TAKING EQUIPMENT OUT OF SERVICE
NUMBER GROUP CONNECTOR CIRCUIT
NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section covers a method to be followed in taking out of service the number group connector circuit and individual pieces of apparatus of this circuit.

2. APPARATUS

2.01 No. 508A (relay blocking) Tools.
2.02 No. 298A Plug.

3. METHOD OF TAKING THE CIRCUIT OUT OF SERVICE

3.01 To remove the number group connector circuit from service, plug the No. 298A plug into the TMB jack.

Caution: Removing the number group connector from service stops all terminating traffic to the subscribers in the number group. For this reason a number group should be made busy only when it will greatly expedite clearing a trouble.

4. METHOD OF TAKING EQUIPMENT OUT OF SERVICE

(A) HB and TB Relays

4.01 These relays cannot be removed from service without seriously affecting terminating service to a group of subscribers, hence if a trouble cross or ground or open exists the trouble should be cleared immediately.

4.02 If the trouble indicator is being brought in on each call to a number group connector as a result of a cross for example, on the contacts of the HB relay or a trouble ground on an NF lead, it may be desirable to remove the number group connector from service as outlined in 3.01.

4.03 If a winding of the TB (245 type) relay is defective, replace the coil immediately. If a winding of the HB relay is defective, replace the relay immediately. The number group connector circuit need not be removed from service, however, extreme care should be taken to avoid falsely grounding or crossing any of the leads.

(B) Marker Connector MGA to MCD Relays

4.04 Make busy the associated terminating marker in the approved manner.

(a) If the contacts of the relay are crossed, the associated lead in the marker should be insulated.

(b) If the contacts of the relay are falsely grounded, the false ground should be cleared immediately.

(C) Marker Preference MF Relays

4.05 The MF relays are out of service if the TR relays are operated. If the TR relays are unoperated, momentarily operate the MTR key. This will cause the TR relays to operate. To silence the alarm operate the SA key if it is normal, or restore it to normal if it is operated.

(D) Marker Preference E Relays

4.06 The E relays are out of service if the TR relays are unoperated. If the TR relays are operated, momentarily operate the MTR key. This will cause the TR relays to release. To silence the alarm operate the SA key if it is normal or restore it to normal if it is operated.

(E) Transfer TR1 Relay

4.07 If the TR1 relay is operated, block it operated, if unoperated, block it unoperated. If the trouble necessitates the removal from service of the associated terminating marker, remove it in the approved manner. If necessary, block all TR relays in the same position as the TR1 relay is blocked.

Note: When the TR1 relay is blocked operated or unoperated, the connector alarm and its associated lamps are out of service. Therefore prompt action is necessary in restoring this relay to service in order to reduce to a minimum the elapsed time that the connector alarm is out of service.

(F) Transfer TR2 and Check CH Relay

4.08 If the TR1 relay is operated, block it operated, if unoperated, block it unoperated. See note under 4.07.

(G) Transfer TR3 to TR6 Relays

4.09 Block all TR relays operated or non-operated as in 4.07 so as to give service without removing any markers from service if possible, otherwise make busy the affected markers. Clear the trouble as soon as traffic will permit the removal of the affected marker from service.
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(H) Number Checking Special Group XO Relay

4.10 Block the relay non-operated.

4.11 Advise the traffic department that number checking will be inoperative on the lines affected by the removal of this relay from service.

5. GENERAL PRECAUTIONS WHEN WORKING ON THE APPARATUS

5.01 Due to multiple wiring and common equipment, it is desirable when working on the individual pieces of apparatus to make busy equipment and take other precautions as indicated below.

(A) Marker Connector MCA To MCD Relays

5.02 Make busy the associated terminating marker in the approved manner. Work on any of the MCA to MCD relays shall only be performed during periods of light traffic when momentary interference to all terminating calls to the line choice will not cause serious reaction.

Caution: Crossing or grounding any of the associated leads on the contacts may cause the frame to be tied up and provide a trouble indication.

(B) Marker Preference MP Relays

5.03 Transfer the circuit to the E relays in accordance with 4.05.

(C) Marker Preference E Relays

5.04 Transfer the circuit to the MP relays in accordance with 4.06.

(D) Transfer TR1 Relay

5.05 Make busy the associated terminating marker in the approved manner.

5.06 If the TR relays are operated, block all the TR relays operated, if the TR relays are unoperated, block all the TR relays unoperated. See note under 4.07.

5.07 On a current flow test of any TR relay, block all TR relays non-operated as outlined in 5.06. Then remove the blocking tool from the relay that is to be current flowed. See note under 4.07.

(E) Transfer TR2 and Check CH Relay

5.08 Remove the CH or TR2 relay from service in accordance with 4.08. On a current flow test of the TR2 relay, proceed in accordance with 5.07.

5.09 If the connections on the winding of the TR2 relay are to be opened then proceed in accordance with 5.06.

Note: While working or putting a current flow test on the TR2 relay, the connector alarm and its associated lamps may operate momentarily.

(F) Transfer TR3 To TR6 Relays

5.10 Remove the associated terminating markers from service in the approved manner. On a current flow test of a TR3 to TR6 relay, proceed in accordance with 5.07.

5.11 If the connections on the winding of the relay are to be opened then proceed in accordance with 5.06.

(G) Number Checking Special Group XE Relay

5.12 Remove the relay from service in accordance with 4.11.

(H) HB and TB Relays

5.13 Same as 4.01 to 4.03.

6. REPORTS

6.01 Any required record of the equipment removed from service should be entered on the proper form.