

# Shafer SH-Series





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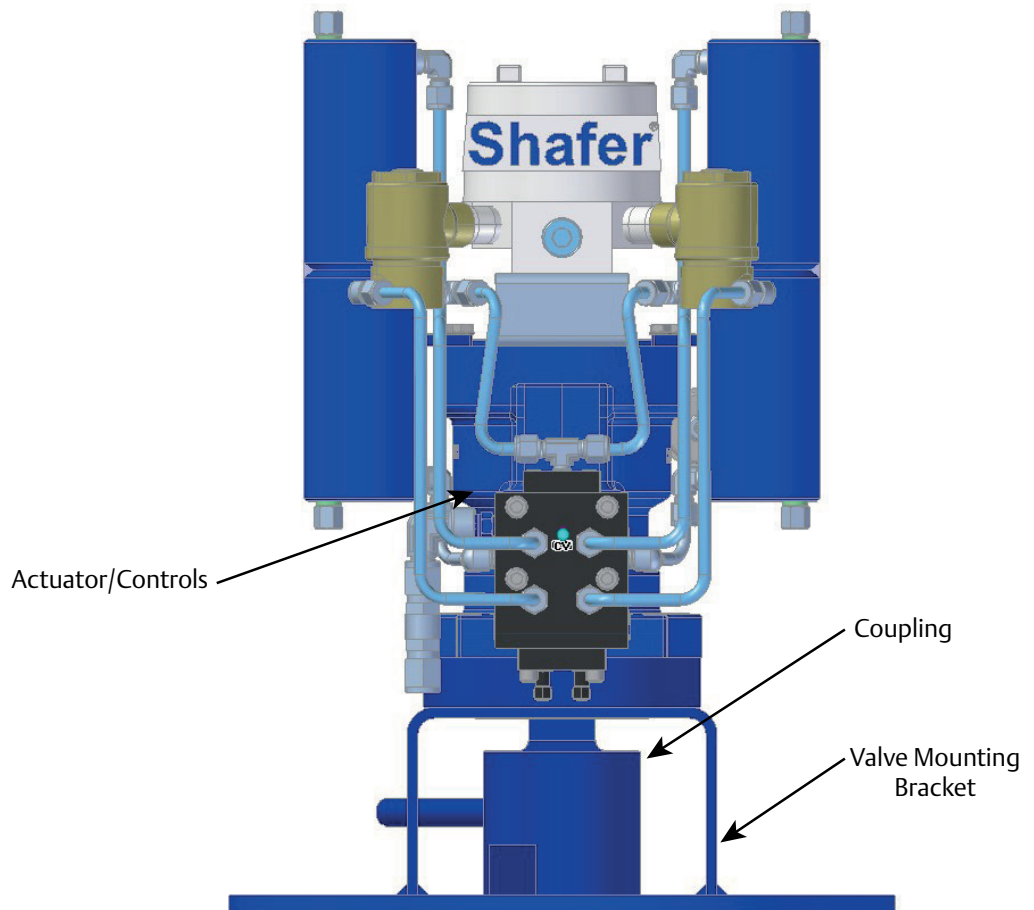
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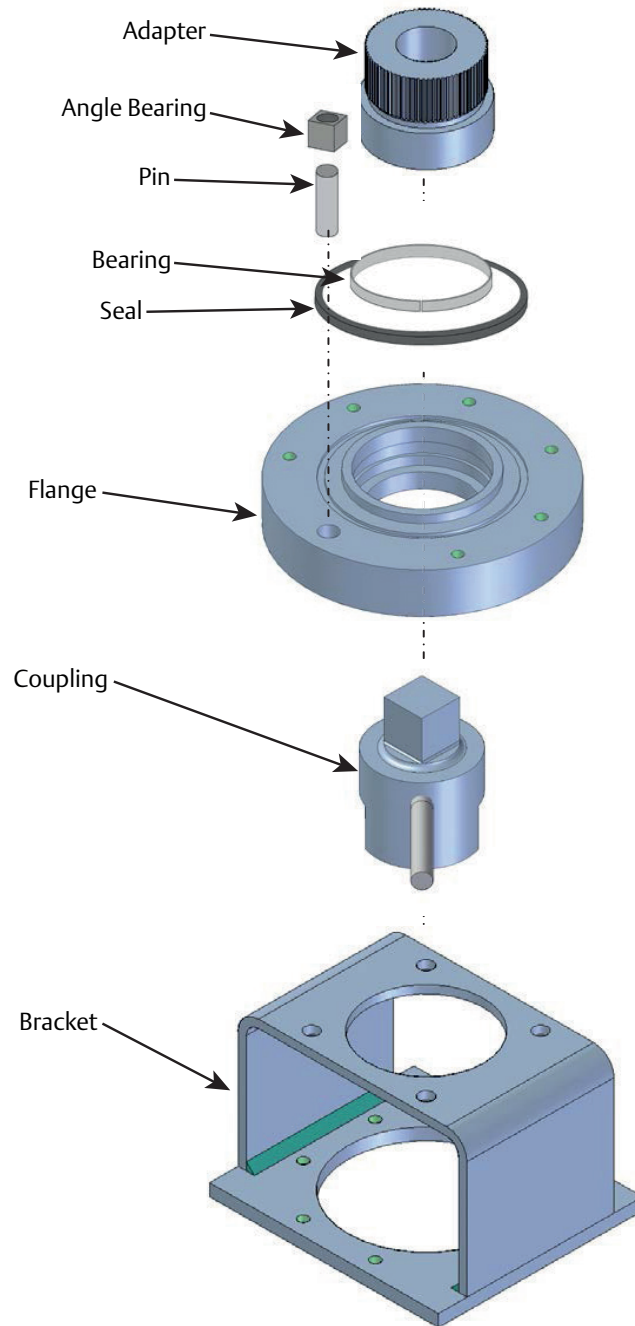
# Section 1: SH-Series Installed on Valve

