

SERVICE REQUIREMENTS

⚠ WARNING! *Read and understand the contents of this manual before attempting to service WL400. Failure to follow the instructions in this manual could result in death, serious personal injury, or severe property damage. Only trained and qualified technicians should attempt to install, maintain, or service Waterlogic Equipment.*

1. Visually inspect all electrical and water connections for signs of wear or damage.

⚠ DANGER! ***HIGH VOLTAGE ELECTRICAL HAZARD.** Unplug before inspection and service.*

2. **Waterlogic** recommends changing the UV Lamp every 6 months.

⚠ WARNING! ***ULTRAVIOLET RADIATION.** Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light. Disconnect before removing UV Lamp.*

⚠ CAUTION! ***UV LAMPS ARE HAZARDOUS.** Lamps are considered Hazardous Waste and must be disposed of accordingly. Refer to Product MSDS sheet for details.*

3. Clean the Spiral Quartz Sleeve that surrounds the UV lamp with a non-abrasive cloth, descaling solution, or ultrasonic bath if needed when changing UV lamps.

⚠ CAUTION! ***UV SYSTEM IS FRAGILE.** Never handle the UV lamp or Quartz Sleeve with bare hands. UV Lamp and quartz sleeve must be free of oils and contaminants to ensure proper operation. Use a soft non-abrasive cloth to clean.*

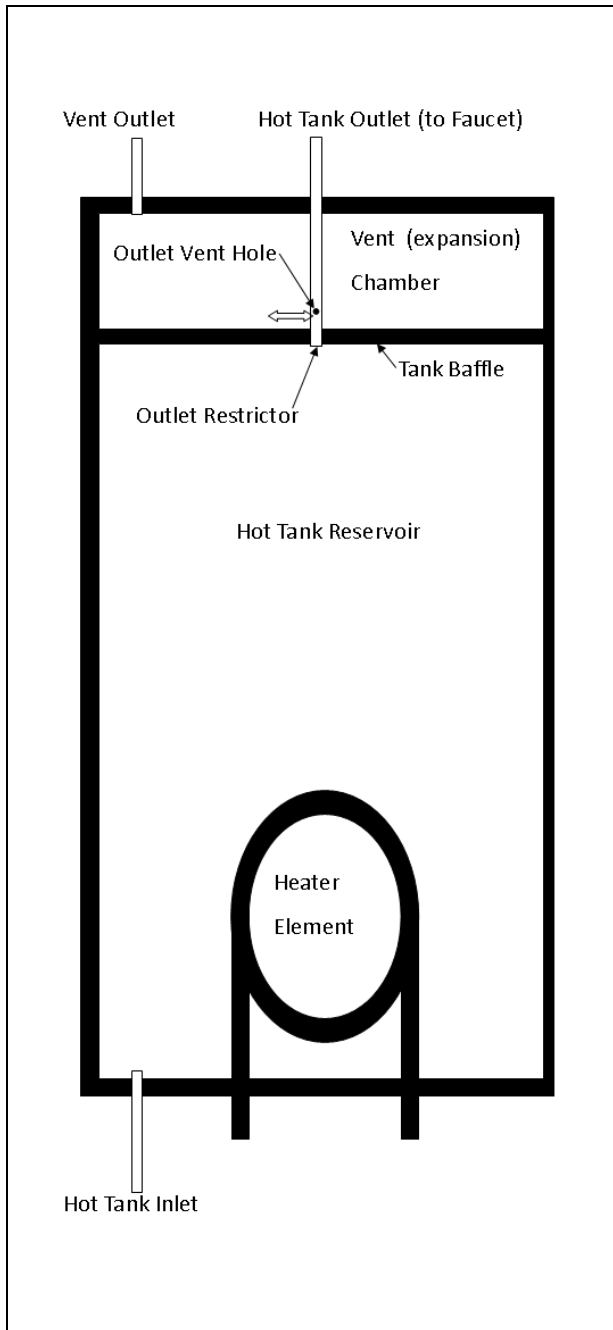
4. Sanitize the Cold Tank per instructions in the Pre-Installation procedures.

5. Clean and sanitize external surfaces of the unit. Use soap and water or chemicals that are compatible with ABS plastic and will not damage or degrade the product surfaces.

6. Remove and clean the Faucet. Replace as needed.

⚠ WARNING! ***SANITIZER MAY CONTAIN HAZARDOUS CHEMICALS.** Use of proper personal protective equipment such as rubber gloves and eye protection is required.*

HOT TANK PRINCIPLES OF OPERATION



All **Waterlogic** Hot Tanks have a built in Vent or Expansion Chamber in the top of the tank except for WL270 (GF) units.

The Vent Chamber allows for expansion of the water when it is heated.

The chambers are separated by a welded-in tank baffle.

Water always flows into the bottom of the tank and out the top to the faucet.

The hot tank outlet tube has a restrictor in its base. This ensures the reservoir is always full by allowing more water in than out.

There is a small hole in the side of the tank outlet tube that allows air and water to pass into the vent chamber as it is heated.

