

OUTGOING INTERTOLL TRUNK CIRCUIT SD-27878-01
FOR OFF-NET ACCESS SERVICE
TESTS USING TRUNK TEST CIRCUIT SD-25918-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

PAGE

1.01 This section provides a method of testing SD-27878-01 (Outgoing Intertoll Trunk) for off-net access service.

D. Trunk Reorder: This test checks that the trunk is set for overflow when a reorder condition is established in the sender.

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1.02 This section is reissued to add Calling Data Transmitter-(CDT) features to Tests A, D, E, F, and I through N. Arrows are used to emphasize significant changes. This issue affects Equipment Test Lists.

E. Call to Distant Office: This test checks that a call may be completed to a distant office.

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1.03 The test covered are:

THROUGH-SWITCHED TESTS (TOG)

SUBSCRIBER OUTGOING TESTS (SOG)

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A. Trunk Seizure and Disconnect:

This test checks the trunk for seizure, polarity on tip and ring leads, supervision, and timed release after called end disconnect. Calling end disconnect is also checked.

5

B. AMA Features (ETS, CDT, or LAMA-C not Provided):

This test checks the following AMA features under billing or traffic sampling conditions: (1) charge supervision, (2) noncharge supervision, and (3) cancel disconnect entry.

7

C. Trunk Message Timing for Trunks Arranged for Message Timing (ETS, CDT, or LAMA-C not Provided):

This test checks that a ground is furnished to message timing circuits when the call is answered.

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F. Trunk Seizure and Disconnect:

This test checks the trunk for seizure, polarity on tip and ring leads, and supervision. Calling end and called end disconnect are also checked.

11

G. AMA Feature (ETS, CDT, or LAMA-C not Provided):

This test checks the following AMA features under billing or traffic sampling conditions: (1) charge supervision, (2) noncharge supervision, and (3) cancel disconnect entry.

13

H. Trunk Message Timing for Trunks Arranged for Message Timing (ETS, CDT, or LAMA-C not Provided):

This test checks that a ground is furnished to the message timing circuit when a call is answered.

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I. Trunk Reorder: This test checks that the trunk is set to overflow when a reorder condition is established in the sender.

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NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

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J. Call to Distant Office: This test checks that a call may be completed to a 103-type test line (SD-27795-01) in a distant office.	16
 MISCELLANEOUS TESTS	
K. Trunk-Busy: This test checks that the trunk may be made busy to service but may be seized for testing.	17
L. Tone and Transmission Suppression: This test checks that the trunk will recognize flashes on the E lead, return busy or overflow tone to the originating end, and open the tip and ring leads towards the terminating end.	17
M. Pad Control: This test checks operations of the pad control relay.	18
N. Cross-Office Lockout—17E Testboard Provided: This test checks that the trunk may be held for tracing.	18
O. Out of Service—17E Testboard Provided: This test checks that the trunk may be taken out of service from the 17E testboard to both service calls and test calls.	19
P. False-Idle and False-Busy Conditions (ETS not Provided): This test checks for continuity and crosses on the F, FT, and BT leads.	20
1.04 Tests B, C, G, H, K, N, O, and P require action and verification at the MTF and 17E testboard.	
1.05 Tests B and G require action and verifications at the MTF and trunk relay rack.	
1.06 Tests C and H require action and verification at the message timing circuit relay rack.	

1.07 Test P requires that all trunks using the same route on same trunk link frame on the trunk under test be made busy.
1.08 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.
1.09 The manner of selecting some circuits and test conditions at the master test frame (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.
1.10 The location statement, At MTF—, is used to refer to all apparatus located on the four basic bays of the MTF.
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.
1.12 When the office is arranged for LAMA-C or ETS, the distributors and scanners associated with the marker and trunk used in the test call must be in service or in a <i>maintenance-busy</i> condition - not in an <i>out-of-service</i> condition. To change a scanner or distributor from an <i>out-of-service</i> to a <i>maintenance-busy</i> condition, use the procedure given in the following sections for the office arrangement.
218-798-308 - Taking LAMA-C Equipment Out-of-Service.
218-799-701 - Taking ETS Equipment Out-of-Service.

1.13 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 supervisory scanning to be repeated on the FT, CS, and S1 lamps at the MTF trunk test circuit. As long as the TST bit is set in the trunk register, supervision 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.

