NUMBER GROUP AND CONNECTOR FRAME ALARM ROUTINE NO. 5 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers the procedures to be followed in response to number group and connector circuit alarms in No. 5 crossbar offices.

1.02 Whenever an open occurs in a chain circuit of the working MP or E relays at a time when the number group and connector circuits are not in use; or whenever a trouble cross exists that would cause only one of the windings of a CH relay to be energized, the circuit is transferred from the working MP or E relays to the E or MP relays which were being held as emergency equipment.

1.03 This transfer from the regular chain circuit to the emergency or from the emergency to the regular chain circuit operates the number group and connector alarm giving the following indications of the condition:

(a) A CH lamp is lighted on the number group and connector frame.

(b) White aisle pilots are lighted to indicate the aisle in which the frame causing the alarm is located.

(c) The minor alarm operates.

Note: When office is equipped for unattended operation the alarm circuit will be under the control of the alarm sending circuit.

2. METHOD

2.01 If, in response to a minor alarm, a lighted CH lamp is found on the number group and connector frame, operate the AR key on the frame showing the alarm if the key is normal, or restore it to normal if the key is operated, in order to retire the alarm and to extinguish its associated lighted lamps.

2.02 If the alarm persists, the trouble may be due to one of the following conditions:

(a) Open lead through the secondary winding of the CH relay through the MTR key to the TR relay contact.

(b) Open lead through the primary winding of the CH relay to the TR relay contact.

(c) Open locking circuit for TR relay through the AR key.

If no open exists then the trouble may be due to a trouble cross on the above contacts, keys or windings of the chain circuit of the working MP or E relays.

2.03 If the alarm retires upon the operation or release of the AR key, the trouble may be due to one of the following conditions:

(a) If TR- relays are operated, one of the chain circuits is open through the MP relays to the TR relay.

(b) If TR- relays are normal, one of the chain circuits is open through the E relays to the TR relay.

If no open exists, then the trouble may be due to a trouble cross on the contacts of the above relays.

2.04 If, in response to a minor alarm no CH lamp is lighted on the number group and connector frames in the aisle with the lighted white aisle pilot and assuming that all AR keys are normal, observe which number group and connector frame has operated TR- relays. This would indicate that this circuit transferred due to a trouble condition as mentioned above and the CH lamp or its circuit is open.

2.05 When the trouble has been cleared, transfer the chain circuit back to the regular or emergency according to the schedule being followed.

2.06 To transfer the chain circuit operate the MTR key and when the CH lamp on the frame lights and the minor alarm operates, restore the MTR key. Operate the AR key if it is normal, or restore it to normal if it is operated. Between the operation of the MTR key and the AR key the number group and connector alarm is operated and its associated lamps are lighted. This temporary operation of the alarm occurs anytime the chain circuits are transferred.

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2.07 If, upon the operation or release of the AR key the alarm retires, but after the chain circuit has been transferred back to the regular or emergency there is a repetition of the alarm, the trouble may be due to a trouble cross on the working MP or E relays. This trouble cross may only be effective when one or more of the MP or E relays are normal or when one or more of the MP or E relays are operated.

3. REPORTS

3.01 The required record of these alarms should be entered on the proper form.