Water in the vent chamber is suctioned back through the outlet tube vent hole when water is dispensed.





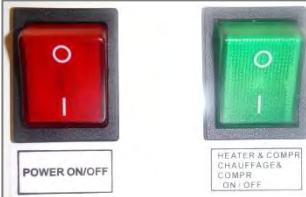
Expansion of water as it is heated in the reservoir will push the water out the faucet when the outlet tube vent hole becomes plugged with debris or scale.

The small Outlet Vent Hole is susceptible to scale build up and is a key indicator that descaling is required.

It is critical to descale the hot tank through the vent line and outlet line on a regular basis to prevent this problem.

Descaling through the inlet and/or outlet lines only will not clean the vent chamber and outlet vent hole properly.

RESETTING THE HOT TANK OVERLOADS - HIGH LIMIT SAFETY

1.	Turn off Green Heater/Compressor Switch on rear of unit. <i>O=OFF</i>	
2.	Unplug the Power Cord from rear of unit.	
3.	Remove the Tower Cover Locking Screws and Slide Locks towards outside of unit to unlock both locks.	
4.	Slide Top Cover forward and lift in front of Top Cover to open.	
5.	Remove the 2 Phillips Screws from Left Side Panel (when standing behind unit) and remove side panel.	
6.	Check and press both Thermal Overload buttons on Hot Tank.	
7.	Close, lock and replace Top Cover Screws	
8.	Turn on Red Power Switch and Green Heater / Compressor Switch. <i>I=ON</i>	

HOT TANK DESCALING INSTRUCTIONS

The hot tank requires removal of mineral deposits (descaling) on a regular basis. Typically descaling should take place every 6 to 12 months to preserve the long-term health of your unit.

Use non-toxic cleaner such as ScaleKleen, DEZCAL, 20% Citric Acid Solution, or Undiluted Vinegar Solution to remove mineral deposits as directed by the manufacturer depending upon filtration and local water conditions.

Descaling is an important process that removes calcium deposits, or scale, that can build up inside a tank over time. Calcium and scale is non-toxic but left unattended will hinder your unit's performance.

⚠️ WARNING! ***PERSONAL PROTECTIVE EQUIPMENT REQUIRED.** Always ensure proper ventilation and use rubber or nitrile gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each product.*

⚠️ CAUTION! ***STAINLESS STEEL TANK DESCALING.***

The hot tank is made from stainless steel. Ensure descaling solution is compatible with stainless and always flush the unit completely. Dispose in an environmentally safe manner.

Materials Needed:

- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
 - Phillips Screwdriver
 - Temperature Gauge
 - Water Pitcher or Container to collect water from the faucet
 - 5-gallon container or drain basin
 - Citric Acid Based Cleaner
 - ¼" Plastic Tubing, at least 4 feet in length, and assorted ¼" quick connect fittings
 - Sanitizing Cartridge
 - Food Coloring
1. Put descaler per directions and 3 drops of food coloring into the descaling cartridge.
 2. Connect descaling cartridge to the inlet water supply and connect to inlet bulkhead fitting on the back of the unit. Turn on Water Supply.
 3. Select Hot Water and depress the Main Dispensing Button on the Front Control Panel until descaling solution (colored water) comes out of the faucet. Container and drain basin will be required to catch water from the faucet.
 4. Turn off water supply and remove sanitizing cartridge from inlet water supply. Reconnect water supply to inlet fitting.

5. Allow descaling solution to remain in the Hot Tank for 15 minutes (length of time may vary depending on water conditions).
6. Place a pitcher, catch basin or other container under the faucet of the **WL400 Water Treatment System**.
7. Flush the Hot Tank until water runs clear.
8. Once clear water dispenses from the faucet the Hot Tank has been descaled. Always ensure unit is performing to the customer's satisfaction.

⚠ WARNING! HOT WATER HAZARD. *WL400 Water Treatment System produces VERY HOT WATER up to 203°F (95°C). Water above 125°F (52°C) can cause severe burns or scalding. Hot water should be dispensed carefully into insulated container to avoid injury.*

⚠ CAUTION! MUST REPLACE HOT TANK 3-5 YEARS DEPENDING ON USAGE. *The hot tank and its controls must be replaced a minimum of every five years to ensure efficient and dependable operation.*

⚠ WARNING! REINSTALL ALL PANELS AND COVERS. *Always reinstall all panels, protective covers, and fasteners after servicing equipment. Failure to do so could result in severe personal injury and will void the certifications and warranty of the equipment.*

DISPLAY PANELS AND ICONS



UV Lamp Has Failed
See troubleshooting section of manual



The UV Lamp is operating



Sleep Mode -
press any button to bring machine out of sleep mode



The Hot Tank is heating up



A leak has been detected - *See troubleshooting section of manual*



Filter needs replacing



The Cold Tank is Chilling



Extra hot water has been selected



The Drip Tray is Full – Please empty the tray

DISABLING SLEEP MODE



Sleep Mode - press any button to bring machine out of sleep mode

ADJUSTING COLD SET POINT

The cold set point can be adjusted by accessing the cold thermostat adjustment screw Under the Decal at the rear of the unit.

