

ATTENDANT ACCESS TRUNK SD-27851-01
FOR USE WITH 608A SWITCHBOARD
TESTS USING TRUNK TEST CIRCUIT SD-25918-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

PAGE

1.01 This section is reissued to include Electronic Translation System (ETS) features. This reissue does not affect Equipment Test Lists.

1.02 The tests covered are:

PAGE

A. Extension of Call On-Net (Switched Connection): The following features are checked: (1) Seizure of trunk. (2) Continuity and polarity of tip and ring leads. (3) Attendant answer. (4) Extension of call to on-net station. (5) Station answer. (6) Automatic trunk release. **4**

B. Attendant Release After Startout (Switched Connection): This test checks that the attendant can cancel a startout signal and indicate a new startout signal as follows: (1) When no originating registers are available, (2) after releasing originating register (partial dial), and (3) after releasing destination (on-net station busy or does not answer). **5**

C. Release Source (Switched Connection): This test checks that the attendant can release an incoming call when the calling party fails to go on-hook. **7**

D. Call to Distant Switchboard (Switched Connection): This test checks that a test call can be completed to an assistant at the service switchboard. **8**

E. Trunk Busy (Switched Connection): This test checks that the trunk can be made busy and that it: (1) can be seized for testing, (2) is busy to service calls, and (3) after release from a made-busy condition, can be seized on a service call. **8**

F. False-Busy and False-Idle Conditions (Switched Connection): This test checks for continuity and crosses on the F, FT, and BT leads. **9**

G. Extension of Call On-Net (Direct-Wired Connection): The following features are checked: (1) Seizure of trunk. (2) Continuity and polarity on tip and ring leads. (3) Attendant answer. (4) Extension of call to on-net station. (5) Station answer. (6) Automatic trunk release. **10**

H. Attendant Release After Startout (Direct-Wired Connection): This test checks that the attendant can cancel a startout signal and initiate a new startout signal as follows: (1) when no originating registers are available and (2) after releasing destination (on-net station busy or does not answer). **11**

I. Release Source (Direct-Wired Connection): This test checks that the attendant can release an incoming call when the calling party fails to go on-hook. **12**

NOTICE

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

**J. Call to Distant Switchboard
(Direct-Wired Connection):**

This test checks that a test call can be completed to an assistant at the service switchboard.

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1.03 Tests D and J require assistance at the service switchboard.

1.04 Test F requires that all trunks of the same route and on the same trunk link frame as the trunk under test be made busy.

1.05 The statement between the asterisks (*---*) after ACTION or VERIFICATION statements is added to clarify the function being simulated or the action taking place in the test procedures.

1.06 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.

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

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

218-799-701 - taking ETS Equipment
Out-of-Service.

1.09 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 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.

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

2. APPARATUS

All Tests Except F

2.01 Trunk test circuit SD-25918-01.

2.02 Master test control circuit SD-25800-01.

Test F

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

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

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

2.06 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord), one KS-6278 connecting clip, and one 624A tool as required (for connecting ground to relay winding terminal).

2.07 Blocking tool. Use tool and apply as covered in Section 069-020-801.

Tests G Through J

2.08 Patching cords, P3E cord, 6 feet long, equipped with two 310 plugs (3P7A) (for patching T1 and T2 jacks of remote line circuit to T1 and T2 jacks on relay rack miscellaneous circuit).

3. PREPARATION**STEP****ACTION****VERIFICATION**

Note: Refer to ¶1.03 through 1.10

All Tests Except F

1 At MTF—
Restore all keys and switches.

2 Momentarily operate RL key.

All lamps extinguished.

Tests A Through E

3 Select completing marker.

4 Select OR class of call with associated translator indication.

5 Select trunk to be tested.

6 Operate GPA/GPB key for required trunk group when the trunk is in an allotted trunk group.

7 Select class of service and rate treatment (if required) that will route test call to trunk under test.

8 Select route advance 0.

9 Select digit A-0.

10 Operate TLK, KY, ONAL, ANS, OEM, LRR keys.

11a ¶If ETS provided—
Operate PCS, PTS keys.¶

Tests A, B, C, E

12 Select OGT class of test.

Tests A Through D

13 Operate FS, TS keys.

Tests G Through J

14 When trunk under test is idle—
At relay rack frame—
Patch T1, T2 jacks of remote line circuit associated with trunk under test to T1, T2

