



INSTRUCTIONS FOR ADDING POSITIONERS TO DURASTROKE 1000 PNEUMATIC ACTUATORS

Installation

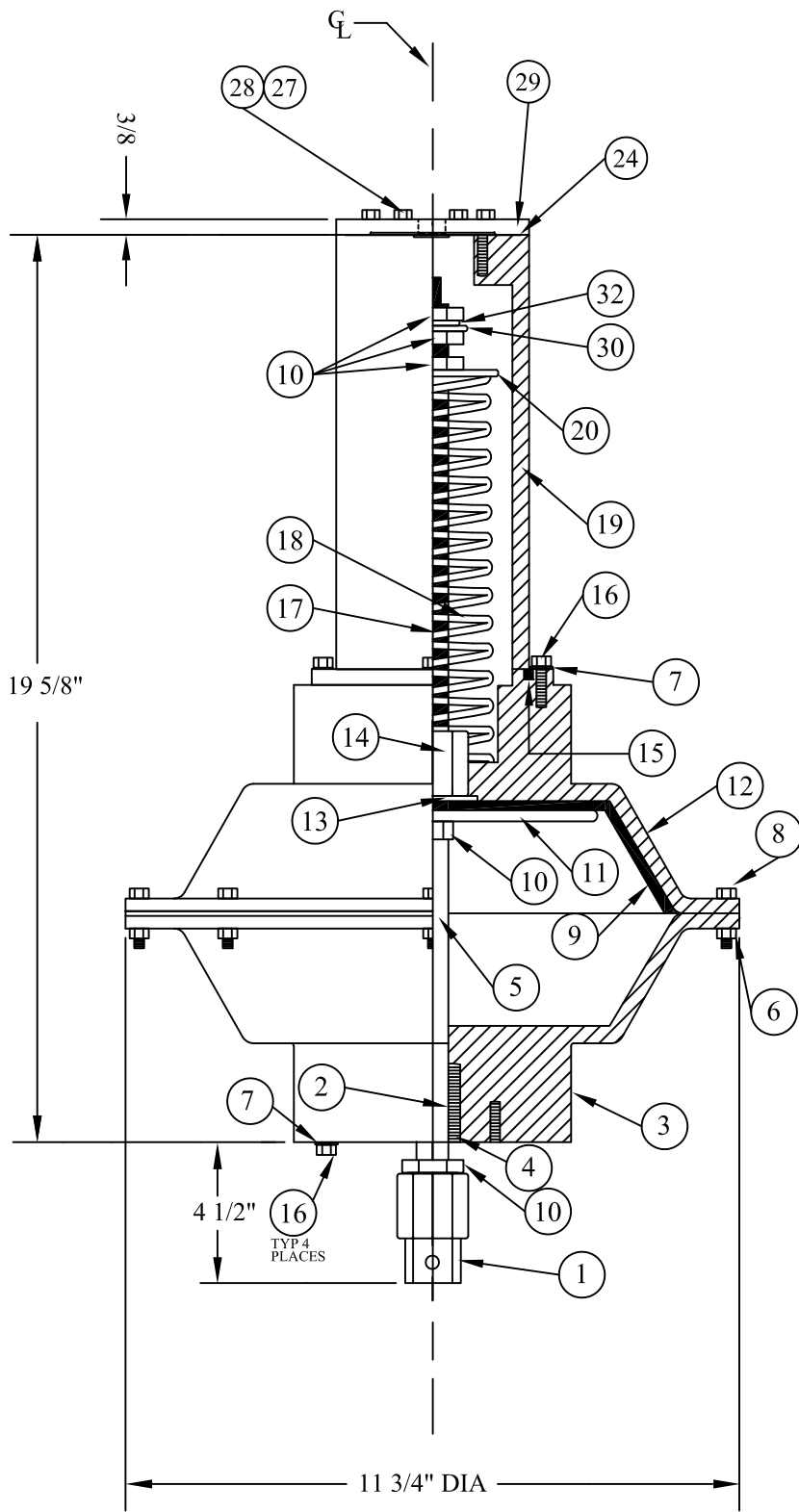
1. Observe all safety precautions – make the proper lock outs to ensure the safety of manpower and protection of equipment.
2. Remove the six cap screws and lock washers holding the existing cover plate (item # 29) and gasket in place. At your option, these parts can be retained or discarded. – none will be reused for this modification.
3. Remove the positioner and hardware kit from the shipping box. Note the hardware kit will contain a positioner washer, positioner gasket and six bolts. Lay the positioner spring (item # 22) atop the top stem locknut (item # 10) inside the actuator body and lay the positioner spring washer (item # 23) atop the spring.
4. Lay the positioner gasket in place and set the positioner on top of the actuator housing. Install the positioner using the 6 bolts supplied in the positioner hardware kit. Tighten the positioner retaining screws in a star pattern until all are firm / snug.