This will NOT Void the Warranty as the current Decal states on the back of the unit. The factory set point is ~41°F and is indicated by the dot on sheet metal around the adjustment screw and behind the decal.

Turning the adjustment screw clockwise lowers the set point temperature and the range is approximately 20°F thru the full range of adjustment (~7:00 to the ~5:00 positions).

You should be able to turn the screw from the factory set point of 41°F (~12:00 position) about 45 degrees clockwise (2:30 on a clock) to reduce the set point temperature by 6°F and achieve the 35-36°F setting you are looking for.

Trial this by adjusting and then measure the water temperature 10-15 minutes after the compressor shuts off (coldest point) to verify the set point temperature.

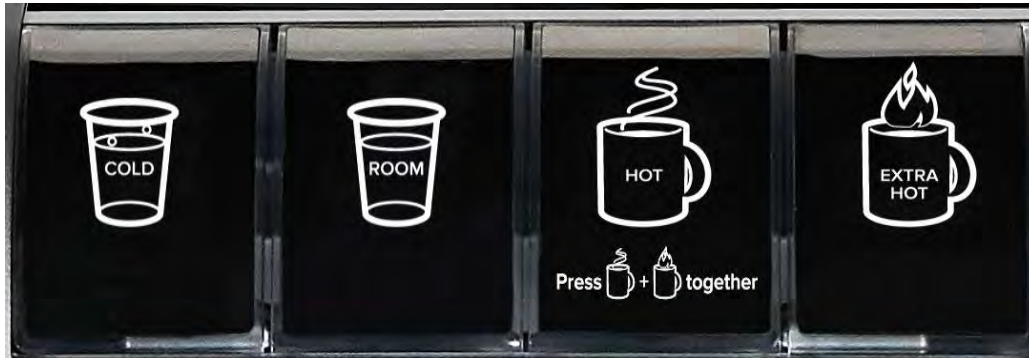
Each unit will vary slightly. Try not to go much past the “3:00 position” to avoid freezing the cold tank as shown above.

Future production will include Cold Thermostat Cover label

Part Number: LP-0326-L00-00 / WLCP PN LP-0326



PROGRAMMING INSTRUCTIONS



The above picture shows front dispensing panel for the *Waterlogic WL400*.

Press and Hold all 4 dispensing buttons for 10 seconds.

There are 5 options in the menu.

Cold Button cycles down the menu

Room (Ambient) Button cycles up the menu

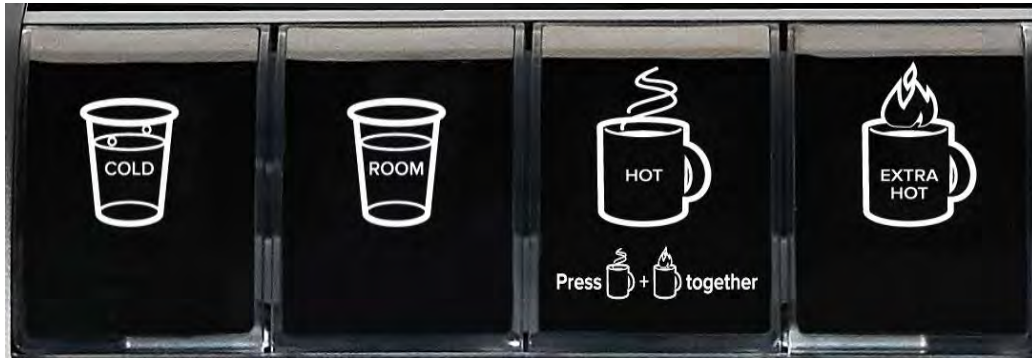
Hot Button Selects the Option

Extra Hot Button Exits the menu

Settings	Programming
F-S Filter Setting	Filter Setting can be adjusted between 1,000 to 9,000 gallons in 1,000 increments.
F-r Filter Resetting	Choices are Yes or No
C-S Cold Temperature Setting	Temperature Setting can be adjusted from 37°F to 54°F (2.8°C to 12.2°C)
H-S Hot Temperature Setting	Temperature Setting can be adjusted from 158°F to 203°F (70°C to 95°C)
S-S Sleep Mode	Choices are 3 Hour, 6 Hour, 12 Hour or No (Off)

PROGRAMMING INSTRUCTIONS

Reset the Display Counter (Gallons)



Reset Gallons Counter on the Display to “0000”

1. Press and Hold all 4 dispensing buttons for 10 seconds.
2. Release when programming mode is initiated and **F-s** is shown on screen
3. Press Cold to scroll down to the **F-r** (Filter Reset Menu)
4. Select **Hot button** to enter into the Filter Reset Menu Options
5. Scroll down to “Yes” by using the **Cold and Ambient Buttons** (up and down)
6. Select **Hot** to enter (Yes to Filter Reset)
7. Select **Extra Hot** to Exit and the Gallon Counter will be reset and will display 0000.

