

**L MULTIPLEX TERMINALS**  
**LMX-1**  
**CARRIER AND PILOT SUPPLY**  
**SUPERGROUP CARRIER**  
**124-KHZ FILTER TESTS**

**PURPOSE OF TEST**

To verify the correct output power of the 124-kHz filter (Fig. 1)

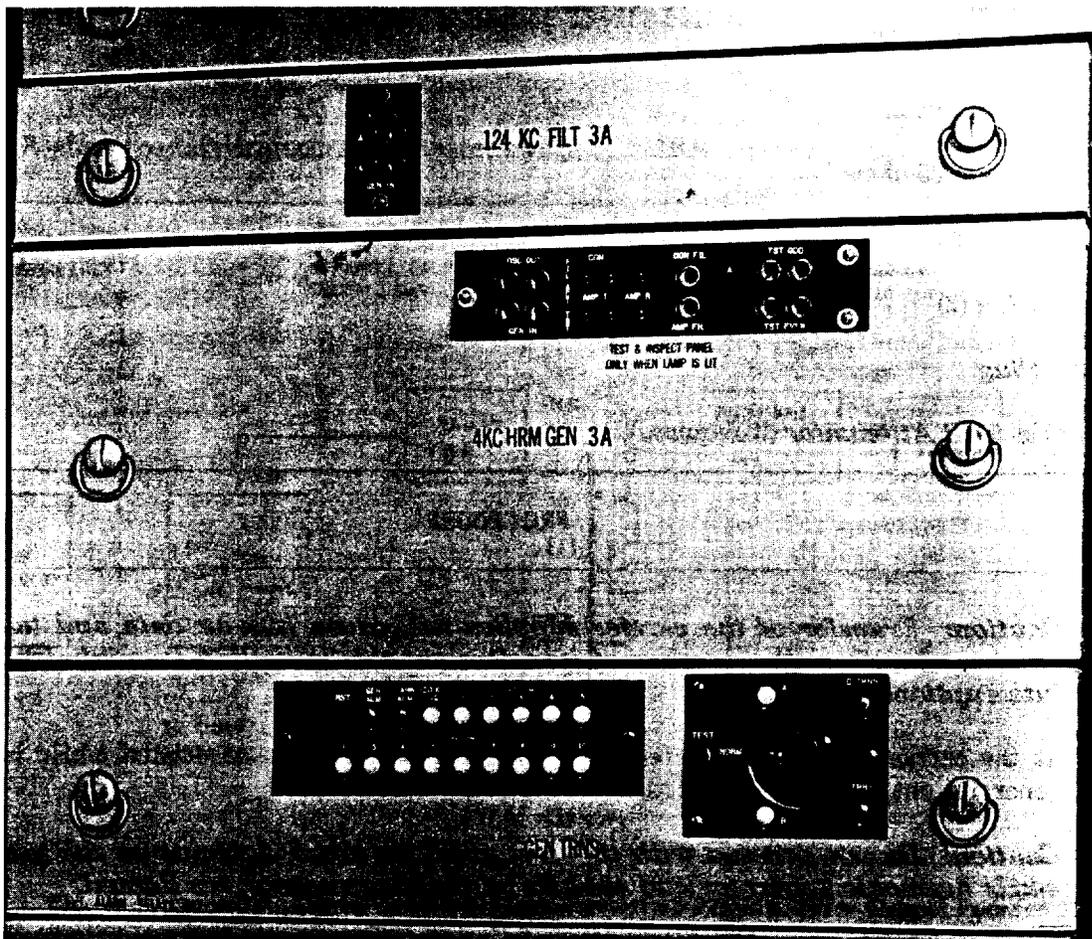


Fig. 1—Channel Carrier Supply Bay—Generator Transfer Panel, 4-kHz Harmonic Generator, and 124-kHz Filter

**REASON FOR ISSUE**

This section supersedes and updates information contained in Section 356-055-502 which has been cancelled. *Equipment Test Lists are affected.*

**SYNOPSIS**

The 124-kHz filter selects the 31st harmonic from the output of the 4-kHz harmonic generator. The selected 124-kHz output feeds the 124-kHz harmonic generator located in the supergroup carrier supply bay. The 124-kHz filter is mounted next to its associated 4-kHz harmonic generator in order to minimize shunt capacitance. Switching logic permits out-of-service testing of the 124-kHz supply when plugs are inserted in the TST ODD and TST EVEN jacks of the standby 4-kHz harmonic generator and the OUT jack of the standby 124-kHz harmonic generator. The standby generators are indicated by a lighted green A lamp.

