

LOCAL AND COMBINATION CONNECTORS
LOCAL OPERATION TESTS
USING TRUNK TEST SET SD-90469-01 OR SD-90469-02 (J94710A)
AND TEST LINE SD-32198-01
STEP-BY-STEP SYSTEMS

1. GENERAL

1.01 This section describes a method of testing the operating features of local connectors, and the local operating features of combination connectors, of the 100- and 200-point type, by means of trunk test set SD-90469-01 or SD-90469-02 and test line SD-32198-01.

1.02 This section is reissued to add information in Tests A and C covering the testing of level hunting connectors arranged to wait for the units digit before starting level hunting and to bring the section generally up to date. Since this reissue covers a general revision, arrows ordinarily used to indicate changes have been omitted.

1.03 The tests covered are:

A. Busy Line Test — Leak. This test checks the stepping and hunting features of connectors under a leak condition. It also checks the ability of a connector to return busy tone and to release.

B. Nonlevel-Hunting Connectors — Idle Line Test — Loop. This test checks the stepping features of a connector under a loop condition. It also checks the ringing, pretrip, trip, transmission, and release features, including the connector timed-release feature, where provided. A false ground test is also made on the timed-release feature. Connector ringing is indicated either by test line bells or visual signals on the test set. On 200-point connectors, cut-through to machine intercept is checked.

C. Level-Hunting Connectors — 100 Point Only — Idle Line Test — Loop. This test checks the trunk-hunting features of a connector under a loop condition. It also checks the

ringing, pretrip, trip, transmission, and release features and the automatic timed-release feature, where provided. A false ground test is also made on the timed-release feature. Connector ringing is indicated either by test line bells or visual signals on the test set.

D. Ringing Polarity Test — 8-Party Semi-selective Ringing Connectors. This test makes a complete check of the H and J relays of 100-point local connectors, or the K and R or G and L relays of 200-point local connectors. It also tests the K and N relays of 100-point combination connectors, or the G and N relays of 200-point combination connectors. It is intended for use only when testing a connector in connection with clearing a specific case of trouble. On a routine basis, the 8-party connectors should be tested as outlined in Tests A and B.

E. Reverting Call Test — 10-Party Connectors. This test checks the reverting-call feature of 10-party connectors arranged for completing reverting calls.

1.04 100-Point Connectors. The test line employed in making these tests is connected to terminal 99, except in the case of rotary-hunting and level-hunting connectors. In rotary-hunting groups, terminal 99 is made busy and the test line connected to terminal 90. The hunting feature is checked by directing the switch to terminal 99 and by having it step to 90 (see 1.07).

1.05 200-Point Connectors. The test line for nonrotary-hunting connectors is connected to terminal 99 of the upper and lower banks. The test line for rotary-hunting connectors is connected to terminal 99 of the upper banks and to terminal 90 of the lower banks,

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terminal 99 of the lower banks being made busy. The rotary-hunting feature is tested by directing the switch to terminal 99 and having it step to 90 (see 1.07).

Caution: *If the connector stops on any other terminal, immediately release the connector so as to avoid ringing on a subscriber line.*

1.06 In the case of level-hunting connectors, terminal 91 is ordinarily used as the test line number. When the connectors are wired so as to hunt over a group of 100 trunks regardless of the digit dialed, terminal 11 is used as the test number (see 1.07).

1.07 For regular connectors, the disconnect time is within 12 to 30 seconds; for rotary-hunting connectors the disconnect time is 25 to 37 seconds. For level-hunting connectors, the disconnect time is within 23 to 37 seconds.

1.08 When testing connectors arranged for 1400- or 1500-ohm maximum external subscriber loop, any ring-trip relays which fail on the pretrip or trip test (test line test resistance values) shall be readjusted mechanically and electrically to meet the requirements specified in Plant Series Sections 040-803-701 and 040-236-701, and in the circuit requirements tables. Repeat the test, and if the relay continues to fail, operate the test set keys as described in Part 4, Method, to apply the test line readjust resistance values and change the tension in the No. 1 spring, as required.

1.09 Action and verification is required at the operator position when making the connector timed disconnect test in conjunction with the associated intercept trunk and at the test position for timed disconnect of the connectors.

1.10 The test equipment specified in this section is designed to apply proper marginal tests (simulated critical circuit conditions) when the circuit under test and the test equipment have an applied voltage of 48.5 to 50. In those offices where power plants are normally operated at more than 50 volts, the battery voltage should be reduced and maintained within the required limits while the tests are being made.

