PCI OUTGOING SENDERS SD-25733-01 AND SD-26053-01
TESTS USING THE AUTOMATIC MONITOR, REGISTER,
AND SENDER TEST CIRCUIT SD-25680-01
NO. 5 CROSSBAR OFFICES

1. General

1.01 This section is reissued for the following reasons:

(a) To revise Test R to change the information on two-line entry observed or non-observed calls.

(b) To add note for offices using the stuck sender trunk identifier (SSTI).

(c) To make other minor changes as required.

This section does not affect Equipment Test Lists.

1.02 The tests covered are:

A. Regular Call: This test checks that the sender records information from a marker and that it outpulses AMA class or non-AMA class interoffice calls. The transfer of information to the transverter is checked on AMA class calls.

B. Trunk Test - Open Trunk—Non-AMA: This test checks that the sender and marker detect an open trunk during trunk test and that the trunk is set for overflow after a definite time-out interval.

C. Abandoned Call—AMA: This test checks that the sender waits until the initial AMA entry has been made before releasing on an abandoned call.

D. Abandoned Call—Non-AMA: This test checks that the sender completes outpulsing (substitutes zeros for registered digits) on an abandoned call, if trunk test has been completed previous to the abandonment.

E. Transverter Trouble Release AMA: This test checks that the sender operates its reorder relay, sets the trunk to overflow, and releases when the transverter fails on both first and second trials on a detail-billed call.

F. Marker Reorder: This test checks that the sender sets the trunk to overflow and releases when the marker calls for reorder.

G. Fast Assignment—Non-AMA: This test checks that the sender trunk guard (TG) relay operates under “fast assignment” conditions.

H. Reversed Trunks: This test checks that the sender overflows relay detects a reversal of the tip and ring conductors of a trunk and when a reversal is detected, causes the sender to set the trunk to overflow and to release.

I. Delay Trunk Test—AMA: This test checks that the sender waits for a transverter release signal, upon completion of AMA functions, before starting trunk test.

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Printed in U.S.A.
J. Time Out Before Trunk Test:
This test checks that the sender times out, sets the trunk to overflow, and releases if the sender blocks before trunk test is completed.

K. Cancel Timed Release and Alarm: This test checks that with the associated CTR key operated, the sender does not release when it times out but that it operates the stuck sender alarm. It also checks that if the call is abandoned at this time, the sender does not release. If the alarm sending circuit is provided, this test also checks that when the alarms are transferred the sender cancel timed release feature is disabled.

L. Time Out During "Waiting Assignment": This test checks that when the sender times out during "waiting assignment," the sender is held until assigned.

M. No-Digits Call: This test checks that the sender releases without making trunk test and without outpulsing when used in connection with trunk test calls.

N. Intersender Timing—Wire-Spring Relay TypeSenders:
This test checks (where the sender is arranged to complete calls to panel sender tandem offices or to crossbar tandem offices, but not to manual tandem offices) that the sender sets the trunk to overflow and releases, if the trunk assignment on a fully mechanical tandem call has not been completed within a definite timed interval when the marker finds all the senders in the sender group busy.

O. Sender Transverter Timing—AMA: This test checks that when the sender is arranged for reduced timing and is arranged to release if the timing circuit functions before a connection is made to a transverter, the sender releases and sets the trunks to overflow if the transverter has not completed its functions within a timed interval.

P. Insufficient Digits—Wire-Spring-Relay Type Senders: This test checks that if less than four numerical digits are registered, the sender operates its reorder relay, sets the trunk to overflow, and releases.

Q. Sender Busy: This test checks that the sender appears busy when it is in service or when it is made busy with the associated make-busy jack.

R. Directory Assistance Charging:
This test checks the ability of the sender to record the called number structure and called number class for directory assistance calls.

1.03 Local instructions should be followed with reference to recording any register operations caused by performing these tests.

1.04 Tests C, I, and O should preferably be made during periods of light traffic.

1.05 For Tests A through P, and R, charts are furnished with spaces provided for listing specific priming information for each test, depending on local conditions. These charts should be filled out from local records in accordance with instructions provided in Part 5, PREPARATION OF TEST CHART.

1.06 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 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.

1.07 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 When the stuck sender trunk identifier (SD-27839-01) is used in an office, the SSI, ACTR, and CTR keys should be in the OFF position when testing senders.

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 Q

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

2.02 Automatic monitor, register, and sender test circuit, SD-25680-01.

Test B

2.03 Trunk test circuit, SD-25918-01.

Tests B, J, K, L, N, P

2.04 KS-3008 stopwatch or equivalent.

Tests C, D, K, N, P, Q

2.05 322A (make-busy) plugs.

