ATTENDANT ACCESS TRUNK CIRCUIT SD-27857-01
FOR USE WITH CONSOLE (CCSA)
TESTS USING TRUNK TEST CIRCUIT SD-25918-01
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section is reissued for the following reasons:

(a) To revise Tests A through D for Electronic Translation System (ETS) features.

(b) To make minor changes, as required.

This reissue does not affect Equipment Test Lists.

1.02 The tests covered are:

A. Extension of Call On-Net (Switched 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.

B. Attendant Release After Startout (Switched 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).

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.

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

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

F. Extension of Call On-Net (Direct-Wired 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.

G. Attendant Release After Startout (Direct-Wired Connection):
This test checks that the attendant can cancel a startout request 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).

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

I. Call to Distant Console (Direct-Wired Connection):
This test checks that a test call can be
completed to an assistant at a service console.  18

J. Nite-Busy (Direct Wired) Connection: This test checks that the remote line circuit repeats an off-hook condition to the distant office from the attendant access trunk when service positions are on nite-busy.  .  19

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

1.04 When the attendant access trunk is used in offices arranged for Phase I centrex, test calls must be completed to an assistant at the service console. The service console is therefore considered the test console.

1.05 Tests D and I require assistance at the service console.

1.06 The 1- or 2-type telephone console keys and lamps are used throughout this section for ACTION and VERIFICATION statements. Where a 9A-type telephone console or 622-type telephone set is provided instead of a 1- or 2-type telephone console as the attendant equipment, the differences in key designations listed in Table A should be applied.

<table>
<thead>
<tr>
<th>1-AND 2-TYPE TELEPHONE CONSOLE</th>
<th>9A-TYPE TELEPHONE CONSOLE OR 622-TYPE TELEPHONE SET</th>
</tr>
</thead>
<tbody>
<tr>
<td>RLS SRC</td>
<td>TRK RLS</td>
</tr>
<tr>
<td>RLS DEST</td>
<td>RLS FWD</td>
</tr>
<tr>
<td>RLS (key)</td>
<td>PA RLS (key)</td>
</tr>
<tr>
<td>RLS (lamp)</td>
<td>PA (lamp)</td>
</tr>
</tbody>
</table>

1.07 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 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 statement between the asterisks (*) after ACTION and VERIFICATION statements is added to clarify the function being simulated on the action taking place in the test procedures of Part 4.

1.09 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.

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

1.11 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.

1.12 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.


1.13 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

All Tests

2.01 322A (make-busy) plugs as required.

All Tests Except E

2.02 Trunk test circuit, SD-25918-01.

2.03 1B15 test console, equipped with D-75B cord with a KS-16409, L19 connector unit and head telephone set.

Tests A Through D

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

Test E

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

Tests F Through J

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

3. PREPARATION

STEP ACTION VERIFICATION

Note: Refer to 1.03 through 1.13.

All Tests Except D, E, I, and J

1a If test call is to be completed to a test console—
When circuit is idle—
At MTF—
Insert 322A make-busy plugs into AT-MB,
AT-TST jacks associated with trunk to be tested.

Note: The CB lamp at the MTF must be extinguished prior to performing this step.

All Tests Except D, E, I, and J

2a Patch test console to CNTX TEST CONN T jack.

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

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

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

2.09 Blocking tool. Use tool and apply as covered in Section 069-020-801.
### SECTION 218-277-505

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Tests Except E, and J</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>At test console— Plug head telephone set into operator telephone jack.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Momentarily operate RLS key.</td>
<td>RLS lamp lighted.</td>
</tr>
<tr>
<td>5</td>
<td>Operate BUZ key to ON.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>At MTF— Restore all keys and switches.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished.</td>
</tr>
</tbody>
</table>

| **Tests A, B, C, D** | | |
| 8 | Select MISC class of test. | | |
| 9 | Select completing marker. | | |
| 10 | Select OR class of call with associated translator indication. | | |
| 11 | Select trunk to be tested. | | |
| 12 | Operate GPA/GPB key for required trunk group when trunk is in an allotted group. | | |
| 13 | Select class of service and rate treatment (if required) that will route test call to trunk under test. | | |
| 14 | Select route advance 0. | | |
| 15 | Select digit A0. | | |
| 16 | Operate TLK, KY, ONAL, LRR keys. | | |
| 17b | If test call is to be completed to a service console— Operate FS, TS keys. | | |
| 18c | If ETS provided— Operate PCS, PTS keys. | | |

| **Tests A, B, C** | | |
| 19a | If test call is to be completed to a test console— Operate NTFS, NTTS keys. | | |

