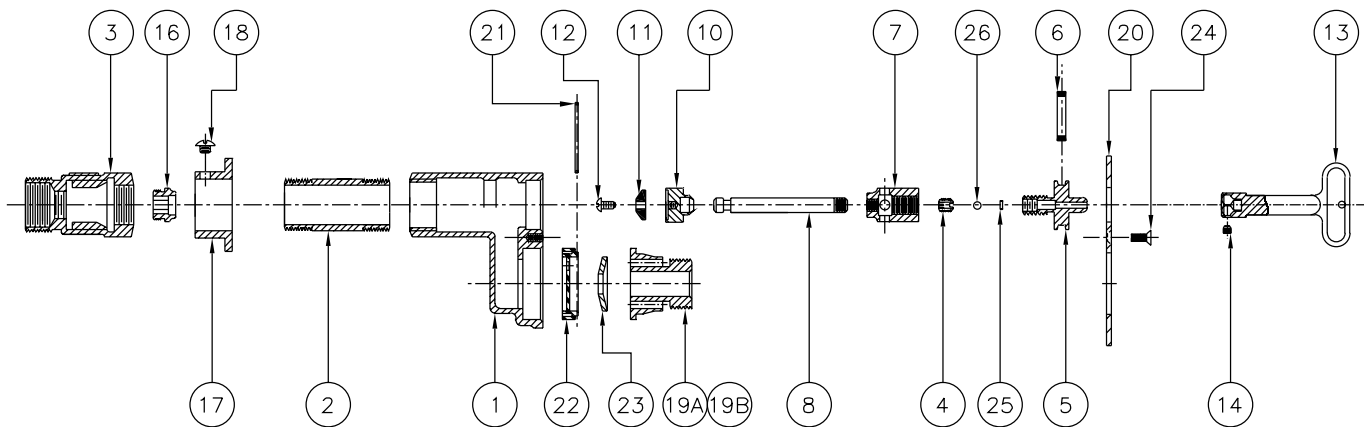


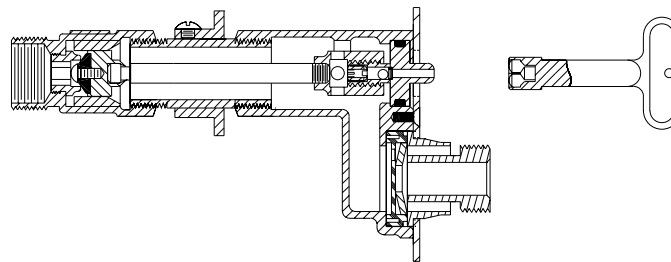
Z1310 ECOLOTROL WALL HYDRANT Parts Assembly, Parts List, and Operating Rod Assemblies

Z1310 Parts Assembly



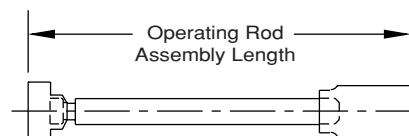
Z1310 Parts List

| Item | Description | Qty. | Part No. |
|------|-----------------------------|------|-----------|
| 1 | Head | 1 | 56061-003 |
| 2 | Casing | 1 | 50270-XXX |
| 3 | Valve Housing | 1 | 31258-001 |
| *4 | Setscrew | 1 | 51459-001 |
| *5 | Operating Screw | 1 | 25049-002 |
| *6 | O-Ring | 1 | 23750-028 |
| *7 | Operating Coupling | 1 | 25147-001 |
| 8 | Operating Rod | 1 | 45042-XXX |
| 10 | Washer Guide | 1 | 25050-001 |
| *11 | Washer | 1 | 23075-001 |
| *12 | Screw #10-24 NC | 1 | 14853-042 |
| *13 | Key | 1 | 59546-001 |
| 14 | Key Setscrew (Optional) | 1 | 18006-027 |
| *16 | Removable Seat | 1 | 25262-001 |
| 17 | Wall Clamp (Optional) | 1 | 50268-001 |
| 18 | Wall Clamp Screw (Optional) | 1 | 26050-004 |
| 19A | 3/4" Nozzle | 1 | 50799-005 |
| 19B | 1" Nozzle | 1 | 50799-006 |
| 20 | Faceplate | 1 | 56115-005 |
| *21 | Disc O-Ring | 1 | 23750-204 |
| 22 | Disc | 1 | 50819-001 |
| *23 | Equa-Balance® Seal | 1 | 50785-001 |
| 24 | Faceplate Screw | 5 | 22698-047 |
| *25 | Ball O-Ring | 1 | 23750-232 |
| *26 | Ball | 1 | 51458-001 |



Operating Rod Assemblies

| | |
|----------|---------|
| 4" Wall | 4-3/4" |
| 6" Wall | 6-3/4" |
| 8" Wall | 8-3/4" |
| 10" Wall | 10-3/4" |
| 12" Wall | 12-3/4" |
| 14" Wall | 14-3/4" |
| 16" Wall | 16-3/4" |
| 18" Wall | 18-3/4" |
| 20" Wall | 20-3/4" |
| 22" Wall | 22-3/4" |
| 24" Wall | 24-3/4" |



*Items are available in -RK Repair Kit Option bag (#66955-201-9).

