

**RECORDING COMPLETING, SPECIAL SERVICE, INTERCEPTING,
AND ASSOCIATED AUXILIARY TRUNKS FROM TRUNK LINK FRAME
TESTS USING MASTER TEST FRAME
NO. 5 CROSSBAR OFFICES**

1. GENERAL

1.01 This section describes a method of testing wire-spring-relay or nonwire-spring-relay type recording completing, special service, vacant code, and denied code intercepting trunks (noncoin or coin, with or without automatic coin return), and the associated auxiliary trunk circuits, using the master test control circuit SD-25800-01 and the trunk test circuit SD-25918-01. Miscellaneous tests are included in this section which are made without the trunk test circuit. Methods for testing the following trunk circuits are included in this section.

SD-25579-01, SD-25597-01, 02, 03, SD-25655-01, SD-25656-01, 02, 03, SD-25657-01, SD-25687-01, SD-25709-01, 02, SD-25710-01, 02, 03, 04, SD-25857-01, 02, SD-25923-01, 02, 03, 04, SD-25924-01, 02, 03, 04, SD-25926-01, SD-25953-01, SD-25954-01, SD-26091-01, SD-26092-01, SD-26093-01, SD-26095-01, SD-26097-01, SD-26098-01, SD-26099-01, SD-26121-01.

1.02 This section is reissued for the following reasons. Revision arrows have been used to emphasize significant changes. This reissue does not affect Equipment Test Lists.

(a) To revise paragraph 1.01 to include the schematic drawing numbers of trunk circuits tested in this section.

(b) To add paragraph 1.11 for information regarding the replacement of a group of 18 "class of test" lamps by a single "start test" lamp designated STT.

1.03 The tests covered are:

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A. Operation: The following features are checked: (1) Seizure of the trunk circuit on a local or tandem call and completion of the connection to the operator or to an announcement machine, with or without automatic transfer to an assistant after one or two announcements. (2) Supervisory and release features of the trunk, including automatic disconnect of a dial-tone-first announcement after one or two announcements. **4**

B. Ringback—Trunks Arranged for Ringback: This test checks the ability of the trunk to transmit a ringback signal from operator to customer. **10**

C. Recall—Trunks Arranged for Recall: This test checks the ability of the trunk to transmit a recall signal from customer to operator and to hold the connection under control of the operator. **11**

D. Customer Hold—Trunks Arranged to Hold Operated Under Control of Calling Customer: This test checks the ability of the trunk to hold under control of the originating customer and to resignal the operator. **12**

E. Trunk Busy: The following features are checked: (1) Seizure by master test frame when trunk is

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made busy. (2) Busy condition to service call when trunk is made busy.	14
F. Coin Control—Coin Trunks Arranged for Automatic Coin Return When Operator Answers: The following features are checked: (1) Ability of trunk to return initial coin when operator answers. (2) Ability of trunk to collect or return the coin under control of the operator.	16
G. Coin Control—Coin Trunks Not Arranged for Automatic Coin Return: This test checks the ability of the trunk to collect and return a coin under control of the operator.	18
H. Disconnection—Coin Trunks Arranged for Automatic Coin Collect on Disconnect: This test checks the ability of the trunk to signal the operator when the customer disconnects and to collect the coin after customer and operator have disconnected.	19
I. Coin Return on Abandoned Call—Coin Trunks: This test checks that the coin is returned on a call abandoned before the operator answers or before the announcement machine is connected.	20
J. Time Delay—Denied and Vacant Code Intercept Trunks Arranged for Time Delay: This test checks the ability of the trunk to cause a delay before signaling an operator or an announcement machine.	21
K. False-Busy and False-Idle Conditions: (Not required for ETS) This test checks for continuity and crosses on the F, BT, and FT leads.	22
1.04 Tests A through H may require actions and verifications at the dial system A (DSA) or toll switchboard.	
1.05 This section tests only the trunk link frame appearance of SD-26121-01.	

1.06 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. When a condition does not apply, all steps designated by that letter should be omitted.

1.07 The manner of selecting some circuits and test conditions at the MTF and its associated circuits varies depending on the apparatus options furnished with these circuits. Therefore, where variable means of selection are provided, precise instructions for the selection of circuits and test conditions are not given. Precise instructions for the use of these variable means are given in Section 218-106-301.

1.08 The location statement, At MTF—, is used to refer to all apparatus located on the four basic bays of the MTF.

1.09 When the office is arranged for ETS, the distributors and scanners associated with the marker and trunk used in the test call must be in service or in a **maintenance-busy** condition—not in an **out-of-service** condition. To change a scanner or distributor from an **out-of-service** to a **maintenance-busy** condition, use the procedure given in the following section for the office arrangement.

