

V-9502-90 Positioner Kit for V-3000-8011 and -8012 Pneumatic Actuators Mounted to VG7000 Series Bronze Control Valves

Note: The positioner spring must be ordered separately. Refer to Table 1 for the appropriate code number.

Kit Includes

- one positioner with cover and mounting bracket
- one feedback connector
- one No. 8-32 x 1/4 in. flat-head mounting screw
- one elbow barbed fitting
- two spacers, 0.374 in. length
- two No. 10-24 x 5/8 in. mounting screws

Tools Required

- standard 1/4 in. blade screwdriver
- 7/16 in. open ended or adjustable wrench
- 3/16 in. Allen wrench

Table 1: Accessories

Description	Code Number
Pilot Positioner Springs:	
5/16 in. Stroke (8 mm Lift) - 3 psi Span	V-9502-6801
1/2 in. Stroke (13 mm Lift) - 5 psi Span	V-9502-6801
3/4 in. Stroke (19 mm Lift) - 10 psi Span	V-9502-6801
5/16 in. Stroke (8 mm Lift) - 8 psi Span	V-9502-6802
1/2 in. Stroke (13 mm Lift) - 12 psi Span	V-9502-6802
3/4 in. Stroke (19 mm Lift) - 4 psi Span	V-9502-6803

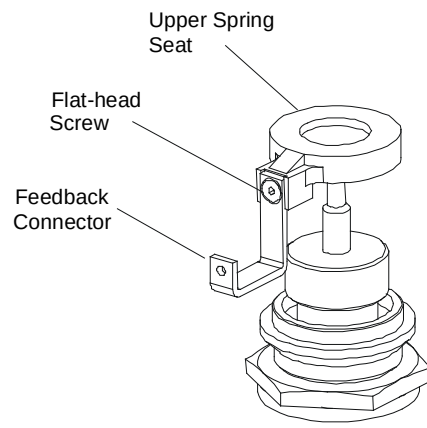


Figure 1: Upper Valve Detail

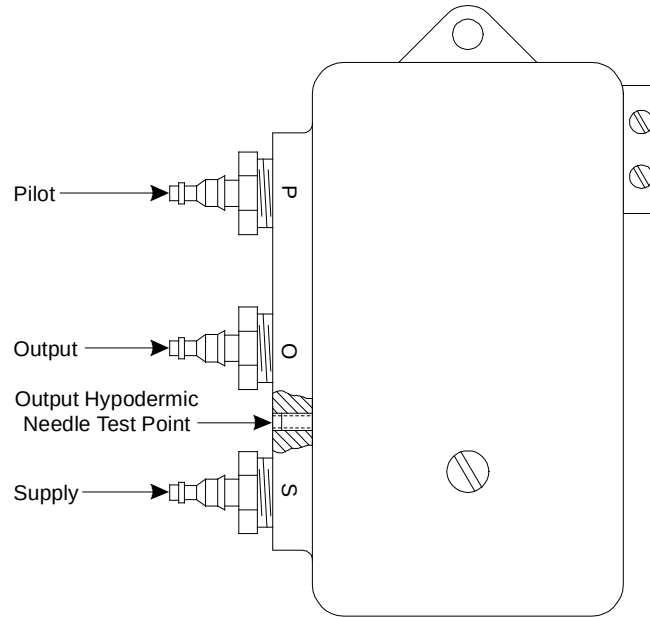


Figure 2: V-9502 Positioner Air Connections

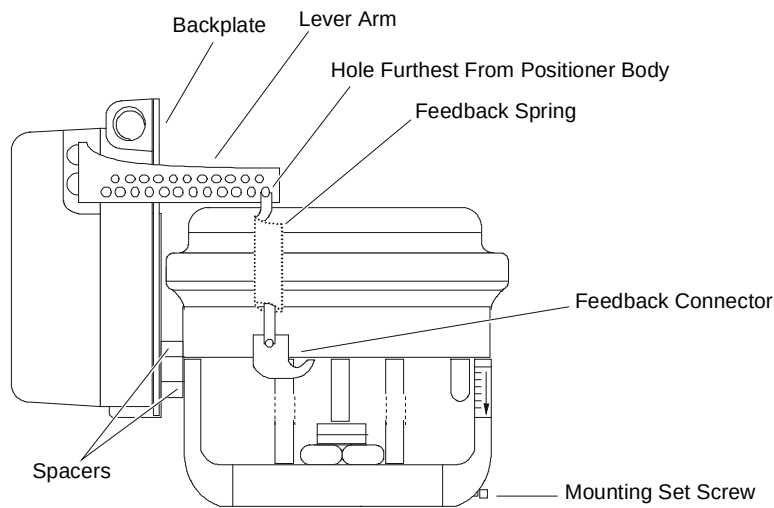


Figure 3: Actuator and Positioner Assembly

Actuator Removal

1. Disconnect the air line attached to the actuator and cap it to prevent control system operation problems.
2. Make sure that the pressure in the actuator has been relieved.
3. Using a 1/4 in. blade screwdriver, remove the V-3000-8011 or -8012 Actuator from the valve by loosening the mounting set screw. See Figure 3.



CAUTION:

Personal Injury Hazard. The spring under the actuator is attached to the valve stem and is pre-compressed. Unknown damage to the valve stem may create a hazardous condition resulting in personal injury.

Mounting Procedure

1. Referring to Figure 1, attach the feedback connector to the upper spring seat with flat-head screw, and using a 3/16 in. Allen wrench, tighten the screw to secure the assembly together.
2. Referring to Figure 2, remove the straight barbed fitting from the actuator and replace it with the elbow barbed fitting provided.
3. Using the two No. 10-24 x 5/8 in. mounting screws and the two 0.374 in. spacers provided, mount the positioner to the actuator using the two lower mounting slots of the positioner backplate (as illustrated in Figure 3). Do not tighten the screws at this time.
4. Place the actuator over the valve spring assembly and feedback connector. Using a 1/4 in. blade screwdriver, tighten the mounting set screw against the valve bonnet.

5. Rotate the feedback connector and align it with the hole on the lever arm that is furthest from the positioner body (as illustrated in Figure 3).
6. Referring to Figure 3, attach one end of the feedback spring to the first hole in the positioner lever arm, and attach the other end of the feedback spring to the feedback connector.
7. Slide the positioner up until the spring is just snug. Securely tighten the screws identified in Step 3 using a 1/4 in. blade screwdriver.
8. Referring to Figure 2, connect the 20 psig (138 kPa) supply to the Supply "S" port and the control signal to the Pilot "P" port.
9. Adjust the positioner starting point to suit the application. The operating span is determined by the type of spring used; refer to Table 1 for list of springs and associated spans. Refer to the *V-9502 Pneumatic Valve Actuator Positioner Product Bulletin (LIT-977265)* found in the *Valve and Actuator Manual (FAN 977)* for the starting point adjustment procedure.

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