1.14 ♦When CDT (calling data transmitter) billing system is provided in the office, this trunk may or may not handle billable calls. When it is arranged for billable calls, supervisory scan points will be assigned and supervision will be repeated from the scan points on test calls to the MTF by CS and S1 lamps.

1.15 When CDT is provided, there may be several configurations in the office - single controller, dual controller with the trunk assigned to one controller, or dual controller and the trunk is assigned to both controllers. When assigned to both controllers in a dual controller configuration, one test must be made to each controller to verify scan points for each controller.♦

2. APPARATUS

Tests A Through O

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

2.02 Trunk test circuit, SD-25918-01.

Tests A, B, F, G

2.03 KS-3008 stopwatch or equivalent.

Tests B, C, G, H, K, N, O, P

2.04 17E testboard (when provided).

2.05 MTF jack, lamp, and key circuit (when 17E testboard is not provided).

2.06 322A (make-busy) plugs (when 17E testboard is not provided).

Tests B, C, G, H, O, P

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

Tests C, H

2.08 32A test set.

2.09 67C test set or equivalent (for checking presence of battery or ground).

Test P

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

2.11 Testing cord, W1AK cord, 6 feet long, equipped with one 296 plug (banana-type), one 360B tool, and one 624B (terminal connector) tool.

2.12 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) and two KS-6278 connecting clips or one KS-6278 connecting clip and one 624B (terminal connector) tool, as required (for connecting high resistance ground [HRG] to terminal strip terminals).

2.13 Two testing cords, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 connecting clip, and one 624A (terminal connector) tool (for making test connections to relay winding terminals).

3. PREPARATION

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STEP	ACTION	TEST															
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	At MTF— Restore all keys and switches.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2	Momentarily operate RL key.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
3	Select OGT class of test.	X	X	X	X	—	X	X	X	X	—	X	X	X	X	X	
4	Select originating class of call and associated translator indication.	X	X	X	X	X	—	—	—	—	—	X	X	X	X	X	
5	Select completing marker.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
6	Select trunk to be tested.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
7	Operate GPA/GPB key for required group when selected trunk is in an allotted trunk group.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8	Select route advance as required for access to trunk under test.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
9	Select class of service and rate treatment as required for access to trunk under test.	X	X	X	X	X	—	—	—	—	—	X	X	X	X	X	
10	Select A- through K-digits as required to direct call to route served by trunk under test.	X	X	X	X	—	X	X	X	X	—	X	X	X	X	X	
11	Operate TLK, EM, KY keys.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12a	If message timing is provided— Operate TTC key.	X	X		X	X	X	X		X	X	X	X	X	X	X	
13	Operate FS, TS keys.	X	—	—	X	X	X	—	—	X	X	—	X	X	X	X	
14b	If ETS provided— Operate PCS, PTS keys.	X	—	—	X	X	X	—	—	X	X	X	X	X	X	X	
15	Operate NTFS, NTS keys.	—	X	X	—	—	—	X	X	—	—	X	—	—	—	—	
16c	If 17E testboard is provided— At 17E testboard— Apply make-busy condition to trunk under test.	—	X	X	—	—	—	X	X	—	—	X	—	—	—	—	
17d	If 17E testboard is <i>not</i> provided— At MTF jack, lamp, and key circuit or OGT test frame test and make-busy jack circuit— Insert make-busy plug into MB jack associated with trunk under test.	—	X	X	—	—	—	X	X	—	—	X	—	—	—	—	
18	At MTF— Select subclass of test (TAN or TOL) assigned to trunk under test.	—			—	—	X	X	X	X	X	—	—	—	—	—	
19e	If TOL subclass of test is selected and IC-keys are provided in SD-25800-01— Operate TOL-RB key.	—			—	—	X	X	X	X	X	—	—	—	—	—	
20f	If trunk is to be tested for CDT— Operate CDTT key.	X			X	X	X			X	X	X	X	X	X	X	
21f	When trunk is assigned to CDT dual controllers, select controller— Operate CDC 0/1 key.	X			X	X	X			X	X	X	X	X	X	X	
22f	When a trouble record is to be taken from the CDT translator access (TA) circuit— Operate TREC key.	X			X	X	X			X	X	X	X	X	X	X	
23f	When the CDT controller operates with both shared and dedicated translator circuits and a particular translator circuit is to be used for the test— Operate TAD key to select dedicated TA circuit, or operate TAS key to select shared TA circuit. <i>Note:</i> When a TA circuit is not selected, the controller will select the next available TA circuit.	X			X	X	X			X	X	X	X	X	X	X	

Proceed to METHOD

— Omit Step

Note: Refer to paragraphs 1.07 through 1.15.

