

TYPE N1 CARRIER TELEPHONE SYSTEM — TERMINAL EQUIPMENT
GROUP UNIT LINE-UP — RECEIVING
TOTAL CARRIER POWER OUTPUT

The channel carrier frequencies generated at the distant transmitting terminal are received at the receiving group unit and amplified, regulated and fed into the channel units.

The purpose of this test is to measure the total carrier power output of the receiving group unit using the 2J Repeater Test Set (J94002J).

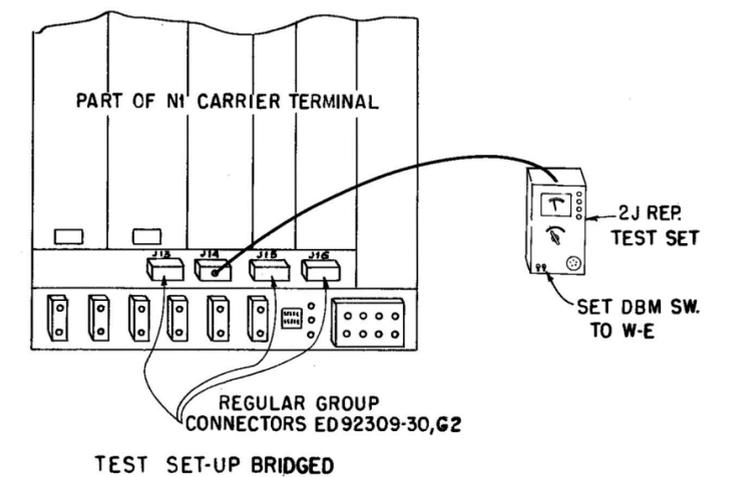
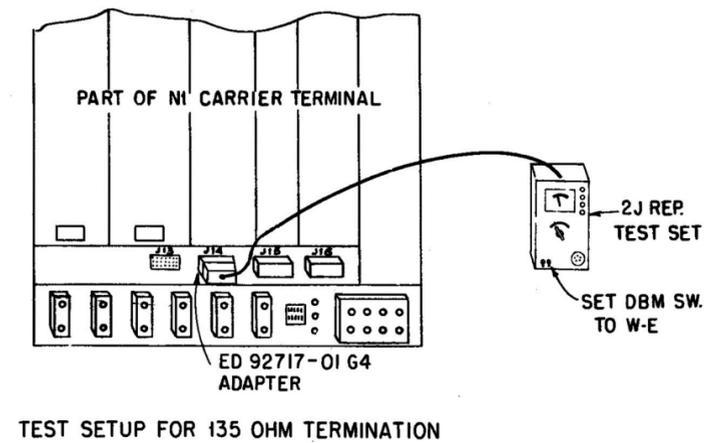
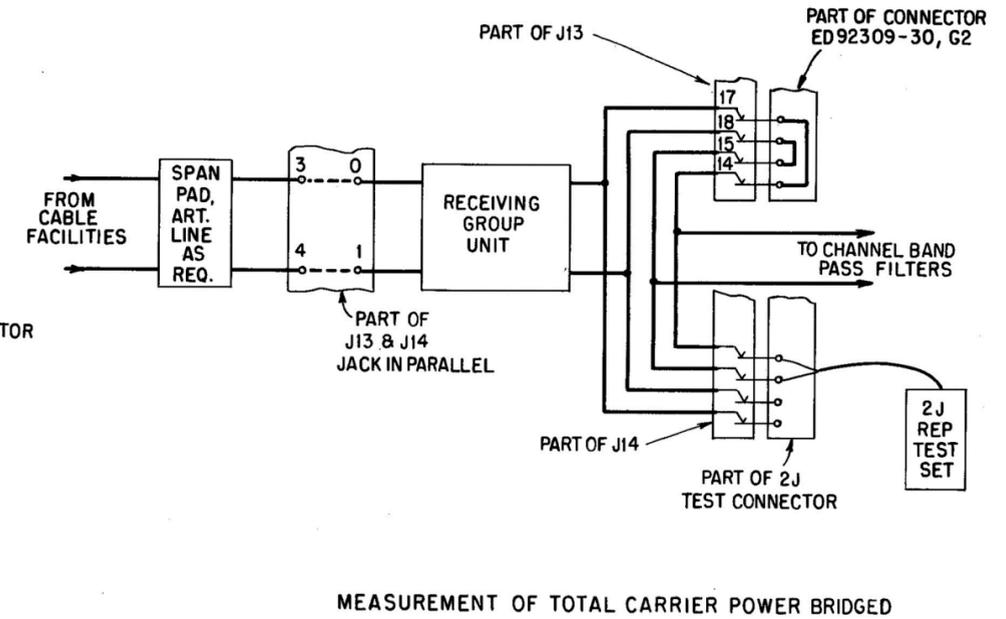
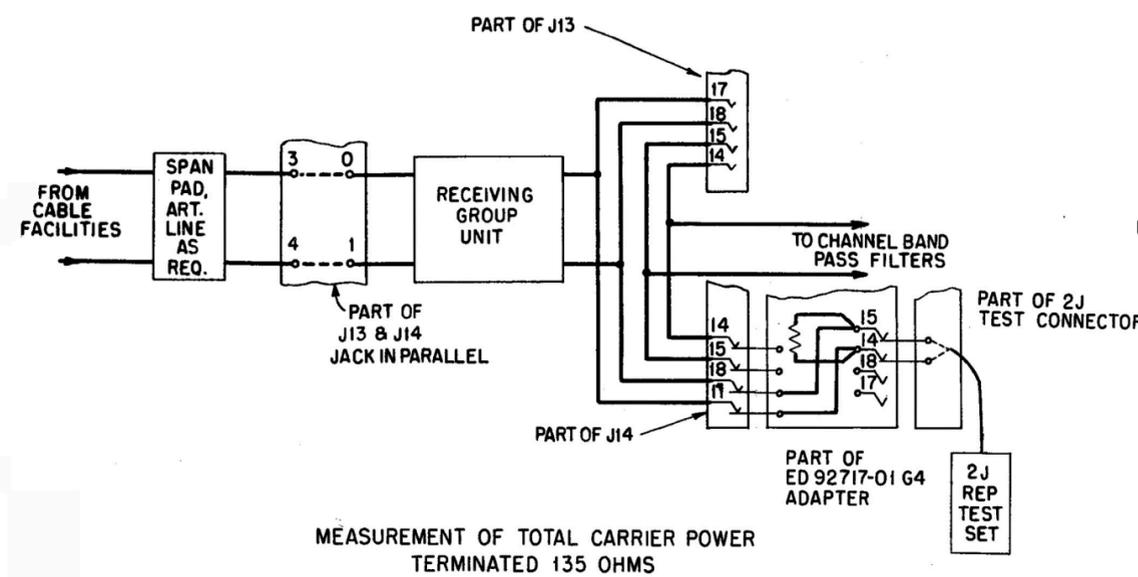
The terminated measurements may be made only when the system is out of service. The bridged measurement may be made on an in-service basis.

