

**CAMA INCOMING TRUNK CIRCUITS**  
**TESTS USING TRUNK TEST CIRCUIT SD-25918-01**  
**NO. 5 CROSSBAR OFFICES**

**1. GENERAL**

**PAGE**

**1.01** This section describes methods for testing CAMA incoming trunks SD-26100-01, SD-26101-01, SD-26103-01, SD-26104-01 with or without local completion. Trunks may be arranged to repeat dial pulses using bylink operation. Supervision incoming is reverse battery or E and M lead supervision and reverse battery or simplex supervision outgoing. Calling party identification may be arranged for automatic identification or operator identification. Billing may be by CAMA or computerized billing using optional ETS-CAMA. Additionally, with reverse battery supervision, trunks may be made busy to the originating office.

outpulsing of the calling customer number by ANI equipment to a CAMA sender.

4

**1.02** This section is reissued for the following reasons listed below. Revision arrows are used to emphasize the more significant changes. This reissue does not affect Equipment Tests Lists.

**B. Supervision—Originating and Terminating Ends Disconnect:**

The following features are checked: (1) Charge functions. (2) Release of circuit without using timed release. (3) Trunk number assignment in call identity indexer and recorder number.

7

(a) To include test procedures required when the No. 5 Crossbar office is arranged with the Electronic Translation System (ETS) and the CAMA feature is provided.

**C. Supervision—Terminating End Disconnect:**

The following features are checked: (1) Charge functions. (2) Timed release of trunk within 13 to 32 seconds.

10

(b) To correct the type of patching cord specified in paragraph 2.06.

**D. Noncharge Supervision:** This test checks that an answer entry is not made when an answered call is held less than 2 seconds.

13

(c) To make minor changes as required.

**E. Cancel Disconnect Entry:** This test checks the canceling of the disconnect entry and release of the trunk if the disconnect entry is not made within 2 to 5 seconds after disconnect.

15

**1.03** The tests covered are:

**PAGE**

**A. Trunk Seizure:** The following features are checked: (1) Seizure of trunk. (2) Selection and seizure of incoming register. (3) Continuity and polarity of tip and ring leads of the originating end of the trunk. (4) Ability to terminate at a CAMA operator position through a CAMA sender, or to transmit

**F. Overflow:** The following features are checked: (1) Overflow tone is returned to the calling customer when the second usage marker is unable to establish the terminating connection. (2) For bylink-type trunks, overflow tone is returned to the calling customer when pulsing occurs before the bylink path is closed.

17

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	PAGE
<b>G. Call to Busy Line:</b> The following features are checked: (1) Charge is not made for call to busy line. (2) Transmission of busy tone. . . . .	19
<b>H. Ringing—Local Completion:</b> The following features are checked: (1) Application of various ringing combinations. (2) Polarity of ringing current on tip and ring leads of terminating end of trunk. . . . .	20
<b>I. Pretrip and Trip—Local Completion:</b> This test checks the operation of the trip relay. . . . .	22
<b>J. Call to Free Line—Local Completion:</b> This test checks that a noncharge condition is set in the trunk by the ringing selection switch on a local free line. . . . .	23
<b>K. Make-Busy and Winkoff:</b> This test is for use when the incoming trunk is associated with a code selector or intramural step-by-step office arranged for operator identification. This test checks that if the MB relay is operated before the end of pulsing, overflow tone is returned to the calling customer and the make-busy condition is maintained toward the originating office. . . . .	24
<b>1.04</b> Tests E and F require action and verification at the master test frame and relay rack frame.	
<b>1.05</b> If the trunk being tested is arranged for intertoll completion, the route selected by the operated A_ through L_ keys should provide access to outgoing (not 2-way) intertoll trunk circuits.	
<b>1.06 Lettered Steps:</b> 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, the steps designated by that letter should be omitted.

**1.07** 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.

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

**1.09** 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.

**1.10** 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 **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

**1.11** 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 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 lamp, 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.♦

**2. APPARATUS**

**Tests A Through J**

- 2.01 Master test control circuit, SD-25800-01.
- 2.02 Trunk test circuit, SD-25918-01.
- 2.03 Test circuit for register and CAMA sender circuits, SD-25988-01.
- 2.04 Test set circuit for register and CAMA sender circuits (test set), SD-25676-01.
- 2.05 Testing cord assembly, 20-conductor cord, 6 feet long, equipped with one KS-14460, L3 plug and one KS-14661, L3 plug (W20C cord) or equivalent (for connecting test set to the test circuit for register and CAMA sender circuits).
- 2.06 Patching cord, P3L cord, 12 feet long, equipped with one 310 plug and one 309 plug (3P16A cord) for connecting trunk test circuit to CAMA incoming trunk circuit.

