

**ATTENDANT TRUNK CIRCUIT SD-65793-01**  
**OPERATION TESTS**  
**700C, 701A, 701B, 702A, OR 740E PBX**

**1. GENERAL**

**1.01** The tests covered are:

**A. Incoming Call — 2-Wire Trunk Circuit From Crossbar Tandem Office:** This test checks the seizure, attendant answer, and release features of the trunk when connected to a crossbar tandem office in a distant building.

**B. Incoming Call — 3-Wire Trunk Circuit From Crossbar Tandem Office:** This test checks the seizure, attendant answer, and release features of the trunk when connected to a crossbar tandem office in the same building.

**C. Incoming Call — 3-Wire Trunk Circuit Connected To PBX Selector Bank Multiple:** This test checks the seizure, digit absorption, attendant answer, and release features of the trunk when connected to a selector bank multiple.

**D. Reverse Battery:** This test checks that reverse battery is returned on charge calls.

**1.02** This test requires action and verification at the telephone switchboard, unit under test, and the central office.

**1.03** Test D should be made at a time when the normal operation of the PBX will not be affected.

**1.04 Lettered Steps:** A letter a, b, c, etc, added to a step number in Part 4 of this section, indicates an action which may or may not be re-

quired 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.

**1.05** When performing Tests A through D the trunk usage register will score. Local instructions should be followed for recording and reporting this register operation.

**2. APPARATUS**

**Tests A, B, C**

**2.01** 1011G handset (dial hand test set) equipped with a 2W39A cord assembly consisting of a W2CL cord, 471A jack, and 240A plug.

**Tests B, C, D**

**2.02** One 893 cord equipped with two KS-6278 connecting clips.

**Test D**

**2.03** Blocking tools as required. Use tools and apply as covered in Section 069-020-801.

**2.04** Test receiver, 716C receiver attached to a W2AB cord equipped with two 360A tools (2W21A cord) or equivalent, one KS-6278 connecting clip, and one 411A (test pick) tool (for use in checking the presence or absence of battery or ground).

**3. PREPARATION**

STEP	ACTION	VERIFICATION
<b>Test A</b>		
1	At central office — Make busy trunk selected for test.	

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
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**Tests A, B, C**

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|---|--|--|
| 2 | Operate handset switch to MON.                           |  |
| 3 | Operate test cord switch to ON.                          |  |
| 4 | At trunk unit under test —<br>Connect handset to T jack. |  |

**4. METHOD**

<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
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**A. Incoming Call — 2-Wire Trunk Circuit From Crossbar Tandem Office**

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|---|--|--|
| 5 | Operate handset switch to TALK.        | Audible ringing tone heard.<br>At switchboard —<br>TRK lamp lighted.<br>At trunk unit under test —<br>A, N, B, relays operated.  |
| 6 | At switchboard —<br>Attendant answers. | At trunk unit under test —<br>J, SL relays operated.<br>N relay released.<br>At handset —<br>Audible ringing tone removed.<br>At switchboard —<br>TRK lamp extinguished.<br>Conversation satisfactory. |

**Disconnect — Attendant Disconnects First**

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|---|--|---|
| 7 | At handset —<br>Request attendant to disconnect. | At trunk unit under test —<br>When attendant disconnected —<br>J, SL relays released.<br>A, B relays remained operated. |
| 8 | Operate handset switch to MON.                   | At trunk unit under test —<br>A, B relays released.<br>Trunk idle.  |

**Disconnect — Calling Party Disconnects First**

- |   |                                |   |
|---|--------------------------------|---|
| 9 | Operate handset switch to MON. | At trunk unit under test —<br>Relay A released.<br>MB relay operated.<br>B, J relays released.<br>At switchboard —<br>Lamp associated with cord connected to<br>trunk unit under test lighted.<br>At trunk unit under test —<br>When attendant disconnected —<br>SL, MB relays released.<br>Trunk idle. |
|---|--------------------------------|---|