1.11 *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.

1.12 Local instructions should be followed for recording and reporting any register operations caused by performing these tests.

2. APPARATUS

All Tests

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

2.02 Connector test line circuit, SD-32198-01.

2.03 Head telephone set (associated with test set).

2.04 Patching cord, P3H cord, 10 feet long, equipped with a 310 plug and a 240A plug (3P2A cord) (for use with 100-point connectors).

2.05 Patching cord, consisting of two 10-foot P3E cords equipped with 310 plugs, with both cords connected to a 240B plug (5P3B cord) (for use with 200-point connectors).

2.06 Patching cord, P2J cord, 9 feet long, equipped with two 310 plugs (2P9A cord).

2.07 Patching cord, P3E cord, 10 feet long, equipped with two 310 plugs (3P6F cord).

Test A

2.08 240A plug (for testing 100-point level-hunting connectors).

Tests B and C

2.09 1011G handset (dial hand test set) equipped with a W2CL cord, a 471A jack, and a 240A plug (2W39A cord).

Tests B, C, D, and E***When Visual Ringing Signal Is Provided***

- 2.10 Patching cord, P3E cord, 10 feet long equipped with two 310 plugs (3P6F cord).
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Test C***When Connector Test Line Terminal Is 11***

- 2.11 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) and two KS-6278 connecting clips.

3. PREPARATION

STEP	ACTION	VERIFICATION
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All Tests

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|---|---|--|
| 1 | Connect BAT-G jack of test set to 48-volt battery supply jack on connector frame, using P2J cord. | |
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Note: To avoid possible grounding of battery supply lead, connect cord to test set first and, when disconnecting, remove cord from test set last.

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|---|--|--|
| 2 | Connect head telephone set to test set TEL jack. | |
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|---|--|--|
| 3 | Connect TL jack of test set to jack on connector frame as follows, using P3E cord. | |
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TL2 — for connectors using superimposed ringing with 66-75V silent-period battery, except level hunting.

TL1 — for level-hunting connectors.

TL — for all other connectors.

Tests B and C

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| 4 | Determine from office records proper connector and level to dial to seize intercepting trunk which provides timed-release ground to connector under test. | |
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Tests B, C, D, and E

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| 5a | If visual ringing signal is provided — Connect test set C jack to jack on connector frame as follows, using P3E cord. | |
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10P — for 10-party connectors arranged to complete reverting calls.

C1 — for 8-party connectors and one-ring connectors using superimposed ringing.

C — for all other connectors.

STEP	ACTION	VERIFICATION
6b	<p>If testing 8-party connectors and audible ringing signal is provided — Operate test line NO-J, OP-H, OP-J key to one of three positions when applying Test B; use different position on each routine test cycle; in performing Test D, use test line, test set as outlined therein.</p> <p><i>Note:</i> By using position OP-H, an operate test of the local connector H relay or combination connector K relay is applied; by using position OP-J, an operate test of the local connector J relay or the combination connector N relay is applied; and by using position NO-J, a nonoperate test of the J or N relay is applied.</p>	
7c	<p>If testing 8-party connectors and visual ringing signal is provided — Operate test set J-NO, J-O, H-O key to one of three positions when applying Test B; use a different position on each routine test cycle; in performing Test D, use test line, test set as outlined therein.</p> <p><i>Note:</i> By using position H-O, an operate test of the local connector H relay or the combination connector K relay is applied; by using position J-O, an operate test of the local connector J relay or the combination connector N relay is applied; and by using position J-NO, a nonoperate test of the J or N relay is applied.</p>	

4. METHOD

STEP	ACTION	VERIFICATION
A. Busy Line Test — Leak		
For 100-Point Connectors		
4	Connect T jack of test set to test jack of connector under test, using P3H cord.	BSY lamp does not light. <i>Note:</i> If BSY lamp lights, disconnect and proceed to another switch.
5	Operate LK key.	
6	Operate, restore DL ST key.	SL lamp lighted.
7d	<p>If testing connectors other than level-hunting type — Dial 99.</p> <p><i>Note:</i> When testing 10-party terminal-per-line connectors arranged for busy test of the called line following dialing of the code digit, dial an extra digit following the test number.</p>	<p>Connector steps smoothly to ninth level, rotates smoothly to terminal 99. Busy tone heard in receiver.</p>