**Tests A Through K**

- 2.07 322A (make-busy) plugs as required.

**Tests B, C, E, J**

- 2.08 KS-3008 stopwatch or equivalent.

**Tests E, F**

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

**Test K**

- 2.10 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) and two KS-6278 connecting clips as required.
- 2.11 67C test set or equivalent, equipped with a KS-6278 connecting clip (for checking the presence or absence of battery or ground).

**3. PREPARATION**

STEP	ACTION	VERIFICATION
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**All Tests Except K**

- |    |   |                         |
|----|---|-------------------------|
| 1  | At MTF—<br>Restore all keys and switches.                             |                         |
| 2  | Momentarily operate RL key.   | All lamps extinguished. |
| 3  | Patch IRT jack to IRT connector of register and CAMA sender test set. |                         |
| 4  | At test set—<br>Set L switch to OFF.                                  |                         |
| 5  | At MTF—<br>Set POS switch to 0.                                       |                         |
| 6  | Set MF switch to MIN L.   |                         |
| 7a | If trunk under test is arranged for ANI—<br>Operate AI, AD keys.      |                         |
| 8b | If trunk under test is not arranged for ANI—<br>Operate OD key.       |                         |

**SECTION 218-184-501**

STEP	ACTION	VERIFICATION
9	Insert make-busy plug into MB- jack of trunk under test.	
10	Connect CAMA/CNTX jack to T jack of trunk under test.	
11c	◆If No. 5 ETS CAMA is provided— Operate PCAM key◆	

**4. METHOD**

STEP	ACTION	VERIFICATION
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**A. Trunk Seizure**

**Bylink Incoming Trunk Circuits**

12	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04.)	
13	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided FT, S1 lamps lighted.◆ At test set— RR lamp lighted.
15b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, POSC, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— P lamp lighted.
16	At MTF— Momentarily operate RL key.	All lamps extinguished except CAMA. High tone silenced. At test set— RR, P lamps extinguished. ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
17d	If no further tests are to be performed— Restore all keys and switches	CAMA lamp extinguished.
18d	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
19d	Remove make-busy plug from MB jack of trunk under test.	

STEP	ACTION	VERIFICATION
20d	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>Nonbylink Incoming Trunks—Ground Shunt on A Relay—Operate Test, One Winding</b>		
21	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04).	
22	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
23	Operate CGS, HS keys.	
24	Restore SLP key.	
25	Momentarily operate ST key.	
26	Operate and hold GS key for approximately 3 seconds.	SLV lamp <i>not</i> lighted.
27	Operate SLP key.	SLV lamp lighted.
28a	If trunk under test is arranged for ANI— Operate LS key.	SLV lamp extinguished. MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
29	If trunk under test is not arranged for ANI— At MTF— Operate LS key.	High tone heard. SLV lamp extinguished. MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1, lamps lighted.♦ At test set— P lamp lighted.
30	At MTF— Restore SLP key.	SLV lamp lighted. OGT-CS lamp extinguished. ♦If No. 5 ETS CAMA is provided— S1 lamp extinguished.♦ High tone silenced.
31	Operate LLP key.	SLV lamp extinguished. OGT-CS lamp lighted. ♦If No. 5 ETS CAMA is provided— S1 lamp lighted.♦

SECTION 218-184-501

STEP	ACTION	VERIFICATION
32	Restore LS, LLP keys.	OCT-CS lamp extinguished. ♦If No. 5 ETS CAMA is provided— S1 lamp extinguished.
33	Momentarily operate RL key.	All lamps extinguished except CAMA. ♦If No. 5 ETS CAMA is provided— FT lamp remains lighted.♦
34d	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
35d	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
36d	Remove make-busy plug from MB jack or trunk under test.	
37d	Remove patch cord from IRT jack of register and CAMA sender test set.♦	

**Nonbylink Incoming Trunk Circuits—No Ground Shunt  
or A Relay—Operate Test, Both Windings**

38	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04.)	
39	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
40	Operate LLP, CGS, LS keys.	
41a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
42b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1, lamps lighted.♦ At test set— P lamp lighted.
43	At MTF— Restore LLP key.	SLV lamp lighted. ♦If No. 5 ETS CAMA is provided— S1 lamp extinguished.♦
44	Momentarily operate RL key.	All lamps extinguished except CAMA. High tone silenced. ♦If No. 5 ETS CAMA is provided—

STEP	ACTION	VERIFICATION
		FT lamp remains lighted.♦ At test set— RR, P lamps extinguished.
45d	At MTF— If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
46d	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
47d	Remove make-busy plug from MB jack of trunk under test.	
48d	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>B. Supervision—Originating and Terminating Ends Disconnect</b>		
12	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04.)	
13	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
15a	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— IE, T_, U_, RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <b>not</b> lighted.♦ If E-M key is operated— E lamps lighted. At test set— When last digit is pulsed— RR lamp extinguished.
16	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, POSC, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1, lamps lighted.♦ At test set— P lamp lighted.
17b	Key calling number.	At MTF— High tone silenced.

