

400A & 600A Mechanism Replacement Kit

Item: HM656A

For use with: 400A & 600A VBII Safety Switches,
Series "A"

Installation Instructions

	Danger	Peligro	Danger
	Hazardous Voltage. Will cause death or serious injury. Turn off and lock out all power supplying this device before working on this device. Replace all covers before power supplying this device is turned on.	Tensión peligrosa. Puede causar la muerte o lesiones graves. Desenergice totalmente antes de instalar o darle servicio. Reemplace todas las barreras y cubiertas antes de energizar el interruptor.	Tension dangereuse. Danger de mort ou risque de blessures graves. Couper l'alimentation de l'appareil et barrer avant de travailler. Remplacez tous les couverts avant que l'approvisionnement de pouvoir soit alimenté.

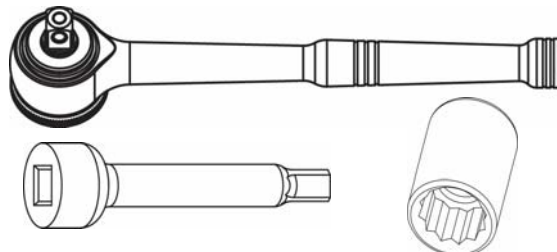
Use only with Siemens certified components.

NOTE - These instructions do not purport to cover all details or variations in equipment, or 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 local Siemens sales office. The contents of this instruction manual shall not become part of or modify any prior or existing agreement, commitment or relationship. The sales contract contains the entire obligation of Siemens. The warranty contained in the contract between the parties is the sole warranty of Siemens. Any statements contained herein do not create new warranties or modify the existing warranty.

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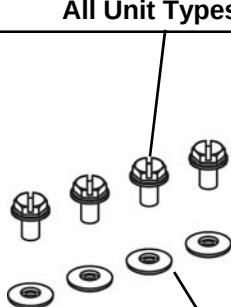
Recommended tools:

**5/16" socket,
Extension bar,
Torque wrench**

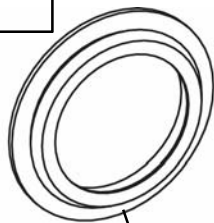


Cat. #: HM656A

**#10 – 32 x .312" L (4)
Mechanism Mounting Screws
All Unit Types**



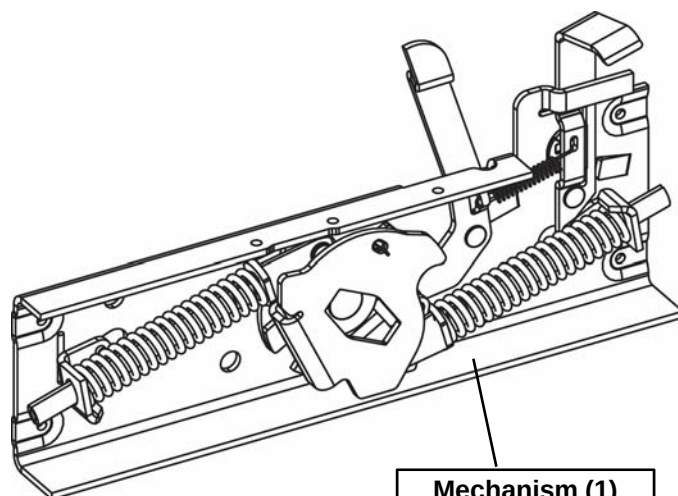
**Sealing washer (4)
Type 4X units only**



**Handle Grommet (1)
Type 3R, 12 & 4X
units only**



**Interlock Grommet (1)
Type 3R, 12 & 4X
units only**



**Mechanism (1)
All Unit Types**

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1. Prepare switch for mechanism replacement.
 - Turn OFF and lock out all power supplying this device before working on the device.
 - Turn OFF the switch
 - Verify that NO voltage is present at the wire grips.
 - Remove any installed fuses (Fusible Switches).
 - Rotate line shields for access to line base mounting screw as shown in Fig's 1 & 2.
 - Remove all conductors from the line base.
2. Remove the Line Base Mounting Screws as shown in Fig. 2. Keep hardware for re-installation.

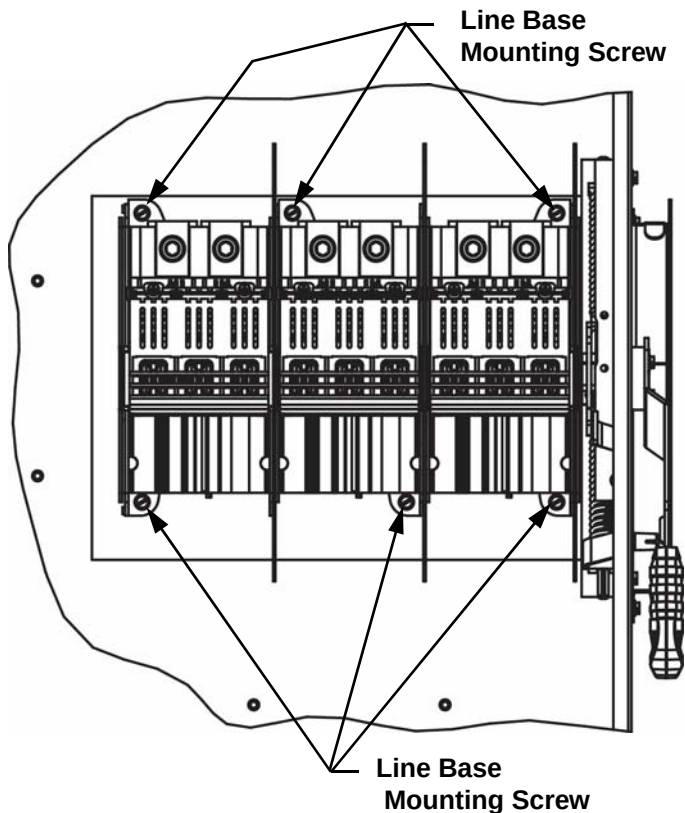


Fig. 1

(View shows line shield rotated.)