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| STEP | ACTION | VERIFICATION |
|--|--|--|
| | jacks, respectively, on the relay rack frame miscellaneous circuit. | |
| 15 | At MTF— Operate TLK, LLS, OEM, ONAL keys. | |
| A. Extension of Call On-Net (Switched Connection) | | |
| 14 | Momentarily operate ST key. *Trunk seizure.* | ◆If ETS provided— FT lamp lighted.◆ PK, AS, CTX lamps lighted. Ringing tone heard. |
| 15 | Operate CANS key. *Attendant answer.* | PK lamp extinguished. Ringing tone silenced. High tone heard. CTX lamp extinguished. |
| 16 | Restore TLK key. | High tone silenced. |
| 17 | Operate STI key. *Attendant startout signal.* | |
| 18 | Operate HP key. *Preparation for detection of +130 volts on tip lead.* | R- lamp lighted. *Detection of +130 volts on tip lead.* |
| 19 | Restore OEM key. | |
| 20 | Restore HP key. *Removal of +130 volts and application of ground start signal.* | R- lamp extinguished. OGT-CS lamp lighted. |
| 21 | Restore ONAL key. | OGT-CS lamp extinguished. |
| 22 | Operate ORV key. *Originating register attached and awaiting pulsing.* | LLS, RDY lamps lighted. |
| 23 | Momentarily operate RR key. *Ground start signal removal check.* | LLS lamp momentarily extinguished. GL lamp lighted. RDY lamp extinguished. |
| 24 | Restore STI key. *Attendant operation of END key at end of pulsing.* | CTX lamp flashes at 30 ipm. *Awaiting station answer.* |
| 25b | If attendant verification of on-net station is not provided— Operate LLR key. *Station answer.* | ◆If ETS provided— FT lamp extinguished.◆ AS, LLS, CTX, GL lamps extinguished. *Release of attendant and trunk from connection.* |

| STEP | ACTION | VERIFICATION |
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| 26c | If attendant verification of on-net station is provided— Operate LLR, TLK, OEM keys. *Station answer.* | High tone heard. CTX lamp lighted steady. |
| 27c | Restore CANS key. *Attendant releases connection.* | High tone silenced. AS, LLS, CTX, GL lamps extinguished. *Release of attendant and trunk from connection.* |
| 28 | Momentarily operate RL key. | All lamps extinguished. |
| 29 | Restore all keys and switches not required in next test. | |
| B. Attendant Release After Startout (Switched Connection) | | |
| 14 | Momentarily operate ST key. *Trunk seizure.* | If ETS provided— FT lamp lighted. PK, AS, CTX lamps lighted. Ringing tone heard. |
| 15 | Operate CANS key. *Attendant answer.* | PK lamp extinguished. Ringing tone silenced. CTX lamp extinguished. High tone heard. |
| 16 | Restore TLK key. | High tone silenced. |
| 17 | Operate STI key. *Attendant startout signal.* | |
| 18 | Operate HP key. *Preparation for detection of +130 volts on tip lead.* | R- lamp lighted. *Detection of +130 volts on tip lead.* |
| 19 | Restore OEM ky. | |
| 20 | Restore HP key. *Removal of +130 volts and application of ground start signal.* | R- lamp extinguished. OGT-CS lamp lighted. |
| 21 | Restore STI key. *Attendant operation of END key— no originating register available.* | |
| 22 | Momentarily operate RB key. *20-Hz ringing on tip and ring leads from attendant.* | OGT-CS lamp extinguished. CTX lamp may light momentarily. |
| 23 | Operate STI key. *Attendant startout signal.* | |