218-799-701—Taking ETS Equipment Out-of-Service.

1.10 When the trunk under test is arranged for ETS, the first completed test call from the MTF will cause the TST bit to be set in the trunk register associated with the selected trunk, enabling trunk scanning to be repeated on the FT lamp at the MTF trunk test circuit. As long as the TST bit is set in the trunk register, scanning will continue to be repeated on the lamps, even on service calls. The TST bit will remain set in the trunk register until (1) a test call is made from the MTF to another trunk, or (2) the command **STOP:TRK TST** is entered at the maintenance TTY.

1.11 On Issue 76D of SD-25800-01, a group of 18 "class of test" lamps was replaced by a single "start test" lamp designated STT. Since the designation given to the lamp is not specific, the lamp will not be called out in the section, as well as the 18 discontinued lamps, such as DT, ORIG, ITDO, ITNP, OGT, etc.

2. APPARATUS

Tests A Through J

2.01 Master test control circuit, SD-25800-01.

2.02 Trunk test circuit, SD-25918-01.

Tests E, K

2.03 322A (make-busy) plugs as required.

3. PREPARATION

STEP

ACTION

VERIFICATION

Refer to paragraphs 1.06 through 1.11

Tests A Through J

- | | | |
|----|---|-------------------------|
| 1 | At MTF—
Restore all keys and switches. | |
| 2 | Momentarily operate RL key. | All lamps extinguished. |
| 3 | Select A_ through C_ digits as required for access to route served by trunk under test. | |
| 4 | Select trunk under test. | |
| 5 | Select MISC class of test. | |
| 6 | Select marker. | |
| 7 | Select route advance 0. | |
| 8 | Operate KY key. | |
| 9a | If ETS provided—
Operate PCS, PTS keys. | |

Tests A Through D, F Through J

- 10 Operate TS, FS keys.

Test J

2.04 KS-3008 stopwatch or equivalent.

2.05 Test receiver, 67C or equivalent, equipped with one KS-6278 connecting clip (for checking the presence of battery on terminal strip terminals).

2.06 32A test set.

Test K

2.07 Oscillator J94730B (SD-95616-01), part of 1A fault locator test set J94730A.

2.08 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 connecting clip, and one 419A or 624B tool as required. (This testing cord is used for making connections to terminal strip terminals.)

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STEP	ACTION	VERIFICATION
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Tests A Through F, H, I

11b	If trunk to be tested in a coin trunk arranged for automatic coin return— Operate CN key.	
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Tests A Through E, G,H

12c	If trunk to be tested is a coin trunk not arranged for automatic coin return— Operate CNR key.	
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4. METHOD

STEP	ACTION	VERIFICATION
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A. Operation

Trunks Arranged to Complete to Switchboard—Non Coin and Tandem Trunks

13	Select class of service and rate treatment as required for access to trunk under test.	
14	Operate TLK key.	
15	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion— PK lamp lighted.
16	Dial digit 0.	AS lamp remains lighted.
17	At switchboard— Assistant answers.	At MTF— AS lamp remains lighted. Ringing tone not heard. If trunk is arranged for toll diversion— PK lamp extinguished. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard.
18	Disconnect cord circuit.	At MTF— If trunk is arranged for toll diversion— PK lamp lighted.
19	Restore TLK key.	If ETS provided— FT lamp extinguished.

STEP	ACTION	VERIFICATION
		AS lamp extinguished. PK lamp extinguished if lighted.
20	Momentarily operate RL key.	All lamps extinguished.
21d	If trunk is arranged for tandem operation— Select TAN subclass of test.	TAN lamp lighted.
22d	Select class of service and rate treatment as required for access to tandem trunk under test.	
23d	Operate TLK key.	
24d	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set.
25d	Dial digit 0.	AS lamp remains lighted.
26d	At switchboard— Assistant answers.	At MTF— AS lamp remains lighted. Ringing tone not heard.
27d	At switchboard— Disconnect cord circuit.	
28d	At MTF— Restore TLK key.	If ETS provided— FT lamp extinguished AS lamp extinguished.
29d	Restore TAN subclass of test.	TAN lamp extinguished.
30d	Momentarily operate RL key.	All lamps extinguished.
Trunks Arranged to Complete to Switchboard—Coin Without Coin Service Improvements (Dial-Tone-First)		
31	Select class of service and rate treatment as required for access to trunk under test.	
32	Operate TLK key.	
33	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion— PK lamp lighted.
34	Dial digit 0.	AS lamp remains lighted.

