

Flowrite™ AP 599 Series 8-inch Pneumatic Valve Actuator

Product Description

The Flowrite AP 599 Series 8-inch Pneumatic Valve Actuator is designed for use with the Flowrite VF 599 Series Valves with a 3/4-inch (20 mm) stroke.

Product Numbers

599-01050

599-01051

Warning/Caution Notations

WARNING		Personal injury/loss of life may occur if a procedure is not performed as specified.
CAUTION		Equipment damage, or loss of data may occur if the user does not follow a procedure as specified.

Required Tools

24 mm open-end wrench

30 mm open-end wrench

3/8-inch, 3/4-inch, and 1-inch open-end wrenches

Expected Installation Time

55 minutes for field mounting of the actuator

90 minutes for removing the old and mounting a new actuator

Prerequisites



WARNING:

If mounting the actuator to a valve already in line, either close the shut-off valves in the piping (upstream first, then downstream) or switch off the pump to allow the differential and static pressure in the valve to drop.



CAUTION:

Do not damage or scratch the polished surface of the valve stem.

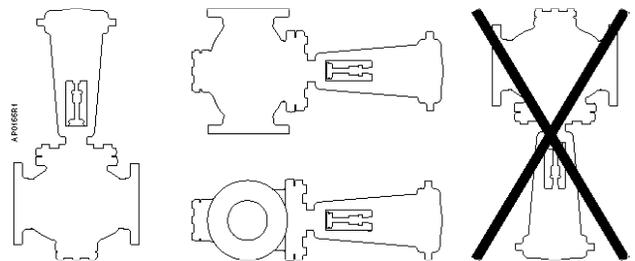


Figure 1. Acceptable Mounting Positions.

The vertical position is recommended for mounting. The acceptable mounting positions are shown in Figure 1.

Installation

Begin with the instructions of Figure 6 if you are not replacing an existing actuator.

Removing an existing actuator from a valve

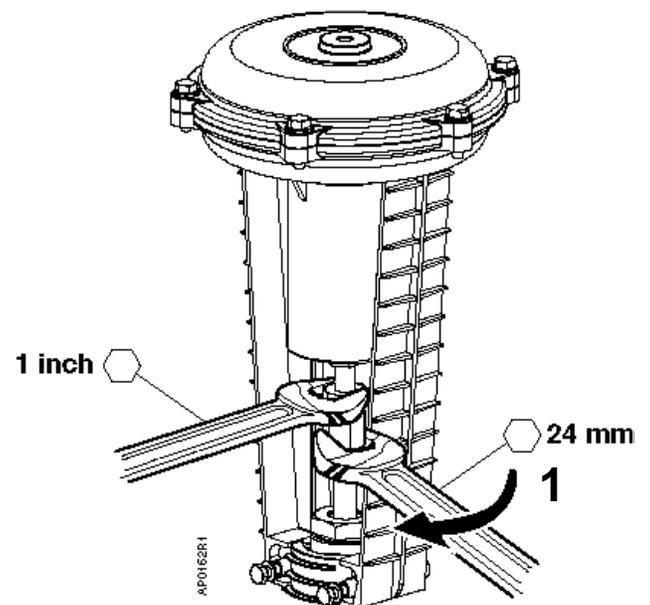


Figure 2.