Test N

2.06 Testing cord, 893 cord, 6 feet long, equipped with two 360A tools (1W13B cord) and two KS-6278 connecting clips (to connect ground).

Test Q

2.07 67C test set or equivalent, (for checking the presence or absence of ground) equipped with one KS-6278 connecting clip and one 518C tool.

3. PREPARATION

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>At MTF— Restore all keys and switches.</td>
</tr>
<tr>
<td>2</td>
<td>Momentarily operate RL key. All lamps extinguished.</td>
</tr>
<tr>
<td>3</td>
<td>Select sender to be tested.</td>
</tr>
<tr>
<td>4</td>
<td>Select marker.</td>
</tr>
<tr>
<td>5</td>
<td>Select route advance.</td>
</tr>
<tr>
<td>6</td>
<td>Release (push-in) CTR. key.</td>
</tr>
</tbody>
</table>

Note: When a particular line location is to be used, special marker 0 or 1 must be selected.
STEP | ACTION | VERIFICATION
--- | --- | ---
All Tests Except B, Q
7 | Select SDR class of test. |  
8 | Operate 900, MAC keys. |  
**Note:** Allow 1 minute for tubes to heat.  
9 | Operate STT key. |  

A. Regular Call

**AMA Calls**

10 | Operate keys and set switches in accordance with Test Chart Test 1. |  
11a | If 2-way trunk is used for selected outgoing route—  
At distant office—  
Have trunk removed from service. |  
12 | Momentarily operate ST key. | OK lamp lighted.  
13 | Momentarily operate RL key. | OK lamp extinguished.  
14b | If trouble record is required to check transverter leads—  
Operate REC key. |  
15b | Momentarily operate ST key. | OK lamp lighted.  
**Two trouble records taken.**  
FR, CN, S, calling line location, OBS or NOB, CP, MB, RNT0, 1, or 2, RN, and LST, L6D, 4DG, or 5DG designations perforated on each record.  
SRT, MKR, called number, called number class, TP or RP designations perforated on first record.  
TV, 2L or 4L, TPT or RPT, and called number (when test is an observed 2-line entry, or a 4- or 5-line entry call) designations perforated on second record.  
16b | Momentarily operate RL key. | OK lamp extinguished.  
17b | Restore REC key. |  
18a | If 2-way trunk is used for selected outgoing route—  
At distant office—  
Have trunk restored to service. |
19  Repeat Steps 10 through 18a as required for Tests 2 through 30.

**Non-AMA Calls or Tandem Class Calls**

20  Operate keys and set switches in accordance with Test Chart Test 31.

21a If 2-way trunk is used for selected outgoing route—
   At distant office—
   Have trunk removed from service.

22  Momentarily operate ST key. OK lamp lighted.

23  Momentarily operate RL key. OK lamp extinguished.

24a If 2-way trunk is used for selected outgoing route—
   At distant office—
   Have trunk restored to service.

25  Repeat Steps 20 through 24a as required for Tests 31 through 60.

**All Calls**

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

**B. Trunk Test - Open Trunk—Non-AMA**

7   Operate keys and set switches in accordance with Test Chart Test 61.

8a  If 2-way trunk is used for selected outgoing route—
   At distant office—
   Have trunk removed from service.

9   Select ITDO class of test.

10  Operate TTL, TLK keys.

11  Insert make-busy plug into MB_jack of sender under test.

12  At trunk test circuit—
    Block nonoperated ITDO relay.

13  At MTF—
    Momentarily operate ST key; **start timing.**

    **With marker on light traffic**
    In 2.5 to 4.5 seconds—
STEP  ACTION  VERIFICATION

14  Momentarily operate RL key.  Overflow tone heard.  Trouble record taken.  TGT, sender, trunk number designations perforated.

15  Operate HTR key.  Overflow tone silenced.

16  Momentarily operate ST key; start timing.  Note: If trouble record is not taken within 4.5 seconds, ensure that marker is in light traffic by making it busy. Repeat test.

17  Momentarily operate RL key.  Overflow tone silenced.

18  Restore HTR key.  With marker on heavy traffic  In 14 to 22 seconds—  TO lamp momentarily lighted.  Overflow tone heard.

19  Remove blocking tool from ITDO relay.  Overflow tone silenced.

20  Remove make-busy plug from MB jack of sender under test.

21a  If 2-way trunk is used for selected outgoing route—  At distant office—  Have trunk restored to service.