## SECTION 218-184-501

STEP	ACTION	VERIFICATION
		IE, T, U, RN lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T, U, RN lamps <i>not</i> lighted.♦ If E-M key is operated— E lamp lighted. At test set— P lamp extinguished.
18	At MTF— Operate ANS key; <i>start timing</i> .	If trunk under test is not arranged for ANI— High tone heard. In 2 to 5 seconds— AE lamp lighted. ♦If No. 5 ETS CAMA is provided— CS lamp lighted.♦
19	Restore ANS, TLK keys.	OGT-CS lamp extinguished. If E-M key is operated— E lamp extinguished. DE lamp lighted. ♦If No. 5 ETS CAMA is provided— S1, CS lamps extinguished.♦
20	Momentarily operate RL key.	All lamps extinguished except CAMA. High tone silenced. ♦If No. 5 ETS CAMA is provided— FT lamp remains lighted.♦
21c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
22c	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
23c	Remove make-busy plug from MB jack of trunk under test.	
24c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
25d	If trunk under test is arranged for local completion— Operate keys in accordance with Table A.	CAMA lamp lighted.
26d	Select A, B, C digits for local office code.	
27d	Operate TTL key.	
28e	If trunk under test is arranged for local completion and ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.

STEP	ACTION	VERIFICATION
29e	<p>Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.</p> <p><b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.</p>	<p>At MTF—            TS, IE, T_, U_, RN_ lamps lighted.            ♦If No. 5 ETS CAMA is provided—              IE, T_, U_, RN lamps <b>not</b> lighted.♦            R- lamp flashes.            Ringing tone heard in unison with R- lamp flashes.            At test set—            When last digit is pulsed—            RR lamp extinguished.</p>
30f	<p>If trunk under test is arranged for local completion but not arranged for ANI—            At MTF—            Momentarily operate ST key.</p>	<p>High tone heard.            MRL, CK2, POSC, OGT-CS lamps lighted.            ♦If No. 5 ETS CAMA is provided—              FT, S1 lamps lighted.♦            At test set—            P lamp lighted.</p>
31f	<p>Key calling number.</p>	<p>At MTF—            High tone silenced.            TS, IE, T_, U_, RN_ lamps lighted.            ♦If No. 5 ETS CAMA is provided—              IE, T_, U_, RN lamps <b>not</b> lighted.♦            R- lamp flashes.            Ringing tone heard in unison with R- lamp flashes.            At test set—            P lamp extinguished.</p>
32d	<p>If trunk under test is arranged for local completion—            At MTF—            Operate ANS key; <b>start timing</b>.</p>	<p>R- lamp extinguished.            High tone heard.            In 2 to 5 seconds—            AE lamp lighted.            ♦If No. 5 ETS CAMA is provided—              CS lamp lighted.♦</p>
33d	<p>Restore ANS, TLK keys.</p>	<p>OGT-CS, TS lamps extinguished.            DE lamp lighted.            High tone silenced.            ♦If No. 5 ETS CAMA is provided—              S1, CS lamps extinguished.♦</p>
34d	<p>Momentarily operate RL key.</p>	<p>All lamps extinguished except CAMA.            ♦If No. 5 ETS CAMA is provided—              FT lamp remains lighted.♦</p>
35c	<p>If no further tests are to be performed—            Restore all keys and switches.</p>	<p>CAMA lamp extinguished.</p>
36c	<p>♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.</p>	

SECTION 218-184-501

STEP	ACTION	VERIFICATION
37c	Remove make-busy plug from MB jack of trunk under test.	
38c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>C. Supervision—Terminating End Disconnect</b>		
<b>Note:</b> Do not proceed with this test until 2 minutes have elapsed since the thermal time-delay relay (TR) in the trunk under test was last energized.		
12	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04.)	
13	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
15a	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— IE, T_ U_ RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_ U_ RN lamps <b>not</b> lighted.♦ If E-M key is operated— E lamp lighted. At test set— When last digit is pulsed— RR lamp extinguished.
16b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard.  MRL, CK2, POSC, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1, lamps lighted.♦ At test set— P lamp lighted.
17b	Key calling number.	At MTF— High tone silenced. IE, T_ U_ RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_ U_ RN lamps <b>not</b> lighted.♦ If E-M key is operated— E lamp lighted.

