

BUSY, OUT-OF-ORDER, UNASSIGNED NUMBER
AND REORDER SIGNAL FEATURES OF DIRECTOR -
TELETYPEWRITER LINE CONCENTRATING UNITS NOS.101A & 102A
(FULL DUPLEX TRUNK TERMINATION)

1. GENERAL

- 1.01 This section describes a method of checking the busy, out-of-order, unassigned number, and reorder signal features of the director at a No. 101A or No. 102A teletypewriter line concentrating unit (full duplex trunk termination).
- 1.02 This issue replaces Issue 2 in order to include reference to the No. 102A teletypewriter line concentrating unit (full duplex trunk termination).
- 1.03 These tests should preferably be made during periods of no traffic, or in periods of very light traffic, since calls originated while the tests are in progress may be interfered with. If it becomes necessary to make tests when calls might be received, and if indications are received that an attempt is being made to pass a call through the equipment, the test should be discontinued immediately.

2. APPARATUS

- 2.01 Test Circuit SD-70295-01.
- 2.02 Two P3E cords equipped at each end with a No. 247A plug (one 6P1A cord).
- 2.03 One P3E cord equipped at each end with a No. 310 plug (one 3P7A cord).
- 2.04 No. 136B tools, as required.

3. METHOD

- 3.01 Select a trunk to be used for test purposes and have it removed from service at the operator office in the regular manner. Operate the trunk BSY key. The trunk BSY lamp should light. Connect the SEND and REC jacks of the test circuit to the SEND and REC jacks of the trunk selected, using the cord equipped with No. 247A plugs and connecting to the test circuit first.
- 3.02 Connect the teletypewriter to the TTY BIAS, TTY SEND and TTY REC jacks of the test circuit, and operate the LINE SIDE OF TRK TTY key of the test circuit.

Busy Signal

- 3.03 Make a local subscriber line busy by connecting the SUB BSY jack to the A

jack of the subscriber line circuit, using the cord equipped with No. 310 plugs and connecting to the SUB BSY jack first.

3.04 Operate the LINE SIDE OF TRK CALL key of the test circuit. The director will be connected to the trunk and will send the "director ready" signal. The NA, LINE SIDE OF TRK SIG, trunk C-DIS, SEQ BSY and CONN lamps should light.

3.05 Within a short interval and using the keyboard of the teletypewriter, send FIGS signal followed by the two-digit code of the line made busy in 3.03. The LINE SIDE OF TRK SIG lamp should flash. In the case of the No. 101A unit, the teletypewriter should receive continuous "K" or "1/2" signals. All other lamps should remain lighted. In the case of the No. 102A unit, the teletypewriter should receive four or five "K" or "1/2" signals. The trunk C-DIS, LINE SIDE OF TRK SIG, NA, SEQ BSY and CONN lamps should be extinguished.

Note: In the case of the No. 101A unit, at the end of approximately 10 seconds from the time the LINE SIDE OF TRK CALL key was operated, all lamps previously lighted should be extinguished, and the red TRK lamp should be lighted and the "K" or "1/2" signals should stop.

3.06 If it is desired to determine the range of the "K" or "1/2" signals on the teletypewriter, this can be done by raising and lowering the range finder until the proper signals cease to appear. If it is desired to use a 118 type measuring set to determine the character of the received signals, the 118 type equipment should be connected to the TM jack of the test circuit. In the case of the No. 101A unit, the ALM CUT OFF key should be operated while the signals are being received and left operated while the measurements are being made. In the case of the No. 102A unit, using No. 136B tools, block operated the A1 relay of the miscellaneous alarm and block released the T relay of the director before sending the calling code from the teletypewriter keyboard. After the measurements have been made, restore the ALM CUT OFF key in the case of the No. 101A unit and remove the No. 136B tools from the A1 and T relays in the case of the No. 102A unit. The "K" or "1/2" signals should cease.

3.07 Restore the LINE SIDE OF TRK CALL key to normal. All lamps except the trunk BSY should be extinguished, the trunk BSY key being operated.

3.08 If there are two directors, repeat the procedures in 3.04 to 3.07 replacing in service the director not previously used.

Out-of-Order Signal

3.09 Repeat the procedures covered in 3.03 to 3.08 except that the SUB OO jack is connected to the A jack of the subscriber line circuit instead of the SUB BSY jack specified in 3.03 and "Q" or "1" signals should be received on the teletypewriter instead of "K" or "1/2" signals as specified in 3.05 and 3.06.

Unassigned Number Signal

3.10 Repeat the procedures covered in 3.03 to 3.08 except that no connection is made to the subscriber line and instead of an existing line number being typed as specified in 3.05, any unassigned number is typed. The signals received on the teletypewriter should be "V" or "3/8" instead of "K" or "1/2" as specified in 3.05 and 3.06.

Reorder Signal

3.11 Repeat the procedure covered in 3.04. At the end of approximately ten seconds from the time the LINE SIDE OF TRK CALL key was operated the LINE SIDE OF TRK SIG lamp should flash momentarily and the teletypewriter should receive four or five "T" or "5" characters, followed by a steady spacing signal. The LINE SIDE OF TRK SIG, trunk C-DIS, NA, SEQ BSY and CONN lamps should be extinguished and the red TRK lamp should light in the case of the No. 101A unit.

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3.12 If it is desired to determine the range of the "T" or "5" signals on the teletypewriter this can be done by raising and lowering the range finder until the proper signals cease to appear. If it is desired to use a 118 type measuring set to determine the character of the received signals, the 118 type equipment should be connected to the TM jack of the test circuit. In the case of the No. 101A unit, using a No. 136B tool, block non-operated the T relay of the director and operate the ALM CUT OFF key while the signals are being received and leave it operated while the measurements are being made. In the case of the No. 102A unit, using No. 136B tools, block operated the A1 relay of the miscellaneous alarm and block released the B0 relay of the trunk sequence circuit associated with the trunk used for test. After the measurements have been made, remove the No. 136B tool from the T relay and restore the ALM CUT OFF key in the case of the No. 101A unit and remove the No. 136B tools from the B0 relay and then the A1 relay in the case of the No. 102A unit. The "T" or "5" signals should cease.

3.13 Restore the LINE SIDE OF TRK CALL key to normal. The red TRK lamp should be extinguished and the trunk BSY lamp should be relighted in the case of the No. 101A unit. If there are two directors place the second director in service and repeat 3.11 and, if desired, 3.12.

3.14 If no further tests are to be made, take down all connections between the test circuit and the trunk and subscriber line circuits in each case removing the patch from the test circuit last. The trunk used for test purposes should be restored to service and the trunk BSY key restored. The trunk BSY lamp should be extinguished.

4. REPORTS

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