SPERRY UNIVAC

RELEASE DOCUMENTATIC

92W0106-013H0

document

Software Release
Description (SRD)

system V77

product level 8R0

issue number 2

software category 1

date June 15,1982

Product: MAINTAIN III TEST SYSTEM

distribution

lists:

PREFACE

This Software Release Description describes the functions of a product that is released for use on all MCO computers and computer systems.

This description is re-issued with each new release of the product which it describes.

Section 2 presents an overview of the product. New functions and enhancements are described in section 3. The complete list of supported programs is given in section 4. A list of Type & Feature numbers supported cross referenced to program numbers is given in section 5. Guidelines and restrictions upon the use of the product compose section 6. Known problems with this version are listed in section 7. DSURs resolved with this release are listed in section 8, while section 9 lists any changes to the documents related with this product.

The use of parenthesis [()] in sections 1.4, 1.5.1, 4, and 5 stand for an alphabetic character representing the media on which the material is supplied.

C = Disc Pack Object
G = 9 Track Magnetic Tape Object, 8ØØ BPI / 16ØØ BPI
J = Punched Card Object
R = 7 Track Magnetic Tape Object, 556 BPI
U = Paper Tape Object

TABLE OF CONTENTS

1. GENERAL INFORMATION

1.1 Release Identification

Release Number:
MAINTAIN III TEST SYSTEM 8RØ.1

Release Media:
The released software may be ordered for delivery on:

6315-ØØ - 9TRK 8ØØBPI MAGNETIC TAPE
6315-Ø1 - PUNCHED CARDS
6315-Ø2 - PUNCHED PAPER TAPE
6315-Ø3 - 7TRK 556BPI MAGNETIC TAPE
6315-Ø5 - 9TRK 16ØØBPI MAGNETIC TAPE
6315-Ø6 - DISC PACK (3Ø94-XX) 76Ø3
6315-Ø8 - DISC PACK (3Ø96-XX) 7613
6315-Ø9 - FLOPPY DISKETTE

1.2 Release Description

Maintain III Test System 8RØ.1 is a stability release. This release replaces all previous releases of the Maintain III Test System. This SRD also serves as a supplement to the Maintain III Test System manuals and it is suggested that it be placed with those manuals for future use.

1.3 Error Reporting Procedure

Users discovering errors or deficiencies in the performance of the software being released should communicate this information to the local Sperry Univac branch office, using a Diagnostic Software Users Report (DSUR), Form UD1-1943, to describe the problem encountered. DSURs should include the release number, along with a clear description of the problem, and may be accompanied by a console printout, and/or memory dump.

The local Sperry Univac personnel will verify that the errors in question are adequately documented and forward the DSUR to:

DIAGNOSTIC SOFTWARE DEVELOPMENT
SPERRY UNIVAC
P. O. BOX C-19504, M.S. Ø582
IRVINE, CA 92713

ATTN: DSUR COORDINATOR

The status of these DSUR's will be found in the TRACE Database.

1.4 Related Documents

The following documents describe their products or contain material relevant to it.

UP-8672	92( )0105-002
UP-8672	92( )0105-003
W 8900239	92( )0105-012
UP-8876	92( )0105-013
UP-8876	92( )0105-014
W 8900258	92( )0106-010
UP-8672	92( )0106-013
UP-8876	92( )0106-014
W 8900247	92( )0106-015
UP-8876	92( )0106-017
W 8900278	92( )0106-019
UP-8877	92( )0106-021
UP-8876	92( )0106-026
UP-8877	92( )0106-027
W 8900474	92( )0106-028
W 8901504	92( )0106-029
UP-8876	92( )0106-030
UP-8672	92( )0107-002
UP-8672	92( )0107-003
UP-8672	92( )0107-005
UP-8672	92( )0107-008
UP-8672	92( )0107-009
UP-8672	92( )0107-010
UP-8877	92( )0107-011
UP-8877	92( )0107-012
W 8900194	92( )0107-015
UP-8672	92( )0107-020
UP-8672	92( )0107-021
UP-8877	92( )0107-022
UP-8877	92( )0107-023
UP-8876	92( )0107-031
W 8900202	92( )0107-032

UP-8672	92( )0107-035
W 8900207	92( )0107-038
W 8900275	92( )0107-039
UP-8672	92( )0109-004
W 8900313	92( )0109-005
UP-8672	92( )0109-006
UP-8877	92( )0109-008
UP-8876	92( )0109-011
UP-8672	92( )0109-012
UP-8876	92( )0109-013
UP-8876	92( )0109-014
UP-8672	92( )0111-002
UP-8877	92( )0111-010
UP-8877	92( )0114-002
UP-8672	92( )0115-001
UP-8672	92( )0115-002
UP-8876	92( )0115-003
UP-8672	92( )0115-004
UP-8672	92( )0115-005
UP-8672	92( )0115-006