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| STEP | ACTION | VERIFICATION |
|---------------------|--|--|
| 24 | Operate HP key. *Preparation for detection of +130 volts on tip lead.* | R- lamp lighted. *Detection of +130 volts on tip lead.* |
| 25 | Restore HP key. *Removal of +130 volts and application of ground start signal.* | R- lamp extinguished. OGT-CS lamp lighted. |
| Partial Dial | | |
| 26 | Restore ONAL key. | OGT-CS lamp extinguished. |
| 27 | Operate ORV key. *Originating register attached and awaiting pulsing.* | LLS, RDY lamps lighted. |
| 28 | Momentarily operate RR key. *Ground start signal removal check.* | LLS lamp momentarily extinguished. GL lamp lighted. RDY lamp extinguished. |
| 29 | Operate ONAL key. | |
| 30 | Restore STI key. *Attendant operation of END key after partial dialing.* | |
| 31 | Momentarily operate RD key. *Attendant operation of RLS DEST key.* | GL lamp extinguished. CTX lamp momentarily lighted. |
| 32 | Restore ORV key. | LLS lamp extinguished. |
| 33 | Operate STI key. *Attendant startout signal.* | |
| 34 | Operate HP key. *Preparation for detection of +130 volts on tip lead.* | R- lamp lighted. *Detection of +130 volts on tip lead.* |
| 35 | Restore HP key. *Removal of +130 volts and application of ground start signal.* | R- lamp extinguished. OGT-CS lamp lighted. |
| 36 | Restore ONAL key. | OGT-CS lamp extinguished. |
| 37 | Operate ORV key. *Originating register attached and awaiting pulsing.* | LLS, RDY lamps lighted. |
| 38 | Momentarily operate RR key. *Ground start signal removal check.* | LLS lamp momentarily extinguished. GL lamp lighted. RDY lamp extinguished. |

| STEP | ACTION | VERIFICATION |
|--|--|---|
| 39 | Restore STI key. *Attendant operation of END key at end of pulsing.* | CTX lamp flashes at 30 ipm. *Awaiting station answer.* |
| 40 | Momentarily operate RD key. *Attendant release of destination before station answer.* | LLS lamp momentarily extinguished. CTX lamp extinguished. |
| 41 | Operate ONAL key. | |
| 42 | Restore ORV key. | LLS lamp extinguished. |
| 43 | Operate STI key. *Attendant startout signal.* | |
| 44 | Operate HP key. *Preparation for detection of +130 volts on tip lead.* | R- lamp lighted. *Detection of +130 volts on tip lead.* |
| 45 | Restore HP key. *Removal of +130 volts and application of ground start signal.* | R- lamp extinguished. OGT-CS lamp lighted. |
| 46 | Restore STI, CANS keys. *Attendant release of source.* | ◆If ETS provided— FT lamp extinguished.◆ AS, OGT-CS lamps extinguished. |
| 47 | Momentarily operate RL key. | All lamps extinguished. |
| 48 | Restore all keys and switches not required in next test. | |
| C. Release Source (Switched Connection) | | |
| 14 | Momentarily operate ST key. *Trunk seizure.* | ◆If ETS provided— FT lamp lighted.◆ PK, AS, CTX lamps lighted. Ringing tone heard. |
| 15 | Operate CANS key. *Attendant answer.* | PK lamp extinguished. Ringing tone silenced. High tone heard. |
| 16 | Restore CANS key. *Attendant release of source.* | ◆If ETS provided— FT lamp extinguished.◆ AS, CTX lamps extinguished. High tone silenced. |
| 17 | Momentarily operate RL key. | All lamps extinguished. |
| 18 | Restore all keys and switches not required in next test. | |

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| STEP | ACTION | VERIFICATION |
|---|---|---|
| D. Call to Distant Switchboard (Switched Connection) | | |
| 14 | Select MISC class of test. | |
| 15 | Momentarily operate ST key. | ♦If ETS provided— FT lamp lighted.♦ AS, PK lamps lighted. Ringing tone heard. At distant switchboard— Assistant answers call. At MTF— Ringing tone silenced. PK lamp extinguished. Talking path established between MTF and distant switchboard. |
| 16 | Request assistant at distant switchboard to release call. | Talking path removed between MTF and distant switchboard. AS lamp extinguished. ♦If ETS provided— FT lamp extinguished.♦ |
| 17 | Momentarily operate RL key. | All lamps extinguished. |
| 18 | Restore all keys and switches not required in next test. | |
| E. Trunk Busy (Switched Connection) | | |
| 13 | Operate NTFS, NTTS keys. | |
| 14 | At relay rack frame— Set MB switch to MB associated with trunk to be tested. | |
| 15 | At MTF— Momentarily operate ST key. | ♦If ETS provided— FT lamp lighted.♦ PK, AS, CTX lamps lighted. Ringing tone heard. |
| 16 | Momentarily operate CANS key. | PK, AS, CTX lamps extinguished. Ringing tone silenced. |
| 17 | Momentarily operate RL key. | All lamps extinguished. ♦If ETS provided— FT lamp remains lighted.♦ |
| 18 | Operate FS, TS keys. | |
| 19 | Momentarily operate ST key. | TB lamp lighted. |
| 20 | Momentarily operate RL key. | All lamps extinguished. |

