



## INSTRUCTIONS

GEH-3403

# S-2500 OVERCURRENT LOCKOUT AND BELL ALARM SWITCH

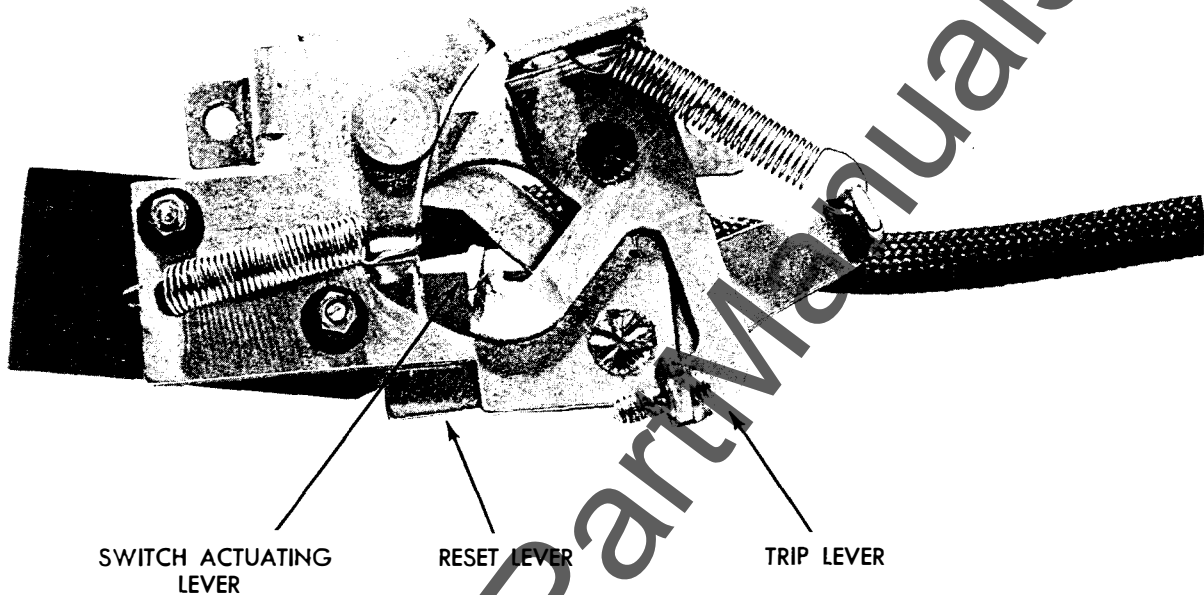


FIGURE 1 — LOCKOUT UNIT SHOWN TRIPPED

### GENERAL DESCRIPTION

This device is designed to provide a signal when the circuit breaker has been opened by an overcurrent condition. Manual, shunt trip or undervoltage opening will not activate signal.

Device also includes a mechanical lockout feature; after an overcurrent tripping condition, device must be reset by pushing breaker's "OPEN" button.

The signal circuit contains one 6A 600V AC AB switch element which can either be used to close or open an external circuit on overcurrent tripping.

### CAUTION

When installing accessories, the breaker must be completely deenergized and disconnected from the electrical circuit. This is mandatory because breaker must be "ON" during certain stages of installation and testing.

*These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.*

GENERAL  ELECTRIC

CIRCUIT PROTECTIVE DEVICES DEPT. PLAINVILLE, CONN. 06062



## INSTALLATION INSTRUCTIONS

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Open breaker by pushing "OPEN" button.

Remove breaker cover and trip unit as described in GEH-3371 or GEH-3389.

