COMBINATION OUTGOING AND TOLL SWITCHING TRUNKS
TESTS USING TRUNK TEST CIRCUIT SD-25918-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section provides tests of combination outgoing and toll switching trunks, SD-25913-01, SD-25913-02, and the wire spring replacement for these trunks, SD-26175-01.

1.02 This section is reissued for the following reasons. Arrows are used to emphasize the most significant changes. Equipment Test Lists are affected.

(a) To add calling data transmitter (CDT) features to tests A through D, F, G, H and P.

(b) To add paragraphs 1.12 and 1.13.

1.03 The tests covered are:

SUBSCRIBER OUTGOING TRUNK OPERATION

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A. Trunk Seizure and Release: The following features are tested: (1) Seizure of trunk (2) Continuity and polarity of originating tip and ring leads. 5

B. Supervision—Originating End Disconnect: The following features are tested. (1) Charge functions (2) Trunk number assignment in call identity indexer and recorder number on AMA operation (3) Release of trunk without timed release (4) Ability to hold if extra digits are dialed into trunk. . . . 6

C. Supervision—Terminating End Disconnect: The following features are tested: (1) Charge functions (2) Timed release of trunk within 13 to 32 seconds. 7

D. Non-Charge Supervision: This test checks that a charge condition is not established when an answered call is held less than 2 seconds. . . . 9

E. Cancel Disconnect Entry—Trunks Arranged for AMA Operation (ETS, ▶CDT,◀ or LAMA-C Not Provided): This test checks the canceling of disconnect entry and release of trunk if disconnect entry is not made within 2 to 5 seconds after disconnect. 11

F. Overflow: This test checks that the trunk is set for overflow and sends back overflow tone when a reorder condition is established in sender. . 12

G. Call to Busy Line: The following features are tested: (1) Charge not established on call to busy line in distant office (2) Transmission of busy tone from distant office. 12

H. Call to Test Line: This test checks supervision when supervisory signals are transmitted from a distant office. 13

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TANDEM OUTGOING TRUNK OPERATION

J. Trunk Seizure and Release: The following features are tested: (1) Seizure of trunk (2) Continuity and polarity of tip and ring leads. . . 14

K. Overflow: This test checks that trunk is set for overflow and sends back overflow flash and tone when a reorder condition is established in sender. 14

TOLL SWITCHING OUTGOING TRUNK OPERATION

L. Trunk Seizure, Toll Supervision and Release: The following features are tested: (1) Seizure of trunk (2) Continuity and polarity of originating tip and ring leads (3) Supervisory signals (4) Ability of operator to hold trunk when called end disconnects. . . . 15

M. Overflow: This test checks that trunk is set for overflow and sends back overflow flash and tone when a reorder condition is established in sender. 15

N. Call to Busy Line: This test checks the transmission of busy signals from a distant office. . . . 16

O. Call to Test Line: This test checks supervision when supervisory signals are transmitted from a distant office. 16

GENERAL TESTS

P. Trunk Busy: The following features are tested: (1) Seizure by test frame when trunk is made busy (2) Busy condition to service calls when trunk is made busy. 17

Q. False-Busy and False-Idle Conditions (ETS not Provided): This test checks for continuity and crosses on the F, BT, and FT leads. . . . 18

1.04 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.

1.05 Test E requires action and verification at the relay rack and master test frame.

1.06 Test Q requires that all trunks in the same trunk group and located on the same trunk link frame be made busy.

1.07 ***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.

1.08 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.

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

1.10 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 ***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 sections for the office arrangement.

218-798-308—Taking LAMA-C Equipment Out-of-Service

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

1.11 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.

1.12 ▶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.

1.13 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 P

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

2.02 Trunk test circuit, SD-25918-01.

2.03 322A (make-busy) plug.

2.04 Head telephone set.

Tests B Through E

2.05 KS-3008 stopwatch, or equivalent.

Test E

2.06 298A (make-busy) plug.

2.07 Head telephone set.

Test Q

2.08 322A (make-busy) plugs as required.

2.09 Test cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B) cord), one KS-6278 tool, and one 419A tool (for connecting ground to relay springs).