Figure 1 SH-Series Installed on Valve



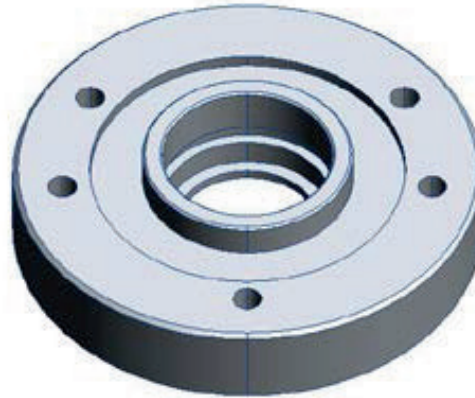
## Section 2: Adaption Parts

Figure 2 Adaption Parts



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**Figure 3**     **Flange Top**



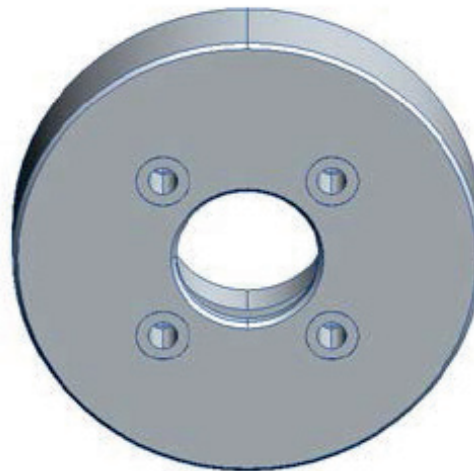
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Part Overview:

- Flange Top - Machined to fit actuator.

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**Figure 4**     **Flange Bottom**

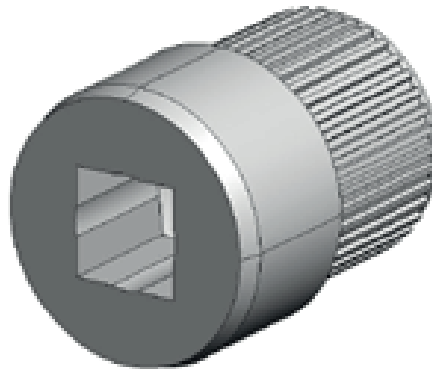


Part Overview:

- Flange Bottom - Machined to bracket.

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**Figure 5 Adapter**



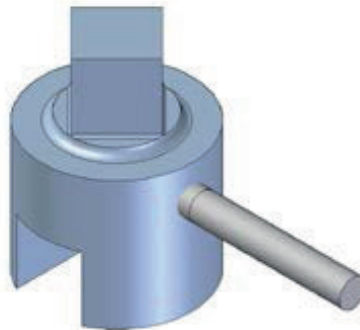
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Part Overview:

- Adapter - Machined to fit coupling.

