# ANALOG MULTIPLEX TERMINAL EQUIPMENT COMMON EQUIPMENT SUPERGROUP CONNECTORS C3 SUPERGROUP CONNECTOR IN-SERVICE TESTS

The C3 supergroup connector (SD-51597) is used to connect the basic supergroup signal from the output of an L multiplex (LMX) supergroup demodulator to the input of a supergroup modulator. The C3 supergroup connector (Fig. 1) includes an adjustable amplifier, an adjustable equalizer, and a test jack which permit in-service measurements and level adjustment. Out-of-service tests for C3 supergroup connectors are explained in Section 356-025-506.

Equipment Test Lists are affected.

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APPARATUS:		

#### CHART 1

Transmission test equipment and test cords provided at the station are required.

## C3 SUPERGROUP CONNECTOR TESTS

**Note:** Two arrangements of the C3 supergroup connector are available: the 4250A and 4250B networks. These connectors are identical except the 4250B network includes a delay equalizer instead of a 3.5-dB pad.

#### NOTICE

Not for use or disclosure outside the Bell System except under written agreement

### CHART 1 (Cont)

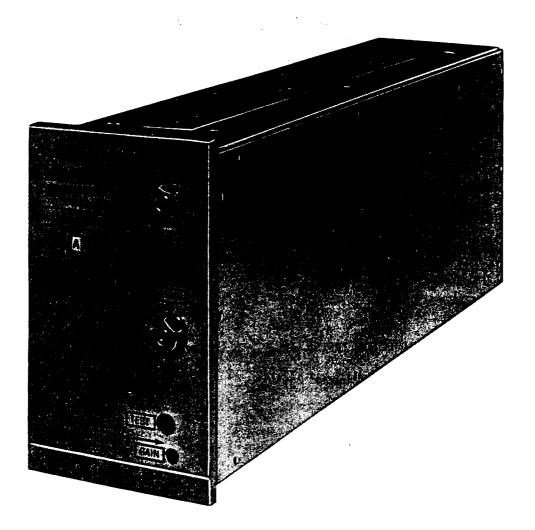


Fig. 1—C3 Supergroup Connector

STEP PROCEDURE

## A. Test at C3 Supergroup Connector Bay

Caution: Check that the locking bar is in place across the front of the supergroup connector shelf. This bar prevents accidental removal of a supergroup connector when the test cord is removed.

Measure the 315.92-kHz pilot signal power at the TEST jack on the front of the supergroup connector under test.

#### CHART 1 (Cont)

STEP

#### **PROCEDURE**

Note: Test equipment impedance is 75 ohms for measurements at the supergroup connector.

**Requirement:**  $-38.1 \text{ dBm } \pm 0.5 \text{ dB}.$ 

2 Proceed to Part C if the requirement is met. Otherwise, proceed to Part B.

#### B. Test at Receiving LMX Terminal

3 Measure the 315.92-kHz pilot signal power at the SG DEM OUT B jack (LMX-2) or at the RCVG SG TST jack on the modem (LMX-3) for the supergroup served by the supergroup connector under test.

**Note:** Nominal power of the 315.92-kHz pilot signal is -48.0 dBm for LMX-2 and -45.0 dBm for LMX-3.

- Perform the test procedure in Section 356-215-501 (LMX-2) or Section 356-350-000 (LMX-3), if required.
- 5 Repeat Step 1.
- 6 Proceed to Part C if the requirement in Step 1 is met. Otherwise, proceed to Part D.

#### C. Test at Transmitting LMX Terminal

Measure the 315.92-kHz pilot signal power at the SG CONN OUT B jack (LMX-2) or at the SGDF OUT ALT jack on the transmitting patch unit (LMX-3).

**Note:** Nominal power of the 315.92-kHz pilot signal is -45.0 dBm for LMX-2 and -48.0 dBm for LMX-3.

8 Proceed to Step 8 for LMX-3.

**Note:** This measurement is made for LMX-2 to check the continuity of the transmission path from the supergroup connector. No adjustment is provided at the LMX-2 terminal; proceed to Step 15 if the pilot signal power is -45.0 dBm  $\pm 0.5$  dB. Otherwise, proceed to Part D.

- Adjust the appropriate TRMTG SGDF TRK ADJ control on the rear of the LMX-3 bay to obtain a pilot signal power of -48.0 dBm ±0.1 dB at the SGDF OUT ALT jack.
- Proceed to Step 15 if the required pilot signal power can be obtained. Otherwise, proceed to Part D.

# CHART 1 (Cont)

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STEP	PROCEDURE
	D. Test Transmission Path
11	Remove the supergroup connector from service.
12	Perform the test procedure in Section 356-025-506.
13	Replace the supergroup connector.
14	Repeat the test procedure in this section.
15	Remove all test equipment.