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

C. Abandoned Call—AMA

10  Operate keys and set switches in accordance with Test Chart Test 62.

11a  If 2-way trunk is used for selected outgoing route—  At distant office—  Have trunk removed from service.

12  Operate FS, TS keys.

13  Select trunk in trunk group serving office code selected for test.

14  Momentarily operate ST key.  OK lamp lighted.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Momentarily operate RL key.</td>
<td>OK lamp extinguished.</td>
</tr>
<tr>
<td>16a</td>
<td>If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Restore all keys and switches not required in next test.</td>
<td></td>
</tr>
</tbody>
</table>

D. Abandoned Call—Non-AMA

| 10   | Operate keys and set switches in accordance with Test Chart Test 63. | |
| 11a  | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service. | |
| 12   | Operate FS, TS keys. | |
| 13   | Select trunk in trunk group serving office code selected for test. | |
| 14   | Momentarily operate ST key. | OK lamp lighted. |
| 15   | Momentarily operate RL key. | OK lamp extinguished. |
| 16a  | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service. | |
| 17   | Restore all keys and switches not required in next test. | |

E. Transverter Trouble Release—AMA

| 10   | Operate keys and set switches in accordance with Test Chart Test 64. | |
| 11a  | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service. | |
| 12   | Momentarily operate ST key. | OK lamp lighted. Overflow tone heard. |
| 13   | Momentarily operate RL key. | OK lamp extinguished. Overflow tone silenced. |
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STEP ACTION VERIFICATION

14a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk restored to service.

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

F. Marker Reorder

10 Operate keys and set switches in accordance with Test Chart Test 65.

11a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk removed from service.

12 Momentarily operate ST key. OK lamp lighted.
Overflow tone heard.

13 Momentarily operate RL key. OK lamp extinguished.
Overflow tone silenced.

14a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk restored to service.

15 Repeat Steps 10 through 14a as required for Test 66.

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

G. Fast Assignment—Non AMA

10 Operate keys and set switches in accordance with Test Chart Test 67.

11a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk removed from service.

12 Momentarily operate ST key. OK lamp lighted.

13 Momentarily operate RL key. OK lamp extinguished.

14a If 2-way trunk is used for selected outgoing route—
STEP  | ACTION                                      | VERIFICATION                  
--- | --- | --- | 
15  | Restore all keys and switches not required in next test. |  

**H. Reversed Trunks**

10  | Operate keys and set switches in accordance with Test Chart Test 68. |  
11a | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service. | OK lamp lighted. Overflow tone heard. 
12  | Momentarily operate ST key. | OK lamp extinguished. Overflow tone silenced. 
13  | Momentarily operate RL key. |  
14a | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service. |  
15  | Repeat Steps 10 through 14a as required for Test 69. |  
16  | Restore all keys and switches not required in next test. |  

**I. Delay Trunk Test—AMA**

10  | Operate keys and set switches in accordance with Test Chart Test 70. |  
11a | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service. |  
12  | Momentarily operate ST key. | OK lamp lighted. 
13  | Momentarily operate RL key. | OK lamp extinguished. 
14a | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service. |  

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<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Restore all keys and switches not required in next test.</td>
<td>●</td>
</tr>
</tbody>
</table>

J. Time Out Before Trunk Test

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Operate keys and set switches in accordance with Test Chart Test 71.</td>
<td>●</td>
</tr>
<tr>
<td>11a</td>
<td>If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service.</td>
<td>●</td>
</tr>
<tr>
<td>12</td>
<td>Momentarily operate ST key; start timing.</td>
<td>TMT lamp lighted. If sender is not arranged to complete calls to panel or crossbar tandem offices or is arranged to complete some calls to manual tandem offices— In 20 to 32 seconds— OK lamp lighted. Overflow tone heard. If sender is arranged to complete calls to panel or crossbar tandem offices or is not arranged to complete any calls to manual tandem offices— In 4.4 to 8.4 seconds— OK lamp lighted. Overflow tone heard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished. Overflow tone silenced.</td>
</tr>
<tr>
<td>14a</td>
<td>If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service.</td>
<td>●</td>
</tr>
<tr>
<td>15</td>
<td>Repeat Steps 10 through 14a as required for Test 72.</td>
<td>●</td>
</tr>
<tr>
<td>16</td>
<td>Restore all keys and switches not required in next test.</td>
<td>●</td>
</tr>
</tbody>
</table>

K. Cancel Timed Release and Alarm

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Operate keys and set switches in accordance with Test Chart Test 73.</td>
<td>●</td>
</tr>
<tr>
<td>11a</td>
<td>If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service.</td>
<td>●</td>
</tr>
</tbody>
</table>
12 Operate (pull-out) CTR. key of sender being tested.

