



## STYLE 8600 ELECTRIC ACTUATOR INSTALLATION INSTRUCTIONS

Akron's 86008xxx electric actuator is designed to operate or convert Styles 8615, 8620, 8625, 8630, 8635, 8815, 8820, 8825, 8830, 8835, 8920, 8925, 8930, and 8935 Swing-Out™ Valves to electric operation. The following installation instructions are provided to assist you in installing the electric actuator on your valve.

### PRODUCT WARNINGS

|                |  |
|----------------|--|
| <b>DANGER</b>  | <ul style="list-style-type: none"><li>Indicates a hazardous situation which, if not avoided, WILL result in death or serious injury.</li></ul>             |
| <b>WARNING</b> | <ul style="list-style-type: none"><li>Indicates a hazardous situation which, if not avoided, COULD result in death or serious injury.</li></ul>            |
| <b>CAUTION</b> | <ul style="list-style-type: none"><li>Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.</li></ul> |
| <b>NOTICE</b>  | <ul style="list-style-type: none"><li>Addresses practices not related to personal injury.</li></ul>  |

#### **NOTICE**

Not for installation on 8840 or 8940 Swing-Out™ Valves. The Akron Electric Valve Actuator may only be operated with the Akron Brass Navigator Pro Valve Controllers. Other controllers will damage the unit.

#### **NOTICE**

Do not use power tools to operate the manual override shaft on the actuator. This can result in permanent damage to the actuator, which can prevent normal valve operation.

#### **NOTICE**

Always disconnect all wiring cables from the valve controller before electric arc welding at any point on apparatus. Failure to do so will result in damage to the controller.

#### **CAUTION**

Electrical power to the valve actuator should be disconnected when operating the valve manually using the manual override.

If the electric actuator is being installed on existing Styles 8615, 8620, 8625, 8630, 8635, 8815, 8820, 8825, 8830, 8835, 8920, 8925, 8930, and 8935 valves with manual handles, begin the installation with Section I instructions. If the electric actuator is received from Akron Brass already installed on a valve, start the installation with Section IV instructions.

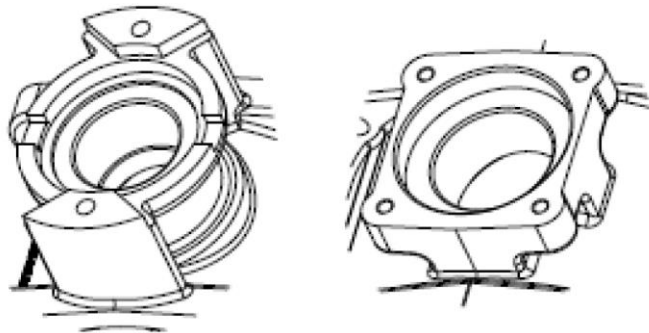


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## I. Disassembly of existing style 8615, 8620, 8625, 8630, 8635, 8815, 8820, 8825, 8830, 8835, 8920, 8925, 8930 and 8935 valves with manual handles:

Prior to installing the electric actuator, the existing handle assembly or actuator must be removed.

- Place the valve in the open position.
- Remove the hex head screw A (Fig. 1.), washer B, handle C, stop plate D, bearing brake E, and wave spring F. They are not needed and can be discarded.
- Using a 5/32" hex wrench, remove the four socket head screws G, bonnet H and ball trunnion J. These items are not needed and can be discarded.
- The assembly is now ready for the electric actuator installation.



Note:  
Actuator will not mount on valve body with cast in handle stops.

Valve body requires square style valve neck.