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STEP	ACTION	VERIFICATION
35	At switchboard— Assistant answers.	At MTF— AS lamp remains lighted. Ringing tone not heard. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard. At MTF— If trunk is arranged for automatic coin return when operator answers— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for toll diversion— PK lamp extinguished.
36	At switchboard— Disconnect cord circuit.	At MTF— If trunk is arranged for toll diversion— PK lamp lighted.
37b	If trunk is arranged for automatic coin return when operator answers— Momentarily restore CN key.	CND lamp extinguished.
38	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished. If trunk is arranged for toll diversion— PK lamp extinguished. If trunk is arranged for automatic coin return when customer disconnects— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for automatic coin collect when customer disconnects— CC lamp momentarily lighted. CND lamp lighted.
39	Momentarily operate RL key.	All lamps extinguished.
Trunks Arranged to Complete to Switchboard—Coin With Service Improvements (Dial-Tone-First)		
40	Select class of service and rate treatment as required for access to trunk under test.	
41	Operate DTNF key.	
42	Operate TLK key.	
43	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted.

STEP	ACTION	VERIFICATION
		Ringing tone heard in MTF telephone set. PK lamp lighted.
44	Dial digit 0.	AS lamp remains lighted.
45	At switchboard— Assistant answers.	At MTF— AS lamp remains lighted. Ringing tone not heard. PK lamp extinguished. OLF lamp <i>does not</i> light. If trunk is arranged for automatic coin return when operator answers— CR lamp momentarily lighted. CND lamp lighted.
46	At switchboard— Disconnect cord circuit.	At MTF— PK lamp lighted.
47b	If trunk is arranged for automatic coin return when operator answers— Momentarily restore CN key.	CND lamp extinguished.
48	Restore TLK key.	If ETS provided— FT lamp extinguished. AS, PK lamps extinguished. If trunk is arranged for automatic coin return when customer disconnects— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for automatic coin collect when customer disconnects— CC lamp momentarily lighted. CND lamp lighted.
49	Momentarily operate RL key.	All lamps extinguished.
Trunks Arranged to Complete to Announcement Machine— Without Automatic Transfer to an Attendant		
50	Select class of service and rate treatment as required for access to trunk under test.	
51e	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
52	Operate TLK key.	
53	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted.

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STEP	ACTION	VERIFICATION
		Ringing tone heard in MTF telephone set. When announcement machine is connected to trunk— Ringing tone not heard. Recorded announcement heard for one complete announcement.
54	If trunk is arranged for automatic release after one or two announcements— Listen for one or two complete announcements.	If ETS provided— FT lamp extinguished. AS lamp extinguished. Recorded announcement not heard.
55	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished. Recorded announcement not heard. If trunk being tested is coin trunk arranged for automatic coin return— CR lamp momentarily lighted. CND lamp lighted.
56b	If coin trunk is arranged for automatic coin return— Momentarily release CN key.	CND lamp extinguished.
57e	If trunk is arranged for coin service improvement (dial-tone-first)— Restore DTNF key.	
58	Momentarily operate RL key.	All lamps extinguished.
59d	If trunk is arranged for tandem operation— Select TAN subclass of test.	TAN lamp lighted.
60d	Select class of service and rate treatment as required for access to tandem trunk under test.	
61d	Repeat Steps 52, 53, 55.	
62d	Restore TAN subclass of test.	TAN lamp extinguished.
63d	Momentarily operate RL key.	All lamps extinguished.
Trunks Arranged to Complete to Announcement Machine—<i>With</i> Automatic Transfer to an Attendant		
64	Select class of service and rate treatment as required for access to trunk under test.	

STEP	ACTION	VERIFICATION
65e	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
66	Operate TLK key.	
67	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. When announcement machine is connected to trunk— Ringing tone not heard. Recorded announcement heard for one or two complete announcements, according to options provided in trunk. When recorded announcement not heard— Start timing. After 4 seconds— Assistant signaled. At switchboard— Assistant answers. Ringing tone heard. Restart timing. After 2 seconds— Ringing tone silenced. Talking connection to assistant established.
68	At MTF— Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished. If trunk under test is arranged for automatic coin return— CR lamp momentarily lighted. CND lamp lighted.
69b	If trunk is arranged for automatic coin return— Momentarily release CN key.	CND lamp extinguished.
70	Momentarily operate RL key.	
71g	If voice alarm and control circuit provided— At relay rack appearance of trunk under test— Operate MB switch to MB position.	MB lamp lighted.
72g	When trunk becomes idle— Connect ground to terminal 54 on terminal strip A (AUX LL/TL UNIT).	
73g	At MTF— Operate TLK key.	