13 Momentarily operate ST key; start timing.
   TMT lamp lighted.
   In 20 to 32 seconds—
   TO_ lamp lighted.
   Overflow tone heard.
   In 10 to 15 seconds after TO_ lamp lighted—
   R-S-TOA lamp lighted.
   Major alarm sounded.

   Note: If R-S-TOA lamp lights in less than 10 seconds, it may be necessary to repeat test because another circuit may have seized common alarm circuit.

14 Insert make-busy plug into MB_ jack of sender under test.
   R-S-TOA lamp extinguished.
   Major alarm silenced.

15 Operate DISC key.
   Overflow tone silenced.

16 Restore (push-in) CTR_ key.
   TO_ lamp extinguished.
   OK lamp lighted.

17 Momentarily operate RL key.
   All lamps extinguished.

18 Remove make-busy plug from MB_ jack of sender under test.

19 Restore DISC key.

20 If alarm sending circuit is provided—
   Operate (pull-out) CTR_ key of sender under test.

21 Operate transfer key to DB position (if provided)
   or to TR position.

   Note: All alarms will be transferred while key is operated.

22 Momentarily operate ST key; start timing.
   TMT lamp lighted.
   In 20 to 32 seconds—
   OK lamp lighted.
   Overflow tone heard.

23 Operate DISC key.
   Overflow tone silenced.

24 Momentarily operate RL key.
   All lamps extinguished.

25a If 2-way trunk is used for selected outgoing route—
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Repeat Steps 10 through 25a as required for Test 74.</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Operate transfer key to NTR position.</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Momentarily operate RS key.</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Restore (push-in) CTR_ key of sender under test.</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Restore all keys and switches not required in next test.</td>
<td></td>
</tr>
</tbody>
</table>

L. **Time Out During “Waiting Assignment.”**

| 10   | Operate keys and set switches in accordance with Test Chart Test 75. | TK1 lamp momentarily lighted.  
If sender is not arranged to complete calls to panel or crossbar tandem offices or is arranged to complete some calls to manual tandem offices—  
In 20 to 32 seconds—  
TO_ lamp dimly lighted.  
After at least 35 seconds—  
TO_ lamp remains dimly lighted.  
If send is arranged to complete calls to panel or crossbar tandem offices or is not arranged to complete any calls to manual tandem offices—  
In 4.4 to 8.4 seconds—  
TO_ lamp dimly lighted.  
After at least 35 seconds—  
TO_ lamp remains dimly lighted. |
| 11a  | If 2-way trunk is used for selected outgoing route—  
At distant office—  
Have trunk removed from service. |  |
| 12   | Momentarily operate ST key; **start timing.** | In 20 to 32 seconds—  
OK lamp lighted. |
<p>| 13   | Restore WAT key. |  |
| 14   | Operate AAT key; <strong>start timing.</strong> | OK lamp lighted. |
| 15   | Momentarily operate RL key. | OK lamp extinguished. |</p>
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>16a</td>
<td>If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Repeat Steps 10 through 16a as required for Test 76.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Restore all keys and switches not required in next test.</td>
<td></td>
</tr>
</tbody>
</table>

**M. No-Digits Call**

| 10    | Operate keys and set switches in accordance with Test Chart Test 77.                                                                                                                                     |              |
| 11a   | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service.                                                                                            |              |
| 12    | Momentarily operate ST key.                                                                                                                                                                               | OK lamp lighted. |
| 13    | Momentarily operate RL key.                                                                                                                                                                               | OK lamp extinguished. |
| 14a   | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk restored to service.                                                                                            |              |
| 15    | Repeat Steps 10 through 14a as required for Test 78.                                                                                                                                                      |              |
| 16    | Restore all keys and switches not required in next test.                                                                                                                                                   |              |

**N. Intersender Timing—Wire-Spring-Relay Type Senders**

| 10    | Operate keys and set switches in accordance with Test Chart Test 79.                                                                                                                                     |              |
| 11a   | If 2-way trunk is used for selected outgoing route— At distant office— Have trunk removed from service.                                                                                            |              |
| 12    | Insert make-busy plug into MB, jack of sender under test.                                                                                                                                                  |              |
| 13b   | If a sender group release circuit is not provided—                                                                                                                                                    |              |
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At sender frame—
Connect ground to terminal 37 of terminal strip A.