Installation, Continued

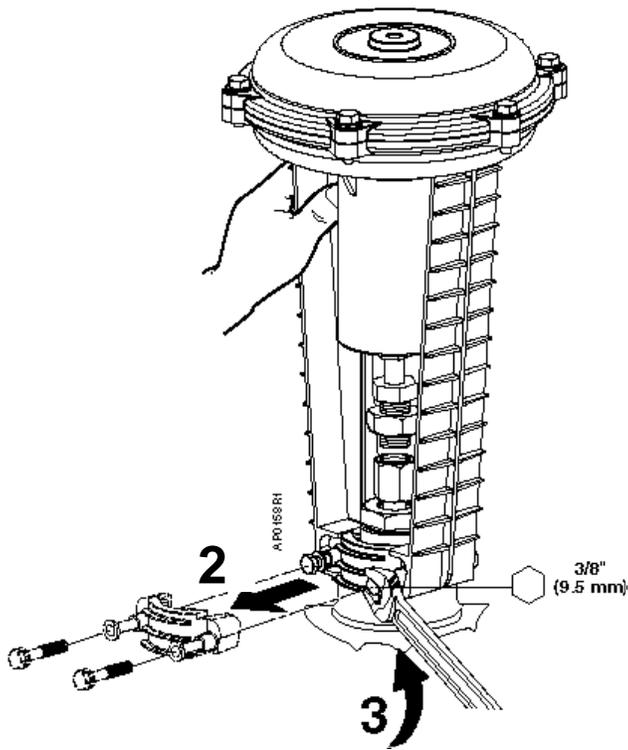


Figure 3.

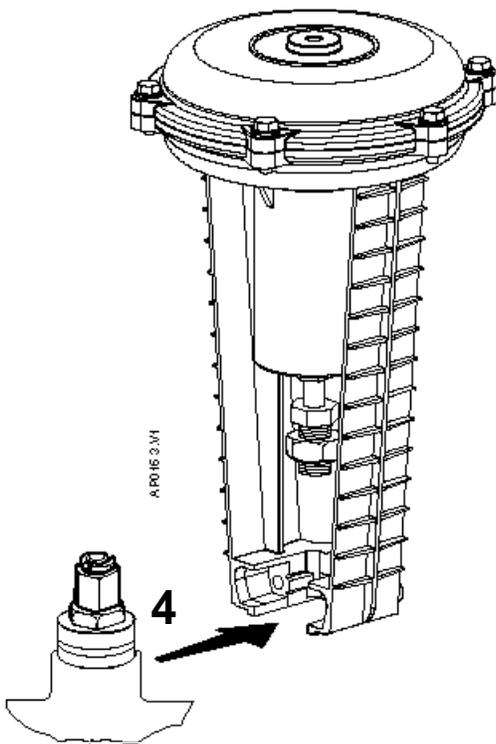


Figure 4.

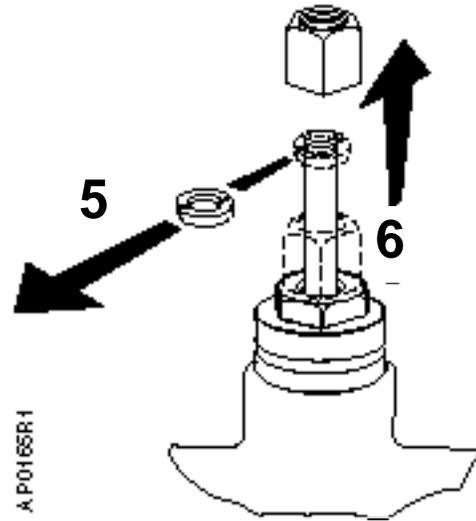


Figure 5.

Before mounting an actuator to a valve

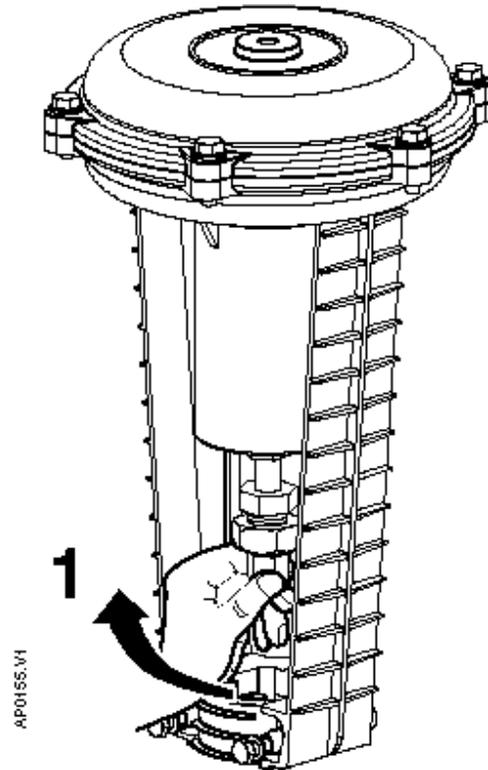


Figure 6.

