

**INTERCEPTING TRUNK
FROM CONNECTORS AND SELECTORS
USING AN ANNOUNCEMENT MACHINE
OPERATION TESTS USING DIAL HAND TEST SET
STEP-BY-STEP SYSTEMS**

1. GENERAL

1.01 This section describes a method of testing intercept trunks that terminate in a recorded announcement with and without transfer to operator after two to four announcements. SD-32202-01, SD-32500-01, and SD-35011-01 are typical trunks covered by this section.

1.02 This section affects the Equipment Test List.

1.03 The tests covered are:

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<p>A. Intercept Trunks from Connectors: This test checks the intercept trunks from all types of connectors. . . .</p>	4
<p>B. Intercept Trunks from Local or Toll Preceding Selector Levels: This test checks the intercept trunks from local and toll preceding selector levels and auxiliary trunks arranged to restrict service on CAMA levels.</p>	4
<p>C. Intercept Trunks from Loop Dialing Toll Transmission and Toll Intermediate Selector Levels: This test checks the intercept trunks associated with loop dialing toll selector levels.</p>	6
<p>D. Intercept Trunks from Intertoll Selector Levels: This test checks the intercept trunks associated with simplex dialing intertoll selector levels.</p>	7

1.04 Lettered Steps: A letter a, b, c, etc, added to a step number in Parts 3 and 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 1014A hand set, or equivalent (dial hand test set).

Tests A and B

2.02 Testing cord, W2CL cord, 4 feet long, equipped with one 240A plug and one 471A jack (2W39A cord).

Tests B, C, and D

2.03 KS-6320 orange stick.

2.04 Blocking and insulating tools as required. Use and apply as covered in Section 069-020-801.

Test C

2.05 Testing cord, W2CL cord, 4 feet long, equipped with one 240B plug and one 471A jack (2W45A cord). Modify the 240B plug by adding a strap between terminals 4 and 5 and moving the lead from terminal 6 to terminal 1 as shown in Fig. 1.

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Test D

2.06 Testing and maintenance talking trunk and test circuit SD-64604-01, Fig. 4 and 7 or Fig. 10 and 11 or 13.

2.07 Testing cord, W4AY cord, 8 feet long, equipped with one 471A jack and one 240A plug (4W10A cord), used when Fig. 7 or 11 or Fig. 13 with Q option (SD-64604-01) is provided.

2.08 Testing cord, W2CK cord, 5 feet long, equipped with one 471A jack and one 310 plug, used when Fig. 13 without Q option (SD-64604-01) is provided (2W38A cord).

2.09 Patching cord, P4K cord, 12 feet long, equipped with one 289B plug, one 240K plug, and two E1 lamps connected as shown in Fig. 2.

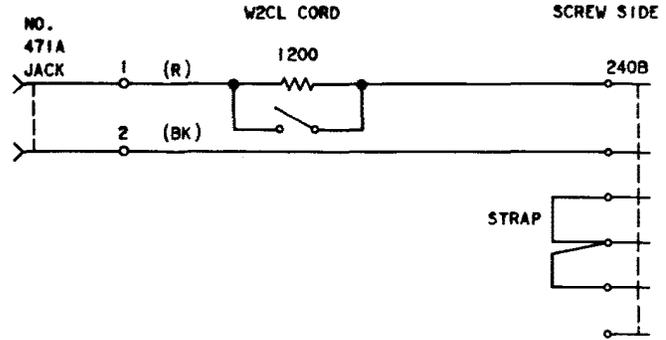


Fig. 1

3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

- 1 Operate TALK MON key of 1014A hand test set to MON.

