TERMINATING MARKER FCG TROUBLE IN COMMON EQUIPMENT  
NO. 1 CROSSBAR OFFICES

1. GENERAL
1.01 This section covers the methods to be followed in connection with trouble due to a false charge and ground test failure of the terminating marker.

2. INDICATIONS OF TROUBLE CONDITION
2.01 A large number of terminating trouble indicator FCG (false charge and ground) lamp displays.

3. REACTION DUE TO TROUBLE CONDITION
3.01 The terminating marker functions are slowed considerably through the forced time out each time that a false charge and ground test failure is encountered.
3.02 The general slowing up of terminating marker functions soon causes a shortage of terminating senders.
3.03 The delays produced through terminating sender shortages may produce an originating sender shortage.
3.04 Widespread line link alarms may be observed because of lack of a sufficient number of idle originating senders.

4. IMMEDIATE PROCEDURE TO BE FOLLOWED
4.01 Insert make busy plugs into the TRO (trouble reorder) jacks on the terminating trouble indicator of the affected terminating equipment.
4.02 Remove defective equipment from service. Incoming trunks may be blocked until such time as they are made busy at the originating end by inserting make busy plugs into the test jacks.
4.03 Request the traffic department to continue immediate priming of all stuck originating senders.
4.04 Use the terminating load control feature for a brief period in order to relieve traffic congestion.

5. ANALYSIS OF TROUBLE
5.01 The terminating marker false charge and ground feature tests the tip and ring leads between the incoming trunk and the subscriber's line hold magnet for the presence of crosses. Usually the trouble conditions encountered are such that they affect only a small portion of the terminating traffic. Occasionally, however, the cross may be in a common portion of the equipment so that it may affect a large number of calls.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE
6.01 An analysis of a number of FCG lamp displays will disclose the common equipment involved. Remove this equipment from service if possible. Inspect and test the tip and ring circuits through the common equipment.

7. TROUBLE CONDITIONS CAUSING REACTIONS MAY BE LISTED BELOW
7.01 Battery cross to common portion of TT lead to an incoming link frame.
1. **Column A** - Trouble indication.
2. **Column B** - Any marker.
3. **Columns G and H** - Indicate the incoming frame, primary switch and channel in common and hence the location of the trouble. The FCG lamp in column S indicates a cross on the tip or ring.

### Analysis of Indication: The FCG lamp indicates a cross on the tip or ring or both leads in some channel.

### Immediate Procedure to Follow: Plug TRO jacks of affected terminating equipment. Remove defective equipment from service. Use terminating load control.

### Procedure for Locating and Clearing Trouble: Analyze trouble indicator records to determine equipment in trouble. Inspect and test tip and ring through common equipment.