SIEMENS



Installation Instructions Document No. 129-232 September 29, 2009

Diaphragm Replacement Kits for Powertop 658 and Flowrite[™] AP 599 Series 4-inch Pneumatic Valve Actuator

Product Description

This kit contains replacement diaphragms for a Flowrite AP 599 or Powertop 658 Series 4-inch pneumatic valve actuator.

Product Numbers

Valve Type	Kit Number	Number of Diaphragms
Flowrite	599-01093	1
Powertop	658-166	5

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 procedure as specified.	

Required Tools

- 1/4-inch socket or open end wrench
- 5 mm hex wrench
- Flat-blade screwdriver

Prerequisites

None

Expected Installation Time

30 minutes to replace the actuator diaphragm.

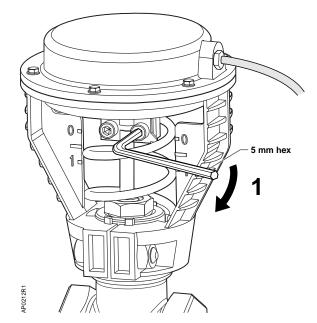
Installation



WARNING:

The spring is under high compression. Make sure the valve stem is held securely in the stem retainer before removing the actuator upper housing.

Flowrite AP599 valve





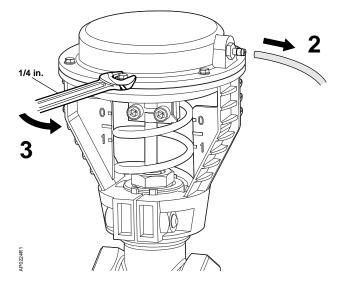


Figure 2. Remove and Cap the Air Line. Remove the Actuator Upper Housing.

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Installation, Continued

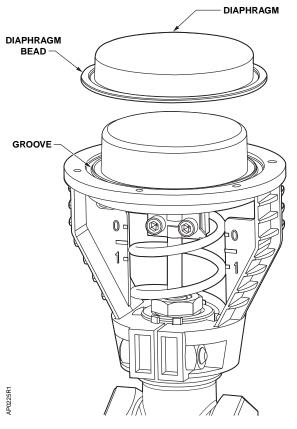


Figure 3. Remove and Replace the Diaphragm.

Make sure the new diaphragm bead fits in the groove of the actuator lower housing.

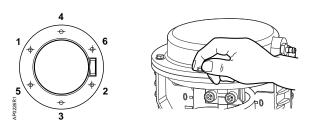


Figure 4. Assemble the Actuator Upper Housing to the Lower Housing.

Follow the pattern shown in *Figure 4* for tightening the screws.

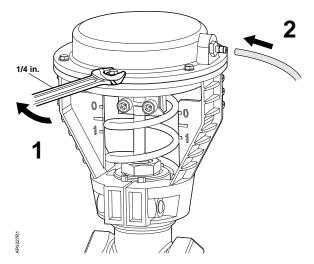


Figure 5. Tighten the Screws and Attach the Supply Air Tubing.

Installation, Continued

Powertop VP658 valve

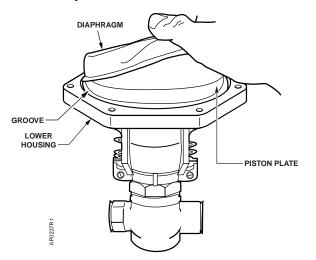


Figure 6. Replacing the Diaphragm on a Powertop Actuator.

1. Using flat-blade screwdriver, remove the six screws in the upper housing. Keep the screws and upper housing.

- 2. Remove and discard the old diaphragm.
- 3. Place the new diaphragm over the piston plate, and press the diaphragm bead into the groove of the lower housing.
- 4. Place the upper housing on the lower housing and fasten with the six screws.
- 5. Connect the air line.

The replacement is now complete.

References

Technical Instructions

- VP 658-4 Powertop Sequence and Sequence Changeover Valves 155-092P25
- VP 658-5 Powertop Two-Way Flared Valves Normally Open/Normally Closed 155-310P25
- AP 599-3 Flowrite[™] AP 599 Series 4-inch Pneumatic Valve Actuator 155-183P25

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