

## SERVICE REQUIREMENTS

**⚠ WARNING!** *Read and understand the contents of this manual before attempting to service WL380. 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.** Always unplug before inspection and service.*

2. **Waterlogic** recommends changing the UV Lamp (CT-2090) every 6 months under normal single shift usage. The lamp may require more frequent changes if placed in high volume/multi-shift environment. Contact Waterlogic for specific recommendations.

**UV DECLARATION:** The UV Lamp in this appliance conforms to the applicable provisions in the Code of Federal Regulations(CFR) requirements including; Title 21, Chapter 1, Subchapter J, Radiological Health.

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

3. Clean the quartz spiral that surrounds the UV lamp with a non-abrasive cloth, descaling solution, or ultrasonic bath if needed when changing UV lamps. Inspect the Firewall housing for wear or damage and replace as necessary.

**⚠ CAUTION!** ***UV SYSTEM IS FRAGILE.** Never handle the UV lamp or Quartz Spiral 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. Test Firewall UV system by unplugging the lamp. 20 second audible alarm and Firewall light should go out. Cold and Ambient icons should be disabled.

5. The filters should be replaced every 6 months or 1250 gallons, whichever comes first. Local water conditions will dictate your exact filter requirements and service intervals. Flush filters per manufacturer's recommendations to rinse carbon fines. Do not rinse the filters through the unit solenoid valve(s) and tanks if at all possible to avoid contamination.

6. Ensure there is adequate (minimum of 2") clearance around the unit and clean the condenser grill and compressor fan to provide efficient cooling system operation.

7. Test the leak detection function. Short sensor pins together to enable alarm. Reboot to clear alarm.

8. Clean and sanitize the drip tray and drip tray grille. Replace if needed.

9. Sanitize the cold and ambient circuits annually per instructions in the pre-installation procedures.

10. 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.

## **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
  - 19 Liter (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 **WL380 Water Treatment System**. 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 **WL380 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 the **WL380 Water Treatment System** is performing to the customer's satisfaction.

**⚠ WARNING! HOT WATER. HOT WATER. Unit produces Hot Water in excess of 80°C (175°F).** Water above 52°C (125°F) can cause severe burns or scalding. Keep unauthorized people and children away from the unit to avoid accidental dispensing of hot water.

**⚠ CAUTION! MUST REPLACE HOT TANK 3-5 YEARS DEPENDING ON USAGE.** The Hot Tank and its controls must be replaced a minimum of every three to 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.

For additional information and updates visit <http://techportal.waterlogic.com>

Contact Waterlogic for assistance or help finding an authorized service representative.

## REPLACEMENT COMPONENTS - CONSUMABLES

Component	WLCP No.	Recommended Replacement Frequency
UV Lamp - 13W Watts Assembly	10-8750	Every 6 months (typical single shift, or as required) Factory PN CT-2090-A
Hot Tank 1.6L with Thermistor 120V 500 Watts	10-4029	Every 3-5 Years or as required. Factory PN HT-3024
GAC Filter - 10" Carbon Activated Inline Filter - <i>Optional</i>	FT-0035	Every 6-months or as required. Local water conditions will determine proper filter type and maintenance schedule. Factory PN FT-0035-IL-WLT
Carbon Block - 10" CBC 1 Micron Lead and Cyst Reduction Inline Filter – <i>Optional</i>	FT-0063	Every 6-months or as required. Local water conditions will determine proper filter type and maintenance schedule. Factory PN FT-0063-IL-WLT
Sediment Block - 10" Sediment 20 Micron Inline Filter - <i>Optional</i>	FT-0053	Every 6-months or as required. Local water conditions will determine proper filter type and maintenance schedule. Factory PN FT-0053-IL-WLT

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 the Hot Tank may be required on a regular basis depending upon filtration and local water conditions. See Service Section.

