

“B” SWITCHBOARD TRUNKS INCOMING FROM MANUAL TANDEM OFFICE SWITCHBOARDS (Arranged for Straightforward Operation)

1. GENERAL

1.01 This section covers the detailed method to be followed in making transmission tests on “B” switchboard trunks incoming to step-by-step offices from manual tandem office switchboards.

1.02 Reference should be made to Section K20.01 for general testing methods and to Section K20.11 for general testing apparatus requirements.

2. TESTING METHOD

2.01 These circuits are tested at the HIDF of the step-by-step office by the loop method and the loops are established at the manual tandem office switchboard by means of a special looping cord circuit.

2.02 At the step-by-step office the circuits are

completed to the transmission measuring set through two vacant connector terminals.

2.03 Figure 1 shows schematically the connections for the test.

Preliminary Connections

2.04 Provide three regular double-ended patching cords equipped with 110-type plugs, two special patching cords equipped and connected as outlined below, and one special looping circuit as shown in Figure 1 and equipped and connected as outlined in Paragraph 2.05.

110-Type Plug connected to a 234 Type
or Similar Plug

Tip	No. 1 Terminal
Ring	No. 2 Terminal
Sleeve	No. 3 Terminal
	No. 4 Terminal Open

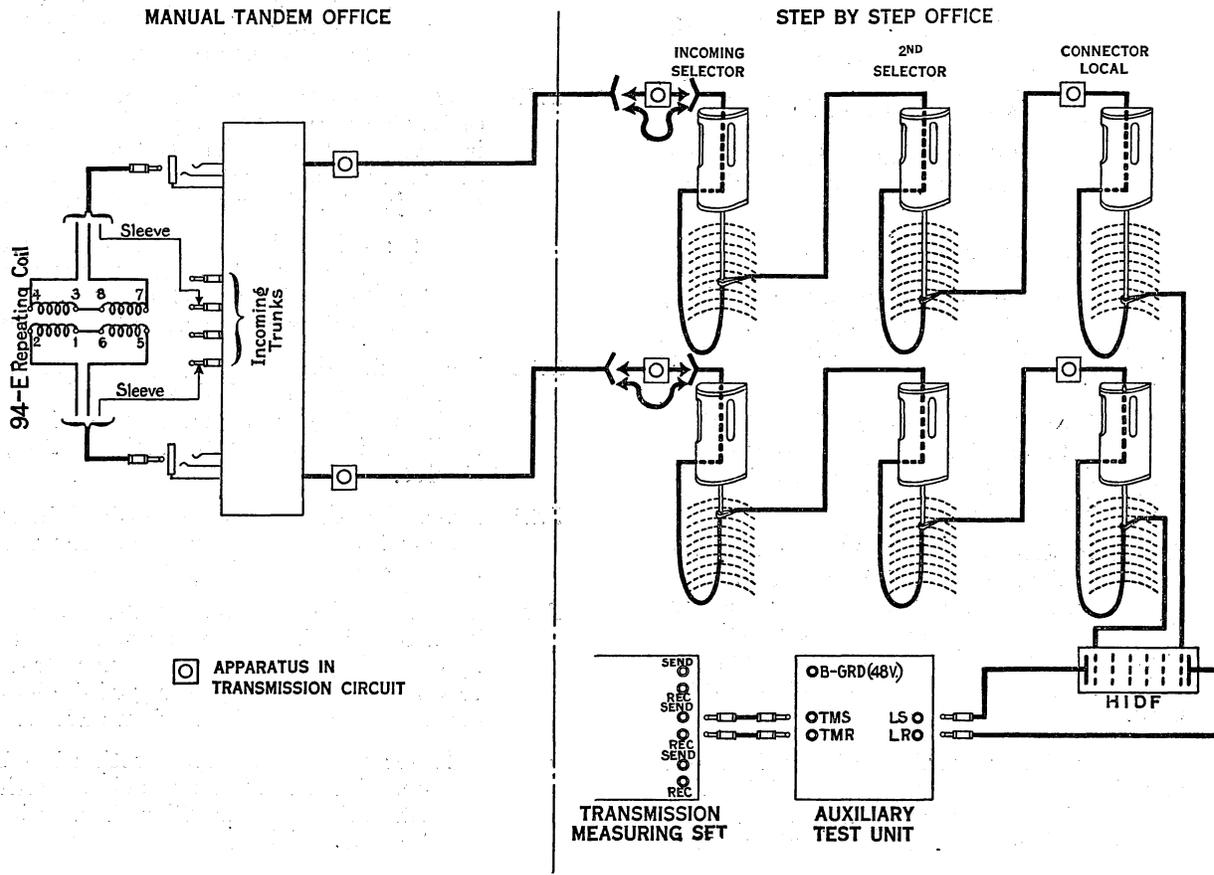


Figure 1

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- 2.05 The looping circuit shown in Figure 1 consists of a No. 94-E or similar repeating coil connected as shown in Figure 1 to two switchboard cords equipped with plugs of the type suited to the jacks of the tandem switchboard and the sleeve conductors connected to the sleeves of plugs of incoming cord-ended trunks at the tandem switchboard or similar sleeve conditions.
- 2.06 Connect the TMS and TMR jacks of the auxiliary test unit, respectively, to the sending and receiving jacks of the transmission measuring set, using two regular patching cords.
- 2.07 Connect the B-GRD (48V) jack of the auxiliary test unit to 48 battery and ground (battery on tip and ground on sleeve), using a regular patching cord.
- Note: This battery and ground may be obtained from any source convenient to the location of the testing apparatus, preferably a nearby BATT jack.
- 2.08 At the HIDF select two vacant connector terminals and remove the tip, ring and sleeve intercepting lines from these two vacant connector terminals.
- 2.09 Connect the LS and LR jacks of the auxiliary test unit, respectively, to the vacant connector terminals, using the special patching cords of Paragraph 2.04.
- 2.10 Establish a talking circuit with an assistant tester at the manual tandem switchboard.

Testing Procedure