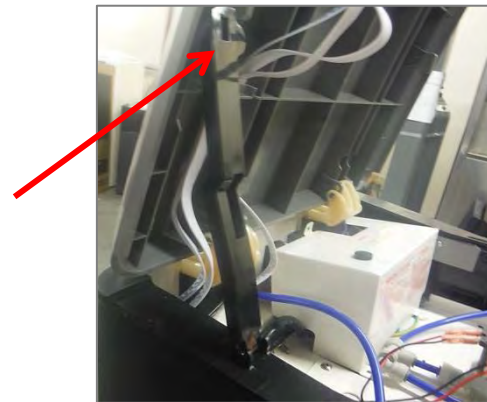
OPENING TOP COVER

1. Remove screws from slide locks located near dispenser.
2. Push Slide Locks inward toward dispensing area.



3. Pull Cover forward and lift from the front to open Top Cover.

4. Locate Top Cover Support Arm attached to left side panel.
5. Lift Support Arm from the front and align with top cover to hold top cover in place.



REPLACEMENT COMPONENTS

Component	WLCP PN	Frequency of Replacement
UV Light, 13 Watts	10-8075	Every 6 months, or as required Part No CT-2090-A
Spiral	10-8080	Clean every 12 months, replace as needed Part No -0007-A
Hot Tank 185°F (85°C)	HT-3037-A	Replace every 3-5 years depending on usage Part No HT-3037-A
Sediment Filter	10-8050	Every 6-months, or as required. Local water conditions will determine proper filter type and maintenance schedule. Part No. RO-0001-A
Pre-Carbon Filter	RO-0002-A	Every 6-months, or as required. Local water conditions will determine proper filter type and maintenance schedule. Part No. 10-8055
RO Membrane Replacement Kit	10-8061	Every 6-months, or as required. Local water conditions will determine proper filter type and maintenance schedule.
Post Carbon Filter	10-8065	Every 6-months, or as required. Local water conditions will determine proper filter type and maintenance schedule. Part No. RO-0005-A

** One pre-installed. One required for NSF-53 and NSF P231 Certification.*

Replacement parts can be obtained from *Waterlogic* or an *Authorized Waterlogic Dealer*. See *Parts Layouts, Drawings, and Lists* for additional repair parts.