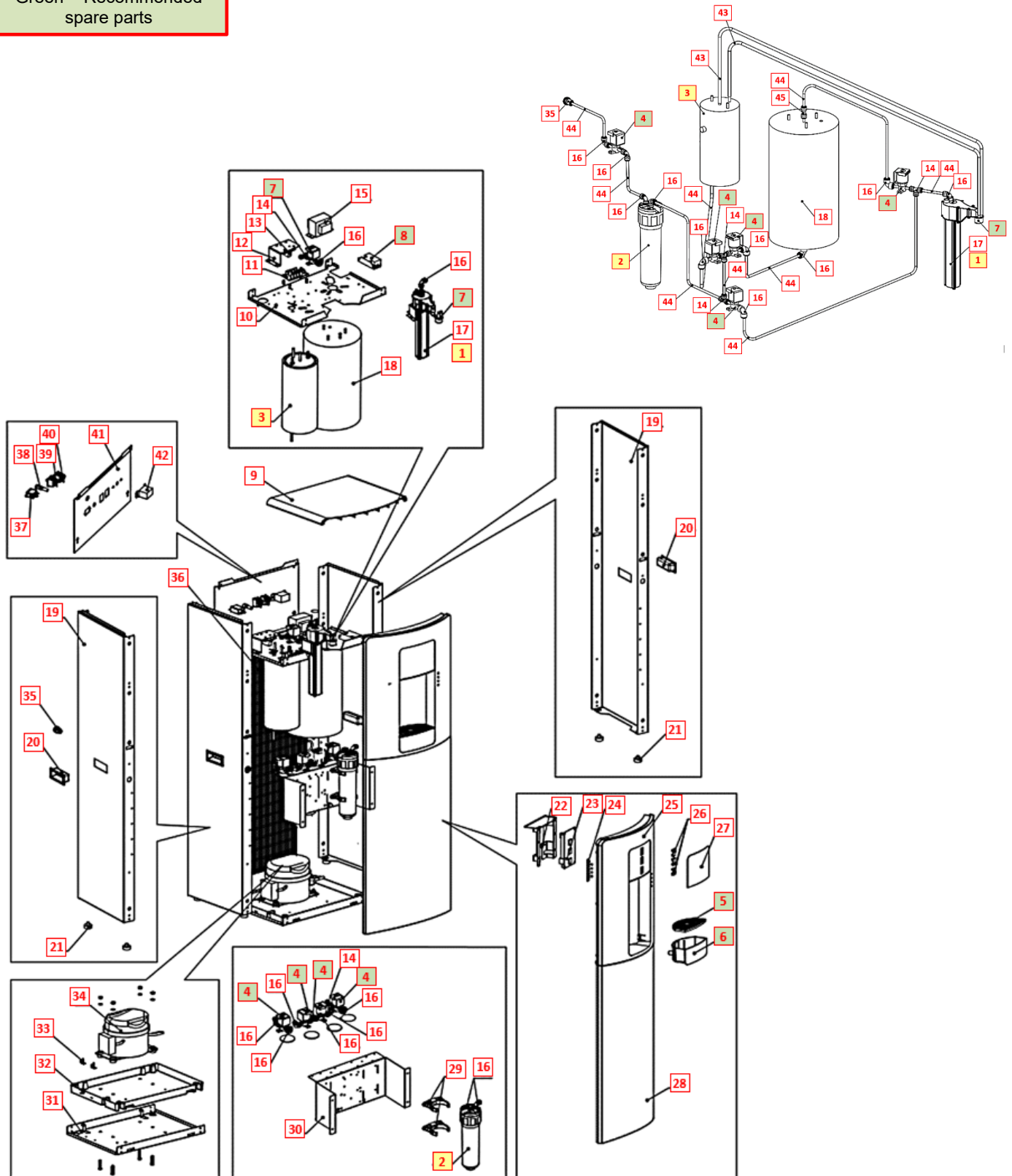
### NOTE:

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**.