Calibration

1. This will require two sets of gauges and two airlines, one set of gauges must be adjustable from 3 – 15 psi. Connect at least 35 psi (anything up to 50 psi is fine) to the “Supply” port on the positioner. Connect the adjustable airline to the “Instrument” port and dial the air pressure down to 0.
2. Remove the black cap from the top of the positioner. You’ll see a brass fitting and a small chrome screw. Ignore the brass fitting. The chrome screw is used for calibration.
3. Back the chrome screw off by 6 full turns.
4. Apply 3 psi air pressure to the instrument port.
5. The actuator stem should have no reaction. If it moved at all then dial the air pressure back down to 0 and back the chrome screw off another 2 turns.
6. Once you’ve confirmed the stem doesn’t move when 3 psi is applied to the instrument port you’re ready to proceed.
7. With 3 psi applied to the instrument port and the stem remaining motionless, slowly start turning the chrome calibration screw clockwise (tightening) until the actuator stem just starts to move. Stop turning when you see movement.
8. Increase the air pressure to the instrument port to 15 psi. You should see the stem travel to full extension. If it does, you’re done. If it doesn’t, slowly continue to turn the chrome screw clockwise until you do get the full extension. At that point the calibration is complete.
9. Reinstall the black cap to the top of the positioner.

Testing

1. Leaving the supply air connected. Dial the instrument air down to 3 psi and watch to confirm the actuator stem pulls back in to full (or nearly full) retraction. Turn the dial back up to 15 psi and confirm the stem extends to full position.



ITEM	QTY.	DESCRIPTION
1	1	CLEVIS
2	1	GUIDE BUSHING
3	1	LOWER HOUSING
4	1	SNAP RING
5	1	STEM
6	8	NYLOCK HOUSING NUT
7	8	LOCKWASHER
8	8	3/8"-16 X 1.5" HOUSING SCREW
9	1	DIAPHRAGM
10	5	3/4"-16 JAMNUT
11	1	DIAPHRAGM PLATE
12	1	UPPER HOUSING
13	1	DIAPHRAGM WASHER
14	1	CONNECTOR NUT
15	1	O-RING
16	8	3/8"-16 X 1 1/4" SPRING COVER SCREW
17	1	SPRING ROD
18	1	MAIN SPRING
19	1	SPRING COVER
20	1	SPRING WASHER
21		
22		
23		
24	1	GASKET
25		
26		
27	6	LOCKWASHER
28	6	COVER PLATE SCREW
29	1	COVER PLATE
30	1	3/4" FLAT WASHER
31		
32	1	3/4" SAE FLAT WASHER

AIRTECH PRODUCTS, INC.