- 2.11 Operate the following keys of the auxiliary test unit to the position specified. Keys not mentioned should remain in the normal position.
- | | |
|---------------|---------------|
| Key 1 to OPEN | Key 5 to BATT |
| Key 2 to OPEN | Key 6 to BATT |
| Key 3 to MET | Key 12 to SL |
| Key 4 to MET | |
- 2.12 At the tandem office switchboard, over one of the trunks to be tested, have the assistant tester pass a call in the regular way for the number of the connector terminal connected to the LS jack of the auxiliary test unit, using a supervisor's telephone circuit cord.
- 2.13 At the tandem switchboard insert in a multiple jack of this trunk one end of the looping circuit of Paragraph 2.05 and remove the supervisor's telephone circuit cord.

Note: When the connection has been completed to the auxiliary test unit, the sleeve lamp associated with the LS jack should light.

- 2.14 Operate key 1 of the auxiliary test unit to HOLD.
- 2.15 At the tandem office switchboard, over another trunk to be tested, have the assistant tester pass a call in the regular way for the number of the connector terminal connected to the LR jack of the auxiliary test unit, using a supervisor's telephone circuit cord.
- 2.16 At the tandem switchboard insert in a multiple jack of this trunk the other end of the looping circuit of Paragraph 2.05 and remove the supervisor's telephone circuit cord.

Note: When the connection has been completed to the auxiliary test unit, the sleeve lamp associated with the LR jack should light.

- 2.17 Operate key 2 of the auxiliary test unit to HOLD.
- 2.18 Measure the transmission loss.
- Note: This will be the loss of two trunk circuits, the looping circuit and two local connector circuits.
- 2.19 Disconnect one trunk by operating key 1 or key 2 (as the case may be) of the auxiliary test unit to OPEN and have the plug of the looping circuit removed from the trunk jack at the tandem switchboard.

Note: When the disconnection has been completed the sleeve lamp of the auxiliary test unit associated with the trunk to be released will be extinguished.

- 2.20 Repeat the above testing procedure to determine the transmission loss of a trunk to be used as standard and set it up as outlined in Paragraphs 2.11 to 2.14, inclusive.
- 2.21 Proceed with the test as outlined in Paragraphs 2.15 to 2.19, inclusive, for the remaining trunks of the group.
- 2.22 When all of the trunks in the group have been tested, disconnect the standard trunk by operating key 1 of the auxiliary test unit to OPEN and have the plug of the looping circuit removed at the tandem switchboard.

Note: When the disconnection has been completed the lamp associated with the LS jack of the auxiliary test unit will be extinguished.