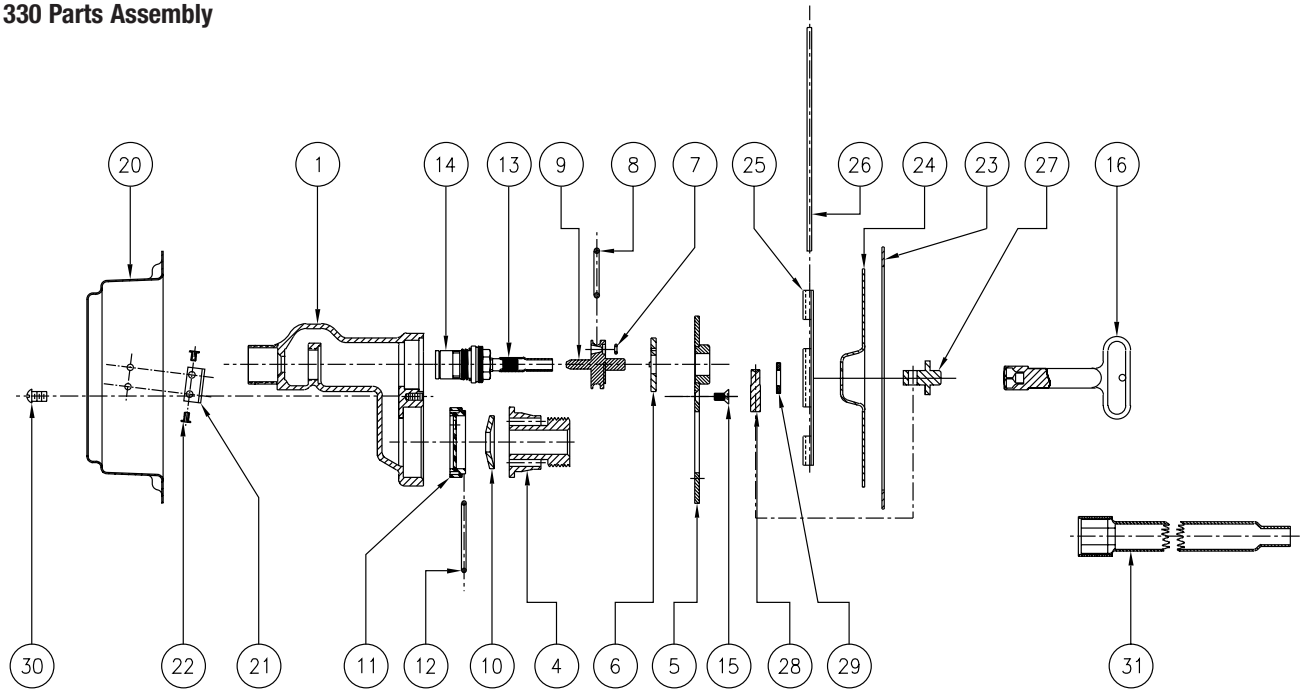
Z1330 ECOLOTROL WALL HYDRANT WITH CERAMIC DISC Parts Assembly and Parts List

