

ALL TRUNKS BUSY CIRCUIT

TELETYPEWRITER LINE CONCENTRATING UNIT NO. 101A

1. GENERAL

1.01 This section describes a method of testing the all trunks busy circuit associated with the teletypewriter line concentrating unit No. 101A.

1.02 This test should be conducted as rapidly as consistent with accuracy and during a period of practically no traffic.

1.03 Record the readings of the SUB OFL, NCA and also the NCB register if provided before and after the tests. Report the difference in readings for each register to the traffic department pointing out that the increase in the readings has been caused by testing.

2. APPARATUS

2.01 Test Circuit SD-70295-01.

2.02 One 6P1A Cord (Two P3E cords equipped at each end with a No. 247A plug.)

3. METHOD

(A) Offices with One Trunk Outlet

3.01 Connect the A and B jacks of the subscriber line circuit to be used for the test to the TST A and B jacks of the test circuit, using a 6P1A cord, connecting to the test circuit first.

3.02 Advise the operator office that all of the trunks are to be used for testing and make all trunks busy by operating all of the trunk BSY keys.

3.03 With the teletypewriter connected to the TTY BIAS, TTY SEND and TTY REC jacks of the test circuit, operate the SUB SIDE OF TRK SEND and SUB SIDE OF TRK REC keys of the test circuit. Then operate the SUB SIDE OF TRK ANS key.

Note: Should a call be originated on the subscriber line which is used for the test, the SUB ANS lamp of the test circuit will light.

3.04 Observe that the NCA register operates approximately once each second and the SUB OFL register operates once.

3.05 A series of groups of "letters" signals should be received by the test circuit teletypewriter. In each group there will be one or two signals received at a speed of approximately one per second, with a waiting period of two to four seconds between each group.

3.06 Release the BSY key of one trunk. A series of groups of "K" signals should

be received at the test circuit teletypewriter. In each group there will be three to nine "K" signals transmitted at the rate of about 4 per second, with a waiting period of two to four seconds between each group.

3.07 Restore the SUB SIDE OF TRK ANS key of the test circuit to normal. The series of "K" signals should cease. Reoperate the SUB SIDE OF TRK ANS key and the test circuit should then seize the idle trunk. When the BSY lamp on the trunk involved lights, immediately restore the SUB SIDE OF TRK ANS key. The BSY lamp of the trunk should be extinguished within approximately 6 seconds.

3.08 Repeat 3.02 to 3.05 and check that after the time for which the alarm circuit is set has elapsed, the LTR lamp of the all trunks busy circuit lights and the buzzer operates.

3.09 Release the alarm by depressing the LTR key of the all trunks busy circuit. Release the SUB SIDE OF TRK ANS key and all trunk BSY keys. Remove the cords from the TST A and B jacks of the test circuit and A and B jacks of the subscriber line, removing the plug from the line circuit first. Restore all test circuit keys to normal.

(B) Offices with Two Trunk Outlets - Arranged for Overflow of Calls Between Outlets

3.10 Proceed as covered in test (A) except that

(1) In 3.02 the trunks to both operator offices should be made busy.

(2) In 3.04 the NCB register should operate with the NCA register.

(C) Offices with Two Trunk Outlets - Not Arranged for Overflow of Calls Between Outlets

3.11 Proceed as covered in test (A) except that

(1) In 3.01 a subscriber line arranged normally to reach the first operator office should be used.

(2) In 3.02 the trunks to the first operator office should be made busy.

(3) In 3.04 the SUB OFL register associated with the first group of trunks should operate.

(4) In 3.08 the LTR lamp of the all trunks busy circuit associated with the group of trunks to the first operator office should light.

3.12 Repeat this procedure, the only difference being that

(1) In 3.01 a subscriber line arranged normally to reach the second operator office should be used.

(2) In 3.02 the trunks to the second operator office should be made busy.

(3) In 3.04 the NCB register should operate instead of the NCA register and the SUB OFL register associated with the second group of trunks should operate.

(4) In 3.08 the LTR lamp of the all trunks busy circuit associated with the group of trunks to the second operator office should light.

4. REPORTS

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

Bell Telephone Laboratories, Inc.