1.5 Installation

1.5.1 Contents of the Release Media

PROGRAM NAME	PART NUMBER		FILE
MAINTAIN III EXECUTIVE	92( )0106-013H		000
DIRECTORY			001
INSTRUCTION TEST, PART 1	92( )0107-002P	P	002
INSTRUCTION TEST, PART 2	92( )0107-003J		003
INSTRUCTION TEST, PART 3	92( )0105-003B		004
MEMORY TEST, PART 1	92( )0107-020K		005
MEMORY TEST, PART 2	92( )0107-021L		006
TELETYPE TEST	92( )0107-005E		007
POWER FAIL RESTART TEST	92( )0107-008G	P	010
PIM TEST	92( )0107-009K		011
REAL TIME CLOCK TEST	92( )0107-035F		012
MEMORY PROTECT TEST	92( )0105-002G		013
BUFFERED I/O TEST	92( )0107-010D		014
600 WCS TEST	92( )0109-004B		015
CARD READER TEST	92( )0107-012F		016

CARD PUNCH TEST	92( )0107-022A	017
PAPER TAPE AND BIC TEST	92( )0107-023G	020
UNIV. ASYN. SERIAL CONT. TEST	92( )0107-031B	021
RELAY CONTACT I/O TEST	92( )0107-032A	022
DCM TEST	92( )0106-014E	023
MOVING HEAD DISK TEST, 2822	92( )0105-012A	024
MAGNETIC TAPE TEST	92( )0106-015D	025
600 DCM MAPPED TEST	92( )0105-013C	026
LINE PRINTER TEST	92( )0107-011U*0P	027
DAMC TEST, 5401	92( )0107-039B	030
DAMC TEST, 5402	92( )0106-010D*0	031
DRUM/FIXED HEAD DISK TEST	92( )0107-015B	032
MOVING HEAD DISK TEST, 70-76*1	92( )0107-038D	033
BSC LAD TEST	92( )0106-017H	034
600 FLOATING POINT UNIT TEST	92( )0109-005C	035
MOVING HEAD DISK TEST, 70-751*	92( )0106-019C	036
600 MEMORY MAP TEST	92( )0109-006K*0P	037
PMA/BTC TEST	92( )0105-014A	040
MOVING HEAD DISK TEST, F3094/96	92( )0106-021G*0P	041
MOVING HEAD DISK TEST, 2823/24	92( )0109-008C	042
600 CACHE MEMORY TEST	92( )0111-002C P	043
DIR. MEM. DISK CONT.	92( )0111-010K P	044
DCM MAPPED TEST, F3074	92( )0109-011B	045
F3074 WCS TEST	92( )0109-012A	046
INFO DISPLAY SUBSYS TEST	92( )0106-026B	047
IEEE 488-1975 CONTROLLER TEST	92( )0106-028B	050
ANALOGIC TEST	92( )0109-014B	051
BOP LAD TEST	92( )0109-013C	052
BUFFERED EDITING TERMINAL	92( )0106-030D*0	053
MAGNETIC TAPE TEST ,F3089/93, 0870	92( )0106-027D*0	054
DCM MAPPED TEST ,F3078	92( )0115-003A	055
CACHE TEST, F3078	92( )0115-004C	056
MAP TEST, F3078	92( )0115-002D*0	057
MICRO DIAGNOSTIC	92( )0115-001C	060
WCS TEST, F3078	92( )0115-005A	061
FPP TEST, F3078	92( )0115-006A	062
F3068-00 CHANNEL TEST	92( )0114-002D*0P	063
DISKETTE STORAGE SYSTEM TEST	92( )0106-029C*0	064

NEW OR CHANGED PROGRAMS *
SEE SECTION 7 - - P

2. PRODUCT OVERVIEW

To provide Engineering, Manufacturing, and Customer Service with diagnostics for isolating and repairing malfunctions in MCO computers (62Ø/ V7Ø/ V77/ etc.), computer options (memory/ extended instructions/ map/ clock/ etc.), or peripherals (disc/ mag tape/ paper tape/ line printer/ card reader/etc.

3. NEW FUNCTIONS AND ENHANCEMENTS

Revision 8RØ.1 contains the following enhancements over revision 7R8.

