



## Installation Instructions for Vari-Depth Handle Mechanism on GC/GHC/GD and GMCP Circuit Breakers



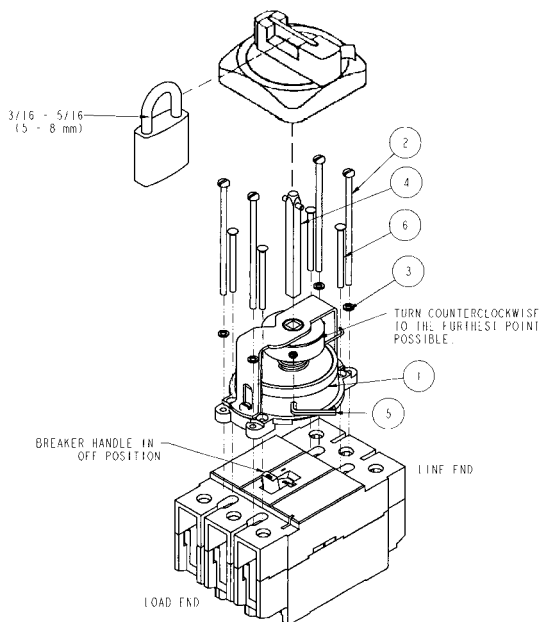
### WARNING

**TO PREVENT ELECTRICAL SHOCK, DISCONNECT FROM POWER SOURCE BEFORE INSTALLING OR SERVICING. INSTALL IN SUITABLE ENCLOSURE. KEEP FREE FROM CONTAMINANTS. TURN OFF AND LOCK-OFF ALL POWER SOURCES. FAILURE TO DO SO CAN RESULT IN DEATH, SEVERE PERSONAL INJURY, OR SUBSTANTIAL PROPERTY DAMAGE.**

### G-FRAME VARI-DEPTH HANDLE MECHANISM

Complete Cat. #	Consisting of:			For Use With:	
	Handle <sup>①</sup>	Shaft	Operator	Enclosure	Breaker
HRGCV11L	Black	HRGSL	HRGCV1	NEMA 1	GC/GHC/GD
HRGCV31L	Yellow	HRGSL	HRGCV1	NEMA 1	GC/GHC/GD
HRGCV14L	Black	HRGSL	HRGCV1	NEMA 3R/12/4	GC/GHC/GD
HRGCV34L	Yellow	HRGSL	HRGCV1	NEMA 3R/12/4	GC/GHC/GD
HRGMV11L	Black	HRGSL	HRGMV1	NEMA 1	GMCP
HRGMV31L	Yellow	HRGSL	HRGMV1	NEMA 1	GMCP
HRGMV14L	Black	HRGSL	HRGMV1	NEMA 3R/12/4	GMCP
HRGMV34L	Yellow	HRGSL	HRGMV1	NEMA 3R/12/4	GMCP

- ① Black Handle NEMA 1 Cat # HRG11  
 Black Handle NEMA 3R/12/4 Cat # HRG14  
 Yellow Handle NEMA 1 Cat # HRG31  
 Yellow Handle NEMA 3R/12/4 Cat # HRG34



ITEM	DESCRIPTION	BACK PAN	DINRAIL OR SNAP-IN BASE PLATE ①
1	SHAFT SUPPORT ASSEMBLY	1	1
2	PAN HEAD SCREW 6-32 X 3.25 LG ②	4	0
3	LOCK WASHER #6	4	0
4	SHAFT	1	1
5	ALLEN WRENCH	1	1
6	HI-LO SCREW 6-19 X 1.75 LG ③	0	4

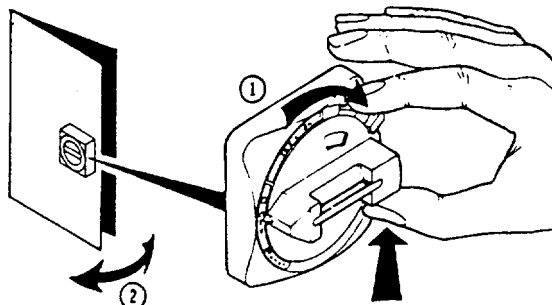
① For DIN Rail or Snap-In Base Plate Application, carefully remove the existing cover screws from the circuit breaker without breaking the catalog warranty nameplate and replace with Item 6.

② Do not exceed a torque of 2.0 lb.-in.

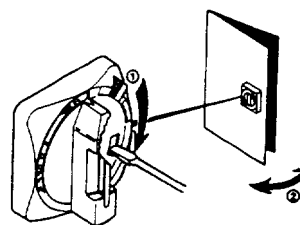
③ Do not exceed a torque of 4.0 lb.-in.