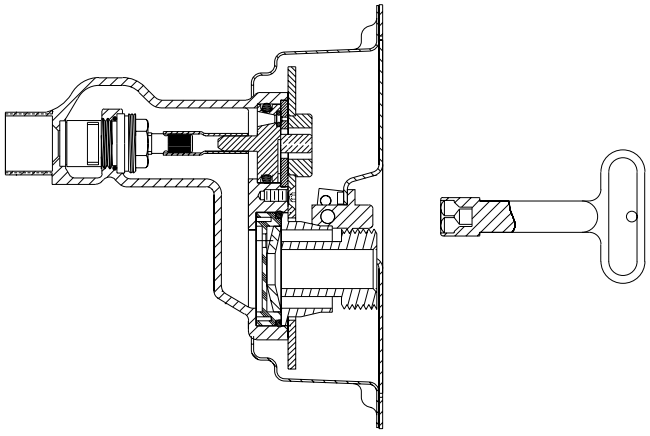
Z1330 Parts Assembly



Z1330 Parts List

Item	Description	Qty.	Part No.
1	Head	1	60703-004
4	3/4" Nozzle	1	50799-005
5	Faceplate	1	56115-008
*6	Retaining Washer	1	60228-001
*7	O-Ring	1	23750-232
*8	O-Ring	1	23750-028
*9	Operating Coupling	1	60227-002
*10	Equa-Balance® Seal	1	50785-001
11	Disc	1	50819-001
*12	Disc O-Ring	1	23750-204
13	Operating Tube	1	60226-001
14	Cartridge Assembly	1	59626-001
15	Faceplate Screw	5	22698-047
*16	Key	1	59546-001
20	Hydrant Body	1	56186-001
21	Lock Clip	1	52033-002
22	Lock Clip Rivet	2	56201-002
23	Frame	1	56185-001
24	Hydrant Cover	1	56187-002
25	Hinge Bracket	1	58482-001
26	Hinge Pin	1	58483-001
27	Locking Pin Mounting	1	25306-001
28	Locking Pln	1	25307-001
29	Washer	1	61631-001
30	Screw #10-24 NC	2	14853-042
31	Cartridge Wrench (Optional)	1	62078-001

*Items are available in -RK Repair Kit Option bag (#66955-195-9).



Z1330 ECOLOTROL WALL HYDRANT WITH CERAMIC DISC Troubleshooting Guide

Z1330 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.	Retaining washer is not properly orientated.	See "Orientating the Retaining Washer" below.
	Hydrant hasn't been used for a long time – O-Ring has adhered to the operating screw and head.	Follow steps 1-2, 4-5, and 8-10 of the Service Guide.
	Ceramic disc is broken and jammed.	Follow steps 1-2, 4, and 6-10 of the Service Guide.
Water sprays from holes around nozzle when hydrant is on.	Equa-Balance® seal is damaged.	Follow steps 1-3 and 8-10 of the Service Guide.
Water sprays through the faceplate's keyway drainage port when the hydrant is on.	Retaining washer pin is not properly orientated into operating coupling groove.	See "Orientating the Retaining Washer" below.
	Operating coupling's O-Ring or air relief orifice O-Ring is damaged or missing.	Follow steps 1-2, 4-5, and 8-10 of the Service Guide.
Hydrant will not self-drain when it is shut off (hose and hose nozzle are attached).	The orifice in the operating coupling, retaining washer, or both is blocked.	Follow steps 1-2, 4 (using a paper clip, evacuate debris from orifice), and 8-10 of the Service Guide.
	Operating coupling is not properly orientated.	See "Orientating the Retaining Washer" below.
Water does not shut off completely when hydrant is turned off.	Retaining washer is not properly orientated.	See "Orientating the Retaining Washer" below.
	Cartridge assembly is loose or damaged.	Follow steps 1-2, 4 (then check that the cartridge assembly is tightly seated), and 6-10 of the Service Guide.
	Debris in the ceramic disc, or disc is broken and jammed.	Follow steps 1-2, 4, and 6-10 of the Service Guide.
Hydrant exhibits low flow.	Water supply to the hydrant is restricted.	Check water supply to ensure that all upstream valves are fully open.
	Retaining washer is not properly orientated.	See "Orientating the Retaining Washer" below.
	Cartridge assembly is damaged or debris in the ceramic disk.	Follow steps 1-2, 4, and 6-10 of the Service Guide.

Orientating the Retaining Washer

If hydrant performance is hindered by the orientation of the retaining washer (**see Troubleshooting Guide**) then follow these simple steps:

Step 1: Turn water supply to hydrant off.

Step 2: Loosen the five faceplate screws (#15) (DO NOT COMPLETELY REMOVE).

Step 3: Use the operating key to gently cycle the hydrant from OFF to ON and back to OFF again (180° OF ROTATION).