4. METHOD

SUBSCRIBER OUTGOING TESTS (SOG)

STEP	ACTION	VERIFICATION
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A. Trunk Seizure and Disconnect

Seizure

- | | | |
|----|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24 | Momentarily operate ST key. | <p>◆If CDTT key is operated—
S1 lamp lighted,◆
If ETS provided—
FT, S1 lamps lighted.
If LAMA-C provided—
S1 lamp lighted.
AS, E lamps lighted.
PK lamp <i>not</i> lighted.
If AMA record is provided for billing and
ETS, ◆CDT,◆ or LAMA-C not provided—
IE, RN_, T2/5, U2/5 lamps lighted.</p> |
| 25 | Operate ANS key; <i>start timing</i> . | <p>◆If CDTT key is operated—
CS lamp lighted.◆
If ETS or LAMA-C provided—
CS lamp lighted.
High tone heard.
If AMA record is provided for billing and
ETS, ◆CDT,◆ or LAMA-C not provided—
In 2 to 2.4 seconds—
AE lamp lighted.</p> |
| 26 | Restore TLK, ANS keys. | <p>◆If CDTT key is operated—
S1, CS lamps extinguished.◆
If ETS provided—
FT, CS, S1 lamps extinguished.
If LAMA-C provided—
CS, S1 lamps extinguished.
High tone silenced.
AS, E lamps extinguished.
If AMA record is provided for billing and
ETS, ◆CDT,◆ or LAMA-C not provided—
DE lamp lighted.</p> |
| 27 | Momentarily operate RL key. | All lamps extinguished. |
| 28 | Operate TLK key. | |

Called End Disconnect

Note: Do not proceed with test until trunk has been idle for 4 minutes.

STEP	ACTION	VERIFICATION
29	Momentarily operate ST key.	♦If CDTT key is operated— S1 lamp lighted.♦ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. PK lamp <i>not</i> lighted. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— IE, T2/5, U2/5, RN_lamps lighted.
30	Operate ANS key; <i>starting timing</i> .	♦If CDTT key is operated— CS lamp lighted.♦ If ETS or LAMA-C provided— CS lamp lighted. High tone heard. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— In 2 to 2.4 seconds— AE lamp lighted.
31	Restore ANS key; <i>start timing</i> .	♦If CDTT key is operated— CS lamp extinguished.♦ If ETS or LAMA-C provided— CS lamp extinguished. High tone silenced. In 13 to 32 seconds— AS, E lamps extinguished. If ETS provided— FT, S1 lamps extinguished. If LAMA-C provided— S1 lamp extinguished. ♦If CDTT key is operated— S1 lamp extinguished.♦ If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— DE lamp lighted.
32	Momentarily operate RL key.	All lamps extinguished.
Calling End Disconnect		
33	Momentarily operate ST key.	♦If CDTT key is operated— S1 lamp lighted.♦ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. PK lamp <i>not</i> lighted. If AMA record is provided for billing and

STEP	ACTION	VERIFICATION
		ETS, ♦CDT,♦ or LAMA-C not provided— IE, RN-, T2/5, U2/5 lamps lighted.
34	Operate ANS key; <i>start timing</i> .	♦If CDTT key is operated— CS lamp lighted.♦ If ETS or LAMA-C provided— CS lamp lighted. High tone heard. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— In 2 to 2.4 seconds— AE lamp lighted.
35	Restore TLK key.	High tone silenced. AS, E lamps extinguished. If ETS provided— FT, CS, S1 lamps extinguished. If LAMA-C provided— CS, S1 lamps extinguished. ♦If CDTT key is operated— S1, CS lamps extinguished♦ If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— DE lamp lighted.
36	Momentarily operate RL key.	All lamps extinguished.

All Tests

- 37 Restore all keys and switches not required in next test.

B. AMA Features (ETS, ♦CDT,♦ or LAMA-C not Provided)**Charge Supervision**

- 18e If trunk under test is associated with trunk group traffic sampling—
At MTF—
Operate TGTS, SA keys.
- 19f If trunk under test is associated with customer group class-of-service traffic sampling—
At MTF—
Operate SMPL key.
- 20 At MTF—
Momentarily operate ST key.
- AS, E lamps lighted.
PK lamp *not* lighted.
IE, RN_, T2/5, U2/5 lamps lighted.