STEP	ACTION	VERIFICATION
		At test set— P lamp extinguished.
18	At MTF— Operate ANS key; <i>start timing</i> .	High tone heard. In 2 to 5 seconds— AE lamp lighted. ◆If No. 5 ETS CAMA is provided— CS lamp lighted.◆
19	Restore ANS key; <i>start timing</i> .	High tone silenced. In 13 to 32 seconds— DE lamp lighted. ◆If No. 5 ETS CAMA is provided— CS lamp extinguished.◆
20	Momentarily operate RL key.	All lamps extinguished except CAMA ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
21c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
22c	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
23c	Remove make-busy plug from MB jack of trunk under test.	
24c	Remove patch cord from IRT jack of register and CAMA sender test set.◆	
	<b>Note:</b> Do not proceed with this test until 2 minutes have elapsed since the thermal time delay relay (TR) in the trunk under test was last energized.	
25d	If trunk under test is arranged for local completion— Operate keys in accordance with Table A for local terminating route.	
26d	Select A_, B_, C_ digits for local office code.	
27d	Operate TTL key.	
28e	If trunk under test is arranged for local completion and ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— RR lamp lighted.

SECTION 218-184-501

STEP	ACTION	VERIFICATION
29e	<p>Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.</p> <p><b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.</p>	<p>At MTF—            TS, IE, T_, U_, RN_ lamps lighted.            ♦If No. 5 ETS CAMA is provided—              IE, T_, U_, RN lamps <b>not</b> lighted.♦            R- lamp flashes.            Ringing tone heard in unison with R- lamp flashes.            At test set—            When last digit is pulsed—            RR lamp extinguished.</p>
30f	<p>If trunk under test is arranged for local completion but not arranged for ANI—            At MTF—            Momentarily operate ST key.</p>	<p>High tone heard.            MRL, CK2, POSC, OGT-CS lamps lighted.            ♦If No. 5 ETS CAMA is provided—              FT, S1 lamps lighted.♦            At test set—            P lamp lighted.</p>
31f	<p>Key calling number.</p>	<p>At MTF—            High tone silenced.            TS, IE, T_, U_, RN_ lamps lighted.            ♦If No. 5 ETS CAMA is provided—              IE, T_, U_, U_, RN lamps <b>not</b> lighted.♦            R- lamp flashes.            Ringing tone heard in unison with R- lamp flashes.            At test set—            P lamp extinguished.</p>
32d	<p>If trunk under test is arranged for local completion—            At MTF—            Operate ANS key; <b>start timing.</b></p>	<p>R- lamp extinguished.            High tone heard.            In 2 to 5 seconds—            AE lamp lighted.            ♦If No. 5 ETS CAMA is provided—              CS lamp lighted.♦</p>
33d	<p>Restore ANS key; <b>start timing.</b></p>	<p>High tone silenced.            In 13 to 32 seconds—            DE lamp lighted.            ♦If No. 5 ETS CAMA is provided—              CS lamp extinguished.♦</p>
34	<p>Momentarily operate RL key.</p>	<p>All lamps extinguished except CAMA.            ♦If No. 5 ETS CAMA is provided—              FT lamp remains lighted.♦</p>
35c	<p>If no further tests are to be performed—            Restore all keys and switches.</p>	<p>CAMA lamp extinguished.</p>
36c	<p>♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.</p>	

STEP	ACTION	VERIFICATION
37c	Remove make-busy plug from MB jack of trunk under test.	
38c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>D. Noncharge Supervision</b>		
12	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04.)	
13	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
15a	Momentarily operate following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— IE, T_ U_ RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_ U_ RN lamps <b>not</b> lighted.♦ R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— When last digit is pulsed— RR lamp extinguished.
16b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard.  MRL, CK2, POSC, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— P lamp lighted.
17b	Key calling number.	At MTF— High tone silenced. IE, T_ U_ RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_ U_ RN lamps <b>not</b> lighted. If E-M key is operated— E lamp lighted. At test set— P lamp extinguished.
18	At MTF— Operate ANS key for 2 seconds.	AE lamp <b>not</b> lighted. While ANS key is operated—