### HANDLE FEATURES

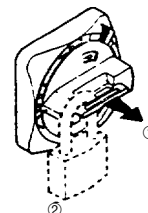
#### Handle Off - Open or Close Enclosure



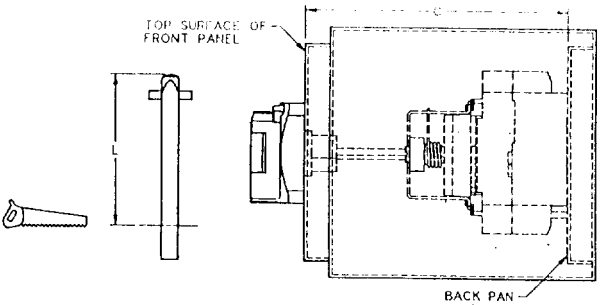
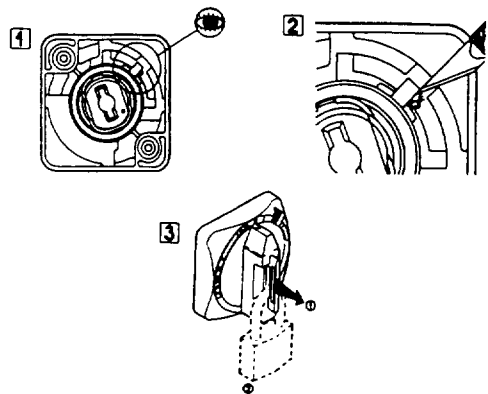
#### Handle On - Open or Close Enclosure



#### Lock Handle Off With Enclosure Door Interlock



Lock Handle On With Enclosure Door Interlock



INSTALLATION INSTRUCTIONS

1. Place circuit breaker in off position. Position the shaft support assembly in the Off position by turning the mechanism counterclockwise until at a solid stop. Place the mechanism onto the circuit breaker such that the slot on the slider on the mechanism mates into the breaker handle. Mount the breaker and mechanism per the customer's application using the necessary hardware (as shown in the chart on page 1). Evenly tighten the screws to the given torques (as shown below chart on page 1).

**NOTE:** Before mounting the shaft support assembly and breaker to the back pan, see installation instruction item 4 to be certain to acquire minimum front panel dimensions for door clearance.

If mounting the breaker directly to the back of the pan, see the figure on page 1 for mounting hole dimensions.

2. Cut shaft to length.

BREAKER MOUNTING	LENGTH OF SHAFT
SCREW INTO BACK PAN	L = C - 106 MM L = C - 4 3/16 IN.
DIN RAIL	L = C - 119 MM L = C - 4 11/16 IN.
SNAP-IN BASE PLATE	L = C - 108 MM L = C - 4 1/4 IN.

**Note:** Dimension C is the measurement from the back pan to the top surface of the front panel.

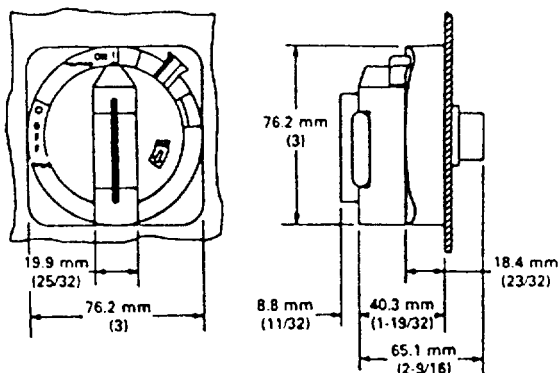
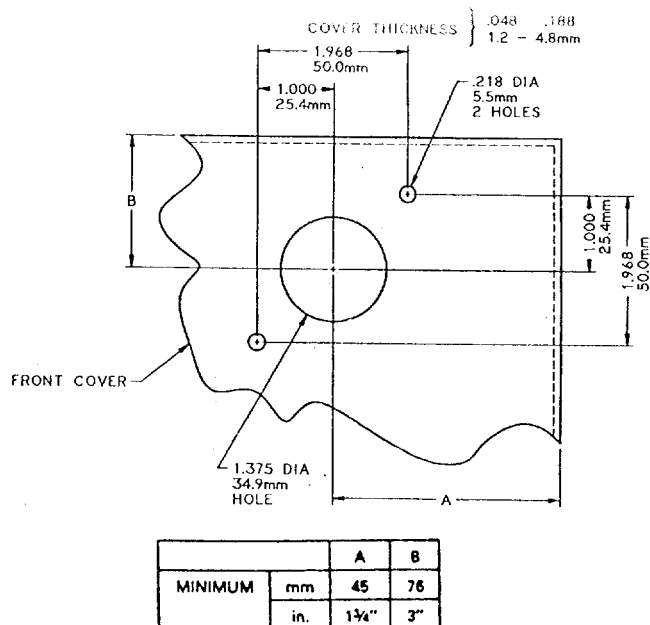
3. Place the shaft into the shaft support assembly as shown on page 1 and tighten the set screw on the collar.
4. Measure the distance from the hinge to the center of the shaft. Measure the distance perpendicular to the last measurement from the center of the shaft to one of the sides of the enclosure. With the front panel door open, mark the inside panel door with these measurements and drill a 5/16 Dia. hole. Carefully close the panel door and check to see if the hole is center to shaft. From inspection of the 5/16 dia. hole, drill a 3/8 Dia. (35mm) hole.