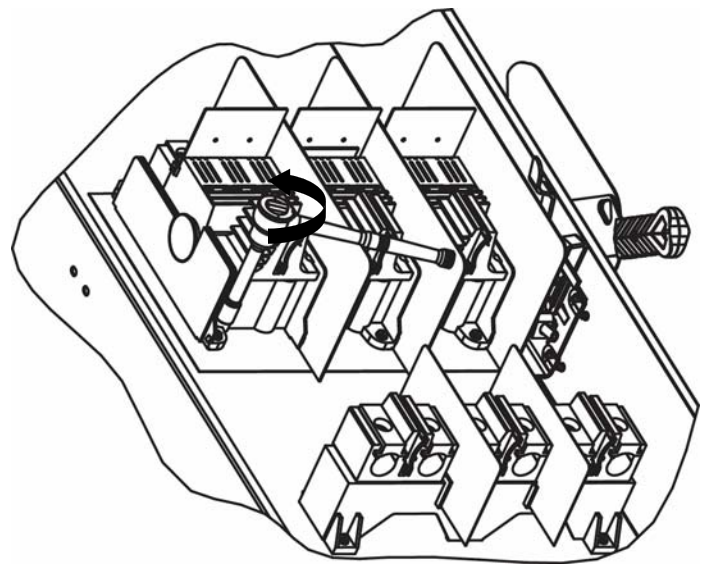


Fig. 2

3. Slide the Line Base assembly away from mechanism assembly until the rotor clears the mechanism assembly as shown Fig's. 3 & 4.
4. Lift the line base assembly and enclosure barrier out of enclosure as shown Fig. 5.

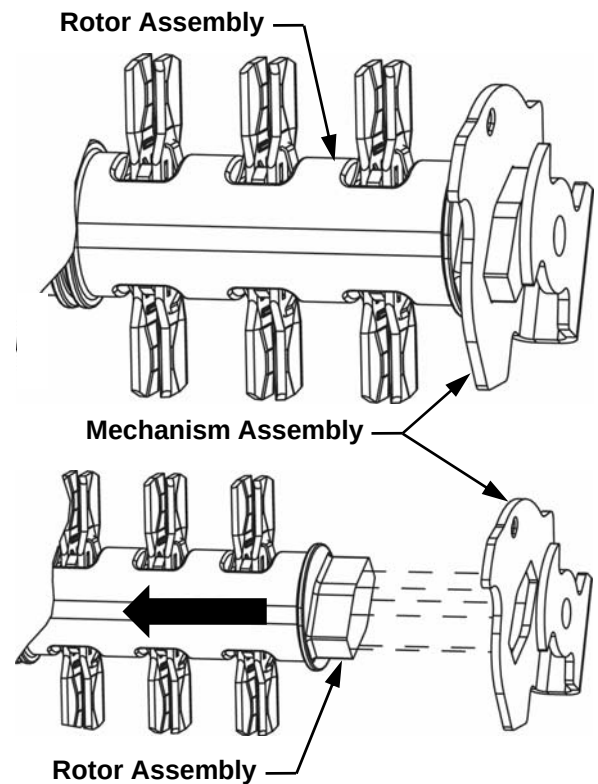
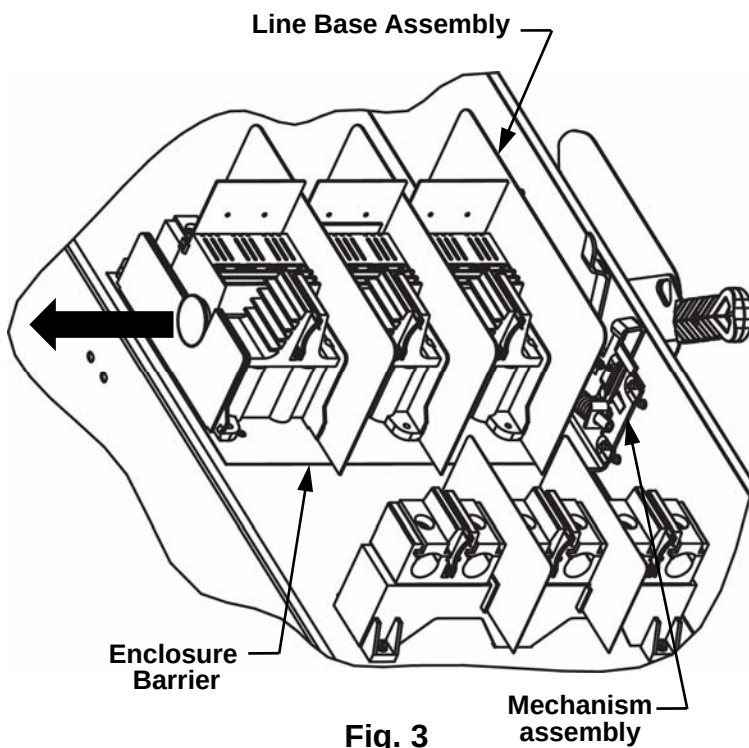


Fig. 4
View shown for clarification.

