

**OUTGOING 2-WIRE INTERCEPTING TRUNKS FROM TRUNK FINDERS
ARRANGED FOR REGULAR OR TROUBLE INTERCEPT TO OPERATOR
OR TO MACHINE ANNOUNCEMENT
OPERATION TESTS
USING TEST SET SD-90469-01 OR SD-90469-02 (J94710A)
STEP-BY-STEP SYSTEMS**

1. GENERAL

1.01 This section describes a method of testing outgoing intercepting trunks arranged to route calls to a regular intercepting operator, a trouble intercepting operator, or an announcement machine located at a distant office using test set SD-90469-01 or SD-90469-02 and test trunk circuit SD-32090-01. Also included are the outgoing intercepting trunks with E and M lead signaling, and associated pulse generator circuit, arranged for more than one class of intercept.

1.02 This section is reissued to include tests of intercept trunks arranged for E and M lead signaling such as SD-32309-01. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The tests covered are:

A. Regular Intercepting to Operator: This test checks that the call is routed to a regular intercepting operator when machine ringing is received on the ring conductor.

B. Regular Intercepting to Announcement Machine: This test checks that the call is routed to the announcement machine when machine ringing is received on the tip conductor.

C. Trouble Intercepting: This test checks that the call is routed to the operator when the call is for a plugged-up line.

1.04 Action and verification is required at the operator position. For trunks with E and M lead supervision arranged for more than one

class of intercept, it will be necessary to verify that the call is terminated at the proper position, to check that the pulse generator circuit signals properly.

1.05 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 3 or 4 of this section, indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

2. APPARATUS

All Tests

2.01 Trunk test set, J94710A (SD-90469-01 or SD-90469-02).

2.02 Test trunk circuit, SD-32090-01.

2.03 Head telephone set (associated with test set).

2.04 Patching cord, P2J cord, 9 feet long, equipped with two No. 310 plugs (No. 2P9A cord) (for use where battery supply jack is available).

2.05 Testing cord, W2M cord, 9 feet long, equipped with a No. 310 plug and two No. 59 cord tips (No. 2W12A cord) (for use where battery supply jack is not available).

2.06 Three patching cords, P3E cords, 6 feet long, equipped with two No. 310 plugs (No. 3P7A cord).

2.07 Testing cord, W3A cord, 12 feet long, equipped with a No. 310 plug and three No. 59 cord tips (No. 3W3A cord) (for use where trunk test jack is not available).

Test B

2.08 Patching cord, P3E cord, equipped as in 2.06 but with the tip and ring reversed at one end.

Test C

2.09 Testing cord, No. 893 cord, 3 feet long, equipped with two No. 360A tools (No. 1W13A cord) and two KS-6278 clips.

2.10 No. 310 plug with tip and ring short circuited.

3. PREPARATION

All Tests

| STEP | ACTION | VERIFICATION |
|------|--|--------------|
| 1a | If battery supply jack is available — Connect test set BAT G jack to 48-volt battery supply jack on connector frame, using P2J cord. <i>Note:</i> To avoid possible grounding of battery supply lead, connect cord to test set first and when disconnecting, remove cord from test set last. | |
| 2b | If battery supply jack is not available — Insert No. 310 plug of W2M cord into BAT G jack of test set. | |
| 3b | Connect red (sleeve) conductor of cord to frame ground, white (tip) conductor to equipment side of convenient 48-volt battery fuse (not to exceed 5 amperes in any case). | |
| 4 | Connect head telephone set to trunk test set TEL jacks. | |
| 5 | If required — Operate test set TRS key. | |
| 6 | Patch trunk test set T, TL jacks to test trunk circuit T, TL jacks, respectively, using two P3E cords. | |

4. METHOD

| STEP | ACTION | VERIFICATION |
|--|--|--|
| A. Regular Intercepting to Operator | | |
| 7c | If trunk test jack is provided — Patch test trunk circuit TK jack to T or TST jack of trunk under test, using P3E cord. | BSY lamp not lighted. <i>Note:</i> If BSY lamp lights, remove plug from trunk jack and proceed to test another trunk. |