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**Figure 6 Coupling**

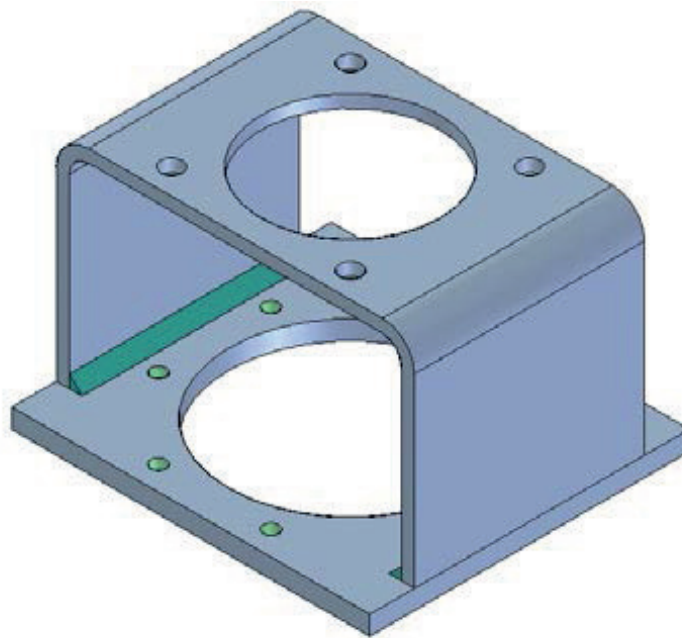


Part Overview:

- Coupling - Top machined to fit bottom of adapter, bottom machined to fit valve stem.

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**Figure 7**     **Bracket**



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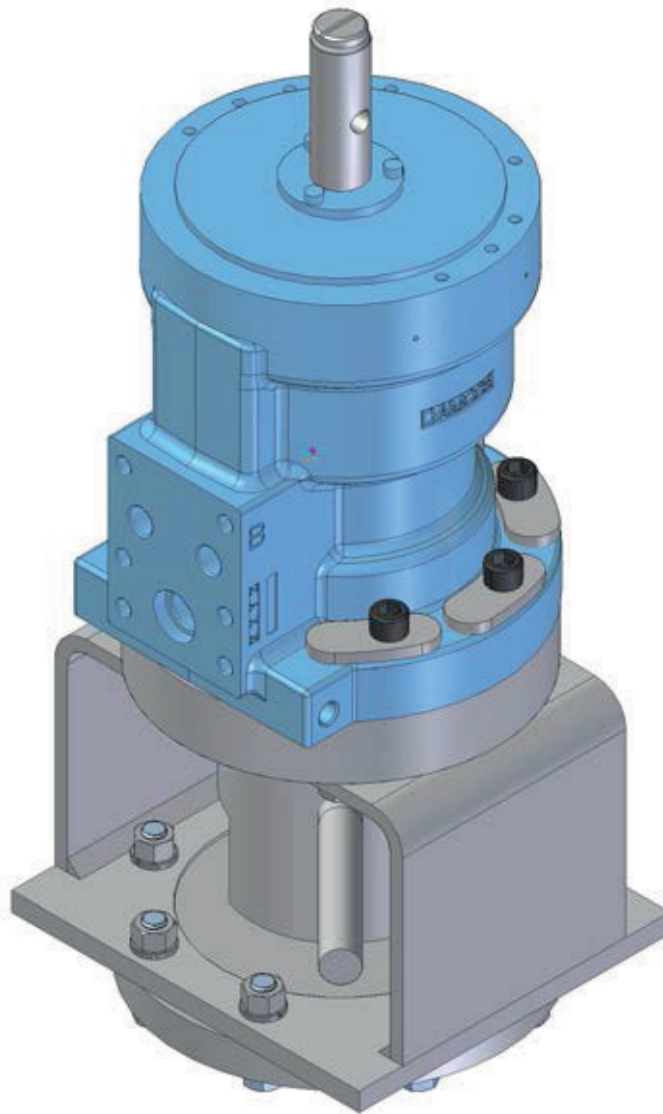
Part Overview:

- Bracket - Top machined to fit bottom of flange, bottom machined to fit valve.