STEP	ACTION	VERIFICATION
8e	If testing level-hunting connector — Insert 240A plug into sleeve cutoff jack.	
9e	Dial any digit or digits which will cause connector to hunt over at least two levels. <i>Note:</i> It will be necessary to dial an additional digit if the connector is arranged to start hunting after the units digit is received.	Connector hunts smoothly, stops on tenth terminal of last level in group of trunks selected. Busy tone heard in receiver.
10	Operate, hold FL key.	SL lamp extinguished. Connector releases.
11	Release FL key.	
12	Restore LK key.	
13e	If testing level-hunting connector — Remove plug from sleeve cutoff jack.	
14	Remove plug from test jack of connector unless other tests are to be made on this switch.	
For 200-Point Connectors		
15	Connect 310 red and black shell plugs to test set T, FR jacks, respectively, and 240B plug to test jack springs of connector under test, using 5P3B cord.	BSY lamp does not light. <i>Note:</i> If BSY lamp lights, disconnect and proceed to another switch.
16	Operate LK key.	
17	Operate, restore DL ST key.	SL lamp lighted.
18	Operate LO-UP key to UP position.	
19	Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to test line terminal. Busy tone heard in receiver.
20	Operate, hold FL key.	SL lamp extinguished. Connector releases.
21	Release FL key, restore LO-UP key.	
22	Operate, restore DL ST key.	SL lamp lighted.
23	Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to test line terminal. Busy tone heard in receiver.
24	Operate, hold FL key.	SL lamp extinguished. Connector releases.
25	Release FL key.	
26	Restore LK key.	
27	Remove plug from test jack of connector unless other tests are to be made on this switch.	

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STEP	ACTION	VERIFICATION
B. Nonlevel-Hunting Connectors — Idle Line Test — Loop		
8d	If testing 100-point connectors — Connect T jack of test set to test jack of connector under test, using P3H cord.	BSY lamp does not light. <i>Note:</i> If BSY lamp lights, disconnect and proceed to another switch.
9e	If testing 200-point connectors — Connect 310 red and black shell plugs to test set T, FR jacks, respectively, and 240B plug to test jack springs of connector under test, using 5P3B cord.	Same as Step 8d.
10	Operate LP, ID keys.	
11	Operate, restore DL ST key.	SL lamp lighted.
For 200-Point Connectors		
12	Operate MI, T keys, LO-UP key to UP position.	
13	Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. Recorded message heard in receiver.
14f	If testing connectors arranged for calling party control — Operate FL key.	Connector releases. SL lamp extinguished.
15g	If testing connectors arranged for joint control — Operate, hold FL key for at least 2 seconds.	Connector does not release. SL lamp extinguished. BSY lamp lighted.
16g	Release FL key, restore T, MI, LO-UP keys.	Connector releases. BSY lamp extinguished.
17e	If testing 200-point connectors — Operate LO-UP key to UP position.	
All Connectors		
18h	If testing connectors other than 10-party terminal per line — Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. RR or C lamp lights, or test line bell rings, follows ringing code. Audible ring heard in receiver. <i>Note:</i> When testing 2-ring or code ringing connectors, check that the first audible ring is a full code ring in order to check the pickup feature.
19i	If testing 10-party terminal-per-line connectors — Dial 99, then dial code digit for ringing over tip.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. C lamp lights; or bell on tip side of line rings, follows ringing code. Audible ring heard in receiver.

STEP	ACTION	VERIFICATION
20i	Operate, hold FL key for at least 2 seconds.	SL lamp extinguished. Connector releases. C lamp stops flashing or test line bell stops ringing.
21i	Operate, restore DL ST key.	SL lamp lighted.
22i	Dial 99, then dial code digit for ringing over ring. <i>Note:</i> Different code digits should be dialed on each routine test cycle so that eventually all codes will have been tested on each switch.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. RR lamp lights; or bell on ring side of line rings, follows ringing code. Audible ring heard in receiver.
23b	If testing 8-party connectors and audible ringing signal is provided — Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. R- bell rings when NO-J, OP-H, OP-J key in test line is in either OP-H or NO-J position. R+ bell rings when NO-J, OP-H, OP-J key in test line is in OP-J position.
24c	If testing 8-party connectors and visual ringing signal is provided — Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. RR lamp lights when test set J-NO, J-O, H-O key is in either H-O or J-NO position. C lamp lights when J-NO, J-O, H-O key is in J-O position.
25	Restore ID key.	
26	Operate T key momentarily.	
27	Operate ID key.	RR or C lamp lights again, or test line bell rings again. Audible ring heard again in receiver.
28	Restore, reoperate ID key during silent interval.	RR or C lamp lights again, or test line bell rings again. Audible ring heard again in receiver.
29	Operate TP BT (or TP) key momentarily, reoperate it to ID position during silent interval.	REV lamp lights momentarily. RR or C lamp does not relight or test line bell does not rering. Audible ring is not heard again in receiver. <i>Note:</i> On connectors using 66-75V silent-period battery, REV lamp may not light. On connectors arranged for free service, REV lamp does not light.

