

## MAINTENANCE INSTRUCTIONS

### For Chemline 710 Series Diaphragm Valve Sizes 3/8" & 1/2"

#### *Maintenance (all sizes)*

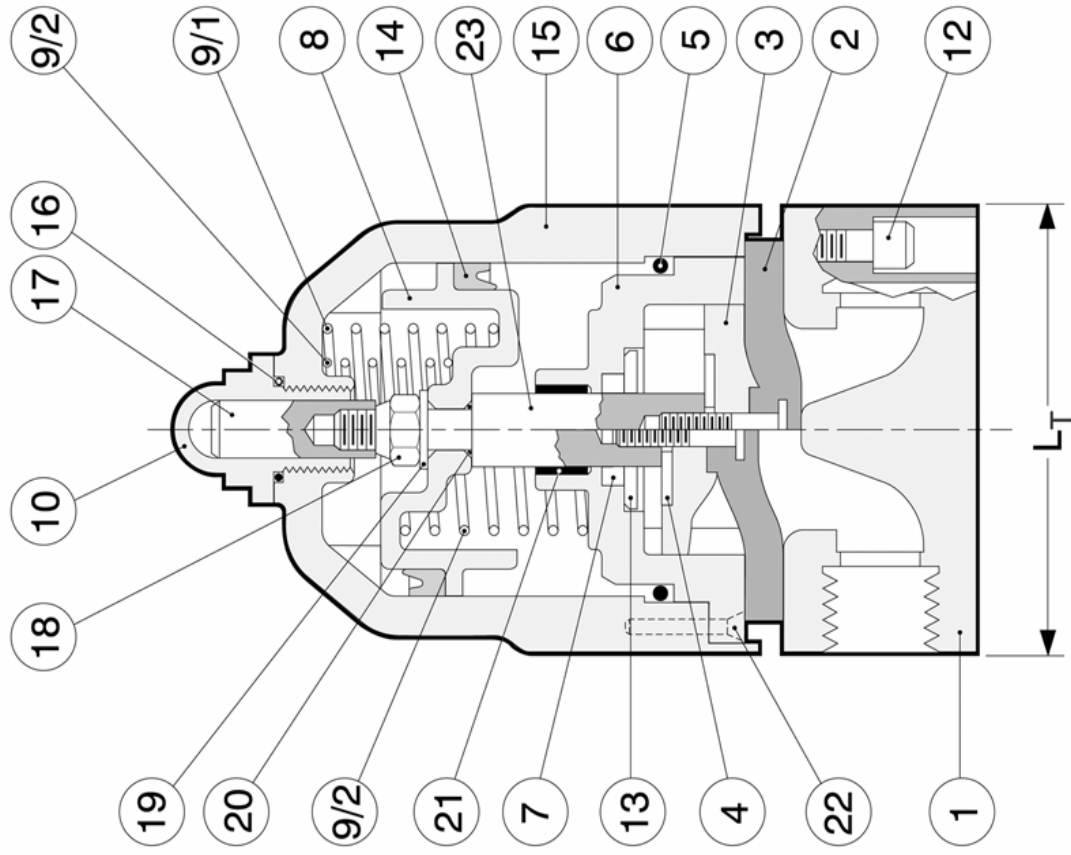
Refer to ASSEMBLY DRAWING APR-236A And proceed as follows:

1. Loosen and remove body bolts (12).
2. Remove body (1), diaphragm (3) and compressor (3).
3. Remove thrust ring (4), circle clip (13) and quad ring (7).
4. Loosen and remove bolt inserts (22). The complete internals will come out of the housing (15).
5. Remove the locknut (18) and washer (19) from the spindle (23). Remove the piston (8) and springs (9/1, 9/2).
6. Remove the guide (6) from the spindle (23).
7. Remove the thrust ring (4), circle clip (13) and quad ring (7) from the spindle (23).
8. Inspect diaphragm (2) and all parts for wear or abrasion.
9. Replace parts as necessary.
10. Before re-assembling valve lubricate spindle (23), Dow Corning Silicone III or equivalent recommended.
11. To re-assemble valve follow steps 1 through 8 in reverse order, tightening to the bolt torques recommended in the chart below.

**IMPORTANT** When re-assembling valve ensure that holes in lower part (6) of valve, piston (8) and housing (15) are in line. When tightening diaphragm, if it stops turning before its tab lines up with that on the actuator, unscrew diaphragm totally until it backs off one screw thread, then retighten. The tab should now line up with that on the actuator. Also if attaching to actuator ensure all screw holes line up. Above application is for normally closed actuator. Piston (8) can be reversed for normally open application by placing springs (9/1,9/2) must then be between piston (8) and guide (6).

**Maintenance Instructions 710 diaphragm Valve cont.*****Maintenance (all sizes)***

VALVE SIZE	DIAPHRAGM MATERIAL BOLT TORQUE (IN-LB)		
	EPDM	Viton	Teflon
3/8	13	13	18
1/2	13	13	18



**PARTS**

No.	Part	Pcs.	Materials
1	Valve Body	1	PVC, CPVC, PP, PVDF
2	Process Diaphragm	1	EPDM, Viton, Teflon
3	Compressor	1	PBTPT
4	Thrust Ring	1	Cad. Plated Steel
5	O-Ring	1	Nitrile
6	Guide	1	Ixef*
7	Quad Ring	1	Nitrile
8	Piston	1	Ixef*
9x	Spring	1	Epoxy Coated Spring Steel
10	Indicator Cover	1	Polycarbonate
12	Socket Head Bolt	4	304 SS
13	Circle Clip	1	Brass
14	Lip Ring	1	Nitrile
15	Actuator Housing	1	Ixef*
16	O-Ring	1	Nitrile
17	Position Indicator	1	Polypropylene
18	Lock Nut	1	Cad. Plated Steel
19	Washer	1	Cad. Plated Steel
20	O-Ring	1	Nitrile
21	Shaft Bearing	1	Teflon/Aluminum
22	Bolt Inserts	2	Steel
23	Spindle	1	Stainless Steel

\* Ixef = Polyamide  
 † PBTB = Polybutylene Terephthalate

TITLE <b>Approval Drawing - Type 710</b> <b>Diaphragm Valve</b>		SCALE	NTS	DATE	CHEMLINE
		DR. BY	PJ	03/04	PLASTICS
REFERENCE		CHKD. BY			DWG. NO
		APP. BY			<b>APR-236A</b>
					REV.