

Spring Kit Instructions For Use With V-3000 Actuators

This procedure describes the recommended method to install or replace the spring used with T-3000 and V-3000 pneumatic valve actuators. Use of all items included in this kit is strongly recommended to insure the best possible operation of the valve. Before beginning this procedure, read these instructions to make sure all required information and necessary materials are on hand.

Valve w/ Threaded Stem	Kit Contents Description
1	Spring
1	Spring Seat, Lower
1	Spring Seat, Upper
1	Stem Extension
1	Set Lock Screw

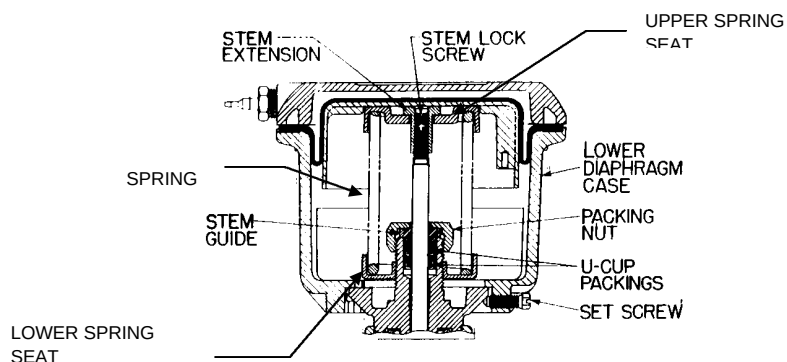


Figure 1: V-3000 Actuator

Tools Required

- ✓ - Standard Screwdriver
- ✓ - Pliers

Contact McCally Tool & Supply For The Following Tools

1 - Squeeze Bulb JC5228

Part No. 14-492-52

© 1995 Johnson Controls, Inc.

Disconnect Power From Actuator

Disconnect the air line attached to the actuator and cap it to prevent control system operation problems. Make sure that the pressure in the actuator has been relieved.

Removal Of Actuator

The V-3000 is easily removed by loosening the set screw and lifting the actuator off of the valve. **Caution:** *The spring under the actuator is attached to the valve and is pre-compressed. Unknown damage to the valve stem may create a hazardous condition.*

Removal Of Spring

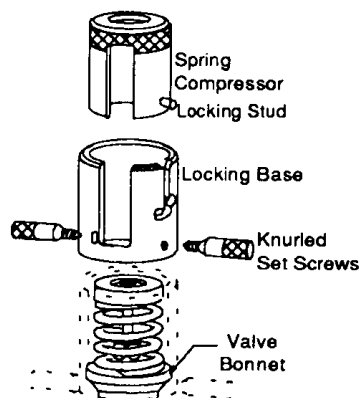


Figure 2: Spring Removal Tool Details

Note the position of the stem extension relative to the stem and the lower spring plate relative to the valve body for later use in reassembly. Place the locking base of tool JC5389 over the spring and attach it securely to the valve bonnet using the two knurled set screws (See Fig. 2). Insert the spring compressor portion of tool JC5389 over the spring and using hand pressure, engage the two parts of the tool together. Use a wrench to hold the stem extension while loosening the stem locking screw with a screwdriver.

Unscrew the stem extension.

Using hand pressure, carefully disengage the top half of tool JC5389 and allow the spring to expand to its relaxed position. Remove the upper spring plate, spring, lower spring plate, and the compression tool from the valve.

Re-installation of Actuator & Spring

Perform reinstallation of the actuator in the reverse order as described in the section titled **Removal of Actuator & Removal of Spring**.

Re-Commission Valve/Actuator

When spring and the particular actuator is reinstalled, check the following items;

1. Verify all threaded parts are tightened as described in this document.
2. Verify that when power or air is applied to the actuator, the valve stem moves to its full up or down position.