Dwg. Name:
DURASTROKE 1000-1049 ACTUATOR

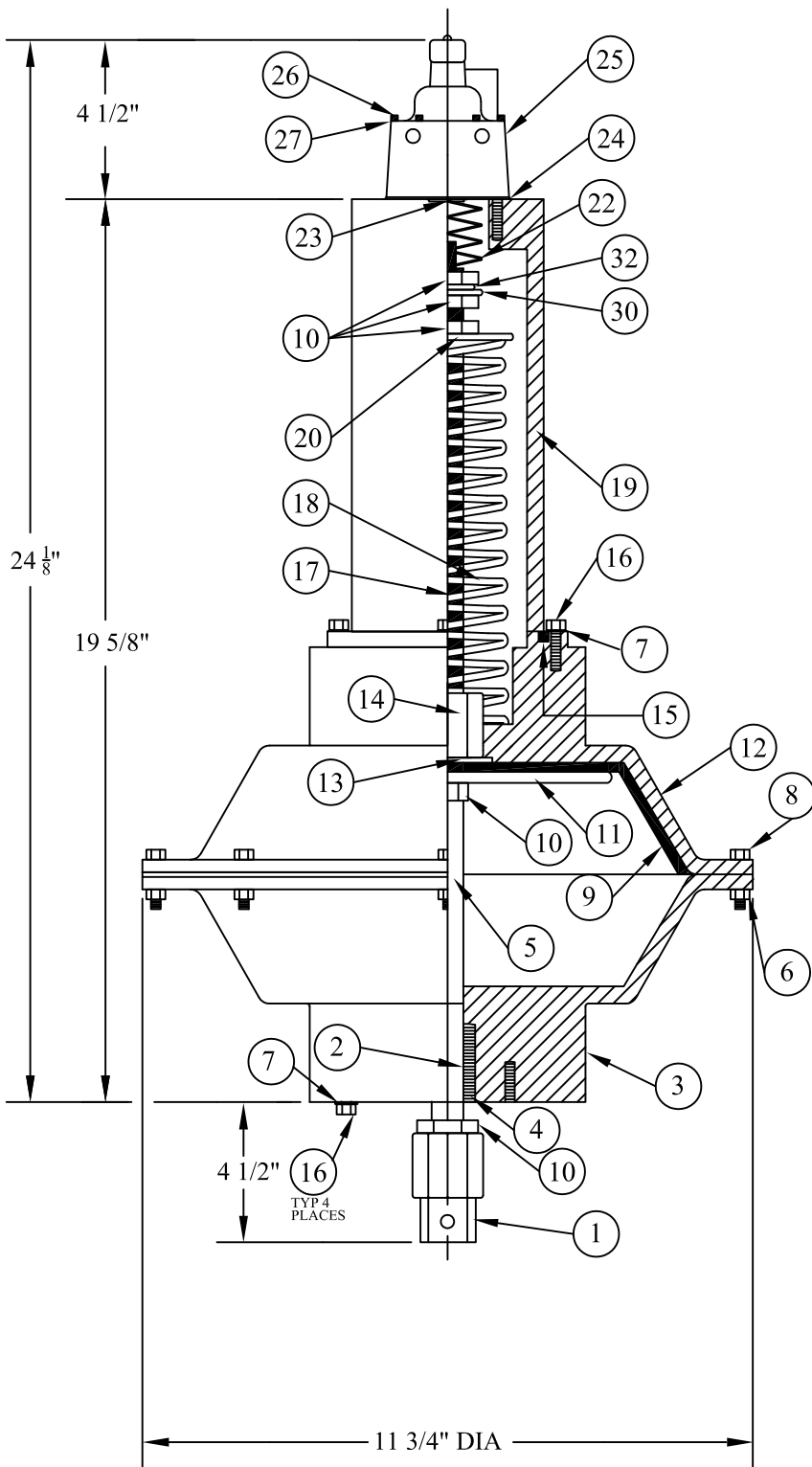
Date:
11-10-15

By:
Stewart

Customer:

File #:

AIR MOTOR



ITEM	QTY.	DESCRIPTION
1	1	CLEVIS
2	1	GUIDE BUSHING
3	1	LOWER HOUSING
4	1	SNAP RING
5	1	STEM
6	8	NYLOCK HOUSING NUT
7	8	LOCKWASHER
8	8	3/8"-16 X 1.5"
		HOUSING SCREW
9	1	DIAPHRAGM
10	5	3/4"-16 JAMNUT
11	1	DIAPHRAGM PLATE
12	1	UPPER HOUSING
13	1	DIAPHRAGM WASHER
14	1	CONNECTOR NUT
15	1	O-RING
16	8	3/8"-16 X 1 1/4"
		SPRING COVER SCREW
17	1	SPRING ROD
18	1	MAIN SPRING
19	1	SPRING COVER
20	1	SPRING WASHER
21		
22	1	POSITIONER SPRING
23	1	POSITIONER WASHER
24	1	GASKET
25	1	POSITIONER
26	6	1/4"-20 X 3"
		POSITIONER SCREW
27	6	1/4" S.S. LOCKWASHER
28		
29		
30	1	3/4" FLAT WASHER
31		
32	1	3/4" SAE FLAT WASHER

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DURASTROKE 1100-1149 ACTUATOR

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