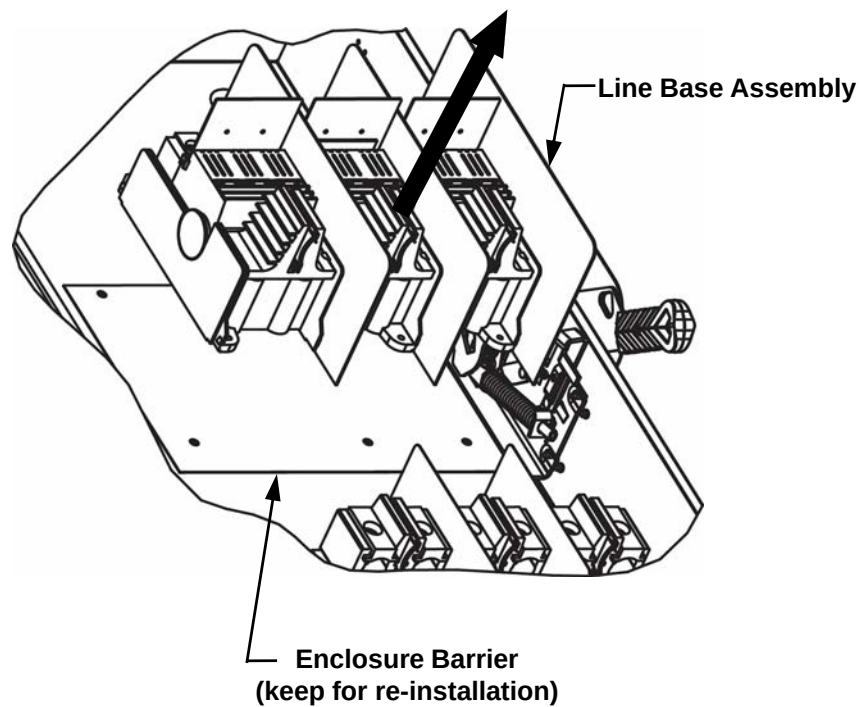


Fig. 5

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5. Remove all 3 existing handle guard mounting screws, sealing washers (type 4X) , #10-32 nuts (type 4X) and handle guard as shown in Fig 6. Do not throw components away.
 6. Remove the two existing handle mounting screws and handle as shown in Fig. 7. Do not throw away components.