*Page 4*
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tests F, G, H, I</strong></td>
<td>When trunk under test is idle—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At relay rack frame—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Patch T1, T2 jacks of remote line circuit associated with trunk under test to T1, T2 jacks, respectively, on relay rack frame miscellaneous circuit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>At MTF—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operate TLK, ONAL, OEM, LLS keys.</td>
<td></td>
</tr>
</tbody>
</table>

### 4. METHOD

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Extension of Call On-Net (Switched Connection)</strong></td>
<td>At MTF—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Momentarily operate ST key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(Trunk seizure.)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Momentarily operate Talk key associated with flashing SRC, DEST lamps.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(Attendant answer.)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restore TLK key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operate HP key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(Preparation for detection of +130 volts on tip lead.)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>At test console—</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Momentarily operate STO key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(Attendant startout signal.)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restore HP key.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(Removal of +130 volts and application of ground start signal.)</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operate TLK key.</td>
<td></td>
</tr>
</tbody>
</table>

*If ETS provided—  
FT lamp lighted.  
AS, PK lamps lighted.  
Ringing tone heard.  
At test console—  
SRC, DEST lamps flash at 60 ipm.  
Audible signal sounds.  
SRC, TALK lamps lighted.  
DEST, RLS lamps extinguished.  
Audible signal silenced.  
Talking path established between MTF and test console.  
At MTF—  
PK lamp extinguished.  
Ringing tone silenced.  
Talking path removed between MTF and test console.  
At MTF—  
R— lamp lighted.  
*(Detection of +130 volts on tip lead.)*  
R— lamp extinguished.  
OGT-CS lamp lighted.  
Talking path established between MTF and test console.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Restore ONAL key.</td>
<td>OGT-CS lamp extinguished.</td>
</tr>
<tr>
<td>28</td>
<td>Operate ORV key.  <em>Originating register attached and awaiting pulsing.</em></td>
<td>Talking path removed.  LLS lamp lighted.  At test console—  RDY lamp lighted.</td>
</tr>
<tr>
<td>30</td>
<td>At test console—  Momentarily operate END key.  <em>Attendant operation of END key at end of pulsing.</em></td>
<td>DEST lamp flashes at 30 ipm.  RLS lamp lighted.  TALK lamp extinguished.  <em>Awaiting station answer.</em></td>
</tr>
<tr>
<td>31d</td>
<td>If attendant verification of on-net station is not provided—  Momentarily operate RLS key.  <em>Attendant release from connection.</em></td>
<td>GL, AS, LLS lamps extinguished.  At test console—  DEST, SRC lamps extinguished.  <em>Console released from connection.</em></td>
</tr>
<tr>
<td>33e</td>
<td>At attendant verification of on-net station is provided—  Operate LLR key.  <em>Station answer.</em></td>
<td></td>
</tr>
<tr>
<td>34e</td>
<td>At test console—  Momentarily operate RLS key.</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>At MTF—  Momentarily operate RL key.</td>
<td></td>
</tr>
<tr>
<td>36e</td>
<td>If attendant verification of on-net station is provided—  Repeat Steps 19 through 29.</td>
<td>• If ETS provided—  FT lamp remains lighted.  ◆ All lamps extinguished except CB.  At test console—  All lamps extinguished except RLS.</td>
</tr>
</tbody>
</table>
STEP | ACTION | VERIFICATION
--- | --- | ---
37e | At test console—
Momentarily operate RLS key.
*Attendant release from connection.* |
38e | Momentarily operate TALK key.
*Attendant re-enters connections.* |
39e | At MTF—
Operate LLR key.
*Station Answer.* |
40e | At test console—
Momentarily operate RLS key.
*Attendant release from connection.* |
41e | At MTF—
Momentarily operate RL key. |
42 | Restore all keys and switches not required in next test. |
43 | Remove all make-busy plugs. |
44 | Remove patching cord from CNTX TST CONN T jack. |
B. Attendant Release After Startout (Switched Connection) |
