

SUBJECT: STEP-BY-STEP ROUTINE CHECK FOR MODEL 2140 BAR BOX INSTALLATIONS

In order to be able to locate quickly the components discussed in this bulletin, it is recommended that the serviceman refer to Pages 2 & 3 of the Handbook for the Model 2140 Bar Box and Model 212 Master Unit, and become thoroughly familiar with the location of the Bar Box relay in the Bar Box, and the set-up relay, selector button relay, pulsing switch, and selector contactor plate in the Master Unit.

On any service call on a Model 2140 Bar Box and Model 212 Master Unit, having determined that the complaint is not based on fuse failure, etc. the procedure described in the steps below should be followed before attempting any general adjustments of the equipment.

- 1. Check the Bar Box relay contacts: make sure that the contacts close in the correct sequence as the relay is actuated. Contacts 5 & 6 must close before contacts 8 & 9 open, and contacts 8 & 9 must open before contacts 7 & 8 close. Correct operation of this relay is pictured in Figure 15, Page 37 in the Handbook.
- 2. Check the set-up relay in the master unit: its contacts 5 & 6 must close before contacts 10 & 11 open. Correct operation of this relay is pictured in Figure 24, Page 43 of the Handbook.
- 3. Check the selector button relay in the Master Unit: its contacts 9 & 10 must close before contacts 10 & 11 open. Correct operation of this relay is shown in Figure 24, Page 43 of the Handbook.
- 4. Check adjustment of the Pulsing Switch as described on Page 40 of the Handbook. A quick check on the adjustment of this switch is to turn off the line switch, then turn the pulsing cam slowly by hand (CAUTION: proper direction of rotation only to avoid bending pulsing switch arm). Estimate the amount of open time and closed time of the switch as it is actuated by the short teeth of the pulsing cam. Actuation should be about 50-50, that is, as the short cam teeth actuate the switch it should be closed for approximately the same length of time as it is open.
- 5. Check adjustment of the selector contactor plate as described on Page 40 of the Handbook.

It will be found that by following the above procedure, that most service calls involving incorrect or erratic selection action, can be easily remedied.

In cases of excessive fuse failure, refer to Service Slant W-200.