

SERVICE REQUIREMENTS

⚠ WARNING! *Read and understand the contents of this manual before attempting to service WL2FLT Water Treatment System. 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 12 months.

⚠ WARNING! *UV-C EMITTER (UV LAMP). This appliance contains a UV-C emitter (UV Lamp). UV-C radiation may, even in little doses, cause harm to the eyes and skin. Unintended use or damage to the housing may result in the escape of dangerous UV-C radiation. Never operate the UV-C emitter if damaged or removed from enclosure. Do not touch or look directly into the faucet.*

⚠ 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 Quartz Spiral 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 Spiral with bare hands. UV Lamp and quartz spiral must be free of oils and contaminants to ensure proper operation. Use a soft non-abrasive cloth to clean.*

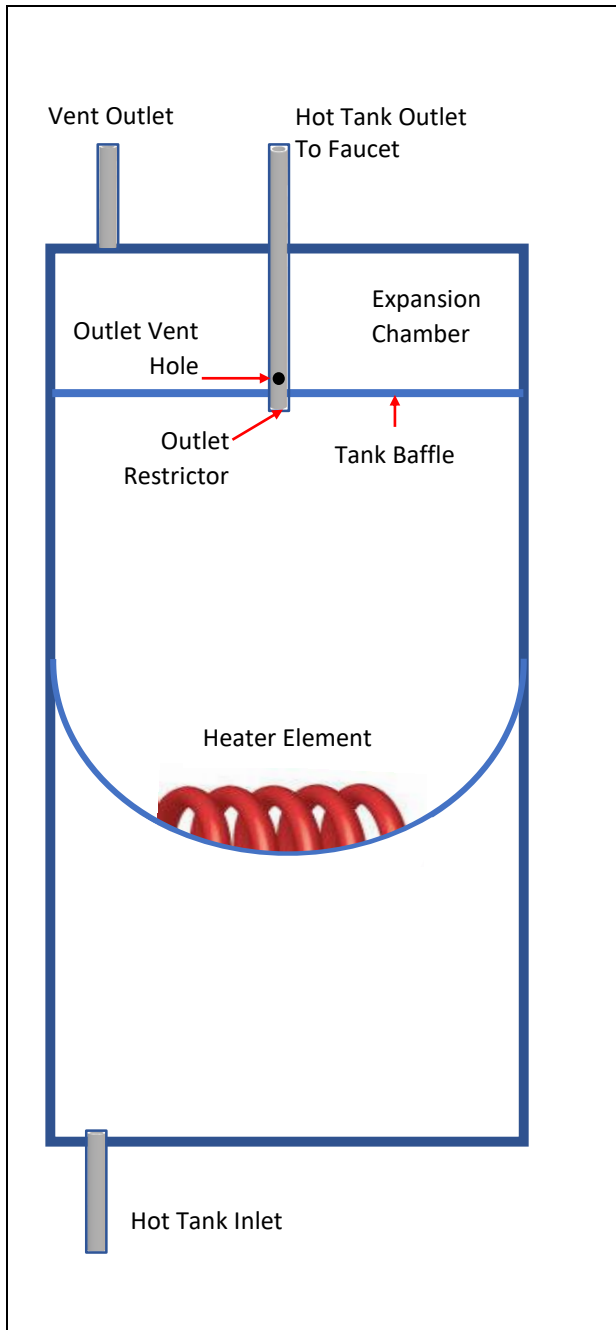
4. Sanitize the Cold Tank per instructions in the pre-installation procedures.

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 OVERLOAD OR HIGH LIMIT SAFETY

1.	Red Compressor/Heater Switch must be in the <i>O=OFF</i> position	
2.	Unplug the Power Cord from rear of WL2FLT Water Treatment System .	
3.	Remove the Side Panel by removing the Front Hatch and Side Panels.	
4.	Locate the Hot Tank	
5.	Press the Reset Button	
6.	Replace the Lower Front Panel.	
7.	Plug in the Power Cord.	
8.	Turn on the Red Compressor / Heater Switch <i>I=ON</i> position The Hot and Cold Tanks must be filled with water BEFORE turning on the Red Heater and Compressor Switch.	
9.	Verify the cooler is fully operational before installing it at the customers' site.	