## WL380 PARTS DRAWING

Yellow = Consumables  
Green = Recommended spare parts

### Wetted Parts



## WL380 PARTS LIST

No	Part No	Description	WLCP Part No.	Stocked?	
<b>Consumables</b>					
1	10-8075	13W UV Lamp Assembly	CT-2090-C	Yes	
2	FT-0035-IL-WLT	GAC Filter - 10" Carbon Activated Inline Filter – <b>Optional</b>	FT-0035	Yes	
	FT-0063-IL-WLT	Carbon Block - 10" CBC 1 Micron Lead and Cyst Reduction Inline Filter – <b>Optional</b>	FT-0063	Yes	
	FT-0053-IL-WLT	Sediment Block - 10" Sediment 20 Micron Inline Filter – <b>Optional</b>	FT-0053	Yes	
3	10-4029	Hot Tank 120V/500W 1.6L with thermistor <u>*Thermistor not sold separately - sold with Hot Tank only</u> <i>Replace every 3-5 Years</i>	HT-3024	Yes	
3.1	12-1360	Overload with Manual reset - 221° F (105° C) <i>Recommend stocking 2 each per every 10 units purchased</i>	HT-3012	Yes	
<b>Recommended Spare Parts</b>					
4	12-1500	Solenoid Valve DC24V 1000mm <i>Recommend stocking 2 each per every 10 units purchased</i>	PU-4016	Yes	
4.1	CU-0001	Solenoid Cushion <i>Recommend stocking 2 each per every 10 units purchased</i>	CU-0001	Yes	
5	NA	Drip Tray Grill <i>Recommend stocking 4 each per every 10 units purchased</i>	PL-0029-L00-BL	No	
6	NA	Drip Tray Body <i>Recommend stocking 4 each per every 10 units purchased</i>	PL-0049-L00-BL-WLG	No	
7	NA	Hot Water Faucet <i>Recommend stocking 2 each per every 10 units purchased</i>	PL-1382	No	
8	12-8315	UV 15 W 120V/60Hz Electronic Ballast <i>Recommend stocking 2 each per every 10 units purchased</i>	EN-0008-L01-00	Yes	

Not Shown	01-2076	ScaleKleen <i>Recommend stocking 2 each per every 10 units purchased</i>	NA	Yes	
<b>Remaining Parts</b>					
9	NA	Black Top Cover	PL-1381	No	
10	NA	Upper Shelf	ST-0034-L00-00	No	
11	NA	Leak Detection PCB	EN-6111-A	No	
12	NA	3minutes UV Timer PCB Fixing Bracket	ST-8287	No	
13	NA	Relay PCB	EN-0010-L00-00	No	
14	Purchase from John Guest	JG Equal Tee Connector 1/4" (PI0208S)	PU-4011-A	No	
15	No	Power Transformer	EL-0016-L00-00	Yes	
16	Purchase from John Guest	JG Equal Elbow Connector 1/4" (PI0308S)	PU-4008	No	
17	NA	Firewall Assembly	FW-0015-L00-00	No	
17.1	NA	Firewall Bracket	FU-0002-B	No	
17.2	FW-0008-L00-00	Quartz Spiral – 22 Turns	FW-0008-L00-00	Yes	