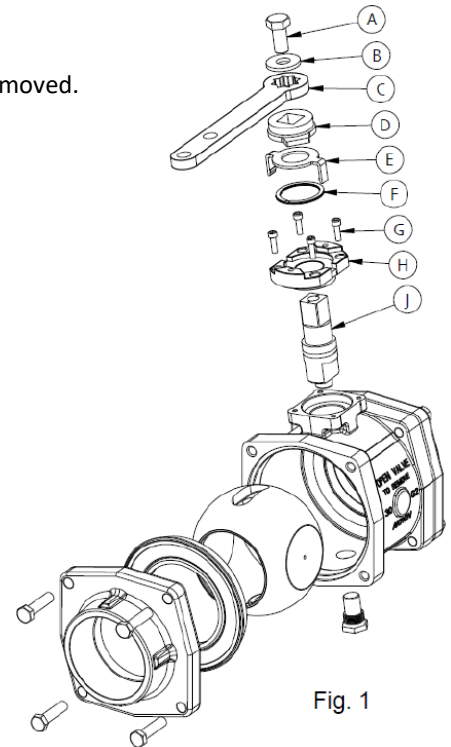
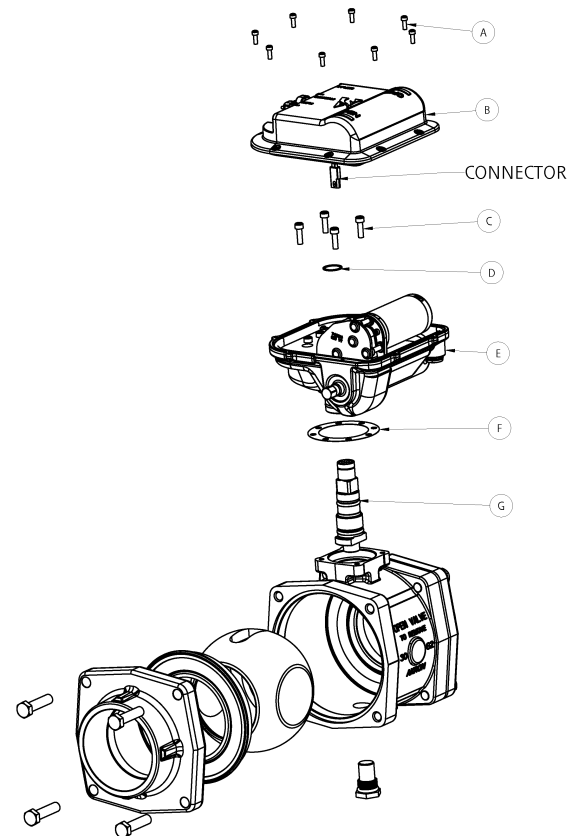


Fig. 1

## II. INSTALLATION OF ELECTRIC ACTUATOR ON VALVE

- Using a 7/64" Allen wrench, remove the eight socket head cap screws A (Fig. 2), and remove the cover B. The motor wire is connected to cover B. Take care not to damage the wires or connector as the cover is removed. (Fig. 2) \* Recommended Actuator be installed so 7/16 wrench connection (manual override) is directed to an accessible location (Fig. 3).
- Rotate ball in valve housing so it is halfway between open and closed. Then place trunnion G into valve until it engages with the valve ball, the magnet in the end of trunnion should be perpendicular length wise to waterway (Fig. 6).
- Determine the desired actuator position (Fig. 4) noting the required sector gear orientation (Fig. 5). If the sector gear is in the wrong orientation, turn the hex end of drive shaft with a 7/16" wrench (Fig. 3) until gear is orientated correctly. Slip the electric actuator over trunnion in the desired actuator position (Fig. 2) down into the top of the valve body. Ensure washer F is in place between the valve body and the actuator, and that the trunnion fits into the slot on the valve ball. The wrench connections for the manual override (Fig. 3) should be accessible from left or right truck panel.
- Insert the four 5/8" long socket head cap screws C in the actuator housing using a 5/32" Allen wrench (Fig. 3), tighten these screws evenly in an X pattern. **NOTE:** Use PermaBond LM 113 or Loctite 222 on screws.



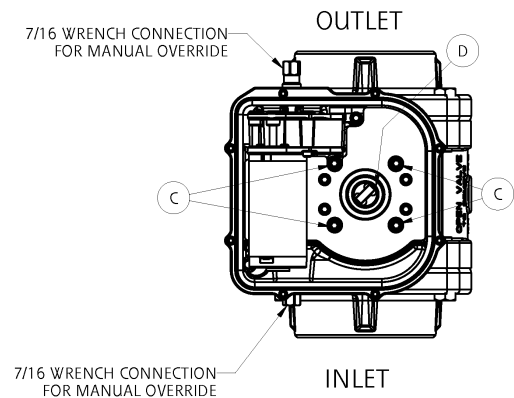


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- E. Attach the retaining ring D to the top of trunnion G inside of the electric actuator housing.
- F. Return the valve to the OPEN position after installing the screws C.
- G. Replace the cover B (Fig. 2) on the actuator and attach with the eight socket head cap screws A.
- H. Go to Section V.

### III. VALVE INSTALLATION

- A. Install the electrically actuated valve into the apparatus piping. To facilitate the installation, the valve adapters may be removed from the valve body, mounted on the piping and the valve body re-bolted onto the adapter flanges. The actuator may be positioned on the top, bottom or side of piping. If necessary, the actuator may also be rotated on the valve to any of the four positions shown on the following page. **NOTE:** The magnet on the trunnion and sector gears must be in the right orientation (Fig.5 and Fig. 6). **The valve must not be installed more than 20 feet from master controller if power for valve is being supplied from the 8 pin Deutsch Connector on the display. See controller installation instructions. Do not splice wiring harness or connect through slip (collector) rings on aerials. Auxiliary controller must be used for this application. The valve actuator will need to be calibrated using the Navigator Controller once installation is complete.**



### IV. CONTROLLER INSTALLATION

See instructions packaged with 9327, 9330 Mini Navigator or 9333, 9335 Navigator Pro for controller installation and operation instructions. Detailed information on system wiring and connector pin outs can also be found in these documents.