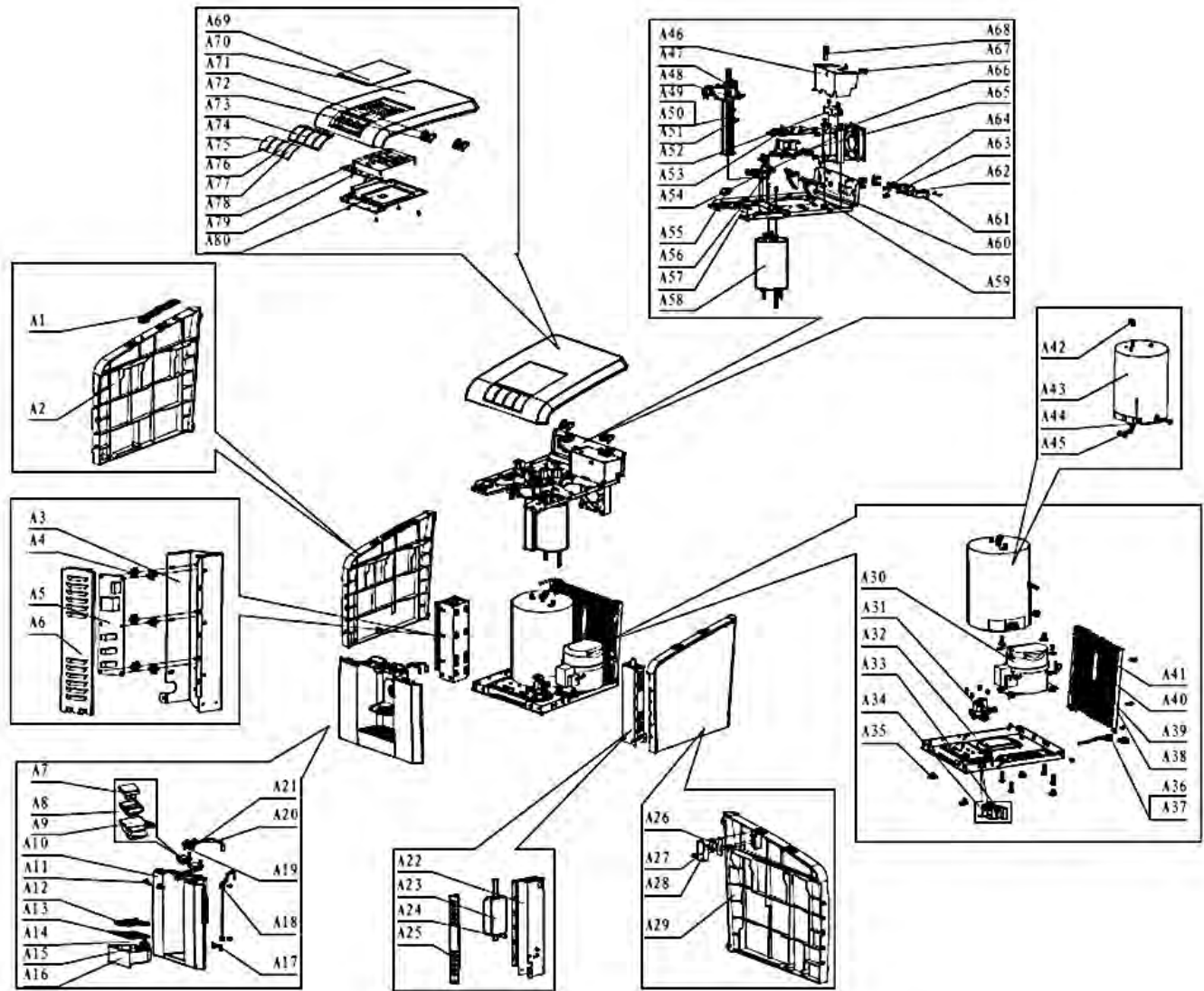
Hot Tank Service

Hot Tanks (with controls) must be replaced at least every 3-5 years depending on usage. Descaling hot tank may be required on a regular basis depending upon filtration and local water conditions. See Service Section.

NOTE:

At the **end of this product's life**, ensure that it is disposed of in an environmentally friendly manner which is fully compliant **with all Federal/State/Local Requirements and Guidelines**.

