FAILURE OF A SUBSCRIBER SENDER LINK G RELAY TO CLOSE THE OG LEAD NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers procedures to be followed in connection with trouble resulting from failure to close the OG lead (40 contact), in a subscriber sender link, when a district junctor group G- relay operates.

2. INDICATIONS OF TROUBLE CONDITION

2.01 Subscriber sender link alarms may be received on various frames. No alarm, however, will be received on the subscriber sender link frame in trouble.

2.02 Line link alarms may be received on frames having access to the sender link in trouble.

2.03 Terminating trouble indications of line link lockout may be received on calls to subscriber lines served by the line link frames on which alarms are received.

3. REACTIONS DUE TO TROUBLE

3.01 Subscribers served from the line link frames having access to the subscriber sender link in trouble may experience delays in receiving dial tone or may not receive dial tone at all.

3.02 During periods of peak traffic, delays may be experienced in completing terminating traffic.

4. IMMEDIATE PROCEDURE TO FOLLOW

4.01 Determine the particular group of district junctors involved in the trouble condition by originating a test call to each group of district junctors appearing on one of the line link frames on which an alarm has been received. The test calls may be forced into the various district junctor groups appearing at the line link frame by temporarily inserting make-busy plugs in the secondary switch jacks (SS).

4.02 The line link controller will block and time out when the group of district junctors involved in the trouble is selected. Make this group of district junctors busy at the subscriber sender link frame.

5. ANALYSIS OF TROUBLE

5.01 When subscriber sender link and line link alarms are received on various frames attended by terminating trouble indications of line link lockouts involving the frames on which alarms have been received, the trouble may be caused by failure of a subscriber sender link G- relay, associated with a particular group of district junctors, to close the OG lead (40 contact).

5.02 Under normal operation in a subscriber sender link controller the OG lead is grounded, to operate the ON relay, with the operation of one of the district junctor group G- relays. Failure of a particular G- relay to close the OG lead (40 contact) will result in the ON relay remaining unoperated. If the ON relay fails to operate the ON1 relay will remain unoperated and the timing of subscriber sender link functions will not be started.

5.03 When the district junctor group G- relay operates, a circuit is closed to operate a sender group SG relay which in turn provides a circuit to operate the associated lockout relay LL. The SS relay will operate, following the operation of relay LL, and open the GT leads to the SG relays. All SG relays, with the exception of the one associated with the preferred sender group will release.

5.04 With the SS relay and one of the SG- relays operated a path should be provided to operate the OC relay from ground on the OG lead. In this case, however, due to failure of the operated G- relay to close the OG lead the OC relay will remain unoperated. This will prevent the C- relay, associated with the sender group, from operating. Depending upon the wiring arrangement used failure of the C- relay to operate will directly prevent the SGE- relay from operating or will prevent the preferred sender S- relay from operating and in turn the SGE- relay.

5.05 With the SGE relay normal, other subscriber sender links in the LL relay chain are permitted an attempt to select the sender group. However, a sender link of lower preference in the LL relay chain other than the one in trouble, attempting to select this sender group, will be unable to operate its SS relay due to the LL relay preference chain. As a result the sender link will block and time out and an alarm will be received.

5.06 Due to failure of the subscriber sender link timing to start (see 5.02) when the district junctor group in trouble is engaged on a call, the sender link controller circuit will block until the line link associated on the call times out and the call is released.

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5.07 While a line link controller is timing out, due to the trouble condition, terminating trouble indications of line link lockout may be received on calls to subscribers served by it.

6. SUGGESTED PROCEDURE FOR LOCATING AND CLEARING TROUBLE

6.01 The procedure for locating and clearing the trouble is covered in 4.01 and 4.02.

7. TROUBLE CONDITIONS CAUSING REACTION MAY BE LISTED BELOW

7.01 Contact 40 on any subscriber sender link G- relay does not close when the relay operates.