STEP	ACTION	VERIFICATION
30	Operate T key. <i>Note:</i> When testing 10-party connectors, remove plug from 10-P jack before operating T key.	100-Point Connectors Proper transmission tone heard in receiver. REV lamp lighted. <i>Note:</i> On connectors arranged for free service, REV lamp does not light.
200-Point Connectors		
High tone heard in receiver. REV lamp lighted (see note above).		
Supervision		
31j	If testing connectors arranged for calling party control without timed disconnect — Operate, hold FL key.	Connector releases. SL lamp extinguished. REV lamp extinguished. Tone removed.
32j	Release FL key, restore T key, proceed to Step 42.	
33k	If testing connectors arranged for calling party control with timed disconnect — Restore test set T key, proceed to Step 42. <i>Note:</i> If Steps 33k and 34l both apply, select one switch per shelf and perform Steps 34l through 39l instead of Step 33k. Perform Step 33k on the remaining switches on the shelf.	Tone removed. Within timed interval, SL, REV lamps extinguished. Connector releases (see 1.07).
34l	If testing connectors arranged for timed disconnect from ground supplied by intercepting trunk — Insert plug of second handset into test jack of second connector having access to intercept trunk associated with connector under test.	
35l	Dial terminal connected to intercept trunk.	Connector steps smoothly, stops on proper terminal. Audible ringing heard. At switchboard — Call answered. At test set — Ringing silenced.
36l	At switchboard — Disconnect when disconnect signal is received.	
37l	Restore test set T key.	Tone removed from switch under test. SL lamp remains lighted. Connector under test does not release at end of timed interval.

STEP	ACTION	VERIFICATION
38l	Disconnect handset from second connector used in test.	Connector releases.
39l	Operate test set FL key momentarily, proceed to Step 42.	Connector under test releases. SL, REV lamps extinguished.
40g	If testing connectors arranged for joint control — Operate, hold FL key for at least 2 seconds.	Connector does not release. SL lamp extinguished. BSY lamp lighted. Tone removed. REV lamp extinguished.
41g	Release FL key, restore T key.	Connector releases. BSY lamp extinguished.
42	Restore ID key immediately.	
43	Restore LP, LO-UP keys.	
For 200-Point Connectors Only		
44	Operate LP, ID keys.	
45	Operate, restore DL ST key.	SL lamp lighted.
46	Dial 99.	Connector steps smoothly to test line terminal.
47	Operate TP BT (or TP) key momentarily, restore it to ID position.	
48	Operate T key. <i>Note:</i> When testing 10-party connectors, remove plug from 10-P jack before operating T key.	Low tone heard in receiver.
49	Operate, restore FL key, restore T key.	Connector releases. SL lamp extinguished.
50	Release ID key immediately.	
51	Restore LP key.	

All Connectors

52 Remove plug from test jack of connector unless other tests are to be made on this switch.

C. Level-Hunting Connectors — 100-Point Only — Idle Line Test — Loop

8	Connect T jack of test set to test jack of connector under test, using P3H cord.	BSY lamp does not light. <i>Note:</i> If BSY lamp lights, disconnect and proceed to another switch.
9	Operate LP, ID keys.	
10	Operate, restore DL ST key.	SL lamp lighted.