20 | At MTF—
Momentarily operate ST key.
*Trunk seizure.* |
21 | At test console—
DEST lamp flashes at 30 ipm.
RLS lamp lighted.
TALK lamp extinguished.
Talking path removed between MTF and test console.
*Awaiting station answer.* |
22 | RLS lamp extinguished.
TALK lamp lighted.
*Still awaiting station answer.* |
23 | DEST lamp lighted steadily.
At MTF—
LLS lamp remains lighted.
Talking path established between MTF and test console.
TALK lamp extinguished.
RLS lamp lighted.
After 1 second—
DEST, SRC lamps extinguished.
At MTF—
GL, AS, LLS lamps extinguished.
Talking path removed between MTF and test console.
*Console released from connection.* |
24 | All lamps extinguished except CB.
At test console—
All lamps extinguished except RLS. |
\*If ETS provided—
FT lamp extinguished.\*
\*If ETS provided—
AS, PK lamps lighted.
Ringing tone heard.
At test console—
SRC, DEST lamps flash at 60 ipm.
Audible signal sounds.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Restore TLK key.</td>
<td>Talking path removed between MTF and test console.</td>
</tr>
<tr>
<td>23</td>
<td>Operate HP key. <em>Preparation for detection of +130 volts on tip lead.</em></td>
<td>At MTF— R- lamp lighted. <em>Detection of +130 volts on tip lead.</em></td>
</tr>
<tr>
<td>24</td>
<td>At test console— Momentarily operate STO key. <em>Attendant startout signal.</em></td>
<td>R- lamp extinguished. OGT-CS lamp lighted.</td>
</tr>
<tr>
<td>25</td>
<td>Restore HP key. <em>Removal of +130 volts and application of ground-start signal.</em></td>
<td>Talking path established between MTF and test console.</td>
</tr>
<tr>
<td>26</td>
<td>Operate TLK key.</td>
<td>At test console— Momentarily operate END key. <em>Attendant operation of END key—no originating registers available.</em></td>
</tr>
<tr>
<td>27</td>
<td>At test console— Momentarily operate END key. <em>Attendant operation of END key.</em></td>
<td>OGT-CS lamp extinguished. Talking path removed between MTF and test console.</td>
</tr>
<tr>
<td>28</td>
<td>At MTF— Operate HP key. <em>Preparation for detection of +130 volts on tip lead.</em></td>
<td>OGT-CS lamp extinguished.</td>
</tr>
<tr>
<td>29</td>
<td>Restore TLK key.</td>
<td>At test console— Momentarily operate STO key. <em>Attendant startout signal.</em></td>
</tr>
<tr>
<td>30</td>
<td>At test console— Momentarily operate STO key. <em>Attendant startout signal.</em></td>
<td>At MTF— R- lamp lighted. <em>+130 volts detected on tip lead.</em></td>
</tr>
<tr>
<td>31</td>
<td>Restore HP key. <em>+130 volts removed and ground-start signal present.</em></td>
<td>R- lamp extinguished. OGT-CS lamp lighted.</td>
</tr>
<tr>
<td>32</td>
<td>At test console— Momentarily operate END key. <em>Attendant operation of END key.</em></td>
<td>OGT-CS lamp extinguished.</td>
</tr>
<tr>
<td>33</td>
<td>Restore ONAL key.</td>
<td></td>
</tr>
</tbody>
</table>
STEP | ACTION | VERIFICATION
--- | --- | ---
34 | Operate ORV key. *Originating register attached and awaiting pulsing.* | LLS lamp lighted. At test console— RDY lamp lighted.
35 | At MTF— Momentarily operate RR key. *Check that ground-start signal has been removed.* | LLS lamp momentarily extinguished. GL lamp lighted.
36 | At test console— Momentarily operate END key. *Attendant operation of END key at end of pulsing.* | RDY lamp extinguished.
37 | Momentarily operate RLS key. *Attendant release from connection.* | DEST lamp flashes at 30 ipm. RLS lamp lighted. *Await station answer.*
38 | Momentarily operate TALK key associated with flashing DEST lamp. *Attendant re-entry to connection.* | TALK lamp lighted. DEST, RLS lamps extinguished.
39 | Momentarily operate RLS DEST key. *Attendant release of destination.* | DEST lamp does not light or flash. RLS lamp lighted. TALK lamp extinguished. *Check that destination is released.*
40 | Momentarily operate RLS key. *Attendant release from connection.* | RLS lamp extinguished. TALK lamp lighted.
41 | Momentarily operate TALK key associated with lighted SRC lamp. *Attendant re-entry to connection.* | GL, LLS lamps extinguished. Talking path established between MTF and test console.
42 | At MTF— Restore ORV key. | Talking path removed between MTF and test console.
43 | Operate ONAL key. | 
44 | Restore TLK key. | 
45 | Operate HP key. *Preparation for detection of +130 volts on tip lead.* | At MTF— R— lamp lighted. *Detection of +130 volts on tip lead.*
46 | At test console— Momentarily operate STO key. *Attendant startout signal.* |
SECTION 218-277-505

