TYPE N AND ON CARRIER REPEATERS — REPEATERED HIGH-FREQUENCY LINE CARRIER LINE-UP — HIGH-FREQUENCY LINE MEASUREMENTS

DEVIATION EQUALIZER LOSS

The deviation equalizer (J98703N) is used with the older J98703L and M repeaters to correct for transmission distortion in the cable facilities of long systems. The equalizer operates in the low group frequency range. The equalizer loss is determined at carrier frequencies by measuring at the output of the equalizer with the equalizer network in and out of the circuit.

The purpose of the test is to determine the loss of the equalizer at carrier frequencies.

APPARATUS:

1 — KS-15538, L1 or L2, Carrier Frequency Voltmeter
2 — 1W13A Cords (to connect carrier frequency voltmeter to equalizer)
2 — P36A918 Cord Tips
2 — 365 Tools

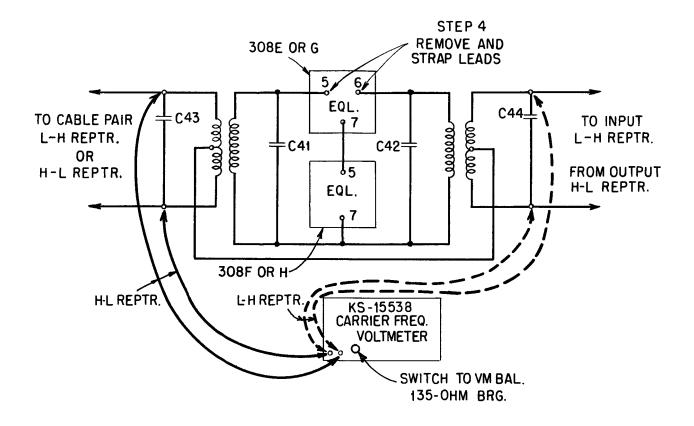| STEP	PROCEDURE
1	After allowing twenty minutes to stabilize, calibrate the carrier frequency voltmeter in accordance with the descriptive section applicable to the particular voltmeter in use.
2	Set the selector switch on carrier frequency voltmeter to VM-BAL 135-OHM BRG and connect the input terminals to the equalizer as follows:
	H-L REPEATER **L-H REPEATER**
	Across C43 Capacitor Across C44 Capacitor
3	Tune the carrier frequency voltmeter to low group channel frequencies and measure the channel carrier levels. (Frequencies given in Table I)
4	Unsolder the leads from terminals 5 and 6 of the equalizer and connect the two leads together with a strap lead.
5	Repeat Step 3.
6	Remove the strap from the leads and reconnect the leads to terminals 5 and 6. Remove all test connections.
7	Determine the equalizer loss which is the difference between measurements obtained in Steps 3 and 5.
	Requirement: See Table I.

FIG. 1 - DEVIATION EQUALIZER

TABLE I

DEVIATION EQUALIZER LOSS

CHAN. NO.	FREQ. KC	LOSS IN DB	
		308 E&F	308 G&H
1	136	4.6–5.6	7.5–8.5
2	128	3.5–4.5	3.7–4.7
3	120	2.0–3.0	2.0–3.0
4	112	0.6–1.6	1.4–2.4
5	104	1.5–2.5	1.7–2.7
6	96	4.4–5.5	2.2–3.2
7	88	6.4–7.4	3.1–4.1
8	80	6.7–7.7	4.0–5.0
9	72	5.9–6.9	5.0–6.0
10	64	4.7–5.7	5.8–6.8
11	56	4.1–5.1	6.3–7.3
12	48	4.8–5.8	5.9–6.9