

## SERVICE REQUIREMENTS

**⚠ WARNING!** *Read and understand the contents of this manual before attempting to service WL500 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.

*Note: UV Lamp Sensor is temperature sensitive. During extended periods of use, especially when filling or draining the unit, when water is not being dispensed, UV Lamp Sensor can overheat, initiating a UV Fault. If this occurs, turn off the unit for 5 minutes and allow sensor to cool before resuming operation.*

**⚠ 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.*

**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.

3. Clean the 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 UV lamps.*

4. Inspect the Quartz Sleeve O-ring for wear or damage and replace as necessary.
5. Test UV Lamp and UV sensor (CDS) is working by removing the sensor from the Retaining Nut and covering the end to produce an audible alarm (continuous beep) and “UV Fault” on the display.
6. The Filters should be replaced every 6 months or 2,000 gallons, whichever comes first. Local water conditions will dictate your exact Filters requirements and service intervals. Flush 5 gallons of water through the Filters to rinse carbon fines. Do not rinse the Filters through the unit Solenoid Valve(s) and Tanks if at all possible to avoid contamination.
7. Reset Filters Life Timer if enabled. See programming instructions for details.

8. **WL500 Water Treatment System** Sparkling Tank has a Level Sensor Probe that needs to be maintained and descaled at every filter change.

**⚠ WARNING! HIGH PRESSURE COMPRESSED GAS HAZARD.** *Isolate CO<sub>2</sub> gas supply and relieve pressure in tank by opening PRV (pressure relief valve) before attempting to remove the Level Sensor Probe or any other component under pressure.*

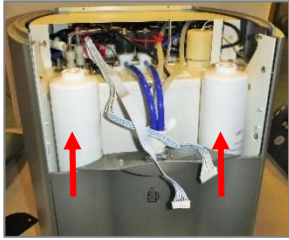
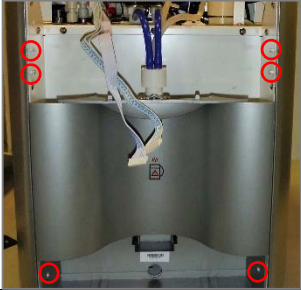


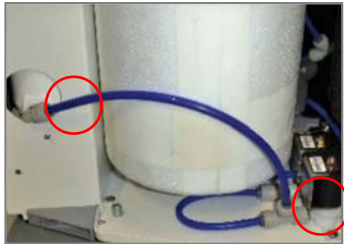

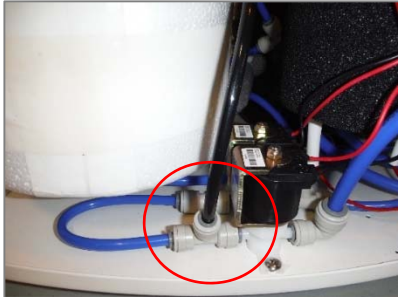
9. Ensure there is adequate (minimum of 2") clearance around the unit and clean the condenser grill and Compressor fan to provide efficient cooling system operation.
10. Test the drip tray overflow function. Clean and dry off the drip tray and sensors.
11. Sanitize the Cold and Sparkling Tanks per instructions in the pre-installation procedures.

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

12. 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.
13. Remove and clean the Faucet. Replace as needed.