Fig. 2

Fig. 3



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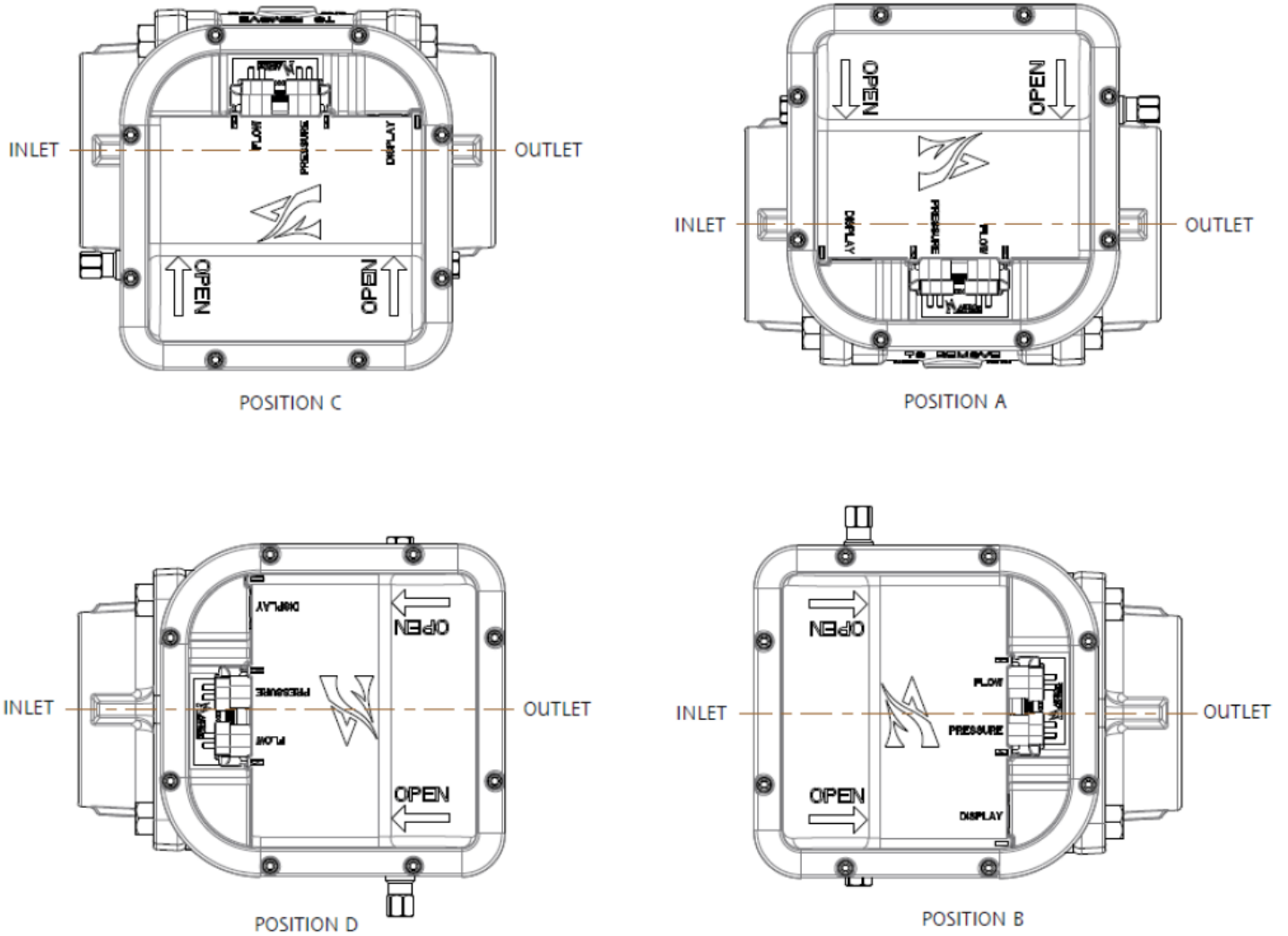


