

SPECIAL SERVICE TRUNKS

METHOD OF HANDLING STEADY SIGNALS

PANEL OFFICES

1. GENERAL

1.01 This section outlines the procedures to be followed in handling steady signals on special service trunks in panel offices. The procedures described are as follows:

- (A) Line Finder Offices - Special Service Cord Supervisory Lamp lighted.
- (B) Line Finder Offices - Special Service Cord Supervisory Lamp not lighted.
- (C) Line Switch Offices - Special Service Cord Supervisory Lamp lighted.
- (D) Line Switch Offices - Special Service Cord Supervisory Lamp not lighted.

1.02 Steady signals occur on special service trunks due to line conditions involving grounded tip conductors and receivers-off-the-hook or short circuits. These troubles cause the lamp associated with the special service trunk to relight when the DSA operator disconnects from the trunk.

1.03 The DSA switchboard supervisor will ordinarily report to the central office maintenance organization the special service trunk number involved in the steady signal condition and whether or not the associated special service cord circuit supervisory lamp is lighted.

2. APPARATUS

- 2.01 D-81761 dial hand test set (or equivalent).
- 2.02 One No. 253B tool (sequence switch brake plate).

3. METHOD

3.01 Upon the receipt of a steady signal report from the traffic department, giving the special service trunk number, determine whether or not the associated special service cord supervisory lamp is lighted. Then determine the district (or office) frames which have access to the particular trunk reported and whether the trunk involved serves a coin or non-coin line group. Prepare a trouble ticket showing this information and assign it to a switchman for tracing.

3.02 The switchman to whom the ticket is assigned should note whether or not the special service cord supervisory lamp was reported as lighted. If the lamp was lighted it should be understood that the trouble is due to a ground on the tip side of the circuit and the switchman should proceed as in (A) or (C). If the supervisory lamp was not lighted it should be understood that the trouble is due to a receiver-off-the-hook or short circuit and the switchman should proceed as in (B) or (D).

(A) Line Finder Offices - Special Service Cord Supervisory Lamp Lighted

3.03 Proceed to the district (or office) selector frames and determine the particular district (or office) selector connected to the special service trunk indicated on the ticket. This may be done by checking the racks of the selectors having a brush tripped in the special service trunk group. Then obtain the number of the associated line finder frame and selector from the designation on the district frame. Enter this information on the ticket.

3.04 Proceed to the line finder frame and selector indicated on the ticket and from the reading on the associated rack determine the line finder terminal of the line affected. Enter this information on the ticket.

3.05 Since a new connection may have been established on the trunk after it was reported, cut in on the connection at the line finder brush tip and ring springs by means of a hand test set and challenge. If no answer to the challenge is received lift the tip spring of the line finder brush.

3.06 Test for ground at the line finder tip terminal associated with the line in trouble. If ground is present, reset the line finder brush and obtain the line number (or numbers on party-lines) and enter the information on the ticket, promptly reporting the line number and trouble to the repair service clerk.

3.07 If the line finder bank tip terminal tests free of ground, reset the line finder brush and determine from the DSA switchboard supervisor whether or not the trouble is still present. If the trouble is still present block the R or R-1 sequence switch of the associated district selector and the R sequence switch of the

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office selector if involved, using a No. 253B tool and proceed to locate the trouble.

3.08 If the DSA switchboard supervisor advises that the trouble has disappeared or when the trouble is disposed of as in 3.06 or 3.07 report the trunk number back to the DSA switchboard supervisor, advising that the trouble has been cleared and that the special service cord may be removed from the associated trunk jack.

3.09 Forward the ticket in accordance with local instructions.

(B) Line Finder Offices - Special Service Cord Supervisory Lamp Not Lighted

3.10 Proceed as in 3.03 and 3.04 to determine the line finder selector brush and terminal involved in the report and enter this information on the ticket.

3.11 Since a new connection may have been established on the trunk after it was reported, cut in on the connection at the line finder brush tip and ring springs by means of a hand test set and challenge. If no answer to the challenge is received, reset the line finder brush.

3.12 Observe that another line finder selects the terminal affected. The line in trouble will then be routed to a permanent signal holding trunk where it may be handled in accordance with local practices.

Note 1: In the case of coin lines where a deposit is required before dial tone is received, after resetting the brush, ground the line finder bank tip terminal by means of the hand test set until dial tone is heard. The line will then be routed to a permanent signal holding trunk.