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 are 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 **WL2FLT 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 basic 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 **WL2FLT Water Treatment System**.
7. Flush the Hot Tank by dispensing hot water until water runs clear.
8. Once clear Water dispenses from the faucet the Hot Tank has been descaled. Always ensure the **WL2FLT Water Treatment System** is performing to the customer's satisfaction.

⚠ WARNING! HOT WATER. *The WL2FLT Water Treatment System produces Hot Water up to 86°C (187°F). Water above 52°C (125°F) can cause severe burns or scalding. Hot water should be dispensed carefully into insulated container to avoid injury.*

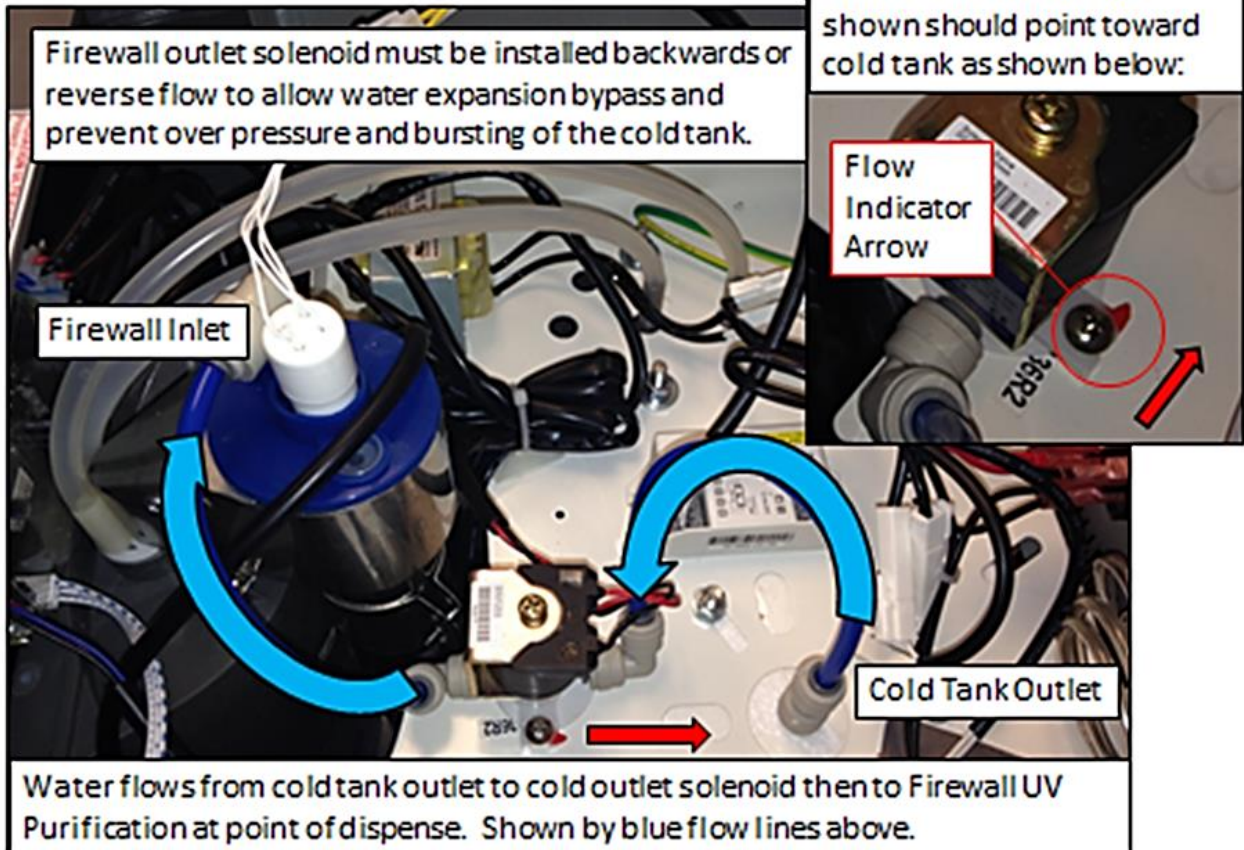
⚠ CAUTION! MUST REPLACE HOT TANK 3-5 YEARS DEPENDING ON USAGE. *The Hot Tank and its controls must be replaced a minimum of every three to five years to ensure efficient and dependable operation.*

⚠ 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.*

FIREWALL™ OUTLET SOLENOID – REVERSE FLOW ORIENTATION

Firewall Outlet Solenoid – Reverse Flow Orientation

Firewall outlet solenoid must be installed backwards or reverse flow to allow water expansion bypass and prevent over pressure and bursting of the cold tank.