Installation, Continued

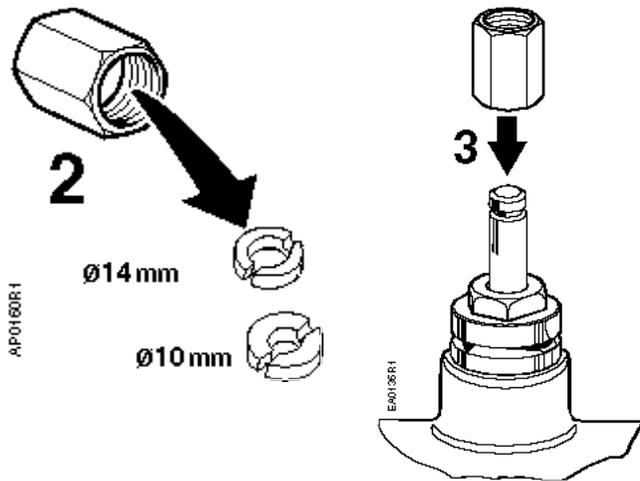
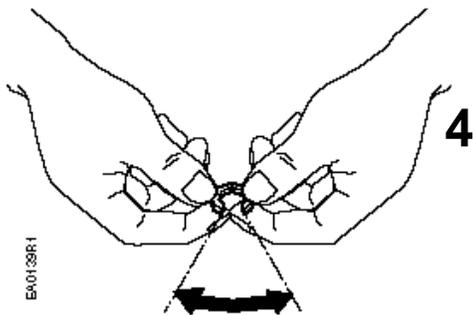


Figure 7.



NOTE: Be careful not to break the washer.

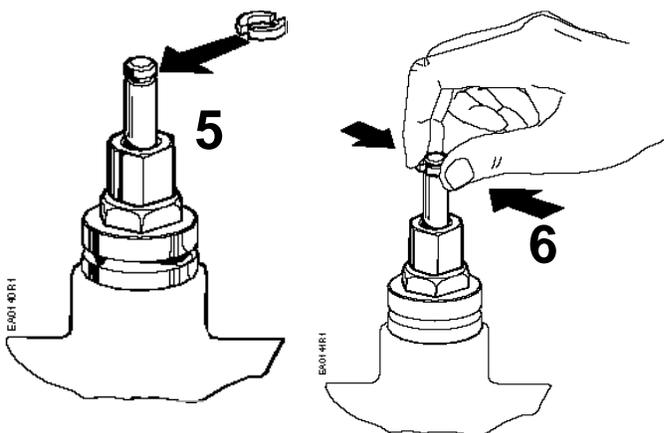


Figure 8.

Mounting an actuator to a valve

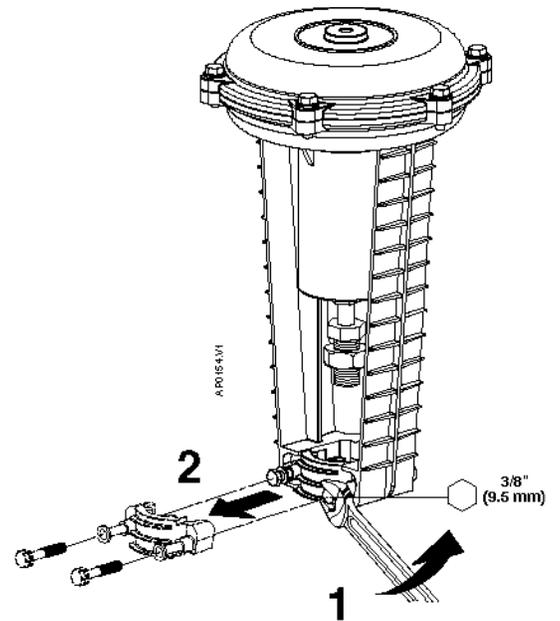


Figure 9.

