

TROUBLE INTERCEPTING AND OBSERVATION TRUNKS

1. GENERAL

- 1.01 This section covers the detailed method to be followed in making transmission tests on trouble intercepting and observation trunks in step-by-step offices.
- 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. TROUBLE INTERCEPTING AND OBSERVATION TRUNKS (PLUGGING UP LINES)

- 2.01 These circuits are tested at the step-by-step "A" switchboard by the loop method.
- 2.02 The loops are established at the MDF plugging-up jack boxes of the respective step-by-step offices by means of patching cords.
- 2.03 Figure 1 shows schematically the connections for the test.

Preliminary Connections

- 2.04 Provide two regular double-ended patching cords equipped with 110 type plugs, one regular patching cord equipped with 109 type plugs, and two regular patching cords equipped with plugs of the type suited to the jacks of the "A" switchboard.
- 2.05 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.
- 2.06 Connect the B-GRD (24V) jack of the auxiliary test unit to 24 volt battery and ground (battery on tip and ground on sleeve) using a regular patching cord equipped with 109 type plugs.
- 2.07 Connect the plugs of two patching cords to the LS and LR jacks of the auxiliary test unit.

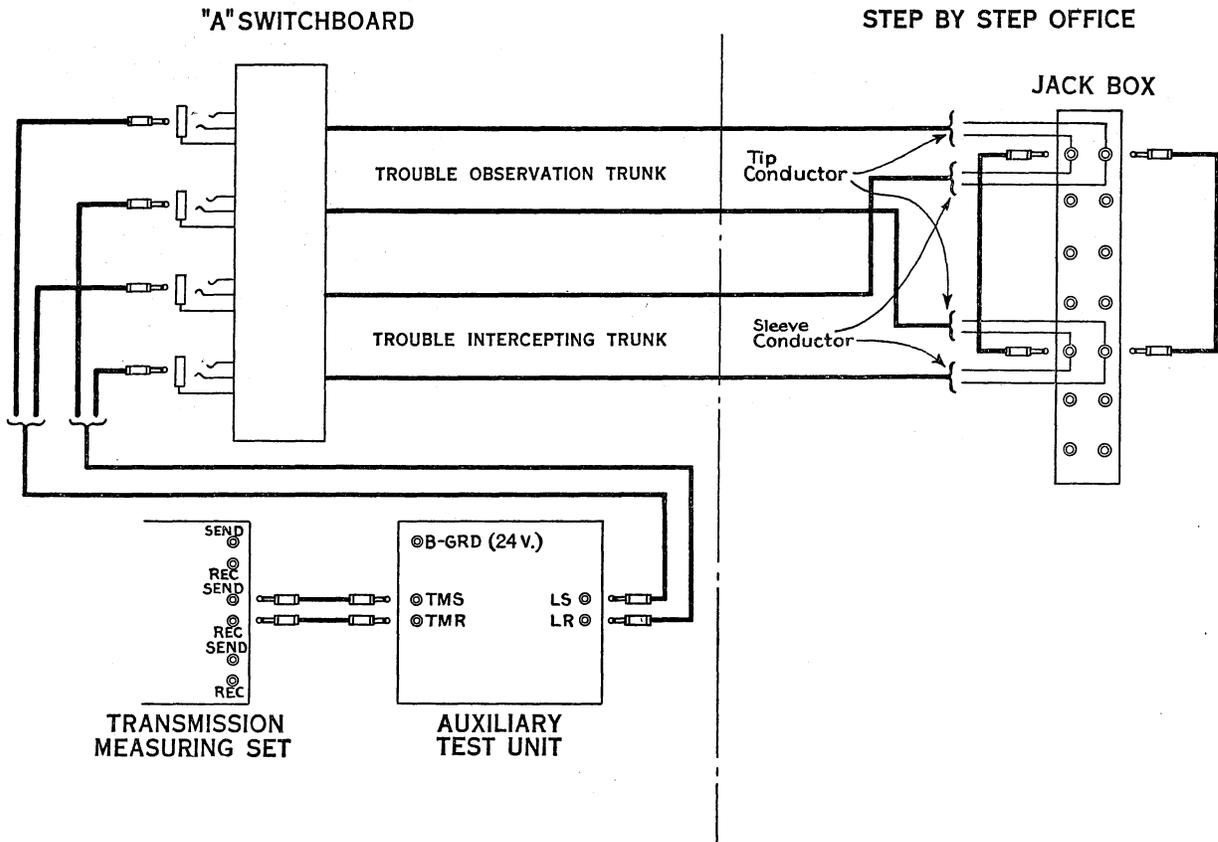


Figure 1

SECTION K24.15

- 2.08 Establish a talking circuit with an assistant tester at the step-by-step office at which the trunks to be tested terminate.

Testing Procedure

- 2.09 Operate the following keys of the auxiliary test unit to the positions specified. Keys not mentioned should remain in the normal position.

Key 1 to HOLD	Key 5 to BATT
Key 2 to HOLD	Key 6 to BATT
Key 3 to MET	Key 7 to BATT
Key 4 to MET	Key 8 to BATT

(a) Trouble Intercepting Trunks

- 2.10 Insert the plug of the cord connected to the LS jack of the auxiliary test unit into the jack of a trouble intercepting trunk to be tested.
- 2.11 Insert the plug of the cord connected to the LR jack of the auxiliary test unit into the jack of another trouble intercepting trunk to be tested.
- 2.12 Advise the assistant tester at the step-by-step office of the two trunks to be looped for test.
- 2.13 Measure the transmission loss.
Note: This is the loss of two trouble intercepting trunks.
- 2.14 Release one trunk by removing the patching cord from the trunk jack at the "A" switchboard and by having the looping cord removed from the jack box at the step-by-step office.
- 2.15 Repeat the above testing procedure to determine the transmission loss of the trunk to be used as a standard or test trunk and set it up as outlined in paragraphs 2.09 and 2.10.
- 2.16 Proceed with the tests as outlined in paragraphs 2.11 to 2.14, inclusive, for the remaining trunks of the group.

- 2.17 When all of the trunks in the group have been tested disconnect the standard trunk by removing the plug of the cord from the trunk jack at the "A" switchboard and by having the looping cord removed at the jack box of the step-by-step office.

(b) Trouble Observation Trunks

- 2.18 Insert the plug of the cord connected to the LS jack of the auxiliary test unit into the jack of a trouble observing trunk to be tested.
- 2.19 Insert the plug of the cord connected to the LR jack of the auxiliary test unit into the jack of another trouble observing trunk to be tested.
- 2.20 Advise the assistant tester at the step-by-step office of the two trunks to be looped for test.
- 2.21 Measure the transmission loss.
Note: This is a loss of two trouble observing trunks.
- 2.22 Release one trunk by removing the patching cord from the trunk jack at the "A" switchboard and by having the looping cord removed from the jack box at the step-by-step office.
- 2.23 Repeat the above testing procedure to determine the transmission loss of a trunk to be used as a standard or test trunk and set it up as outlined in paragraphs 2.09 and 2.18.
- 2.24 Proceed with the tests as outlined in paragraphs 2.19 to 2.22 inclusive, for the remaining trunks of the group.
- 2.25 When all of the trunks in the group have been tested disconnect the standard trunk by removing the plug of the cord from the trunk jack at the "A" switchboard and by having the looping cord removed at the jack box of the step-by-step office.