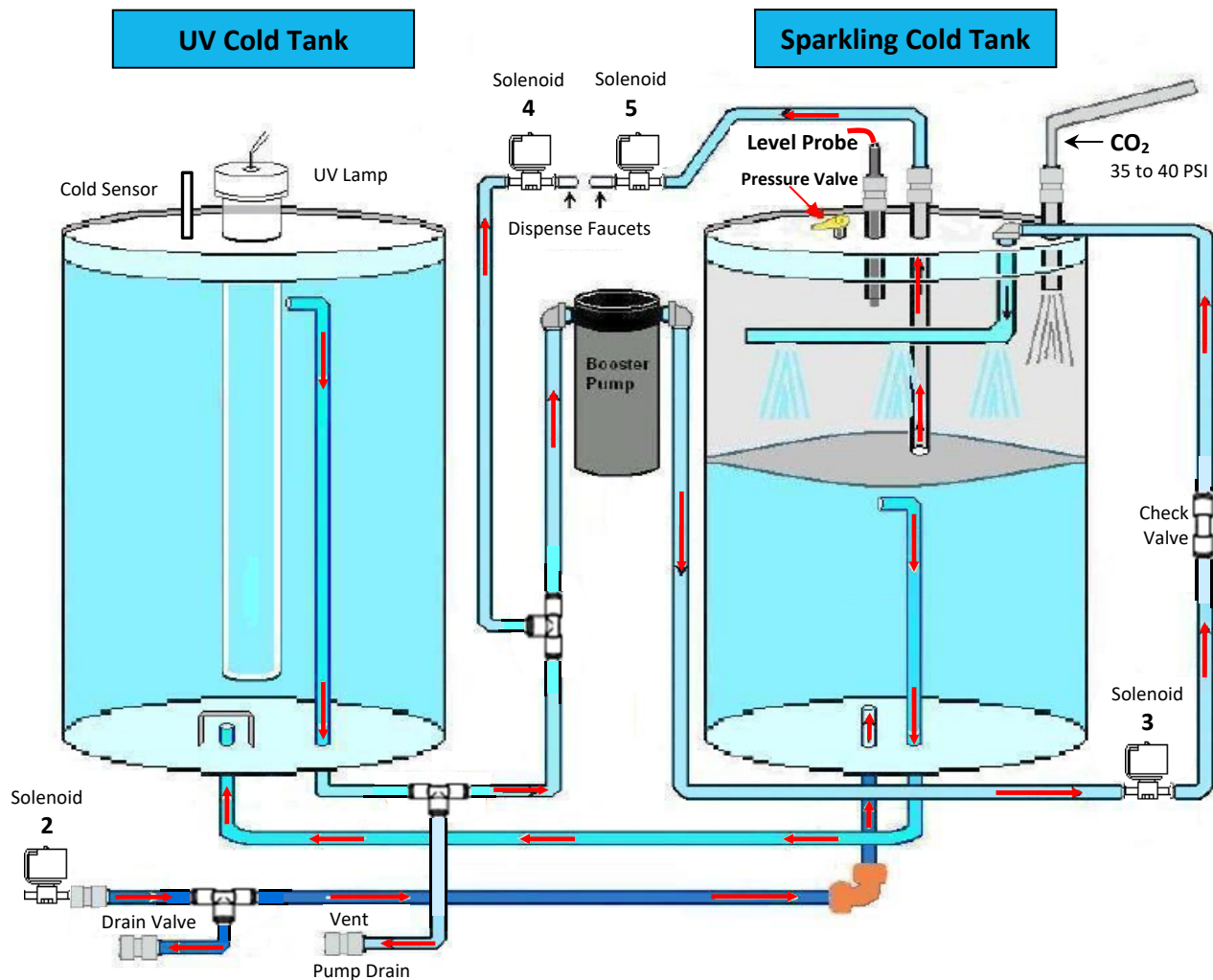
## **BYPASSING FILTERS**

Older Models of the **WL500** Water Treatment System may have filters installed and need to be bypassed.

<p>1. Remove both reverse threaded filters in unit by unscrewing filters clockwise.</p> 	<p>2. Remove 6 Screws from Front of the <b>WL500</b> Water Treatment System.</p> 
<p>3. Remove six screws from back of Unit.</p> 	<p>4. Remove both Side Panels</p>
<p>5. Remove Tube from Water Inlet</p> <p><b>LEFT SIDE OF UNIT</b></p> 	<p>6. Remove Tube from Filter to Tee at Solenoid</p> <p><b>RIGHT SIDE OF UNIT</b></p> 
<p>7. Attach new tube from Water Inlet to Tee at Solenoid. Care to be taken to ensure that the new tube does not touch the compressor, nor any sharp edges.</p> <div style="display: flex; justify-content: space-around;">   </div>	

## WL500 PRINCIPLES of OPERATION

It will take the **WL500 Water Treatment System** approximately 10 minutes to heat 1.6 liters of water in the hot circuit and 45 minutes to chill the 4 liters of water in the cold circuit to set point temperatures after all tanks have been properly filled. The **WL500 Water Treatment System** has two Cold Tanks; a 2 liter UV Cold Tank and a 2 liter Sparkling Cold Tank which is separated by a baffle/divider plate that isolates a 1 liter Sparkling Water Chamber from a 1-liter Pre-Chill Chamber within.



