JOHNSON CONTROLS®

24-4892-8, Rev. A

D-9502-8 & D-9502-12 Positioner Kit (For D-3153 & D-3073 Series Actuators)

Kit Includes

1. 1 Positioner w/Cover
2. 1 Positioner Mounting Plate
3. 1 Pull Bracket
4. 2 #8-32 Screws
5. 2 Self-Tapping Holding Screws
6. 1 Positioner Spring
7. 2 1/4x5/32 in. Straight Barbed Fittings
8. 2 1/4 in. Elbow Barbed Fittings
9. 1 Installation Instructions

Specifications

Maximum Pressure		25 PSIG (175 kPa)
Starting Point		Adjustable From 2 to 12 PSIG (14 to 84 kPa)
Operating Span		Adjustable From 3 to 13 PSI (21 to 91 kPa)
Output Capacity	1/4 or 5/32 in. Barbed Fitting	1000 SCIM (273 mL/s)
	1/4 in. Barbed Fitting	1600 SCIM (437 mL/s)
Air Connections		Barbed Fittings for 5/32 or 1/4 in. O.D. Polytubing
Air Consumption		5 SCIM (1.4 mL/s)
Ambient Operating Temperature Limits		-20 to 150°F (-29 to 66°C)
Repair Parts (Order Separately)		D-9502-600 Diaphragm D-9502-609 4-11/64 in. Spring

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

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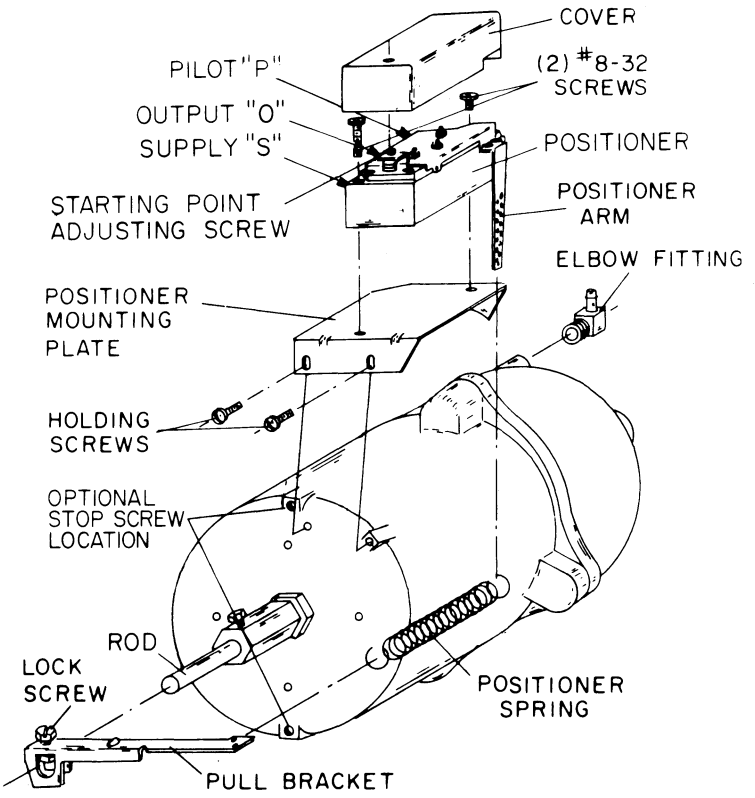

Fig. 1: Positioner Mounting on D-3153

Mounting Procedure (See Figs. 1 & 2)

1. Secure the positioner mounting plate to the actuator with the two self-tapping holding screws.

2. Remove the cover from the positioner.

3. Secure the positioner to the mounting plate with two #8-32 screws.

4. Remove the crankarm or linkage from the actuator rod and retain for reassembly.

5. Attach the pull bracket to the rod, making sure the pull bracket lines up with the positioner arm. Do not tighten the lock screw in place.

6. Attach one end of the spring to the pull bracket and the other end to the positioner arm. Slide the pull bracket away from the actuator until the spring is just taut.

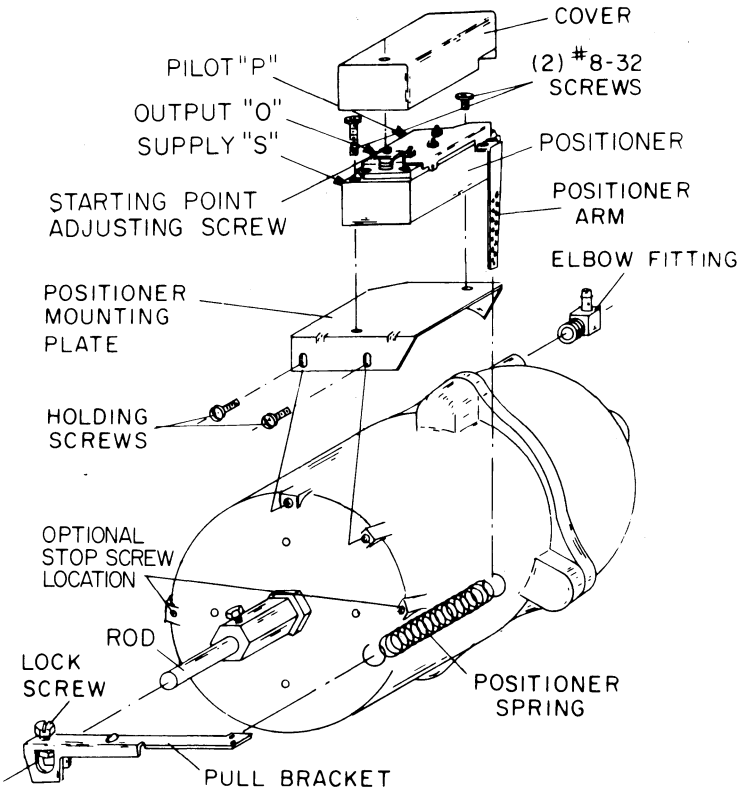

Fig. 2: Positioner Mounting on D-3073

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7. Tighten the lock screw in place.

8. Reattach the crackarm or linkage retained in step 4.

9. Remove the straight fitting from the actuator.

10. Install the fittings furnished with the positioner kit. The straight fittings go in the "P" and "S" ports and the elbow fittings go in the "O" port and the actuator body.

Adjustments

The holes in the positioner arm determine the operating span. The hole nearest the fixed end represents an operating span of 3 PSI (21 kPa) and the hole furthest from the fixed end represents an operating span of 13 PSI (91 kPa).

The starting point adjustment is the brass screw located on the positioner (under the cover). Note: The other three screws on the

positioner are factory settings and should not be adjusted. When adjusting the positioner starting point, keep in mind that the sum of the starting pressure and the span must not exceed the supply pressure. If the sum exceeds the supply pressure, the actuator will not move over its full stroke.

Operational Checkout

To check the operation of the positioner, proceed as follows:

1. Apply 20 PSIG (140 kPa) to the supply "S" port.
2. Apply variable air (0 to 20 PSIG) to the pilot "P" port.
3. Connect the output "O" port of the positioner to the actuator connection.
4. Vary the pressure to the pilot "P" port. The actuator should begin to stroke when the pilot pressure reaches the starting point. The actuator should be fully stroked when the pilot pressure reaches the high end of the operating span.

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