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 1P (P44B, 490) banana plug, one 360B tool, and one 419A tool for testing nonwire-spring type circuits, or one 624B tool for testing wire-spring type circuits.

3. PREPARATION

Note: Refer to ▶paragraphs 1.04 through 1.13.◀

STEP	ACTION	VERIFICATION
Tests A Through P		
1	At MTF— Restore all keys and switches.	
2	Momentarily operate RL key.	All lamps extinguished.
3	Insert plug of head telephone set into TEL jack.	
4	Select A through F digits as required to select route used by trunk under test.	

STEP	ACTION	VERIFICATION
5	Select route advance as required.	
6	Select trunk under test.	
7a	If trunk is in an allotted trunk group— Operate GPA/GPB key as required.	
8	Operate FS, TS keys.	
9	Select marker	
10	Select originating class of call with local translator indication.	
11b	If ETS provided— Operate PCS, PTS keys.	
12c	If testing AMA trunks and AMA features not under test and KAMA key is provided— Operate KAMA key.	

Tests A through D, F, G, H and P

13d	If trunk is to be tested for CDT— Operate CDTT key.	
14d	When trunk is assigned to CDT dual controllers, select controller— Operate CDC 0/1 key.	
15d	When a trouble record is to be taken from the CDT translator access (TA) circuit— Operate TREC key.	
16d	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. ***Note:*** When a TA circuit is not selected, the controller will select the next available TA circuit.	

STEP	ACTION	VERIFICATION
4.	**METHOD**	
	A. Trunk Seizure and Release	
	Flat Rate	
17	Select flat rate class of service and rate treatment as required.	
18	Select OGT class of test.	
19	Operate TTL, TLK keys.	
20	Momentarily operate ST key.	▶If CDTT key is operated— S1 lamp lighted.◀ AS lamp lighted. PK lamp not lighted. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted.
21	Restore TLK key.	AS lamp extinguished. If ETS provided— FT, S1 lamps extinguished. If LAMA-C provided— S1 lamp extinguished. ▶If CDTT key is operated— S1 lamp extinguished.◀
22	Momentarily operate RL key.	All lamps extinguished.
	AMA (ETS, ▶CDT,◀ or LAMA-C not Provided)	
23	Select AMA class of service and rate treatment as required.	
24	Select OGT class of test.	
25	Operate TTL, TLK keys.	
26	Momentarily operate ST key.	AS lamp lighted. PK lamp not lighted. If KAMA key not operated— IE, RN_, T_, U_ lamps lighted.
27	Restore TLK key.	AS lamp extinguished.
28	Momentarily operate RL key.	All lamps extinguished.

STEP	ACTION	VERIFICATION
	Flat Rate and AMA	
29	Restore all keys and switches not required in next test.	
	B. Supervision—Originating End Disconnect	
	Flat Rate	
17	Select flat rate class of service and rate treatment as required.	
18	Select OGT class of test.	
19	Operate TTL, TLK keys.	
20	Momentarily operate ST key.	⧫If CDTT key is operated— S1 lamp lighted.⧫ AS lamp lighted. PK lamp not lighted. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted.
21	Dial digit 7.	AS lamp remains lighted.
22e	If improved testing of CS relay is provided— Momentarily operate SK key.	
23	Operate ANS key; ***start timing.***	⧫If CDTT key is operated— CS lamp lighted.⧫ OGT-CS lamp lighted. High tone heard. If answer and disconnect supervision to local customer is provided— PK lamp extinguished. If ETS or LAMA-C provided— CS lamp lighted.
24e	If improved testing of CS relay is provided— Momentarily operate CSR key.	OGT-CS lamp momentarily extinguished. If ETS or LAMA-C provided ⧫or CDTT key is operated⧫ — CS lamp momentarily extinguished.
25	After 5 seconds— Restore TLK key.	OGT-CS, AS lamps extinguished. High tone silenced. ⧫If CDTT key is operated— S1, CS lamps extinguished⧫ If ETS provided— FT, CS, C1 lamps extinguished.

