FALSELY GROUNDED DISTRICT JUNCTOR DC LEAD
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers methods to be followed in connection with troubles due to a grounded DC lead in the district junctor.

2. INDICATIONS OF TROUBLE CONDITION

2.01 Originating trouble indicator records.

3. REACTIONS DUE TO TROUBLE

3.01 The individual call involved fails to complete.

3.02 District junctors on the frame involved are unable to serve calls.

3.03 During busy-hour periods this trouble may cause an overload of the originating traffic.

4. IMMEDIATE PROCEDURE TO FOLLOW

4.01 Analyze trouble indicator records.

4.02 Make the district frame involved busy.

5. ANALYSIS OF TROUBLE

5.01 A false ground on the DC lead of a particular district junctor causes the F relay of the district junctor to operate and in turn operates the LC relay of the district link and connector circuit. Whenever any call is originated from this frame, this false ground will cause additional LC and F relays to lock, causing the marker to return a trouble release and summon the trouble indicator.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE

6.01 Remove covers of the LC relays on the district link and connector frame. Open the locking contact on each LC relay until one fails to release. This is the group in which the false ground is located.

6.02 Remove the covers from the district junctor F relays of the above mentioned group. Release the operated F relays of these district junctors until one fails to release. This is the district junctor in trouble.

6.03 Block this F relay non-operated.

6.04 Make the particular group of districts junctors busy and restore the remaining district junctors on the frame to service.

7. TROUBLE CONDITIONS CAUSING REACTIONS MAY BE LISTED BELOW

7.01 Grounded DC lead on the subscriber sender link primary switch.

© American Telephone and Telegraph Company, 1941
Printed in U.S.A.
**ORIGINATING TROUBLE INDICATOR RECORD**

**CROSSBAR OFFICES**

| No. | CL | CT | DR | DS | ES | CS | CH | SW | M | IC | P | CHL | OHR | ZE | ZO | ZL | ZN | PS1 | NS2 | OTL | DDP | TPK | TP2 | TP3 | TP4 | TR | A | B | C | D | E | F | G | H | I |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 4   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 5   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

---

**Column A - Trouble indication.**

**Column B,C,D - Any marker, sender or trunk.**

**Column F - Same district frame with no US lamp in column M. Different district frame with US lamp.**

**Column I - District frame indicated by column F with XDC lamp in column 0 and multiplicity of SW lamps in column F, it indicates trouble on this frame.**

**Columns E,G,H,J,K,L,N,P - Have no significance.**

---

**Analysis of Indication:** The XDC lamp display occurs when a sender with a false ground on the DC lead selects a marker. Therefore, any operated LC relay and SW lamps indicate falsely operated F relays.

**Immediate Procedure to Follow:** Make district junctors on frame involved busy.

**Procedure to Locate and Clear Trouble:** Locate LC relay operated falsely and then F relay in that group which is operated falsely. Block this relay down and test for false ground.