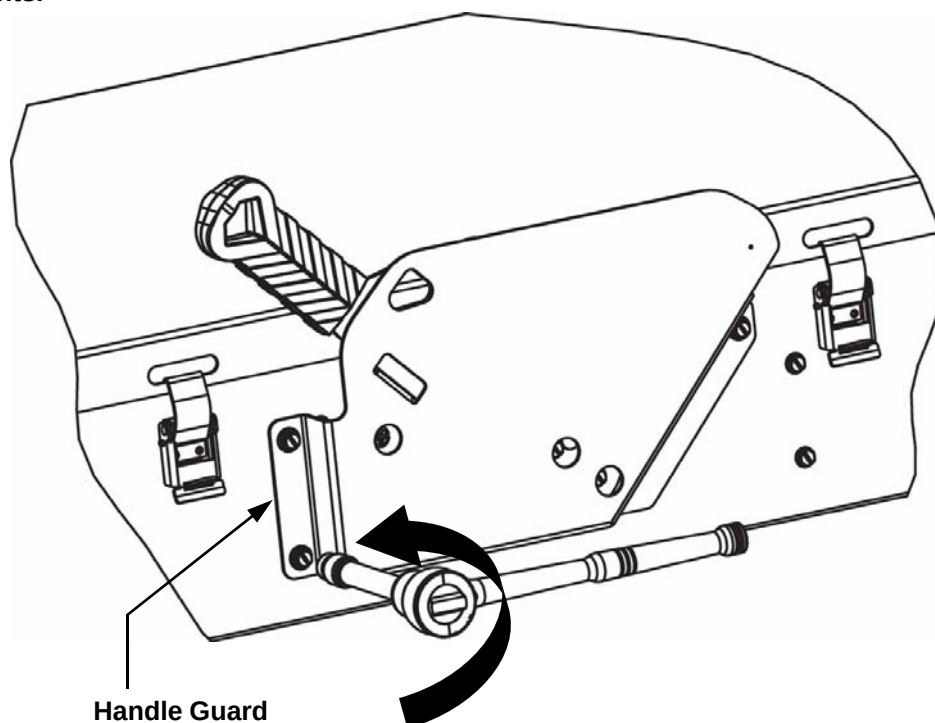


Fig. 6

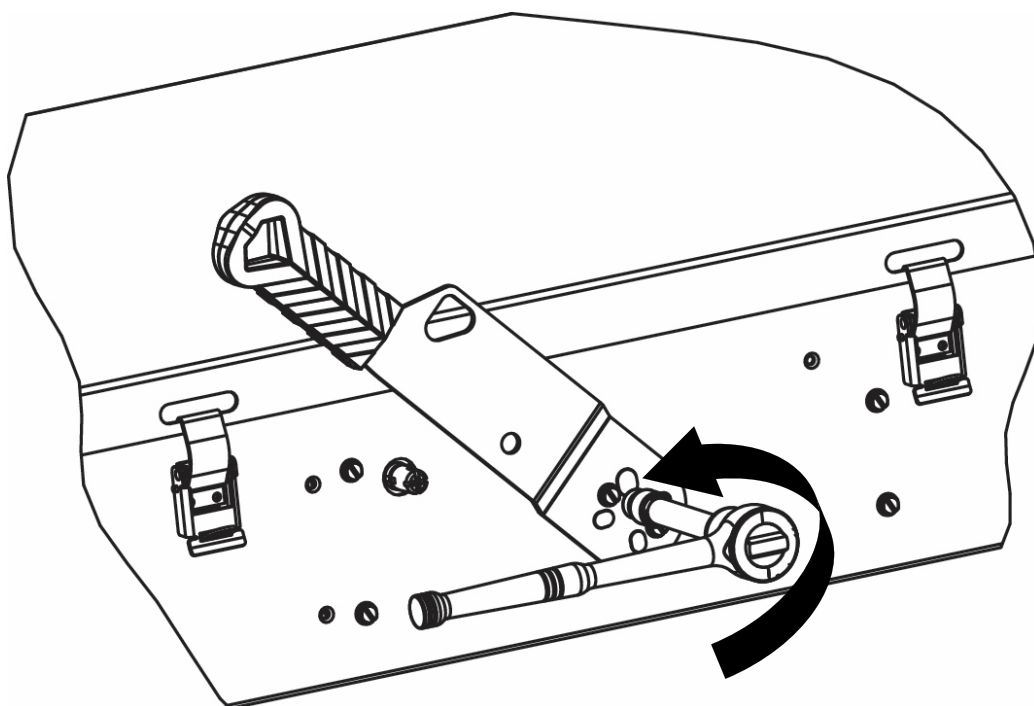


Fig. 7

 	⚠ Danger Hazardous Voltage. Will cause death or serious injury. Turn off and lock out all power supplying this device before working on this device. Replace all covers before power supplying this device is turned on.	⚠ Peligro Tensión peligrosa. Puede causar la muerte o lesiones graves. Desenergice totalmente antes de instalar o darle servicio. Reemplace todas las barreras y cubiertas antes de energizar el interruptor.	⚠ Danger Tension dangereuse. Danger de mort ou risque de blessures graves. Couper l'alimentation de l'appareil et barrer avant de travailler. Remplacez tous les couverts avant que l'approvisionnement de pouvoir soit alimenté.
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7. Remove the mechanism mounting screws and sealing washers as shown in Fig. 8.
8. Dispose of the mechanism and it's hardware as shown in Fig. 9.

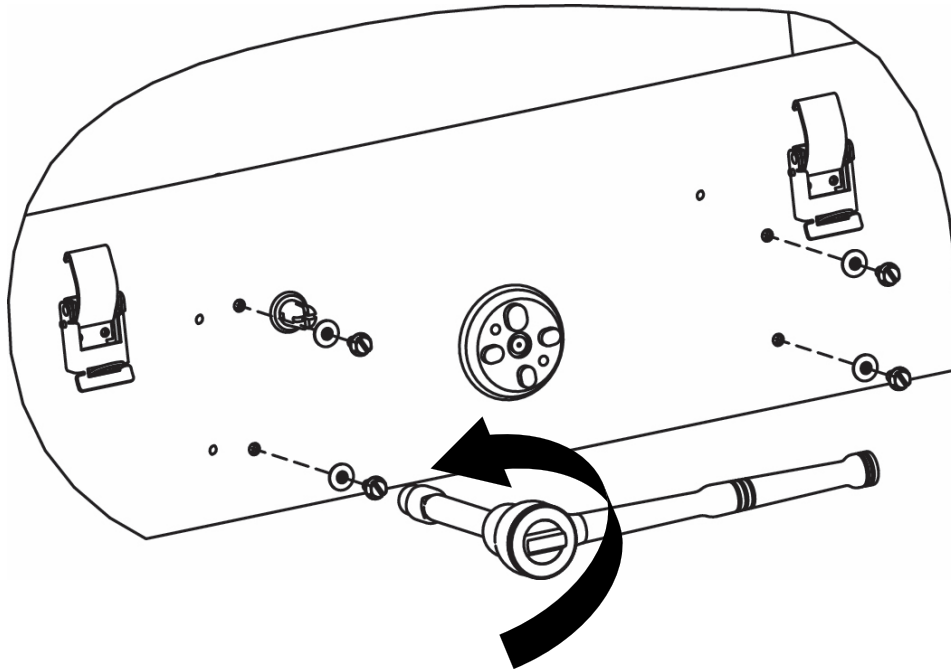


Fig. 8

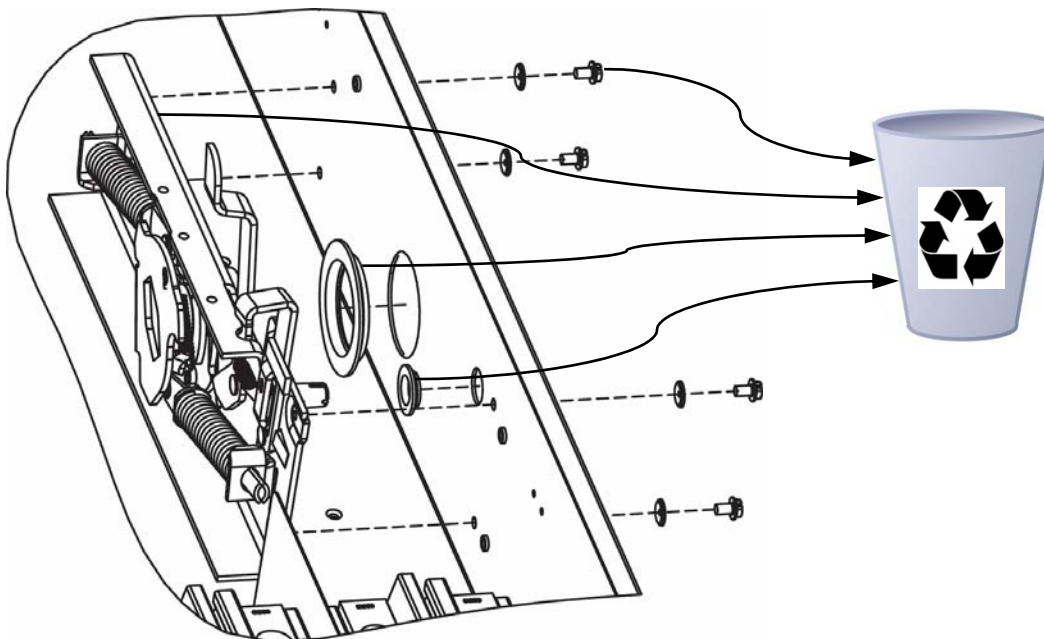


Fig. 9

9. For Type 3R, 12 & 4X enclosures, place the new handle grommet and interlock grommet onto the enclosure as shown in Fig 10. When properly seated, the enclosure sidewall will be captivated within the groove in the grommet.
10. Align the new mechanism through the grommets openings. Mount the Mechanism with the Mechanism Mounting Screws (and sealing washers for type 4X) as shown in Fig's. 11 & 12.

