

SUBSCRIBER LINE RELAY CIRCUIT  
TELETYPEWRITER SWITCHBOARD NO. 1

1. GENERAL

1.01 This section describes operation tests of the subscriber line relay circuit associated with the teletypewriter switchboard No. 1. These tests are made at the No. 15 test board.

1.02 The tests outlined herein, with the exception of minor changes were previously covered in Provisional Section A281.201. This section cancels Section A281.201.

1.03 The tests require two persons, one at the No. 15 test board and one at the switchboard, usually an operator. In some offices it may be convenient to have another person located at the subscriber line relay rack bay depending on the location of the relay rack bay with respect to the No. 15 test board.

2. APPARATUS

2.01 One P4H Cord equipped with two No. 288A Plugs or two P2B Cords equipped with No. 247A Plugs.

3. METHOD

3.01 Request the trouble operator to connect a station line testing trunk to the jack of the subscriber line to be tested. The guard lamp associated with the station line testing trunk at the No. 15 test board should light.

Note: Should a subscriber on the line under test originate a call between the time the plug of the station line testing trunk is inserted into the jack of the circuit under test and the time the connections are made at the relay rack bay, the ANS lamp associated with the station line testing trunk will light.

3.02 Connect the TGL and TTY SWBD jacks of an idle testing trunk located at the subscriber line relay bay to the TGL and TTY SWBD jacks of the circuit under test using one P4H cord or two P2B cords. The BUSY lamp associated with the testing trunk at the No. 15 test board should light.

Note: Connect first the TGL and TTY SWBD jacks of the testing trunk and then the line test jacks of the circuit under test to minimize any possible interference with service.

3.03 At the No. 15 test board, first insert the plug of the STA LINE TST-A cord of the line testing circuit into the TGL jack of the testing trunk associated with the station line circuit under test, and then insert the plug of the STA LINE REL TST-D cord into the TTY SWBD jack of the same trunk.

Note: Should the subscriber on the line under test originate a call with the connections established as above, the lamp associated with the STA LINE TST-A cord will light.

3.04 At the No. 15 test board, insert the plug of the OVERALL LINE TST-B cord of the line testing circuit into the line test jack associated with the station line testing trunks connected to the circuit under test. The lamp associated with the OVERALL LINE TST-B cord should light. The guard lamp associated with testing trunk should remain lighted and the ANS lamp should be extinguished.

3.05 Ringling Test: Operate the RING key of the line testing circuit at the test board for approximately 2 seconds. The bell of the line testing circuit should ring steadily while the key is operated.

3.06 Unattended Station Test: Operate the UNATT RECALL DISC key for approximately one second. The lamp associated with the STA LINE REL TST-D cord should light while the key is operated. The lamp associated with the OVERALL LINE TST-B cord should flash when the key is operated and should continue to flash when the key is released.

3.07 Communication Test: Operate the TTY ON STATION key and operate the TTY ON CORD key momentarily. The lamp associated with the OVERALL LINE TST-B cord should be extinguished. The CORD and TTY milliammeters should indicate a current between 19. and 21. milliamperes when the subscriber line relay circuit and the test board cord battery tap resistances are both 150 ohms or both 540 ohms. The CORD milliammeter should indicate 20.5 and 22.5 milliamperes when the subscriber line relay circuit battery tap resistance is 150 ohms and the test board cord battery tap resistance is 540 ohms.

3.08 Operate the TTY SIG ON CORD key. Test signals should be received on the attendant's teletypewriter while the key is operated. Restore the TTY SIG ON CORD key.

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3.09 Station Recall Test: Operate the STA RECALL key momentarily. The lamp associated with the OVERALL LINE TST-B cord should flash.

3.10 Operate the TTY ON CORD key momentarily. The lamp associated with the OVERALL LINE TST-B cord should be extinguished.

3.11 Station Disconnect Test: Restore the TTY ON STATION key. The lamp associated with the OVERALL LINE TST-B cord should light.

3.12 Test of Incoming Call to Switchboard: Momentarily operate the DISC key associated with the station line testing trunk. The disconnect lamp associated with the station line testing trunk at the switchboard should light as an indication to the operator to remove the plug of the station line testing trunk from the line circuit under test. When the plug of the trunk is removed from the line under test, the associated guard lamp at the test board is extinguished.

3.13 Operate the TTY ON STATION key. The line lamp or lamps associated with the circuit under test should light at the switchboard.

Note: The night alarm feature may also be tested if the test is made at a time when the NA key associated with the night alarm circuit is operated.

3.14 When the operator answers the call, the line lamp or lamps should be extinguished and test signals should be received on the attendant's teletypewriter. Advise the operator that this is a test call.

3.15 Restore the TTY ON STATION key. The supervisory lamp associated with the operator's cord circuit used to answer the call should light as a disconnect signal and the operator should remove the cord from the circuit under test.

3.16 Remove the plugs of the P4H or P2B cords from the TGL and TTY SWBD jacks of the circuit under test.

Note: In removing these cords at the station line relay bay, first remove the cords from the TGL and TTY SWBD jacks associated with the circuit under test and then remove the cords from the TGL and TTY SWBD jacks of the testing trunks.

3.17 Disconnection: Upon the completion of the tests restore all cords and keys to normal.

4. REPORTS

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