

**tone or recorded announcement circuit
with or without audible ring (SD-2H118
and SD-2H119)—TEST
NO. 2 ELECTRONIC SWITCHING SYSTEM**

1. General

1.01 This section describes the procedure for testing the tone or recorded announcement circuit (SD-2H118) or the audible ring and recorded announcement circuit (SD-2H119) used in the No. 2 Electronic Switching System (ESS).

1.02 The following test will be performed.

Relay Operation: This test verifies the operation of the individual relays in the circuit. The trunk test panel (TTP) provides a talk battery to operate the EN relay when the TALK key is depressed. A tone or recorded announcement verifies the operation of the individual relays.

1.03 The tone or recorded announcement circuit with or without audible ring test is performed on a periodic basis as prescribed by equipment test list procedures or when malfunction of the circuit is suspected.

1.04 The test will be performed from the TTP. For detailed information about the TTP and its operation, refer to Section 232-130-301, TRUNK TEST PANEL—METHOD OF OPERATION.

1.05 The keys on the TTP may be either a locking or a nonlocking type. In order to differentiate between the two types of keys, the use of a locking type key shall be identified by the words "operate" and "release" and the use of

a nonlocking type key shall be identified by the word "depress" in the ACTION column.

Note: Nonlocking keys require a depression of at least one-half second to ensure system recognition.

1.06 Lettered Steps: A letter a, b, c, etc, added to a step number in Part 3 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 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 tests. Where a condition does not apply, all steps designated by the letter should be omitted.

2. APPARATUS

2.01 No. 52 type, head telephone set.

3. METHOD

3.01 Refer to the office records to obtain the trunk group number (TGN) and the member number (MEMN) of the circuit to be tested.

3.02 If the verification procedure fails or if a malfunctioning circuit is indicated during any part of this test, proceed as follows:

- (1) Discontinue the test.
- (2) Troubleshoot the circuit which failed.

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SECTION 232-157-501

- (3) Replace faulty circuit components using standard repair procedures.
- (4) Repeat the test step which failed. If verification indicates that the faulty circuit has been repaired, continue the test.

3.03 Use the following procedure to make the circuit traffic busy and to connect it to the TTP (Fig. 1).

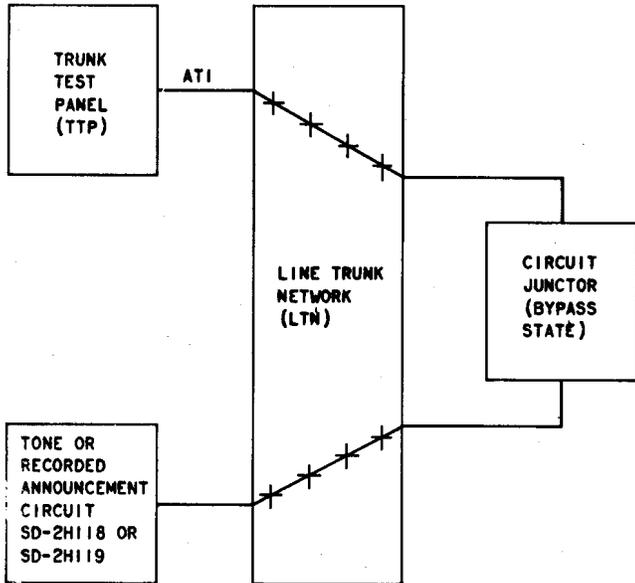


Fig. 1—Test Configuration Using Trunk Test Panel When Testing a Tone or Recorded Announcement Circuit With or Without Audible Ring

STEP	ACTION	VERIFICATION
1	At telephone set on TTP— Operate access trunk 1 key.	
2	Lift handset off-hook, or operate TRFR key at TEL CKT on TTP is using headset.	At telephone set— Access trunk 1 lamp lighted. At ACCESS TRUNK 1 CONTROL— SUPV lamp lighted. At TEL CKT— TRFR lamp lighted if TRFR key is operated.
3	At TOUCH-TONE® dial— Dial 1 + TGN + MEMN + ST.	At ACCESS TRUNK 1 CONTROL— EQPT ST lamp lighted steadily or flashing at a rate of 120 interruptions per minute.

STEP	ACTION	VERIFICATION
		At MISC TEST CONTROL— P & E lamp lighted if connection was successful.
		<i>Note:</i> If the EQPT ST lamp is flashing and the P & E lamp is not lighted steadily, the TTP is not connected to the circuit to be tested.
4a	If the P & E lamp is not lighted steadily— At ACCESS TRUNK 1 CONTROL— Depress RLS key.	
5a	Repeat step 3 until connection is successful.	
6	Place handset on-hook or release TRFR key.	At telephone set— Access trunk 1 lamp extinguished. At TEL CKT— TRFR lamp extinguished.
7	At ACCESS TRUNK 1 CONTROL— Depress VM key.	At ACCESS TRUNK 1 CONTROL— VM lamp lighted. At VOLTMETER CONTROL— 100K lamp lighted. At VOLTMETER— Meter indicates 0.
8	At VOLTMETER CONTROL— Depress 1K key. Operate GRD key.	At VOLTMETER CONTROL— 100K lamp extinguished. 1K lamp lighted GRD lamp lighted. At VOLTMETER— Meter indicates between 7.2 and 8.8 volts on 24-volt scale.
9	Release GRD key.	GRD lamp extinguished.
10	At front of writing shelf— Insert headset in TEL SET jack.	
11	At ACCESS TRUNK 1 CONTROL— Depress TALK key.	At ACCESS TRUNK 1 CONTROL— TALK lamp lighted. VM lamp extinguished. At VOLTMETER CONTROL— 1K lamp extinguished. At headset—
		<i>For SD-2H118—</i> Tone or recorded announcement present. <i>For SD-2H119 with Z option—</i> Recorded announcement present. <i>For SD-2H119 without Z option—</i>

SECTION 232-157-501

STEP	ACTION	VERIFICATION
		Up to 12 seconds of audible ring, followed by 12 seconds of recorded announcement present.
12	At ACCESS TRUNK 1 CONTROL— Depress RLS key.	At ACCESS TRUNK 1 CONTROL— TALK lamp extinguished. SUPV lamp extinguished. EQPT ST lamp extinguished. At MISC TEST CONTROL— P & E lamp extinguished.
13	At telephone set on TTP— Operate green release key.	