WL400 COUNTER TOP MAIN PARTS DRAWING AND PARTS LIST

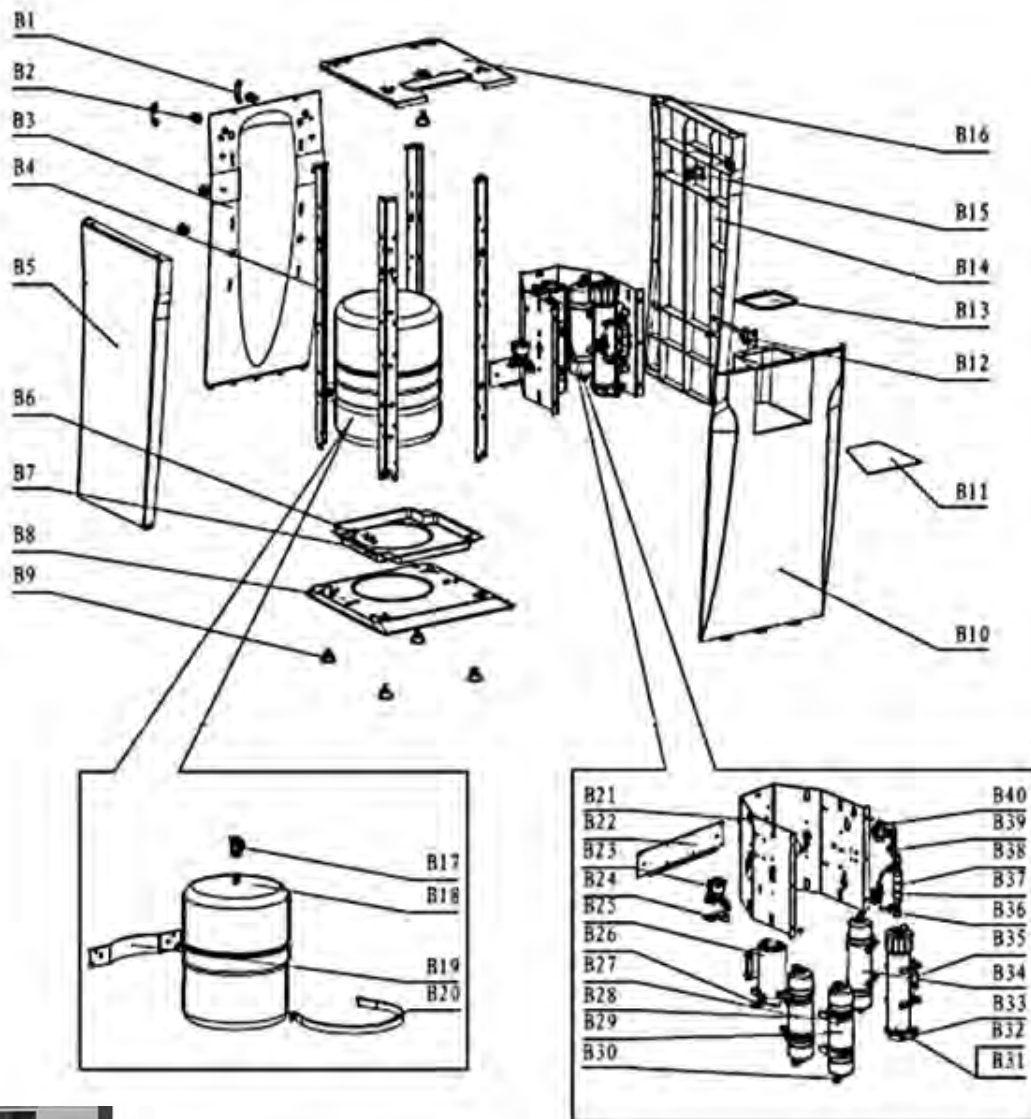


No	Part No	Description	WLCP Part No	Stocked?
A1	PL-1321	Top Cover Safety Support	PL-1321	Yes
A2	PL-1328	Counter Left Top Side Panel	PL-1328	Yes
A3	ST-8260	PCB Holder Bracket	NA	No
A4	EN-6059	PCB Support	10-3017	Yes
A5	EN-6137	RO Main PCB	EN-6137	Yes
A6	ST-8285	Fan Bracket	NA	No
A7	EN-6119	PCB LED	EN-6119	Yes
A8	PL-1335	LED PCB Holding Sealing Rubber	PL-1335	Yes
A9	PL-1318	LED Hold Plate	NA	No
A10	PL-1312-C	Front Upper Panel – Silver	PL-1312-C	Yes
A11	PL-1317	Top Cover Lock with Screw Hole	PL-1317	Yes
A12	PL-1344-A	Adjustable Drip Tray Grill with BioCote®	PL-1344-A	No
A13	PL-1320-A	Drip Tray Grill Silver with BioCote®	PL-1320-A	Yes
A14	ST-8267-C	Drip Tray Sensor Pin – Left	ST-8267-A	Yes
A15	ST-8267-D	Drip Tray Sensor Pin – Right	ST-8267-B	Yes
A16	PL-1319-F	Drip Tray Body	PL-1319-F	Yes
A17	ST-8266	Drip Tray Sensor Holder	ST-8266	Yes
A18	CU-0055	Air Vent Clip	CU-0055	Yes
A19	PL-1354	Firewall Hot Water Faucet – Insert Pipe	PL-1354	Yes
A20	PU-4064	Silicone Tube 5/16" for Hot Water	10-7040	Yes
A21	PL-1354	Firewall Hot Water Faucet	PL-1354	Yes
A22	ST-8261	Adaptor Holder Bracket	NA	No
A23	EL-5128	Power Adaptor 2A Universal with ST-8264-A	EL-5128	Yes
A24	ST-8264-A	Adaptor Fixing Bracket	NA	No
A25	ST-8284	Adaptor Metal Cover	NA	No
A26	ST-8286	Micro SW Metal Cover	ST-8286	Yes
A27	EL-5027	Micro Door Lock S/W Only	14-5006	Yes
A28	PL-1329	Safety Micro Switch Cover	PL-1329	Yes
A29	PL-1327	Counter Top Side Panel – Right	PL-1327	Yes
A30	CO-9001-A	Compressor (R134a 1/8 HP) 110V/60Hz	10-2200	Yes
A31	PU-4016C	Solenoid Valve DC24V	PU-4016-C	Yes
A32	ST-8258	Counter Top Bottom Base	NA	No
A33	PL-1311	Leak Detector Sensor Bracket	PL-1311	Yes

A34	ST-8207CN	Leak Containment Tray Clip (Sensor 0.5mm)	12-3180	Yes
A35	PL-1251-CN	Unit Rubber Feet for Counter Top	12-3150	Yes
A36	CT-2028	Drain Valve Cap	CT-2028	Yes
A37	CT-2039-A	Drain Valve Body Only for ¼"	CT-2039-A	Yes
A38	ST-8256	Counter Top Front Support Frame	NA	No
A39	CO-9041	Wire Condenser	NA	No
A40	CO-9008	Filter Dryer	12-1001	No
A41	ST-8255	Counter Top Support Frame – Left	NA	No
A42	PU-4008	JG Equal Elbow Connector ¼" (PI0308S)	NA	Purchase from John Guest
A43	CT-2072-A	Firewall Cold Only Tank	NA	No
A44	PU-4140	JG End Stop ¼" (PI4608S)	NA	Purchase from John Guest
A45	PU-4011	JG Bulkhead Connector Union ¼" * ¼" (PI1208S)	NA	Purchase from John Guest
A45.1	AK-0014-B	1.8mm Hole Flow Restrictor	NA	Yes
A46	ST-8283	Electronics Cover Bracket	ST-8283	Yes
A47	CT-2090	UV Lamp 13W	10-8075	Yes
A48	ST-8298-A	Firewall System Fixing Bracket to the Upper Shelf	ST-8298	Yes
A49	FU-0009-A	Firewall Assembly	FU-0009-A	Yes
A50	FU-0007-A	Firewall Spiral Quartz	10-8080	Yes
A51	AK-0064	UV Sensor with Wire	AK-0064	No
A52	EL-0010-L00-00	Ballast 110V – 13W	NA	No
A53	ST-8300	Firewall C&S Fixing Bracket to Upper Shelf	ST-8300	Yes
A54	ST-8265	Fan Bracket	NA	No
A55	CU-0001	Cushion for Solenoid Valve	CU-0001	Yes
A56	PL-1336	Upper Panel Wire Route Hole – Silicone Cover	PL-1336	Yes
A57	ST-8259-H	RO Countertop Upper Shelf / Back Panel	NA	No
A58	HT-3037-A	1.2L 120V 500W Hot Tank – Steel 185°F (85°C)	HT-3037-A	Yes
A59	PL-1330	Back Panel Hinge A-4	PL-1330	Yes
A60	PL-1331	Back Panel Hinge A-1	PL-1331	Yes
A61	EL-5016	Socket with EMI Filter	10-4013	Yes
A62	EL-5004	Red Power Switch	10-3008	Yes
A63	EL-5005	Green Heater/Compressor Switch	10-3009	Yes
A64	PU-4028	JG Bulkhead Connector Union ¼" * ¼" (PI1208S)	10-3067	Yes