ADJUSTING COLD SET POINT

Cold Water Temperature – Factory Set Point is 41°F (5°C) and can be adjusted to 34°F - 54°F (1.1°C to 12.2°C)

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



Remove the red portion of the Cold Tank Temperature label to access the adjustment screw.

The factory set point is ~41°F and is indicated by the dot on sheet metal.



Turning the adjustment screw clockwise to lower the set point temperature.

Do not adjust past the “Max Cold” position at 3:00 position to avoid freezing the cold tank.



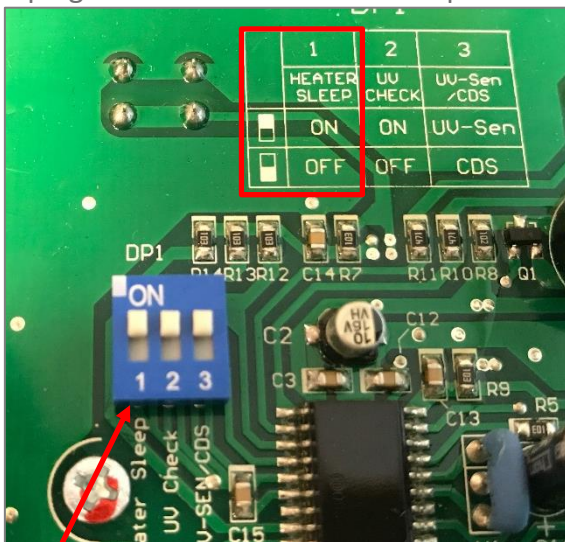
Turning the adjustment screw counter-clockwise to raise the set point temperature.

PROGRAMMING INSTRUCTIONS

DISABLING ENERGY SAVING SLEEP MODE

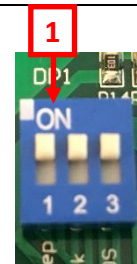
All **WL2FLT Water Treatment Systems** come from the factory with Energy Saving Sleep Mode engaged to meet the Energy Star Certification requirements. Energy Saving Sleep Mode disables the heater circuit if the unit has not been used for a continuous 3 hour or longer period. Selecting any button "wakes up" the **WL2FLT Water Treatment System** and turns the heater circuit back on. The hot tank will typically take less than 10 minutes to heat the water from ambient to the 85°C (185°F) set point.

Unplug Power Cord and remove Top Cover to access back side of the Display PCB.

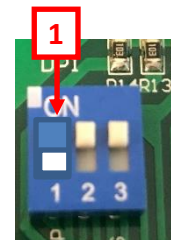


WL2FLT Water Treatment Systems comes with the Energy Saving Sleep Mode "ON" - the Default Position.

DIP 1 in the "ON" position (up).



Deactivate the Energy Saving Sleep Mode by moving DIP 1 in the "OFF" position (down).



REPLACEMENT COMPONENTS - CONSUMABLES

Component	WLCP PN	Frequency of Replacement
15W LTFW XTM UV Lamp Assembly	12-8310	Every 12 months, or as required Factory Part No CT-2085-IA0-00
Hot Tank 120V/500W - 1.6L with Thermistor	10-4029	Replace every 3 to 5 years depending on usage. Factory Part No HT-3024
Sediment Filter - 10" 20 Micron Inline Filter	FT-0053-IL containing FT-0055 Filter Element	Every 12 months or every 1,250 gallons. Factory Part No FT-0053-IL Assembly containing FT-0055-WLT Filter Element
1-micron 10" Inline CBC Filter for CTO, Lead, Cyst and Asbestos Reduction (Carbon Block) NSF 53 Required for NSF Certification	FT-0014-IL containing FT-0007 Filter Element	Every 12 months or every 1,250 gallons. Factory Part No FT-0014-IL Assembly containing FT-0007-WLT Filter Element
10-micron 10" Inline GAC Filter for Taste and Odor Reduction (Grannual Activated Carbon) NSF 42 Required for NSF Certification	FT-0035-IL containing FT-0038 Filter Element	Every 12 months or every 1,250 gallons. Factory Part No FT-0035-IL Assembly containing FT-0038-WLT Filter Element

* One pre-installed. One required for NSF-42 / NSF-53 Certification.