| STEP | ACTION | VERIFICATION |
|------|--|--|
| 21 | At relay rack frame— Restore MB switch to N. | ◆If ETS provided— FT lamp extinguished.◆ |
| 22 | At MTF— Momentarily operate ST key. | ◆If ETS provided— FT lamp lighted.◆ PK, AS, CTX lamps lighted. Ringing tone heard. |
| 23 | Momentarily operate CANS key. | ◆If ETS provided— FT lamp extinguished.◆ PK, AS, CTX lamps extinguished. Ringing tone silenced. |
| 24 | Momentarily operate RL key. | All lamps extinguished. |
| 25 | Restore all keys and switches not required in next test. | |

F. False-Busy and False-Idle Conditions (Switched Connection)

| | | |
|----|--|--|
| 1 | At relay rack frame— Set MB switch to MB on trunk to be tested. | |
| 2 | Connect power to 1A fault locator; set W-T switch to W and HR-LRT switch to LRT. | Whistle heard. |
| 3 | Connect WT jack of 1A fault locator to terminal 45 of terminal strip A on trunk under test. | Whistle silenced. |
| 4 | Set MB switch to MB on all other trunks using the same route on the same trunk link frame as trunk under test. | Whistle heard. |
| 5 | Momentarily restore MB switch to N on trunk under test. | Whistle silenced while MB switch is restored. |
| 6 | Block nonoperated S1A relay. | |
| 7 | Connect ground to U of S1 relay. | |
| 8 | Momentarily restore MB switch to N. | Whistle still heard while MB switch is restored. |
| 9 | Remove ground from U of S1 relay and connect to U of AM relay. | |
| 10 | Momentarily restore MB switch to N. | Whistle still heard while MB switch is restored. |
| 11 | Remove ground from U of AM relay. | |

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| STEP | ACTION | VERIFICATION |
|-------------|---|--|
| 12 | Restore all MB switches to N on all trunks except trunk under test. | Whistle silenced. |
| 13 | Connect HRG to terminal 55 of terminal strip A. | |
| 14 | Remove test connection from terminal 45 of terminal strip A and connect to terminal 15 of terminal strip A. | Whistle heard. |
| 15 | Momentarily restore MB switch to N. | Whistle silenced while MB switch is restored. |
| 16 | Connect ground to U of S1 relay. | |
| 17 | Momentarily restore MB switch to N. | Whistle still heard while MB switch is restored. |
| 18 | Remove ground from U of S1 relay and connect to U of AM relay. | |
| 19 | Momentarily restore MB switch to N. | Whistle still heard while MB switch is restored. |
| 20 | Remove ground from U of AM relay. | |
| 21 | Remove blocking tool from S1A relay. | |
| 22 | Remove test connections from terminals 15 and 55 of terminal strip A. | |
| 23 | Restore MB switch to N. | |
| 24 | Remove power from 1A fault locator. | Whistle silenced. |

G. Extension of Call On-Net (Direct-Wired Connection)

| | | |
|----|--|--|
| 16 | Momentarily operate ST key. *Trunk seizure from remote line circuit.* | OGT-CS lamp remains extinguished. Ringing tone heard. CTX lamp lighted. |
| 17 | Operate CANS key. *Attendant answer.* | CTX lamp extinguished. OGT-CS lamp lighted. Ringing tone silenced. High tone heard. |
| 18 | Operate STI key. *Attendant startout signal.* | High tone silenced. OGT-CS lamp momentarily extinguished. *Startout flash.* |
| 19 | Operate ONT key. *Originating register attached.* | RDY lamp lighted. |
| 20 | Restore STI key. *Attendant operation of END key at end of | RDY lamp extinguished. High tone heard. |