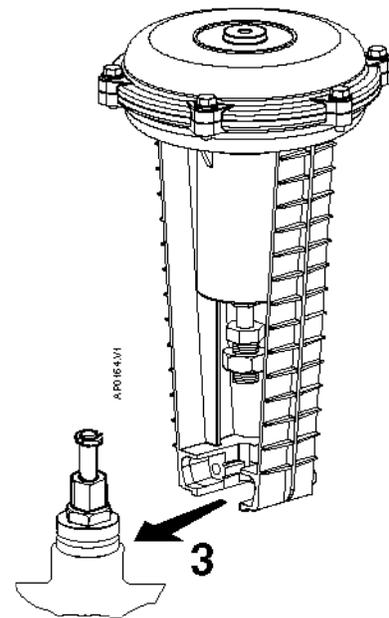


Figure 10.

Installation, Continued

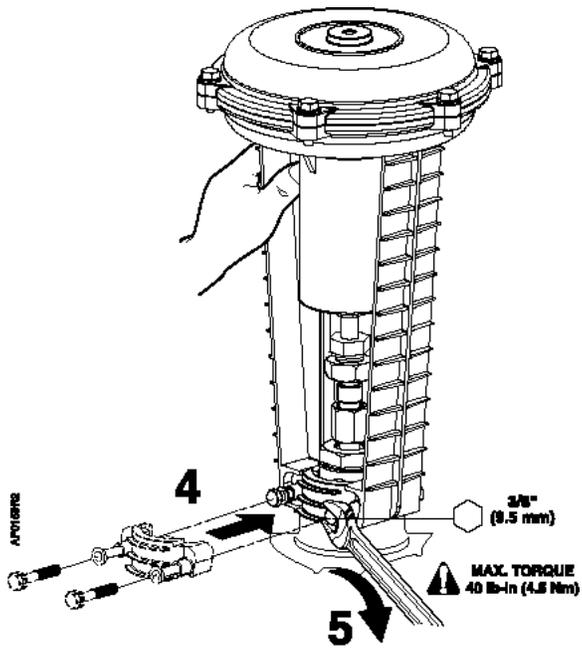


Figure 11.

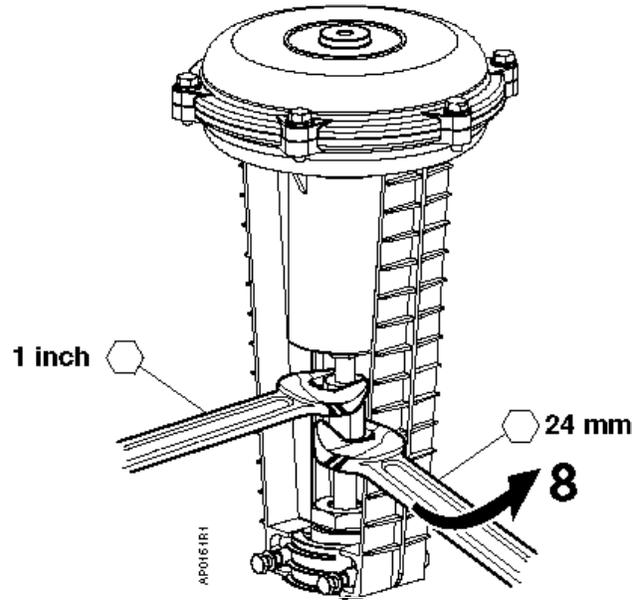


Figure 13.

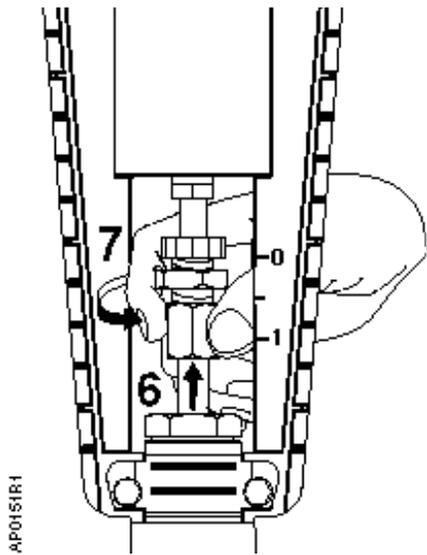


Figure 12.

