

MAINTENANCE INSTRUCTIONS
For Chemline 730 Series (formerly 700 Series) Normally Open
and Double Acting Diaphragm Valves Sizes 1/2" - 4"

Maintenance (all sizes)

Refer to **ASSEMBLY DRAWING NODV REV 0**. And proceed as follows:

1. Remove plug (20) and threaded plug (1).
2. Lift off o-ring (2) and cover (3).
3. Undo lock nut (15) and washer (14).
4. Lift off spring support plate (13) and washer (12).
5. Remove o-ring (10) and spacing ring (11), if present (not on all models).
6. Remove control diaphragm (9) and washer (8).
7. Diaphragm support (7) lifts off from the spindle (6).
8. Remove spring washer (16) and guard ring (17) from bottom of spindle (6).
9. Remove plug (29), int hex screw (22) and washer (21) from lower part (18) of valve.
10. Remove protective cap (28), hex screw (27) and washer (26).
11. Spindle bearing (19), compressor (23) and diaphragm (24) will separate from valve body (25).
12. Inspect diaphragm and all parts for wear and abrasion.

Maintenance Instructions N/O 730 Series Diaphragm Valve cont.

13. Replace parts as necessary.
14. Before re-assembling valve lubricate spindle (6), Dow Corning III silicone or equivalent recommended.
15. To re-assemble valve follow steps 1 through 11 in reverse order, tightening to the bolt torques recommended in the chart below.

IMPORTANT

When re-assembling valve ensure that holes in lower part (18) of valve, diaphragm (24) and cover (3) 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.

| VALVE SIZE | DIAPHRAGM MATERIAL BOLT TORQUE (IN-LB) | | |
|---------------|---|-------|--------|
| | EPDM | Viton | Teflon |
| ½ | 44 | 44 | 44 |
| ¾ | 44 | 44 | 44 |
| 1 | 44 | 44 | 44 |
| 1-1/4" | 80 | 80 | 106 |
| 1-1/2" | 80 | 80 | 106 |
| 2 | 124 | 124 | 159 |
| 2-1/2" | 354 | 354 | 443 |
| 3" | 354 | 354 | 443 |
| 4" | 266 | 266 | 354 |

CHEMLINE PLASTICS

CHEMLINE

DWG. NO. NODV

REV. 0

DATE

SCALE

DR. BY

CHKD. BY

APP. BY

TITLE

CHEMLINE 700 SERIES NORMALLY OPEN

REFERENCE

DIAPHRAGM VALVE SIZES 1/2" - 4"

| PT# | DESCRIPTION | MATERIAL |
|-----|-----------------|--------------------|
| 1 | THREADED PLUG | AL |
| 2 | O-RING | PERBUNAN (NBR) |
| 3 | COVER | PP GLASS |
| 6 | SPINDEL | STEEL 1.4104 |
| 7 | DIAPH. SUPPORT | PLATE |
| 8 | WASHER | STEEL (Cad Plated) |
| 9 | CONTROL DIAPH. | PERBUNAN (NBR) |
| 10 | O-RING | NEOPRENE (CR) |
| 11 | SPACING RING | PERBUNAN (NBR) |
| 12 | WASHER | STEEL (Cad Plated) |
| 13 | SPRING SUPPORT | PERBUNAN (NBR) |
| 14 | WASHER | STEEL (Cad Plated) |
| 15 | LOCK-NUT | MS |
| 16 | SPRING WASHER | M8.8 (Cad Plated) |
| 17 | QUAD RING | PE |
| 18 | LOWER PART | PP/GLASS |
| 19 | SPINDEL BEARING | PPTB |
| 20 | PLUG | VARIABLE |
| 21 | WASHER | STEEL (Cad Plated) |
| 22 | INT. HEX SCREW | STEEL (Cad Plated) |
| 23 | COMPRESSOR | M8.8 (Cad Plated) |
| 24 | DIAPHRAGM | VARIABLE |
| 25 | VALVE BODY | VARIABLE |
| 26 | WASHER | STEEL (Cad Plated) |
| 27 | HEX SCREW | M8.8 (Cad Plated) |
| 28 | PROTECTIVE CAP | PE |

