



Installation Instructions for Mounting Gemini A500 Series Pneumatic Actuators to 309 Series Ball Valves

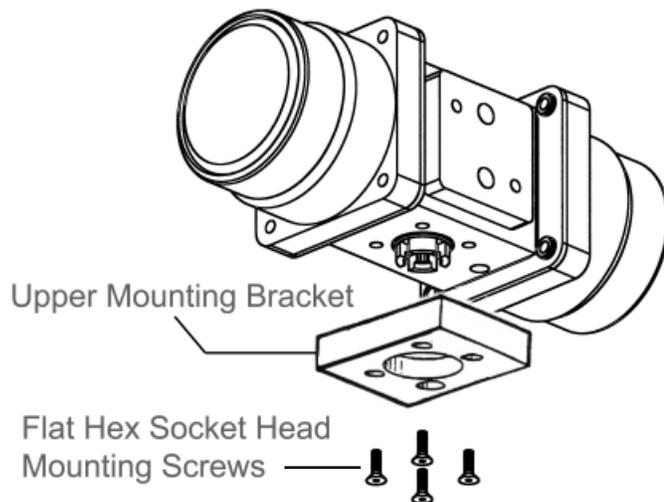
2 Otter Court, Raymond, New Hampshire 03077 • Tel. (603) 895-4761 • FAX (603) 895-6785

These instructions detail the procedure for installing a Gemini A500 Series pneumatic actuator on a drive-key equipped Gemini 309 Series diverter ball valve. Valves may be purchased with the drive-key assembled or may be retrofitted with a drive-key conversion kit.

Caution: The actuated valve will fail to function if the orientation of the valve stem, with respect to the actuator pinion is not in accordance with these instructions.

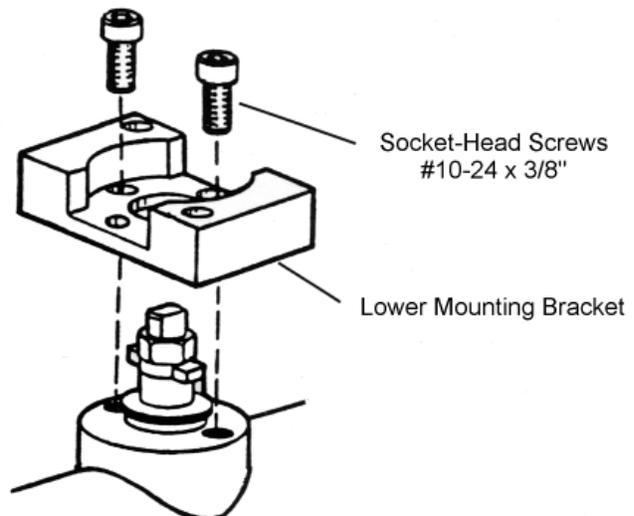
Assemble Bracket to Actuator

1. Place the upper mounting bracket, on the mounting surface so that the four countersunk holes align with and facing away from the four holes in the actuator. Make sure the long axis of the bracket is perpendicular to the centerline of the actuator.
2. Fasten the upper mounting bracket to the actuator with the four flat hex socket head mounting screws as shown. Tighten securely.
3. Turn actuator shaft clockwise so that the flats on the upper drive shaft are perpendicular to the centerline of the actuator.



Assemble Bracket to Valve

1. Position lower mounting bracket on the valve with 'slots' facing fore and aft as shown. Secure with #10-24 x 3/8" socket-head screws.
2. The valve stem flats must align with the centerline of the valve as shown in the illustrations. Rotate the stem to this position with an adjustable wrench or other tool if necessary.



Assemble Valve to Actuator

1. Complete the assembly by joining the actuator, with attached upper mounting bracket, and the valve, with the attached lower mounting bracket. It may be necessary to work the actuator back and forth in the horizontal plane to engage the drive-key and stem nut in the actuator pinion, reposition the nut slightly (this should require less than 1/12 turn of the nut).

2. Fasten the upper bracket to the lower bracket with the two #10-24 x 3/8" socket-head screws. Tighten securely.