SECTION 218-184-501

STEP	ACTION	VERIFICATION
		High tone heard. ◆If No. 5 ETS CAMA is provided— CS lamp <i>not</i> lighted.◆
19	Momentarily operate RL key.	All lamps extinguished except CAMA. ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
20c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp lighted.
21c	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
22	Remove make-busy plug from MB jack of trunk under test.	
23c	Remove patch cord from IRT jack of register and CAMA sender test set.◆	
24d	If trunk under test is arranged for local completion— Operate keys in accordance with Table A for local terminating route.	
25d	Select A_, B_, C_ digits for local office code.	
26d	Operate TTL key.	
27e	If trunk under test is arranged for local completion and ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— RR lamp lighted.
28e	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <i>Note:</i> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— TS, IE, T_, U_, RN_ lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <i>not</i> lighted. R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— RR lamp extinguished.
29f	If trunk under test is arranged for local completion but not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. ITNP, MRL, CK2, POSC, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— P lamp lighted.

STEP	ACTION	VERIFICATION
30f	Key calling number.	At MTF— High tone silenced. TS, IE, T_, U_, RN_ lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <b>not</b> lighted.◆ R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— P lamp extinguished.
31d	At MTF— Operate ANS key for 2 seconds.	AE lamp <b>not</b> lighted. While ANS key is operated— High tone heard. ◆If No. 5 ETS CAMA is provided— CS lamp <b>not</b> lighted.◆
32d	Momentarily operate RL key.	All lamps extinguished except CAMA. ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
33c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
34c	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
35c	Remove make-busy plug from MB jack of trunk under test.	
38c	Remove patch cord from IRT jack of register and CAMA sender test set.◆	

#### E. Cancel Disconnect Entry

**Note 1:** Refer to paragraph 1.03.

**Note 2:** Do not proceed with this test until 2 minutes have elapsed since the thermal time-delay relay (TR) in the circuit under test was last energized.

12	Select A_ through L_ digits for tandem or intertoll terminating route. (Refer to paragraph 1.04.)	
13	Operate keys in accordance with Table A for selected route.	CAMA lamp lighted.
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆

STEP	ACTION	VERIFICATION
		At test set— RR lamp lighted.
15a	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <i>Note:</i> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— IE, T-, U-, RN- lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T, U, RN lamps <b>not</b> lighted. If E-M key is operated— E lamp lighted. At test set— When last digit is pulsed— RR lamp extinguished.
16b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, POSC, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— P lamp lighted.
17b	Key calling number.	At MTF— High tone silenced. IE, T, U, RN lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T, U, RN lamps <b>not</b> lighted.◆ If E-M key is operated— E lamp lighted. At test set— P lamp extinguished.
18	At MTF— Operate ANS key.	High tone heard. AE lamp lighted. ◆If No. 5 ETS CAMA is provided— CS lamps lighted.◆
19c	If trunk under test is nonbylink— At relay rack frame— Insulate 7B of D relay.	
20d	If trunk under test is bylink— At relay rack frame— Insulate 6B of D relay.	
21	At MTF— Restore TLK, ANS keys; <i>start timing.</i>	At relay rack frame— In 2 to 5 seconds— MA relay released. At MTF— DE lamp <b>not</b> lighted. ◆If No. 5 ETS CAMA is provided— S1, CS lamps extinguishd.◆

STEP	ACTION	VERIFICATION
22	At relay rack frame— Remove insulator from D relay.	
23	At MTF— Momentarily operate RL key.	All lamps extinguished except CAMA. ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
24	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
25f	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
26f	Remove make-busy plug from MB jack of trunk under test.	
27f	Remove patch cord from IRT jack of register and CAMA sender test set.◆	
<b>F. Overflow</b>		
12	Operate keys in accordance with Table A for tandem or intertoll terminating route.	CAMA lamp lighted.
13	Select A- through G- digits for local office code and permanent overflow number.	
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1, lamps lighted.◆ At test set— RR lamp lighted.
15a	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <b>Note:</b> Keying must be completed within 4.8 seconds to avoid sender timeout.	At MTF— Overflow tone heard. IE, T, U, RN lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T, U, RN lamps <i>not</i> lighted.◆ If trunk under test is equipped with AF100 RV relay— At relay rack frame— RV relay operated. At test set— When last digit is pulsed— RR lamp extinguished.
16b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, POSC, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1, lamps lighted.◆ At test set— P lamp lighted.