STEP ACTION VERIFICATION

47 Restore HP key.
*Removal of +130 volts and application of
ground-start signal.*

48 Operate TLK key.

49 At test console—
Momentarily operate END key.
*Attendant operation of END key.*

50 Momentarily operate RLS SRC key.
*Attendant release of source.*

51 Momentarily operate RL key.

52 Restore all keys and switches not required in
next test.

53 Remove all make-busy plugs.

54 Remove patching cord from CNTX TST CONN
T jack.

C. Release Source (Switched Connection)

20 At MTF—
Momentarily operate ST key.
*Trunk seizure.*

21 Momentarily operate TALK key associated
with flashing SRC, DEST lamps.
*Attendant answer.*

22 At test console—
Momentarily operate RLS SRC key.
*Attendant release of source.*

R- lamp extinguished.
OGT-CS lamp lighted.

Talking path established between MTF and
test console.

SRC lamp extinguished.

At MTF—
AS, OGT-CS lamps extinguished.
*Source and console released for connection.*

If ETS provided—
FT lamp remains lighted.
All lamps extinguished except CB.

If ETS provided—
FT lamp extinguished.
CB lamp extinguished.

If ETS provided—
FT lamp lighted.
AS, PK lamps lighted.
Ringing tone heard.
At test console—
SRC, DEST lamps flash at 60 ipm.
Audible signal sounds.

SRC, TALK lamps lighted.
DEST, RLS lamps extinguished.
Audible signal silenced.
Talking path established between MTF and
test console.
At MTF—
PK lamp extinguished.
Ringing tone silenced.

All lamps extinguished except RLS.
AS lamp extinguished.
Talking path removed between MTF and test
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Momentarily operate RL key.</td>
<td>console. <em>Source and console released from connection.</em></td>
</tr>
<tr>
<td>24</td>
<td>Restore all keys and switches not required in next test.</td>
<td>•If ETS provided— FT lamp remains lighted. All lamps extinguished except CB.</td>
</tr>
<tr>
<td>25</td>
<td>Remove all make-busy plugs.</td>
<td>•If ETS provided— FT lamp extinguished. CB lamp extinguished.</td>
</tr>
<tr>
<td>26</td>
<td>Remove patching cord from CNTX TST CONN T jack.</td>
<td></td>
</tr>
</tbody>
</table>

**D. Call to Distant Console (Switched Connection)**

19   | At MTF— Momentarily operate ST key. *Trunk seizure.* |

20   | Request assistant at distant console to release call. | •If ETS provided— FT lamp lighted. AS, PK lamps lighted. Ringing tone heard. At distant console— Assistant answers call. Talking path established between MTF and distant console. At MTF— PK lamp extinguished. Ringing tone silenced. |

21   | Momentarily operate RL key. | Talking path removed between MTF and distant console. AS lamp extinguished. •If ETS provided— FT lamp extinguished. |

22   | Restore all keys and switches not required in next test. | All lamps extinguished. |

**E. False-Idle and False-Busy Conditions (Switched Connection)**

2    | At relay rack frame— Connect power to 1A fault locator; operate W-T switch to W and HR-LRT switch to LRT. | Whistle heard. |
SECTION 218-277-505