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STEP	ACTION	VERIFICATION
74g	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. Trunk transferred to assistant.
75g	Momentarily operate RL key.	All lamps extinguished.
76g	At relay rack appearance of trunk under test— Remove ground from terminal 54 on terminal strip A (AUX LL/TL UNIT).	
77g	Operate MB switch to N.	MB lamp extinguished.
78e	If trunk is arranged for coin service improvements (dial-tone-first)— Restore DTNF key.	
79d	If trunk is arranged for tandem operation— Select TAN subclass of test.	TAN lamp lighted.
80d	Select class of service and rate treatment as required for access to tandem trunk under test.	
81d	Repeat Steps 66, 67, 68.	
82h	If no further tests are to be made— Restore all keys and switches.	

B. Ringback—Trunks Arranged for Ringback

13	Select class of service and rate treatment as required for access to trunk under test.	
14	Operate TLK key.	
15	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion— PK lamp lighted.
16	At switchboard— Assistant answers.	At MTF— Ringing tone not heard. PK lamp extinguished if lighted. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard.

STEP	ACTION	VERIFICATION
17	Momentarily ring back on trunk.	At MTF— R- lamp momentarily lighted.
18d	If trunk is arranged for ringback with telephone on hook— Restore TLK key.	
19d	At switchboard— Momentarily ring back on trunk.	At MTF— R- lamp momentarily lighted.
20e	If emergency ringback circuit is provided— Operate TR key.	
21e	At switchboard— Momentarily ring back on an emergency basis.	At MTF— R-, R+, T-, T+ lamps lighted in succession and in accordance with codes provided in area.
22e	Restore TR key.	
23	At switchboard— Disconnect cord circuit.	At MTF— AS lamp extinguished. If ETS provided— FT lamp extinguished.
24	Momentarily operate RL key.	All lamps extinguished.
25f	If no further tests are to be made— Restore trunk to service.	
26f	Restore all keys and switches.	
C. Recall—Trunks Arranged for Recall		
13	Select class of service and rate treatment as required for access to trunk under test.	
14	Operate TLK key.	
15d	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
16	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted.
17	At switchboard— Assistant answers.	At MTF— Ringing tone not heard.

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STEP	ACTION	VERIFICATION
		PK lamp extinguished if lighted. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard. At MTF— If trunk is arranged for automatic coin return when operator answers— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light.
18	Operate and release TLK key at 120 IPM rate for about 2 seconds.	AS lamp remains lighted. At switchboard— Supervisory lamp flashes.
19	Disconnect cord circuit.	At MTF— If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted.
20h	If trunk is arranged for automatic coin return when operator answers— Momentarily restore CN key.	CND lamp extinguished.
21	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished. PK lamp extinguished if lighted. If trunk is arranged for automatic coin collect when subscriber disconnects— CC lamp momentarily lighted. CND lamp lighted.
22	Momentarily operate RL key.	All lamps extinguished.
23e	If no further tests are to be made— Restore trunk to service.	
24e	Restore all keys and switches.	
D. Customer Hold—Trunks Arranged to Hold Operated Under Control of Calling Customer		
13	Select class of service and rate treatment as required for access to trunks under test.	
14	Operate TLK key.	

STEP	ACTION	VERIFICATION
15d	If office is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
16	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted.
17	At switchboard— Assistant answers.	At MTF— Ringing tone not heard. PK lamp extinguished if lighted. If trunk is arranged for tone identification of class of service— Spurt of high tone heard. If trunk is arranged for automatic coin return when operator answers— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light.
18	At switchboard— Momentarily disconnect cord circuit.	Line lamp momentarily lighted. At MTF— AS lamp remains lighted.
19	At switchboard— Disconnect cord circuit.	At MTF— If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted.
20b	If trunk is arranged for automatic coin return when operator answers— Momentarily restore CN key.	CND lamp extinguished.
21	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished. PK lamp extinguished if lighted. If trunk is arranged for automatic coin collect when subscriber disconnects— CC lamp momentarily lighted. CND lamp lighted.
22	Momentarily operate RL key.	All lamps extinguished.
23e	If trunk is arranged for tandem operation— Select TAN subclass of test.	TAN lamp lighted.

