

GEH3417 INSTALLATION INSTRUCTIONS

Molded Case Circuit Breakers

Undervoltage Release for Types: TED, TEC

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

NOTES: 1. Any work requiring cover removal of a sealed breaker voids UL listing. The UL label must be destroyed. 2. UVR cannot be installed in breakers code dated with this number or lower:

101

ELECTRICAL DATA

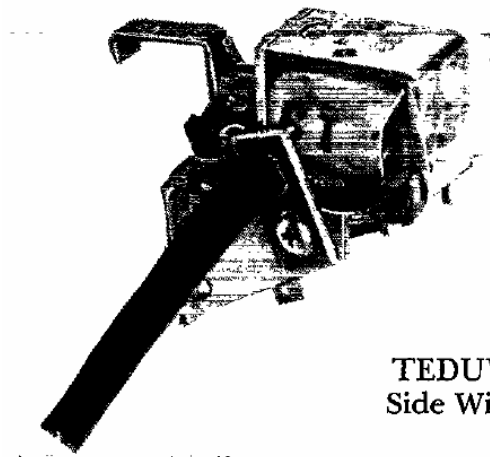
Cat. No. (Right Pole Only)		Rated Voltage	MA Current	
			De	Ac
TEDUV1	S	120V Ac	...	18
TEDUV2*	S	240V Ac	...	18
TEDUV3*	S	380V Ac	...	18
TEDUV4*	S	480V Ac	...	18
TEDUV6*	S	600V Ac	...	18
TEDUV7	S	12V De	200	...
TEDUV8	S	24V De	100	...
TEDUV9	S	48V De	50	...
TEDUV10	S	125V De	18	...
TEDUV11*S		250V De	18	...

DESCRIPTION

This device is used for automatic breaker tripping when line voltage drops below a pre-determined level.

STEP 1 BREAKER PREPARATION-FOR FIELD INSTALLATION.

Open breaker contacts by moving handle to the breaker "OFF" position.



**TEDUV-S
Side Wired**

* Kit includes special externally mounted resistor.

**ALL RATINGS CONSUME 2.2 WATTS EXCLUSIVE OF
RESISTOR**

Figure 1.

TEDUV-S
Side Wired

Remove breaker cover by removing cover screws as shown in Figure 2. (Care must be taken when opening the TBI as the button shown in Figure 8 may pop out.) Tar must be removed and discarded to gain access to screw shown in Figure 2. Remove and save plastic handle.

Push trip bar towards line end to trip mechanism. (See Figure 3.)

FOUR COVER SCREWS

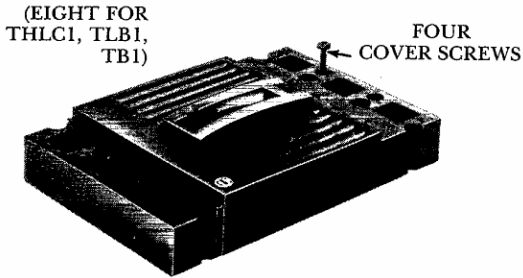
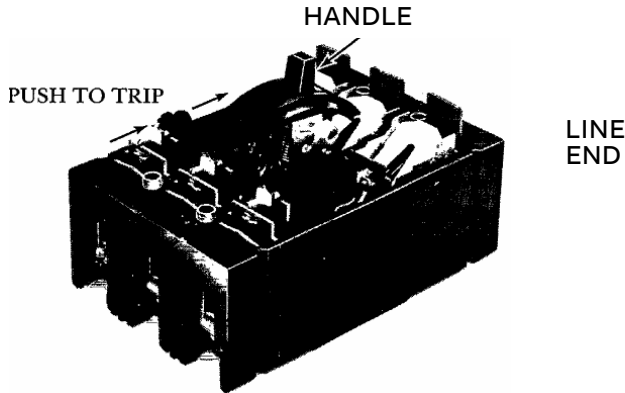


Figure 2.



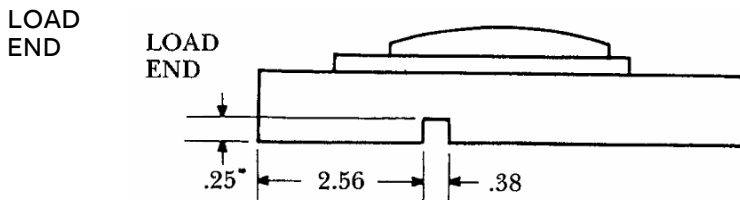
LOAD END

Figure 3.

**STEP2
MODIFYING COVER**

Perform cover modification as shown in Figure 4. Remove all debris.

SIDE WIRING MODIFICATION



CUT NOTCH IN RIGHT SIDE

Figure 4. Side View of Breaker Cover

**STEP3
MODIFYING TWIST TO TRIP FEATURE**

Assembly of the Undervoltage Release in the right side of the breaker immobilizes the Twist to Trip feature. Place the enclosed label P/N 331 A3044P1 over the Twist to Trip feature button as shown in figure 5. Perform inside cover modification to remove the legs of the Twist to Trip feature (trim even with the Twist to Trip Button) and avoid potential interference with the Undervoltage Release. The trip functionality previously provided by the Twist to Trip feature can be obtained through removal of control voltage to the Undervoltage Release.