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Connect WT jack of 1A fault locator to terminal 45 of terminal strip A on trunk under test.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>4</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>5</td>
<td>At MTF— Insert make-busy plugs into AT-MB jacks of all other trunks using same route on same trunk link frame as trunk under test.</td>
<td>At relay rack frame— Whistle heard when last trunk made busy.</td>
</tr>
<tr>
<td>6</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>7</td>
<td>Block nonoperated S1A relay.</td>
<td>Whistle silenced.</td>
</tr>
<tr>
<td>8</td>
<td>Connect ground to U-S1 relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>9</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>10</td>
<td>Remove ground from U-S1 relay and connect to 1L-JAM relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>11</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>12</td>
<td>Remove ground from 1L-JAM relay.</td>
<td>Whistle silenced.</td>
</tr>
<tr>
<td>13</td>
<td>Remove make-busy plugs from AT-MB jacks.</td>
<td>Whistle silenced.</td>
</tr>
<tr>
<td>14</td>
<td>Connect HRG to terminal 55 of terminal strip A on trunk under test.</td>
<td>Whistle heard.</td>
</tr>
<tr>
<td>15</td>
<td>Disconnect test connections from terminal 45 on terminal strip A and connect to terminal 15.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>16</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>17</td>
<td>Connect ground to U-S1 relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>18</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>19</td>
<td>Remove ground from U-S1 relay and connect to 1L-JAM relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>20</td>
<td>Momentarily restore MB relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>21</td>
<td>Remove ground from 1L-JAM relay.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
<tr>
<td>22</td>
<td>Remove test connections from terminals 15, 55 on terminal strip A.</td>
<td>Whistle silenced while MB relay restored.</td>
</tr>
</tbody>
</table>
STEP | ACTION | VERIFICATION
--- | --- | ---
23 | Remove blocking tool from S1A relay. |  
24 | Remove power to 1A fault locator. |  
25 | Remove make-busy plugs from CCSA-MB, CCSA-TST jacks. |  

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

22 | At MTF—  
Momentarily operate ST key.  
*Trunk seizure from remote line circuit.* |  
23 | Momentarily operate TALK key associated with flashing SRC, DEST lamps.  
*Attendant answer.* |  
24 | At test console—  
Momentarily operate STO key.  
*Attendant startout signal.* |  
25 | Operate ONT key.  
*Originating register attached.* |  
26 | Momentarily operate END key.  
*Attendant operation of END key at end of pulsing.* |  
27d | If attendant verification of on-net station is not provided—  
Momentarily operate RLS key.  
*Attendant release from connection.* |  
28 | At MTF—  
Restore ONT key.  
*Station answer.* |  
29e | If attendant verification of on-net station is provided—  
At MTF—  
Restore ONT key.  
*Station answer.* |  
29e | If attendant verification of on-net station is provided—  
At MTF—  
Restore ONT key.  
*Station answer.* |  
29e | If attendant verification of on-net station is provided—  
At MTF—  
Restore ONT key.  
*Station answer.* |  
29e | If attendant verification of on-net station is provided—  
At MTF—  
Restore ONT key.  
*Station answer.* |  

OGT-CS lamp remains extinguished.
Ringing tone heard.
At test console—
SRC, DEST lamps flash at 60 ipm.
Audible signal sounds.

SRC, TALK lamps lighted.
DEST, RLS lamps extinguished.
Talking path established between MTF and test console.
Audible signal silenced.
At MTF—
OGT-CS lamp lighted.
Ringing tone silenced.

At MTF—
OGT-CS lamp momentarily extinguished.
*Startout flash.*
Talking path removed between MTF and test console.

At test console—
RDY lamp lighted.

RDY lamp extinguished.

TALK lamp extinguished.
RLS lamp lighted.
DEST lamp flashes at 30 ipm.
*Awaiting station answer.*

OGT-CS lamp extinguished.
At test console—
DEST, SRC lamps extinguished.
*Console released from connection.*

DEST lamp lighted.
At MTF—
OGT-CS lamp remains lighted.
Talking path established between MTF and test console.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 30e  | At test console—  
Momently operate RLS key.  
*Attendant release from connection.* | TALK lamp extinguished.  
RLS lamp lighted.  
After 1 second—  
DEST, SRC lamps extinguished.  
At MTF—  
OGT-CS lamp extinguished.  
Talking path removed between MTF and test console.  
*Console released from connection.* |
| 31   | At MTF—  
Momently operate RL key. | All lamps extinguished. |
| 32e  | If attendant verification of on-net station is provided—  
Repeat Steps 22 through 26. | |
| 33e  | At test console—  
Momently operate RLS key.  
*Attendant release from connection.* | TALK lamp extinguished.  
RLS lamp lighted.  
DEST lamp flashes at 30 ipm.  
*Awaiting station answer.* |
| 34e  | Momentarily operate TALK key.  
*Attendant re-enters connection.* | RLS lamp extinguished.  
TALK lamp lighted. |
| 35e  | At MTF—  
Restore ONT key. | OGT-CS lamp remains lighted.  
At test console—  
DEST lamp lighted steadily.  
Talking path established between MTF and test console. |
| 36e  | At test console—  
Momently operate RLS key.  
*Attendant release from connection.* | TALK lamp extinguished.  
RLS lamp lighted.  
After 1 second—  
DEST, SRC lamps extinguished.  
At MTF—  
OGT-CS lamp extinguished.  
Talking path removed between MTF and test console.  
*Console released from connection.* |
| 37e  | At MTF—  
Momently operate RL key. | All lamps extinguished except CB. |
| 38   | Restore all keys and switches not required in next test. | |
| 39   | Remove all make-busy plugs. | CB lamp extinguished. |
| 40   | Remove patching cord from CNTX TST CONN T jack. | |
STEP | ACTION | VERIFICATION
--- | --- | ---
41 | At relay rack frame— Remove patching cords from T1, T2 jacks. | 
G. Attendant Release After Startout (Direct-Wired Connection)