### Dispensing Cold Still Water from the WL500 Water Treatment System

The **WL500 Water Treatment System** defaults to cold water selection when idle. “COLD” will appear on the display and cold water will be dispensed when the Main Dispense Button is pressed. Selecting COLD (Button 1) and then pressing the Main Dispense Button opens Solenoids 2 and 4, which allows supply water to push into the Pre-Chill Chamber of the Sparkling Cold Tank. Pressurize feed water pushes into the bottom of the pre-chill chamber and forces pre-chilled water through the tall draw tube into the bottom of the UV Cold Tank. UV treated, cold, still water is forced out through the tall draw tube, through Solenoid 4, out the faucet of the dispenser. When the main dispense button is released, both Solenoid 2 and 4 will close, thus stopping cold, still water output. The **WL500 Water Treatment System** is a pressure fed unit and output is dependent on supply.

### Dispensing Hot Water from the WL500 Water Treatment System

To dispense hot water, select the small HOT (Button 3) and release. HOT will appear in the display, and press the Main Dispense Button. This will open the hot input solenoid (Solenoid 1— not shown above) and allow hot water to dispense through the faucet. The **WL500 Water Treatment System** can be programmed to default back to COLD or Sparkling after 3 seconds of inactivity as a safety feature to prevent accidental dispensing of hot water.

### Dispensing Extra Hot Water from the WL500 Water Treatment System

Typically, the **WL500 Water Treatment System** hot water temperature is set to 87.2°C (189°F). In some cases, extra hot water is desired for making soups and teas. To temporarily raise the hot water temperature, users can depress and release the EXTRA HOT select button (button 4). The word HEATING will appear in the display for 10-seconds, which will raise the hot water temperature about 2°F. If the user presses the EXTRA HOT select button again after 30-seconds have expired, the word HEATING will appear in the display, and the temperature in the Hot Tank will be raised another 2° F. Eventually, as the process is repeated, the Hot Tank temperature will reach up to 95°C (203°F), and the extra heating will be disabled. At this point, 95°C (203°F) hot water can be dispensed from the **WL500, Water Treatment System** which is a desired temperature for soups/teas. The **WL500 Water Treatment System** will return to the hot temperature set point after the extra hot water is dispensed.

### Dispensing Premium Sparkling Water from the WL500 Water Treatment System

To dispense sparkling water, press and release Sparkling (Button 2). SPARKLING will appear in the display. From this point, the user has 3-seconds to press the Main Dispensing Button for Premium Sparkling Water. The unit will default back to COLD water after 3 seconds unless the Default Set is changed to Sparkling. (See Programming Section)

When the Main Dispensing Button is pressed, Solenoid 5 will open, and the CO<sub>2</sub> gas supply from the bottle will push sparkling water out of the sparkling water chamber to the faucet. The CO<sub>2</sub> supply is what forces sparkling water out of the Sparkling Chamber. The sparkling water chamber is 1 liter in size and a maximum of 1 liter of sparkling water can be dispensed to the glass at a time. Once the Sparkling Tank empties of sparkling water, only CO<sub>2</sub> gas will dispense to the glass. At this point, the main dispensing button must be released to allow the **WL500 Water Treatment System** to make another batch of Premium Sparkling Water.

