

digital

PDP 12  
DIAGNOSTIC START UP  
PROCEDURES



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PERIPHERAL INTERCHANGE PROGRAM

STARTING ADDRESS  
LOCATION 20

DEC-12-YITA-D

MARK12 A FORMATING AND  
VERIFICATION PROGRAM FOR  
UNCERTIFIED TAPES  
(VERSION D)

STARTING PROCEDURE  
IF THE VERSION OF DIAL USED  
DOES NOT AUTOMATICALLY START  
THAN MARK12 IS STARTED BY THE  
FOLLOWING PROCEDURE:

1. BE SURE PROCESSOR IS STOPPE;  
MOMENTARILY PRESS THE STOP  
SWITCH IF NECESSARY.
2. PRESS I-0 PRESET WITH THE  
MODE SWITCH SET TO LINC.
3. PRESS START 20.

DEC-08-LRAA-D

READ-IN-MODE LOADER

STARTING ADDRESS  
LOCATION 7756

DEC-08-LBAA-D

BINARY LOADER

STARTING ADDRESS  
LOCATION 7777

MAINDEC-08-DILO

BASIC PDP-8 MEMORY CHECKERBOARD  
BASIC PDP-8I MEMORY CHECKERBOARD

STARTING ADDRESS  
LOC. 0005 LOW END CHECKERBOARD  
LOC. 7430 HIGH END CHECKERBOARD

LOC. 20

SWITCH SETTINGS

SR00 = 1 SUPPRESS HALT

SR01 = 1 SUPPRESS PRINTOUT

SR02 = 1 SCOPE LOOP ON ERROR

ALSO SET SR9 SR10 AND SR11 TO THE NUMBER OF THE  
MEMORY BANK YOU WISH TO TEST. THIS WOULD BE 000 IN A BASIC 4K MACHINE.

MAINDEC-03-D07B-D

RANDOM ISZ TEST

STARTING ADDRESS

LOC. 0037

SWITCH SETTINGS

SR0 = 1 HALT ON ERROR

SR1 = 1 ELIMINATE ERROR PRINTOUT

SR3 = 0 RANDOM FROMS

SR3 = 1 FIXED FROMS

SR4 = 0 RANDOM TOS

SR4 = 1 FIXED TOS

SR5 = 0 RANDOM OPERAND

SR5 = 1 FIXED OPERAND

SR9 = 1 DO ONE ISZ ONLY

SR11 = 0 DO PART 1

SR11 = 1 DO PART 2 (SR3 SR4 SR5 MUST BE ZEROS)

MAINDEC-03-D04B-D

RANDOM JMP TEST

STARTING ADDRESS

LOC. 0200

RESTART ADDRESS

LOC. 0214

SWITCH SETTINGS

SR0 = 1 HALT ON ERROR

SR2 = 0 SELECT RANDOM JUMP FROM ADDRESS

SR2 = 1 HOLD JUMP FROM ADDRESS CONSTANT.

SR3 = 0 SELECT RANDOM JUMP TO ADDRESS.

SR3 = 1 HOLD JUMP TO ADDRESS CONSTANT.

MAINDEC-03-D05B-D

RANDOM JMP-JMS TEST

MAINDEC-81-D02B

INSTRUCTION TEST 2

STARTING ADDRESS  
LOC. 201

08-D01A-D

PDP-8 INSTRUCTION TEST - PART 2A

ST ADD  
LOC 200

*SW 2 = Print Error*

*SW 3 = Leave Two's Add Test*

~~SW SET~~

~~SET LSW = 7777 BEFORE ST PROGRAM~~

08-D02B

~~PDP8 INST TST PART 2~~

~~ST ADD  
LOC 0200 TWOS ADD TST  
LOC 2000 ROTATE TST~~

SW SET  
SW0 STOP ON ERR  
SW1 SCOPE MODE  
SW2 PRINT ERROR  
SW3 LEAVE TWOS ADD TST ST ROTATE  
ALSO MAY USE COMBINATIONS SW0-2

MAINDEC-81-DOAA

PDP-81 INSTRUCTION TEST PART 3A

*BAE3A*

STARTING LOCATION  
LOC. 200

SWITCH SETTINGS  
SR0 = 1 HALT ON ERROR  
SR1 = 1 SCOPE MODE  
SR2 = 1 PRINT ERROR INFO  
SR0 AND SR2 = 1  
SR1 AND SR2 = 1  
SR0 SR2 AND SR3 = 1  
SR0 SR1 AND SR2 = 1