STEP	ACTION	VERIFICATION
		If LAMA-C provided— CS, S1 lamps extinguished.
26	Momentarily operate RL key.	All lamps extinguished.
	AMA (ETS, ▶CDT,◀ or LAMA-C not Provided)	
27	Select AMA class of service and rate treatment as required.	
28	Select OGT class of test.	
29	Operate TTL, TLK keys.	
30	Momentarily operate ST key.	AS lamp lighted. PK lamp not lighted. If KAMA key not operated— IE, RN_, T_, U_ lamps lighted.
31	Dial digit 7.	AS lamp remains lighted.
32e	If improved testing of CS relay is provided— Momentarily operate SK key.	
33	Operate ANS key; ***start timing.***	OGT-CS lamp lighted. High tone heard. If KAMA key not operated— In 2 to 5 seconds— AE lamp lighted.
34e	If improved testing of CS relay is provided— Momentarily operate CSR key.	OGT-CS lamp momentarily extinguished.
35	After 5 seconds— Restore TLK key.	OGT-CS, AS lamps extinguished. High tone silenced. If KAMA key not operated— DE lamp lighted.
36	Momentarily operate RL key.	All lamps extinguished.
	Flat Rate and AMA	
37	Restore all keys and switches not required in next test.	

C. Supervision—Terminating End Disconnect

Note: Do not proceed with this test until assured that the time shown below has elapsed since the thermal time delay relay (RL) in trunk circuit was last energized: 4 minutes

STEP	ACTION	VERIFICATION
	where tube type (RL) relay is used; 2 minutes where 235 type (RL) relay is used.	
	Flat Rate	
17	Select flat rate class of service and rate treatment as required.	
18	Select OGT class of test.	
19	Operate TTL, TLK relays.	
20	Momentarily operate ST key.	▶If CDTT key is operated— S1 lamp lighted.◀ AS lamp lighted. PK lamp not lighted. If ETS provided— FT, S1 lamp lighted. If LAMA-C provided— S1 lamp lighted.
21	Operate ANS key; ***start timing.***	▶If CDTT key is operated— CS lamp lighted.◀ OGT-CS lamp lighted. High tone heard. If ETS or LAMA-C provided— CS lamp lighted.
22	After 5 seconds— Restore ANS key.	▶If CDTT key is operated— CS lamp extinguished.◀ OGT-CD lamp extinguished. High tone silenced. If ETS or LAMA-C provided— CS lamp extinguished. In 13 to 32 seconds— AS lamp extinguished. If ETS provided— FT, S1 lamps extinguished. If LAMA-C provided— S1 lamp extinguished. ▶If CDTT key is operated— S1 lamp extinguished.◀
23	Momentarily operate RL key.	All lamps extinguished.
	AMA (ETS, ▶CDT,◀ or LAMA-C not Provided)	
24	Select AMA class of service and rate treatment as required.	
25	Select OGT class of test.	

STEP	ACTION	VERIFICATION
26	Operate TTL, TLK keys.	
27	Momentarily operate ST key.	AS lamp lighted. PK lamp not lighted. If KAMA key not operated— IE, RN_, T_, U_ lamps lighted.
28	Operate ANS key; ***start timing.***	OGT-CS lamp lighted. High tone heard. If KAMA key not operated— In 2 to 5 seconds— AE lamp lighted.
29	After 5 seconds— Restore ANS key.	OGT-CS lamp extinguished. High tone silenced. In 13 to 32 seconds— AS lamp extinguished. If KAMA key not operated— DE lamp lighted.
30	Momentarily operate RL key.	All lamps extinguished.
	Flat Rate and AMA	
31	Restore all keys and switches not required in next test.	

D. Non-Charge Supervision

Flat Rate

17	Select flat rate class of service and rate treatment as required.	
18	Select OGT class of test.	
19	Operate TTL, TLK keys.	
20	Momentarily operate ST key.	▶If CDTT key is operated— S1 lamp lighted.◀ AS lamp lighted. PK lamp not lighted. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted.
21	Operate ANS key; ***start timing.***	▶If CDTT key is operated— CS lamp lighted.◀ OGT-CS lamp lighted. High tone heard.