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STEP	ACTION	VERIFICATION
21	Operate ANS key; <i>start timing</i> .	High tone heard. In 2 to 2.4 seconds— AE lamp lighted.
22	Restore TLK key.	High tone silenced. AS, E lamps extinguished. DE lamp lighted.
23	Momentarily operate RL key.	All lamps extinguished.
24	Restore ANS key.	
25	Operate TLK key.	
Noncharge Supervision		
<i>Note:</i> Do not proceed with test until trunk has been idle for 4 minutes.		
26e	If trunk under test is associated with trunk group traffic sampling— Operate TGTS, SA keys.	
27f	If trunk under test is associated with customer group class-of-service traffic sampling— Operate SMPL key.	
28	Momentarily operate ST key.	AS, E lamps lighted. PK lamp <i>not</i> lighted. IE, RN_, T2/5, U2/5 lamps lighted.
29	Operate ANS key for 1 to 1-1/2 seconds; <i>start timing</i> .	High tone heard while ANS key is operated. AE lamp <i>does not</i> light.
30	In 7 to 9 seconds— Restore TLK key.	AS, E lamps extinguished.
31	Momentarily operate RL key.	All lamps extinguished.
32	Operate TLK key.	

Cancel Disconnect Entry

Note: Do not proceed with test until trunk has been idle for 4 minutes.

- 33e If trunk under test is associated with trunk group traffic sampling—
Operate TGTS, SA keys.

STEP	ACTION	VERIFICATION
34f	If trunk under test is associated with customer group class-of-service traffic sampling— Operate SMPL key.	
35	Momentarily operate ST key.	AE, E lamps lighted. PK lamp <i>not</i> lighted. IE, RN, T2/5, U2/5 lamps lighted.
36	Operate ANS key; <i>start timing</i> .	High tone heard. In 2 to 2.4 seconds— AE lamp lighted.
37	At relay rack frame— Insulate 5 of S2 relay on trunk under test.	
38	At MTF— Restore TLK key; <i>start timing</i> .	High tone silenced. AS, E lamps extinguished. DE lamp <i>does not</i> light At relay rack frame— In 2 to 6 seconds— MA relay on trunk under test released.
39	Remove insulator from S2 relay.	
40	At MTF— Momentarily operate RL key.	All lamps extinguished.
All Tests		
41	Restore all keys and switches not required in next test.	
42	Remove make-busy condition from trunk under test.	
C. Trunk Message Timing for Trunks Arranged for Message Timing (ETS, CDT, or LAMA-C not Provided)		
18	Operate ANS key.	
19	At relay rack frame— Block nonoperated TMT relay of message timing circuit associated with trunk under test.	Battery present on U- winding of TMT relay.
20	Insert plug of 32A test set into RC jack.	
21	Momentarily operate white (ST) button on 32A test set.	Ground present on U- winding of TMT relay.
22	Momentarily operate red (RL) button on 32A test set.	Battery present on U- winding of TMT relay.

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STEP	ACTION	VERIFICATION
23	Remove blocking tool from TMT relay.	
24	Remove plug of 32A test set from RC jack.	
25	At MTF— Restore all keys and switches not required in next test.	
26	◆Remove make-busy condition from trunk under test.◆	

D. Trunk Reorder

24	Operate ROT key.	
25	Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS lamp lighted. PK lamp not lighted. Overflow tone heard.
26	Momentarily operate RL key.	Overflow tone silenced. All lamps extinguished.
27	Restore all keys and switches not required in next test.	

E. Call to Distant Office

24	Select MISC class of test.	
25	Select A_ through K_ digits as required to direct call to permanent busy number in distant office.	
26	Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS lamp lighted. PK lamp not lighted. Busy tone heard.
27	Momentarily operate RL key.	Busy tone silenced. All lamps extinguished.