Note 2: The line number involved in the permanent signal may be traced at this time to the permanent signal holding trunk involved and the information forwarded as outlined in the Section covering the handling of permanent signals on permanent signal holding trunks. In the case of coin lines, refer the case to the repair service clerk immediately and advise the sender monitor operator accordingly.

3.13 If a line finder does not find the line after the brush is reset (and after the line finder tip terminal is grounded in the case of coin lines where a deposit is required to receive dial tone), it is an indication that the trouble is in the equipment. Then block the sequence switches as in 3.07 and proceed to locate the trouble.

3.14 When the report has been disposed of in accordance with 3.12 or 3.13, re-

port the trunk number back to the DSA switchboard supervisor, advising that the trouble has been cleared and that the special service cord may be removed from the associated trunk jack.

3.15 Forward the ticket in accordance with local instructions.

(C) Line Switch Offices - Special Service Cord Supervisory Lamp Lighted

3.16 The switchman to whom the ticket is assigned should proceed to the district selector frames involved and determine the particular district selector connected to the special service trunk indicated on the ticket. This may be done by checking the racks of the selectors which have a brush tripped in the special service trunk group.

3.17 Cut in on the connection at the district selector P or P-1 or Q or Q-1 cams by means of a hand test set and challenge since a new connection may have been established on the trunk following the report.

3.18 If the subscriber or operator does not answer the challenge, lift the P-2 cam spring of the R or R-1 district selector sequence switch and test for ground at the P cam. If ground is present obtain the number, from the designation on the district selector frame, of the line switches having access to this selector.

3.19 Proceed to the line switches indicated and check the switches which are off normal until the one connected to the district selector involved is located. Enter this information on the ticket.

Note: Refer to the line switch designation cards for the district selectors corresponding to particular line switch positions.

3.20 Determine from the line switch designation card or from the group and terminal record, the number (or numbers on party-lines) of the line and whether or not the line is a P.B.X. trunk. Enter this information on the ticket.

3.21 Advance the line switch off of the district selector involved allowing the line switch to restore to normal. Then promptly report the line number and trouble to the repair service clerk.

3.22 If no ground is present when testing as in 3.18, determine from the DSA supervisor whether or not the trouble has disappeared. If the trouble has not disappeared block the associated district selector R or R-1 sequence switch and the R sequence switch of the office selector if involved, using a No. 253B tool. Then locate as in 3.19, the line switch connected to the district selector involved and advance the switch off the district, allowing

the switch to restore to normal. Then proceed to locate the trouble.

3.23 If the DSA supervisor advises that the trouble has disappeared or when the report has been disposed of as in 3.21 or 3.22, notify the DSA switchboard supervisor, giving the trunk number involved, that the trouble has been cleared and that the special service cord may be removed from the associated trunk jack. Then forward the ticket in accordance with local instructions.

(D) Line Switch Offices - Special Service Cord Supervisory Lamp Not Lighted

3.24 Proceed as in 3.16 and 3.17 and if the subscriber or operator does not answer the challenge proceed to the line switches as indicated in 3.19 and check the switches which are off normal until the one connected to the district selector involved is located.

3.25 Advance the line switch off of the district selector and observe that the switch selects another district thus routing the line in trouble to a permanent signal holding trunk where it may be handled in accordance with local practices.

Note 1: In the case of coin lines where a deposit is required before dial tone is received, after advancing the line switch off of the district selector involved, ground

the tip side of the line at the line switch terminal strip by means of the hand test set until dial tone is heard. The line will then be routed to a permanent signal holding trunk.

Note 2: The line number involved in the permanent signal may be traced at this time to the permanent signal holding trunk involved and the information forwarded as outlined in the Section covering the handling of permanent signals on permanent signal holding trunks. In the case of coin lines refer the case to the repair service clerk immediately and advise the sender monitor operator accordingly.

3.26 If the line switch does not find a district selector when it is advanced as in 3.25 or after grounding the tip terminal in the case of coin lines where a deposit is required to receive dial tone, it is an indication of equipment trouble. Then block the sequence switches as in 3.22 and proceed to locate the trouble.

3.27 After the trouble has been disposed of as in 3.25 or 3.26 notify the DSA switchboard supervisor, giving the trunk number shown on the ticket, that the trouble has been cleared. Then forward the ticket in accordance with local instructions.