



# GEH3416 INSTALLATION INSTRUCTIONS FOR RIGHT OR LEFT POLE MOUNTING

## For Type TED Circuit breakers Shunt Trip Device



**CAUTION:** Before inspecting or beginning any maintenance work on the breaker, it must be disconnected from all voltage sources, both power and control, and breaker must be off (open).

**NOTE:** Any work requiring cover removal of a sealed breaker voids UL Listing. The UL label must be destroyed.

### DESCRIPTION

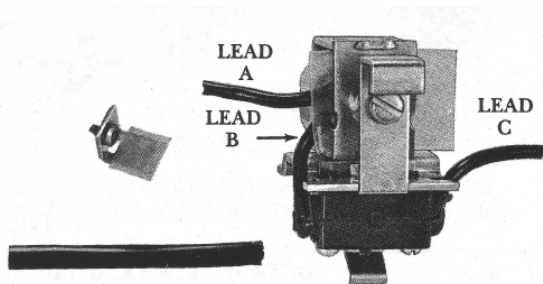
The device shown in Figure 1 is used for remote opening of the circuit breaker. The integral switch operated by the breaker contact arm opens the coil circuit when the breaker is open or tripped.

The standard device is supplied as shown in Figure 1, and leads must be positioned as shown in Figures 2, 3, 4, or 5 to prepare the device for mounting as desired.

These devices are suitable for use with ground fault equipment.

Pass lead A under lead B and insert into end of sleeve nearest slit. (See Figure 2.) Bring lead C around coil as shown in Figure 3, and insert into slit in sleeve, as shown in Figure 2. Position leads to match notch in breaker cover.

### ACTUATOR ASSEMBLY



SLEEVING

Figure 1.

### FOR LEFT POLE MOUNTING LEADS OUT THE SIDE

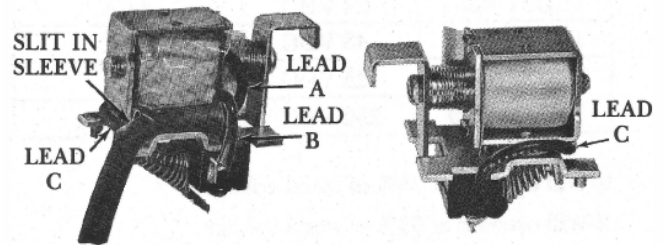


Figure 2.

Figure 3.

Pass lead A under lead B as shown in Figure 4 and around coil. Insert lead A into slit in sleeve as shown in Figure 5. Insert lead C into end of sleeve nearest slit. Position leads to match notch in breaker cover.

### FOR RIGHT POLE MOUNTING LEADS OUT THE SIDE

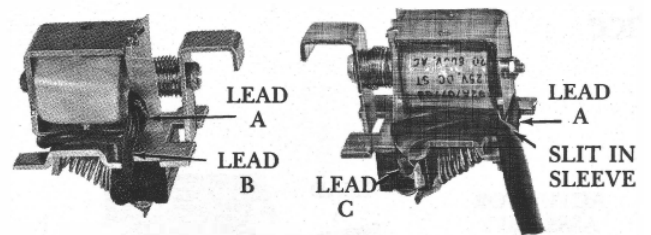


Figure 4.

Figure 5.

CAT.NO.	VOLTAGE RATING	MAX.INRUSH CURRENT
TEDST 12	120VAC	1.0A
TEDST 12	240VAC	1.9A
TEDST 13 <sup>②</sup>	480VAC	1.5A
TEDST 13	600VAC	1.9A
TEDST 7 <sup>①</sup>	12VDC	7.5A
TEDST 8 <sup>①</sup>	24VDC	4.6A
TEDST 9 <sup>①</sup>	48VDC	2.4A
TEDST 12 <sup>①</sup>	125VDC	1.0A
TEDST 11 <sup>①</sup>	250VDC	0.4A

- ① Will operate at 75% of rated voltage.
- ② Will operate at 55% of rated voltage.

### INSTALLATION

Open breaker contacts by moving handle to the breaker "OFF" position. Remove breaker cover by removing four cover mounting screws on the TED, eight for the THLC1 and TLB1 (one is sealed with tar.) Remove and save screws, insulating tubes and plastic handle as shown in Figure 6. (The type THLC7 and TLB7 circuit breakers do not have insulating tubes.)

