA
S32
        4929=DATA
S33
        4935=DATA
```

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