14c If outgoing PCI sender group release circuit is provided—
At release circuit associated with sender being tested—
Block operated PR relay.

15d If outgoing sender group release circuit is provided—
At release circuit associated with sender being tested—
Block operated R relay.

16 At MTF—
Momentarily operate ST key; start timing.

17 Momentarily operate RL key.

18a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk restored to service.

19 Repeat Steps 10 through 18a as required for Test 80.

20 Remove test ground or blocking tool.

21 Remove make-busy plug from MB_ jack of sender under test.

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

O. Sender Transverter Timing—AMA

10 Operate keys and set switches in accordance with Test Chart Test 81.

11a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk removed from service.

12 Insert make-busy plugs into MB_ jacks of all senders in tranverter connector of sender under test.
<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Momentarily operate ST key; <strong>start timing.</strong></td>
<td>TK1 lamp momentarily lighted. In 7 to 11 seconds—OK lamp lighted. Overflow tone heard.</td>
</tr>
<tr>
<td>14</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished Overflow tone silenced.</td>
</tr>
<tr>
<td>15a</td>
<td>If 2-way trunk is used for selected outgoing route—At distant office—Have trunk restored to service.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Remove make-busy plugs from MB jacks of all senders.</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Restore all keys and switches not required in next test.</td>
<td></td>
</tr>
</tbody>
</table>

**P. Insufficient Digits—Wire-Spring-Relay Type Senders**

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Operate keys and set switches in accordance with Test Chart Test 82.</td>
<td></td>
</tr>
<tr>
<td>11a</td>
<td>If 2-way trunk is used for selected outgoing route—At distant office—Have trunk removed from service.</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Momentarily operate ST key.</td>
<td>TK1, TBL lamps lighted. Overflow tone heard.</td>
</tr>
<tr>
<td>13</td>
<td>Momentarily operate RL key.</td>
<td>All lamps extinguished. Overflow tone silenced.</td>
</tr>
<tr>
<td>14a</td>
<td>If 2-way trunk is used for selected outgoing route—At distant office—Have trunk restored to service.</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Repeat Steps 10 through 14a as required for Test 83.</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Restore all keys and switches not required in next test.</td>
<td></td>
</tr>
</tbody>
</table>

**Q. Sender Busy**

<table>
<thead>
<tr>
<th>STEP</th>
<th>ACTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>At sender frame—When sender under test is idle—Block operated SB relay.</td>
<td></td>
</tr>
</tbody>
</table>
STEP                  ACTION

2       At MTF—
        Insert make-busy plugs into MB_ jacks of all
        other senders ✷in the same subgroup. ✷

3       Remove blocking tool from SB relay.

4       At MTF—
        Insert make-busy plug into MB_ jack of sender
        under test.

5       At MTF—
        Remove make-busy plug from MB_ jack of
        sender under test.

6       At MTF—
        Remove make-busy plugs ✷used in Step 2✞
        from all MB_ jacks.

R. Directory Assistance Charging

10      Operate keys and set switches in accordance
        with Test Chart Test 84.

11a     If 2-way trunk is used for selected outgoing
        route—
        At distant office—
        Have trunk removed from service.

12      Operate REC key.

13      Momentarily operate ST key.

VERIFICATION

At sender frame—
Nonwire - spring - relay type senders
Check for absence of ground on 1T, 5T, 3B
of SB relay.
Wire - spring - relay type senders
Check for absence of ground on terminals 16,
26 of terminal strip A and terminal 17 of
terminal strip B on sender control unit.

At sender frame—
Nonwire - spring - relay type senders
Check for absence of ground on 1T, 5T, 3B
of SB relay.
Wire - spring - relay type senders
Check for absence of ground on terminals 16,
26 of terminal strip A and terminal 17 of
terminal strip B on sender control unit.

At sender frame—
Nonwire - spring - relay type senders
Check for presence of ground on 1T, 5T, 3B
of SB relay.
Wire - spring - relay type senders
Check for presence of ground on terminals
16, 26 of terminal strip A and terminal 17 of
terminal strip B on sender control unit.

OK lamp lighted.
Two trouble records taken.
Both trouble records
FR, CN, S, calling line location, OBS or
NOB, RNT0, 1, or 2, RN designations
perforated.
If test is for 411 or 555-1212 observed or
14 Momentarily operate RL key.

15a If 2-way trunk is used for selected outgoing route—
At distant office—
Have trunk restored to service.