A. New listings for all component tests on FICHE.

B. Directory
   1. Executing the directory program will clear all PIM masks

C. Line Printer Test
   1. Corrected problem with non-SUL printers

D. DAMC Test, 54Ø2
   1. Corrected part number printout

E. 6ØØ Memory Map Test
   1. Added memory error state printout

F. Moving Head Disc Test, F3Ø94/96
   1. Corrected problem in BIC interrupt routine

G. Buffered Editing Terminal Test
   1. Corrected Test Ø11 (Programmed Attention Test)

H. Magnetic Tape Test, F3Ø89/93, Ø87Ø
   1. Corrected timeout problems in F and T tests.

I. Map Test, F3Ø78
   1. Added memory error state printout.

J. F3Ø68-ØØ Channel Test
   1. Corrected error
   2. Added purge CACHE

K. Diskette Storage System Test
   1. Enhanced for single sided IBM format

4. SUPPORTED SOFTWARE

The following is a list of the software parts that comprise the Maintain III Test System and their current revision level.

PART NUMBER	SOURCE	OBJECT				LIST
		RMD	MT	CARD	PT	
92()0105-002	G				G	G
92()0105-003	B				B	B
92()0105-012	A				A	A
92()0105-013	C				C	C
92()0105-014	A				A	A
92()0106-010	D				D	D
92()0106-013	H	H0	H0	H0	H	H
92()0106-014	E				E	E
92()0106-015	D				D	D
92()0106-017	H				H	H
92()0106-019	C				C	C
92()0106-021	G				G	G
92()0106-026	B				B	B
92()0106-027	D				D	D
92()0106-028	B				B	B
92()0106-029	C				C	C
92()0106-030	D				D	D
92()0107-002	P				P	P
92()0107-003	J				J	J
92()0107-005	E				E	E
92()0107-008	G				G	G
92()0107-009	K				K	K
92()0107-010	D				D	D
92()0107-011	U				U	U
92()0107-012	F				F	F
92()0107-015	B				B	B
92()0107-020	K				K	K
92()0107-021	L				L	L
92()0107-022	A				A	A
92()0107-023	G				G	G
92()0107-031	B				B	B
92()0107-032	A				A	A
92()0107-035	F				F	F

92()0107-038	D	D	D
92()0107-039	B	B	B
92()0109-004	B	B	B
92()0109-005	C	C	C
92()0109-006	K	K	K
92()0109-008	C	C	C
92()0109-011	B	B	B
92()0109-012	A	A	A
92()0109-013	C	C	C
92()0109-014	B	B	B
92()0111-002	C	C	C
92()0111-010	K	K	K
92()0114-002	D	D	D
92()0115-001	C	C	C
92()0115-002	D	D	D
92()0115-003	A	A	A
92()0115-004	C	C	C
92()0115-005	A	A	A
92()0115-006	A	A	A

5. SUPPORTED HARDWARE

The following is a list of the peripheral type and feature numbers and their applicable program numbers that comprise the Maintain III Test System.

TYPE/FEATURE	PROGRAM NUMBER
Ø786-**	92( )Ø1Ø7-Ø11
Ø777-**	92( )Ø114-ØØ2
Ø78Ø-**	92( )Ø1Ø7-Ø11
Ø786-**	92( )Ø1Ø7-Ø11
Ø789-**	92( )Ø1Ø7-Ø11
Ø87Ø-**	92( )Ø1Ø6-Ø27
Ø876-**	92( )Ø1Ø6-Ø27
28Ø8-**	92( )Ø115-ØØ1
28Ø8-**	92( )Ø115-ØØ2
28Ø8-**	92( )Ø115-ØØ3
28Ø8-**	92( )Ø115-ØØ4
28Ø8-**	92( )Ø115-ØØ5
28Ø8-**	92( )Ø115-ØØ6
281Ø-**	92( )Ø1Ø7-ØØ5
2811-**	92( )Ø1Ø7-ØØ5
2812-**	92( )Ø1Ø7-Ø12
2813-ØØ	92( )Ø1Ø7-Ø22
2817-**	92( )Ø1Ø7-ØØ5
2817-Ø3	92( )Ø1Ø7-Ø31
2817-Ø4	92( )Ø1Ø7-Ø31
2817-Ø5	92( )Ø1Ø7-Ø31
2817-Ø6	92( )Ø1Ø6-Ø14
2817-Ø7	92( )Ø1Ø6-Ø14
2817-Ø8	92( )Ø1Ø6-Ø14
2818-**	92( )Ø1Ø7-ØØ5
2819-**	92( )Ø1Ø7-Ø11
282Ø-**	92( )Ø1Ø7-Ø11
2822-**	92( )Ø1Ø5-Ø12
2823-**	92( )Ø1Ø9-ØØ8
2824-**	92( )Ø1Ø9-ØØ8
2825-**	92( )Ø111-Ø1Ø
2826-**	92( )Ø111-Ø1Ø
2838-**	92( )Ø1Ø7-ØØ5
2839-**	92( )Ø1Ø7-ØØ5