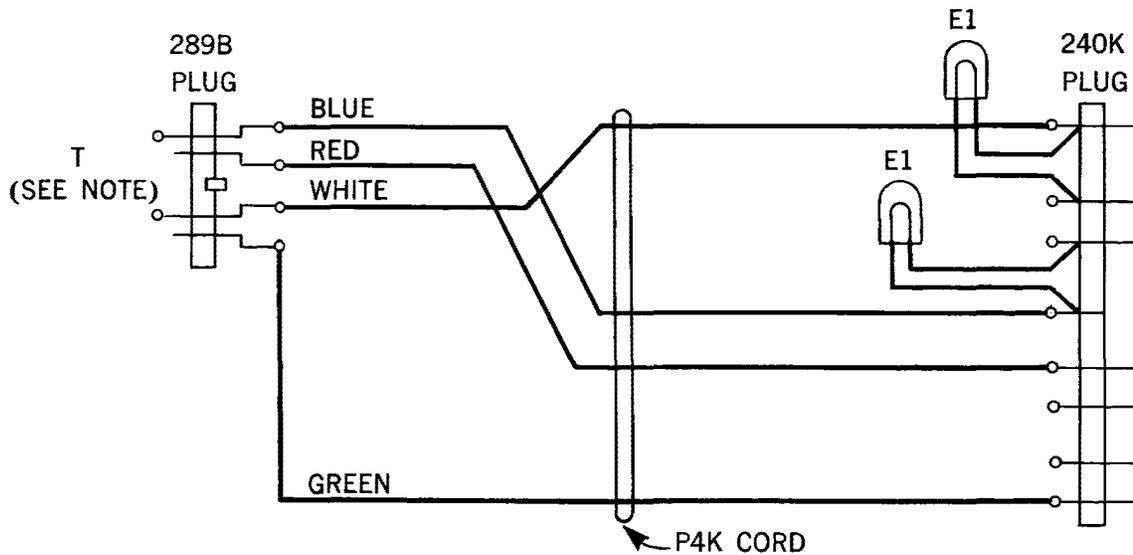
Tests A and B

- 2 Connect 346A plug of 1014A hand test set to 471A jack of W2CL cord (2.02).

Test C

- 3 Connect 346A plug of 1014A hand test set to 471A jack of W2CL cord (2.05).

STEP	ACTION	VERIFICATION
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NOTE:
LETTER T SHOULD BE STAMPED
ON 289B PLUG SHELL OPPOSITE
PRONG INDICATED.

Fig. 2

Test D

- 4 If using SD-64604-01 with Fig. 7 or 11 or Fig. 13 with Q option—
Connect 356A plug of 1014A hand test set to 471A jack of W4AY cord (2.07).
- 5b If using SD-64604-01 with Fig. 13 without Q option—
Connect 346A plug of 1014A hand test set to 471A jack of W2CK cord (2.08).
- 6 Insert 289B plug of P4K cord into SW jack (SD-64604-01).

Note: T element of 289B plug must be inserted into T jack. Plugs recently furnished are stenciled T and R. Stenciling should be provided if not present or indistinct.

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4. METHOD

STEP	ACTION	VERIFICATION
A. Intercept Trunks from Connectors		
3	Insert 240A plug of hand test set into test jack of idle connector.	Monitor to make sure switch has not been seized.
4	Operate and lock hand test set TALK MON switch to TALK.	
5	Dial the two digits of the terminal connected to the trunk to be tested. <i>Note:</i> Terminal per line connectors require third (ringing code) digit.	Connector steps smoothly to proper terminal. Ringing tripped; recorded announcement clearly heard in hand test set.
6c	If trunk is arranged to transfer to operator after two to four announcements— Hold connection for two to four announcements.	After last announcement— Ringing tone heard unless operator answers in less than four seconds. Operator answers and hears identification tone if provided.
7c	Advise operator that a test is being made.	
8d	If identification tone is provided— Verify that operator heard it.	
9	Restore hand test set TALK MON switch to MON.	Connector releases.
10	Repeat Steps 3 through 9 for other trunks to be tested.	
B. Intercept Trunks from Local or Toll Preceding Selector Levels		
3	Insert 240A plug of hand test set into test jack of idle selector having access to trunks to be tested.	Monitor to make sure switch has not been seized.
4	Operate and lock hand test set TALK MON switch to TALK.	
5	Dial digit required to step selector to level on which trunks appear. <i>Note:</i> If selector is arranged for digit absorbing, it may be necessary to dial one or more preliminary digits.	Selector steps to level dialed, cuts in without chattering, and stops on first idle terminal. Recorded announcement clearly heard in hand test set.

STEP	ACTION	VERIFICATION
6c	If trunk is arranged to transfer to operator after two to four announcements— Hold connection for two to four announcements.	After last announcement— Ringing tone heard unless operator answers in less than four seconds. Operator answers and hears identification tone, if provided.
7c	Advise operator that a test is being made.	
8d	If identification tone is provided— Verify that operator heard it.	
9e	If testing SD-32183-01 selectors— Block VON springs nonoperated.	
10e	Using KS-6320 orange stick, rapidly open and close the rotary interrupter springs.	Selector rotates to next idle trunk and cuts through without chattering. Recorded announcement clearly heard in hand test set.
11f	If testing selectors other than SD-32183-01— Block relay as shown in Table A.	

TABLE A

SELECTOR	BLOCK RELAY
SD-30976-01	F Nonoperated
SD-31022-01	F Operated
SD-31784-01	F Operated
SD-31933-01	D Operated
SD-32077-01	F Operated

12f	Using KS-6320 orange stick, rapidly open and close VON springs.	Selector rotates to next idle trunk and cuts through without chattering.
13f	Remove blocking tool used in Step 11f.	Recorded announcement clearly heard in hand test set.
14j	If trunk is arranged to transfer to operator after two to four announcements— Hold connection for two to four announcements.	After last announcement— Ringing tone heard unless operator answers in less than four seconds. Operator answers and hears identification tone, if provided.
15j	Advise operator that a test is being made.	
16h	If identification tone is provided— Verify that operator heard it.	