16 Repeat Steps 10 through 15a as required for Test 85 through 87.

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

5. PREPARATION OF TEST CHART

5.01 The Test Chart is used as a particular number chart and provides the priming information required for each test. Information obtained from local office records should be used to fill in the Test Chart in the following manner:

(a) Selection of a Particular Trunk:
When it is desired to use a particular trunk for test, select the trunk as follows.

Note: When 2-way trunks are required to be used for the selected outgoing route, a particular trunk must always be selected.

(1) Consult local office records for location of desired trunk. Whenever possible, avoid the use of 2-way and intertoll trunks.

(2) In the TRUNK SELECTION column, record trunk location.

(3) In the MISCELLANEOUS KEYS AND/OR SWITCHES column, record FS, TS keys.

(4) Record CX key when trunk selected requires CX supervision.

(5) Record C20H key when 2-way or intertoll trunk is selected.

(6) Record GPA or GPB key when the trunks served by the sender are in allotted groups.

(b) Record originating class of call and translator indication required by the marker to select a route and sender group.

(c) Record the various classes of service for line locations and routes selected. When office

VERIFICATION

nonobserved 2-line entry—
•CP1, 2, • MB6, LST designations perforated.
If test is for 555-1212 observed or nonobserved 4-line entry—
•CP1, 2, • MB9, 4DG designations perforated.
First Trouble record
SRT, MRK, called number, called number class, TP or RP designations perforated.
Second trouble record
TV, 2L or 4L, TPT or RPT designations perforated.
If test is for 411 or 555-1212 observed or non-observed 2-line entry—
Called number designations not perforated.
If test is for 555-1212 observed or nonobserved 4-line entry—
Called number designations perforated.
OK lamp extinguished.
is provided with rate treatment, record various rate treatments.

(d) Record the line location when a specific line location is required.

(e) Record NTC key in the MISCELLANEOUS KEYS AND/OR SWITCHES column when a specific line location (d) is required.

(f) Record numericals or numericals and letter for called numbers, unless they are already shown. Five-digit, ten thousand numbers are always between 10,000 and 10,999 inclusive, and any office that has any of these numbers cannot have party letters with four digit numbers between 1000 and 1099.

(g) Select and record office codes as required for the proper translation of the stations or the ten thousands digits and for the maximum number of digits for the selected called numbers.

5.02 Test A

(1) Determine from local local office records, the office code for each office that can be reached by the sender on an AMA or non-AMA basis.

(2) Record the 11 key under the MISCELLANEOUS KEYS AND/OR SWITCHES column when a one-one prefix is required.

(3) For Tests 1 through 30, apply (a) through (g) of 5.01, selecting an office code, class of service, and an interoffice trunk requiring AMA routing.

(4) For Tests 31 through 58, apply (a) through (g) of 5.01, selecting an office code, class of service, and an interoffice trunk not requiring AMA routing.

(5) For Tests 59 and 60 apply (a) through (g) of 5.01, selecting an office code, class of service, and a tandem trunk not requiring AMA routing. In offices that have more than one tandem class, select and record the tandem class under column CST.

5.03 Test B

(1) Apply (b), (c), (f) and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.04 Test C

(1) Apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

5.05 Test D

(1) Apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.06 Test E

(1) Apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

5.07 Test F

(1) For Test 65, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 66, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.08 Test G

(a) Apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.09 Test H

(1) For Test 68, apply (b), (c), (f), and (g) of 5.01, selecting an office code requiring AMA routing.

(2) For Test 69, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.10 Test I

(1) Apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.
5.10 Test J

(1) For Test 71, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 72, apply (b), (b), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.11 Test K

(1) For Test 73, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 74, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.12 Test L

(1) For Test 75, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 76, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.13 Test M

(1) For Test 77, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 78, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.14 Test N

(1) For Test 79, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 80, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.15 Test O

(1) Apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

5.16 Test P

(1) For Test 82, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service requiring AMA routing.

(2) For Test 83, apply (b), (c), (f), and (g) of 5.01, selecting an office code and class of service not requiring AMA routing.

5.17 Test R

(1) For Tests 84 through 87, apply (b), (c), (f), and (g) of 5.01, selecting a class of service requiring AMA routing.
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<td>Test Out</td>
<td>NON-AMA 73</td>
<td>1 2 3 4</td>
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<td>BOTE BREC MODL 66 C</td>
<td>63 B</td>
<td>73</td>
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<td>K</td>
<td>Before Truck Test</td>
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<td>No-Reply Coil</td>
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