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STEP	ACTION	VERIFICATION
24e	Select class of service and rate treatment as required for access to tandem trunk under test.	
25e	Repeat Steps 14, 16, 17, 18, 19, 21, 22.	
26f	If no further tests are to be made— Restore all keys and switches.	
E. Trunk Busy		
13d	If trunk under test is equipped with MB jack— At MTF— Insert a 322A plug in MB jack of trunk under test.	
14e	If trunk under test is equipped with MB switch— At relay rack— Operate switch to MB.	
15	At MTF— Select class of service and rate treatment as required for access to trunk under test.	
16f	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
17	Operate NTTS, NTFS, TLK keys.	
18	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted. If trunk is arranged to complete to an announcement— Ringing tone heard. When announcement machine is connected to trunk— Ringing tone not heard. Recorded announcement heard.
19g	If trunk is arranged to complete to switchboard— At switchboard— Assistant answers.	At MTF— Ringing tone not heard. PK lamp extinguished if lighted. At switchboard— If trunk is arranged for tone identification of class of service—

STEP	ACTION	VERIFICATION
		Spurt of high tone heard. At MTF— If trunk is arranged for automatic coin return when operator answers— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light.
20g	At switchboard— Disconnect cord circuit.	At MTF— If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted.
21b	If trunk is arranged for automatic coin return when operator answers— Momentarily restore CN key.	CND lamp extinguished.
22	Restore TLK key.	AS lamp extinguished. PK lamp extinguished if lighted. If trunk is arranged for automatic coin collect when subscriber disconnects— CC lamp momentarily lighted. CND lamp lighted.
23	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
24	Operate FS, TS, TLK keys.	
25	Momentarily operate ST key.	TB lamp lighted. AS lamp <i>not</i> lighted.
26	Momentarily operate RL key.	TB lamp extinguished.
27d	If trunk under test is equipped with MB jack— Remove 322A plug from MB jack of trunk being tested.	If ETS provided— FT lamp extinguished.
28e	If trunk under test is equipped with MB switch— At relay rack— Restore MB switch to N.	If ETS provided— FT lamp extinguished.
29	Repeat Steps 18 through 23.	If ETS provided— FT lamp extinguished in Step 22.
30h	If trunk is arranged for tandem operation— Select TAN subclass of test.	TAN lamp lighted.

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STEP	ACTION	VERIFICATION
31h	Select class of service and rate treatment as required for access to tandem trunk under test.	
32h	Repeat Steps 13d, 14e, 17, through 20g, 22 through 28e.	
33h	Repeat Steps 18 through 20h, 22, 23.	
34i	If no further tests are to be made— Restore all keys and switches.	
F. Coin Control—Coin Trunks Arranged for Automatic Coin Return When Operator Answers		
12	Select class of service and rate treatment as required for access to trunk under test.	
13c	If office is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
14	Operate TLK key.	
15	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted.
16	At switchboard— Assistant answers.	At MTF— Ringing tone not heard. PK lamp extinguished if lighted. CR lamp momentarily lighted. CND lamp lighted. If office is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard.
17	At MTF— Restore CN key.	CND lamp extinguished.
18	Operate CN key.	
19	At switchboard— Collect coin.	Coin present signal received. At MTF—

STEP	ACTION	VERIFICATION
		CC lamp momentarily lighted. CND lamp lighted. If office is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light. If office is arranged for positive coin collect potential and coin service improvements (dial-tone-first) are not provided— PK lamp momentarily lighted in unison with CC lamp.
20	At switchboard— Collect coin.	Coin present signal not received.
21	At MTF— Restore CN key.	CND lamp extinguished.
22	Operate CN key.	
23	At switchboard— Return coin.	Coin present signal received. At MTF— CR lamp momentarily lighted. CND lamp lighted. If office is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light. If office is arranged for positive coin return potential and coin service improvements (dial-tone-first) are not provided— PK lamp momentarily lighted in unison with CR lamp.
24	At switchboard— Disconnect cord circuit.	
25	At MTF— Restore CN key.	CND lamp extinguished.
26	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished.
27	Momentarily operate RL key.	All lamps extinguished.
28d	If no further tests are to be made— Restore trunk to service.	
29d	Restore all keys and switches.	