STEP	ACTION	VERIFICATION
		If ETS or LAMA-C provided— CS lamp lighted.
22	After 2 seconds— Restore ANS key.	◗If CDTT key is operated— CS lamp extinguished.◖ OGT-CS lamp extinguished. High tone silenced. If ETS or LAMA-C provided— CS lamp extinguished.
23	After 35 seconds— Restore TLK key.	◗If CDTT key is operated— S1 lamp extinguished.◖ AS lamp extinguished. If ETS provided— FT, S1 lamps extinguished. If LAMA-C provided— S1 lamp extinguished.
24	Momentarily operate RL key.	All lamps extinguished.
AMA (ETS, ◗CDT,◖ or LAMA-C not Provided)		
25	Select AMA class of service and rate treatment as required.	
26	Select OGT claas of test.	
27	Operate TTL, TLK keys.	
28	Momentarily operate ST key.	AS lamp lighted. PK lamp not lighted. If KAMA key not operated— IE, RN_, T_, U_ lamps lighted.
29	Operate ANS key; ***start timing.***	OGT-CS lamp lighted. High tone heard.
30	After 2 seconds— Restore ANS key.	OGT-CS lamp extinguished. High tone silenced. If KAMA key not operated— AE lamp ***not*** lighted.
31	Momentarily operate RL key.	All lamps extinguished.
Flat Rate and AMA		
32	Restore all keys and switches not required in next test.	

STEP	ACTION	VERIFICATION
	E. Cancel Disconnect Entry—Trunks Arranged for AMA Operation (ETS, ▶CDT,◀ or LAMA-C not Provided)	
	Note: Do not proceed with this test until assured that the time shown below has elapsed since the thermal time delay relay (TR) in the trunk circuit was last energized; 3 minutes where tube (TR) relay is used; 2 minutes where 235 type (TR) relay is used.	
13	Insert make-busy plug into OGT-MB jack of trunk under test.	
14	Operate NTFS, NTTS keys.	
15	At relay rack frame location of trunk under test— Insert the plug of the head telephone set into frame line circuit telephone jacks.	
16	At MTF— Select AMA class of service and rate treatment as required.	
17	Select OGT class of test.	
18	Operate TTL, TLK keys.	
19	Momentarily operate ST key.	AS lamp lighted. PK lamp not lighted. If KAMA key not operated— IE, RN_, T_, U_ lamps lighted.
20	Operate ANS key.	OGT-CS lamp lighted. High tone heard. If KAMA key not operated— AE lamp lighted.
21	Operate LOC FR L key.	
22	Insert make-busy plug into TM jack.	High tone removed from local frame line.
23	At relay rack location of trunk under test— Insulate 1B of S2 relay in trunk.	
24	At MTF— Remove make-busy plug from TM jack.	High tone heard.
25	Restore TLK, ANS keys; ***start timing.***	OGT-CS, AS lamps extinguished. High tone silenced. If KAMA key not operated—

STEP	ACTION	VERIFICATION
		DE lamp ***not*** lighted. At relay rack location of trunk under test— In 2 to 5 seconds— MA relay released.
26	Remove insulator from 1B of S2 relay.	
27	At MTF— Momentarily operate RL key.	All lamps extinguished.
28	Restore all keys and switches not required in next test.	
29	Remove make-busy plug from OGT-MB jack.	
30	At relay rack location of trunk under test— Remove head telephone set from local frame line.	
F. Overflow		
17	Select flat rate or AMA class of service and rate treatment as required.	
18	Select OGT class of test.	
19	Operate ROT, TTL, TLK keys.	
20	Momentarily operate ST key.	♦If CDTT key is operated— S1 lamp lighted.♦ AS lamp lighted. PK lamp not lighted. Overflow tone (120 ipm) heard If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted.
21	Momentarily operate RL key.	All lamps extinguished.
22	Restore all keys and switches not required in next test.	
G. Call to Busy Line		
17	Select flat rate or AMA class of service and rate treatment as required.	
18	Select D through G digits for permanently busy number in distant office.	
19	Select MISC class of test.	

STEP	ACTION	VERIFICATION
20	Operate KY, TLK keys.	
21	Momentarily operate ST key.	▶If CDTT key is operated— S1 lamp lighted.◀ AS lamp lighted. PK lamp not lighted. Busy tone (60 ipm) heard. If KAMA key not operated and AMA class of service used— IE, RN_, T_, U_ lamps lighted. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted.
22	Momentarily operate RL key.	All lamps extinguished.
23	Restore all keys and switches not required in next test.	