⚠ CAUTION! Use only Waterlogic Replacement parts that can be obtained from *Waterlogic* or an *Authorized Waterlogic Dealer*, failure to do so will void the Warranty.

See **Installation and Service Manual** for additional information.

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 Installation and Service Manual for further details.

Surface Cleaning

Clean on a regular basis with damp lint free cloth. Never use harsh chemicals (alcohol or acid based) or abrasive agents on any part of the product to avoid damage. A mild cleaner such as Simple Green or equivalent is recommended.

DISPOSAL

End of Life

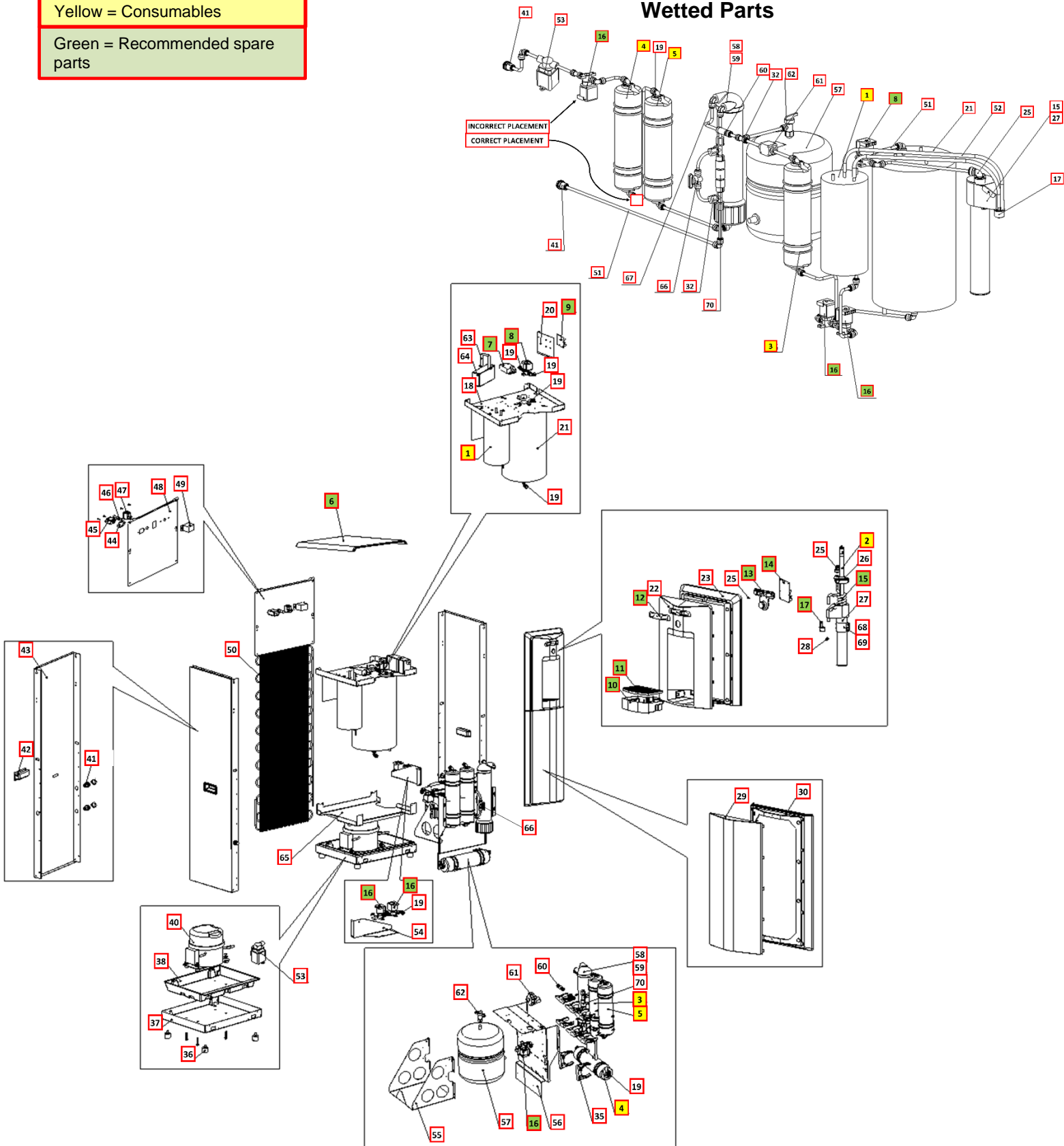
At the **end of this product's life**, ensure that it is disposed of in an environmentally friendly manner which is fully compliant **with all Federal/State/Local Requirements and Guidelines**. Do not dispose of this appliance with normal household or business waste.