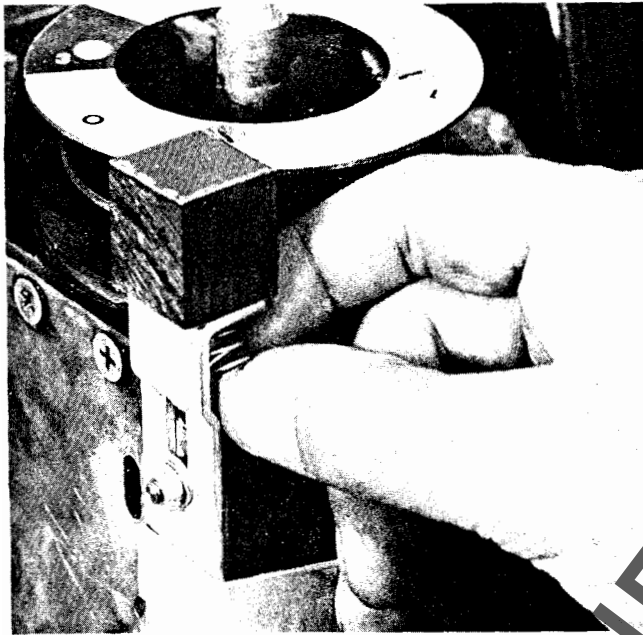


FIGURE 2

Remove spring from under trip slide.

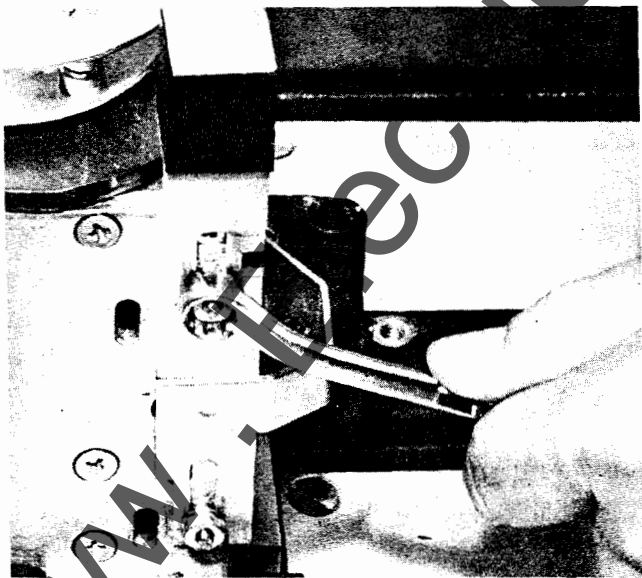


FIGURE 3

Then remove trip slide as shown above, being very careful not to lose any hardware inside the breaker.



FIGURE 4

Remove left hand center pole knockout. Remove all debris from breaker.

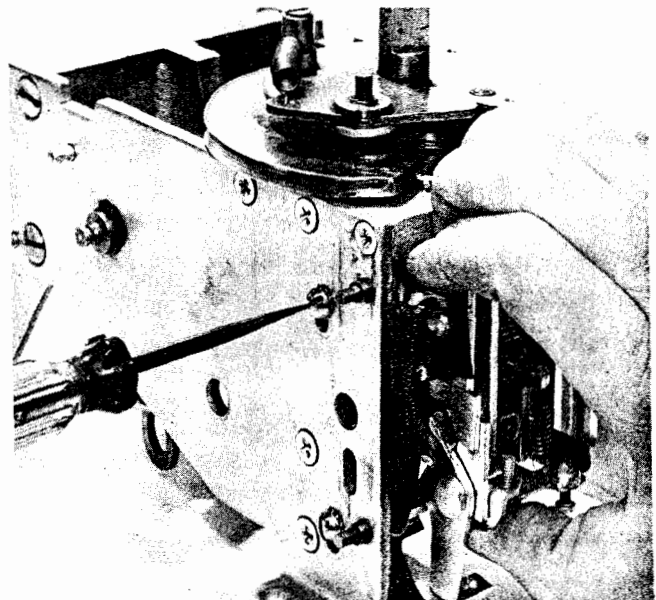


FIGURE 5

With lockout unit tripped as shown in Fig. 1, hold down switch insulation and position as shown above, taking care that trip lever is above breaker latch, see Fig. 6. Install but do not fully tighten screws.