H. Call to Test Line

17	Select flat rate or AMA class of service and rate treatment as required.	
18	Select D through G digits for incoming trunk test line in distant office.	
19e	If call is to 10X test line in distant office— Operate DL3 or DL6 key as required.	
20e	Select D through K digits as required. ***Note:*** The last three digits are the 10X code.	
21	Select ITDO class of test.	
22	Operate KY, TLK keys.	
23	Momentarily operate ST key.	▶If CDTT key is operated— S1 lamp lighted.◀ AS lamp lighted. PK lamp not lighted. Ringing tone heard. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. OGT-CS lamp flashes. If ETS or LAMA-C provided, ▶or CDTT key operated◀ — CS lamp flashes with OGT-CS lamp.

STEP	ACTION	VERIFICATION
		Note: Ringing and supervisory signals will vary depending upon type of test line used in distant office. A series of clicks is given by synchronizing types of test line circuits to indicate that cycle of tests has been completed. The signals received on first test will indicate the signals that may be expected on successive tests to same office.
24	Momentarily operate RL key.	All lamps extinguished.
25	Restore all keys and switches not required in next test.	

I. ***DELETED***

TANDEM OUTGOING TRUNK OPERATION

J. Trunk Seizure and Release

13	Select TAN subclass of test.	TAN lamp lighted.
14	Select OGT class of test.	
15	Operate TTL, TLK keys.	
16	Momentarily operate ST key.	AS lamp lighted. If ETS provided— FT lamp lighted.
17	Operate ANS key.	OGT-CS lamp lighted. High tone heard.
18	Restore ANS key.	OGT-CS lamp extinguished. High tone silenced.
19	Restore TLK key.	AS lamp extinguished. If ETS provided— FT lamp extinguished.
20	Momentarily operate RL key.	All lamps extinguished except TAN.
21	Restore all keys and switches not required in next test.	TAN lamp extinguished.

K. Overflow

13	Select TAN subclass of test.	TAN lamp lighted.
14	Select OGT class of test.	
15	Operate TTL, TLK, ROT keys.	

STEP	ACTION	VERIFICATION
16	Momentarily operate ST key.	AS lamp lighted. If ETS provided— FT lamp lighted. OGT-CS lamp flashes. Overflow tone (120 ipm) heard.
17	Momentarily operate RL key.	All lamps extinguished except TAN.
18	Restore all keys and switches not required in next test.	TAN lamp extinguished.

TOLL SWITCHING OUTGOING TRUNK OPERATION

L. Trunk Seizure, Toll Supervision and Release

13	Select TOL subclass of test.	TOL lamp lighted.
14	Select OGT class of test.	
15	Operate TTL, TLK keys.	
16	Momentarily operate ST key.	TAS lamp lighted. If ETS provided— FT lamp lighted.
17	Operate ANS key.	OGT-CS lamp lighted. High tone heard.
18	Restore ANS key.	OGT-CS lamp extinguished. High tone silenced.
19	Restore TLK key.	TAS lamp extinguished. If ETS provided— FT lamp extinguished.
20	Momentarily operate RL key.	All lamps extinguished except TOL.
21	Restore all keys and switches not required in next test.	TOL lamp extinguished.

M. Overflow

13	Select TOL subclass of test.	TOL lamp lighted.
14	Select OGT class of test.	
15	Operate TTL, TLK, ROT keys.	
16	Momentarily operate ST key.	TAS lamp lighted. If ETS provided— FT lamp lighted.