WL2FLT TOWER LAYOUT DRAWING AND PARTS LIST

Yellow = Consumables

Green = Recommended spare parts

Wetted Parts



WL2FLT TOWER LAYOUT DRAWING AND PARTS LIST





No	WLUSA Part Number	Description	Factory Part Number	Stocked?	
Consumables					
1	10-4029	Hot Tank 120V/500W - 1.6L with Thermistor	HT-3024	Yes	
2	12-8310	15W X UV Lamp Assembly	CT-2085-LA0-00	Yes	
3	FT-0035	GAC Filter - 10" Carbon Activated Inline Filter	FT-0035-IL-WLT	Yes	
4	FT-0053	Sediment Filter - 10" Sediment 20 Micron Inline Filter	FT-0053-IL-WLT	Yes	
5	FT-0014	1-micron 10" Inline CBC Filter for CTO, Lead, Cyst and Asbestos Reduction – Carbon Block	FT-0014-IL-WLT	Yes	
Not shown	01-2076	Scale Kleen	NA	Yes	
Recommended Spare Parts					
1.1	12-1360	Overload with Manual reset - 221°F (105°C) <i>Recommend stocking 2 each per 10 units purchased</i>	HT-3012	Yes	
1.2	12-6900	Overload Metal Cover <i>Recommend stocking 2 each per 10 units purchased</i>	ST-8290	Yes	
6	PL-0191-L00-BL	Black Top Cover <i>Recommend stocking 2 each per 10 units purchased</i>	PL-0191-L00-BL	Yes	
7	EN-0008-LA1-00	13W / 15W 120V / 60Hz Electronic FX Ballast <i>Recommend stocking 2 each per 10 units purchased</i>	EN-0008-LA1-00	Yes	
8	PU-4017	Solenoid Valve DC24V 500mm <i>Recommend stocking 2 each per 10 units purchased</i>	PU-4017-B	Yes	
9	EN-6134	FW2 Extra hot Main PCB <i>Recommend stocking 2 each per 10 units purchased</i>	EN-6134	Yes	
9.1	10-3017	Plastic PCB Support <i>Recommend stocking 2 each per 10 units purchased</i>	EN-6059	Yes	
10	PL-0194-L00-BL	Black Drip Tray Body <i>Recommend stocking 4 each per 10 units purchased</i>	PL-0194-L00-BL	Yes	
11	PL-0195-L00-BL	Black Drip Tray Grill <i>Recommend stocking 4 each per 10 units purchased</i>	PL-0195-L00-BL	Yes	

12	LP-0422-L00-00	Hot and Cold User Interface Label <i>Recommend stocking 2 each per 10 units purchased</i>	LP-0422-L00-00	Yes	
13	PL-0199-L00-00	Hot and Cold Dispense Silicon Button Mat <i>Recommend stocking 2 each per 10 units purchased</i>	PL-0199-L00-00	Yes	
14	EN-0147-L00-00	WL2FWFL Display PCB H&C w/ Pedal – Ver. 2 <i>Recommend stocking 2 each per 10 units purchased</i>	EN-0147-L00-00	Yes	
15	12-8305	Quartz Spiral UV Faucet <i>Recommend stocking 2 each per 10 units purchased</i>	FU-0007	Yes	
16	PU-0017-L00-00	Solenoid Valve MS DC SWV24-01 <i>Recommend stocking 2 each per 10 units purchased</i>	PU-0017-L00-00	Yes	
17	12-8370	Hot Water Faucet <i>Recommend stocking 2 each per 10 units purchased</i>	PL-1351	Yes	
Remainder of Parts					
18	12-8003	Upper Shelf	ST-8136-R2	Yes	
19	Purchase from John Guest	JG Equal Elbow Connector 1/4" John Guest P/N PI0308S	PU-4008	No	
20	12-5245	Main PCB Bracket	ST-8165-CN	Yes	
21	CT-2017-A	Cold Tank Assembly - 4Liters	CT-2017-A	No	
22	PL-0202-L00-BL	Black Front Top Panel	PL-0202-L00-BL	Yes	
23	PL-0192-L00-SI	Silver Front Top Panel Trim	PL-0192-L00-SI	Yes	
24	EL-0148-L00-00	LED Light Pipe	EL-0148-L00-00	Yes	
25	Purchase from John Guest	JG 3/8" x 1/4" Reducing Elbow (PI211208S)	PU-4137	No	

