

L CARRIER SYSTEM—CARRIER AND PILOT SUPPLY
INTERMEDIATE FREQUENCY CONVERTER CIRCUIT
MEASUREMENT OF THE 516-KC OUTPUT

A variable gain amplifier in the intermediate frequency converter circuit receives the output of the 516-kc filter of the primary frequency converter circuit or of the intermediate frequency converter circuit, depending on which types of converter circuits are provided. The amplified 516 kc is fed to the 516-kc bus through an impedance transformation circuit. The bus supplies 516 kc to the 2064- and 3096-kc pilot generator circuits where the 516-kc measurement is made.

This section is reissued to include references to the later (J68828AC) intermediate frequency converter circuit. Because of the general revision of this section, marginal arrows normally used to denote changes have been omitted.

The purpose of this test is to measure the output of the 516-kc distributing circuit and to adjust the 516-kc GAIN control R4 to meet the requirements of this test.

APPARATUS:

- 1 — Receiving Console J68827B (27B)
- 1 — W2ED Cord (See Fig. 1)
- 1 — P2BJ Cord

STEP	PROCEDURE
1	<p><i>Caution: The transfer of the carrier supply causes hits on data and superimposed telegraph service, so the number of transfers should be kept to a minimum. This is important.</i></p> <p>Lock out-of-service the intermediate frequency converter under test. Refer to Section 356-052-501 to transfer service.</p> <p><i>Caution: Do not perform this test until the green lamp associated with the intermediate frequency converter panel under test is lighted.</i></p>
2	Make patch designated (1) in Fig. 1.
3	Tune the 37B TMS to 516 kc and read the TMS meter indication.
	<p><i>Requirement: -37.0 ± 2.0 dbm.</i></p>

STEP	PROCEDURE
	<p>Note: If this requirement is not met, make tests on primary frequency converter circuit in accordance with Sections 356-066-501 and 356-066-502. Adjust the 516-kc GAIN control R4 until the requirement is met. If the requirement still cannot be met, proceed as follows:</p> <p>(a) Connect the W2ED cord to the 37B TMS, clip the red cord to terminal 2 (SD-59528-01) or terminal 3 (SD-59734-01) of inductor L1, and clip the black cord to ground.</p> <p>(b) Read the TMS meter indication.</p> <p>Requirement: Reading should be at least -10.5 dbm (-11 dbm is unacceptable).</p> <p>Note: If this requirement is met, replace tube V1 in the intermediate frequency converter circuit and repeat Steps 2 and 3.</p>
4	Transfer the P2BJ cord to make patch designated (2) in Fig. 1.
5	Read the TMS meter indication.
	Requirement: -37.0 ± 2.0 dbm.
6	Remove all patch cords and restore service to normal.

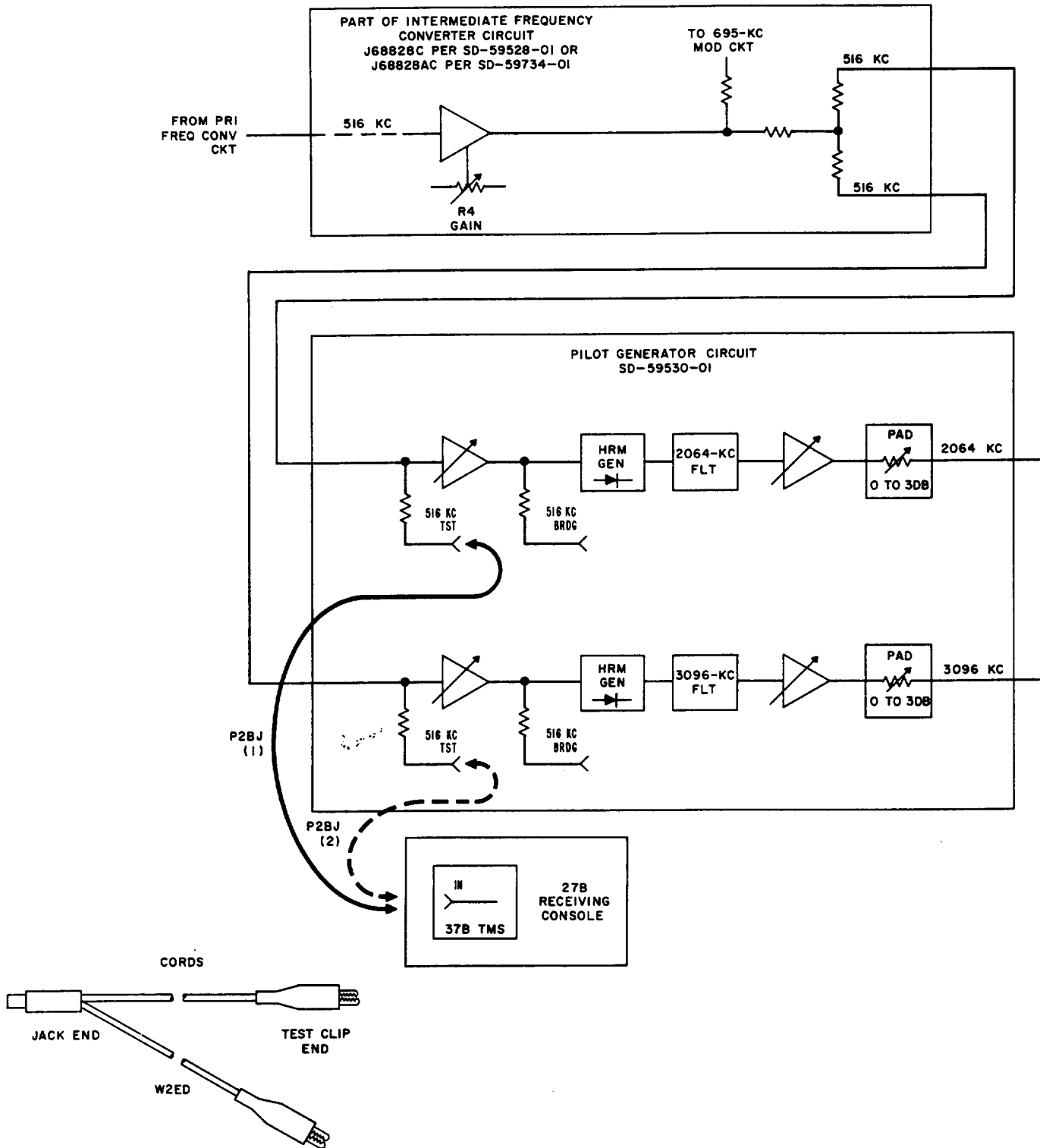


Fig. 1 — Intermediate Frequency Converter Circuit — Measurement of the 516-KC Output