**APPARATUS**

*Receiving Test Equipment*, per Section 356-010-500, having the following input characteristics:

Frequency: 124 kHz

Power: +9.0 dBm

Impedance: 135 ohms

*3P20B Cord*

*217D Plug (2)*

*165C Plug*

Suitable *9-dB Attenuator* (if required)

STEP	PROCEDURE
1	<p><i>Caution: Transfer of the carrier supplies will cause hits on data and telegraph service; therefore, the number of transfers should be limited to minimize service interruptions.</i></p> <p>At the carrier generator transfer panel, manually transfer the associated 4-kHz harmonic generator out of service per Section 356-150-300.</p> <p><i>Caution: Do not proceed with this test until the green A lamps on the associated 4-kHz harmonic generator and 124-kHz harmonic generator are lighted.</i></p>

STEP	PROCEDURE
2	At the standby 4-kHz harmonic generator (A or B), insert a 217D plug into the TST ODD and TST EVEN jacks.
3	At the supergroup carrier supply bay, insert a 165C plug into the OUT jack of the associated 124-kHz harmonic generator (A or B).
4	Prepare the receiving test equipment (RTE) for a 135-ohm measurement of 124-kHz at +9.0 dBm.
5	At the channel carrier supply bay, connect the RTE (through a 9-dB attenuator) to the 124-kHz filter [patch (1), Fig. 2].
6	Read the RTE meter.  <b>Requirement:</b> +9.0 dBm minimum
7	If the requirement of Step 6 is met, proceed to Step 8. If it is not met, perform tests of the 4-kHz harmonic generator in Section 356-152-501.
8	Remove all patches and plugs.
9	Restore the carrier generator transfer switch to NORM.

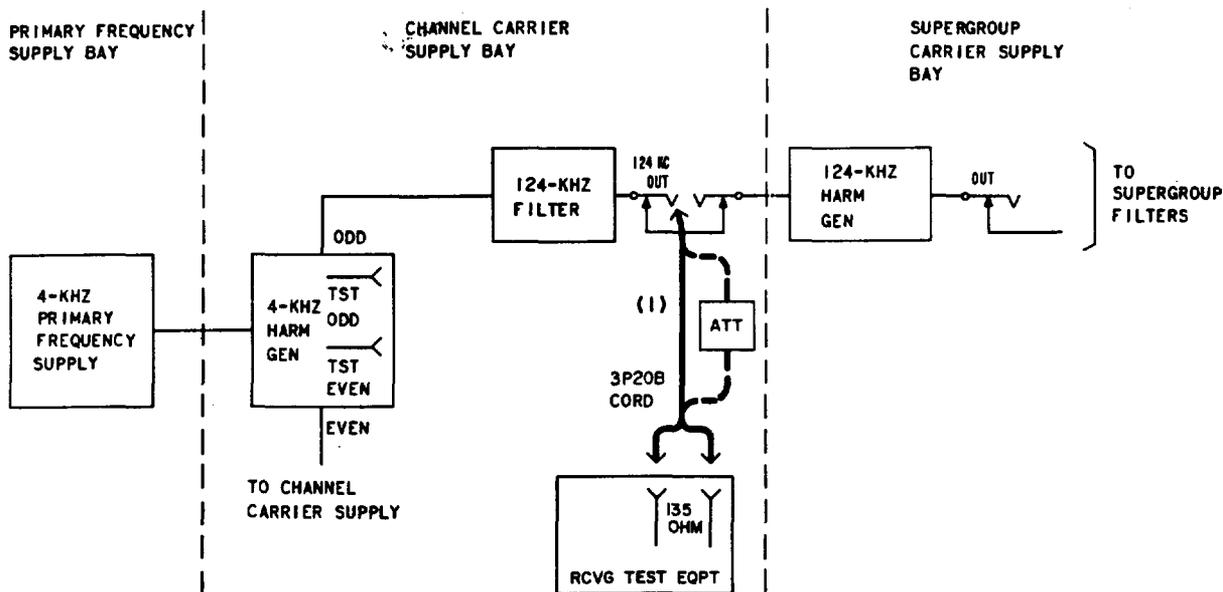


Fig. 2—Supergroup Carrier Supply—Measurement of 124-kHz Filter Output Power