26	12-8320	Firewall UV Lamp Rubber	CT-2088	Yes	
27	FW-0027	Firewall Mark IV Stainless Assy No internal components	FW-0027-L00-00	Yes	
28	AK-0064	UVC Sensor Assembly	AK-0064	Yes	
29	PL-0301-L00-00	WL2FLT Front Down Panel	PL-0301-L00-00	Yes	
30	PL-0302-LA0-00	WL2FLT Front Down Trim	PL-0302-LA0-00	Yes	
31	Purchase from John Guest	JG Reducing Elbow Connector 5/16" * 1/4" (PI211008S)	PU-4007	No	
32	Purchase from John Guest	JG Equal Tee Connector 1/4" (PI0208S)	PU-4011	No	
33	CU-0001	Solenoid Cushion	CU-0001	Yes	
34	12-8005	Filter Bracket	ST-8138	Yes	
35	20-1010	2.8" Filter Clip	PU-4161	Yes	
36	ST-8167CN	Unit Rubber Feet	ST-8167CN	Yes	
37	12-8004	Bottom Tray	ST-8137	Yes	
38	12-3155	Leak Tray	PL-1294-A	Yes	
39	12-3180	Leak Containment Tray Clip (sensor 0.5mm)	ST-8207-CN	Yes	

Verify compressor in machine before ordering parts as the Compressor P/N CO-0020-L00-00 and 10-2200 (CO-0001A) and related parts are not interchangeable.

CO-0020-L00-00 Compressor (China model)

40A.1	CO-0020-L00-00	LG Compressor 120V R134A CSB035LJCM	CO-0020-L00-00	Yes	
40A.2	CO-0019-L00-00	Compressor Capacitor	CO-0019-L00-00	Yes	
40A.3	ST-0216-L00-00	Capacitor Bracket	ST-0216-L00-00	Yes	
40A.4	CO-0017-L00-00	PTC Relay	CO-0017-L00-00	Yes	
40A.5	CO-0018-L00-00	Overload Protector	CO-0018-L00-00	Yes	