STEP	ACTION	VERIFICATION
11d	If using test line 91 — Dial digit or digits which will direct connector to ninth level. <i>Note:</i> It will be necessary to dial an additional digit if the connectors are arranged to start hunting after the units digit is received.	Connector hunts smoothly, stops on test line terminal. RR or C lamp lights, or test line bell rings, follows ringing code. Audible ring heard in receiver.
12e	If using test line 11 — Connect ground to commutator terminal for level No. 1, using 893 cord.	
13e	Dial any digit. <i>Note:</i> It will be necessary to dial an additional digit if the connectors are arranged to start hunting after the units digit is received.	Connector hunts smoothly, stops on test line terminal. RR or C lamp lights, or test line bell rings, follows ringing code. Audible ring heard in receiver.
14	Restore ID key.	
15	Operate T key momentarily.	
16	Operate ID key.	RR or C lamp lights again, or test line bell rings again. Audible ring heard again in receiver.
17	Restore, reoperate ID key during silent interval.	RR or C lamp lights again, or test line bell rings again. Audible ring heard again in receiver.
18	Operate TP BT (or TP) key momentarily, reoperate it to ID position during silent interval.	REV lamp lights momentarily. RR or C lamp does not relight or test line bell does not rering. Audible ring is not heard again in receiver. <i>Note:</i> On connectors using 66-75V silent-period battery, REV lamp may not light. On connectors arranged for free service, REV lamp does not light.
19	Operate T key. <i>Note:</i> When testing 10-party connectors, remove plug from 10-P jack before operating T key.	Proper transmission tone heard in receiver. REV lamp lighted. <i>Note:</i> On connectors arranged for free service, REV lamp does not light.
20e	If using test line 11 — Remove ground from commutator terminal for level No. 1.	
21f	If testing connectors arranged for calling party control without timed disconnect — Operate FL key.	Connector releases. SL lamp extinguished. REV lamp extinguished. Tone removed.
22f	Release FL key, restore T key.	

STEP	ACTION	VERIFICATION
23g	<p>If testing connectors arranged for calling party control with timed disconnect — Restore T key, proceed to Step 32.</p> <p><i>Note:</i> If Steps 23g and 24h both apply, select one switch per shelf and perform Steps 24h through 29h instead of Step 23g. Perform Step 23g on the remaining switches on the shelf.</p>	<p>Tone removed. Within timed interval, SL, REV lamps extinguished. Connector releases (see 1.07).</p>
24h	<p>If testing connectors arranged for timed disconnect from ground supplied by intercepting trunk — Insert plug of second handset into test jack of second connector having access to intercept trunk associated with connector to be tested.</p>	<p>Connector hunts smoothly, stops on proper terminal. Audible ringing heard.</p>
25h	<p>Dial terminal connected to intercept trunk, using second handset.</p>	<p>Connector hunts smoothly, stops on proper terminal. Audible ringing heard.</p>
26h	<p>At operator position — Disconnect when disconnect signal is received.</p>	<p>Tone removed from connector under test. SL lamp remains lighted. Connector under test does not release at end of timed interval.</p>
27h	<p>Restore test set T key.</p>	<p>Tone removed from connector under test. SL lamp remains lighted. Connector under test does not release at end of timed interval.</p>
28h	<p>Disconnect handset from second connector used in test.</p>	<p>Connector releases.</p>
29h	<p>Operate test set FL key momentarily, proceed to Step 32.</p>	<p>Connector under test releases. SL, REV lamps extinguished.</p>
30i	<p>If testing connectors arranged for joint control — Operate, hold FL key for at least 2 seconds.</p>	<p>Connector does not release. SL lamp extinguished. BSY lamp lighted. Tone removed. REV lamp extinguished.</p>
31i	<p>Release FL key, restore T key.</p>	<p>Connector releases. BSY lamp extinguished.</p>
32	<p>Restore ID key immediately.</p>	<p>Connector releases. BSY lamp extinguished.</p>
33	<p>Restore LP key.</p>	<p>Connector releases. BSY lamp extinguished.</p>
34	<p>Remove plug from test jack of connector unless other tests are to be made on this switch.</p>	<p>Connector releases. BSY lamp extinguished.</p>

STEP	ACTION	VERIFICATION
D. Ringing Polarity Test — 8-Party Semiselective Ringing Connectors		
8d	If testing 100-point connectors — Connect T jack of test set to test jack of connector under test, using P3H cord.	BSY lamp does not light. <i>Note:</i> If BSY lamp lights, disconnect and proceed to another switch.
9e	If testing 200-point connectors — Connect 310 red and black shell plugs to test set T, FR jacks, respectively, and 240 plug to test jack springs of connector under test, using 5P3B cord.	Same as Step 8d.
10f	If audible ringing signal is provided — Operate test line NO-J, OP-H, OP-J key to OP-H position.	
11f	Operate LP, ID keys.	
12e	If testing 200-point connectors — Operate LO-UP key to UP position.	
13f	If audible ringing signal is provided — Operate, restore DL ST key.	SL lamp lighted.
14f	Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. R— bell rings, follows ringing code. Audible ring heard in receiver.
15f	Operate test line NO-J, OP-H, OP-J key to NO-J position.	R— bell continues to ring.
16f	Operate test line NO-J, OP-H, OP-J key to OP-J position.	R— bell silenced. R+ bell rings, follows ringing code.
17f	Restore, reoperate ID key during silent interval.	R+ bell continues to ring. Audible ring heard again in receiver.
18a	If visual ringing signal is provided — Operate test set J-NO, J-O, H-O key to H-O position.	
19a	Operate LP, ID keys.	
20e	If testing 200-point connectors — Operate LO-UP key to UP position.	
21a	If visual ringing signal is provided — Operate, restore DL ST key.	SL lamp lighted.
22a	Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. RR lamp flashes, follows ringing code. Audible ring heard in receiver.
23a	Operate test set J-NO, J-O, H-O key to J-NO position during silent interval.	RR lamp continues to follow ringing code.