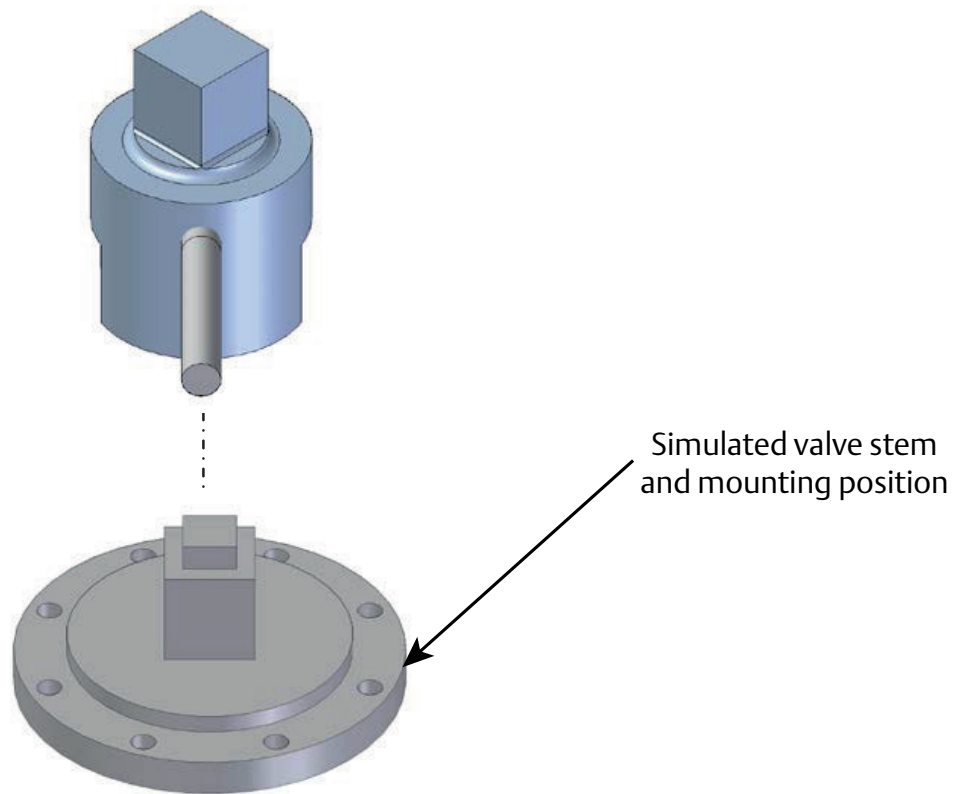
## Section 3: Step by Step Installation on Valve

Figure 8 Installation of an SH-Series Actuator on Valve



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**Figure 9**      **Mounting the Coupling on the Valve Stem**



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1. Determine orientation and mount the coupling on the valve stem.

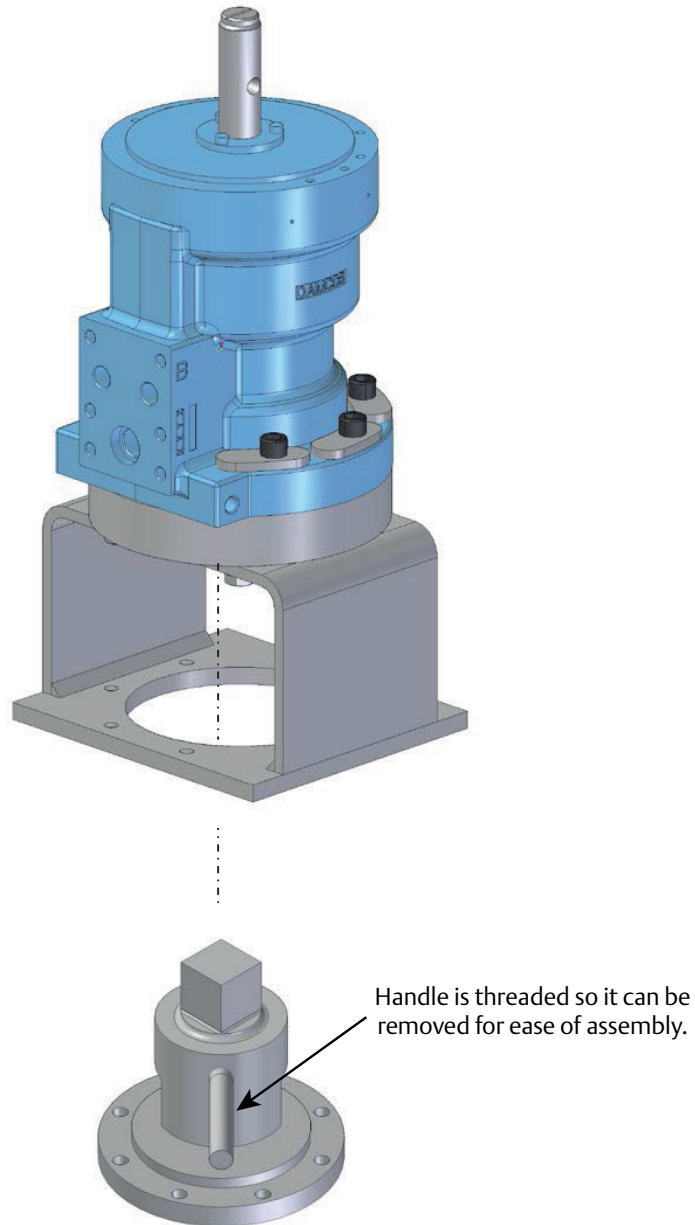
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**NOTE:**

