

TOLL SWITCHING TRUNKS

NO. 1 OFFICE

1. GENERAL

1.01 This section describes methods of testing toll switching trunks incoming from the No. 1 or No. 3 toll switchboard. The following tests are covered.

- (A) Ringing Key Test
- (B) A-C. Continuity Test
- (C) Coin Control Test
- (D) Busy Test

1.02 This section has been revised to bring it into agreement with the toll office sections covering toll switching trunks. The supervisory relay test and the polarity and current flow test have been omitted as they are now covered in the toll office sections.

1.03 The tests in this section cover only the features of the trunks primarily associated with the local office end. The other features are covered in the tests originated at the toll end as outlined in the toll office sections of the A200 Division.

2. APPARATUS

Test (A) and (D)

2.01 Operator's Telephone Set.

Tests (B) and (C)

2.02 No. 528 Receiver equipped with a No. 712 Cord and a No. 109 Plug or an R2AC Cord and a No. 110 Plug.

3. METHOD

(A) Ringing Key Test

3.01 Establish a talking connection with a telephone set connected to the telephone circuit of a toll position associated with the last working section of the trunk multiple and to the supervisor's telephone circuit associated with the "B" position in which the trunks to be tested appear. Use a toll cord at the toll end and the supervisor's circuit at the "B" end.

3.02 After the talking connection has been established, request the assistant at the toll end to insert the plug of the trunk cord of a toll cord pair into the trunk under test.

3.03 When the guard signal appears, insert the plug of the trunk into the ring-

ing test line and request the tester at the toll end to ring on the trunk. The bell on the ringing test line should ring.

3.04 If the trunks are arranged for party ringing, depress each party ringing key in turn and observe that the corresponding party bell rings.

3.05 Withdraw the plug of the trunk cord from the test line and request the assistant to disconnect.

(B) A-C. Continuity Test

3.06 Insert the plug of the cord attached to the receiver into the REC jack of the cord testing circuit.

3.07 Before proceeding with the A-C. continuity test, check the operation of the tone circuit as follows: While listening in the receiver, partially insert the plug of the cord circuit to be tested into the CON jack, so that the tip of the plug makes contact with the ring spring of the jack and the sleeve of the plug makes contact with the sleeve of the jack. Tone should be heard as an indication that the tone circuit is functioning properly.

3.08 Complete the insertion of the plug of the trunk under test into the CON jack of the testing circuit.

3.09 It is probable that a slight tone will be heard in the receiver. This slight tone can be expected and is not an indication of trouble. After testing several trunks, the tester should become familiar with the volume of the tone which is heard on normal trunks. Trunks on which this volume is increased appreciably should be considered in trouble.

Note: Where there is more than one trunk group, comparison should not be made between trunks of different trunk groups as the variation in volume of tone from one trunk group to another is not an indication of trouble and should be disregarded.

3.10 Listen in the receiver during the following operations for any clicks or changes in the volume of the tone which will indicate a cutout or other trouble condition.

3.11 Hold the plug in the jack with one hand and shake the cord with the other hand.

3.12 Turn the plug around in the jack so as to cause the jack springs to make

contact at all possible points of the tip and ring of the plug.

Note: Scratchy noises heard while the plug is being rotated should be disregarded.

3.13 If the trunk is equipped with coin control keys, tap lightly on the key top to detect loose connections or defective contacts. Contact follow should be checked by a slight movement of each key in the direction of normal operation travel.

(C) Coin Control Test

3.14 Insert the plug of the cord attached to the receiver into the REC jack of the cord testing circuit.

3.15 Insert the plug of the trunk under test into the COIN TEST jack of the cord testing circuit. Operate the coin collect key of the trunk under test. Observe that the coin pilot lamp lights and note that high tone is heard in the receiver. Release the coin collect key. On this test approximately the test "operate" current value is applied to the position coin collect relay and the lighting of the pilot lamp indicates the proper operation of the relay. The fact that the tone is heard

in the receiver indicates that the coin collect current was applied to the tip and that the ring was opened.

3.16 Operate the coin return key of the trunk under test. Observe that the coin pilot lamp lights and note that low tone is heard in the receiver. Release the coin return key and remove the cord from the COIN TEST jack. On this test the approximate "operate" test current value is applied to the position coin return relay.

(D) Busy Test

3.17 Make sure that the position to be tested is not grouped so as to transfer the busy test to another position.

3.18 Connect an operator's telephone set to the position.

3.19 Touch the sleeve of a trunk to the tip of the plug of each trunk in turn. Note that a distinct busy test is heard on each trunk.

4. REPORTS

4.01 The required record of these tests should be entered on the proper form.