When the Main Dispensing Button is released, Solenoid 2 and 3 will open, and the Booster Pump will start the *Mizzling Process*. The Booster Pump will draw cold, still water from the Cold Tank, forcing that water through Solenoid 3 and the Check Valve into the Spray Header inside of the Sparkling Chamber. The spray will enter the Sparkling Chamber as a fine mist that will absorb the CO<sub>2</sub> gas that is present in the chamber. Once the Sparkling Tank fills with water, the Level Probe mounted in the top of the Sparkling Tank will detect the water and signal the PCB to shut down the Booster Pump, as well as close Solenoid 2 and 3. Note that the Booster Pump can supply this spray up to approximately 70 psi, if the CO<sub>2</sub> gas pressure is too high, the Booster Pump will not be able to overcome the gas pressure, and will “dead-head”. If the booster pump runs for 10 minutes without a signal from the level sensor, the PCB will shut down the sparkling water process and signal a NO WATER SUPPLY FAULT will be displayed.

Once the level sensor detects the tank is full of water, the PCB will shut down sparkling water generation (*Mizzling Process*). The **WL500 Water Treatment System** will return to the COLD default selection after 3 seconds. Cold and Hot water can be dispensed while sparkling water is being generated. The sparkling water generation will stop as soon as sparkling water is dispensed or the chamber fills. The **WL500 Water Treatment System** will make 1 liter (34 ounces) of sparkling water in approximately 1 minute, 20 seconds. Typically, users will only dispense up to ½ liter (17 ounces) of sparkling water at a time, and the **WL500 Water Treatment System** takes about 40 seconds to regenerate sparkling water tank accordingly.



**Waterlogic WL500 Water Treatment System** produces Premium Sparkling Water which is made in a batch and contains a fine, dense carbonation as compared to some “soda water” products. Optimal sparkling water is generated with cold water under 7.8°C (46°F).

**WL500 Water Treatment System** Sparkling Level Sensor Probe requires inspection and service. See Service Section.

#### [WL500 Water Treatment System Energy Saving Sleep Mode](#)

The **WL500 Water Treatment System** has programmable Energy Saving Sleep Mode. When Energy Saving Sleep Mode is ON the **WL500 Water Treatment System** will shut down the heater circuit to conserve energy after the machine is idle for 3 hours. The heater circuit will awake once any button is depressed and it will reheat the Hot Tank to set point temperature. “ENERGY SAVING SLEEP MODE” will be displayed. Always check the Energy Saving Sleep Mode setting if unit does not produce hot water as expected.

#### [WL500 UV Protection](#)

The **Waterlogic WL500 Water Treatment System** contains a germicidal ultraviolet (UV) lamp that sterilizes water in the Cold Tank and requires annual replacement.

The **WL500 Water Treatment System** has a UV CDS Sensor located in the Cap of the UV Tank. UV Fault Mode Protection will alert the user with a 20 second audible alarm and display UV FAULT on screen when UV light is not detected. UV Fault Mode Protection will shut off Cold and Sparkling water to avoid potentially dispensing unsafe water.

## **WATERLOGIC WL500 PREMIUM SPARKLING OVERVIEW**

**Waterlogic WL500 Water Treatment System** produces Premium Sparkling Water which is made in a batch and contains a fine, dense carbonation as compared to other “soda water” products in the market. Optimum sparkling water is generated in the **WL500 Water Treatment System** with 5°C (41°F) cold water and food grade CO<sub>2</sub> at 43.5 psi (3 Bar).

Please ensure customer’s carbonation expectations are clear before installing a **WL500 Water Treatment System**. Waterlogic Premium Sparkling Water is very similar to Perrier and Pellegrino.

The premium fine dense sparkling water produced by the **WL500 Water Treatment System** may not meet user's expectations if they are looking for large bubble soda stream type of carbonation.

A blind taste test using Pellegrino/Perrier is a great way to demonstrate the expectations and quality of the Waterlogic Premium Sparkling Water. Open two bottles and empty one and fill with Premium Waterlogic Sparkling Water from a freshly regenerated tank operating at optimum conditions (41°F / 43 psi). Recap both and mark the bottles accordingly. Ensure the bottles are sampled at the same temperature by refrigerating if necessary for later use and comparison. Most users will prefer the great taste of the Waterlogic Premium Sparkling Water at a fraction of the cost of the bottled counterparts.

