
L MULTIPLEX TERMINALS
LMX-1
CARRIER AND PILOT SUPPLY
INTERMEDIATE FREQUENCY CONVERTER CIRCUIT
77- AND 139-KHZ OUTPUT TESTS

Output tests at the pilot generator circuit J68828S are described. Test jacks are mounted on the intermediate frequency converter (Fig. 1).

This issue corrects the reference cited in Steps 10 and 12. *Equipment Test Lists are not affected.*

APPARATUS

Receiving Test Equipment (356-010-500) having the following characteristics:

Frequency: 77 kHz and 139 kHz

Input Impedance: 75 ohms

Input Power: ~~-37.0 to~~ -35.0 dBm

P2BJ Cord

STEP

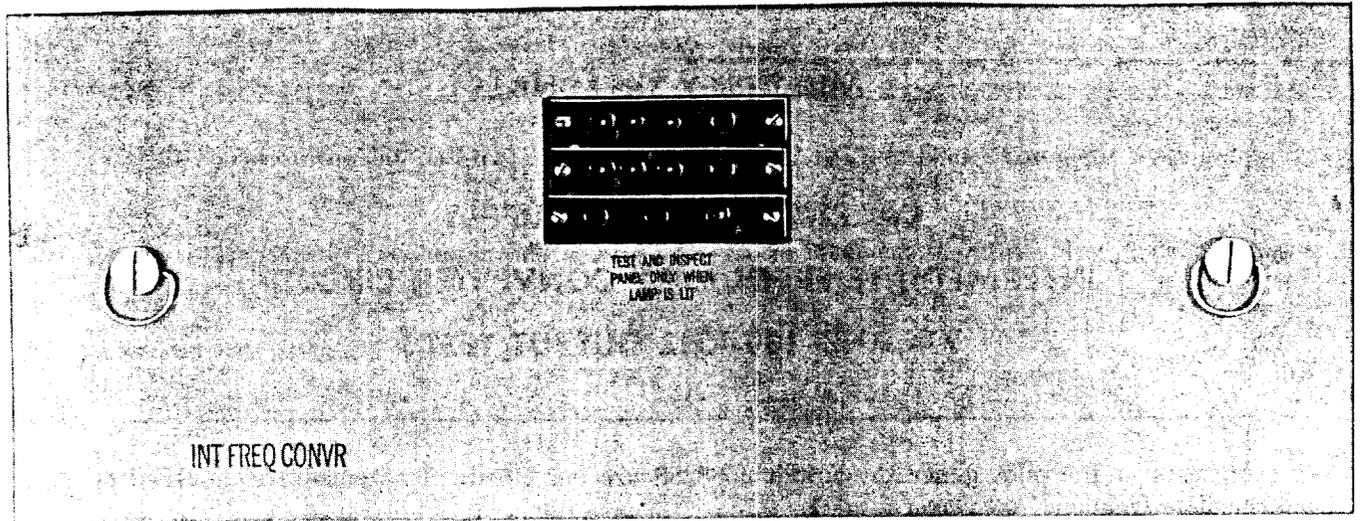
PROCEDURE

Note: The requirements of this test are based on the assumption that the levels of the 216-kHz and 556-kHz input signals from the primary frequency converter circuit are correct. The input levels may be tested as prescribed in Section 356-165-501.

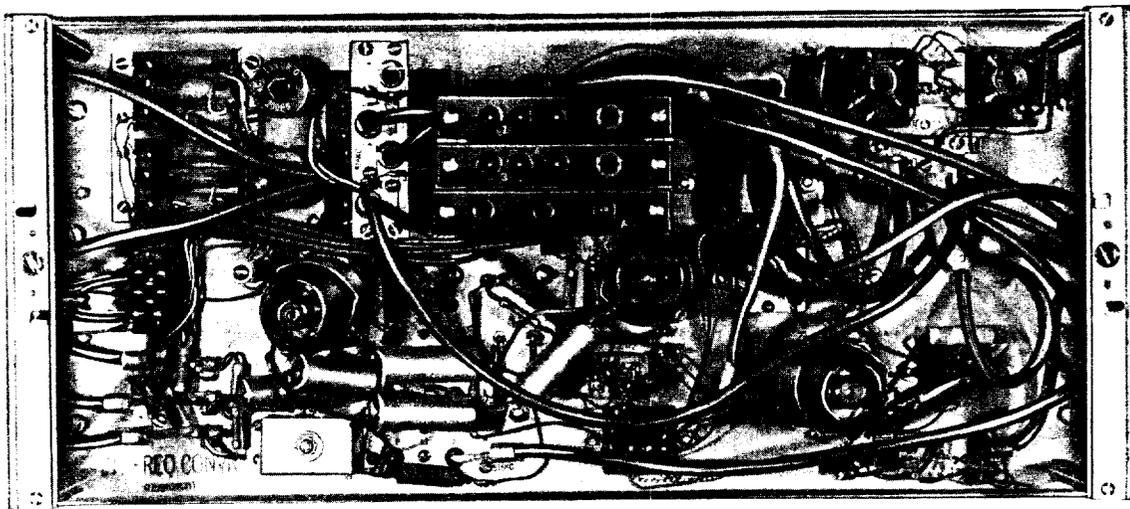
- 1 Prepare the receiving test equipment (RTE) for a 75-ohm terminated measurement of 77 kHz at -37 dBm.
- 2 Make patch (1), Fig. 2.
- 3 Measure the power at the 77 KC TST jack.

Requirement: -37.0 dBm \pm 2.0 dB

- 4 If the requirement of Step 3 is not met, adjust pad R49 (Fig. 2) until the requirement is met.



