

**L MULTIPLEX TERMINALS
COMMON EQUIPMENT
TERMINAL CIRCUITS
TESTS**

LINE PADS AT BRANCHING POINTS—NO BLOCKING

L1 line connecting equipment is used at switching and terminal main repeater stations to provide a number of functions. One is to provide a fixed loss for through signals that are not dropped. Line pads between receiving and transmitting repeater bays replace the blocking circuit when the main line section beyond the branching point is not to be reused for the same frequencies that are dropped.

The information in this section is included in Division 356 because of earlier nomenclature that was applied to LMX terminals in the related drawings (SD-59252-01).

The information in this section was formerly contained in Section 356-118-501 and is renumbered to place it in a more proper classification.

To check transmission in one direction, the test equipment is connected as shown in Fig. 1A. Upon completion of tests in one direction, the process must be repeated for the other direction of transmission as shown in Fig. 1B.

The equipment must be removed from service to perform this test.

The purpose of this test is to check the transmission loss of the line pads to determine whether the circuit meets the loss requirements at the specified frequencies.

APPARATUS:

The test in this section requires suitable transmission test equipment. Refer to Section 356-010-500 and select, from available equipment, sending and/or receiving units having the following capabilities:

Sending test equipment capable of delivering, into 75-ohm circuits, signals between 64 kHz and 3096 kHz at a power level of -10 dBm.

Receiving test equipment capable of detecting, from 75-ohm circuits, signals between 64 kHz and 3096 kHz at a power level of -50 dBm.

In addition to the above, the following is required:

2—368A 75-Ohm Terminating Plugs

4—P2BJ Cords.

STEP	PROCEDURE
1	Check that the equipment to be tested is removed from service.
2	Terminate the REC BRANCH A HYB and TRSG BRANCH A HYB jacks with the 368A terminating plugs as shown in Fig. 2.
3	Verify that the 368A terminating plugs are inserted into jack 1 of each hybrid coil.
4	Set up and calibrate the receiving test equipment for a 75-ohm terminated measurement of 64 kHz at a power level of -50.0 dBm.
5	Set up and calibrate the sending test equipment for an output of 64 kHz at -10.0 dBm.
6	In the repeater bay jack field, make patches designated (1), (2), (3), and (4) in Fig. 2.
7	Measure the power at the TRSG BR HYB OUT jack. Requirement: -50.0 dBm \pm 0.6 dB.
8	Repeat Steps 4 through 7 at frequencies of 556, 2064, and 3096 kHz. Note: The steps just completed check the line pad as well as the receiving branch pad and the branch hybrid coils.
9	Check the spare line pad by making patches (1), (2), (5), and (6) in Fig. 2.
10	Repeat Steps 4, 5, 7, and 8.
11	Remove the 368A terminating plugs and test equipment and restore the equipment to normal.
12	Repeat this test for the other direction of transmission.