MAINTENANCE INSTRUCTIONS
For Chemline 730 (formerly 700) Series Normally Closed Diaphragm Valve
Sizes 1/2" to 4"

Maintenance (all sizes)

Refer to **ASSEMBLY DRAWING NCDV REV 0.** And proceed as follows:

1. Remove plug (1) and cover (2).
2. Release springs (3), (4) and (5).
3. Undo lock nut (15) and washer (14).
4. Lift off spring support plate (13) and washer (12).
5. Remove o-ring (10) and spacing ring (11), if present (not on all models).
6. Remove control diaphragm (9) and washer (8).
7. Diaphragm support plate (7) lifts off from the spindle (6).
8. Remove spring washer (16) and quad ring (17) from bottom of spindle (6).
9. Remove plug (20), int. hex screw (22) and washer (21) from lower part (18) of valve.
10. Remove protective cap (28) hex screw (27) and washer (26).
11. Spindle bearing (19), compressor (23) and diaphragm (24) will separate from valve body (25).
12. Inspect diaphragm (24) and all parts for wear or abrasion.

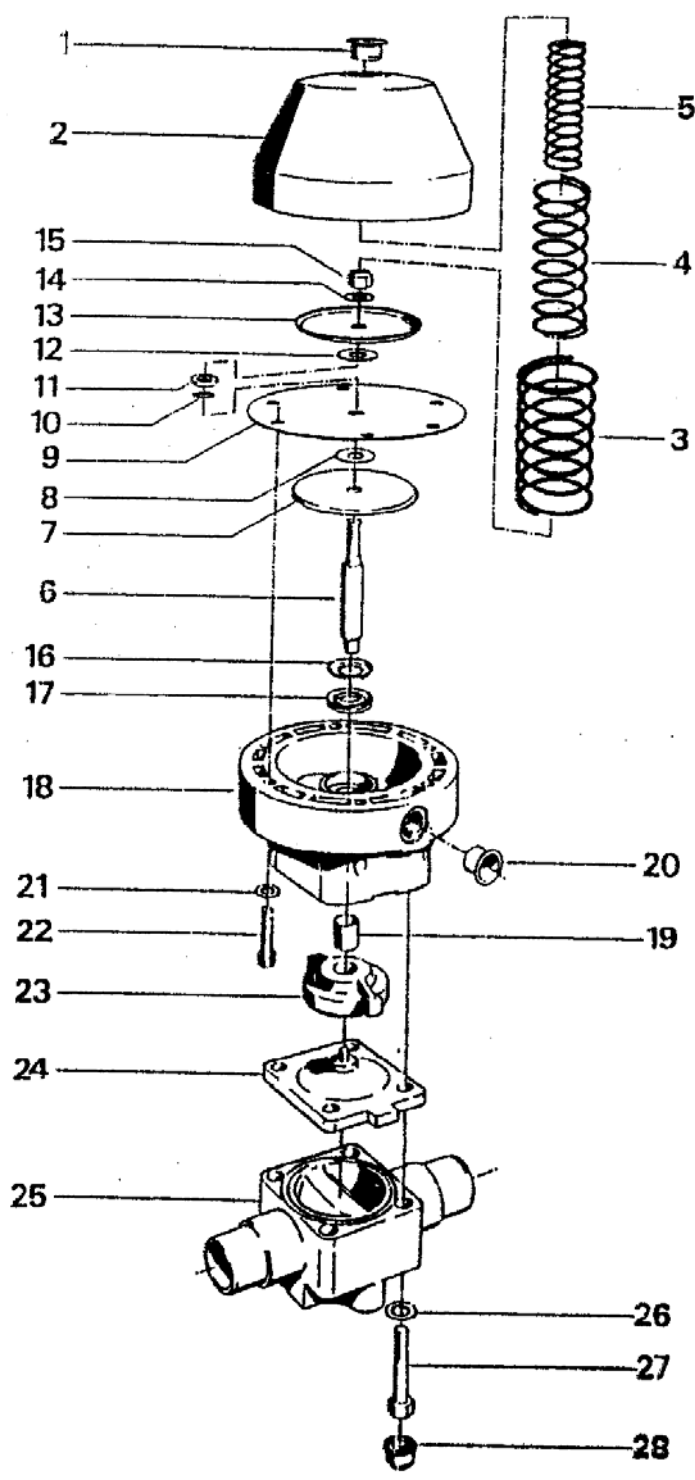
Maintenance Instructions N/C 730 Series Diaphragm Valve cont.