(COVER ON)



(COVER REMOVED)

Fig. 1—Intermediate Frequency Converter Circuit (With and Without Cover)

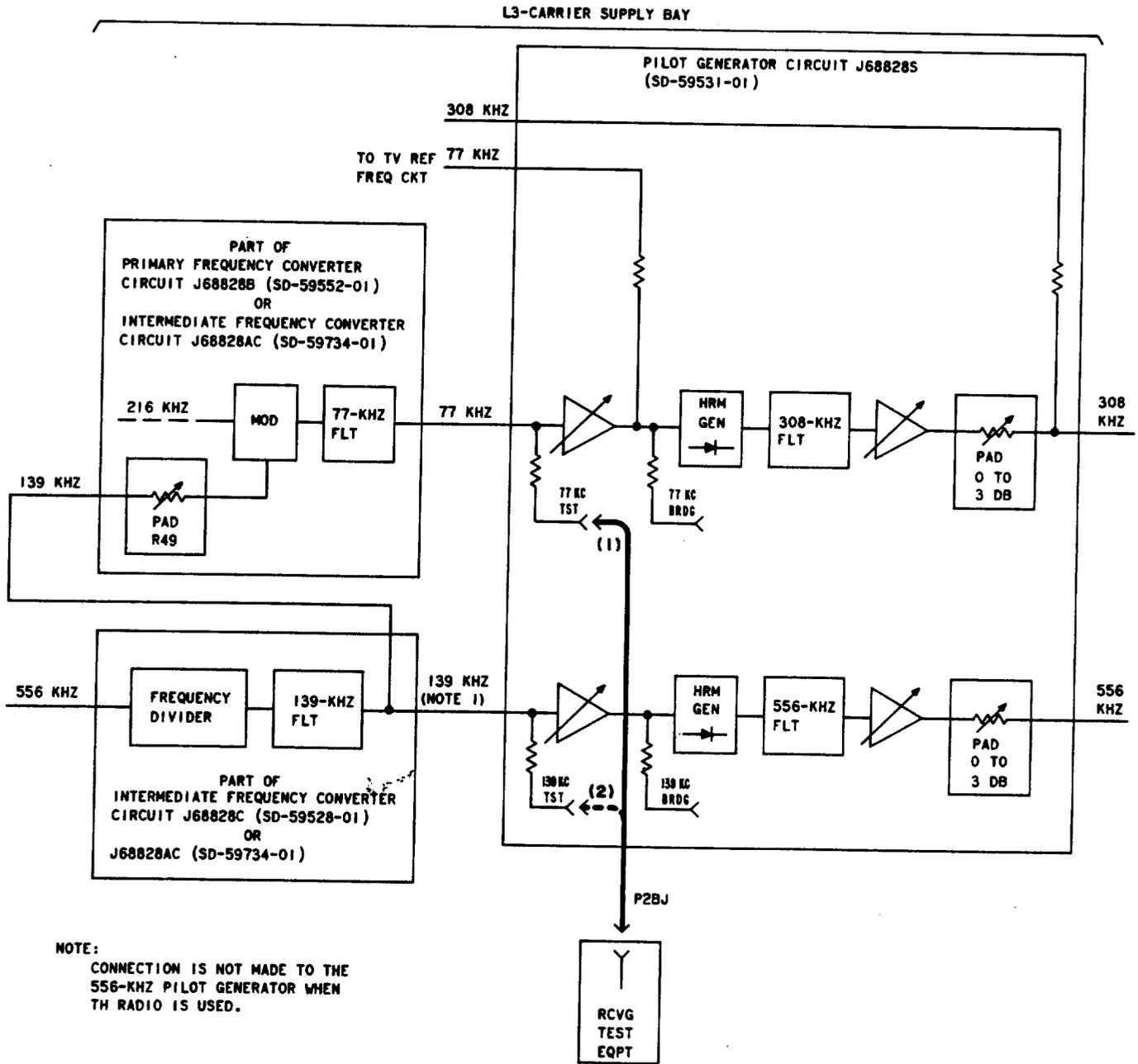


Fig. 2—Measurement of 77- and 139-kHz Filter Outputs

STEP	PROCEDURE
5	If the requirement of Step 4 is not met, proceed to Step 6 and complete testing of this section to verify proper 139-kHz input into the 77-kHz modulator. <i>Note:</i> Step 5 is not applicable where TH radio is involved; therefore, Step 6 will complete testing.
6	Remove patch (1), Fig. 2.
7	Prepare the RTE for a 75-ohm terminated measurement of 139 kHz at -35 dBm.
8	Make patch (2), Fig. 2.
9	Measure the power at the 139 KC TST jack. <i>Requirement:</i> -35.0 dBm ± 2.0 dB
10	If the requirement of Step 9 is met, proceed to Step 13. If it is not met, manually switch the intermediate frequency converter under test out of service and test as prescribed in Section 356-150-300. <i>Caution 1: Do not proceed with this test until the green lamp associated with the intermediate frequency converter under test is lighted.</i> <i>Caution 2: It is important that the number of transfers of the carrier supply be kept to a minimum to avoid hits on data and carrier telegraph service.</i>
11	Locate and correct the trouble in the intermediate frequency converter circuit under test, and repeat Steps 1 through 9. <i>Note 1:</i> Electron tubes for the converter circuit under test (Table A) may be tested and replaced as prescribed in Section 356-150-501.
12	Restore the intermediate frequency converter panel under test to service as prescribed in Section 356-150-300.
13	Remove patch (2), Fig. 2.

TABLE A

INTERMEDIATE FREQUENCY CONVERTER CIRCUIT

PANEL	SCHEMATIC	ELECTRON TUBE DESIGNATION
J68828C	SD-59528-01	V3, V4
J68828AC	SD-59734-01	V4, V5