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STEP	ACTION	VERIFICATION
G. Coin Control—Coin Trunks Not Arranged for Automatic Coin Return		
13	Select class of service and rate treatment as required for access to trunk under test.	
14d	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
15	Operate TLK key.	
16	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. Ringing tone heard in MTF telephone set. If trunk is arranged for coin service improvements (dial-tone-first)— PK lamp lights.
17	At switchboard— Assistant answers.	At MTF— Ringing tone not heard. PK lamp extinguished if lighted. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard.
18	At MTF— Operate CN key.	
19	At switchboard— Collect coin.	At MTF— CC lamp momentarily lighted. CND lamp lighted. If office is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light. If office is arranged for positive coin collect potential and coin service improvements (dial-tone-first) are not provided— PK lamp lighted in unison with CC lamp. At switchboard— Coin present signal received.
20	Collect coin.	Coin present signal not received.
21	At MTF— Restore CN key.	
22	Operate CN key.	

STEP	ACTION	VERIFICATION
23	At switchboard— Return coin.	At MTF— CR lamp momentarily lighted. CND lamp lighted. If office is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light. If office is arranged for positive coin return potential and coin service improvements (dial-tone-first) are not provided— PK lamp lighted in unison with CR lamp. At switchboard— Coin present signal received.
24	Disconnect cord circuit.	At MTF— If trunk is arranged for coin service improvements (dial-tone-first)— PK lamp lights.
25	Restore CN, CNR keys.	CND lamp extinguished.
26	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished. PK lamp extinguished if lighted.
27	Momentarily operate RL key.	All lamps extinguished.
28e	If no further tests are to be made— Restore trunk to service.	
29e	Restore all keys and switches.	
H. Disconnection—Coin Trunks Arranged for Automatic Coin Collect on Disconnect		
13	Select class of service and rate treatment as required for trunk under test.	
14d	If office is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
15	Operate TLK key.	
16	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. If trunk is arranged for toll diversion or coin service improvements (dial-tone-first)— PK lamp lighted. Ringing tone heard in MTF telephone set.

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STEP	ACTION	VERIFICATION
17	At switchboard— Assistant answers.	At MTF— Ringing tone not heard. PK lamp extinguished if lighted. At switchboard— If trunk is arranged for tone identification of class of service— Spurt of high tone heard. At MTF— If trunk is arranged for automatic coin return when operator answers— CR lamp momentarily lighted. CND lamp lighted. If trunk is arranged for coin service improvements (dial-tone-first)— OLF lamp <i>does not</i> light.
18b	If trunk under test is arranged for automatic coin return— Momentarily restore CN key.	CND lamp extinguished.
19	Restore TLK key.	At switchboard— Disconnect signal received.
20	Disconnect cord circuit.	At MTF— If ETS provided— FT lamp extinguished. AS lamp extinguished. CC lamp momentarily lighted. CND lamp lighted.
21	Restore CN key.	CND lamp extinguished.
22	Momentarily operate RL key.	All lamps extinguished.
23e	If no further tests are to be made— Restore all keys and switches.	

I. Coin Return on Abandoned Calls

12	Select class of service and rate treatment as required for access to trunk under test.	
13c	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
14	Operate TLK key.	
15	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted.

STEP	ACTION	VERIFICATION
16	When AS lamp lights— Restore TLK key.	CR lamp momentarily lighted. CND lamp lighted. AS lamp extinguished. If ETS provided— FT lamp extinguished.
17	Momentarily operate RL key.	All lamps extinguished.
18d	If no further tests are to be made— Restore all keys and switches.	

**J. Time Delay—Denied and Vacant Code Intercept
Trunks Arranged for Time Delay**

Nonwire-Spring-Relay Type Trunks

11	Select class of service and rate treatment as required for access to trunk under test.	
12	Operate TLK key.	
13	Momentarily operate ST key.	If ETS provided— FT lamp lighted. AS lamp lighted. In 13 to 32 seconds— Ringing heard.
14	Restore TLK key.	If ETS provided— FT lamp extinguished. AS lamp extinguished.
15	Momentarily operate RL key.	All lamps extinguished.

Wire-Spring-Relay Type Trunks

16	Select class of service and rate treatment as required for access to trunk under test.	
17b	If trunk is arranged for coin service improvements (dial-tone-first)— Operate DTNF key.	
18	Operate TLK key.	
19	At relay rack frame— Insert plug of 32A test set into RC jack.	
20	Momentarily operate start (white) button on 32A test set.	
21c	If trunk is equipped with SA relay— When S relay operates, <i>start timing</i> .	In 13 to 32 seconds— SA relay operated.