A65	PU-4066	JG Stem Elbow Connector ¼" * ¼" – Acetyl (PI220808S)	NA	Purchase from John Guest
A66	CT-2011	Fan Motor 100V	10-1500	Yes
A67	EL-5122	Wire from Ballast to UV Lamp	EL-5122	Yes
A68	EL-5053	Fuse Holder and Fust 110V/15A with one wire	10-3014	Yes
A69	PL-1337-E	RO LCD Cover Panel	PL-1337-E	Yes
A70	PL-1322-C	Top Cover	PL-1322-C	Yes
A71	PL-1332	Back Panel Hinge A-2	PL-1332	Yes
A72	PL-1333	Back Panel Hinge A-3	PL-1333	Yes
A73	PL-1323	4 Button Panel	PL-1323	Yes
A74	LP-7310	RO Cold Button Label – H/C/A	LP-7310	Yes
A75	LP-7311	RO Ambient Button Label – H/C/A	LP-7311	Yes
A76	LP-7312	RO Hot Button Label H/C/A	LP-7312	Yes
A77	LP-7313	RO Extra Hot Button Label H/C/A	LP-7313	Yes
A78	EN-6136	RO Display PCB – H/C/A; H/C; C	EN-6136	Yes
A79	EN-6118	PCB Button	EN-6118	Yes
A80	PL-1334	PCB Cover	PL-1334	Yes
Not Shown	EL-5001-B	Power Cord	10-3007	Yes