2840-ØØ	92( )Ø1Ø6-Ø3Ø
2840-Ø1	92( )Ø1Ø6-Ø3Ø
2840-Ø2	92( )Ø1Ø6-Ø3Ø
2840-Ø3	92( )Ø1Ø6-Ø3Ø
2840-Ø4	92( )Ø1Ø6-Ø3Ø
2840-Ø5	92( )Ø1Ø6-Ø3Ø
2842-**	92( )Ø111-Ø1Ø
2843-**	92( )Ø111-Ø1Ø
2844-ØØ	92( )Ø1Ø7-Ø11
2844-Ø2	92( )Ø1Ø7-Ø12
2844-1Ø	92( )Ø1Ø7-Ø22
2845-**	92( )Ø1Ø6-Ø26
2846-**	92( )Ø1Ø6-Ø26
2847-**	92( )Ø1Ø7-Ø11
62Ø-25	92( )Ø1Ø7-Ø12
7Ø-63ØØ	92( )Ø1Ø7-Ø23
7Ø-631Ø	92( )Ø1Ø7-Ø23
7Ø-6311	92( )Ø1Ø7-Ø23
7Ø-632Ø	92( )Ø1Ø7-Ø23
7Ø-6372	92( )Ø1Ø7-Ø23
7Ø-8Ø3Ø	92( )Ø1Ø9-Ø14
73-ØØ2Ø	92( )Ø1Ø6-Ø15
8433-**	92( )Ø111-Ø1Ø
F2834*	92( )Ø1Ø9-Ø17
F2960-Ø4	92( )Ø1Ø9-ØØ5
F2960-Ø5	92( )Ø1Ø9-ØØ4
F2960-Ø6	92( )Ø1Ø9-ØØ4
F2960-Ø8	92( )Ø1Ø9-ØØ6
F2960-Ø9	92( )Ø111-ØØ2
F2960-32	92( )Ø1Ø9-ØØ4
F2960-47	92( )Ø1Ø5-Ø13
F2960-47	92( )Ø1Ø9-ØØ6
F3ØØØ-**	92( )Ø1Ø5-Ø13
F3ØØØ-**	92( )Ø1Ø6-Ø14
F3ØØØ-**	92( )Ø1Ø9-Ø11
F3ØØØ-**	92( )Ø115-ØØ3
F3ØØ1-ØØ	92( )Ø1Ø5-Ø13
F3ØØ1-ØØ	92( )Ø1Ø6-Ø14
F3ØØ1-ØØ	92( )Ø1Ø9-Ø11
F3ØØ1-ØØ	92( )Ø115-ØØ3

