

IDENTIFICATION

PRODUCT CODE: MAINDEC-08-DHCRA-A-D
FORMERLY: MAINDEC-8E-D2EB
PRODUCT NAME: CR8E/CR8F CARD READER TEST
DATE REVISED: MAY 22, 1972
MAINTAINED: DIAGNOSTIC GROUP
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DIGITAL EQUIPMENT CORPORATION

1.

ABSTRACT

THE PROGRAM TESTS THE CARD READER FOR CORRECT ALPHANUMERIC AND BINARY OPERATIONS. IT ALSO TESTS CONTROL INTERRUPT AND TIMING.

2.

REQUIREMENTS

IF DF32 DISK IS PART OF THE SYSTEM, IT SHOULD BE IN THE OPERATE MODE. WHEN DF32 DISK IS IN MAINTENANCE MODE IT SHARES DEVICE CODES WITH THE CARD READER AND THEREFORE THE CARD READER DIAGNOSTIC CANNOT BE VALIDLY RUN. STATIC TESTS AND MANUAL INTERVENTION TESTS SHOULD OPERATE CORRECTLY BEFORE ATTEMPTING TO OPERATE ALL OTHER TESTS.

2.1

EQUIPMENT

PDP8-E WITH EITHER ONE OF THE FOLLOWING CARD READERS:

A, CR03 G.D.I 100 MS CARD READER (CR8E)

B, DOCUMENTATION M200 CARD READER (CR8F)

CR03 ALPHANUMERIC CARD DECK

CR03 BINARY CARD DECK

3.

LOADING PROCEDURE

THE PROGRAM TAPE IS IN BINARY FORMAT. LOAD THE PROGRAM INTO CORE BY FOLLOWING THE INSTRUCTIONS PUBLISHED FOR THE PARTICULAR BINARY FORMAT BEING USED.

4.

STARTING PROCEDURE

4.1

CONTROL SWITCH SETTINGS

SW0=0 TEST ALPHANUMERIC DECK

SW0=1 TEST BINARY DECK

SW1=0 PRINT DATA ERROR

SW1=1 SUPPRESS PRINT DATA ERROR

SW2=0 HALT AFTER DATA ERROR

SW2=1 SUPPRESS HALT AFTER DATA ERROR

SW3=0 HALT AT END OF TEST DECK

SW3=1 CONTINUE TO NEXT TEST DECK WITHOUT HALT.

4.2

STARTING ADDRESSES OF CARD READER TESTS

0200 = ALPHA AND BINARY DATA RELIABILITY TESTS

0202 = STATIC IOT TESTS

0204 = MANUAL INTERVENTION TESTS

0206 = COMPRESSED CODE DATA RELIABILITY TESTS

0210 = VALIDITY BIT DATA RELIABILITY TESTS

2300 = SCOPE LOOP

4.3 PROGRAM AND/OR OPERATOR ACTION

THE TESTS PROVIDED IN THIS DIAGNOSTIC SHOULD BE RUN IN THE
FOLLOWING SEQUENCE,

- A. REFERENCE 4.4 FOR CR03 G.D.I CARD READER
- B. REFERENCE 4.4A FOR DOCUMENTATION M200 CARD READER

4.4 CR03 G.D.I (CR8E) PROGRAM AND/OR OPERATOR ACTION

STATIC IOT TESTS FOR CR8E CARD READER

- A. PLACE A CARD DECK INTO INPUT HOPPER
- B. TURN ON CARD READER POWER AND THEN DEPRESS MOTOR START
- C. AT THIS POINT THE ONLY RED LIGHT TO BE ON SHOULD BE READ STOP. REFERENCE G.D.I. MANUAL TO REMEDY OTHER RED LIGHT ERROR CONDITIONS.
- D. LOAD ADDRESS 0202
- E. DEPRESS CLEAR AND THEN DEPRESS CONTINUE
- F. PROGRAM WILL PRINT "IOTS OK" IF TEST RUNS. PROGRAM WILL HALT IF TEST FAILS. REFERENCE SYMBOLIC LISTING AND COMMENTS FOR APPROPRIATE ERROR DESCRIPTION.

MANUAL INTERVENTION TESTS FOR CR8E CARD READER

- A. PLACE ALPHANUMERIC OR BINARY TEST DECK IN LOWER HOPPER.
- B. TURN ON CARD READER POWER
- C. DEPRESS MOTOR START AND THEN DEPRESS READ START
AT THIS POINT ALL RED LIGHTS SHOULD BE OFF.
- D. LOAD ADDRESS 0204
- E. SELECT APPROPRIATE SWITCH CONTROL (REFERENCE 4.1),
- F. DEPRESS CLEAR AND THEN DEPRESS CONTINUE
- G. AT THIS POINT PROGRAM WILL ATTEMPT TO READ FOUR CARDS AND THEN ISSUE MESSAGE "OPERATOR MUST NOW PRESS READ STOP."
- H. AFTER READ STOP IS PRESSED PROGRAM WILL THEN ISSUE MESSAGE "OPERATOR MUST NOW PRESS READ START."
- I. PROGRAM WILL PRINT "MANUAL TESTS OK" IF TEST RUNS. PROGRAM WILL HALT IF TEST FAILS. REFERENCE SYMBOLIC LISTING AND COMMENTS FOR APPROPRIATE ERROR DESCRIPTION.

VALIDITY BIT DATA RELIABILITY TESTS FOR CR8E CARD READER

STATIC IOT TESTS MUST OPERATE CORRECTLY BEFORE ATTEMPTING THIS TEST.

- A, PLACE BINARY TEST DECK IN LOWER HOPPER
- B, TURN ON CARD READER POWER
- C, DEPRESS MOTOR START AND THEN DEPRESS READ START
AT THIS POINT ALL READ LIGHTS SHOULD BE OFF,
- D, LOAD ADDRESS 0210
- E, SELECT APPROPRIATE SWITCH CONTROL (REFERENCE 4,1)
- F, DEPRESS CLEAR AND THEN DEPRESS CONTINUE
- G, PROGRAM WILL RING BELL AND PRINT "*" WHEN FINISHED WITH AN 80 CARD TEST DECK,
- H, IF MORE THAN 1 TEST DECK HAS BEEN LOADED, REPEAT STEP E AND PRESS CONTINUE,

COMPRESSED CODE DATA RELIABILITY TESTS FOR CR8E CARD READER

STATIC IOT TEST MUST OPERATE CORRECTLY BEFORE ATTEMPTING THIS TEST.

- A, PLACE ALPHANUMERIC TEST DECK IN LOWER HOPPER,
- B, TURN ON CARD READER POWER,
- C, DEPRESS MOTOR START AND THEN DEPRESS READ START
AT THIS POINT ALL RED LIGHTS SHOULD BE OFF,
- D, LOAD ADDRESS 0206
- E, SELECT APPROPRIATE SWITCH CONTROL (REFERENCE 4,1)
- F, DEPRESS CLEAR THEN DEPRESS CONTINUE
- G, PROGRAM WILL RING BELL AND PRINT "*" WHEN FINISHED WITH AN 80 CARD TEST DECK,
- H, IF MORE THAN 1 TEST DECK HAS BEEN LOADED, REPEAT STEP E AND PRESS CONTINUE,