Enclosure Inside Surface

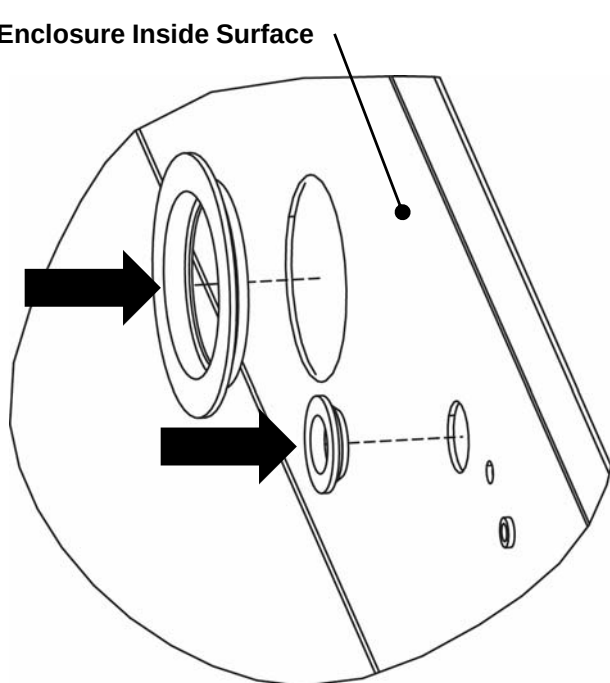


Fig. 10

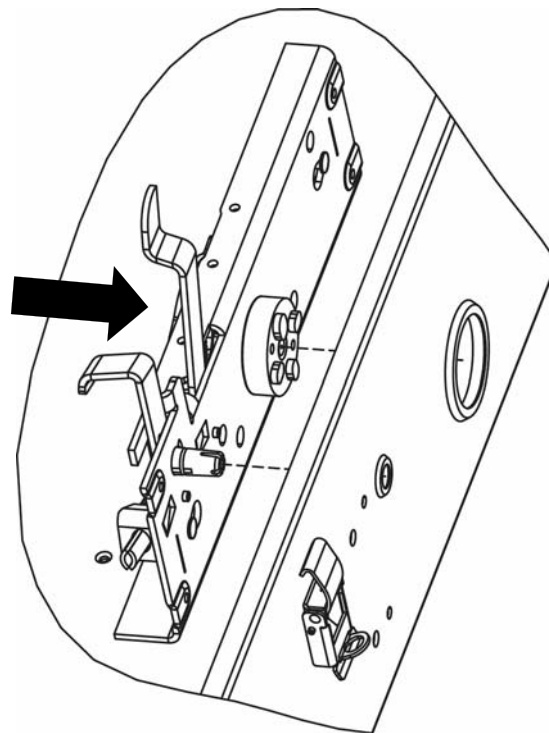


Fig. 11

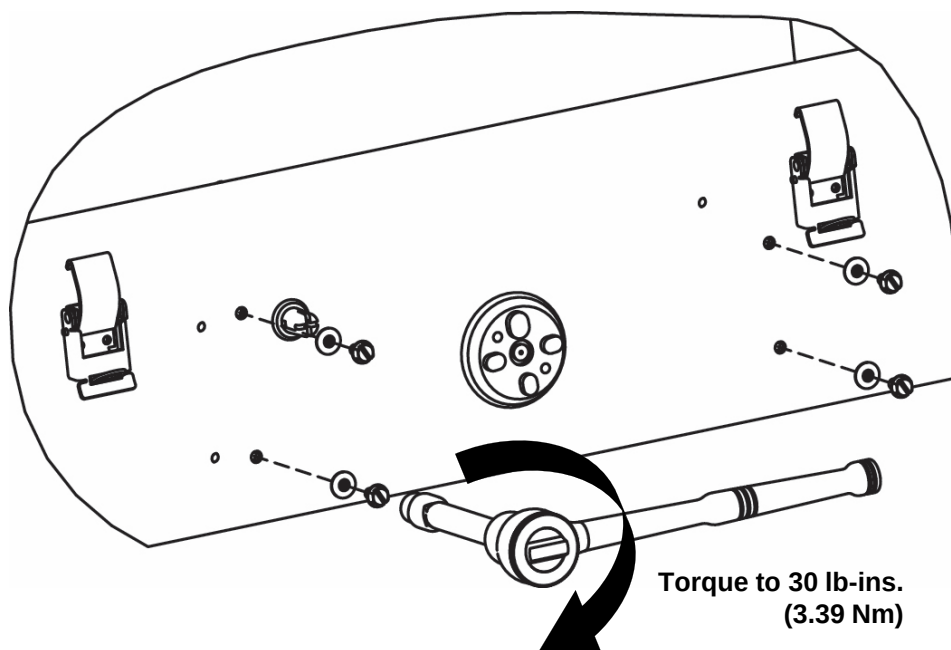
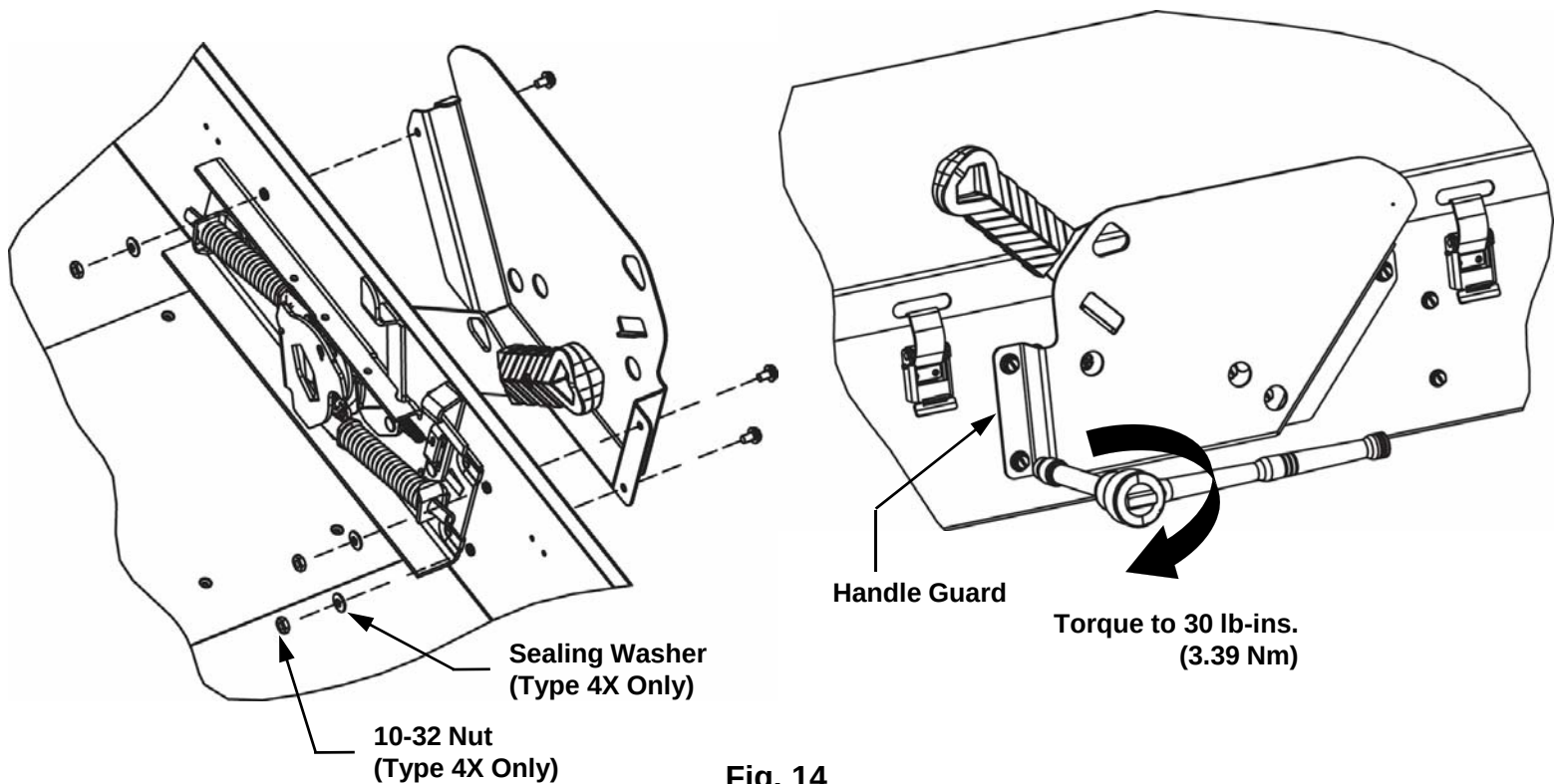
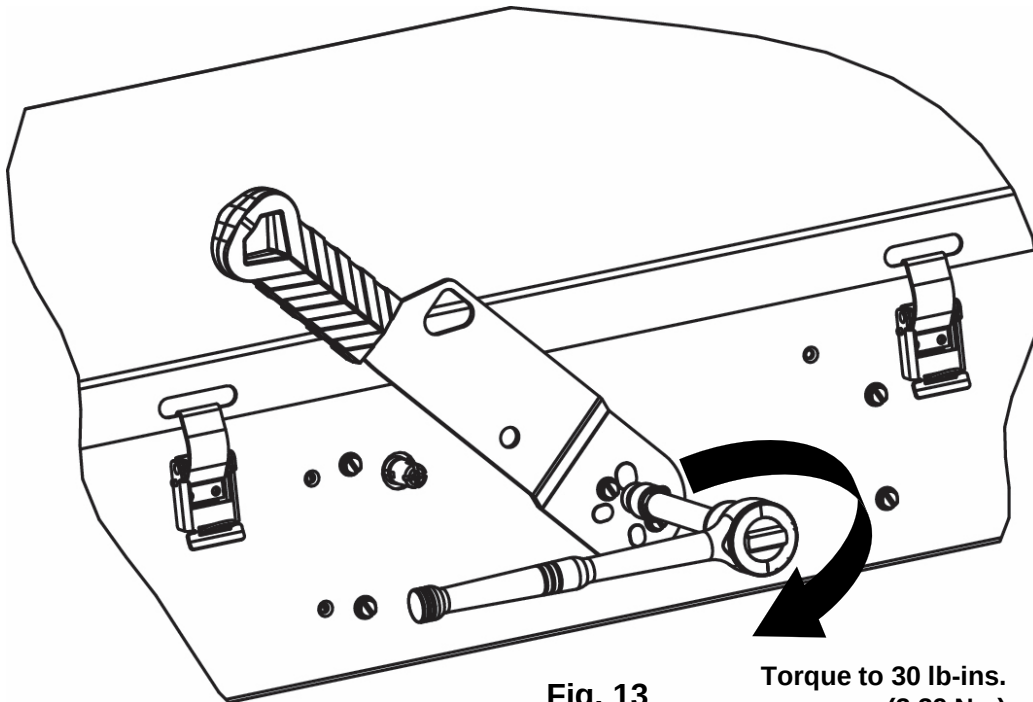


Fig. 12

11. Place the handle onto the Mechanism as shown in Fig. 13. Secure with (2) #10-32 x 0.5" screws (saved from Step 6 above).
12. Place the handle guard onto the enclosure as shown in Fig. 14. Secure with (3) #10-32 x 0.312" screws (saved from Step 5 above). Include sealing washers and #10-32 nuts for type 4X enclosures only.