22 | At MTF—
Momentarily operate ST key.
*Trunk seizure from remote line circuit.* | OGT-CS lamp remains extinguished.
Ringing tone heard.
At test console—
SRC, DEST lamps flash at 60 ipm.
Audible signal sounds.

23 | Momentarily operate TALK key associated with flashing SRC, DEST lamps.
*Attendant answer.* | SRC, TALK lamps lighted.
DEST, RLS lamps extinguished.
Audible signal silenced.
Talking path established between MTF and test console.
At MTF—
OGT-CS lamp lighted.
Ringing tone silenced.

24 | At test console—
Momentarily operate STO key.
*Attendant startout signal.* | At MTF—
OGT-CS lamp momentarily extinguished.
*Startout flash.*
Talking path removed between MTF and test console.

25 | At test console—
Momentarily operate END key.
*Attendant operation of END key—no originating register available.* | At MTF—
OGT-CS lamp momentarily extinguished.
*Cancellation of startout request.*
Talking path established between MTF and test console.

26 | At test console—
Momentarily operate STO key.
*Attendant startout signal.* | At MTF—
OGT-CS lamp momentarily extinguished.
*Startout flash.*
Talking path removed between MTF and test console.

27 | At test console—
Momentarily operate END key.
*Attendant operation of END key.* | At MTF—
OGT-CS lamp momentarily extinguished.
*Cancellation of startout request.*
Talking path established between MTF and test console.

28 | At test console—
Momentarily operate RLS SRC key.
*Attendant release of source.* | SRC lamp extinguished.
Talking path removed between MTF and test console.
At MTF—
OGT-CS lamp extinguished.
*Source and console released from connection.*
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished except CB.</td>
</tr>
</tbody>
</table>
| 30   | At MTF—  
Momentarily operate ST key.  
*Trunk seizure from remote line circuit.* | OGT-CS lamp remains extinguished.  
Ringing tone heard.  
At test console—  
SRC, DEST lamps flash at 60 ipm.  
Audible signal sounds. |
| 31   | Momentarily operate TALK key associated with flashing SRC, DEST lamps.  
*Attendant answer.* | SRC, TALK lamps lighted.  
DEST, RLS lamps extinguished.  
Audible signal silenced.  
Talking path established between MTF and test console. |
| 32   | At test console—  
Momentarily operate STO key.  
*Attendant startout signal.* | At MTF—  
OGT-CS lamp momentarily extinguished.  
*Startout flash.*  
Talking path removed between MTF and test console. |
| 33   | Operate ONT key.  
*Originating register attached.* | At test console—  
RDY lamp lighted.  |
| 34   | Momentarily operate END key.  
*Attendant operation of END key at end of pulsing.* | RDY lamp extinguished.  |
| 35   | Momentarily operate RLS key.  
*Attendant release from connection.* | DEST lamp flashes at 30 ipm.  
TALK lamp extinguished.  
RLS lamp lighted.  
*Awaiting station answer.* |
| 36   | Momentarily operate TALK key associated with flashing DEST lamp.  
*Attendant re-entry to connection.* | DEST, RLS lamps extinguished.  
TALK lamp lighted.  |
| 37   | Momentarily operate RLS DEST key.  
*Attendant release of destination.* | At MTF—  
OGT-CS lamp momentarily extinguished.  
*Release destination flash.* |
| 38   | At test console—  
Momentarily operate RLS key.  
*Attendant release from connection.* | DEST lamp does not flash or light.  
RLS lamp lighted.  
TALK lamp extinguished.  
*Check that destination is released.* |
| 39   | At MTF—  
Restore ONT key. | |
STEP | ACTION | VERIFICATION
40 | At test console—
Momentarily operate TALK key associated with lighted SRC lamp.
*Attendant re-entry to connection.*

41 | Momentarily operate STO key.
*Attendant startout signal.*

42 | At test console—
Momentarily operate END key.
*Attendant operation of END key.*

43 | At test console—
Momentarily operate RLS SRC key.
*Attendant release of source.*

44 | Momentarily operate RL key.