Step 4: Tighten the five faceplate screws (#15) until screws are snugged tight (by hand only).

Z1330 ECOLOTROL WALL HYDRANT WITH CERAMIC DISC Service Guide

Z1330 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 (15) from head (1) by turning counterclockwise. Remove the faceplate (5), nozzle (4) and retaining washer (6).

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 (10). Check seal for damage (punctures, rips, etc.). Replace damaged seal with a new seal (10) observing proper orientation (EQUA-BALANCE® SEAL SHOULD CUP INWARD IN ITS REPLACED STATE.)

Step 4: Removing the Operating Coupling
The operating coupling (9) can be removed by gripping the 5/16" square end of the operating coupling (9) with a pair of pliers and gently (being careful not to damage the O-Ring) pulling straight out until the coupling (9) breaks free from the operating tube (13).

If the operating coupling, O-Ring and the air relief orifice O-Ring were not the reason for service – skip to step 6.

Step 5: Replacing the Operating Coupling O-Ring, and the Air Relief Orifice O-Ring
Slip the old O-Ring (8) off, and replace with new O-Ring (8). Remove the old air relief orifice O-Ring (7) and replace with new air relief orifice O-Ring (7).

If the cartridge and operating tube assemblies were not the reason for service – skip to step 8.

Step 6: Removing the Cartridge and Operating Tube Assemblies
Insert the 17 mm cartridge wrench (31) into the hydrant, and over the operating tube (13) until it stops, then with gentle forward pressure, turn the cartridge wrench (31) clockwise until it engages the hex portion of the cartridge assembly (14). Then rotate cartridge wrench (31) counterclockwise, unscrewing the cartridge assembly (14) until the cartridge assembly (14) is free from the head (1). Remove the cartridge wrench (31) with the cartridge and operating tube assemblies (13-14). IMPORTANT: Ensure that the entire cartridge assembly is removed and that the housing seating area is free of debris.

Step 7: Installing Cartridge and Operating Tube Assemblies
Place the cartridge and operating tube assemblies (13-14) into the cartridge wrench (31) so that the operating tube (13) is inside of the cartridge wrench (31), and is engaged on the hex portion of the cartridge assembly (14). Insert the cartridge wrench (31) with the cartridge and operating tube assemblies (13-14) into the hydrant until making contact with the head (1), then rotate the cartridge wrench (31) clockwise screwing the cartridge assembly (14) in until it stops, then torque to 15 ft/lbs. (Make sure that the cartridge assembly is in the off position.)

Step 8: Installing the Operating Coupling and Retaining Washer
Orient the operating coupling (9) so that the air relief orifice is in the uppermost position. Press the operating coupling (9) firmly into the head (1) and the operating tube (13). (NOTE: Lubricate the operating coupling O-Ring (8) with Lubriplate FGL-2 if needed.) Insert the retaining washer (6) onto the operating coupling (9) ensuring that the guide pin fits into the operating coupling (9) groove properly and that the air relief orifice is aligned with the operating coupling (9) air relief orifice. (If necessary, lubricate lightly between the operating coupling (9) and retaining washer (6) with Lubriplate FGL-2 for smoother operation.)

Step 9: Replacing the Faceplate
Insert nozzle (4) into place and fasten the faceplate (5) to head (1) using the 1/8" Allen wrench and the five faceplate screws (15). 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.

Z1330 Ecolotrol Wall Hydrant with Ceramic Disc – 3/4" Hose Connection

Static Pressure (psi)	Running Inlet Pressure (psi)	Running Outlet Pressure (psi)	Flow Rate (gpm)	Pressure Drop Across Unit (psi)
10	4.9	0.0	2.2	4.9
20	15.6	0.1	4.1	15.5
30	24.3	0.4	5.3	23.9
40	33.5	0.8	6.1	32.7
50	42.3	1.2	7.0	41.0
60	50.5	1.6	7.6	49.0
70	62.3	2.1	8.5	60.2
80	70.9	2.5	9.1	68.4
90	79.3	2.9	9.5	76.5

