DYNAMIC OVERLOAD CONTROL CIRCUIT SD-27970-01

TESTS

NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section provides a method of checking the dynamic overload control circuit (DOC) SD-27970-01 and route transfer in the associated switching entities.

1.02 This issue affects the Equipment Test List.

1.03 The tests covered are:

A. Seizure, Route Transfer and Cross Detection: This test checks that: (1) the DOC will respond to a maximum of 30 incoming signals; (2) for each incoming signal the DOC will repeat identical signals to succeeding DOCs or to regional center; (3) signals will be sent to a maximum of 8 switching entities; (4) incoming signals are interrupted at a constant rate; (5) when a C lead becomes falsely grounded, an audible alarm and lamp indication will be originated at the associated switching entity.

B. Timing: This test checks that: (1) an incoming signal which persists for more than 31 to 38 seconds will be removed from all associated switching entities, any succeeding DOC(s), and the traffic control circuit; (2) an alarm will be initiated at DOC under test.

1.04 The tests require action and verification at traffic control circuit and switching entity (entities).

1.05 Table A is provided to assist in associating RTC1_ relay contacts with particular C_ leads for a particular switching entity.

2. APPARATUS

Test A

2.01 893 cord, equipped with 411A tool and KS-6278 tool (for applying ground).

All Tests

2.02 Blocking tools and insulators, as required. Use tools and apply as covered in Section 069-020-801.

2.03 KS-3008 stopwatch or equivalent.

3. METHOD

STEP ACTION VERIFICATION

A. Seizure, Route Transfer, and Cross Detection

Seizure and Route Transfer

1 At DOC— Block nonoperated RTC1_ relay associated with route under test.

At DOC— RTC_ relay associated with route under test operated for 29 seconds and released for 800 milliseconds for duration of overload signal.

At traffic control circuit—
SECTION 216-262-501

STEP ACTION VERIFICATION

3 At RTC1_ relay associated with route under test—
   Insulate make contacts associated with all equipped switching entities except one under test. See Table A.

4 At switching entity under test—
   Block nonoperated RT_ relay associated with route under test.

5 At DOC—
   Remove blocking tool from RTC1_ relay associated with route under test.
   At switching entity under test—
   RTCA_ lamp associated with route under test lighted.
   RT_ relay associated with route under test energized.

6 At DOC—
   Block nonoperated RTC1_ relay associated with route under test.
   At switching entity under test—
   RTCA_ lamp associated with route under test extinguished.
   RT_ relay associated with route under test de-energized.

Cross Detection

7 Using 893 cord, momentarily apply ground to C lead of route under test to switching entity under test.
   At switching entity under test—
   RTCA_ lamp momentarily lighted.
   RTCX lamp lighted.
   Major alarm sounded.

Note: Use Table A for identification of C lead to particular switching entity.

8 At switching entity under test—
   Operate RT-AR key.
   RTCX lamp extinguished.
   Major alarm silenced.

9 Remove blocking tool placed in Step 4.

TABLE A

<table>
<thead>
<tr>
<th>SWITCHING ENTITY</th>
<th>FIRST</th>
<th>SECOND</th>
<th>THIRD</th>
<th>FOURTH</th>
<th>FIFTH</th>
<th>SIXTH</th>
<th>SEVENTH</th>
<th>EIGHTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTC1 Contact</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>RTC1 C— Leads</td>
<td>00 - 29</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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STEP | ACTION | VERIFICATION
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10 | At traffic control circuit—
Discontinue overload signal on route under test. |  |
11 | Repeat Steps 1 through 10 for each remaining route to switching entity under test. |  |
12 | Repeat Steps 1 through 11 for each remaining switching entity to be tested. |  |
13 | Remove insulators placed in Step 3. |  |
14 | Remove blocking tool placed in Step 6. |  |

### B. Timing

1 | At DOC—
Insulate 10B of TM₁ relay associated with route under test. | In 31 to 38 seconds—TM₁ relay associated with route under test operated. 
**Restart timing.**
In 13 to 32 seconds—DOC lamp lighted. 
Major alarm sounds. |
2 | Block operated RTC₁ relay associated with route under test; **start timing.** |  |
3 | Remove blocking tool from RTC₁ relay associated with route under test. |  |
4 | Operate DOC-AR key. | DOC lamp extinguished. 
Major alarm silenced. |
5 | Remove insulator from TM₁ relay of route under test. |  |
6 | Repeat Steps 1 through 5 for each remaining equipped route to be tested. |  |