STEP	ACTION	VERIFICATION
10a	If no further tests are to be performed — Request attendant to disconnect. Disconnect handset from T jack, request central office to remove make busy.	
<b>B. Incoming Call — 3-Wire Trunk Circuit From Crossbar Tandem Office</b>		
5	At trunk unit under test — Observe A relay.	If A relay nonoperated — Trunk idle. If A relay operated — Trunk busy.
6	Using 893 cord, connect ground to terminal 38 on terminal strip of idle trunk selected for test.	Relay A nonoperated. If A relay is operated, remove ground from terminal 38 and wait for trunk to become idle. Relay A nonoperated.
7	Operate handset switch to TALK.	Audible ringing tone heard. At switchboard — TRK lamp lighted. At trunk unit under test — A, N, B relays operated.
8	At switchboard — Attendant answers.	At trunk unit under test — J, SL relays operated. N relay released. At handset — Audible ringing tone removed. At switchboard — TRK lamp extinguished. Conversation satisfactory.
<b>Disconnect — Attendant Disconnects First</b>		
9	At switchboard — Attendant disconnects.	At trunk unit under test — When attendant disconnected — J, SL relays released. A, B relays remained operated.
10	Operate handset switch to MON.	At trunk unit under test — A, B relays released. Trunk idle.
<b>Disconnect — Calling Party Disconnects First</b>		
11	Operate handset switch to MON.	At trunk unit under test — A, B, J relays released. At switchboard — Cord lamp lighted. At trunk unit under test — SL relay remained operated.

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
12	At switchboard — Attendant disconnects.	Cord lamp extinguished. At trunk unit under test — SL relay released.
13	Request attendant to disconnect.	
14	Operate handset switch to MON.	
15a	If no further tests are to be performed — Disconnect handset from T jack. At trunk unit under test — Remove ground from terminal 38.	
<b>C. Incoming Call — 3-Wire Trunk Circuit Connected to PBX Selector Bank Multiple</b>		
5	At trunk unit under test — Observe A relay.	If A relay nonoperated — Trunk idle. If A relay operated — Trunk busy.
6	Using 893 cord, connect ground to terminal 38 on terminal strip of idle trunk selected for test.	Relay A nonoperated. If A relay operated — Remove ground from terminal 38 and wait for trunk to become idle. Relay A nonoperated.
7	Operate handset switch to TALK.	Audible ringing tone heard. At switchboard — TRK lamp lighted. At trunk unit under test — A, N, B relays operated.
8a	If V option is provided — Operate handset switch to TALK.	At trunk unit under test — AA relay operated. At switchboard — TRK lamp lighted. At handset — Audible ringing heard.
9b	If W option is provided — Operate handset switch to TALK. Dial one digit.	At trunk unit under test — After digit is dialed — AA relay operated. At switchboard — TRK lamp lighted. At handset — Audible ringing heard.
10c	If X option is provided — Operate handset switch to TALK. Dial two digits.	At trunk unit under test — After last digit is dialed — AA relay operated. At switchboard — TRK lamp lighted. At handset — Audible ringing heard.

STEP	ACTION	VERIFICATION
11d	If V, W, X options are not provided — Operate handset switch to TALK. Dial three digits.	At trunk unit under test — After last digit is dialed — AA relay operated. At switchboard — TRK lamp lighted. At handset — Audible ringing heard.
12	At switchboard — Attendant answers.	TRK lamp extinguished. At handset — Audible ringing tone removed. Conversation satisfactory.
<b>Disconnect — Attendant Disconnects First</b>		
13	At switchboard — Attendant disconnects.	At trunk unit under test — A, B relays operated.
14	Operate handset switch to MON.	At trunk unit under tests — A, B relays released.
<b>Disconnect — Calling Party Disconnects First</b>		
15	Operate handset switch to MON.	At switchboard — Cord lamp lighted. At trunk unit under test — SL relay operated.
16	At switchboard — Attendant disconnects.	Cord lamp extinguished. At trunk unit — SL relay released.
17	Operate handset switch to MON.	At switchboard — Cord lamp lighted.
18	Attendant disconnects.	Cord lamp extinguished.
19e	If no further tests are to be performed — Disconnect handset from T jack. At trunk unit under test — Remove ground from terminal 38.	

**D. Reverse Battery**

1	At trunk unit under test — Observe A relay.	If A relay nonoperated — Trunk idle. If A relay operated — Trunk busy.
2	Using 893 cord, connect ground to terminal 38 on terminal strip of idle trunk selected for test.	
3	At trunk unit under test — Block nonoperated N relay.	

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
4	Block operated A relay.	
5	At 716C receiver — Connect one lead to ground. At trunk unit under test — Momentarily touch other lead to terminal 48.	Battery on terminal 48 indicated by click in receiver as receiver lead momentarily made contact with terminal 48.
6	At trunk unit under test — Block operated J relay.	
7	At 716C receiver — Connect one lead to ground. At trunk unit under test — Momentarily touch other lead to terminal 58.	Battery on terminal 58 indicated by click in receiver as receiver lead momentarily made contact with terminal 58.
8	Remove blocking tools from J, A, N relays.	
9	Remove ground from terminal 38 on terminal strip of trunk unit under test.	
10	Disconnect test receiver from trunk unit under test.	