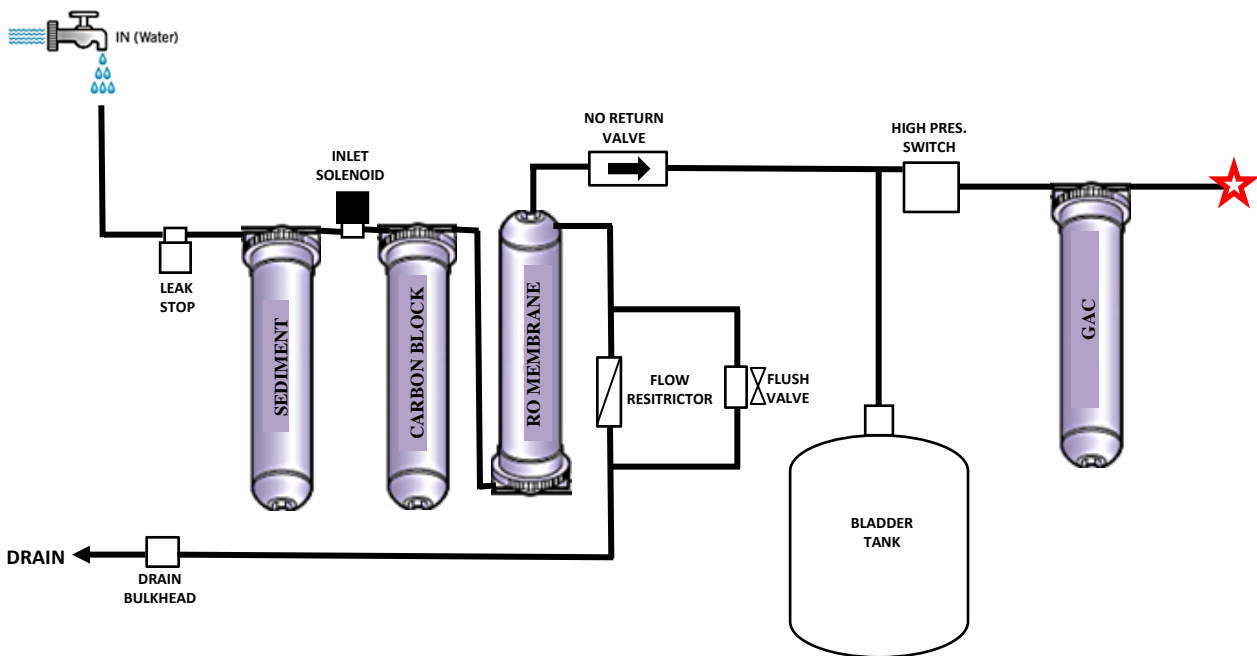
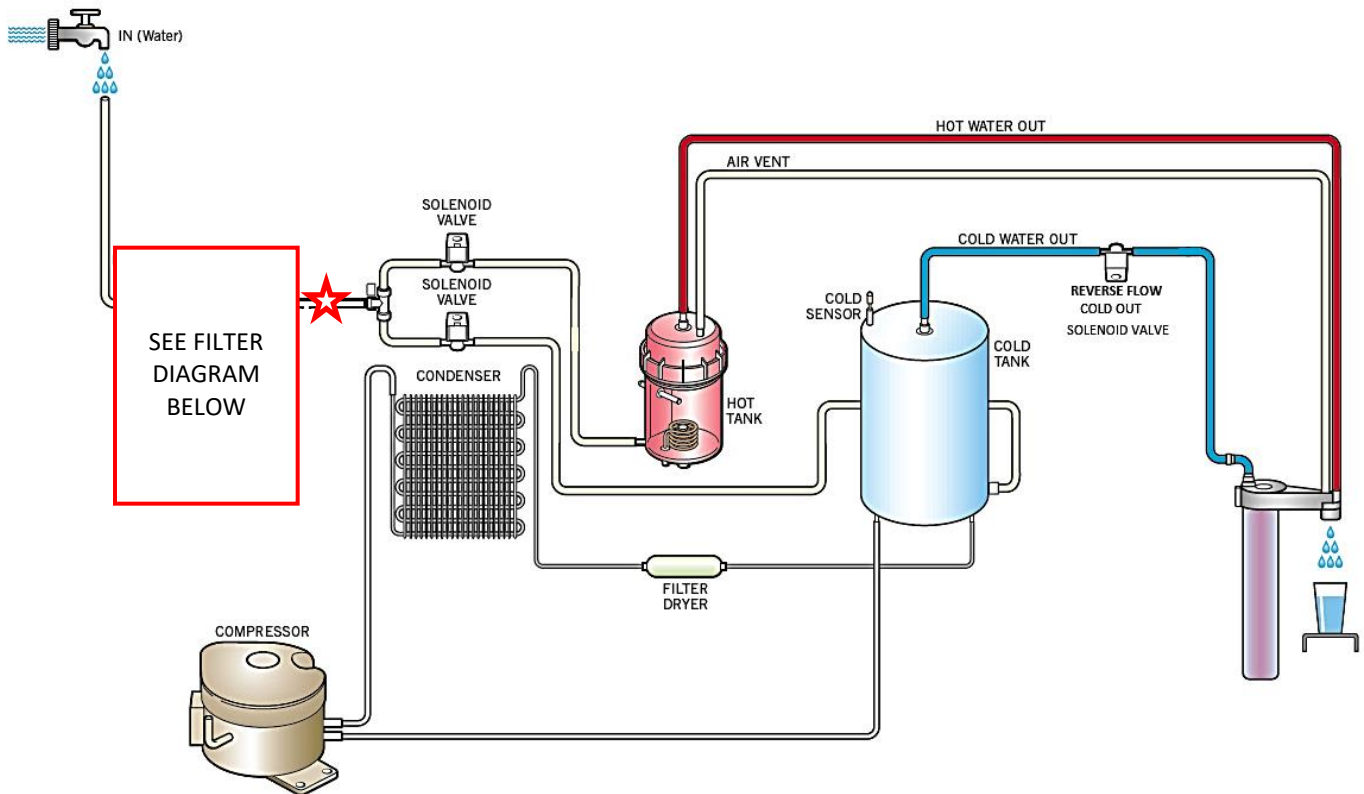
CO-xxxx-L00-00 Compressor (USA model)