Fig. 4



# STYLE 8600 ELECTRIC ACTUATOR INSTALLATION INSTRUCTIONS

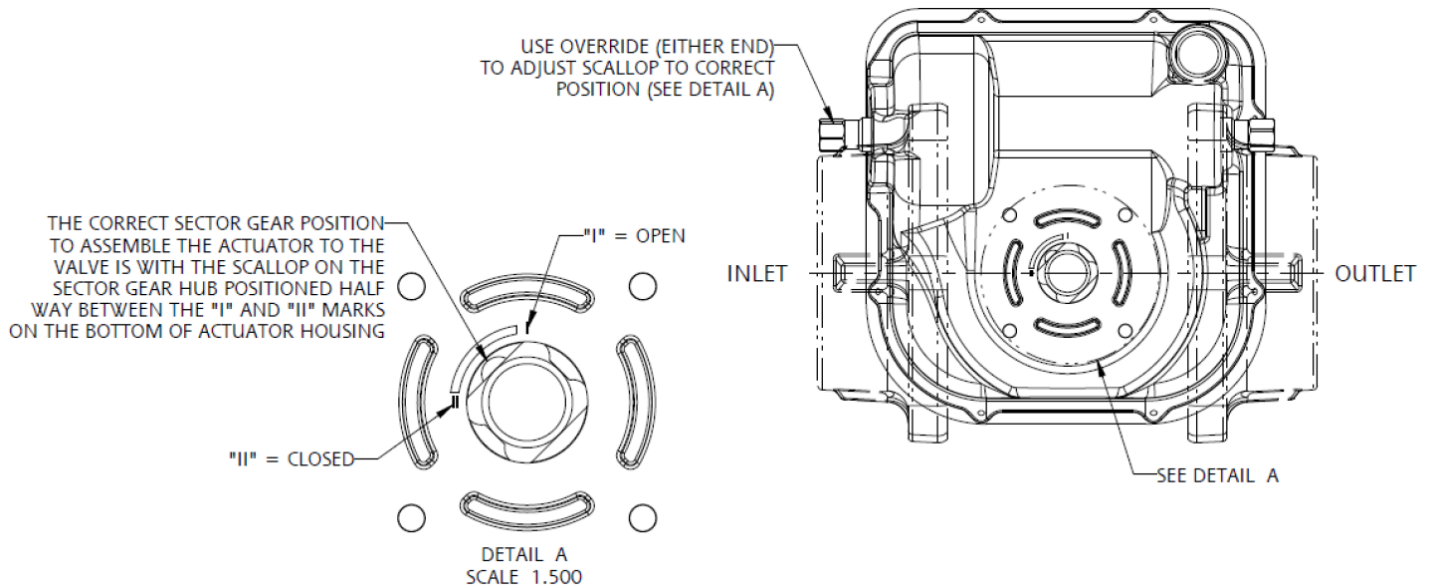


Fig. 5

SET BALL IN VALVE AT 45° THEN PLACE TRUNION INTO VALVE. THE MAGNET IN END OF TRUNION SHOULD BE PERPENDICULAR TO WATERWAY AS SHOWN REGARDLESS OF ACTUATOR POSITION.

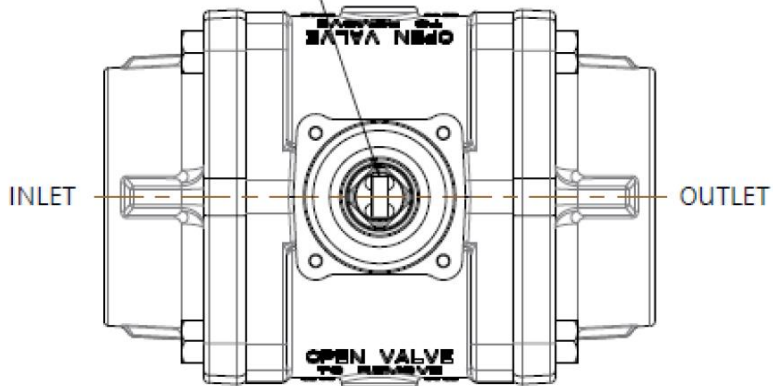


Fig. 6

**WARRANTY AND DISCLAIMER:** We warrant Akron Brass products for a period of five (5) years after purchase against defects in materials or workmanship. Akron Brass will repair or replace product which fails to satisfy this warranty. Repair or replacement shall be at the discretion of Akron Brass. Products must be promptly returned to Akron Brass for warranty service. We will not be responsible for: wear and tear; any improper installation, use, maintenance or storage; negligence of the owner or user; repair or modification after delivery; failure to follow our instructions or recommendations; or anything else beyond our control. **WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, OTHER THAN THOSE INCLUDED IN THIS WARRANTY STATEMENT, AND WE DISCLAIM ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.** Further, we will not be responsible for any consequential, incidental or indirect damages (including, but not limited to, any loss of profits) from any cause whatsoever. No person has authority to change this warranty. Unless otherwise provided herein, Akron Brass industrial electronic components & the Severe-Duty Monitor have a one (1) year warranty. Select Akron Brass handline nozzles and valves carry a ten (10) year warranty. Weldon products have a two (2) year warranty from date of manufacture (excluding consumable components). Select Weldon LED products carry a five (5) year warranty. Honda products have the manufacturers' warranty and Akron Brass disclaims any warranty in respect of those products.