You may purchase a carbonation tester from a company such as Taprite to measure the level of carbonation if you wish to quantify the results and check the output of the **WL500 Water Treatment System**. The level of carbonation is very consistent as long the test conditions are repeatable and proper testing procedures are followed.

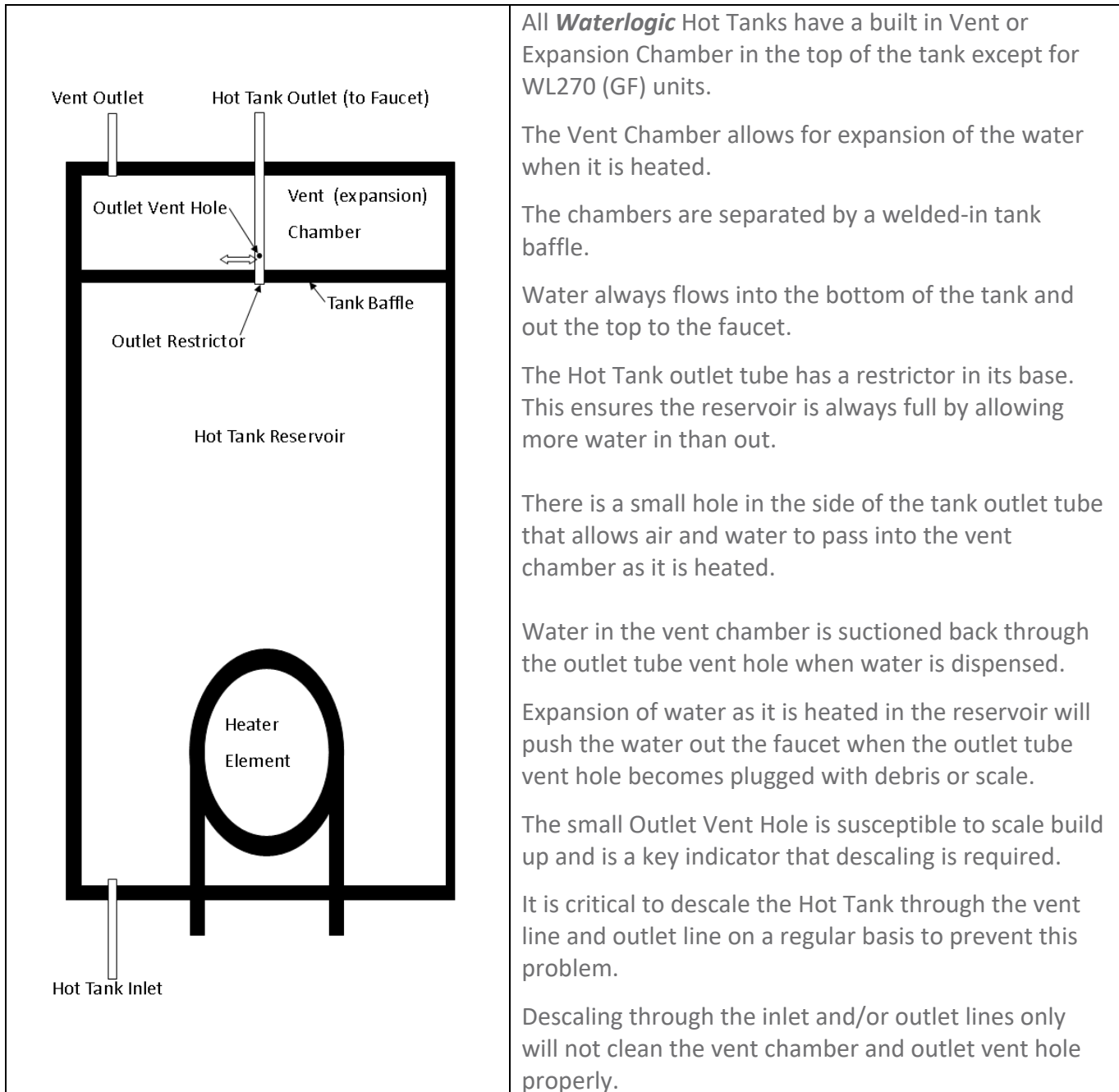
Temperature of the water in the **WL500 Water Treatment System** has the largest impact on the taste and carbonation levels and the Cold Tank must be below 46°F (prefer 41°F) before injecting water into the Sparkling Chamber (carbonator) to produce proper results.