40B.1	CO-0043-I00-00	LG Compressor 120V R134A CSB035LJCM	CO-0043-I00-00	Yes	
40B.2	ST-0216-L00-00	Capacitor Bracket	ST-0216-L00-00	Yes	
40B.3	CO-SS01-L00-00	PTC Relay	CO-SS01-L00-00	Yes	
40B.4	CO-SS02-L00-00	Overload Protector	CO-SS02-L00-00	Yes	
40.1	12-1001	Filter Dryer	CO-9008	Yes	
41	10-3067	Bulkhead Union 1/4" x 1/4" John Guest P/N PI1208S	PU-4028	Yes	
42	10-4004	Black Plastic Handle	PL-1120	Yes	
43	ST-0338-L00-00	Tower Side Panel (Tall) - Black	ST-0338-L00-00	Yes	
44	19-1015	Gasket for Power Socket	ST-8052	Yes	
45	19-1090	Power Line Noise Filter, ElectroMagnetic Interference filter (EMI)	EL-5029	Yes	
46	10-3014	Fuse Holder and Fuse 120V / 15A with One Wire	EL-5053	Yes	

46.1	10-3013	Fuse 120V / 15A	EL-5010	Yes	
47	12-5600	Red Heater and Compressor Switch	EL-5019-A	Yes	
48	ST-0339-L00-00	Tower Back Panel (Tall) - Black	ST-0339-L00-00	No	
49	19-1069	Cold Tank Thermostat 3°C (37.4°F)	CT-2070-A	Yes	
49.1	LP-0326	Cold Thermostat Cover Label	LP-0326-L00-00	Yes	
50	12-8102	Wire Condenser	CO-9027	No	
51	Purchase from John Guest	JG LLD PE Tube - Blue O.D.1/4" John Guest P/N PE-08-BI-1000F-B	PU-4031	No	
52	10-7040	Silicon Tube 5/16" for hot water	PL-4064-L00-00	Yes	
53	PU-0061-L00-00	Stormtech Mechanical Leak Detector	PU-0061-L00-00	Yes	
54	ST-0006-L00-WH	FW2 RO Solenoid Valve Fixing Bracket	ST-0006-L00-WH	Yes	
55	ST-0004-L00-WH	FW2 RO Bladder Tank Fixing Bracket	ST-0004-L00-WH	Yes	
56	ST-0003-L00-WH	FW2 RO Filter Bracket	ST-0003-L00-WH	Yes	
57	CT-0001-L00-00	RO Pressurized Tank (2 Gallons) – FW2 RO	CT-0001-L00-00	Yes	
58	RO-0003-A	RO Housing Micro	RO-0003-A	Yes	
59	RO-0099	RO Membrane FilmTec BW60-1812-75	RO-0099	Yes	
60	PU-4057	JG Non-Return Valve 1/4"	PU-4057	Yes	
61	RO-0024	High Water Pressure Switch	RO-0024	Yes	
62	PU-4082	JG Shut Off Valve NPT 1/4" (PPSV500822W)	PU-4082	Yes	
63	ST-8315	WL400 Adapter Bracket	ST-8315	Yes	

64	RF-0001-L00	Power Adaptor (24V) for Pump for FW2 RO	RF-0001-L00	Yes	
65	ST-0007-L00-WH	WL2000 + 2500 FS upper front Shelf (universal to ST-8136)-FW	ST-0007-L00-WH	Yes	
66	RO-0010-A	Flushing Valve Micro	RO-0010-A	Yes	
67	RO-0006-A	¼" Rigid Elbow for RO Housing Micro	RO-0006-A	Yes	
68	FU-0010	UVC Sensor Fixing Metal Bracket (w/Tube)	FU-0010	Yes	
69	FU-0011	UVC Sensor Fixing Metal Bracket Back	FU-0011	Yes	
70	RF-0004-L00-00	RO Flow Restrictor w/ Quick Fitting	RF-0004-L00-00	Yes	
Not Shown	10-3007	Power Cord 120V – 18240mm	EL-5001-B	Yes	

WL2FLT (-FZ) TOWER WATER FLOW DIAGRAM



WL2FLT ELECTRICAL DIAGRAM

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