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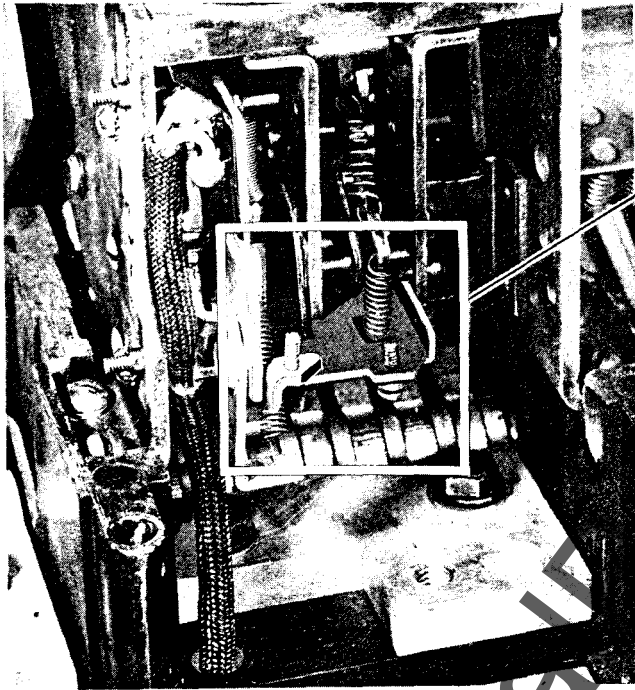
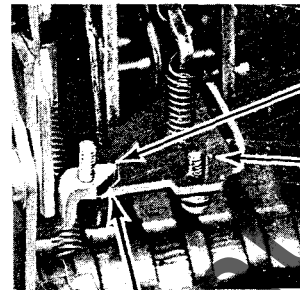


FIGURE 6



TRIP LEVER

BREAKER LATCH

IN CONTACT WHEN BREAKER IS TRIPPED AND BELL ALARM IS TRIPPED

Thread the lead wires through the knockout as show. Now shift the unit so that trip lever just contacts the breaker latch and tighten screws to 15-20 inch pound torque. Mounting screws should be approximately in the middle of the slots.

Reinstall the trip slide, being very careful not to lose any hardware inside the breaker. Check to be sure trip slide moves freely. If binding occurs, check first to be sure switch wires are not causing problem. If binding still persists, remove and straighten trip slide as required.

Reinstall the breaker trip unit as described in GEH-3371 or GEH-3389.

## FUNCTIONAL CHECKS AND ADJUSTMENTS

### NOTE:

If breaker has been removed from switchboard, breaker must be clamped to a firm support for the following checks to simulate normal switchboard mounting, and to reduce the shock effects of the stored energy mechanism.

### CAUTION:

**DURING ALL TESTS, KEEP HANDS AWAY FROM BREAKER CONTACT ARMS & OPERATING MECHANISM.**

### BELL ALARM TRIP LEVER FREE TRAVEL CHECKS

#### Check No. 1

Press down the trip slide while pushing down the trip unit trip bar to put the bell alarm in the overcurrent trip position. Using a screwdriver, hold the trip unit trip bar down as far as possible against the breaker latch, and check that the bell alarm trip lever has approximately  $\frac{1}{64}$ " of play. In some cases, adjustment may be required as shown in Fig. 7a. If less than  $\frac{1}{64}$ " play exists, bend extension piece up as required. If more than  $\frac{1}{64}$ " play exists, bend extension piece down as required. Small nose pliers are suggested for above bending operation.