13. Place the enclosure barrier and line base assembly into enclosure as shown Fig. 15.
14. Slide the line base assembly towards the mechanism assembly. Insert the end of rotor into the mechanism assembly until the line base mounting holes are aligned as shown in Fig's 16 & 17.

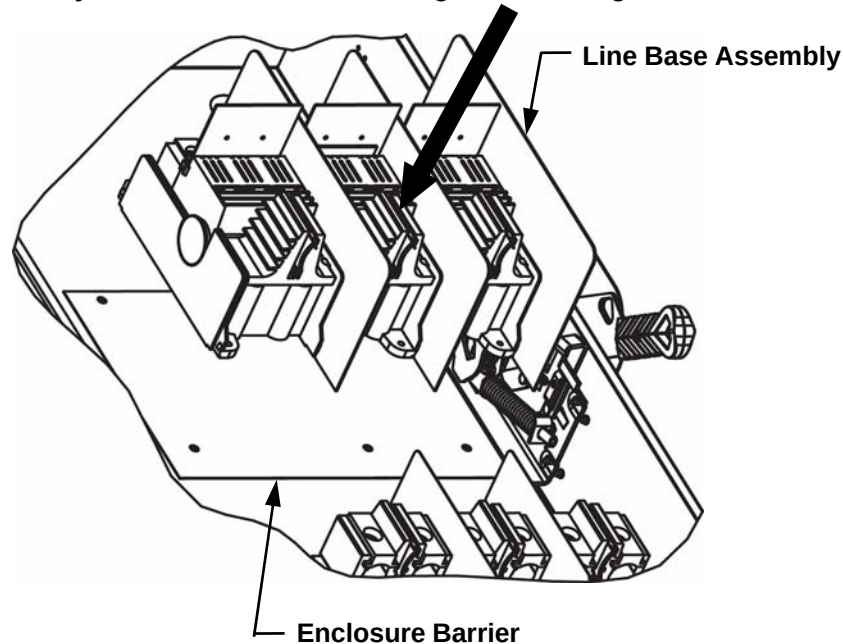


Fig. 15

	⚠ WARNING
	Electrical Shock Hazard
	Could cause death or serious injury
Ensure the Enclosure Barrier is properly installed before restoring power	

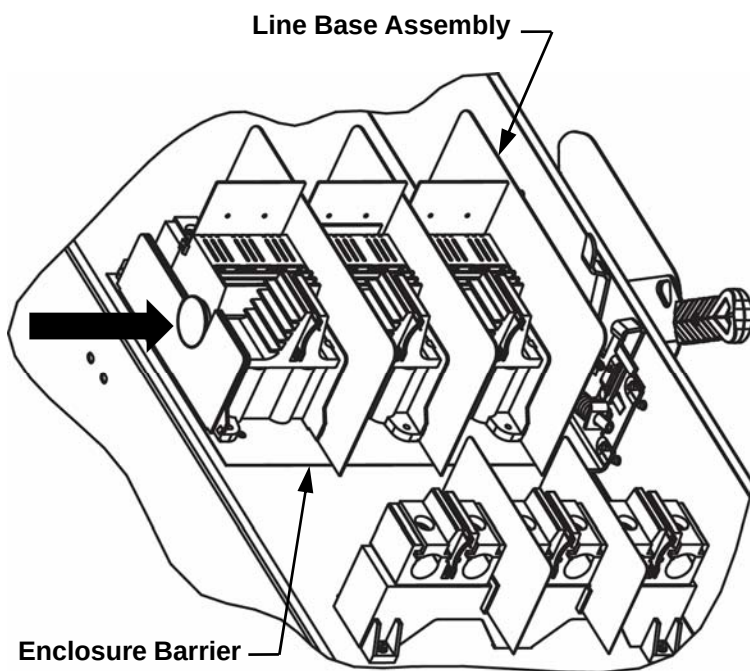


Fig. 16

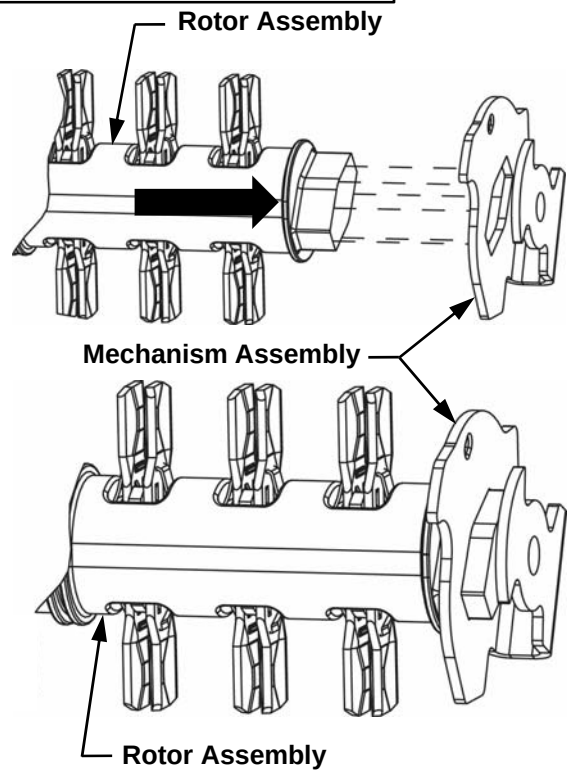


Fig. 17

View shown for clarification.