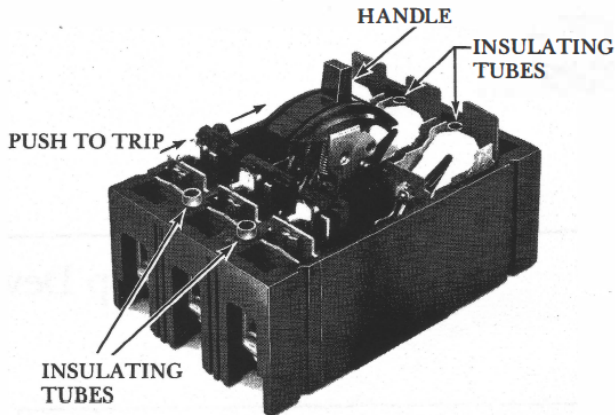


Figure 6.

### MODIFYING COVER

Perform cover modification as shown in Figure 7. Remove all debris.

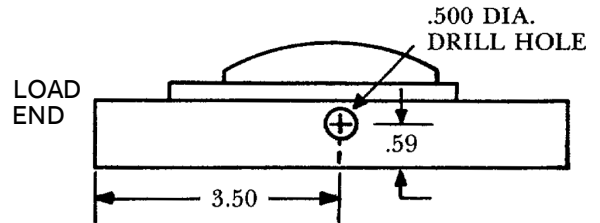


Figure 7. Side view of breaker cover

### INSTALLING ACTUATOR

Close circuit breaker and install actuator assembly in desired pole as shown in Figure 8. Trip breaker by pushing trip bar as shown in Figure 8.

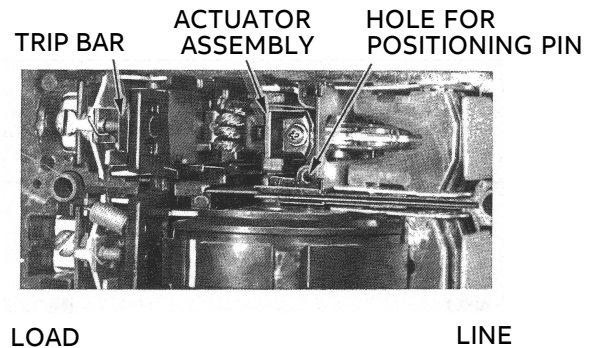


Figure 8.

### INSTALLING SHUNT TRIP DEVICE

#### IMPORTANT

Breaker must be in tripped position to install shunt trip

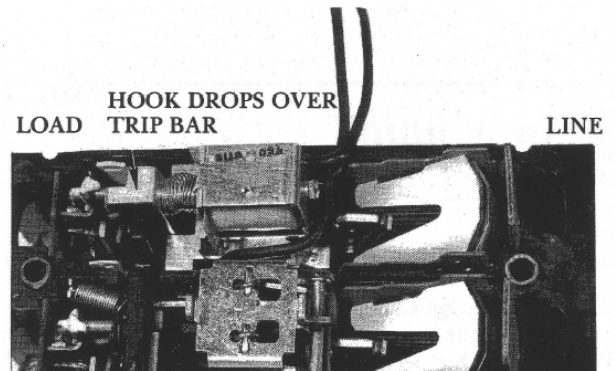


Figure 9.

Install device in breaker base (See Figure 9) .

Plug positioning pin into locating hole in breaker base. (See Figure 8.)

Thread accessory leads through hole in cover.

Position handle with white line towards load end. (See Figure 6.) On type TED breakers, also reinsert the insulating tubes.

Be certain to reinstall in their proper location barriers or other parts accidentally removed from the breaker.

Apply descriptive label to appropriate side of breaker base.

Install strain relief (black Heyco plug 4N-4) in .500 dia. hole where accessory leads exit.

## PERFORMANCE CHECK

1. Close breaker contacts.
2. Apply 50% of rated voltage for AC devices and 70% for DC devices. Breaker must trip.
3. Check continuity of shunt trip. In "TRIPPED" or "OFF" position shunt trip coil should show open.

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 ABB Company.