

TERMINATING MARKER RECEIVING LEAD PERMANENTLY CLOSED TERMINATING MARKER CONNECTOR NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers methods to be followed when a terminating marker receiving lead is permanently closed at the TM or S relay of a terminating marker connector.

2. INDICATIONS OF TROUBLE CONDITION

2.01 Terminating trouble indicator displays.

2.02 MB (Marker Busy) lamp lighted for an extended period of time.

3. REACTIONS DUE TO TROUBLE

3.01 Calls involved in trouble indications as the result of a permanently closed receiving lead at the TM relay of a marker connector will be completed on second trial.

3.02 Calls involved in trouble indications as the result of a permanently closed receiving lead at the S relay of a marker connector may or may not be completed on second trial. If the call is not completed the originating subscriber will in some instances be given an audible ringing signal.

4. IMMEDIATE PROCEDURE TO FOLLOW

4.01 If as shown on the attached trouble indicator record, one marker is involved in these types of indications in various connectors and other markers are involved in similar indications in a particular connector, remove the former marker from service.

4.02 If all senders except one in a particular connector are involved in trouble indications, as shown in the attached trouble indicator record, or are involved in receiving lead check failure trouble indications, remove the sender that is not involved in trouble indications from service.

5. ANALYSIS OF TROUBLE

TM Relay

5.01 The trouble indications usually occur during medium and heavy traffic periods.

5.02 When a trouble-free marker is engaged in the connector in trouble and is not using the permanently closed lead to assist in establishing the connection to the desired line, a

trouble indication may result from the application of ground to this lead by the marker in trouble. When the marker in trouble is engaged in any connector other than the connector in trouble and is not using the permanently closed lead to assist in establishing the connection to the desired line, a trouble indication may result from the application of ground to this lead by some other marker or sender engaged in the connector in trouble.

5.03 The trouble indications vary depending on the particular permanently closed lead and on the stage of the operation at which ground is applied to the closed lead. In some instances the X relay may operate from a momentary cross or ground as the marker functions are disturbed by the trouble, or the XR relay may operate due to the release of the ringing relays in the marker, or the XTB relay may operate as a result of the operation of additional HP relays. All H, T, U or F lamps of the trouble indicator may be lighted on a particular display. This is an indication of a false ground on one of the leads in a particular group of receiving leads which are arranged as follows:

<u>Check leads</u>	<u>Receiving leads checked</u>
CK1	TH1, TH2, U1 - U5
CK2	TH4, TH8, T1 - T5, TR2
CK3 and CK4	H1-H5, OAB, RO(CK3) F1-10(CK4)

5.04 Ground may be removed from the lead in trouble at the moment that the marker starts to summon the indicator. The marker proceeds to set up the call and depending on the availability of the various connector frames, may progress through many functions before the trouble indicator has completed recording the trouble condition. In this event, a marker receiving lead failure may not be indicated and the trouble indications in such instances are misleading. Enough indications showing marker receiving lead failures will be received, however, so that an analysis may be made.

5.05 No trouble is encountered when the marker in trouble is engaged with the connector in trouble.