Z1310 ECOLOTROL WALL HYDRANT Troubleshooting Guide

Z1310 Troubleshooting Guide

| PROBLEM | CAUSE | SOLUTION |
|---|--|---|
| Hydrant will not operate when turned on. | Water supply is shut off. | Turn on water supply. |
| Cannot turn the hydrant on with key. | Hydrant hasn't been used for a long time – O-Ring has adhered to the operating screw and head. | Follow steps 1-2, 5, and 9-10 of the Service Guide. |
| Water running continuously from orifice in operating screw. (Note: When first turning hydrant on, water may spit for a few seconds until ball seats on O-Ring.) | Debris between ball and O-Ring (in operating screw). | Follow steps 1-2, 6, and 9-10 of the Service Guide. |
| | Ball O-Ring not seated properly (in operating screw). | Follow steps 1-2, 6, and 9-10 of the Service Guide. |
| Water sprays from holes around nozzle when hydrant is on. | Equa-Balance® seal is damaged. | Follow steps 1-3 and 9-10 of the Service Guide. |
| Hydrant will not self-drain when it is shut off (hose and nozzle are attached). | Screw nozzle is closed. | Open screw nozzle so hose will drain some, relieving pressure. |
| | Gun nozzle is closed. | Squeeze gun nozzle trigger so hose will drain some, relieving pressure. |
| Water does not shut off completely when hydrant is turned off. | Debris between seat and washer. | Follow steps 1-2, 4, and 8-10 of the Service Guide. Clean by turning water supply on and flush hydrant. |
| | Washer is worn out. | Follow steps 1-2, 4, and 7-10 of the Service Guide. |
| | Wire draw in seat. | Replace seat. |
| Hydrant exhibits low flow. | Water supply to the hydrant is restricted. | Check water supply to ensure that all upstream valves are fully open. |

Z1310 ECOLOTROL WALL HYDRANT Service Guide

Z1310 Service Guide

Step 1: Shutting Off the Water Supply to the Hydrant

Locate the supply shut-off valve and rotate until water supply is off.

Step 2: Removing the Faceplate and Adjacent Components

Using 1/8" Allen wrench, remove the five faceplate screws (24) from head (1) by turning counterclockwise. Remove the faceplate (20), and nozzle (19).

If the Equa-Balance® seal was not the reason for service – skip to step 4.

Step 3: Replacing the Equa-Balance® Seal

Remove the current Equa-Balance® seal (23). Check seal for damage (punctures, rips, etc.). Replace damaged seal with a new seal (23) observing proper orientation (EQUA-BALANCE® SEAL SHOULD CUP INWARD IN ITS REPLACED STATE.)

Step 4: Removing the Internal Operating Assembly

The internal operating assembly (4-8, 10-12, and 25-26) can be removed by gripping the square end of the operating screw (5) with a pair of pliers and pulling straight out.

If the operating screw O-Ring was not the reason for service – skip to step 6.

Step 5: Replacing the Operating Screw O-Ring

Remove the operating screw (5) from operating coupling (7) by turning clockwise and slip the old O-Ring (6) off, and replace with new O-Ring (6). Reinstall operating screw (5) into operating coupling (7) by turning counterclockwise. (Note: Lubricate the operating screw (5) threads and the O-Ring (6) with Lubriplate FGL-2 if needed.)

If the operating screw assembly was not the reason for service – skip to step 7.

Step 6: Checking Operating Screw Assembly

Remove the operating screw (5) from the operating coupling (7) by turning clockwise, and using 5/32" Allen wrench, remove setscrew (4) by turning counterclockwise, remove stainless steel ball (26) and check orientation of O-Ring (25). If not seated properly, reseal, replace the ball (26) and replace setscrew (4) using Allen wrench and turning clockwise until flush with operating screw (5) or until tight and flush with operating screw (5).

(Note: Lubricate and reinstall as in step 5.)

If the hydrant shutoff washer was not the reason for service – skip to step 8.

Step 7: Replacing the Hydrant Shutoff Washer

Remove #10-24 NC x 3/8 screw (12) using a flat screwdriver and turning screw (12) counterclockwise, remove washer (11) and replace with new washer (11) and new screw (12) turning screw clockwise until tight.

Step 8: Replacing the Internal Operating Assembly

There is a flat or a V-notched boss inside of the hydrant head (1) that keeps the operating coupling (7) from rotating when hydrant is turned on and off. With operating screw (5) turned counterclockwise into operating coupling (7) until it stops, and making sure that a flat side or corner of operating coupling (7) lines up with appropriate boss, reinsert the internal operating assembly into the hydrant.

Step 9: Replacing the Wall Plate

Insert nozzle (19) into place and fasten the faceplate (20) to head (1) using the 1/8" Allen wrench and the five faceplate screws (24). Rotate the screws clockwise until screws are snugged tight. (By hand only!)

Step 10: Turning On the Water Supply

Locate the water supply shut-off valve and rotate until water supply is on.

Z1310 Ecolotrol Wall Hydrant – 3/4" Hose Connection

| Z1310 Ecolotrol Wall Hydrant – 3/4" Hose Connection | | | | |
|--|------------------------------|-------------------------------|-----------------|---------------------------------|
| Static Pressure (psi) | Running Inlet Pressure (psi) | Running Outlet Pressure (psi) | Flow Rate (gpm) | Pressure Drop Across Unit (psi) |
| 10 | 3.1 | 0.1 | 2.8 | 3.0 |
| 20 | 11.3 | 1.0 | 6.0 | 10.3 |
| 30 | 22.4 | 1.7 | 7.3 | 20.7 |
| 40 | 31.8 | 2.5 | 8.6 | 29.4 |
| 50 | 40.9 | 3.2 | 9.7 | 37.7 |
| 60 | 48.5 | 3.9 | 10.6 | 44.6 |
| 70 | 60.1 | 7.9 | 12.2 | 52.2 |
| 80 | 67.8 | 9.5 | 13.3 | 58.2 |
| 90 | 76.5 | 10.7 | 14.4 | 65.8 |