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15. Secure the line base assembly with six #10-32 x 5/8" screws (from Step 2 above) into the enclosure as shown in Fig.18. See Fig 19 for the sequence of the line base mounting screw placement.

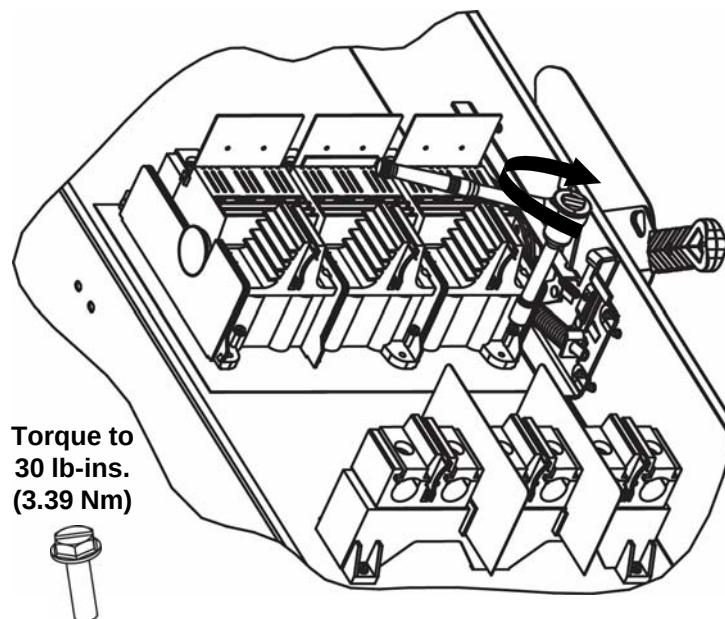
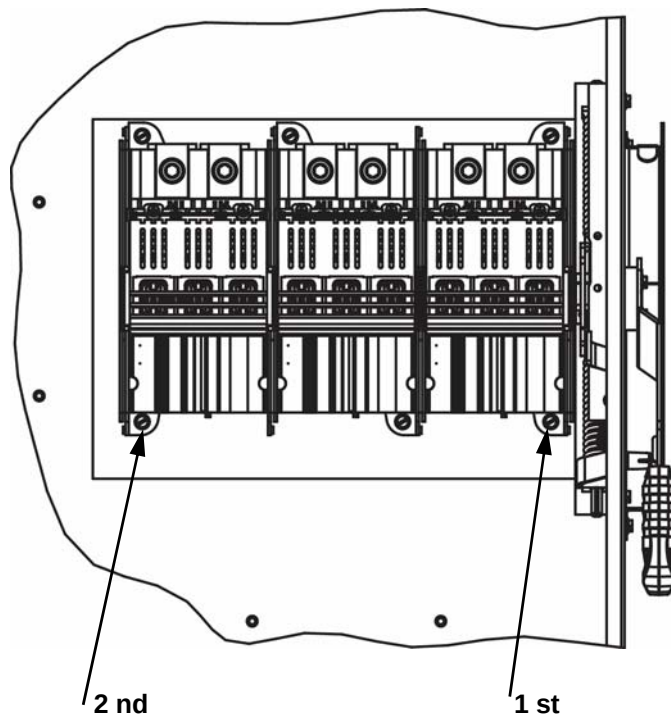


Fig. 18



Note the order of the first 2 (of 6) mounting screws to secure the Line Base Assembly.

Fig. 19

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16. While all power supplying the Safety Switch is still OFF and locked out:

- a. **Hold Interlock Lever below the front of the enclosure to operate switch with the door open. (See Fig. 14) Move the safety Switch handle to the ON position.**
- b. **Cycle the mechanism while checking for smooth switch operation and moveable contact movement. If the switch does not operate in a smooth manner, or if there are any questions about the replacement kit installation, contact Customer Service 1-800-241-4453.**
- c. **Turn the Safety Switch OFF.**

17. Reinstall line conductors. Torque lugs to the wire tightening torque values listed in the Terminal & Wire Information Table on the interior label.

18. Rotate line shields as shown in Fig.20.

19. Install fuses, if removed in step 1.

20. Close cover before restoring power to the safety switch.

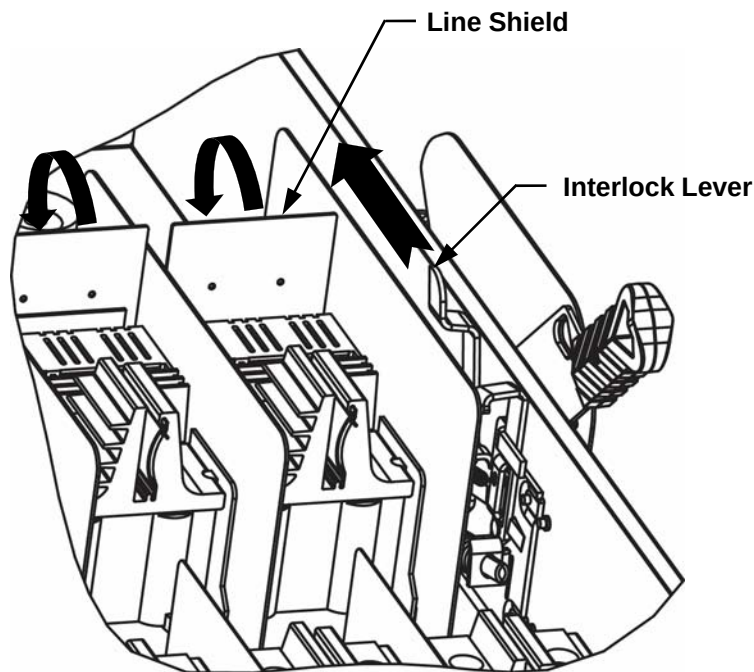


Fig. 20