



GEAR ACTUATOR INSTALLATION INSTRUCTIONS

Akron's gear actuator is designed to operate 2 - 3 $\frac{1}{2}$ " Swing-Out valves.

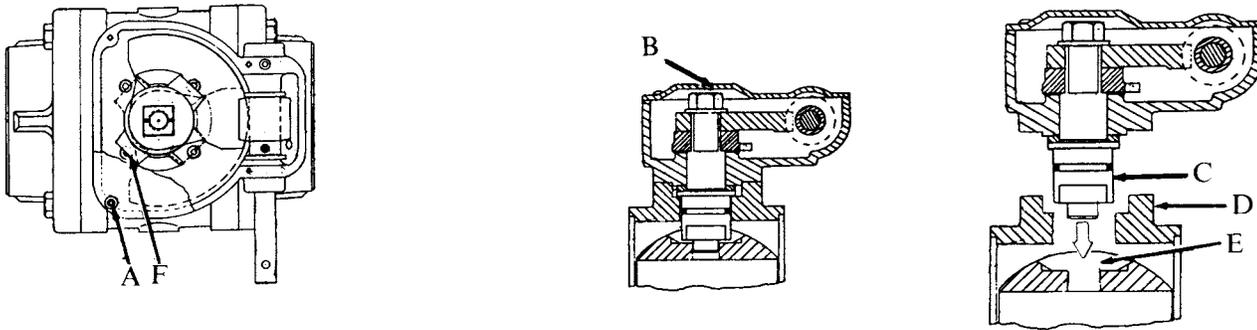
The following installation instructions are provided to assist you in installing the gear actuator on your valve.

I. DISASSEMBLY OF EXISTING VALVE OPERATOR

If the existing valve has a manual actuator all parts from the ball trunnion and up needs to be removed and discarded. If the existing valve has either a gear or electric actuator follow the steps outlined below to remove existing actuator.

II. INSTALLATION OF GEAR ACTUATOR

A. Using a $\frac{3}{32}$ " Allen wrench, remove the four round head screws (A), from the cover plate (B), and remove the cover plate.



B. Slip the gear actuator, with its attached drive trunnion (C), down onto the top of the valve (D). Ensure that the trunnion fits into the slot (E) on the valve ball.

C. Slowly rotate the gear housing on top of the valve until the countersunk mounting holes in the base of the gear housing match the mounting holes in the top of the valve neck and the handwheel shaft is positioned for connection to the control panel handwheel

D. Insert the four $\frac{5}{8}$ " long socket head screws (F) in the gear housing. Apply Permabond LM113 or Loctite 222 to the treads of the screws and tighten evenly in an "x" pattern. NOTE: The sector gear will need to be rotated 90 degrees for all four screws to be tightened.

E. Replace the cover plate on the gear housing and attach with the four round head screws.

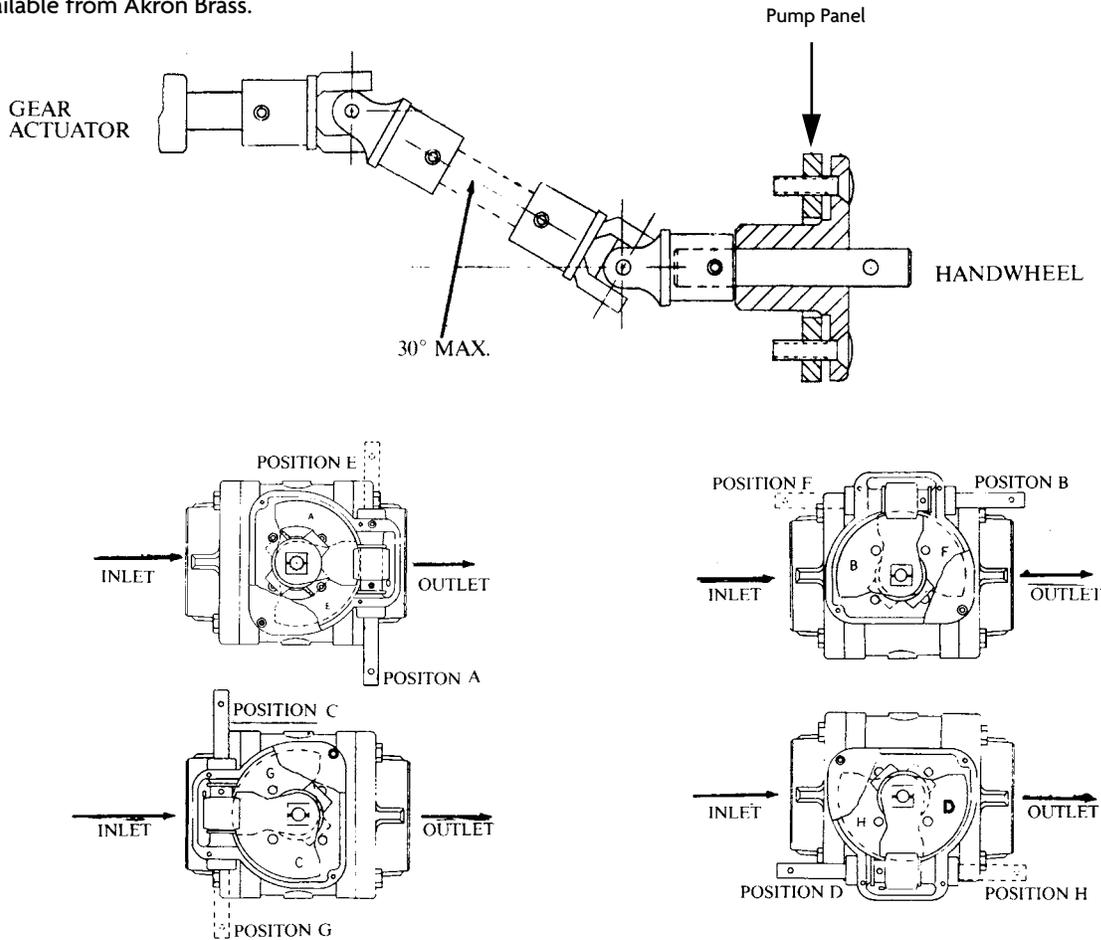
F. When actuated, the handwheel will rotate clockwise to close.

III. REMOTE OPERATOR

The gear actuator requires a remote operator if the distance from the valve centerline to the apparatus control panel is greater than 3.5". An optional remote operator kit includes two universal joints and a handwheel mounting bracket. The universal joints are essential to correct for remote operator connecting rod misalignment.

IV. GEAR ACTUATOR MOUNTING POSITIONS

The gear actuator can be mounted in any one of the eight drive shaft positions shown below. These drive shaft positions are designated A, B, C and D (solid lines), and E, F, G, and H (dotted lines). Any one of the eight positions can be specified when ordering the gear actuated valve. If one wishes to change the drive shaft position after installation, detailed instructions for repositioning the shaft are available from Akron Brass.



All positions shown with the ball open.