



# Installation Instructions for Mounting Gemini 400 Series Pneumatic Actuators to 76, 86 and 96 Series Ball Valves

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These instructions detail the procedure for installing a Gemini 400 Series pneumatic actuator on a drive-key equipped Gemini 76, 86 or 96 Series ball valve. Valves may be purchased with the drive-key assembled or may be retrofitted with a drive-key conversion kit.

## Assemble Bracket to Actuator

1. Position the bracket gasket on the actuator mounting surface so that the alignment pins engage the slots (B410 Series) or holes (A420 Series) in the gasket.
2. Place the bracket, from the mounting kit, on the mounting surface over the gasket so that the alignment pins engage the bracket. In the interest of uniformity, mount the bracket so that the valve locator is on the same side as the actuator inlet ports (or spring module if you are mounting a spring return) as shown in Figure 1.

## Assemble Valve to Actuator

1. Double Acting Actuators: Check the valve to be sure that it is either completely open or completely shut. Observe the OPEN / SHUT indicator mounted on the actuator shaft; turn the shaft if necessary so that the indicator corresponds to the position of the valve.  
Spring Return Actuators: Turn the valve stem to orient the ball in the desired for spring action, i.e. "spring to open" or "spring to close". Observe the OPEN / SHUT indicator mounted on the actuator shaft to assure that it reads correctly. If it does not, remove the two screws which hold the indicator cover and rotate the cover 180 degrees, reinstall the screws.

2. Place the actuator, with the bracket attached, atop the valve so that the 12 point socket engages the stem nut, the shaft notch engages the drive-key and locator engages the valve body hex. If your valve is a Series 86 or 96, the locator must contact the valve body on the side opposite the end plug as shown in Figure 2. If the valve stem nut will not engage the socket in the coupling, reposition the nut slightly (this should require less than 1/12 turn). The valve locator has been preassembled to the bracket to fit your valve; if the valve locator does not engage the hex, or if it prevents the bracket from contacting the upper surface of the valve body, it must be repositioned.

3. Position the retainer on the underside of the valve and fasten to the actuator bracket with the two hex-head capscrews. Tighten the screws alternately to assure balanced pulldown and to avoid skewing of the actuator bracket on the valve body. Continue tightening only until the actuator is securely anchored. A gap should remain between the lower surface of the bracket and the retainer "ears" when the assembly is complete.

Your Gemini Actuated Valve is now ready for service.

Figure 1

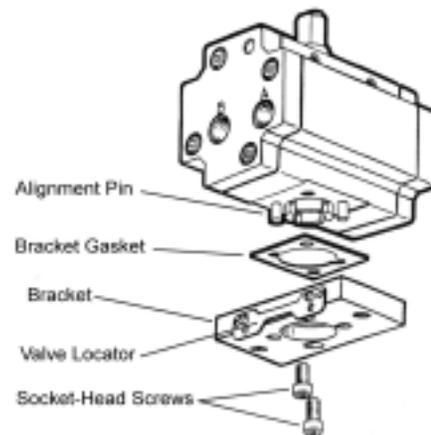


Figure 2

