

**TAKING EQUIPMENT OUT OF SERVICE**  
**DISTRICT COIN CONTROL CIRCUIT**  
**COIN CONTROL LINK AND CONTROL FRAME**  
**KEY PULSING "A" SENDER LINK AND CONTROL FRAME**  
**NO. 1 CROSSBAR OFFICES**

**1. GENERAL**

**1.01** This section covers the methods to be followed in taking out of service, a district coin control circuit, a group circuit, a control circuit, sender links and individual pieces of apparatus of the coin control link and control circuit or the key pulsing "A" sender link and control circuit.

**2. APPARATUS**

- 2.01 No. 275A (make busy) Plugs.
- 2.02 No. 298A (make busy) Plugs.
- 2.03 No. 508A (relay blocking) Tools.
- 2.04 No. 325C Plugs (for making a vertical unit busy).

**3. METHOD OF TAKING EQUIPMENT OUT OF SERVICE**

**(A) District Coin Control Circuit**

**3.01** Insert a 298A plug into the MB jack of the associated district coin control circuit.

**(B) Control Circuit**

**3.02** Insert a 298A plug into the associated control MB jack at the link and control frame.

**(C) Alarm Circuit (Entire or Individual Parts)**

**3.03** Same as 3.02.

**(D) Primary Switch**

**3.04** During periods of light traffic, a primary switch may be removed from service by making busy the associated control circuit in accordance with 3.02. At all other times follow the procedures outlined in 3.05 to 3.08.

**3.05** Make busy the associated control circuit in accordance with 3.02. This removes two primary switches from service.

**3.06** Await the release of all hold magnets, of the primary switch to be removed, which may be operated in service.

**3.07** Insert a 325C plug into the sleeve grounding jack of each B primary hold magnet of the primary switch to be removed (maximum of 10 links).

**3.08** Restore the other primary switch to service by removing the 298A plug from the associated control circuit MB jack.

**(E) Secondary Switch**

**3.09** Block operated the pair of associated GB-relays.

**(F) LR Relay**

**3.10** Same as 3.09.

**(G) Coin Control or Sender Link**

**3.11** Make busy the associated control circuit in accordance with 3.02.

**3.12** Insert a 325C plug into the coin control or sender link B primary hold magnet sleeve grounding jack when the hold magnet is unoperated. If the A or B primary hold magnet winding is open then insulate the 1 and 2 off normal contacts of the A and B primary hold magnets in the approved manner.

**3.13** Restore the associated control circuit to service by removing the 298A plug from the control circuit MB jack.

**(H) Group Circuit**

**3.14** Insert 298A plugs into each of the MB jacks of the associated coin district junctors (maximum 10 circuits) or make busy the associated key pulsing "A" district junctors or outgoing trunks at the "A" switchboard in the approved manner.

3.15 Insert a 298A plug into the associated GB jack at the link frame.

**(I) HA and AG Relays**

3.16 Block unoperated the associated G-relay of the A control circuit.

**(J) HB and BG Relays**

3.17 Block unoperated the associated G-relay of the B control circuit.

**(K) SGB and SGE Relays**

3.18 Insert a 275A plug into the associated GB jack at the sender make busy frame to make busy the group of associated senders or coin control circuits.

3.19 If the winding of the SGB relay is open, then block the SGB relay operated. If the normally closed contacts of the SGB relay are short circuited then block the associated SGE relay operated. Check that the associated GB relays are operated.

**(L) C and LL Relays**

3.20 Block operated the associated GB relay.

3.21 If the contacts of the C relay are short circuited, remove the group of associated senders or coin control circuits from service in accordance with 3.18. If the contacts of the C relay become falsely grounded remove the associated control circuit from service in accordance with 3.02 or remove the group of associated senders or coin controls in accordance with 3.18 depending upon which contact becomes falsely grounded.

3.22 If the normally closed contacts of the LL relay are open, short circuit the contacts. If the normally open contacts of the LL relay are short circuited, remove from service the associated group of senders or coin control circuits in accordance with 3.18. If the contacts of the LL relay become falsely grounded, remove from service the associated control circuit in accordance with 3.02 or remove the group of associated senders or coin control circuits in accordance with 3.18 depending upon which contact becomes falsely grounded.

**(M) S and SB Relays**

3.23 Insert a 275A plug into the MB jack of the associated key pulsing "A" sender at the

sender make busy frame or insert a 298A plug into the MB jack of the associated coin control circuit.

3.24 If the winding of the SB relay is open, then block the SB relay operated. If the normally closed or normally open contacts of the SB relay are short circuited, then remove from service the group of associated senders or coin control circuits in accordance with 3.18. If there is a ground on any of the contacts of the SB relay that would affect all the senders or coin control circuits in the sub group then remove from service the associated senders or coin control circuits in accordance with 3.18. If the preference lead contacts or any operated SB relay are open, then short circuit the contacts.

3.25 If any of the contacts of the S relay become short circuited or falsely grounded so as to affect all the senders or coin control circuits of the sub group, then remove the associated group of senders or coin control circuits in accordance with 3.18. If any contact on the S relay becomes falsely grounded and operates the fuse, then block operated the associated GB relays.

**(N) GB Relay**

3.26 Block the relay operated.

3.27 If the SG lead contacts become short circuited or falsely grounded, then remove from service the group of associated senders or coin controls in accordance with 3.18. If any of the other normally closed contacts become short circuited or falsely grounded, insulate the 1 and 2 off normal contacts of the associated A and B primary hold magnets.

**4. GENERAL PRECAUTIONS WHEN WORKING ON THE APPARATUS**

4.01 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) Control Circuit**

4.02 Make busy the control circuit in accordance with 3.02. Allow approximately 15 seconds for connection to be established which may have been connected to the control circuit at the time it was made busy.

**(B) Alarm Circuit (Entire or Individual Parts)**

4.03 Same as 4.02.

**(C) Primary Switch**

4.04 Remove the associated control circuit from service in accordance with 4.02. If the work to be performed on the primary switch affects only a small proportion of available paths, the affected junctors should be removed from service in accordance with 3.14.

4.05 If the work to be performed on the primary switch affects more than a small proportion of available paths, then the work should be performed during periods of light traffic and the junctors affected should be removed from service in accordance with 3.14.

**(D) Secondary Switch**

4.06 Remove the associated control circuit from service in accordance with 4.02. Make busy in accordance with 3.23 or 3.18 the senders or coin controls or the group of senders or coin controls which would be affected by the work to be performed on the secondary switch.

**(E) LR Relay**

4.07 Remove the associated control circuit from service in accordance with 4.02.

**(F) Coin Control or Sender Link**

4.08 Same as 4.07.

**(G) Group Circuit**

4.09 Same as 4.07 and 3.14.

**(H) HA, HB, AG, BG and GB Relays**

4.10 Same as 4.07.

**(I) S, SB and SGE Relays**

4.11 Make busy the associated group of coin controls or senders in accordance with 3.18. Wait approximately 20 seconds for senders or coin controls to become normal.

**(J) C and LL Relays**

4.12 Remove the associated control circuit from service in accordance with 4.02 and remove the associated group of coin control circuits or senders from service in accordance with 3.18. Wait approximately 20 seconds for senders or coin control circuits to become normal.

**(K) SGB Relay**

4.13 Block operated the associated GB-relays.

**5. REPORTS**

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