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STEP	ACTION	VERIFICATION
22d	If trunk is equipped with C relay— When L1 relay operates, <i>start timing</i> .	In 13 to 32 seconds— C relay operated.
23e	If trunk is equipped with E relay but not equipped with SA or C relay— When L relay operates, <i>start timing</i> .	In 13 to 32 seconds— L1 relay operated.
24f	If trunk is not equipped with SA, C, or E relay— When L1 relay operates, <i>start timing</i> .	In 13 to 32 seconds— Battery present on terminal 18 of terminal strip on unit.
25	Momentarily operate release (red) button on 32A test set.	
26b	If trunk arranged for coin service improvements (dial-tone-first)— At MTF— Restore DTNF key.	
27g	If no further tests are to be made— Restore all keys and switches.	

K. False-Busy and False-Idle Conditions (Not required for ETS)

1	At relay rack frame— Connect 110-volt ac supply to 1A fault locator.	
2	Operate W-T switch to W position, HR-LRT switch to HR position.	Whistle heard.
3a	If trunks are equipped with MB jacks— At MTF— Insert 322A plugs into MB jacks of all trunks using same route on same trunk link frame except trunk being tested.	
4b	If trunks are equipped with MB switch— At relay rack— Operate MB switch of all trunks using same route on same trunk link frame except trunk being tested, to MB.	
5c	If trunk being tested is not preceded by auxiliary trunk— Connect WT jack of fault locator to terminal of terminal strip on trunk being tested as follows: Trunks not equipped with D-type terminal strips— Terminal 10 or A10, as provided.	When trunk being tested is idle— Whistle not heard.

STEP	ACTION	VERIFICATION
	Trunks equipped with D-type terminal strips— Terminal 45.	
6c	When trunk being tested is idle— Block relays in sequence indicated in Table A as required for trunk being tested.	Whistle heard and relays function as indicated in Table A.
7d	If trunk being tested is preceded by auxiliary trunk— Connect WT jack of fault locator to terminal 9 of terminal strip on auxiliary trunk.	When trunk being tested is idle— Whistle not heard.
8d	When trunk being tested is idle— Block relays in sequence indicated in Table B as required for trunk being tested.	Whistle heard and relays function as indicated in Table B.
9	Restore trunks to service.	
10	Disconnect WT jack of fault locator from terminal 45, 10, or A10 and connect to terminal of terminal strip on trunk being tested as follows: Trunks not equipped with D-type terminal strips— Terminal 11 or A11, as provided. Trunks equipped with D-type terminal strips— Terminal 15.	
11c	If trunk being tested is not preceded by auxiliary trunk— Connect HRG terminal to terminal of terminal strip on trunk being tested as follows: Trunks not equipped with D-type terminal strips— Terminal 9 or A9, as provided. Trunks equipped with D-type terminal strips— Terminal 55.	When trunk being tested is idle— Whistle not heard.
12c	When trunk being tested is idle— Block relays in sequence indicated in Table C as required for trunk being tested.	Whistle heard and relays function as indicated in Table C.
13d	If trunk being tested is preceded by auxiliary trunk— Connect HRG terminal to terminal 9 of terminal strip on auxiliary trunk.	When trunk being tested is idle— Whistle not heard.
14d	When trunk being tested is idle— Block relays in sequence indicated in Table D as required for trunk being tested.	Whistle heard and relays function as indicated in Table D.
15	Remove all blocking tools.	

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STEP	ACTION	VERIFICATION
16	Remove test connections from terminal strips.	

TABLE A

TRUNK SD NO.	SEQUENCE	BLOCK RELAY		REMOVE BLOCKING TOOL FROM RELAY	OBSERVATIONS
		NONOPERATED	OPERATED		
25597-01, 02, 03	1		BY		Whistle heard
25656-01, 02, 03	2		S1		Whistle heard
25657-01	3			BY	BY relay remains operated
25687-01, 02	4			S1	BY relay released
25709-01, 02					Whistle not heard
25710-01, 02, 03, 04					
25857-01, 02					
25923-01, 02, 03, 04					
25924-01, 02, 03, 04					
26090-01					
26091-01					
26092-01					
26093-01					
26098-01					
26108-01					
26096-01	1	SA, SP			
	2		S1		Whistle heard
	3		E		Whistle heard
	4			S1	Whistle heard
	5		CN		Whistle heard
	6			E	Whistle heard
	7		TM		Whistle heard
	8			CN	Whistle heard
	9		CO		Whistle heard
	10			TM	Whistle heard
	11		BY		Whistle heard
	12			CO	Whistle heard
	13		S1		Whistle heard

TABLE A (Cont)