Valve shown in open position.

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**Figure 10** Mounting the Actuator to the Coupling

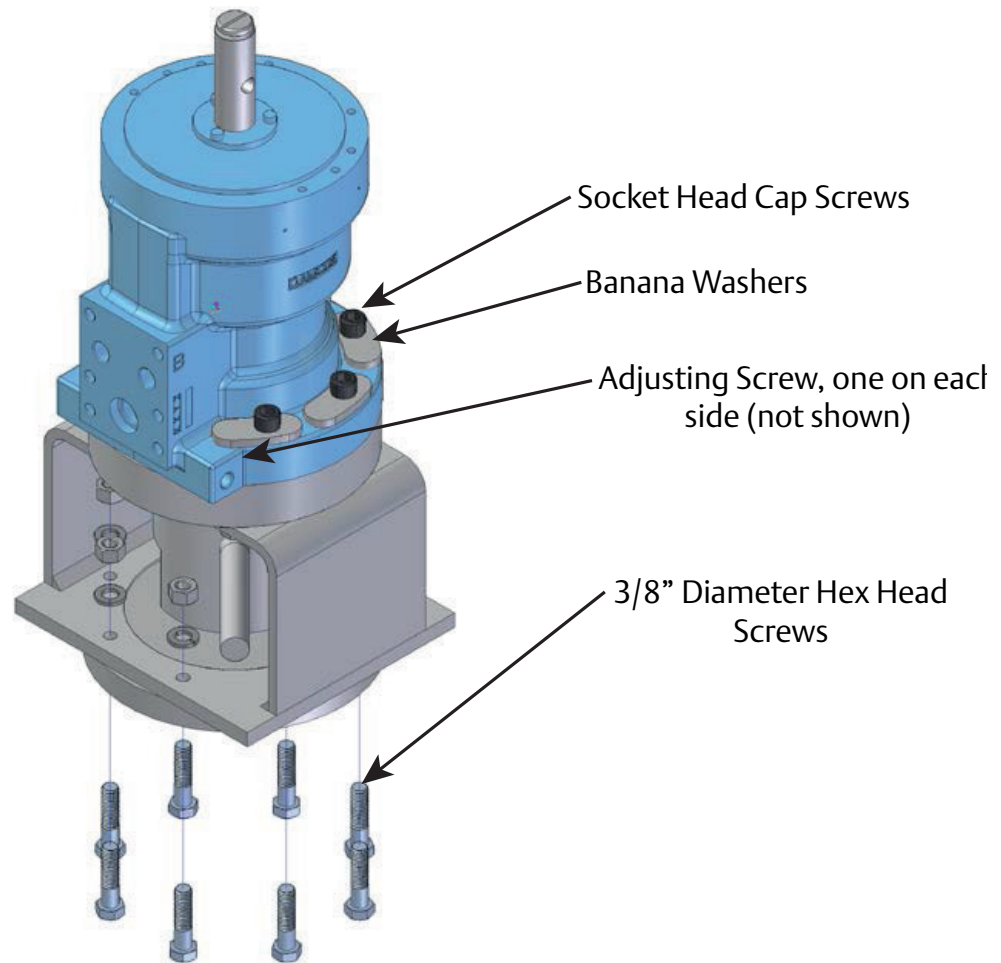


2. With the actuator assembly supported by a proper means, work the bracket down over the handle until the bracket rests on the valve.

