



Installation Instructions for Mounting Gemini A500 Series Actuators to 76, 82, 86 & 96 Series Ball Valves

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These instructions detail the procedure for installing a Gemini A500 Series actuator on a drive-key equipped Gemini 76, 82, 86 & 96 Series ball valve. Valves may be purchased with the drive-key assembled or may be retrofitted with a drive-key conversion kit.

Instructions:

Assemble Bracket to Actuator

1. Position the actuator upright with driver and the A & B ports oriented as shown in Figure 1.

2. With the counter sunk holes exposed, position the bracket to achieve an inline or cross mounted actuator orientation as described below. Table 1 lists the valve condition at rest with respect to the Actuator Model # (See actuator name-plate to determine model number

a. Inline- (standard mounting for most actuators) The long axis of the actuator is in-line with the piping. The bracket should be oriented perpendicular to the actuator body. (See Figure 2)

b. Cross mounted- the long axis of the actuator is perpendicular to the piping. The bracket should be mounted parallel to the actuator body. (See Figure 3)

3. Install the 4 hex flat socket head mounting screws to (60 inches lbs. for A510 and 75 inch lbs. for A520 actuators) secure bracket to the actuator body. Important: To ensure positive fastening mounting screws and bracket counter sunk holes must be clean and dry.

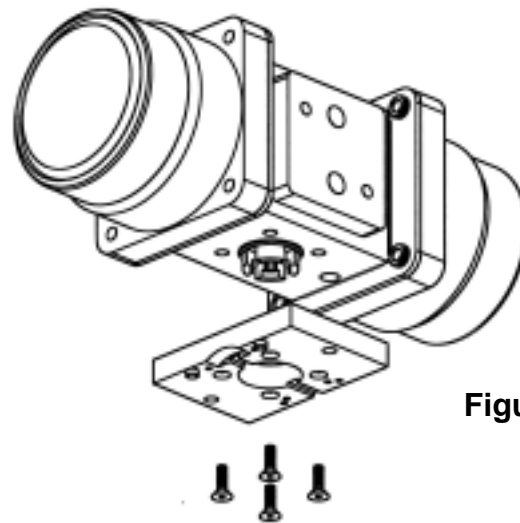


Figure 1

Actuator Model	Mounted	Valve Condition at Rest
A512NO	Inline	Open
A512NO	Cross Mount	Closed
A512	Inline	Closed
A512	Cross Mount	Open
A522NO	Inline	Open
A522NO	Cross Mount	Closed
A522	Inline	Closed
A522	Cross Mount	Open

Table 1

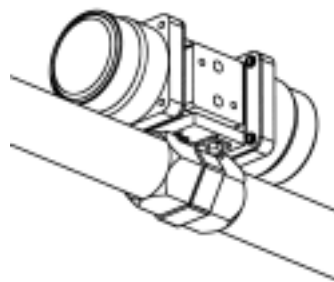


Figure 2

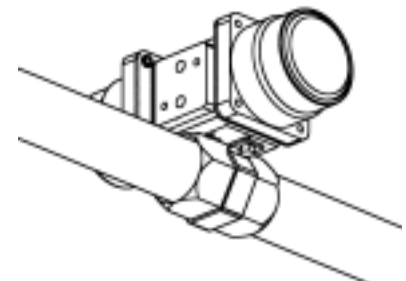


Figure 3

Assemble Valve to Actuator

IMPORTANT Note the red OPEN/SHUT indicator mounted on top of the actuator shaft and the position of the ball in the valve. The actuator should be mounted such that the red indicator is in-line with the valve body when the ball is in the open position, or across the valve body when the ball is in the closed position.

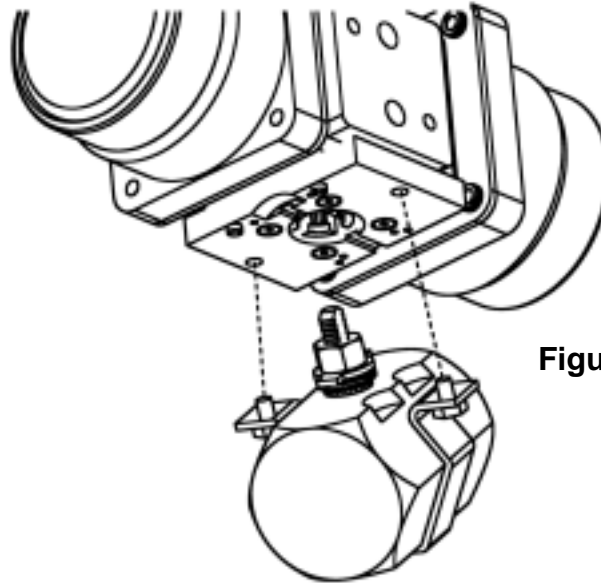


Figure 4

1. Rotate the valve stem so that it is in the corresponding closed or open position with regards to the actuator. The drive key on the valve should be perpendicular to valve body when valve is open and parallel when in the closed position.

2. Confirm proper position of the locator screws on the bottom of the bracket based on the size and series of the valve being mounted as Listed in Table 2.

3. 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 screws straddle the valve body hex (see Figure 4). If the locator screws do not span the valve properly (i.e. interfere with eyebrows or do not engage valve) turn valve 180 degrees.

4. Position the valve retaining strap over the valve and align with bracket holes. Secure strap with two hex head cap screws. Alternate tightening the strap bolts to obtain even tension on the strap and to avoid skewing. Do not over tighten. A gap should remain between strap and bracket when assembly is complete.

Actuator Series	Valve Size & Series				Locator Screw Mounting Pattern
	76	82	86	96	
A510	1/2	1/4, 3/8, 1/2	1/4 & 3/8	-	1
	3/4	3/4	1/2	-	2
	1	1	3/4	1/2	3
	1-1/4	-	1	3/4	4
	1-1/4	-	1	3/4	4
A520	1-1/2	-	1-1/4	1	5
	2	-	1-1/2	1-1/4	6
	-	-	2	1-1/2	7
	-	-	2	1-1/2	7

Table 2