STEP	ACTION	VERIFICATION
		OGT-CS lamp flashes. Overflow tone (120 ipm) heard.
17	Momentarily operate RL key.	All lamps extinguished except TOL.
18	Restore all keys and switches not required in next test.	TOL lamp extinguished.
N. Call to Busy Line		
13	Select D through G digits for permanently busy number in distant office.	
14	Select TOL subclass of test.	TOL lamp lighted.
15	Select MISC class of test.	
16	Operate KY, TLK keys.	
17	Momentarily operate ST key.	TAS lamp lighted. If ETS provided— FT lamp lighted. OGT-CS lamp flashes. Busy tone (60 ipm) heard.
18	Momentarily operate RL key.	All lamps extinguished except TOL.
19	Restore all keys and switches not required in next test.	TOL lamp extinguished.
O. Call to Test Line		
13	Select TOL subclass of test.	TOL lamp lighted.
14	Select MISC class of test.	
15	Operate KY, TLK keys.	
16	Select D through G digits for incoming trunk test line number in distant office.	
17d	If call is to 10X test line in distant office— Operate DL3 or DL6 key as required.	
18d	Select D through K digits as required. ***Note:*** Last three digits are 10X code.	
19	Momentarily operate ST key.	TAS lamp lighted. If ETS provided— FT lamp lighted.

STEP	ACTION	VERIFICATION
		Ringing tone heard. OGT-CS lamp flashes.
		Note: Ringing and supervisory signals will vary depending upon type of test line used in distant office. A series of clicks is given by synchronizing types of test line circuits to indicate that cycle of tests has been completed. The signals received on first test will indicate the signals that may be expected on successive tests to same office.
20	Momentarily operate RL key.	All lamps extinguished except TOL.
21	Restore all keys and switches not required in next test.	TOL lamp extinguished.

GENERAL TESTS

P. Trunk Busy

17	Select flat rate or AMA class of service and rate treatment as required.	
18	Select OGT class of test.	
19	Operate TTL, TLK keys.	
20	Momentarily operate ST key.	♦If CDTT key is operated— S1 lamp lighted.♦ AS lamp lighted. PK lamp not lighted. If ETS provided— FT, S1 lamps lighted. If LAMA-C provided— S1 lamp lighted. If KAMA key not operated and ETS or LAMA-C not provided— IE, RN_, T_, U_ lamps lighted.
21	Momentarily operate RL key.	All lamps extinguished.
22	Insert make-busy plug into OGT-MB jack of trunk under test.	If ETS provided— FT lamp lighted.
23	Momentarily operate ST key.	TB lamp lighted.
24	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
25	Operate NTTS, NTFS keys.	

STEP	ACTION	VERIFICATION
26	Momentarily operate ST key.	AS lamp lighted. PK lamp not lighted. If CDTT key is operated— S1 lamp lighted. If ETS or LAMA-C provided— S1 lamp lighted. If KAMA key not operated and ETS or LAMA-C not provided— IE, RN_, T_, U_ lamps lighted.
27	Momentarily operate RL key.	All lamps extinguished. If ETS provided— FT lamp remains lighted.
28	Remove make-busy plug from OGT-MB jack of trunk under test.	If ETS provided— FT lamp extinguished.
29	Restore all keys and switches not required in next test.	

Q. False-Busy and False-Idle Conditions (ETS not Provided)

1	At relay rack frame— Connect power to 1A fault locator and operate W-T switch to W position, HR-LRT switch to HR position.	Whistle heard.
2	Connect WT jack of fault locator to terminal 10 of terminal strip A on unit.	Whistle not heard.
3	While circuit under test is idle— Block operated S1 relay.	If trunk under test is the only idle trunk or the only trunk using same route on same trunk link frame— Whistle heard.
4a	If more than one trunk on same trunk link frame using same route— At MTF— Insert make-busy plugs into OGT-MB jacks of all other circuits using same route on same trunk link frame as trunk under test.	At relay rack frame— Whistle heard when last trunk made busy.
5	Momentarily remove blocking tool from S1 relay.	Whistle not heard while blocking tool removed.
6a	If more than one trunk on same trunk link frame using same route— At MTF— Remove make-busy plugs from OGT-MB jacks inserted in step 4A.	Whistle not heard if any trunks idle.

STEP	ACTION	VERIFICATION
7	At relay rack frame— Connect HRG terminal to terminal 9 of terminal strip A on unit.	
8	Disconnect WT jack of fault locator and connect to terminal 11 on terminal strip A on unit.	Whistle heard.
9	Remove blocking tool from S1 relay.	Whistle not heard.
10	Remove test connections from terminal strip.	