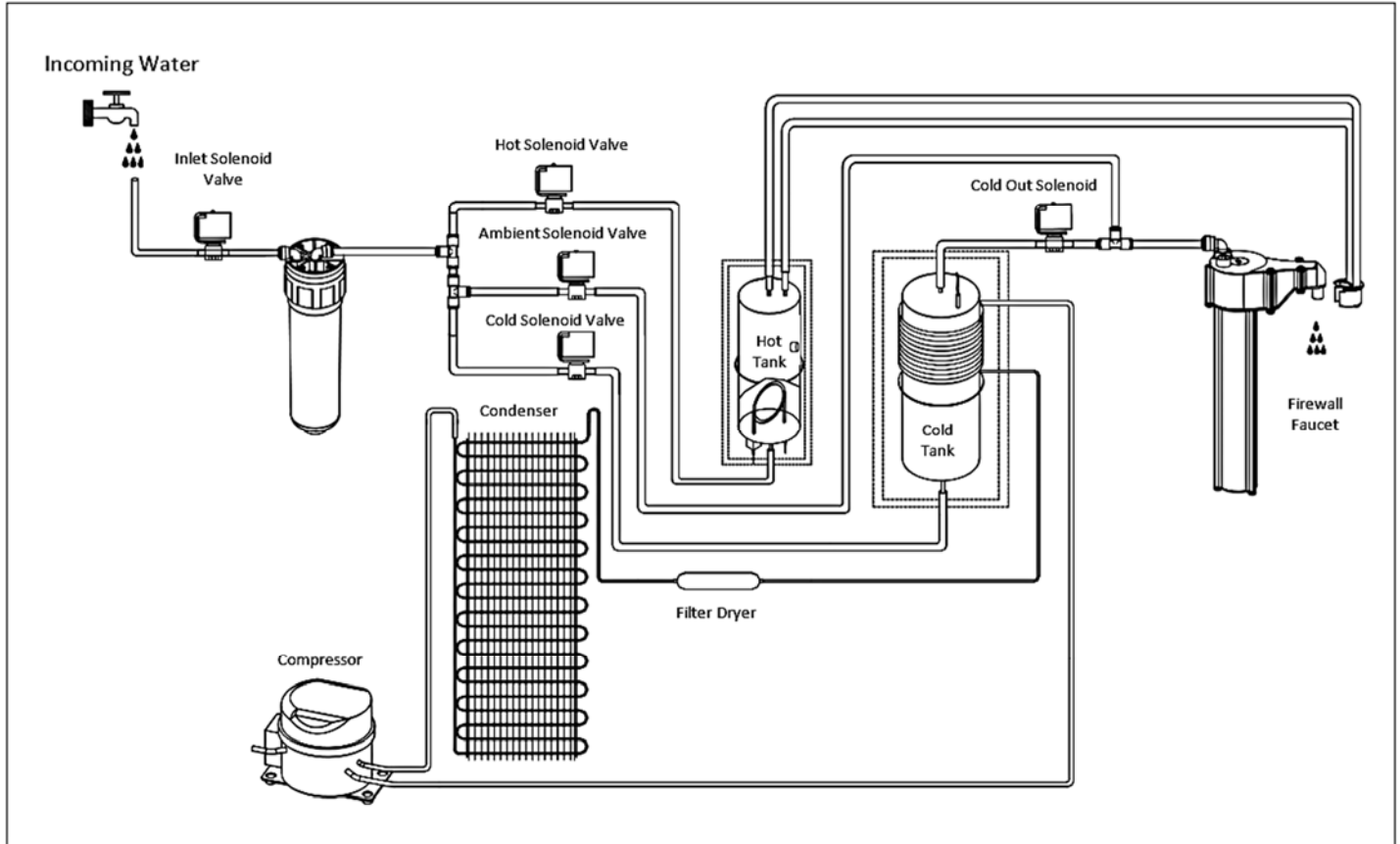
17.3	NA	Firewall UV Fixing Rubber (Bung)	CT-2078-B	No	
17.4	AK-0064	UV Sensor with Wire	AK-0064	Yes	
17.5	NA	Spiral Rubber Buffer	FW-0020-L00-00	Yes	
18	NA	Cold Tank Assembly (4Liters, No UV holder, No sub-tank)- FW	CT-2017-A	No	
19	10-4002	Side Panel	ST-8225	Yes	
20	10-4004	Black Plastic Handle	PL-1120	Yes	
21	10-3083	Unit Rubber Feet	ST-8016	Yes	
22	NA	Display PCB Cover Bracket	ST-8340	No	
23	NA	Display PCB	EN-0024-L00-00	No	
24	NA	LED PCB	EN-6139	No	
25	NA	Black Top Front Panel	PL-0017-L00-BL	No	
26	NA	Top Front Button Cover	PL-1379	No	
27	NA	Hot - Cold - Ambient Label	LP-0309-L00-00	No	



28	NA	Front Bottom Panel	PL-0020-L00-BL	No	
29	20-1010	2.8" Filter Clip	PU-4161	Yes	
30	19-1016	Filter Bracket	ST-8206-CN	Yes	
30.1	14-5011	Drain valve and Cap 5/16"	CT-2028 and CT-2031-A	Yes	
30.2	NA	Drain Valve Clamp 1/4"	CT-2044	No	
31	12-1602	Bottom Shelf	ST-8035	Yes	
32	NA	Leak Tray	PL-0095-L00-00	No	
33	12-3180	Leak Containment Tray Clip (sensor 0.5mm)	ST-8207-CN	Yes	
34	10-2200	Compressor (R134a 1/8HP) 110V/60Hz	CO-9001-A	Yes	
34.1	10-3003	Compressor Starter Relay	CO-9016	Yes	
34.2	10-5018	Compressor Overload	CO-9015	Yes	
34.3	12-1001	Filter Dryer	CO-9008	Yes	
35	10-3067	Bulkhead Union 1/4" x 1/4" John Guest P/N PI1208S	PU-4028-A	Yes	