APPARATUS:

- 1 — 2J Repeater Test Set (J94002J)
- 1 — ED-72717-01 G4 Adapter (135-ohm termination)

STEP	PROCEDURE
TERMINATED MEASUREMENT	
1	Remove one group connector from J13 or J14 switching jack.
2	Plug ED-92717-01 G4 adapter into vacant jack J13 or J14 to terminate group unit in 135 ohms.
3	Remove the remaining group connector from J13 or J14 switching jack.
4	Connect 2J repeater test set to the ED-92717-01 G4 adapter.
5	Set DBM toggle switch on W-E and the DBM rotary switch on 0 db.
6	Read the meter on the 2J set on DBM scale. Requirement: $+5.5 \pm 2.5$ dbm
7	To determine if the value read on the meter is actual carrier or noise, operate the rotary switch to MON and listen to the output of the 2J set. Normal carrier will be heard as varying tones. The signaling frequencies of the N1 system produce 600-cycle and 3700-cycle tones in addition to the 8000-cycle tones produced by the intermodulation of the systems carriers. The absence of these tones or the presence of excessive noise is an indication of trouble in the group unit or in a preceding section.
8	Replace one group connector in either J13 or J14 switching jack.
9	Remove the ED-92717-01 G4 adapter from J13 or J14.

STEP	PROCEDURE
	BRIDGED MEASUREMENT
10	Connect the 2J repeater test set to vacant J13 or J14.
11	Read the meter on 2J set on DBM scale.
	<p><i>Requirement:</i></p> $+5.5 \frac{+2.5 \text{ dbm}}{-3.7 \text{ dbm}}$
12	Determine if the meter reading represents carrier or noise by monitoring as outlined in Step 7 above.



TOTAL CARRIER POWER OUTPUT OF RECEIVING GROUP UNIT