STEP	ACTION	VERIFICATION
28	Restore all keys and switches not required in next test.	
THROUGH-SWITCHED TESTS (TOG)		
F. Trunk Seizure and Disconnect		
Seizure		
24	Momentarily operate ST key.	♦If CDTT key is operated— S1 lamp lighted.♦ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— IE, RN_, T2/5, U2/5 lamps lighted.
25	Operate ANS key; <i>start timing</i> .	♦If CDTT key is operated— CS lamp lighted.♦ If ETS or LAMA-C provided— CS lamp lighted. OGT-CS lamp lighted. High tone heard. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— In 2 to 2.4 seconds— AE lamp lighted.
26	Restore TLK, ANS keys.	♦If CDTT key is operated— S1, CS lamps extinguished.♦ If ETS provided— FT, CS, S1 lamps extinguished. If LAMA-C provided— CS, S1 lamps extinguished. High tone silenced. OGT-CS, AS, E lamps extinguished. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— DE lamp lighted.
27	Momentarily operate RL key.	All lamps extinguished.
28	Operate TLK key.	
Called End Disconnect		
29	Momentarily operate ST key.	♦If CDTT key is operated— S1 lamp lighted.♦ If ETS provided—

STEP	ACTION	VERIFICATION
		FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— IE, RN_, T2/5, U2/5 lamps lighted.
30	Operate ANS key; <i>start timing</i> .	♦If CDTT key is operated— CS lamp lighted.♦ If ETS or LAMA-C provided— CS lamp lighted OGT-CS lamp lighted. High tone heard. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— In 2 to 2.4 seconds— AE lamp lighted.
31	Restore ANS key.	♦If CDTT key is operated— CS lamp extinguished.♦ If ETS or LAMA-C provided— CS lamp extinguished. High tone silenced. OGT-CS lamps extinguished.
32	Restore TLK key.	♦If CDTT key is operated— S1, CS lamps extinguished.♦ AS, E lamps extinguished. If ETS provided— FT, S1 lamps extinguished. If LAMA-C provided— S1 lamp extinguished. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— DE lamp lighted.
33	Momentarily operate RL key.	All lamps extinguished.
Calling End Disconnect		
34	Momentarily operate ST key	♦If CDTT key is operated— S1 lamp lighted.♦ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted AS, E lamps lighted. If AMA record is provided for billing and ETS, ♦CDT,♦ or LAMA-C not provided— IE, RN_, T2/5, U2/5 lamps lighted.

STEP	ACTION	VERIFICATION
35	Operate ANS key; <i>start timing</i> .	<p>◆If CDTT key is operated— CS lamp lighted.◆ If ETS or LAMA-C provided— CS lamp lighted. OGT-CS lamp lighted. High tone heard. If AMA record is provided for billing and ETS, ◆CDT,◆ or LAMA-C not provided— In 2 to 2.4 seconds— AE lamp lighted.</p>
36	Restore TLK key.	<p>◆If CDTT key is operated— S1, CS lamps extinguished.◆ OGT-CS, AS, E lamps extinguished. If ETS provided— FT, CS, S1 lamps extinguished. If LAMA-C provided— CS, S1 lamps extinguished. High tone silenced. If AMA record is provided for billing and ETS, ◆CDT,◆ or LAMA-C not provided— DE lamp lighted.</p>
37	Momentarily operate RL key.	All lamps extinguished.
All Tests		
38	Restore all keys and switches not required in next test.	

G. AMA Features (ETS, ◆CDT,◆ or LAMA-C not Provided)

Charge Supervision

20f	If trunk under test is associated with trunk group traffic sampling— Operate TGTS, SA keys.	
21g	If trunk under test is associated with customer group class-of-service traffic sampling— Operate SMPL key.	
22	Momentarily operate ST key.	AS, E lamps lighted. IE, RN-, T2/5, U2/5 lamps lighted.
23	Operate ANS key; <i>start timing</i> .	High tone heard. In 2 to 2.4 seconds— AE lamp lighted.

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STEP	ACTION	VERIFICATION
24	Restore TLK key.	High tone silenced. AS, E lamps extinguished. DE lamp lighted.
25	Momentarily operate RL key.	All lamps extinguished.
26	Restore ANS key.	
27	Operate TLK key.	
Noncharge Supervision		
	Note: No not proceed with test until trunk has been idle for 4 minutes.	
28f	If trunk under test is associated with trunk group traffic sampling— Operate TGTS, SA keys.	
29g	If trunk under test is associated with customer group class-of-service traffic sampling— Operate SMPL key.	
30	Momentarily operate ST key.	AS, E lamps lighted. IE, RN_, T2/5, U2/5 lamps lighted.
31	Operate ANS key for 1 to 1-1/2 seconds; start timing.	High tone heard while ANS key is operated. AE lamp does not light.
32	In 7 to 9 seconds— Restore TLK key.	AS, E lamps extinguished.
33	Momentarily operate RL key.	All lamps extinguished.
34	Operate TLK key.	