45 | Restore all keys and switches not required in next test.

46 | Remove all make-busy plugs.

47 | Remove patching cord from CNTX TST CONN T jack.

48 | At relay rack frame—
Remove patching cords from T1, T2 jacks.

H. Release Source (Direct-Wired Connection)
22 | At MTF—
Momentarily operate ST key.
*Trunk seizure from remote line circuit.*

23 | Momentarily operate TALK key associated with flashing SRC, DEST lamps.
*Attendant answer.*

OGT-CS lamp remains extinguished.
Ringing tone heard.
At test console—
SRC, DEST lamps flash at 60 ipm.
Audible signal sounds.

SRC, TALK lamps lighted.
DEST, RLS lamps extinguished.
Audible signal silenced.
Talking path established between MTF and test console.
At MTF—
### SECTION 218-277-505

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 24   | At test console—  
      | Momentarily operate RLS SRC key.  
      | *Attendant release of source.* |  
      |                     | OGT-CS lamp lighted.  
      |                     | Ringing tone silenced. |
| 25   | Momentarily operate RL key. | SRC, TALK lamps extinguished.  
      |                     | Talking path removed between MTF and test console.  
      |                     | At MTF—  
      |                     | OGT-CS lamp extinguished.  
      |                     | *Source and console released from connection.* |
| 26   | Restore all keys and switches not required in next test. | All lamps extinguished except CB. |
| 27   | Remove all make-busy plugs. | CB lamp extinguished. |
| 28   | Remove patching cord from CNTX TST CONN T jack. |  
| 29   | At relay rack frame—  
      | Remove patching cords from T1, T2 jacks. |  

### Call to Direct Console (Direct-Wired Connection)

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
</table>
| 22   | At MTF—  
      | Momentarily operate ST key.  
      | *Trunk seizure from remote line circuit.* |  
      |                     | OGT-CS lamp remains extinguished.  
      |                     | Ringing tone heard.  
      |                     | At distant console—  
      |                     | Assistant answers call.  
      |                     | At MTF—  
      |                     | OGT-CS lamp lighted.  
      |                     | Ringing tone silenced.  
      |                     | Talking path established between MTF and distant console. |
| 23   | Request assistant at distant console to release call. | Talking path removed between MTF and distant console.  
      |                     | At MTF—  
      |                     | OGT-CS lamp extinguished. |
| 24   | Momentarily operate RL key. | All lamps extinguished. |
| 25   | Restore all keys and switches. |  
| 26   | Remove all make-busy plugs. |  
| 27   | At relay rack frame—  
      | Remove patching cords from T1, T2 jacks. |  

Page 18
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. Nite-Busy (Direct-Wired Connection)</td>
<td>When remote line circuit associated with attendant access 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 jacks, respectively, on relay rack frame miscellaneous circuit.</td>
<td>NB relay operated.</td>
</tr>
<tr>
<td>1</td>
<td>At MTF jack, lamp, and key circuit—Insert 322A (make-busy) plug into AT-MB jack associated with trunk under test.</td>
<td>OGT-CS lamp lighted. <em>Verifies battery on M lead of remote line circuit towards distant office.</em></td>
</tr>
<tr>
<td>2</td>
<td>At MTF—Connect ground to terminal 56, terminal strip C.</td>
<td>NB relay released.</td>
</tr>
<tr>
<td>3</td>
<td>At MTF—Operate OEM key.</td>
<td>At MTF—OGT-CS lamp extinguished.</td>
</tr>
<tr>
<td>4</td>
<td>At MTF—Remove ground placed in Step 3.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>At MTF jack, lamp, and key circuit—Remove make-busy plug from AT-MB jack.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>At relay rack frame—Remove patching cords from T1, T2 jacks.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>At MTF—Restore OEM key.</td>
<td></td>
</tr>
</tbody>
</table>