REVERTIVE PULSE INCOMING REGISTER  
FOR USE WITH CENTRAL B SWITCHBOARD  
TESTS USING TEST SET SD-25676-01 (J24756B)  
NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers a method of testing "B" Switchboard revertive pulse incoming register circuits Terminating Office Part using the incoming register test circuit SD-25988-01 and the register test set circuit SD-25676-01 in No. 5 crossbar offices.

1.02 The tests and the features tested are:

A. Registration
The features tested are:
(a) Registration of trunk link frame number
(b) Registration of trunk number
(c) Registration of pulses on each selection
(d) Ability to recognize the completion of a selection
(e) Translation of number on a two out of five basis
(f) Ability of selecting bars, centering and snubbing springs to restore to normal before following selection is registered when maximum number of fingers are engaged in one direction

B. Tell Tale - Resulting From Position Disconnect
This test checks the ability of the register to recognize a reversed battery signal and release after a trouble record is taken.

C. Over-all Time Out
This test checks that the over-all timer will cause a trouble release within the required interval.

D. Link Release
This test checks the ability of the register to cause a trouble release when linkage is not established within one second.

E. Common Alarm Timing

F. Trouble Release

G. Double Connection
This test checks that the register recognizes a double connection at the link switch.

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

1.04 Tests A through F are made with the register test set located at the master test frame. For Test G and for trouble locating purposes, the register test set shall be located at the register frame and the operated or released ON relay in the register under test should be substituted for the verification of the lighted or extinguished IRON lamp respectively.

1.05 When tests are made at the register frame or to avoid duplicate trouble record cards, release the ITRR key.

1.06 If the office is equipped with both automatic monitor and incoming register test circuits the STT/STM key of the automatic monitor should be restored to normal before starting any tests using the incoming register test circuit. If the STT/STM key of the automatic monitor is operated while a test by the incoming test circuit is in progress, the circuit will release as if the RL key had been operated.

1.07 Test C should preferably be made during periods of light traffic.

2. APPARATUS

Tests A through F

2.01 Incoming register test circuit (SD-25988-01).

2.02 Register test set circuit J24756B (SD-25676-01).

2.03 Test cord - 20 conductor cord, 6 feet long, equipped with one KS-13875 plug and one KS-13895 plug (W20C cord). (For connecting IRT jack of register test set to IRT jack of incoming register test circuit.)

2.04 No. 1011D dial hand test set equipped with a No. 2W38A cord assembly consisting of a W20K cord, a No. 310 plug and a No. 471A jack.

Tests A through G

2.05 No. 322A (make busy) plug.

Tests C, D, and E

2.06 KS-3005 stop watch or equivalent.

Test G

2.07 Test cord - No. 893 cord, 6 feet long, equipped with two No. 360A tools (1W15B cord) two KS-6278 tools (for connecting ground to terminal strip punchings).
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3. PREPARATION