| STEP | ACTION | VERIFICATION |
|--|---|---|
| 8d | If trunk test jack is not provided — At trunk unit terminal strip — Patch tip, ring, sleeve of test trunk circuit TK jack to terminals 1, 2, 3, respectively, using W3A cord. | BSY lamp not lighted. (See note, Step 7c). |
| 9 | Operate REV, CT keys, then T key. <i>Note:</i> Operated REV key simulates local call on other than E and M lead trunks. | Audible ringing tone heard. At operator position — Call is answered, audible ringing tone silenced. Where separate answering jacks or circuits for “regular” and “trouble” intercepting are provided, verify that call was received on “regular” intercept. |
| 10e | If test is to switchboard and trunk is arranged to flash — At switchboard — With cord in jack, restore, reoperate CT key several times. | At switchboard — Cord supervisory lamp flashes. |
| 11 | Restore T, CT, REV keys. | At operator position — Call is disconnected. At test set — BSY lamp may light momentarily. |
| 12f | If testing other than E and M lead trunks — Reoperate CT, then T key. <i>Note:</i> REV key normal simulates toll call. | Audible ringing tone heard. At operator position — Call is answered, audible ringing silenced. Where separate answering jacks or circuits for “regular” and “trouble” intercepting are provided, verify that call was received on “regular” intercept. Where trunk is arranged for toll identification tone, verify tone heard. |
| 13f | Restore CT, T keys. | At operator position — Call is disconnected. At test set — BSY lamp may light momentarily. |
| 14 | If no other tests are to be made — Disconnect cord from trunk T or TST jack or unit terminal strip of trunk, remove remaining test connections. | |
| 15g | If TRS key is operated — Restore TRS key. | |
| B. Regular Intercepting to Announcement Machine | | |
| 7c | If trunk test jack is provided — Patch test trunk circuit TK jack to T or TST jack of trunk under test, using P3E cord, with tip, ring reversed. | BSY lamp not lighted. <i>Note:</i> If BSY lamp lights, remove plug from trunk jack and proceed to test another trunk. |

| STEP | ACTION | VERIFICATION |
|------|---|---|
| 8d | If trunk test jack is not provided — At trunk unit terminal strip — Patch tip of TK jack to terminal 2, ring to terminal 1, sleeve to terminal 3, using W3A cord. | BSY lamp not lighted. (See note, Step 7c.) |
| 9 | Operate CT key, then T key. <i>Note:</i> REV key normal simulates local call on certain trunks, other than E and M lead trunks. | Audible ringing tone heard. Cut through to announcement machine is made, audible ringing tone silenced. Note that announcement starts at beginning, volume, quality are satisfactory. |
| 10 | After first announcement, restore T, CT keys. | |
| 11 | Reoperate CT key, then T key. | |
| 12 | After predetermined number of announcements — At operator position, call is answered. | If separate answering jacks or circuits for "regular" and "trouble" intercepting are provided — Verify that call was received on "regular" intercept. |
| 13 | Restore T, CT keys to normal. | At operator position — Call is disconnected. At test set — BSY lamp may light momentarily. |
| 14 | If no other tests are to be made — Disconnect cord from trunk T or TST jack or unit terminal strip of trunk, remove remaining test connections. | |
| 15e | If TRS key is operated — Restore TRS key. | |

C. Trouble Intercepting

| | | |
|-----|--|-----------------------|
| 7c | If trunk test jack is provided — Patch test trunk circuit TK jack to T or TST jack of trunk under test, using P3E cord. | BSY lamp not lighted. |
| 8d | If trunk test jack is not provided — At trunk unit terminal strip — Patch tip, ring, sleeve of TK jack to terminals 1, 2, 3, respectively, using W3A cord. | |
| 9e | If trunk T1 jack is provided — Insert No. 310 plug into T1 jack of trunk under test. | |
| 10f | If trunk T1 jack is not provided — At trunk unit terminal strip — Connect terminals 3, 4 together, using No. 893 cord. | |

| STEP | ACTION | VERIFICATION |
|------|--|--|
| 11 | Operate REV, CT keys, then T key. <i>Note:</i> REV key operated simulates local call on other than E and M lead trunks. | Audible ringing tone heard. At operator position — Call is answered, audible ringing tone silenced. Where separate answering jacks or circuits for “regular” and “trouble” intercepting are provided, verify that call was received on “trouble” intercept. |
| 12 | Request operator to disconnect, then restore T, CT, REV keys. | BSY lamp may light momentarily. |
| 13 | If no other tests are to be made — Remove test cord from T or TST jack or unit terminal strip, remove remaining test connections. | |
| 14e | If TRS key is operated — Restore TRS key. | |
| 15f | If trunk T1 jack is provided — Remove No. 310 plug from T1 jack. | |