SECTION 218-184-501

STEP	ACTION	VERIFICATION
17b	Key calling number.	At MTF— High tone silenced. Overflow tone heard. IE, T, U, RN lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T, U, RN lamps <i>not</i> lighted.♦ At test set— P lamp extinguished. If trunk under test is equipped with AF100 RV relay— At relay rack frame— RV relay operated.
18	At MTF— Momentarily operate RL key.	All lamps extinguished except CAMA. ♦If No. 5 ETS CAMA is provided— FT lamp remains lighted.♦
19c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
20c	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
21c	Remove make-busy plug from MB jack of trunk under test.	
22c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
23d	If bylink incoming trunk is under test— At relay rack frame— Block nonoperated R relay.	
24d	Insulate 4M of B relay.	
25e	If CLRR key is provided— At MTF— Operate CLRR key.	
26d	If bylink incoming trunk is under test— At MTF— Momentarily operate ST key.	OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided FT, S1, lamps lighted.♦
27d	Dial digit 0.	Overflow tone heard. Minor alarm sounds. If trunk under test is equipped with AF100 RV relay— At relay rack frame— RV relay operated.
		<p><b>Note:</b> If a nonwire-spring-type relay marker was selected, a trouble record will be taken.</p>

STEP	ACTION	VERIFICATION
		If a wire-spring-type relay marker was selected, no trouble record will be taken.
28d	At MTF— Momentarily operate RL key.	All lamps extinguished except CAMA. ♦If No. 5 ETS CAMA is provided— FT lamp remains lighted.♦
29d	Momentarily operate AR key.	Minor alarm silenced.
30d	At relay rack frame— Remove blocking tool from R relay.	
31d	Remove insulator from B relay.	
32c	At MTF— If no further tests are to be performed— Restore all keys and switches.	
33c	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
34c	Remove make-busy plug from MB jack of trunk under test.	
35c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	CAMA lamp extinguished.

#### G. Call to Busy Line

12	Select A_ through L_ digit for tandem or intertoll route to distant busy line. (Refer to paragraph 1.04.)	
13	Operate keys in accordance with Table A for selected route.	
14	Operate OP key.	
15a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
16a	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.	At MTF— IE lamp lighted. Busy tone heard. AE lamp <i>not</i> lighted.
	<b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.	At test set— When last digit is pulsed— RR lamp extinguished.

**SECTION 218-184-501**

STEP	ACTION	VERIFICATION
17b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CKT, POSC, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— P lamp lighted.
18b	Key calling number.	At MTF— High tone silenced. Busy tone heard. IE lamp lighted. AE lamp <i>not</i> lighted. At test set— P lamp extinguished.
19	At MTF— Momentarily operate RL key.	All lamps extinguished except CAMA. ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
20c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
21c	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
22c	Remove make-busy plug from MB jack of trunk under test.	
23c	Remove patch cord from IRT jack of register and CAMA sender test set.◆	
24d	If trunk under test is arranged for local completion— Operate keys in accordance with Table A for local terminating route.	
25d	Select A_, B_, C_ digits to select local office code.	
26d	Operate BB key.	
27d	Repeat Steps 14 through 23c.	

**H. Ringing—Local Completion**

12	Operate keys in accordance with Table A for local terminating route.	CAMA lamp lighted.
13	Select A_ through L_ digits for local terminating test line for first provided ringing combination. (Refer to Table B.)	

STEP	ACTION	VERIFICATION
14a	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— RR lamp lighted.
15a	Momentarily operate the following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— TS, IE, T_, U_, RN_ lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <b>not</b> lighted.◆ R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— When last digit is pulsed— RR lamp extinguished.
16b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, POSC, OGT-CS lamps lighted. ◆If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.◆ At test set— P lamp lighted.
17b	Key calling number.	At MTF— High tone silenced. IE, T_, U_, RN_ lamps lighted. ◆If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <b>not</b> lighted.◆ R+, R-, T+, or T- lamp flashes. (Refer to Table B.) Ringing tone heard in unison with R- lamp flashes. At test set— P lamp extinguished.
18	At MTF— Momentarily operate RL key.	All lamps extinguished except CAMA. ◆If No. 5 ETS CAMA is provided— FT lamp remains lighted.◆
19	Repeat Steps 13 through 18 for each ringing combination provided.	
20c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
21c	◆Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
22c	Remove make-busy plug from MB jack of trunk under test.	