F3001-01 92( )0105-013

F3001-01 92( )0106-014
F3001-01 92( )0109-011
F3001-01 92( )0115-003
F3001-02 92( )0105-013
F3001-02 92( )0106-014

F3001-02 92( )0109-011
F3001-02 92( )0115-003
F3001-03 92( )0105-013
F3001-03 92( )0106-014
F3001-03 92( )0109-011

F3001-03 92( )0115-003
F3001-04 92( )0105-013
F3001-04 92( )0106-014
F3001-04 92( )0109-011
F3001-04 92( )0115-003

F3001-05 92( )0106-017
F3001-06 92( )0106-014
F3001-07 92( )0106-014
F3002-00 92( )0107-039
F3002-01 92( )0106-010

F3003-02 92( )0106-017
F3003-03 92( )0106-017
F3003-04 92( )0106-017
F3003-05 92( )0106-017
F3004-** 92( )0107-031

F3012-00 92( )0111-010
F3012-01 92( )0111-010
F3012-02 92( )0111-010
F3012-03 92( )0111-010
F3024-00 92( )0105-014

F3024-01 92( )0107-009
F3026-01 92( )0109-006
F3026-01 92( )0109-011
F3027-00 92( )0109-005
F3028-00 92( )0111-002

F3034-00 92( )0109-004
F3034-01 92( )0109-004
F3034-02 92( )0109-004
F3034-03 92( )0109-012

F3049-00	92( )0107-010
F3057-00	92( )0109-004
F3059-00	92( )0107-011
F3060-00	92( )0109-013
F3061-00	92( )0106-028
F3064-**	92( )0106-029
F3066-00	92( )0106-021
F3067-**	92( )0111-010
F3068-00	92( )0114-002
F3074-00	92( )0109-011
F3078-**	92( )0115-001
F3078-**	92( )0115-002
F3078-**	92( )0115-004
F3078-**	92( )0115-005
F3078-**	92( )0115-006
F3080-00	92( )0107-012
F3082-**	92( )0107-023
F3083-**	92( )0107-023
F3084-**	92( )0107-023
F3085-00	92( )0107-011
F3086-00	92( )0107-011
F3087-00	92( )0107-011
F3088-**	92( )0106-015
F3089-00	92( )0106-015
F3089-01	92( )0106-015
F3089-02	92( )0106-015
F3089-03	92( )0106-015
F3089-04	92( )0106-027
F3089-05	92( )0106-027
F3089-06	92( )0106-027
F3090-00	92( )0105-012
F3091-00	92( )0109-008
F3092-00	92( )0109-008
F3093-00	92( )0106-027
F3093-01	92( )0106-027
F3093-02	92( )0106-027
F3093-03	92( )0106-027
F3093-04	92( )0106-027
F3093-05	92( )0106-027
F3093-06	92( )0106-027

F3Ø94-**	92( )Ø1Ø6-Ø21
F3Ø95-**	92( )Ø1Ø7-Ø38
F3Ø96-**	92( )Ø1Ø6-Ø21
F3Ø98-**	92( )Ø1Ø7-Ø15
F3278-**	92( )Ø1Ø7-Ø32
F3310-**	92( )Ø1Ø6-Ø21
F3320-**	92( )Ø1Ø6-Ø27

6. GUIDELINES AND RESTRICTIONS

6.1 Guidelines

Maintain III Test System 8RØ contains no operating differences from 7R8.

To boot from cartridge disk (unit Ø) or floppy diskette (unit Ø) use the CPUs ABL by placing a 2 in Register Ø prior to initiating the ABL. For systems without ABL, key in the following bootstrap:

```
ØØ1130 1004XX START  EXC      Ø4XX
ØØ1131 1040XX        EXC2     XX
ØØ1132 1002XX        EXC      Ø2XX
ØØ1133 005001        TZA
ØØ1134 1031XX        OAR      XX
ØØ1135 1010XX LOOP1  SEN      XX,SDONE
ØØ1136 ØØ1141
ØØ1137 ØØ1ØØØ        JMP      LOOP1
ØØ1140 ØØ1135
ØØ1141 1025XX SDONE  CIA      XX
ØØ1142 151167        ANA      MASK
ØØ1143 ØØ1Ø16        JANZ     START
ØØ1144 ØØ113Ø
ØØ1145 1ØØØZZ        EXC      ZZ
ØØ1146 1ØØ3XX        EXC      Ø3XX
ØØ1147 005102        INCR     2
ØØ1150 1032XX        OBR      XX
ØØ1151 1031YY        OAR      YY
ØØ1152 ØØ6Ø1Ø        LDAI     Ø113Ø
ØØ1153 ØØ113Ø
ØØ1154 1031ZZ        OAR      ZZ
ØØ1155 1ØØØYY        EXC      YY
ØØ1156 1ØØØXX        EXC      XX
ØØ1157 1014XX LOOP2  SEN      Ø4XX,LOOP2
ØØ116Ø ØØ1157
ØØ1161 1025XX        CIA      XX
ØØ1162 151167        ANA      MASK
ØØ1163 ØØ1Ø16        JANZ     START
ØØ1164 ØØ113Ø
ØØ1165 ØØ1ØØØ        JMP      Ø6ØØ
ØØ1166 ØØ6ØØ
ØØ1167 Ø07760 MASK   DATA     Ø7760
```

WHERE: XX=DISKETTE DEVICE ADDRESS
YY=BIC EVEN DEVICE ADDRESS
ZZ=BIC ODD DEVICE ADDRESS

START PROGRAM AT 01130

6.2 Restrictions

A change is required to the card bootstrap when used on a V77-200.

LOCATION	NEW CONTENTS
000173	1021ZZ
000174	055000
000175	005144
000176	001000
000177	000213
000221	001000
000222	000173

Do not input into locations 000223-000225.
Restart at location 0212 with R2(X)=07000.

Unless specifically designated as a MAPped test, no test within the test system utilizes the MAP key or BIC key. to run any nonMAPped test in a MAPped environment, the system must be MAPped by using the utility functions of the MAP test.

A prerequisite to running the Magnetic Tape Test F3089/93, 0870 is hardware IEN 94001.

A prerequisite to running the MAP Test, F3078 is hardware FCO W2834-14.

Refer to Section 7 (KNOWN PROBLEMS) for further restrictions.

7. KNOWN PROBLEMS

The following are reported problems. MCO Diagnostic Software Development has not verified the existance of these problems.