TRUNK SD NO.	SEQUENCE	BLOCK RELAY		REMOVE BLOCKING TOOL FROM RELAY	OBSERVATIONS
		NONOPERATED	OPERATED		
26096-01	14 15			BY S1	BY relay remains operated BY relay released Whistle not heard
26099-01	1 2 3 4 5 6 7	SL	E BY S1	E BY S1	Whistle heard Whistle heard Whistle heard Whistle heard BY relay remains operated BY relay released Whistle not heard
26121-01	1 2 3 4 5 6 7 8 9	SP	S1 CN TM CO	S1 CN TM CO	Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle not heard

TABLE B

TRUNK SD NO.	SEQUENCE	BLOCK AUXILIARY TRUNK RELAY		BLOCK TRUNK RELAY OPERATED	REMOVE BLOCKING TOOL FROM RELAY	OBSERVATIONS
		NONOPERATED	OPERATED			
25597-01, 03 25656-01, 03	1 2 3 4 5 6 7 8 9		SP CO CN			Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard BY relay remains operated BY relay released Whistle not heard
25687-01, 02 25709-01, 02	1 2 3 4 5 6 7 8 9	CRI, SP	LDI CN			Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard Whistle heard BY relay remains operated BY relay released Whistle not heard

TABLE C

TRUNK SD NO.	SEQUENCE	BLOCK RELAY		REMOVE BLOCKING TOOL FROM RELAY	OBSERVATIONS
		NONOPERATED	OPERATED		
25597-01, 02, 03	1		BY		Whistle heard
25656-01, 02, 03	2			BY	Whistle not heard
25657-01					
25687-01, 02					
25709-01, 02					
25710-01, 02, 03, 04	1	BY			
25857-01, 02	2		S1		Whistle heard
25923-01, 02, 03, 04	3			BY	BY relay operated
25924-01, 02, 03, 04	4		BY		Whistle heard
26090-01	5			S1	Whistle heard
26091-01	6			BY	Whistle not heard
26092-01					
26093-01					
26098-01					
26096-01	1	SA, SP			
	2		S1		Whistle heard
	3		E		Whistle heard
	4			S1	Whistle heard
	5		CN		Whistle heard
	6			E	Whistle heard
	7		TM		Whistle heard
	8			CN	Whistle heard
	9		CO		Whistle heard
	10			TM	Whistle heard
	11		BY		Whistle heard
	12			CO	Whistle heard
	13			BY	Whistle not heard

TABLE C (Cont)

TRUNK SD NO.	SEQUENCE	BLOCK RELAY		REMOVE BLOCKING TOOL FROM RELAY	OBSERVATIONS
		NONOPERATED	OPERATED		
26099-01	1	SL, BY			
	2		E		Whistle heard
	3		S1		Whistle heard
	4			E	Whistle heard
	5			BY	BY relay operated
	6		BY		Whistle heard
	7			S1	Whistle heard
	8			BY	Whistle not heard
26108-01	1		S1A		Whistle heard
	2		BY		Whistle heard
	3			S1A	Whistle heard
	4			BY	Whistle not heard
26121-01*	1	SP, S1A			
	2		CN		Whistle heard
	3		TM		Whistle heard
	4			CN	Whistle heard
	5		CO		Whistle heard
	6			TM	Whistle heard
	7		S1		Whistle heard
	8			CO	Whistle heard
	9			S1A	S1A relay operated
	10		S1A		Whistle heard
	11			S1	Whistle heard
	12			S1A	Whistle not heard

* Test for line link frame appearance covered in Section 218-283-501.

TABLE D

TRUNK SD NO.	SEQUENCE	BLOCK AUXILIARY TRUNK RELAY		BLOCK TRUNK RELAY OPERATED	REMOVE BLOCKING TOOL FROM RELAY	OBSERVATIONS
		NONOPERATED	OPERATED			
25597-01, 03	1		SP			
25656-01, 03	2		CO			Whistle heard
	3		CN			Whistle heard
	4				CO	Whistle not heard
	5		FI			Whistle heard
	6				CN	Whistle not heard
	7				FI	Whistle not heard
	8				BY	Whistle heard
	9				BY	Whistle not heard
25687-01, 02	1	CRI, SP				
25709-01, 02	2		LDI			Whistle heard
	3		CN			Whistle heard
	4				LDI	Whistle not heard
	5		FI			Whistle heard
	6				CN	Whistle not heard
	7				FI	Whistle not heard
	8				BY	Whistle heard
	9				BY	Whistle not heard