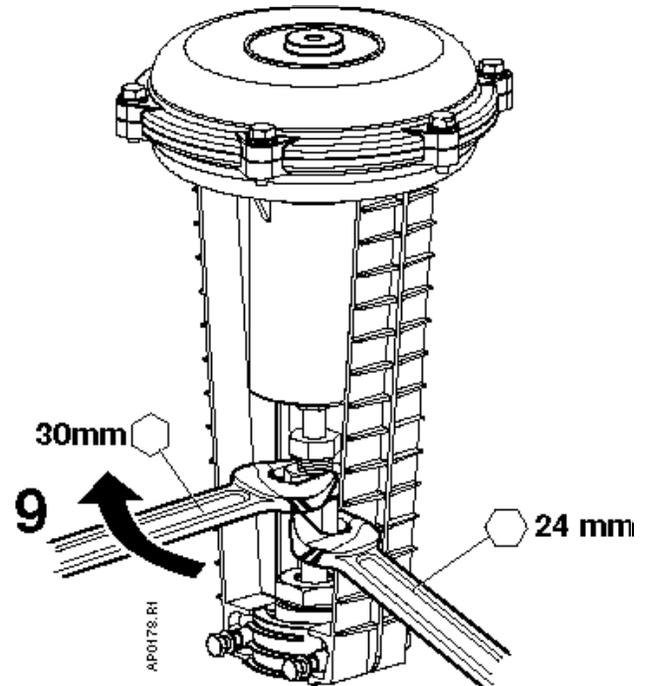


Figure 14.

Installation, Continued

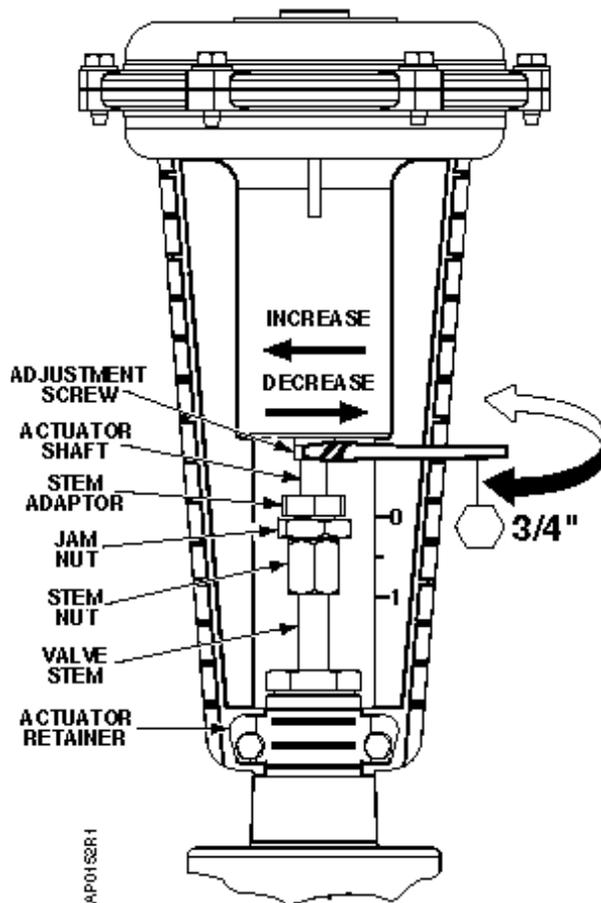


Figure 15. Spring Adjustment.

Spring Adjustment

The top edge of the stem nut indicates the valve stem position. The "0" marking on the actuator yoke indicates stem up position. The "1" mark indicates stem down position. See *Figure 15*.

With the actuator in an upright position and the stem visible as shown in *Figure 15*, use a 3/4-inch open-end wrench to turn the adjustment screw.

- **For Normally Open Valves:** To increase the start to close pressure, turn the adjustment screw from right to left. To decrease, turn the adjustment screw from left to right.
- **For Normally Closed Valves:** To increase the start to open pressure, turn the adjustment screw from right to left. To decrease, turn the adjustment screw from left to right.

NOTE: As the line pressure differential across the valve increases, the spring span will decrease.

The installation is now complete.

Reference

Technical Instructions

*Flowrite AP 599 Series 8-inch
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Document Number

155-161P25

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