Patches and further information from DSD may be found indented following the description of the problem.

SMR 1693, 12/16/77, MEMORY - MEGAMAP DIAG.
Memory-MegaMAP I/O error key bits (status register bits 12-15) not tested under diagnostic for other than zero condition.

SUR, 10/19/79, LINE PRINTER TEST
The document contains no examples of the Vertical Format Test.

DSUR 05717, 11/12/80, ANALOGIC
This program does not provide testing for the following features: F2963-14 thru 18, 20 thru 49, F2964.

DSUR 05720, 8/10/81, ANALOGIC
the diagnostic does not have the capability to test the analogic ready interrupt.
SPS 89A0475 Rev. X does not clearly state input parameters.
(1) Page 7 does not indicate that this is for the BIC complete interrupt.
(2) Page 17 does not indicate which voltage range to enter.
(3) The programable gain does not indicate which feature to put yes.
(4) This document is written assuming the user has been trained on the Analogic equipment.
SPS W8900475 has been replaced by UP-8876.
Due to logic problems in the test, DSD recommends not using the interrupts. Which, by the way, is the BIC complete.

DSUR 05721, 2/5/80, MAP TEST
It is not possible to use the Cmm,x,x command after running only test 1. It seems to be necessary to run test 2 first.

DSUR 06195, 11/2/81, LINE PRINTER
Latest release of this test not working correctly to 2820 printers if spirial pattern selected. Data not

spiral, if set, format pattern selected still prints complete buffer. Earler rev level of t6his test 'S' works OK

Patch from DSTB 599:

LOCATION	WAS	SHOULD BE
001376	XXXXXX	005203

Restart from location 0500

DSUR 18645, 2/22/80, DOCUMENTS
Some documents still contain the old Varian model numbers.

DSUR 19351, 6/22/81, V77-800 MAP
The error printout for a parity error prints out the incorrect board number.

A patch is available from DSTB 599:

LOCATION	NEW CONTENTS
013002	014133
013003	005000

Restart the program at 0500.

DSUR 19357, 12/16/80, V77-400
The load instruction allows indirect addressing to occur when bit 15 is set in the register specified by the (RX) field of the instruction. This fact is not documented in the Architecture Ref. Manual nor is it tested in Maintain III.

DSUR 29174, 8/3/81, MEMO 1
Memo test, part 1 enables interrupts. The V77-400 alters loc. 062 to reflect address of a parity or protect violation. This distroys a return jump instruction and Memo goes into a loop if the error occurs prior to option selection.

A patch is available from DSTB 599

LOCATION	NEW CONTENTS
000044	005000

Restart program at 7.

DSUR 31834, 3/11/81, SU39LAZR
There is not any provision for altering the print buffer (PRTBUF) used by test #4.

DSUR 36753, 12/18/79, POWER FAIL/RESTART TEST
It is possible to get extra, random characters preceeding the normal output messages. This occurs because the console power is removed.

DSUR 39335, 2/22/8Ø, DMDC
The test will experience rate errors when used with the 128K ECC memories.

DSUR 42385, 6/1Ø/81, CACHE 8ØØ
Chache test dis not find a Cache failure that was pattern dependant

DSUR 48643,Ø3/24/81, EXECUTIVE
Enhance Executive to provide a hardcopy of all input/output messages.

DSUR 49548, 1/5/81, CACHE 6ØØ
When running the CACHE Memory Test, subtests 1-4 will fail with an ERØ4 error reported to the user. This error is reported only when subtest 1-4 are run first. If subtest 7 is run prior to running subtest 1-4 the error does not occur.

DSUR 49884, 8/12/81, RTC
Maintain III Test Program Users Manual UP-8672 page 3-5 Section 8.6.2.2 does not specify an input parameter for the V77-2ØØ and V77-4ØØ computers.
The clock rate is dependant upon the input frequency as defined in the system memo: Typically it is the line frenquency 5Ø/6Ø Hertz.

DSUR 49885, 8/12/81, BIOC
Maintain III Test Program Users Manual UP-8672 page 1Ø-3 Section 1Ø.2 does not describe each subtest function and which test to run without BIC.
Subtest 1 is the Pulse Output Test and may be run with or without BIC.
Subtest 2 is the Sense Line Test and may be run with or without BIC.
Subtest 3 is the Load Input Buffer Via BIC Test and must be run with BIC.
Subtest 4 is the Load Output Buffer Via BIC Test and must be run with BIC.