STEP	ACTION	VERIFICATION
24a	Operate test set J-NO, J-O, H-O key to J-O position.	RR lamp extinguished. C lamp flashes, follows ringing code.
25a	Restore, reoperate ID key during silent interval.	C lamp continues to following ringing codes. Audible ring heard again in receiver.
26	Operate TP BT (or TP) key momentarily, reoperate it to ID position during silent interval.	REV lamp lights momentarily. RR or C lamp does not relight or test line bell does not ring. Audible ring is not heard again in receiver. <i>Note:</i> On connectors using 66-75V silent-period battery, REV lamp may not light.
27	Operate T key.	100-Point Connectors Proper transmission tone heard in receiver. REV lamp lighted. <i>Note:</i> On connectors arranged for free service, REV lamp does not light. 200-Point Connectors High tone heard in receiver. REV lamp lighted (see note above).
28g	If testing connectors arranged for calling party control — Operate FL key.	Connector releases. SL lamp extinguished. REV lamp extinguished. Tone removed.
29g	Restore FL, T keys.	
30h	If testing connectors arranged for joint control — Operate, hold FL key for at least 2 seconds.	Connector does not release. SL lamp extinguished. BSY lamp lighted. Tone removed. REV lamp extinguished.
31h	Restore FL, T keys.	Connector releases. BSY lamp extinguished.
32	Restore ID key immediately.	
33i	If operated — Restore LP, LO-UP keys.	
For 200-Point Connectors Only		
34	Operate LP, ID keys.	
35	Operate, restore DL ST key.	SL lamp lighted.
36	Dial 99.	Connectors step smoothly to test line.
37	Operate TP BT (or TP) key momentarily, restore it to ID position.	

STEP	ACTION	VERIFICATION
38	Operate T key.	Low tone heard in receiver.
39	Operate, restore FL key.	Connector releases. SL lamp extinguished.
40	Restore T key.	
41	Restore ID key immediately.	
42	Restore LP key.	
43	Remove plug from test jack of connector unless other tests are to be made on this switch.	
E. Reverting Call Test — 10-Party Connectors		
8d	If testing 100-point connectors — Connect T jack of test set to test jack of connector under test, using P3H cord.	BSY lamp does not light. <i>Note:</i> If BSY lamp lights, disconnect and proceed to another switch.
9e	If testing 200-point connectors — Connect 310 red and black shell plugs to test set T, FR jacks, respectively, and 240B plug to test jack springs of connector under test, using 5P3B cord.	Same as Step 8d.
10	Operate ID, LP keys.	
11e	If testing 200-point connectors — Operate LO-UP key to UP position.	
12	Operate, restore DL ST key.	SL lamp lighted.
13	Operate T key momentarily.	
14	Dial 99.	Connector steps smoothly to ninth level, rotates smoothly to terminal 99. Busy tone heard in receiver.
15	Operate, hold FL key for at least 2 seconds.	SL lamp extinguished. Connector does not release. BSY lamp lighted. Busy tone removed. When audible ringing signal is provided — RING side bell rings, follows test line ringing code. TIP side bell rings, follows reverting call ringing code. When visual ringing signal is provided — RR lamp lights, follows test line ringing code. C lamp lights, follows reverting call ringing code.
16	Operate TP BT (or TP) key during silent interval.	RR, C lamps stop flashing, or test line bells stop ringing.

STEP	ACTION	VERIFICATION
17	Restore ID key.	Connector releases. BSY lamp extinguished.
18	Restore LO-UP key to normal position.	
19	Restore LP key.	
20	Remove plug from test jack of connector unless other tests are to be made on this switch.	