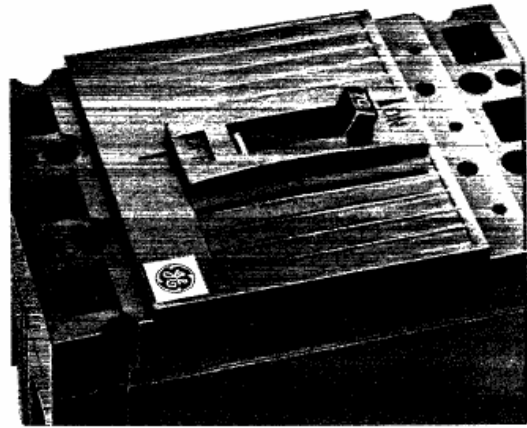


Figure 5.

**STEP4
REPLACING BARRIER**

Remove barrier between right pole and mechanism pole, and replace with barrier supplied with kit. Locate projection of new barrier toward load end of breaker. (See Figure 6.)

**BARRIER PROTECTION
LOAD END**

BARRIER PROTECTION
LOAD END

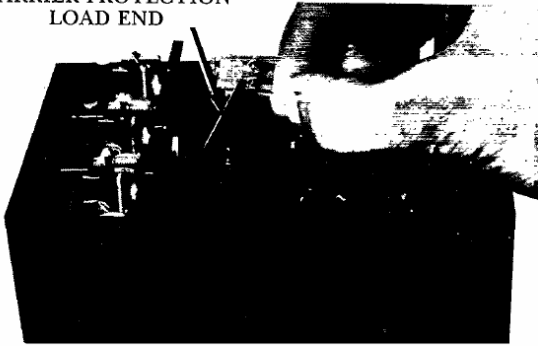
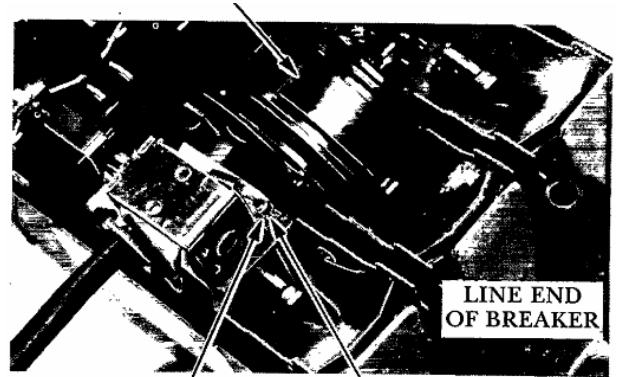


Figure 6.

MOVE HANDLE TOWARDS LINE END



LOCATING TAB

TAB POSITIONING
HOLE

Figure 7.

**STEP5
INSTALLATION**

Move the handle toward the line end of the breaker to facilitate assembly. Be sure locating tab is plugged into positioning hole in base. (See Figure 7.)

The pre-positioned coil leads should be close to the current location to fit the notch in the cover.

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

Reinstall plastic breaker handle (white line towards breaker load end). Install breaker cover making sure no wires are pinched in the process. Install cover mounting screws and apply label to breaker side.

Note that on TB 1 breakers the second barrier shown in Figures 8 and 9 must be installed.

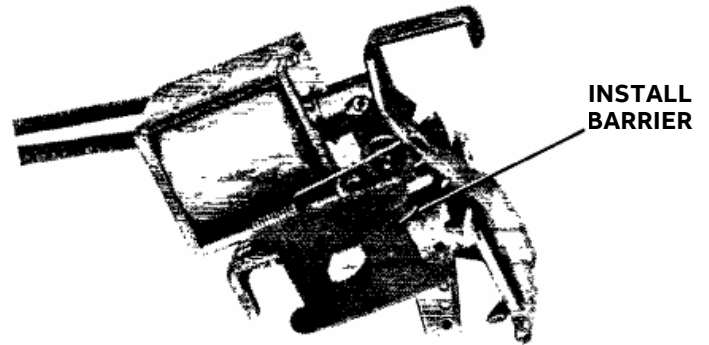


Figure 8.

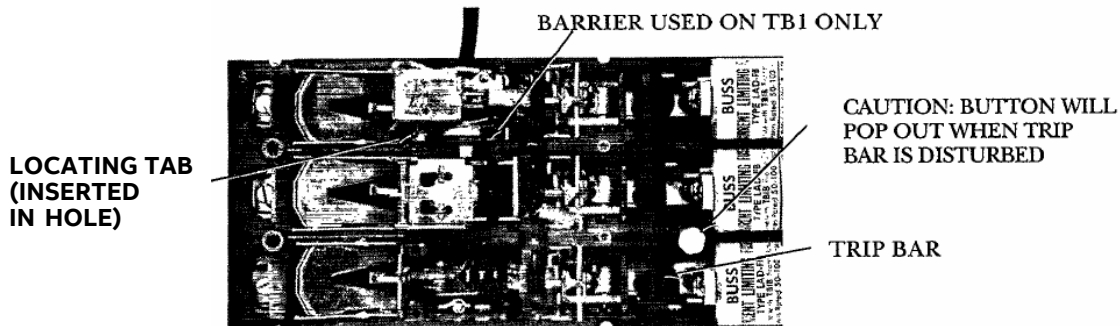


Figure 9.

TRIP BAR

CAUTION: BUITON WILL
POP OUT WHEN TRIP
BARIS DISTURBED

STEPS PERFORMANCE CHECK

1. Move breaker handle to "OFF" position to reset breaker.
2. With coil deenergized, move breaker handle towards "ON" position. Breaker should trip and handle should come to rest in the tripped position when released.
3. Apply 80% of rated voltage to coil (use dropping re-sistor if required). Repeat Step 1, then move handle to "ON" position. Breaker should turn "ON" and stay "ON".
4. Reduce coil voltage. Device should trip breaker between 35% and 70% of rated voltage.

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 .