SECTION 218-184-501

STEP	ACTION	VERIFICATION
23c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>I. Pretrip and Trip—Local Completion</b>		
12	Operate keys in accordance with Table A for local completion.	CAMA lamp lighted.
13	Select A_, B_, C_ digits for local office code.	
14	Operate TTL key.	
15	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
16a	Momentarily operate the following keys, in turn: KP, number 0 for X digit, calling number, ST.  <i>Note:</i> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— TS, IE, T_, U_, RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <i>not</i> lighted.♦ R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— When last digit is pulsed— RR lamp extinguished.
17b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, POSC, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— P lamp lighted.
18b	Key calling number.	At MTF— High tone silenced. TS, IE, T_, U_, RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <i>not</i> lighted.♦ R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— P lamp extinguished.
19	At MTF— Operate and hold PTP key for 1/2 second during silent interval of ringing.	R- lamp continues to flash. Ringing tone heard in unison with R- lamp flashes.

STEP	ACTION	VERIFICATION
20	Operate and hold TRP key for 1 second during silent interval of ringing.	R- lamp extinguished. Ringing tone silenced.
21	Momentarily operate RL key.	All lamps extinguished except CAMA. ♦If No. 5 ETS CAMA is provided— FT lamp remains lighted.♦
22c	Restore all keys and switches not required in next test.	CAMA lamp extinguished.
23c	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
24c	Remove make-busy plug from MB jack of trunk under test.	
25c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>J. Call to Free Line—Local Completion</b>		
12	Operate keys in accordance with Table A for local completion.	CAMA lamp lighted.
13	Select A_ through L_ digits for terminating test line.	
14	If trunk under test is arranged for ANI— Momentarily operate ST key.	MRL, CK2, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— RR lamp lighted.
15a	Momentarily operate following keys, in turn: KP, numeral 0 for X digit, calling number, ST.  <b>Note:</b> Keying must be completed in 4.8 seconds to avoid sender timeout.	At MTF— IE, T_, U_, RN_ lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T_, U_, RN lamps <b>not</b> lighted.♦ R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— When last digit is pulsed— RR lamp extinguished.
16b	If trunk under test is not arranged for ANI— At MTF— Momentarily operate ST key.	High tone heard. MRL, CK2, POSC, OGT-CS lamps lighted. ♦If No. 5 ETS CAMA is provided— FT, S1 lamps lighted.♦ At test set— P lamp lighted.

## SECTION 218-184-501

STEP	ACTION	VERIFICATION
17b	Key calling number.	At MTF— High tone silenced. IE, T, U, RN lamps lighted. ♦If No. 5 ETS CAMA is provided— IE, T, U, RN lamps <i>not</i> lighted. R- lamp flashes. Ringing tone heard in unison with R- lamp flashes. At test set— P lamp extinguished.
18	At MTF— Operate ANS key; <i>start timing</i> .	R- lamp extinguished. Ringing tone silenced. High tone heard. In 6 seconds— AE lamp <i>not</i> lighted. ♦If No. 5 ETS CAMA is provided— CS lamp <i>not</i> lighted.♦
19	Restore ANS key.	DE lamp <i>not</i> lighted. High tone silenced.
20	Momentarily operate RL key.	All lamps extinguished except CAMA. ♦If No. 5 ETS CAMA is provided— FT lamp remains lighted.♦
21c	If no further tests are to be performed— Restore all keys and switches.	CAMA lamp extinguished.
22c	♦Remove patch cord from CAMA/CNTX jack to T jack of trunk under test.	
23c	Remove make-busy plug from MB jack of trunk under test.	
24c	Remove patch cord from IRT jack of register and CAMA sender test set.♦	
<b>K. Make-Busy and Winkoff</b>		
1	At MTF— When trunk under test is idle— Insert make-busy plug into MB jack associated with trunk under test.	If SD-26101-01 is under test— At relay rack frame— Ground present on 6 of MB relay. If SD-26104-01 is under test— At relay rack frame— Ground present on 4 of MB relay.
2	Connect terminal 48 to terminal 58 of terminal strip A.	
3	Connect test set to terminal 58 of terminal strip and ground.	Overflow tone heard at test set.

STEP	ACTION	VERIFICATION
4	Check for presence of ground on terminal 18 of terminal strip B.	Ground present.
	<i>Note:</i> Maintain test set connection to terminal 18 of terminal strip B while performing Step 5.	
5	Remove test connection from terminal 58 of terminal strip A.	Ground momentarily absent on terminal 18 of terminal strip B.
6	Remove test connections and test sets.	
7	At MTF— Remove make-busy plug.	

