

REPEATERS

C RELAY RELEASE TEST

USING DIAL HAND TEST SET

STEP-BY-STEP SYSTEMS

1. GENERAL

1.01 This section describes a method of making a rapid test for C relay release on outgoing interoffice repeaters other than pulse correcting repeaters.

1.02 The test applies to both loop pulsing and battery and ground pulsing repeaters in which the C relays operate from the back contact of the pulsing relay and are required to hold over dial pulses. It assumes that the repeaters are equipped with a 6-spring test jack on which the outgoing tip and ring conductors are terminated.

1.03 This method is intended as a means for rapidly disclosing C relays which in the judgment of the tester are slow in releasing.

1.04 Failure of the C relay to release properly may indicate the presence of some sticky substance on the core of the relay, or it may indicate that the relay is out of timing adjustment. Relays that fail should be checked to see that they meet their timing requirement.

1.05 Care should be exercised not to interfere with traffic when making this test. When plunger type out-trunk switches are used, operate the associated master switch to pick up all idle plungers before starting the test to prevent interference with traffic.

2. APPARATUS

2.01 One modified No. 240B Plug with lamp socket springs from a No. 240F Plug added. Arrange the lamp springs for connecting the lamp as shown in Fig. 1 and equip with a No. 2U or 2Y lamp, whichever will give the best lamp indication, depending upon the trunk loop condition in the particular office. Connect the cord and plug to a Dial Hand Test Set (D-81763 or equivalent).

Note: In order to simplify connecting the special cord combination to the Dial Hand Test Set the No. 30 Cord Tips may be substituted with No. 360 Tools for connecting to a Dial Hand Test Set equipped with D-97530 Cord Tips, as covered in Section 100-120-101.

3. METHOD

3.01 With the C button of the hand set normal insert the modified No. 240B plug into the test jack of the repeater to be tested just far enough for the No. 1 to No. 4 springs of

the plug to make contact with the No. 1 to No. 4 springs of the test jack. Note that no dialing, ringing tone or conversation is heard in the receiver.

Note: If dialing, ringing tone or conversation is heard, the repeater is busy, in which case defer the test until the repeater is idle.

3.02 If the repeater is idle depress the C button on the hand test set and insert the test plug all the way into the test jack. Listen for the operation of the A relay which is a further indication that the repeater is idle. The lamp on the test plug should light dimly.

3.03 Dial the digit 1 and observe that the lamp flashes once and then increases in brilliancy after the pulse, indicating operation of the C relay. Shortly after the end of the pulse the lamp should become dim again indicating release of the C relay.

Note: By performing this test a few times on a repeater on which the C relay is known to be within requirements, the tester will be able to judge whether the C relays on other repeaters are releasing properly.

4. REPORTS

4.01 The required record of this test should be entered on the proper form.

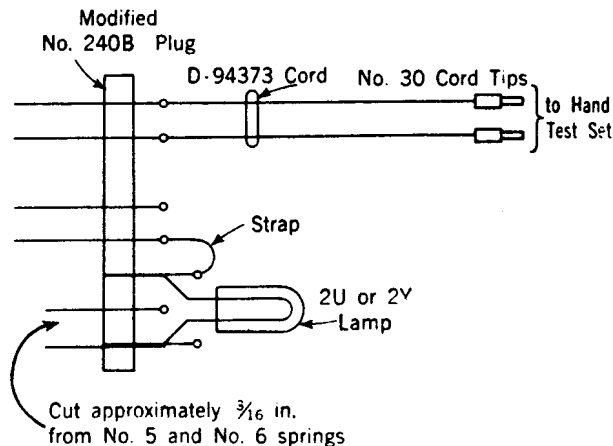


Fig. 1