WL400 BASE MAIN PARTS DRAWING AND PARTS LIST



WL400 BASE LAYOUT DRAWING AND PARTS LIST

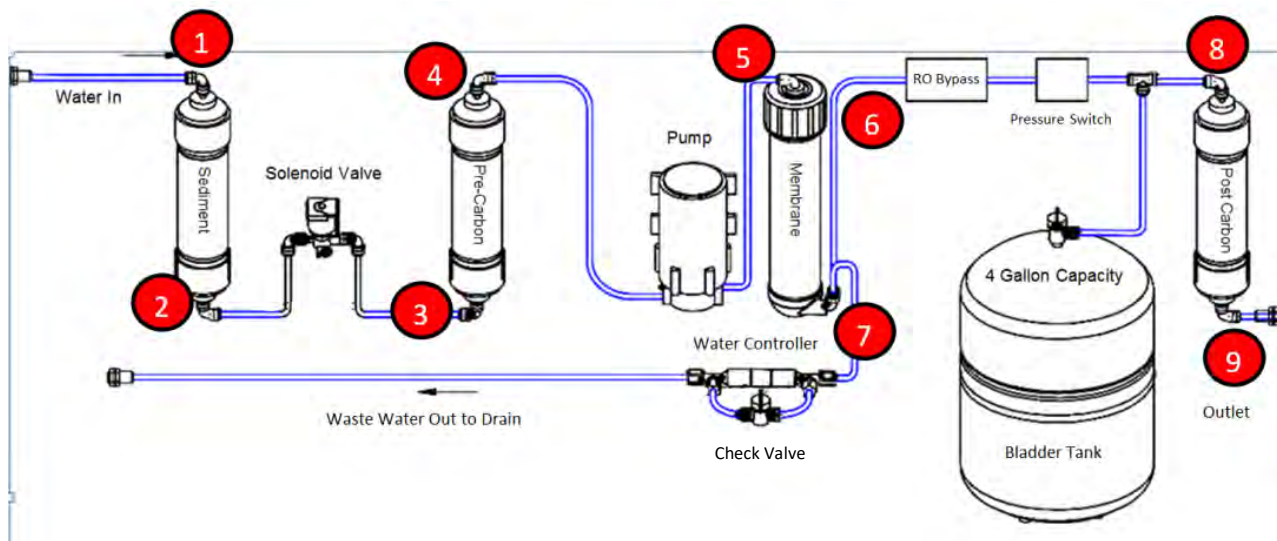
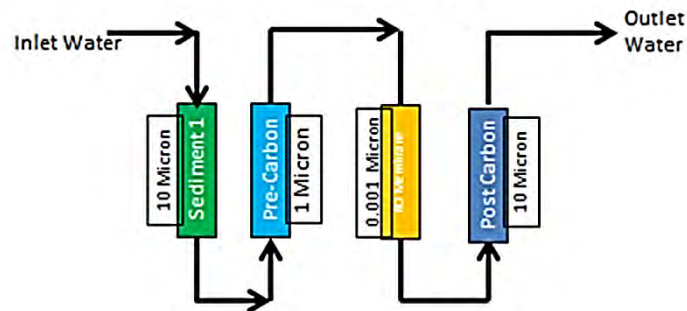
No	Part No	Description	WLCP Part No	Stocked?
B1	ST-8342	Fixing Bracket – Base Cabinet Back Panel	NA	No
B2	PU-4028	JG Bulkhead Connector Union 1/4" * 1/4"(PI1208S)	10-3067	Yes
B2.1	AK-0014-B	1.8mm Flow Restrictor	NA	Yes
B3	ST-8273	Base Cabinet Back Panel	NA	No
B4	ST-8270	Base Cabinet Support Frame	NA	No
B5	PL-1339	Base Cabinet Plastic Side Panel-L	PL-1339	Yes
B6	ST-8207CN	Leak containment tray Clip (sensor 0.5mm)	12-3180	Yes
B7	PL-1375	RO Base Cabinet Leak Containment Tray	PL-1375	Yes
B8	ST-8269	Base Cabinet Down Base	NA	No
B9	ST-8016	Unit Control Rubber Feet	10-3083	Yes
B10	PL-1341-A	Base Cabinet Front Down Panel Silver	PL-1341-A	Yes
B11	ST-8336	Cup Dispenser Hole Metal Cover	ST-8336	Yes
B12	ST-8272	Base Cabinet Door Lock Bracket	ST-8272	Yes
B13	PL-1343	Base Cabinet Cup Dispenser Cover	PL-1343	Yes
B14	PL-1340	Base Cabinet Plastic Side Panel-R	PL-1340	Yes
B15	PL-1342	Base Cabinet Door Lock Cover	PL-1342	Yes
B16	ST-8268	Base Cabinet Upper Shelf	NA	No
B17	PU-4082	HG Shut Off Valve NPT 5/16" * 1/4" (PPSV00822W)	12-6102	Yes
B18	CT-2056-A	RO Bladder Tank – 4 Gallons	CT-2056-A	Yes
B19	ST-8337	RO Bladder Tank (4 Gallon) holding bracket 1	ST-8337	Yes
B20	ST-8338	RO Bladder Tank (4 Gallon) holding bracket 2	ST-8338	Yes
B21	ST-8333	RO filter bracket	ST-8333	Yes
B22	ST-8334	RO filter bracket support	ST-8334	Yes
B23	PU-4017-B	Hot and Cold Solenoid Valve DC24 300mm Wire	PU-4017-B	Yes
B24	ST-8300	Firewall C&S Fixing Bracket to Upper Shelf	ST-8300	Yes
B25	CT-2035-E	Water Pressure Pump DC24	10-7235	Yes
B26	PU-4010	JG Equal Straight Connector 1/4"(PI0408S)	NA	No
B27	RO-0002-A	Pre-Carbon Filter – Micro	10-8055	Yes
B28	PU-4024	3" Filter Clip	10-3099	Yes

B29	RO-0001-A	Sediment Filter – Micro	10-8050	Yes
B30	PU-4008	JG Equal Elbow Connector 1/4" (PI0308S)	NA	No
B31	RO-0003-A	RO Housing Micro	RO-0003-A	Yes
B32	NA	RO Membrane 100 GPD – Micro Filter	NA	No
B33	RO-0006-A	1/4" Rigid Elbow for RO Housing Micro	RO-0006-A	Yes
B34	RO-0005-A	Post Carbon Filter – Micro	10-8065	Yes
B35	PU-4082	HG Shut Off Valve NPT 5/16" * 1/4" (PPSV00822W)	12-6102	Yes
B36	RO-0009-A	T-Connect (2) Micro	RO-0009-A	Yes
B37	RO-0010-A	Flushing Valve – Micro	RO-0010-A	Yes
B38	RO-0011	Flow Restrictor – Micro	RO-0011	Yes
B39	PU-4011	JG Bulkhead Connector Union 1/4" * 1/4" (PI1208S)	NA	Purchase from John Guest
B40	RO-0024	High Pressure Switch	RO-0024	Yes
Not Shown	EL-5001-B	Power Cord	10-3007	Yes

WL400 STANDARD WATER FLOW DIAGRAM

There is a 100 Gallons per day (Gpd) / 378.5 Liters per day (Lpd) flow restrictor inline after the Main Unit bulkhead inlet fitting on all **WL400 Treatment Systems**.

Flow Restrictor
Part Number AK-0014-B



WL400 COUNTER TOP ELECTRICAL DIAGRAM

⚠ DANGER! HIGH VOLTAGE ELECTRICAL HAZARD. PCB (Printed Circuit Board) contains High Voltage. Only trained and qualified technicians should attempt live testing.