**TABLE A**  
**MTF KEY OPERATIONS FOR CAMA TRUNK TESTS**

CAMA INCOMING TRUNK		TYPE OF COMPLETION	OUTGOING TRUNK OG SUPERVISION	OPERATE KEYS	
TYPE	INC SUPV			AT MTF	AT TTC
Nonbyl	Rev Bat.	Tandem		ITNP,KY,CAM0	TLK,COGT,SLP
Nonbyl	Rev Bat.	Intertoll	Rev Bat.	ITNP,KY,CAM1	TLK,COGT,SLP
Nonbyl	Rev Bat.	Intertoll	E & M Leads	ITNP,KY,CAM1	TLK,SLP,E-M
Nonbyl	Rev Bat.	Local		ITNP,CAM0	TLK,SLP
Bylink	E & M Leads	Tandem		ITNP,KY,CAM0	TLK,COGT,CEMI
Bylink	E & M Leads	Intertoll	Rev Bat.	ITNP,KY,CAM1	TLK,COGT,CEMI
Bylink	E & M Leads	Intertoll	E & M Leads	ITNP,KY,CAM1	TLK,E-M,CEMI
Bylink	E & M Leads	Local		ITNP,CAM0	TLK,CEMI
Bylink	Rev Bat.	Tandem		ITNP,KY,CAM0	TLK,COGT,SXS
Bylink	Rev Bat.	Intertoll	Rev Bat.	ITNP,KY,CAM1	TLK,COGT,SXS
Bylink	Rev Bat.	Intertoll	E & M Leads	ITNP,KY,CAM1	TLK,E-M,SXS
Bylink	Rev Bat.	Local		ITNP,CAM0	TLK,SXS
Bylink	Loop*	Tandem		ITNP,KY,CAM0	TLK,COGT,SXS,IRV
Bylink	Loop*	Intertoll	Rev Bat.	ITNP,KY,CAM1	TLK,COGT,SXS,IRV
Bylink	Loop*	Intertoll	E & M Leads	ITNP,KY,CAM1	TLK,E-M,SXS,IRV
Bylink	Loop*	Local		ITNP,CAM0	TLK,SXS,TRV

\* Incoming from intramural (local) step-by-step office.

TABLE B — RINGING CODE CHECK CHART

RINGING COMB.	RINGING SELECTION SWITCH SELECT MAGNETS OPERATED	RINGING DETECTION LAMP LIGHTED	RINGING TEST LINE NO.	RINGING CODES	RINGING INTERVAL IN SECONDS							REMARKS	
					0	1	2	3	4	5	6		
1*†	0,6	R-		Code 1 Gen	█	█							
2	0,2	R-		Code 1 Gen									
		R-		Code 2 Gen	█								
		R-		Continuous	█	█	█	█	█	█	█	█	█
3*	0,3	R+		Code 2+	█								
		R-		Code 1 Gen									
		R-		Code 3 Gen	█								
4	0,4	R+		Code 3+	█								
		R-		Code 4 Gen	█								
		R-		Code 1 HV	█								
5*	0,5	R-		Code 2 Gen	█								
		R-		Code 5 Gen	█								
		§¶		-48 Ring, Grd Tip	█	█	█	█	█	█	█	█	█
6	0,7	§¶		-48 Ring, Grd Tip	█	█	█	█	█	█	█	█	Silent Level
		R+		Code 1+	█								
		R-		Code 2 Gen	█								
7*	1,7	T-§		-48 Tip, Grd Ring	█	█	█	█	█	█	█	█	Silent Level
		T+		Code 1+	█								
		T-		Code 2 Gen	█								
8*	0,8	R-		Code 1 Gen	█								Free Line
		R+		Code 2+	█								
9	1,8	T-		Code 1 Gen	█								Free Line
		T+		Code 2+	█								
10‡	0,6	R-		Code 1 Gen	█								
11*†	1,6	T-		Code 1 Gen	█								
12*	1,2	T-		Code 1 Gen									
		T-		Code 2 Gen	█								
		T-		Continuous	█	█	█	█	█	█	█	█	█
13	1,3	T+		Code 2+	█								
		T-		Code 1 Gen									
		T-		Code 3 Gen	█								
		T+		Code 3+	█								
14*	1,4	T-		Code 4 Gen	█								
		T-		Code 1 HV	█								
		T-		Code 2 Gen	█								
15	1,5	T+		Code 2+	█								
		T-		Code 2 Gen	█								
		T-		Code 5 Gen	█								
		T-§		-48 Tip, Grd Ring	█	█	█	█	█	█	█	█	█

\*These ringing combinations check all equipped crosspoints on the ringing selection switch.

†In offices arranged for marker controlled immediate ring, set RMBR switch to position 1.

‡Ringing combination 10 is listed for information purposes only and should not be used for testing the ringing feature.

§If line link pulsing or direct access to No. 101 ESS is provided, operate RTK key to test silent level.

¶No indication.