STEP ACTION VERIFICATION

Preparation for Tests A through F

At Master Test Frame

1 Insert make busy plug into IRMB jack of register under test

2 Set IRC switch to select the register group

3 Set IR switch to select the register under test within the group

4 Set TCL switch to select the trunk class

At Register Test Set

5 Patch IRT jack of register test set to IRT jack of incoming register test circuit

6 Insert the plug of a telephone hand set into the PLS jack of the register test set

7 Set L switch to 0 position

4. METHOD

STEP ACTION VERIFICATION

A. Registration

8 Operate ITRR key

9 Operate STT key momentarily

IRT, IRON, RR lamps lighted
Order tone heard

10 Pass to the "B" operator the code of the office under test, followed by the number for test call 1 shown in Table 1

Trouble record taken and IRON, RR lamps extinguished

Table 1

<table>
<thead>
<tr>
<th>Test Call</th>
<th>Selections to be keyed</th>
<th>Perforations on trouble recorder card</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I0 B 0 0 0 1</td>
<td>A 0 B 1 0 1</td>
</tr>
<tr>
<td>2</td>
<td>1 1 1 1 1 0</td>
<td>2 2 2 2 2 3</td>
</tr>
<tr>
<td>3</td>
<td>2 2 2 2 2 3</td>
<td>5 5 5 5 5 2</td>
</tr>
<tr>
<td>4</td>
<td>3 3 3 3 3 2</td>
<td>7 7 7 7 2 2</td>
</tr>
<tr>
<td>5</td>
<td>4 4 0 4 0 5</td>
<td>8 8 4 4 5 0</td>
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<td>6</td>
<td>1 2 1 5 1 7</td>
<td>3 1 5 6 7 7</td>
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<tr>
<td>7</td>
<td>0 3 0 6 8</td>
<td>1 5 8 6 8</td>
</tr>
<tr>
<td>8</td>
<td>2 1 2 7 7</td>
<td>4 7 8 9</td>
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<tr>
<td>9</td>
<td>3 0 3 8 6</td>
<td>6 3 8 6</td>
</tr>
<tr>
<td>10</td>
<td>4 3 4 9 4</td>
<td>9 9 9 3</td>
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<tr>
<td>11</td>
<td>0 2 0 2 0</td>
<td>1 0 9 2</td>
</tr>
<tr>
<td>12</td>
<td>1 3 1 3 1</td>
<td>3 6 3 1</td>
</tr>
<tr>
<td>13</td>
<td>2 0 2 0 2</td>
<td>4 2 0 2</td>
</tr>
<tr>
<td>14</td>
<td>3 1 3 1 3</td>
<td>6 8 1 3</td>
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<tr>
<td>15</td>
<td>4 2 4 2 4</td>
<td>9 4 2 4</td>
</tr>
<tr>
<td>16*</td>
<td>0 5 0 5 4</td>
<td>0 0 5 4</td>
</tr>
<tr>
<td>17*</td>
<td>0 8 0 6 7</td>
<td>0 5 6 7</td>
</tr>
<tr>
<td>18*</td>
<td>0 7 0 7 6</td>
<td>1 0 7 6</td>
</tr>
<tr>
<td>19*</td>
<td>0 8 0 8 9</td>
<td>1 5 8 9</td>
</tr>
<tr>
<td>20*</td>
<td>0 9 0 9 8</td>
<td>0 0 9 8</td>
</tr>
</tbody>
</table>

* Omit test calls 16-20 when high incoming group selection is not required.
11 Operate RL key momentarily

All lamps extinguished
Check perforations of trouble recorder card for the number shown for the test call in Table 1, trunk frame number, trunk number and trunk class

12 Repeat steps 9 to 11 for test calls 2 to 20 shown in Table 1

13 Restore ITRR key

B. Tell Tale - Resulting from Position Disconnect

8 Operate ITRR key

IRT, IRON, RR lamps lighted
Order tone heard

9 Operate STT key momentarily

10 Pass to the "B" operator the code of the office under test, then request the operator to depress the position disconnect key

Trouble record taken and IRON, RR lamps extinguished

11 Operate RL key momentarily

All lamps extinguished
Trouble record card shows R0 perforation

12 Restore ITRR key

C. Over-all Time Out

8 Operate STT key momentarily
Start timing

IRT, IRON, RR lamps lighted
Order tone heard

9 Request the "B" operator to delay keying

10 Operate RL key momentarily

IRON lamp extinguished in 20 to 37 seconds

All lamps extinguished

D. Link Release

8 Set TCL switch to OFF position

9 Operate ITRR key

IRT lamp lighted for approximately one second
IRT lamp lighted
Trouble record taken

10 Operate STT key momentarily

All lamps extinguished
Trouble recorder card shows LR perforation

11 Operate RL key momentarily

12 Restore ITRR key

E. Common Alarm Timing

8 Block TRL relay nonoperated

9 Insulate 3B of M relay

10 Operate STT key momentarily and start timing

IRT, IRON lamps lighted
T0 lamp lighted at master test frame jack bay in 20 to 37 seconds

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**VERIFICATION**
- RS-TOA lamps lighted at master test frame jack bay in 10 to 15 seconds
- Note: If the RS-TOA lamp is lighted in less than 10 seconds, it will be necessary to replace the make busy plug in the IRWB jack and repeat step 10 because another circuit may have seized the common alarm circuit.
- IRTN lamp extinguished
- All lamps extinguished

**F. Trouble Release**
- Operate IRBT key
- Operate SIT key momentarily
- Pass to the "B" operator the code of the office under test, followed by any test call number shown in Table 1, Test A
- Operate RL key momentarily
- Restore IRBT key
- IRT, IRTN, RR lamps lighted
- Order tone heard
- IRON, RR lamps extinguished
- All lamps extinguished

**G. Double Connection**
- At master test frame jack bay - Insert make busy plug into IRWB jack of register under test
- Ground HN lead (punching C18 of register control unit terminal strip)
- Block TRL relay nonoperated
- Manually operate and hold ON relay
- Release ON relay
- Remove blocking tool from TRL relay
- Remove ground from HN lead
- Block operated H relay
- Manually operate and hold ON relay
- Release ON relay
- TCL, TC2 relays operated after approximately one second
- DCH relay not operated
- Trouble record taken
- DCK designation not perforated
- DCK relay operated