36	12-1000	Wire Condenser	CO-9007	Yes	
37	NA	Power Socket	EL-0061-L00-00	No	
37.1	19-1015	Gasket for Power Socket	ST-8052	Yes	
38	EL-5053	Fuse Holder and Fuse 120V / 15A with One Wire	EL-5053	Yes	
38.1	10-3013	Fuse 120V / 15A	EL-5010	Yes	
39	12-5600	Red Heater and Compressor Switch	EL-5019-A	Yes	
40	10-3009	Switch - Heater/Compressor	EL-5005	Yes	
41	12-1622	Black Back Panel	ST-8028	No	
42	19-1069	Cold Tank Thermostat	CT-2070-A	Yes	
43	10-7040	Silicon Tube 5/16" for hot water	PU-4064	Yes	
44	Purchase from John Guest	JG LLD PE Tube - Blue O.D.1/4" John Guest P/N PE-08-BI-1000F-B	PU-4031-A	No	
45	Purchase from John Guest	JG Equal Straight Connector 1/4"(PI0408S)	PU-4010	No	
Not Shown	AK-0014-B	Flow Restrictor 1.8mm Hole <b><u>Before inlet to Cold Tank</u></b>	AK-0014-B	Yes	
Not Shown	10-3007	Power Cord 120V – 1840 mm	EL-5001-B	Yes	

## WL380 FLOW DIAGRAM



## WL380 PRINCIPLES OF OPERATION

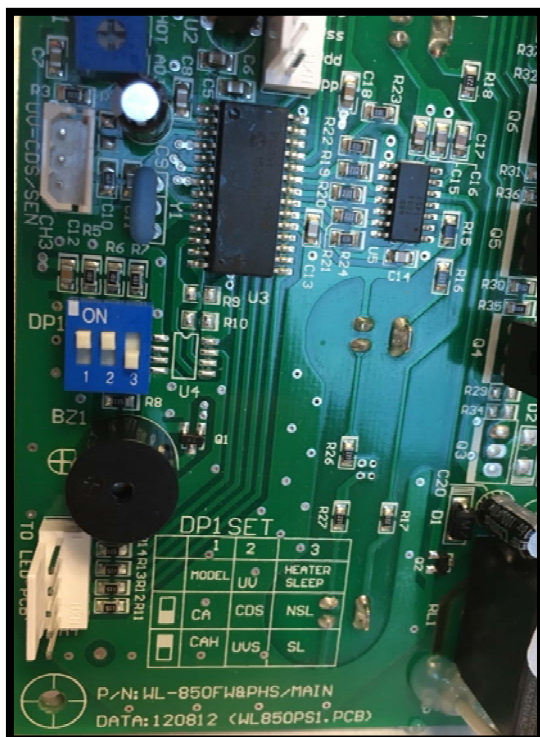
The **WL380** is a pressure fed machine that utilizes mains supply to push water through the unit to the faucet. The **WL380** provides Cold, Ambient, Hot and Extra Hot water with a modern touch-to-dispense interface. The **WL380** has a single cold tank 4-liter (1-gallon) and high efficiency cooling system. Filtration can be customized to meet your specific water conditions.

The patented Firewall purification system purifies the ambient and cold water before it is dispensed while providing a sanitary faucet and preventing outside contamination back into the water circuits. Our advanced UV sensor measures the dose of UV through the water stream to guarantee the safety of the water. The Firewall purification system will not allow unsafe water dispense and alarms the user if the system is inactive.

## WL380 PROGRAMING

Factory Default Settings shown in bold:

- **Cold Temp Set = 41° F (5° C)** – Adjustable Thermostat on back access panel. Do not turn down past 36°F to avoid freezing risk.
- **Hot Temp Set = 189° F (87° C)** – Not Adjustable. Advanced thermistor technology used to provide precise accuracy and extend life of the hot tank control system.
- **Extra Hot Temp Set = 203° F (95° C)** – Not Adjustable.
- **Leak Detector = Enabled** – WL380 comes with built in leak tray in the base with leak detector pins. Water in tray will activate leak detection alarm and shut off inlet solenoid to prevent leaks.



- **Energy Saver Mode (Heater Sleep)**  
Unit comes set with **energy saver or heater sleep mode enabled (SL)**. Heater will be disabled after 3 hours of machine inactivity (no icons selected). Turn Energy Saver off by moving pin 3 on dip switch 1 (DP1) located on front printed circuit board (PCB) to the NSL (no sleep) position.
- **Cold, Ambient, Hot (CAH) or Cold, Ambient (CA)**  
**WL380** hot water function can be disabled and the unit converted from a **Cold, Ambient, Hot, Extra-Hot (CHA)** to a Cold and Ambient (CA) only by moving pin 1 on dip switch 1 (DP1) located on front printed circuit board (PCB) to CA position.
- **UV Sensor Setting CDS or UVS**  
Set to UV Sensor (**UVS**) for UV function. Do not change factory setting. Pin 2 on DP1 should be UVS.

## WL380 ELECTRICAL DIAGRAM

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