DSUR 49887, 8/12/81, DAMC
Software Performance Specification 89AØ258 does not describe the meaning of the error printouts.
The loopback shoe wraps control lines out to control lines in, the error messages reference these control lines. or the message has enough information contained whithin it to determine the type of error encountered.

DSUR 50129,04/09/81, MHDT-F
Diagnostic is forcing an end-of-track condition but is not testing to insure that the "EOT" bit is set
A patch is available from DSTB 599

LOCATION	OLD CONTENTS	NEW CONTENTS
003314	001000	001010
003315	003326	003320
003316	001010	001000
003317	003322	003326

Restart at location 0500

DSUR 50145, 9/4/81, BSC LAD
The BSC lad test program fails test 4 in mode 0 and 2 (ebcdic an ascii in the transparent mode) and fails test 1 and 4 in mode 1 non-transparent mode).
The failure is observed when EIR W95006 is installed.

DSUR 50150, 10/1/81, DMDC
Program may enter an indefinite loop or may report an illogical disc configuration if there exists one or more devices in the system that respond with a 'true' sense to the command 01010XX. The Floppy disk controller will respond true.

DSUR 50170, 10/14/81, BOPLAD
Test 2 of the BOP Lad test will print the same error message when no 'control character detected' interrupt occurs as when an incorrect character causes a CCD interrupt.

DSUR 50171, 10/14/81, BOPLAD
Invalid test 2 (Control Character Detected test) errors may be reported when the CC is 0377.

DSUR 50185, 1/7/82, ANALOGIC
The diagnostic does not allow the user to use a BIC DA above 026.
The following patch enables any DA up to 060.

LOCATION	WAS	S/B
020134	026	060

Reatart at location 0500

DSUR 50187, 1/12/82, BOPLAD
The BOPLAD test will report timeout errors during subtests 4, 7,12, & 16 if the lad is run at 110BPS on a V77-800 with cache enabled.
A patch is available

LOCATION	CONTENTS

```
000011        005001
000012        005311
000013        001016
000014        000012
000015        001000
000016        100010
003044        002000
003045        000010
Restart at location 01000
```

DSUR 50189, 1/12/82, BOPLAD
Subtest 16 of the BOPLAD test will report a status error if the lad is run at 110BPS on a V77-800 with cache enabled.

```
A patch is available
LOCATION      CONTENTS
007161        077000
Restart at location 01000
```

DSUR 50204, 9/17/81, MHDT-F
When running the 'F' or 'T' test in the interrupt mode and utilizing the BIC complete, the system will hang in a loop and never exit.

DSUR 50206, 9/10/81, LINE PRINTER
During an error condition, ie Power Loss or Paper Check, on the SUL printer the program reports "PRINTER NOT READY" and does not report any ARM status.

```
A patch is available from DSTB 599
LOCATION      CONTENTS
005050        000010
Restart program at 0500.
```

DSUR 50208, 9/10/81, LINE PRINTER
When specifing the sprial pattern on a type 6 printer and 0100 cycles are to be run, the program will output one line of the spiral pattern to the printer and the computer will halt.

```
A patch is available from DSTB 599
LOCATION      CONTENTS
001376        005203
Restart program at 0500.
```

8. DSURS CLOSED

The problems relating to these DSURs may be found in the TRACE Database.

DSUR#	COMPONENT
8R0	
05714	MANUAL
05717	MANUAL
06716	PRINTER
19364	DCM
19366	DCMMAP
19368	DCM
34381	MHDT-F
42547	MAP8
49534	MAGT89
49555	BUFEDT
51659	PRINTER

9. DOCUMENTATION CHANGES

The following describes additions to be made to the Maintain III Test Programs Users Manual UP-8672.

Delete Tables 2-9 and 2-1Ø as they are no longer applicable.

Renumber Section 2.2.2.3 to Section 2.2.2.2.1

Insert the following after the new Section 2.2.2.2.1:

2.2.2.3 Diskette Commands

If the diskette version is being used, the following additional commands may be used:

Fn. Position to file N.
Ln, Load from file N.
or If the terminator is a period, the program is
Ln. loaded and the start address is displayed, control is then returned to MAINTAIN III.

If the terminator is a comma, then the program is loaded and executed.

2.2.2.3.1 Writing Diskette Files

When writing a file from memory to diskette:

a. Ensure the diskette is write-enabled.

b. Select the output file by using the F command.
The Executive responds with: OUTPUT FILE SELECTED.

c. Write out the object modules by using the P command.

d. Close the output file and update the directory by using the U command.
The executive responds with: ENTER OCTAL FILE NUMBER.

This number will be the n used with the L command.

Note: The directory udpated is an internal one, not the directory in file 1.