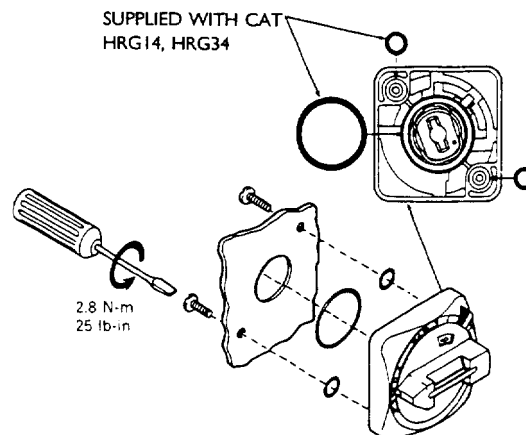
CAUTION

BE CERTAIN TO CORRECTLY ASSEMBLE SHAFT SUPPORT TO THE CIRCUIT BREAKER. FAILURE TO DO THIS WILL CAUSE IMPROPER OPERATION AND BREAKAGE OF PANS.

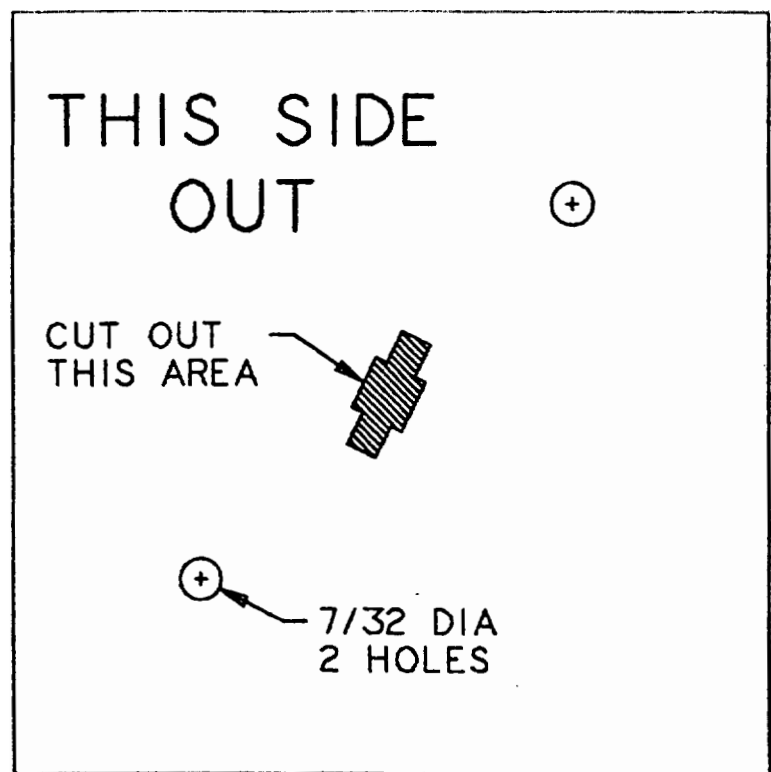
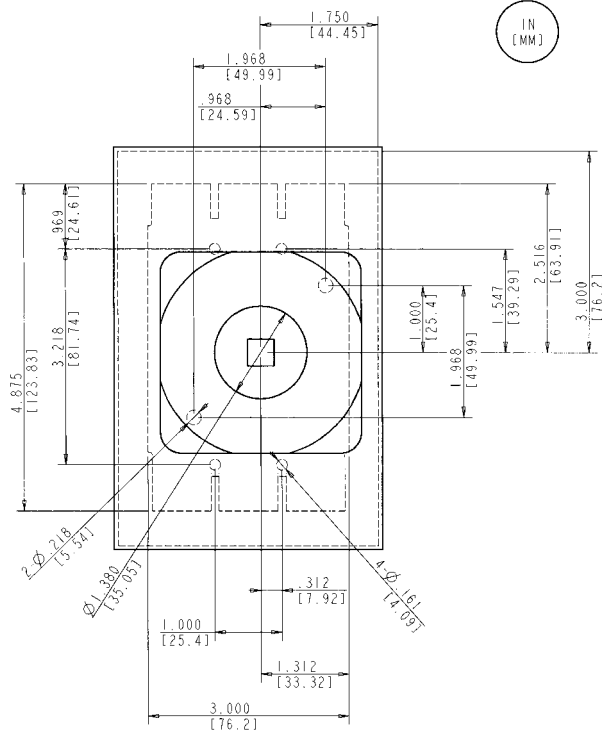
DO NOT EXCEED TORQUE LIMITS ON SCREWS. HIGHER TORQUES COULD CAUSE CRACKING ON THE SHAFT SUPPORT ASSEMBLY AND IMPROPER OPERATION.



- After drilling, close the door of the front panel and place the full size cutout template on the front panel. Center the template over the shaft and align the top edge of the template so that it is parallel with the line end of the breaker. Mark the handle screw holes and drill (2) 7/32 Dia. (5.5mm) holes as indicated on the template.
- Apply the mounting screws to door and handle.



- With main power Off, check the mechanism operation in the On, Off, and reset positions.



**Cutler-Hammer**

Pittsburgh, Pennsylvania U.S.A.

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**EATON**