The temperature inside the Cold Tank can be displayed on the LCD screen by setting the temp display function to "Ranging" mode. See the programming section to adjust this setting.

Allow a minimum of an hour for the **WL500 Water Treatment System** to chill the cold circuit to the 41°F set point temperature before sampling the sparkling water. Once the water is chilled, the Sparkling Tank should be "Regenerated" by completely and continuously dispensing the initial batch (0.8 liters) of product from the carbonator until only Co<sub>2</sub> gas is dispensing from the faucet. The initial batch of sparkling product will be flat because it was injected into the carbonator at ambient temperature when initiating the **WL500 Water Treatment System**. Always remember that the water must be below 46° F to make premium sparkling water.

Do not set the cold temperature set point below 41°F or you increase the risk of freezing the Sparkling Tank. The Thermistor that controls the refrigeration system is located in the well in the UV Cold Tank and does not monitor water temperature in the Sparkling Tank (carbonator). The refrigeration system chills both tanks simultaneously and is either on/off based up on feedback from the Thermistor. Frequent or continuous use of the cold still water results in refrigeration system running and continuously chilling the sparkling product in the carbonator below freezing point. This can result in a frozen Sparkling Tank and sparkling product will not be dispensed even with proper gas supply.

## 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.	Green Compressor/Heater Switch must be in the <i>O=OFF</i> position	
2.	Unplug the Power Cord from rear of <b>WL500 Water Treatment System</b> .	
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 Green Compressor / Heater Switch <i>I=ON</i> position  <b>The Hot and Cold Tanks must be filled with water BEFORE turning on the Red Heater and Compressor Switch.</b>	
9.	Verify the cooler is fully operational before installing it at the customers' site.	

## **DESCALING THE HOT TANK**

The Hot Tank requires removal of mineral deposits (descaling) on a regular basis, 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, it will hinder your unit's performance.

**Hot Tank Troubleshooting:** Hot water intermittently forced out through the faucet is an indicator that descaling is needed. This occurs when scale has deposited on the expansion slot inside the Hot Tank vent chamber and blocks the normal path for water to expand.

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.

**⚠ 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.*


See Hot Tank Descaling Video and training procedure located on the **Partner Area of the Waterlogic Website** for more detailed instructions. [www.waterlogic.us](http://www.waterlogic.us)

### **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 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 **WL500 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.

 **WARNING! HOT WATER HAZARD.** *Unit Produces Very Hot Water and Steam. Always use insulated and chemically compatible containers and let unit cool down before draining the Hot Tank to avoid injury.*

 **CAUTION! REPLACE HOT TANK (HT-3021) EVERY 3-5 YEARS.** *The Hot Tank and its controls should be replaced a minimum of every five years to ensure efficient operation.*

9. Always ensure unit is performing to the customer's satisfaction.



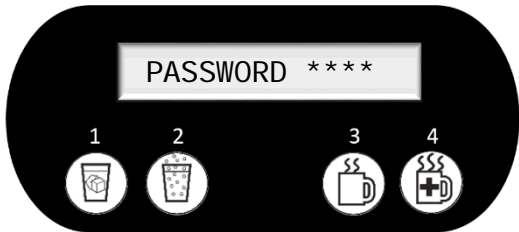

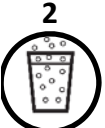
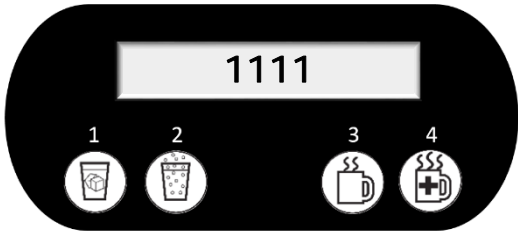