13. Replace parts as necessary.
14. Before re-assembling valve lubricate spindle (6), Dow Corning Silicone III or equivalent recommended.
15. To re-assemble valve follow steps 1 through 11 in reverse order, tightening to the bolt torques recommended in the chart below.

IMPORTANT

When re-assembling valve ensure that holes in lower part (18) of valve, diaphragm (24) and cover (3) 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.

| VALVE SIZE | DIAPHRAGM MATERIAL BOLT TORQUE (IN-LB) | | |
|---------------|---|-------|--------|
| | EPDM | Viton | Teflon |
| ½ | 44 | 44 | 44 |
| ¾ | 44 | 44 | 44 |
| 1 | 44 | 44 | 44 |
| 1-1/4" | 80 | 80 | 106 |
| 1-1/2" | 80 | 80 | 106 |
| 2 | 124 | 124 | 159 |
| 2-1/2" | 354 | 354 | 443 |
| 3" | 354 | 354 | 443 |
| 4" | 266 | 266 | 354 |



| PART # | DESCRIPTION | MATERIAL |
|--------|-----------------|------------|
| 1 | PLUG | PP/GLASS |
| 2 | COVER | SP. STEEL |
| 3 | SPRING (outer) | SP. STEEL |
| 4 | SPRING (middle) | SP. STEEL |
| 5 | SPRING (inner) | SP. STEEL |
| 6 | SPINDEL | STEEL |
| 7 | DIAPH. SUPPORT | CAD PLATED |
| | PLATE | STEEL |
| 8 | WASHER | PERBUNAN |
| 9 | CONTROL DIAPH | NEOPRENE |
| 10 | O-RING | PERBUNAN |
| 11 | SPACING RING | STEEL |
| | | CAD PLATED |
| 12 | WASHER | PERBUNAN |
| 13 | SPRING SUPPORT | STEEL |
| | PLATE | CAD PLATED |
| 14 | WASHER | STEEL |
| | | CAD PLATED |

| PART # | DESCRIPTION | MATERIAL |
|--------|---------------|--------------|
| 14 | WASHER | STEEL |
| | | CAD PLATED |
| 15 | LOCK NUT | M.8.8. CAD |
| | | PLATED |
| 16 | SPRING WASH. | MS |
| 17 | QUAD RING | PERBUNAN |
| 18 | LOWER PART | PP/GLASS |
| 19 | SPINDEL BEAR. | METAL/TEFLON |
| 20 | PLUG | PE |
| 21 | WASHER | STEEL |
| | | CAD PLATED |
| 22 | INT. HEX | M.8.8. CAD |
| | SCREW | PLATED |
| 23 | COMPRESSOR | PBTP |
| 24 | DIAPHRAGM | VARIABLE |
| 25 | VALVE BODY | VARIABLE |
| 26 | WASHER | STEEL |
| | | CAD PLATED |
| 27 | HEX SCREW | M.8.8. |
| | | CAD PLATED |
| 28 | PROTECTIVE | PE |
| | CAP | |

CHEMLINE PLASTICS CHEMLINE

REV. 0

DWG. NO. NCDV

| SCALE | DATE | DR. BY | CHKD. BY | APP. BY |
|-------|------|--------|----------|---------|
| | | | | |

TITLE CHEMLINE 700 SERIES NOMALLY CLOSED
REFERENCE DIAPHRAGM VALVE SIZES 1/2"-4"