

TERMINATING SENDER LINK FRAME ALARM ROUTINE NO. 1 CROSSBAR OFFICES

1. GENERAL

- 1.01 This section covers the procedure to be followed for the various alarms associated with the terminating sender link and control circuit. It also covers other features which do not bring in an alarm.
- 1.02 These alarms usually occur as the result of troubles which cause delays in handling service calls. High traffic register readings indicate an abnormal number of delays in seizing senders or that there is excessive traffic for the various sender groups. Since all of these alarms indicate delays in handling service thru all incomings on one trunk frame, they should receive prompt attention.
- 1.03 The AL and M time alarm lamps are located on each terminating sender link frame and apply to that frame only. The aisle pilot lamps are white. The sender identifying lamps appear on a relay rack bay containing terminating sender selector units. The traffic registers are located on the traffic register rack.

2. APPARATUS

- 2.01 No. 275A and No. 298A (make busy) plugs.
- 2.02 No. 508A (relay blocking) tools.

3. METHOD

(A) Minor Time Alarm

- 3.01 If, in response to a minor intermittent alarm a lighted AL lamp is found on a terminating sender link, observe the relays that are operated.
- (a) If the AL relay alone is operated, the trouble may be in the connection between the sender link and the senders, a double connection, or a continuity failure of the sleeve circuit.
- (b) If TA2 relay is operated, the trouble may be in the home control circuit.
- (c) If TB2 relay is operated and TA2 relay is normal, the trouble may be in the portion of the link circuit which is individual to the frame or the trouble may be in the mate control circuit especially if the mate frame has an alarm as described in (b) above.

AL Relay Operated

- 3.02 In case the AL relay only is operated, restore the alarm by momentarily operating the TR key.
- 3.03 Operate the L key associated with the sender identifying S lamps and observe their flashing. An S lamp flashes every time the associated sender is seized on a service call. If, however, the sender is selected and due to trouble is not used on the call, the S lamp will remain lighted approximately 1 second during the short time out period in the sender link.
- 3.04 If an S lamp is observed to be lighted for approximately 1 second, there may be trouble grounds or opens in the leads connecting the associated sender and the sender link which brought in the AL lamp signal. If only one terminating sender link alarm has appeared, there is probably an open at the associated C relay or a falsely grounded lead in the control circuit as indicated by an operated FG relay covered in 3.17. If there are several terminating sender link alarms together with the long flashing of S lamp or lamps, there may be a false ground on the leads common to the one sender subgroup which are multiplied to all the sender links.

- 3.05 If the identifying S lamp gives no indication of trouble, insert a 298A plug in the HD jack and block the W relay non-operated. (The alarm has already been restored by momentarily operating the TR key). Whenever a trouble occurs with a 298A plug in the hold jack, the major alarm sounds in place of the minor alarm, proceed as described under (B) Major Time Alarm, especially note 3.16, 3.17 and 3.18.

TA2 or TB2 Relay Operated

- 3.06 If the TA2 or TB2 relay is operated, insert a 298A plug in the HD jack and momentarily operate the TR key to restore the throw-over equipment and alarm. If there is an indication that the trouble is in the portion of the circuit which directs the call to the mate control circuit a 298A plug may also be inserted in the EB jack.

Caution: With the 298A plug in the HD jack - when trouble occurs to bring in an alarm, the throw over feature has been blocked, consequently, all new calls to the associated incoming trunk frame will be delayed until the terminating sender link is manually released, hence a test man should