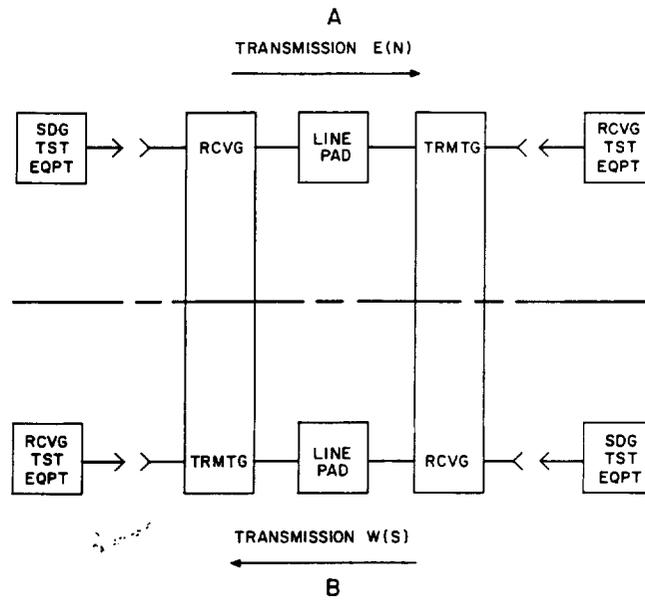


Fig. 1—Simplified Test Setup

SD-59252-01

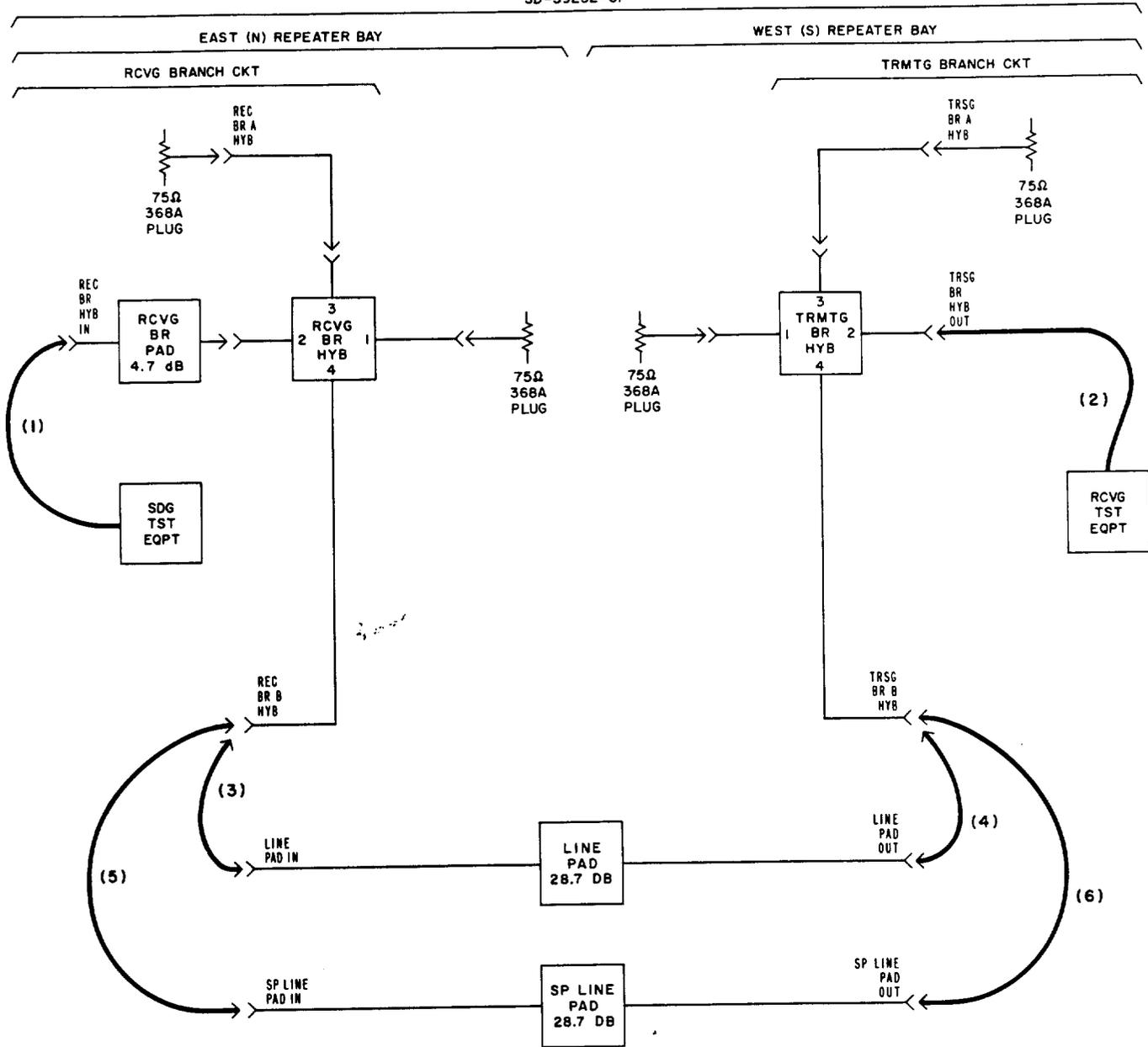


Fig. 2—Transmission Test of Line Pads