Cancel Disconnect Entry

Note: Do not proceed with test until trunk has been idle for 4 minutes.

35f	If trunk under test is associated with trunk group traffic sampling— Operate SMPL key.	
36	Momentarily operate ST key.	AS, E lamps lighted. IE, RN_, T2/5, U2/5 lamps lighted.
37	Operate ANS key; start timing.	High tone heard. In 2 to 2.4 seconds— AE lamp lighted.

STEP	ACTION	VERIFICATION
38	At relay rack frame— Insulate 5 of S2 relay on trunk under test.	
39	At MTF— Restore TLK key; <i>start timing</i> .	High tone silenced. AS, E lamps extinguished. DE lamp <i>does not</i> light. In 2 to 6 seconds— MA relay on trunk under test released.
40	At relay rack frame— Remove insulator from S2 relay.	
41	At MTF— Momentarily operate RL key.	All lamps extinguished.
All Tests		
42	Restore all keys and switches not required in next test.	
43	Remove make-busy condition from trunk under test.	
H. Trunk Message Timing for Trunks Arranged for Message Timing (ETS, CDT, or LAMA-C not Provided)		
20	Operate ANS key.	
21	At relay rack frame— Block nonoperated TMT relay of message timing circuit associated with trunk under test.	Battery present on U- winding of TMT relay.
22	Insert plug of 32A test set into RC jack.	
23	Momentarily operate white (ST) button on 32A test set.	Ground present on U- winding of TMT relay.
24	Momentarily operate red (RL) button on 32A test set.	Battery present on U- winding of TMT relay.
25	Remove blocking tool from TMT relay.	
26	Remove plug of 32A test set from RC jack.	
27	At MTF— Restore all keys and switches not required in next test.	
I. Trunk Reorder		
20	Operate ROT key.	

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STEP	ACTION	VERIFICATION
21	Momentarily operate ST key.	If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. Overflow tone heard.
22	Momentarily operate RL key.	Overflow tone silenced. All lamps extinguished.
23	Restore all keys and switches not required in next test.	
J. Call to Distant Office		
24	Select MISC class of test.	
25	Select A_ through J_ digits as required to terminate to 103 test line in distant office.	
26g	If A_ through F_ digits are selected— Operate DL3 key.	
27h	If A_ through J_ digits are selected— Operate DL6 key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS lamp lighted. OGT-CS lamp lighted. If ETS or LAMA-C provided— CS lamp lighted. ◆If CDTT key is operated— CS lamp lighted.◆
29	Momentarily operate RR key.	OGT-CS lamp extinguished. If ETS or LAMA-C provided— CS lamp extinguished.— ◆If CDTT key is operated— CS lamp extinguished.◆
30	Momentarily operate RR key.	120-ipm low tone heard. OGT-CS lamp does not flash.
31	Momentarily operate RL key.	All lamps extinguished.
32	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
MISCELLANEOUS TESTS		
K. Trunk-Busy		
24	At MTF— Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. PK lamp not lighted.
25	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
26	Restore NTFS, NTTS keys.	
27	Operate FS, TS keys.	
28	Momentarily operate ST key.	TB lamp lighted.
29	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
30	Remove make-busy condition from trunk under test.	If ETS provided— FT lamp extinguished.
31	When trunk is idle— Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. PK lamp not lighted.
32	Momentarily operate RL key.	All lamps extinguished.
33	Restore all keys and switches not required in next test.	
L. Tone and Transmission Suppression		
24	Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted.

STEP	ACTION	VERIFICATION
		AS, E lamps lighted. PK lamp <i>not</i> lighted.
25	Momentarily operate ANS key several times. <i>Note:</i> This simulates 60- or 120-ipm flashes on E lead from distant office.	Interrupted low tone heard in unison with operation and release of ANS key. Test high tone <i>should not</i> be heard.
26	Momentarily operate RL key.	All lamps extinguished.
27	Restore all keys and switches not required in next test.	

M. Pad Control

24	Operate 2WD key.	
25	Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. ES lamp lighted.
26	Momentarily operate RL key.	All lamps extinguished.
27	Restore all keys and switches not required in next test.	

N. Cross-Office Lockout—17E Testboard Provided

24	Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. AS, E lamps lighted. PK lamp <i>not</i> lighted.
25	At 17E testboard— Apply lockout condition to trunk under test.	LO lamp associated with trunk under test lighted.
26	At MTF— Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
27	Momentarily operate ST key.	TB, MRL lamps lighted.