 **CAUTION! RIBBON CONNECTORS MUST BE FULLY ENGAGED.** *Ensure ribbon connectors are properly engaged and fully seated in front PCB (Printed Circuit Board) to avoid intermittent/connectivity issues any time the front Hatch Panel is accessed.*

 **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.*

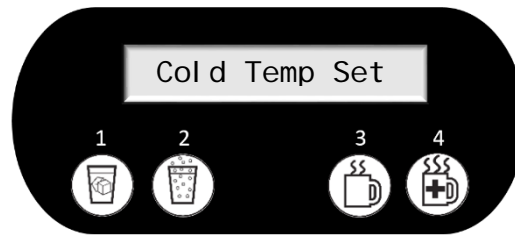
## PROGRAMING MENU AND SELECTIONS

Menu	Options	Brief Description
Cold Temp Set	3° - 12°C	The cold temperature can be set between 3°C and 12°C or 37°F and 54°F, depending on which units are selected (°C or °F) in the F/C option.
	37° - 54°F	<b>Recommended/Default Setting is 5°C/41°F.</b>
Hot Temp Set	70°C - 95°C	The hot temperature can be set between 70°C and 95°C or 158°F and 203°F, depending on which units are selected (°C or °F) in the F/C option.
	158°F - 203°F	<b>Recommended/Default Setting is 87°C/189°F.</b>
Temp Display	Static	The display indicates the STATIC (SET POINT) temperature. <b>Default</b>
	Ranging	The display indicates the ACTUAL tank temperature
UV Timer	<b>3 minutes</b>	The UV Lamp lights every time you take a drink of cold water, and stays on for 3 minutes. <b>Recommended/Default Setting is 3 minutes</b>
	10 minutes	The UV Lamp lights every time you take a drink of cold water, and stays on for 10 minutes.
	Constant	The UV Lamp stays on when power is on. <b>Not Recommended</b>
F/C	°F	Temperatures are displayed in degrees Fahrenheit. <b>Default is °F</b>
	°C	Temperatures are displayed in degrees Celsius.
Language	<b>English</b>	The display will read in English. <b>Default is English</b>
	Spanish	The display will read in Spanish
	French, Etc.	The display will read in French, and many others...
Flow Counter	Liters (4000-9000)	<b>DO NOT USE.</b> "NO WATER SUPPLY" Fault will occur. Use Filters Timer Instead.
	Gallons (1000-3000)	<b>DO NOT USE.</b> "NO WATER SUPPLY" Fault will occur. Use Filters Timer Instead.
Filters Timer	3 months	Timer for Filters Life set at 3 months. Displays "Change Filters" after 3 months
	6 months	Timer for Filters Life set at 6 months. Displays "Change Filters" after 6 months
	9 months	Timer for Filters Life set at 9 months. Displays "Change Filters" after 9 months
	<b>None</b>	Timer for Filters Life is turned off. <b>Default is None</b>
Filters Life	<b>00 DAYS</b>	Indicates amount of water flowed(gal/liters) or days elapsed since last reset Ensure Filters Timer is enabled and Filters Life indicates DAYS
Energy Saving Sleep Mode	<b>On</b>	Shuts heater down (hot water) if not used in 3 hours. – <b>Default Sleep is ON</b>
	Off	Hot water remains powered indefinitely.
Default Set	<b>Cold</b>	Defaults Display & Dispense Selection to Cold after 3 seconds. <b>Default is Cold</b>
	Sparkling	Defaults Display & Dispense Selection to Sparkling after 3 seconds.
Reset	OK?	Resets the Filters Life to zero. Confirm by selecting Button 3 (Hot) to Save and Exit. This resets the timer.

