IC5182-A120 MULTIPLE-POLE RELAY

DESCRIPTION
This relay has four normally open contacts and at each end of the device is an interlock which is both normally open and normally closed, with a common feed.

The device is used as a control relay or an under-voltage relay, and has a contact rating of 5 amperes, 440 volts.

The relay is operated by a shunt - coil solenoid. The solenoid plunger is connected to a gear mechanism, so that when the coil is energized the operating rod is brought down, thus operating the movable contact carrier and closing the contacts.

MAINTENANCE
NOTE: Before working the contactor make sure that all power is removed from the controller.

Adjustment for Contact Wear
The wear allowance or contact wipe should be maintained at 1/16 inch plus or minus 1/64 inch as indicated by the travel of the movable contact support after the contacts touch.

To readjust the contact wipe, remove the nut (4), Fig. 1. Turn the adjusting nut shown in Fig. 4 using a screwdriver or a spanner with a hollow shaft. Two or three trial adjustments may be necessary. The adjusting nuts should be tight on the shaft to maintain adjustment.

Replacement of Coil
To service the solenoid, it is necessary to disconnect the wiring, take out the base holding screws, and remove the contactor from the enclosing case.

Remove the four screws holding the solenoid support (1), Fig. 2 and lift out the solenoid and support assembly. Remove the four screws holding the solenoid to the support (2) to permit removal and replacement of the coil.

Fig. 1. IC5182-A120 multiple-pole relay
Fig. 2. IC5182-A120 multiple-pole relay
Replacement of Operating Spring

To change the operating spring (3), Fig. 3, remove the contactor from the enclosing case and unhook the spring ends with the aid of needle-nose pliers. Hook new spring in same position.

Replacement of Movable and Stationary Contact Tips

First remove the screws (5), Fig. 1 and take off the movable spring contacts from the end interlocks. Remove the nut (4) from the center of the movable contact support and lift off the contact support.

Movable contact tips and springs may be removed by unscrewing the retaining screws (6), and removing the tips and springs, being careful not to lose any parts when springs are released. Insert new tips and springs and replace screws (6). When reassembling, care must be taken to have the screw through the center hole in the contact strip before tightening.

To remove the stationary contact tips, remove screws (7), Fig. 2 and replace tips.

The movable and stationary tips should line up within 3/64 inch, both vertically and horizontally.

Replacement of Interlock Contact Tips

To change the movable contact tips of the interlocks, remove screws (5), Fig. 1, install new tips, and replace screws.

To change a normally closed stationary tip, remove screws (8), Fig. 2, install a new tip, and replace screws.

To change a normally open stationary tip, it is necessary to remove the movable contact support by removing nut (4), Fig. 1. Then remove the entire stationary contact head by first removing the four corner screws and then removing, from the back, the holding screw for the stationary tip.

In reassembling, make sure the movable tips properly engage both the normally closed and normally open stationary tips.