ORIGINATING TROUBLE INDICATOR
TESTS
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes a method of testing the originating trouble indicator in No. 1 crossbar offices. The tests covered are intended to detect trouble that would not be evident in the normal use of the originating trouble indicator.

1.02 This section is reissued to add a step in Table A to provide for testing the INF lamp added for charging directory assistance. This reissue does not affect the Equipment Test List.

1.03 The tests covered are:

A. Preference Chain Lockout Circuit Feature: This test checks that the trouble indicator prefers a particular marker and that only one marker at a time will connect to the indicator.

B. Make-Busy Feature: This test checks that the originating trouble indicator can be made busy to markers on an individual basis.

C. DT Key Chain and DT Relay Lock Feature: This test checks that, when a test call is originated, any later change of DT key settings will not alter the test call then in progress.

D. Lamp Check: This test checks that the originating trouble indicator lamps are lighted when their associated relays are operated.

1.04 Test B requires verification at the originating marker frames.

1.05 During these tests, markers may be unable to connect to the trouble indicator or, if connected, false indications may be received on the trouble indicator display lamps.

2. APPARATUS

Test A

2.01 One 716C test receiver and a KS-6278 connecting clip (for use in checking for the presence or absence of ground).

2.02 Two 893 cords, 6 feet long, equipped with two 360A tools (1W13B cord), a KS-6278 connecting clip and a 607A relay winding connector (for use in applying battery to winding of DS relays).

Tests A and D

2.03 Blocking and insulating tools as required.

Tests B and D

2.04 322A (make-busy) plug.

Test D

2.05 329A (make-busy) plug.
A. Preference Chain Lockout Circuit Feature

1. At originating trouble indicator frame—Block all DR relays nonoperated.

   Note: Disregard any indicator display or alarm.

2. Connect battery to 4B of the DS relay with first operating preference.

   DS relay operated.

3. Momentarily apply battery to 4B of other DS relays.

   DS relays not operated.

4. Remove battery from DS relay.

   DS relay released.

5. Connect battery to 4B of the DS relay with next lower operating preference.

   DS relay operated.

6. Momentarily apply battery to 4B of the DS relays with lower operating preference.

   DS relays not operated.

7. Remove battery from DS relay.

   DS relay released.

8. Repeat Steps 5, 6, and 7 for remaining DS relays.

9. Block operated the DS relay with the last operating preference.

10. Block operated the DS relay with first operating preference.

11. Momentarily apply battery to 4B winding of intermediate DS relays.

    DS relays operate and release.

12. Remove blocking tool from DS relay with first operating preference.

    DS relay released.

13. Check for ground on 1T of DS relay with last operating preference.

    Ground present.

14. Remove blocking tool from the DS relay.

    DS relay released.

15. Block operated, one at a time, the other remaining DS relays and check for the presence of ground on 1T before removing the blocking tool.

    Ground present.

16. Remove blocking tools from DR relays.
B. Make-Busy Feature

1. At originating trouble indicator frame—Insert a 322A plug into the TIB jack associated with marker 0.

2. Remove 322A plug.

3. Repeat Steps 1 and 2 for remaining markers.

C. DT Key Chain and DT Relay Lock Feature

1. At originating trouble indicator frame—Originate a test call using DT0 key.

2. While test call is in progress—Restore DT0 key and operate DT1 key.

3. Originate test call using DT1 key.

4. While test call is in progress—Restore DT1 key and operate DT2 key.

5. Repeat Steps 2, 3, and 4, substituting remaining DT keys.

D. Lamp Check

1. At originating trouble indicator frame—Restore all operated keys.

2. Operate LP key.

3. Block operated HD relay.

4. Manually operate and release, where provided, the relays listed in Table A.

5. Remove blocking tool from HD relay.

6. Insert 329A plug into a BM jack.

7. Operate ST key.

8. Release ST key.

9. Remove 329A plug from BM jack.

10. Release LP key.

Verification

- At originating marker 0—TIB relay operated.
- At originating marker 0—TIB relay released.
- Test call completed for marker 0.
- Test call completed for marker 1.
- XOB, XOG, XO5 Y, YW Option), XSG (E Option), XSB (E Option), XCR, XCL, XTL, XC, XGS XGE, XOF, XSS lamps lighted.
- Observe that lamps listed in Table A are lighted when associated relays are operated.
- All lamps extinguished.
- BM lamp lighted.
- BM lamp extinguished.
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<tr>
<th>STEP</th>
<th>ACTION</th>
<th>VERIFICATION</th>
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<tr>
<td>11</td>
<td>Insert make-busy plug into IT jack.</td>
<td>ANE, ANO, AM, IT lamps lighted.</td>
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<tr>
<td>12</td>
<td>Remove make-busy plug from IT jack.</td>
<td>ANE, ANO, IT lamps extinguished.</td>
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<tr>
<td>13</td>
<td>Momentarily operate AMR key.</td>
<td>AM lamp extinguished.</td>
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<tr>
<td>14a</td>
<td>If dynamic overload control features are provided— At miscellaneous relay rack— Momentarily operate RTCA_ relays.</td>
<td>RTCA_ lamps lighted when associated relays are operated.</td>
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<td>15a</td>
<td>Insulate M10 or RTX 0, 2, 4, 6 relays, M3 of RTX 1, 3, 5, 7 relays, and M3 of RTCX relay.</td>
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<td>16a</td>
<td>Manually operate RTX_ relays.</td>
<td>Associated RTX_ lamps lighted.</td>
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<td>17a</td>
<td>Manually operate RTCX relay.</td>
<td>RTCX lamp lighted.</td>
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<tr>
<td>18a</td>
<td>Momentarily operate RT-AR key.</td>
<td>RTCX lamp and RTX_ lamps extinguished.</td>
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<td>19a</td>
<td>Remove insulators placed in Step 15a.</td>
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<td>20b</td>
<td>If marker speedup features are provided— Manually operate and release ABK, BBK, CBK relays.</td>
<td>ABK, BBK and CBK lamps lighted when associated relays are operated.</td>
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