| STEP | ACTION | VERIFICATION |
|--|--|---|
| | pulsing.* | CTX lamp flashes at 30 ipm. *Awaiting station answer.* |
| 21b | If attendant verification of on-net station is not provided— Restore ONT key. *Station answer.* | CTX, OGT-CS lamps extinguished. High tone silenced. *Release of attendant from connection.* |
| 22c | If attendant verification of on-net station is provided— Restore ONT key. *Station answer.* | CTX lamp lighted steady. OGT-CS lamp remains lighted. High tone still heard. |
| 23c | Restore CANS key. *Attendant releases connection.* | CTX, OGT-CS lamps extinguished. High tone silenced. *Release of attendant from connection.* |
| 24 | Momentarily operate RL key. | All lamps extinguished. |
| 25 | Restore all keys and switches not required in next test. | |
| 26 | Remove all patching cords. | |
| H. Attendant Release After Startout (Direct-Wired Connection) | | |
| 16 | Momentarily operate ST key. *Trunk seizure from remote line circuit.* | OGT-CS lamp remains extinguished. Ringing tone heard. CTX lamp lighted. |
| 17 | Operate CANS key. *Attendant answer.* | OGT-CS lamp lighted. Ringing tone silenced. High tone heard. |
| 18 | Operate STI key. *Attendant startout signal.* | CTX lamp extinguished. High tone silenced. OGT-CS lamp momentarily extinguished. *Startout flash.* |
| 19 | Restore STI key. *Attendant operation of END key—no originating register available.* | |
| 20 | Momentarily operate RB key. *20-Hz ringing on tip and ring leads from attendant.* | OGT-CS lamp momentarily extinguished. *Flash to cancel startout request.* High tone heard. |
| 21 | Operate STI key. *Attendant startout signal.* | OGT-CS lamp momentarily extinguished. *Startout flash.* High tone silenced. |

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| STEP | ACTION | VERIFICATION |
|-------------|---|--|
| 22 | Operate ONT key. *Originating register attached.* | RDY lamp lighted. |
| 23 | Restore STI key. *Attendant keying into originating register and operation of END key.* | RDY lamp extinguished. High tone heard. CTX lamp flashes at 30 ipm. *Awaiting called station answer.* |
| 24 | Momentarily operate RD key. *Attendant operation of RLS DEST key when line busy or no answer.* | OGT-CS lamp momentarily extinguished. *Release destination flash.* |
| 25 | Restore ONT key. | CTX lamp lighted. |
| 26 | Operate STI key. *Attendant startout signal.* | CTX lamp extinguished. High tone silenced. OGT-CS lamp momentarily extinguished. *Startout flash.* |
| 27 | Restore STI, CANS keys. *Attendant release of call.* | OGT-CS lamp extinguished. *Release of attendant from connection.* |
| 28 | Momentarily operate RL key. | All lamps extinguished. |
| 29 | Restore all keys and switches not required in next test. | |
| 30 | Remove all patching cords. | |

I. Release Source (Direct-Wired Connection)

| | | |
|----|--|---|
| 16 | Momentarily operate ST key. *Trunk seizure from remote line circuit.* | OGT-CS lamp remains extinguished. Ringing tone heard. CTX lamp lighted. |
| 17 | Operate CANS key. *Attendant answer.* | OGT-CS lamp lighted. Ringing tone silenced. High tone heard. |
| 18 | Restore CANS key. *Attendant release of source.* | CTX, OGT-CS lamps extinguished. High tone silenced. *Release of attendant from connection.* |
| 19 | Momentarily operate RL key. | All lamps extinguished. |
| 20 | Restore all keys and switches not required in next test. | |
| 21 | Remove all patching cords. | |

| STEP | ACTION | VERIFICATION |
|------|---|--|
| J. | Call to Distant Switchboard (Direct-Wired Connection) | |
| 16 | Restore ONAL key. | |
| 17 | Momentarily operate ST key. | OGT-CS lamp remains extinguished. Ringing tone heard. At distant switchboard— Assistant answers call. At MTF— Ringing tone silenced. Talking path established between MTF and distant switchboard. |
| 18 | Request assistant at distant switchboard to release call. | Talking path removed between MTF and distant switchboard. OGT-CS lamp extinguished. |
| 19 | Momentarily operate RL key. | All lamps extinguished. |
| 20 | Restore all keys and switches. | |
| 21 | Remove all patching cords. | |

