

DIMENSION® 2000 AND CUSTOM PBX  
(CSS 201L)  
X-RAY TEST 46  
(SERIAL DATA CHANNEL)

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1. GENERAL INFORMATION

1.1 Description

1.11 This section describes the procedures to be followed to perform X-Ray Test 46.

1.12 X-Ray Test 46 checks the serial data and network channels in the internal loop back mode via random data patterns sent to the equipped cabinets. This test takes approximately 1 second to perform.

1.2 Test Description

1.21 X-Ray Test 46 executes the DLXRAY subroutine, which checks all serial data links, including the data channel cables to each network cabinet.

1.22 The LC34B boards are tested in internal loopback mode using the following four data patterns:

- a) 5555
- b) AAAA
- c) Channel address complement
- d) Channel address

Each pattern is first sent to all equipped channels, then read from each channel and verified.

1.23 The LC130 boards are then tested in internal loopback mode using the same data patterns. Each pattern is first sent to every thirty second channel (one per LC130), then read from each channel and verified.

1.24 Data channels to each network cabinet are then tested using random data (10 millisecond count) with the op code field (high 5 bits) zeroed so that the network cabinet treats the message as a no-op. The echo is verified.

PRIVATE

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

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 Preliminary

4.11 Before executing this test, X-Ray Test 01 should have passed.

4.2 Test Execution

4.21 To execute X-Ray Test 46, momentarily operate the EXECUTE, 4, 6 keys at the MAAP.

4.3 Test Pass Indication

4.31 The SEE NOTE, MAAP LED lighting (or the Alarm Panel PASS lamp) indicates that X-Ray Test 46 has passed.

4.4 This completes testing per X-Ray Test 46.

5. MINIMUM CIRCUIT PACK REQUIREMENTS (8K Memory, Low Speed, MD)

## X-RAY Test 46

Basic Control Carrier  
J58882AA

<u>CARRIER SLOT</u>	<u>CIRCUIT PACK CODE</u>	<u>FUNCTION</u>
00	LC35	RAM Bit Swap
01	LC28B or C	RAM (0-1FFF*)
02	LC28B or C	RAM (2000-3FFF*)
03	LC28B or C	RAM (4000-5FFF*)
04	LC28B or C	RAM (6000-7FFF*)
05	LC28B or C	RAM (8000-9FFF*)
06	LC28B or C	RAM (A000-BFFF*)
07	LC28B or C	RAM (C000-DFFF*)
08	LC28B or C	RAM (E000-FFFF*)
09	LC28B or C	RAM (10000-11FFF*)
10	LC28B or C	RAM (12000-13FFF*)
11	LC28B or C	RAM (14000-15FFF*)
12	LC28B or C	RAM (16000-17FFF*)
13	LC28B or C	RAM (18000-19FFF*)
14	None Required	
15	None Required	
16	None Required	
17	LC36	RAM Data Buffer
18	LC37	RAM Control
19	LC147	Alarm Control
20	LC143	Processor
21	LC143	Processor
22	LC142	ROM
23	None Required	
24	LC133	I/O Memory Decode
25	LC132	I/O Buffer
26	LC29B	Tape Controller II
27	LC30B	Tape Controller I
28	None Required	
29	None Required	
30	LC34B or LC172	Data Link**
31	None Required	
32	None Required	
33	None Required	
34	None Required	
35	None Required	
36	None Required	
37	None Required	
38	None Required	
39	LC130	4 MHZ Channel Control
40	LC131	4 MHZ Subchannel
41	None Required	

\*Memory locations

\*\*The tape will load and the processor x-ray will run without this circuit pack;  
however, MAAP I/O is not possible.

5. MINIMUM CIRCUIT PACK REQUIREMENTS (8K Memory, High Speed)

## X-RAY Test 46

Basic Control Carrier  
J58882AA

<u>CARRIER SLOT</u>	<u>CIRCUIT PACK CODE</u>	<u>FUNCTION</u>
00	LC135	RAM Bit Swap
01	LC28C	RAM (0-1FFF*)
02	LC28C	RAM (2000-3FFF*)
03	LC28C	RAM (4000-5FFF*)
04	LC28C	RAM (6000-7FFF*)
05	LC28C	RAM (8000-9FFF*)
06	LC28C	RAM (A000-BFFF*)
07	LC28C	RAM (C000-DFFF*)
08	LC28C	RAM (E000-FFFF*)
09	LC28C	RAM (10000-11FFF*)
10	LC28C	RAM (12000-13FFF*)
11	LC28C	RAM (14000-15FFF*)
12	LC28C	RAM (16000-17FFF*)
13	LC28C	RAM (18000-19FFF*)
14	None Required	
15	None Required	
16	None Required	
17	LC136	RAM Data Buffer
18	LC137	RAM Control
19	LC147	Alarm Control
20	LC143	Processor
21	LC143	Processor
22	LC142	ROM
23	None Required	
24	LC133	I/O Memory Decode
25	LC134	I/O Buffer
26	LC29B	Tape Controller II
27	LC30B	Tape Controller I
28	None Required	
29	None Required	
30	LC34B or LC172	Data Link**
31	None Required	
32	None Required	
33	None Required	
34	None Required	
35	None Required	
36	None Required	
37	None Required	
38	None Required	
39	LC130	4 MHZ Channel Control
40	LC131	4 MHZ Subchannel
41	None Required	

\*Memory locations

\*\*The tape will load and the processor x-ray will run without this circuit pack;  
however, MAAP I/O is not possible.

5. MINIMUM CIRCUIT PACK REQUIREMENTS (16K Memory, High Speed)

## X-RAY Test 46

Basic Control Carrier  
J58882AA

<u>CARRIER SLOT</u>	<u>CIRCUIT PACK CODE</u>	<u>FUNCTION</u>
00	LC135	RAM Bit Swap
01	LC128B	RAM (0-3FFF*)
02	LC128B	RAM (4000-7FFF*)
03	LC128B	RAM (8000-BFFF*)
04	LC128B	RAM (A000-DFFF*)
05	LC128B	RAM (E000-11FFF*)
06	LC128B	RAM (12000-15FFF*)
07	LC128B	RAM (16000-19FFF*)
08	None Required	
09	None Required	
10	None Required	
11	None Required	
12	None Required	
13	None Required	
14	None Required	
15	None Required	
16	None Required	
17	LC136	RAM Data Buffer
18	LC138	RAM Control
19	LC147	Alarm Control
20	LC143	Processor
21	LC143	Processor
22	LC142	ROM
23	None Required	
24	LC133	I/O Memory Decode
25	LC134	I/O Buffer
26	LC29B	Tape Controller II
27	LC30B	Tape Controller I
28	None Required	
29	None Required	
30	LC34B or LC172	Data Link**
31	None Required	
32	None Required	
33	None Required	
34	None Required	
35	None Required	
36	None Required	
37	None Required	
38	None Required	
39	LC130	4 MHZ Channel Control
40	LC131	4 MHZ Subchannel
41	None Required	

\*Memory locations

\*\*The tape will load and the processor x-ray will run without this circuit pack;  
however, MAAP I/O is not possible.

Reason for Issue:  
New Section

Manager, Denver PBX PECC