

DIMENSION® 2000 AND CUSTOM PBX
(CSS 201L)
X-RAY TEST 15
(SMDR)

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1. GENERAL INFORMATION

1.1 Description

- 1.1.1 This section describes the procedures to be followed to perform X-Ray Test 15.
- 1.1.2 X-Ray Test 15 tests the "Station Message Detail Recorder" (SMDR). There are two basic types of SMDR, the direct output version (printer and/or optional paper tape punch) and the magnetic tape version.
- 1.1.3 X-ray tape issues 5 through 7 for the Dimension 2000 are designed to drive a printer (direct output). If your x-ray tape falls into this category, the output will be functional only to a direct output printer.

X-ray tape issue 8 and later are set up for output to a nine-track tape. If a direct output printer is equipped the operation described in Paragraph 4.3 of this section must be performed to inform the system software of the output device type.

PRIVATE

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

1. GENERAL INFORMATION (Cont'd)

1.2 Test Description

- 1.2.1 X-Ray Test 15 executes the SMDR XR subroutine which performs a group of tests to identify faults within the SMDR and the interface circuitry including the circuit packs listed below.

<u>Function</u>	<u>Code</u>
Transmitter/Receiver	LC62
Memory Write Control	LC63
Memory	LC39 or LC40
Memory Read Control	LC64 or LC68
Printer Formatter	LC65
Tape Formatter	LC70, LC174 and LC175
Tape Control and Display	LC71
Clock and Date	LC66 and LC67
Battery	LC38

2. RECORDS

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

3. TEST EQUIPMENT

- 3.1 Test Sets - see Section 400 of Handbook 281.

4. TEST PROCEDURES

- 4.1 The MAAP lamps (I-Use, Busy Out and Wait) should be cycling on and off (or Busy Out lamp flashing). If not, at the Alarm Panel, depress Halt then Go.
- 4.2 If SMDR is direct output equipped, proceed to Paragraph 4.3, if SMDR output is to nine-track tape jump to step 4.7.
- 4.3 If a direct output SMDR is equipped, the output device type and address must be entered into the software table PREDEV using the REMOVE key as follows:
- 4.3.1 Depress STOP key.
- 4.3.2 Depress REMOVE key.
- 4.3.3 Enter octal 10416.
- 4.3.4 Depress ENTER key.
- 4.3.5 Depress RESET key.
- 4.4 To execute Test 15, momentarily operate the EXECUTE, 1, 5 keys at the MAAP.

4. TEST PROCEDURES (Cont'd)

- 4.5 Visually verify data pattern is correct per Table A.
- 4.6 Test pass indication
 - 4.61 If the data printout is correct the SMDR equipment is operating properly. This completes X-Ray Test 15 for a direct output SMDR.
- 4.7 If the SMDR is equipped for nine-track tape output data may be captured by the LED display if the nine-track tape is in the extension number display mode as follows:
 - 4.7.1 Momentarily operate the EXECUTE, 1, 5 keys at the MAAP.
 - 4.7.2 Place the SMDR nine-track tape in the EXTENSION NUMBER DISPLAY mode.
 - 4.7.3 Set thumbwheel switches to 1111.
 - 4.7.4 Rock RESET switch after each pass through the SMDR XR subroutine to display the data being written to the tape. A pass through SMDR XR is seen as a pause in tape movement. (A pass being written to tape can be observed by noting three rapid movements of the tape and a pause).
 - 4.7.5 Throughout the first sixteen passes, all numbers displayed except the station number will be the same, e.g., all 0's, all 1's, all 2's . . . through 9's. The station number is fixed by the thumbwheel switch setting of 1111. During the last six passes of the first sixteen, all fields except the station number field will be blank.
 - 4.7.6 During the second group of sixteen passes, in the display mode, a walking pattern is displayed, e.g., 0123 . . . etc., is displayed in the fields with exception of the station field. The station field will remain fixed at 1111 per the thumbwheel switch setting.
 - 4.7.7 During the third and subsequent passes the thumbwheels can be set with all digits in a sequence (e.g., 0123, 4567, 8901, etc.). The RESET switch is depressed and within one pass the station number set at the thumbwheel switches will be displayed with a continuing pattern appearing in the other fields.
 - 4.7.8 After thirty-two passes the SMDR XR routine repeats.

4. TEST PROCEDURES (Cont'd)

4.7.9 Test data written to the nine-track tape should match the data at the LED display. Data written to the nine-track tape must be read elsewhere to verify the test data.

4.8 Test pass indication

4.8.1 Verification of proper data displayed and written to the nine-track tape is the indication that X-Ray Test 15 for nine-track tape is complete.

5. MINIMUM CIRCUIT PACK REQUIREMENTS

5.1 The system should be equipped per the C.O.D. for this test.

Reason for Issue:
New Section

Manager, Denver PBX PECC