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STEP	ACTION	VERIFICATION
17	Repeat Steps 9e through 16h for other trunks on this level.	
18e	If testing SD-32183-01 selectors— Remove blocking tool from VON springs.	
19	Operate hand test set TALK MON switch to MON.	Selector restores properly.
20	Repeat Steps 4 through 19 for trunks on other levels.	
C. Intercept Trunks from Loop Dialing Toll Transmission and Toll Intermediate Selector Levels		
4	Insert 240B plug of hand test set into test jack of idle selector having access to trunks to be tested.	Monitor to make sure selector has not been seized.
5	Operate and lock hand test set TALK MON switch to TALK.	
6	Dial digit required to step selector to level on which trunks appear. <i>Note:</i> If selector is arranged for digit absorbing, it may be necessary to dial one or more additional digits.	Selector steps to level dialed, cuts in and stops on first idle trunk without chattering. Recorded announcement clearly heard in hand test set.
7c	If trunk is arranged to transfer to operator after two to four announcements— Hold connection for two to four announcements.	After last announcement— Ringing tone heard unless operator answers in less than four seconds. Operator answers and hears identification tone, if provided.
8c	Advise operator that a test is being made.	
9d	If identification tone is provided— Verify that operator heard it.	
10	Remove switch cover.	
11	Step selector to next idle terminal as follows.	
12	Hold A relay operated.	
13	Operate and release C relay. <i>Note:</i> On some digit absorbing selectors it may be necessary to hold the A and D relays operated while operating the C relay.	Selector steps to next idle trunk and cuts through without chattering. Recorded announcement clearly heard in hand test set.

STEP	ACTION	VERIFICATION
14c	If trunk is arranged to transfer to operator after two to four announcements— Hold connection for two to four announcements.	After last announcement— Ringing tone heard unless operator answers in less than four seconds. Operator answers and hears identification tone, if provided.
15c	Advise operator that a test is being made.	
16d	If identification tone is provided— Verify that operator heard it.	
17	Repeat Steps 10 through 16d for other trunks on this level.	
18	Restore hand test set TALK MON key to MON.	Selector released properly.
19	Repeat Steps 5 through 18 for trunks on other levels.	
D. Intercept Trunks from Intertoll Selector Levels		
7	Touch bottom terminal of 240K plug to spring 3 of selector test jack.	SP lamp not lighted. <i>Note:</i> Lighted SP lamp indicates that selector is busy.
8	Insert 240K plug into idle selector test jack.	
9	Operate and lock hand test set TALK MON switch to TALK.	T, R lamps lighted. <i>Note:</i> In pad control offices where trunk is arranged to retain pad in connecting circuit, T lamp should be appreciably brighter than R lamp. In nonpad control offices and in pad control offices where trunk is arranged to remove pad in connecting circuit, T and R lamps should be lighted with approximately equal brilliancy.
10	Dial digit corresponding to level on which trunk under test appears.	T, R lamps flash with pulses. Selector steps smoothly to level dialed and rotates to first idle trunk. Recorded announcement clearly heard in hand test set.
	<i>Note:</i> If selector is arranged for digit absorbing, it may be necessary to dial one or more additional digits.	
11c	If trunk is arranged to transfer to operator after two to four announcements—	After last announcement— Ringing tone heard unless operator answers

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STEP	ACTION	VERIFICATION
	Hold connection for two to four announcements.	in less than four seconds. Operator answers and hears identification tone if provided.
12c	Advise operator that a test is being made.	
13d	If identification tone is provided— Verify that operator received it.	
14	Remove switch cover.	
15	Step selector to next idle trunk as follows.	
16	Hold A relay operated.	
17	Operate and release C relay. <i>Note:</i> On some digit absorbing selectors it may be necessary to hold the A and D relays operated while operating the C relay.	Selector steps to next idle trunk and cuts through without chattering. Recorded announcement clearly heard in hand test set.
18c	If trunk is arranged to transfer to operator after two to four announcements— Hold connection for two to four announcements.	After last announcement— Ringing tone heard unless operator answers in less than four seconds. Operator answers and hears identification tone if provided.
19c	Advise operator that a test is being made.	
20d	If identification tone is provided— Verify that operator heard it.	
21	Repeat Steps 15 through 20d for other trunks on this level.	
22	Remove 240K plug from selector test jack.	Selector released properly.
23	Restore hand test set TALK MON switch to MON.	
24	Repeat Steps 8 through 23 for trunks on other levels.	
25e	If no further test are to be made— Remove 289B plug from SW jack.	