STEP	ACTION	VERIFICATION
28	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
29	Restore FS, TS keys.	
30	Operate NTFS, NTTS keys.	
31	Momentarily operate ST key.	◆If CDTT key is operated— S1 lamp lighted.◆ If ETS or LAMA-C provided— S1 lamp lighted. AS, E lamps lighted.
32	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
33	At 17E testboard— Remove lockout condition.	If ETS provided— FT lamp extinguished. LO lamp extinguished.
34	Restore all keys and switches not required in next test.	

O. Out of Service—17E Testboard Provided

15	At relay rack frame— Block nonoperated SL1 relay on trunk under test.	
16	At 17E testboard— Apply out-of-service condition to trunk under test.	
17	At MTF— Momentarily operate ST key.	TB, MRL lamps lighted.
18	Momentarily operate RL key.	All lamps extinguished.
19	Restore FS, TS keys.	
20	Operate NTFS, NTTS keys.	
21	Momentarily operate ST key.	TB, MRL lamps lighted.
22	Momentarily operate RL key.	All lamps extinguished.
23	At 17E testboard— Remove out-of-service condition.	

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STEP	ACTION	VERIFICATION
24	At relay rack frame— Remove blocking tool from SL1 relay.	
25	Restore all keys and switches not required in next test.	
P. False-Idle and False-Busy Conditions (ETS not Provided)		
1a	If 17E testboard is provided— At 17E testboard— Apply make-busy condition to trunk under test.	
2b	If 17E testboard is <i>not</i> provided— At MTF jack, lamp, and key circuit or OGT test frame test and make-busy jack circuit— Insert make-busy plug into MB jack associated with trunk under test.	
3	At relay rack frame— Connect power to 1A fault locator; set W-T switch to W and HR-LRT switch to LRT.	Whistle heard.
4	Connect WT jack of 1A fault locator to terminal 45 of terminal strip A on trunk under test.	Whistle not heard.
5	Perform Step 1a or 2b for all other trunks using same route on same trunk link frame as trunk under test.	Whistle heard when last trunk is made busy.
6	Momentarily restore B relay on trunk under test.	Whistle silenced while B relay is restored.
7	Connect ground to U winding terminal of MB relay.	
8	Momentarily restore B relay.	Whistle not heard.
9	Remove ground from U winding terminal of MB relay and manually restore MB relay.	
10	Block nonoperated SL1 relay.	
11	Connect battery to 2L winding of SL relay.	
12	Momentarily restore B relay.	Whistle not heard.
13	Remove battery from 2L winding of SL relay.	
14	Remove blocking tool from SL1 relay.	

STEP	ACTION	VERIFICATION
15	Block nonoperated D relay.	
16	Connect ground to U winding terminal of E relay.	
17	Momentarily restore B relay.	Whistle not heard.
18	Remove ground from U winding terminal of E relay.	
19	Remove blocking tool from D relay.	
20	Remove make-busy conditions placed in Step 5.	
21	Connect HRG (high resistance ground) to terminal 55 on terminal strip A on trunk under test.	
22	Disconnect WT jack of 1A fault locator from terminal 45 and connect to terminal 15 of terminal strip A on trunk under test.	Whistle heard.
23	Momentarily restore B relay.	Whistle not heard while B relay is restored.
24	Block nonoperated G relay.	
25	Connect ground to U winding of MB relay.	
26	Momentarily restore B relay.	Whistle still heard while B relay is restored.
27	Remove ground from U winding terminal of MB relay and manually restore relay.	
28	Block nonoperated SL1 relay.	
29	Connect battery to 2L winding terminal of SL relay.	
30	Momentarily restore B relay.	Whistle still heard while B relay is restored.
31	Remove battery from 2L winding terminal of SL relay.	
32	Remove blocking tool from SL1 relay.	
33	Block nonoperated D relay.	
34	Connect ground to U winding terminal of E relay.	
35	Momentarily restore B relay.	Whistle still heard while B relay is restored.

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STEP	ACTION	VERIFICATION
36	Remove ground from U winding of E relay.	
37	Remove blocking tool from D relay.	
38	Remove blocking tool from G relay.	
39	Remove test connections from terminal strip A of trunk under test.	
40	Remove power from 1A fault locator.	
41	Remove make-busy condition from trunk under test.	