Section 3 after the discription of subtest 22 add the following warning:

On V77-200's there is no indirect address limiting and the message indicating such will appear. On V77-200's this is not an error printout

Section 11.5.2 add the following after the BIC DEV ADDR= response:

INPUT TYPE 2 PAGES

The operator must respond with the character A for all are type 2, or an N for none are type 2 pages.

Section 17.2.3.3 add to list

TEST	FUNCTION TESTED
22	STORE BYTE EXECUTIVE MODE 1 KEY 1
23	STORE BYTE EXECUTIVE MODE 1 KEY 1
24	STORE BYTE EXECUTIVE MODE 2 KEY 1
25	STORE BYTE EXECUTIVE MODE 2 KEY 1
26	STORE BYTE BLOCK EXECUTIVE MODE 1 KEY 1
27	STORE BYTE BLOCK EXECUTIVE MODE 1 KEY 1

Section 17.4.4 add to list

ERROR CODE	MEANING
22	EXECUTIVE MODE STATE 1 STORE BYTE FAILED
23	EXECUTIVE MODE STATE 1 STORE BYTE FAILED
24	EXECUTIVE MODE STATE 2 STORE BYTE FAILED
25	EXECUTIVE MODE STATE 2 STORE BYTE FAILED
26	EXECUTIVE MODE STATE 1 STORE BYTE BLOCK FAILEI
27	EXECUTIVE MODE STATE 1 STORE BYTE BLOCK FAILEI

If error codes 23, 25, and 27 all occur, then the FCO is probably not installed.

In UP-8876 part 3, add the following general comment at the end of the hardware requirements 1.2 & 2.2:

The LAD under test must have a test connector

wired as shown in the DCM Operation and Service Manual attached to the LAD output connector.

Until an update to UP-8877 is available,

Add the Ø789 PRINTER TYPE to section 4.2 heading line.

Add the following text to the PRINTER TYPE description in section 4.2.3.1:

A 1Ø FOR A Ø789 PRINTER

Add the following text following the PRINTER TYPE description in section 4.2.3.1:

FOR THE TYPE 1Ø PRINTERS, THE PROGRAM PROMPTS

BAND DASH NUMBER

The operator responds with the two digit decimal number corrisponding to the dash number of the band feature followed by a period.

Add the following printer type to table 4.2:

PRINTER TYPE 1Ø
TØ789 PRINTER

Add the following at the end of section 4.2.3.2:

When using figure 4-1 for the Ø789 printer, the output will vary according to the band used.

Add the following to table 4-4:

The following error messages are applicable to the type 1Ø printer;

ACTUATOR ERROR
BAND ERROR
DATA PARITY ERROR
PARITY ERROR
PAPER FEED MOTION ERROR
FORMS JAM
FORMS RUNAWAY

INVALID TRANSFER
PAPER CHECK
POWER LOSS
SLEW ERROR *
STACKER FULL
TEMPERATURE ERROR
VFU ERROR

* The vertical format test forces a slew error condition, so this should appear once each time the 'V' test is run.

Add the following commands to section 7.4.5.2:

DOWN,[C],[T],[S].

This places an entry into the table. Before an entry can be made the device and unit numbers must be set. The program checks the cylinder [C], track [T], and sector [S] for proper range. The sector is saved but is not used by the program, the entire track is downed and not used. if the track is already downed the message 'ALREADY IN TABLE' is printed. If the table is full the message 'TABLE FULL' is printed (there is room for 255 entries). Tests 0, 1, 2, 3, 4, and BURNIN have been changed to skip over any track that is in the table. Note that the key-in commands such as WRITE,DATA READ,DATA FORMAT, etc can still use the track.

UP,[C],[T],[S]

This command deletes an entry from the table thereby allowing the track to be tested. if the track was not downed then the message 'NOT IN TABLE' is printed.

CLEAR.

This will clear all entries in the table. Note that the table is initilized when the program is loaded but not when the program is restarted at location 0500.

LIST.

This command will list all the entries in the table. the form of the printout is:

DEVICE UNIT CYLINDER TRACK SECTOR

If there were no entries in the table the message 'TABLE EMPTY' is printed.

It should be noted that the BTF table is only kept in memory and will be lost when another program is loaded. it is suggested an external copy be made of the bad tracks so they may be reentered when the test is run again.

Until W 89ØØ313B is available, replace the first part of the first paragraph of section 2.3 with the following:

When the test program is loaded and execution begins, it identifies itself and inquires if the real-time clock should be enabled during testing. if it is, the user responds with a Y)es, otherwise, the response is N)o. The program then asks if underflow interrupt checks are to be suppressed, the responses are Y)es or N)o. The test program then masks off interrupts....