

DIMENSION • 2000 AND CUSTOM PBX
MICRODIAGNOSTIC 8

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1. GENERAL INFORMATION

1.1 Description

1.11 This section describes the procedures to be followed to perform Microdiagnostic 8. The Microdiagnostics are a series of tests of the processor that are initiated from the Alarm Panel. The machine instructions for the performance of these tests are provided in the processor on Read Only Memories (ROM). The circuits tested by this section are shown in SD-1E480-01.

1.2 Sequence of Operations

1.21 This test should be run after the Application of Power Section and before any Call Processing Sections. All Microdiagnostics should be run in order (Tests 0 through 9, covered in Sections 310 through 319) since each Microdiagnostic uses some of the circuits tested by the previous test while testing additional circuits.

2. RECORDS AND REQUIREMENTS

2.1 Records

2.11 Form SD-97-1313 is required for recording the results of this test.

2.2 Requirements

2.21 The tests in this section are based on the performance requirements for SD-1E480-01.

PRIVATE

THE INFORMATION CONTAINED HEREIN SHOULD NOT BE DISCLOSED TO UNAUTHORIZED PERSONS. IT IS MEANT SOLELY FOR USE BY AUTHORIZED BELL SYSTEM EMPLOYEES.

3. TEST EQUIPMENT

- 3.1 MAAP is required to help isolate possible failures.

4. PROCEDURE

4.1 Test Description

- 4.11 This test tests the memory circuits of the Processor. This test and all other Microdiagnostics, except MD9, run continuously repeated cycles until some other operation is initiated.
- 4.12 A diagram of the Alarm Panel is shown in SEC. 310.
- 4.13 If it is necessary to replace a circuit pack while performing this test section, follow the procedure given in PAR. 4.34 of SEC. 310.
- 4.14 If a pack is replaced, repeat all previously run Microdiagnostic Tests.

CAUTION: In Feature Package 9, running Microdiagnostic Test 8 will destroy billing data. Thus, a hard copy printout of billing data should be obtained before running MD8. Also, call processing is disabled while this test is running.

4.2 Test Procedure

- 4.21 Set the GO/HALT switch to HALT.
- 4.22 Insert a tape cartridge into the minirecorder, either a generic tape or an X-Ray tape (see SEC. 400.01 for minimum ckt pack requirements when X-Ray is used).
- 4.23 Connect the MAAP to the processor to be tested.
- 4.24 Turn the MAAP flipcharts to PROC 572.
- 4.25 Set the alarm panel TEST SELECT thumbwheel switch to Position 8.
- 4.26 Set the GO/HALT switch to GO, then depress ENABLE immediately thereafter (on alarm panel).

4.3 Test Results Indications

- 4.31 This test takes many seconds to complete, the total time being determined by the number of memory packs tested. The number of memory packs tested is determined by the number installed (see Table A) and/or by the tape used for this test.

4. PROCEDURE (Cont'd)

4.3 Test Results Indications (Cont'd)

- 4.32 The MJ and PROC indicators remain steadily lit while MD8 is running.
- 4.33 A short time after the ENABLE switch is operated, the tape will run briefly to load some information defining memory space requirements. Also the BIT SWAP indicator should light.
- 4.34 If the test passes, the PASS indicator should light steadily. Also, the MJ, PROC, and BIT SWAP indicators should be lit.
- 4.35 If this test passes, execute paragraph 4.39 and proceed to SEC. 319. If this test fails (i.e. the fail indicator flashes or lights steadily), proceed to PAR. 4.36.
- 4.36 If the failure is in one memory board, that board's block number will be displayed (flashing) in the two leftmost digits of the MAAP. Replace the indicated memory board and retest (memory board numbers are on a designation strip immediately below the boards).
- 4.37 If the MAAP has a changing display or no display or a 00 display, and the FAIL indicator lights, replace, one at a time, each of the following circuit packs in the order listed, while returning each circuit pack that does not change the test results:
- LC 143 (or LC 455)
 - LC 142
 - LC 37 (or LC 137 or LC 138 or LC454)
 - LC 35 (or LC 135)
 - LC 36 (or LC 136)
- 4.38 If the leftmost field on the MAAP continually displays a single 0, refer to SEC. 572T of this handbook.
- 4.39 If the BIT SWAP indicator is lit, set the GO/HALT switch to HALT, GO, and HALT; if the BIT SWAP indicator is not lit, set GO/HALT to HALT.

4. PROCEDURE (Cont'd)

Feature Package	Memory Configuration				
	B	C	D	E	F
FP7	1.8/128K	1.9/144K	1.9/200K	1.8/256K	1.9/384K
FP8	—	1.6/256K	1.6/320K	—	1.6/512K
FP9	1.3/176K	1.3/192K	1.3/240K	1.3/288K	—
FP11	—	—	1.3/448K	—	—
FP12	—	1.6/256K	1.6/320K	—	1.6/512K

TABLE A - DIMENSION® 2000 Memory Requirements
(latest issue tape/minimum memory size req'd)

4.40 End of Section

Reason for Issue:
Update

Manager, Denver PBX PECC