**NOTE:**

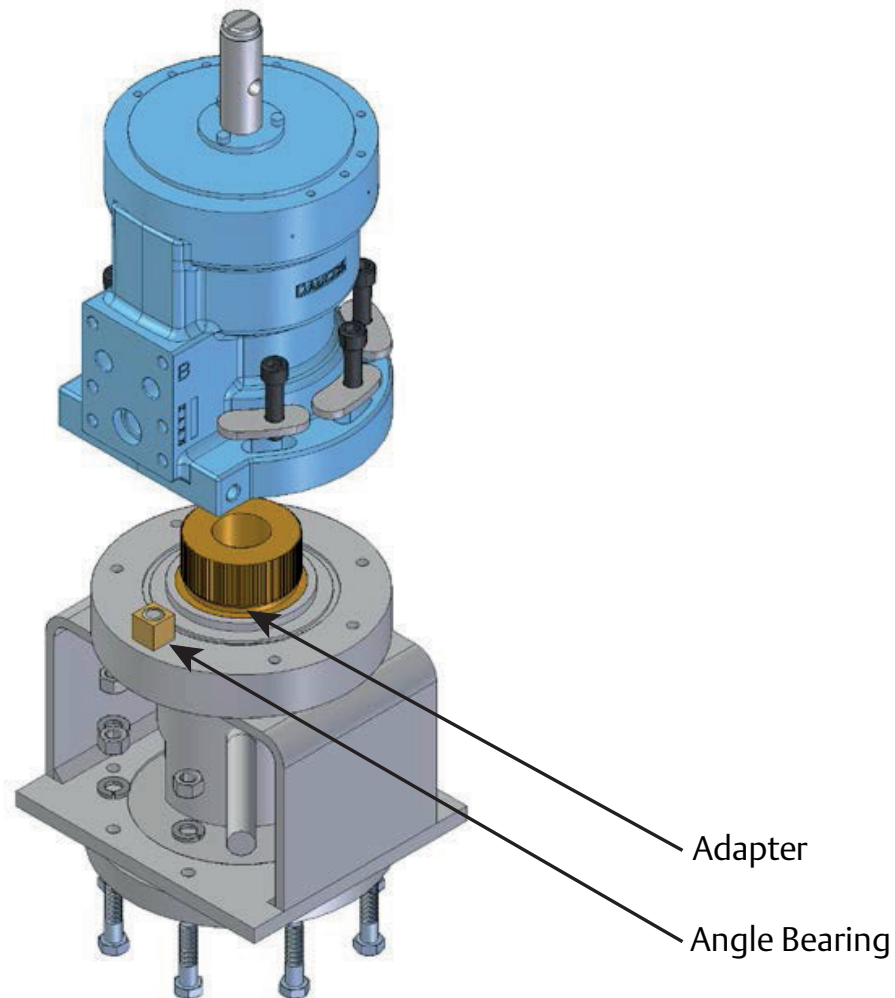
Handle may be removed for clearance. Replace and tighten after the bracket is seated. Actuator shown without controls for clarity. It will ship fully assembled.

Figure 11 Fastening the Bracket using Head Cap Screws



3. Fasten the bracket to the valve using the 3/8" diameter hex head cap screws, lock washers and hex nuts supplied. It may be necessary to loosen the socket head cap screws retaining the banana washers and turn the bracket using the adjusting screws to line up the bolt holes. If unable to achieve alignment, the adapter will have to be turned one tooth in the required direction, see Step 4.

Figure 12 Mounting the Actuator to the Adapter



4. Remove the 3/8" socket head cap screws and banana washers. Lift the actuator off the adapter, see illustration at the top. Now turn the bracket to line up the bolt holes and install the 3/8" hex head cap screws, lockwashers and nuts. Loosen the adjusting screws to allow them to pass angle bearing and lower the actuator back onto the adapter. Use care aligning the spline in the adapter with the one on the actuator. Replace the 3/8" socket head cap screws and banana washers and tighten. Tighten the hex head cap screws and nuts. Tighten the adjusting screws against the angle bearing.

**Table 1. Adjustment Available**

Size	Angle Adjustment +/- With Screws	With Adapter
SH - 4.5	7,5°	5°/tooth
SH - 9.0	7,5°	5°/tooth
SH - 18.0	7,5°	5°/tooth

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***ASIA PACIFIC***

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Saudi Arabia  
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24 Angus Crescent  
Longmeadow Business Estate East  
P.O. Box 6908 Greenstone  
1616 Modderfontein Extension 5  
South Africa  
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***EUROPE***

Berenyi u. 72- 100  
Videoton Industry Park  
Building #230  
Székesfehérvár 8000  
Hungary  
T +36 22 53 0950  
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