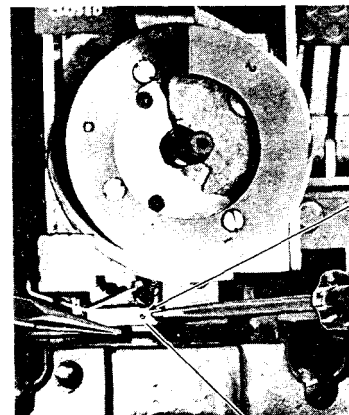


FIGURE 7

EXTENSION PIECE

BEND UP OR DOWN TO OBTAIN CORRECT FREE PLAY

TRIP UNIT TRIP BAR

BELL ALARM TRIP LEVER

BREAKER LATCH

$\frac{1}{64}$  FREE PLAY

FIGURE 7A—VIEW FROM LOAD END OF BREAKER



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### Check No. 2

Place the breaker cover in position, push the "OPEN" button to reset the lockout, use the breaker handle to close the breaker, and then remove the breaker cover.

### Check No. 3

Repeat steps 1 and 2 until breaker contacts will close.

With breaker closed, push the trip unit trip bar down slowly until breaker just trips, and release. Replace breaker cover and attempt to close the breaker. Breaker contacts should NOT close due to the lockout feature of the bell alarm.

### Check No. 4

When satisfactory adjustment has been achieved, push trip slide down to rest lockout, install breaker cover and trip unit escutcheon cover. Breaker is now ready for installation in switchboard.

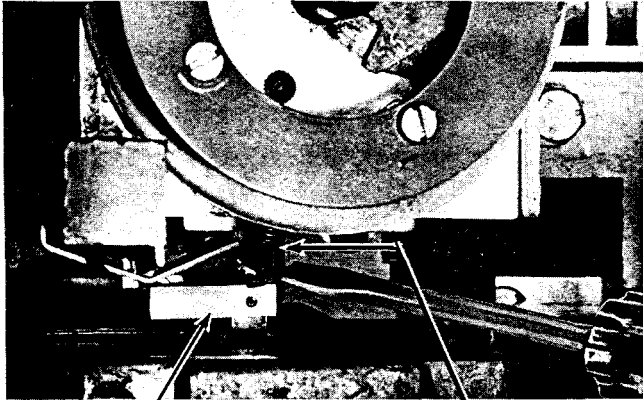


FIGURE 8

TRIP UNIT  
TRIP BAR

BREAKER  
LATCH



FIGURE 9

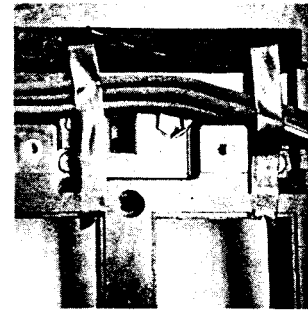


FIGURE 10

Then, push the breaker latch down, to trip the breaker, being careful not to move the trip unit trip bar.

Replace the breaker cover as before and use the handle to close the breaker. If breaker contacts do not close, further adjustment is required. Push the trip slide down to reset the lockout, and adjust as follows:

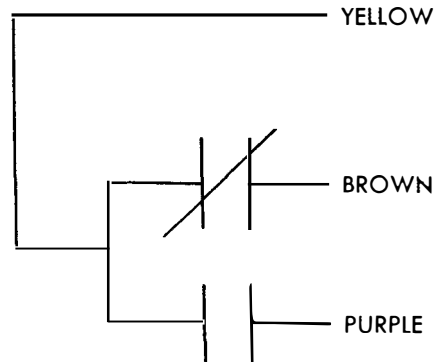
- a) Mark the position of the bell alarm mounting screws in slots.
- b) Loosen these screws, move the unit down  $\frac{1}{32}$ ", and retighten screws.

Attach the label "PUSH TO RESET" above and adjacent to the OPEN button opening on the front escutcheon, as shown in Figure 9.

### NOTE:

Before reinstalling the breaker to its supporting structure, use tape to hold the lead wires in position so they will not be pinched under the mounting bosses.

Attach the descriptive label to the right side of the breaker base.



SWITCH RATED AT  
6A 600V AC

Circuit shown in overcurrent trip condition.