Pmode START 400

SW SET  
RSW5=0 A SYSTEM  
RSW5=1 B OR C SYSTEM

03-D2PE

*TTY 1*

FAMILY-OF-8 ASR 33 OR 35 TELE- TYPE TESTS PART 1

STARTING ADDRESS  
LOC 200

SWITCH SETTINGS  
SR0 HALT AT END OF ROUTINE  
SR1 SELECT ROUTINE WHOSE NUMBER IS IN SR6-11  
SR6-11 ROUTINE NUMBER SELECTED

08-D2QD

*TTY 2*

TELETYPE TESTS

ST ADD  
LOC 200

SW SET  
PRG 0-3  
SR0 HLT END ROUT NUM IN AC  
SR1 SEL ROUT SR6 TO SR11  
SR2 LOOP PRG  
SR6 TO SR11 SEL ROUT  
ALSO  
PRG1 3 6 7 10  
SR5=1 HLT ON ERR BAD CHAR IN AC  
SR5=0 HLT END DATA BK ERR CNT AC

MAINDEC-12-D3EA

*Dime Empty  
Set to Zero, Remote*

TC 12-F OPTION

ST ADD  
START 20 KEY

SW SET  
RSW 0 = 0 HLT ON ERROR  
RSW 1 = 0 PRINT ERROR MESSAGE

08-D2AA-D

08-D1GB

EXT MEMORY CONTROL

ST ADD  
LOC 200

SW SET  
SR8=1 IF PDP-8I  
SW8-0 IF PDP-8 OR 8S  
SR9 10 11 MUST CONT AN OCTAL VAL  
EQUAL TO THE NUM OF EXT MEM FLDS  
AVAILABLE(1 TO 7) NOTE FLD ZERO  
IS NOT INCLUDED IN THIS VALUE

08-D1EB

EXT MEM CHECKERBOARD

*EXTCB*

ST ADD  
LOC 200

REST ADD  
LOC 207

SW SET  
TST LIM TYPEOUT SR=0000 NORMALLY  
SR0 HALT AFTER TST OR ERR  
SR1 INHIB ERR PRINTOUT  
SR2 BELL ON ERR  
SR3-6 TST SEL  
SR7 INH PRG RELOCATION  
SR11 PRG AUTO REST LOC 207 ALLOW  
TST LIM AND SR TO BE CHANGED

MAINDEC-12-D3AD-D

*TC 12 I*

PDP-12 TAPE CONTROL TEST (PART I OF 2)

ST ADD  
LSW = 200  
RSW = 0  
8 MODE  
I-O PRES  
ST LEFT SW

SW SET  
SR00 = 1 SUPPRESS ERROR HALTS  
SR01 = 1 SUPPRESS TYPEOUTS RING BELL ON ERROR  
SR02 = 1 SCOPE LOOP ON A FAILING TEST



- A. 8 MODE
- B. IF=0 DF=0
- C. IO PRESET

RSW TO RELAY TST

- A. L MODE
- B. IO PRESET
- C. LSW=1000
- D. ST LS
- E. RSW=0011
- F. ALTER RSW6-11 DATA SHOULD AP-PEAR IN BOTH RELAY

REG LAMPS AND AC

- G. RSW0-5 APPEAR BUT NO EFFECT

RELAY TST

- A. L MODE
- B. IO PRESET
- C. LSW=1003
- D. ST LS

12-D6BA

VR12 DISPLAY TST

ST ADD  
LOC 20

SW SET

SSW0=1 RETURN TO DIAL MONITOR  
 STRIKING F KEY ON TTY DIRECTS THE PROG TO LOCK  
 ONTO THE CURRENT DIS  
 STRIKING ANY OTHER TTY KEY WILL DIRECT THE PROG TO  
 ALTERNATE BETWEEN THE THREE PATTERNS

MAINDEC-12-DIAC-D

*EXTMC12*

PDP-12 EXT MEM CONTROL TST

ST PROCEDURE

RSW = DESIRED OPTIONS  
 8 MODE  
 I-0 PRESET  
 START 20

SW SET

RSW 00 = 1 SUPPRESS ERROR HALT  
 RSW 01 = 1 SUPPRESS ERROR PRINTOUT  
 RSW 02 = 1 SCOPE LOOP ON FAILING ROUTINE  
 RSW 03 = 1 SCOPE LOOP ON NON-FAILING ROUTINE  
 RSW 05 = 1 INHIBIT BELL  
 RSW 06 = 1 INHIBIT PASS COUNTER