## PROGRAMING - ACCESSING PROGRAMMING MODE

<p>1.  + </p>	<p>Press Buttons No. 1 and No. 2 <u>at the same time for seven seconds</u> until “Password ****” appear on the display.</p> 
<p>2. </p> <p></p>	<p><u>Enter Password:</u></p> <p>Alternately Press No. 1 and No. 2 to enter the password</p> <p><u>Password is: 1111</u></p> <p>*Press Cold Selection Button (No. 1) to enter the password number *Press Sparkling Selection Button (No. 2) to move to the next password number</p> 
<p>3. </p>	<p>Press Hot Selection Button (No. 3) to enter the “1111” Password</p>
<p>After entering the programming mode – Press:</p> <p>4. Cold Selection Button (No. 1) to scroll programming options forward</p> <p>Sparkling Selection Button (No. 2) to scroll programming options backwards</p>	


## PROGRAMING – COLD TEMPERATURE SETTING



The cold temperature can be set between 3°C and 12°C (37°F and 54°F) depending on which units are selected (°C or °F) in the F/C programming setting.


**Recommended / Default Temperature Setting: 5°C (41°F)**

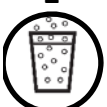
1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

2.  After entering the programming mode – Press Cold Selection Button (No. 1) until “Cold Temp” is displayed.

*\*Note:*


*Pressing Cold Selection Button (No. 1) scrolls programming options forward  
Pressing Sparkling Selection Button (No. 2) programming options backward*

3.  Press Hot Selection Button (No. 3) to see what the current setting is.

4.  Press Cold Selection Button (No. 1) to increase the Cold Temperate Setting

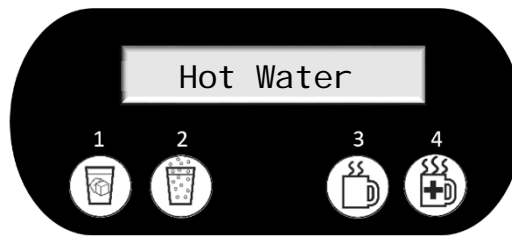
4.  Press Sparkling Selection Button (No. 2) to decrease the Cold Temperature Setting.

**Recommended / Default Temperature Setting: 5°C (41°F)**

5.  Press Hot Selection Button (No. 3) to save the temperature setting chosen.

6.  Press Extra Hot Selection Button (No. 4) to exit programming mode.


## PROGRAMING – HOT TEMPERATURE SETTING



The hot temperature can be set between 70°C to 95°C (158°F to 203°F) depending on which units are selected (°C or °F) in the F/C programming setting.


**Recommended / Default Temperature Setting: 87°C (189°F)**


1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

2.  After entering the programming mode – Press Cold Selection Button (No. 1) until “Hot Water” is displayed.


*\*Note:*

*Pressing Cold Selection Button (No. 1) scrolls programming options forward  
Pressing Sparkling Selection Button (No. 2) programming options backward*

3.  Press Hot Selection Button (No. 3) to see what the current setting is.

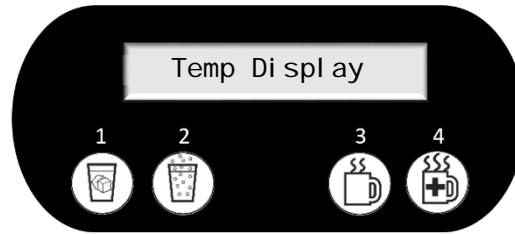
4.  Press Sparkling Selection Button (No. 2) to increase or decrease the temperature setting.





**Recommended / Default Temperature Setting: 87°C (189°F)**

5.  Press Hot Selection Button (No. 3) to save the temperature setting chosen.

6.  Press Extra Hot Selection Button (No. 4) to exit programming mode.

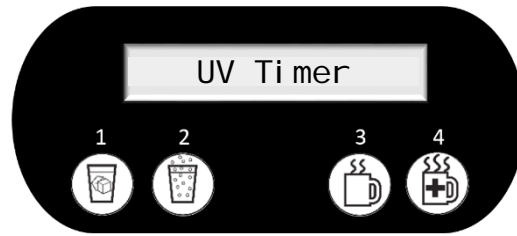
## PROGRAMING – TEMPERATURE DISPLAY



<p>Temperature display is the temperature that the display screen shows.</p> <p><b>Static</b> – Display will always show the <b>STATIC (SET POINT) temperature</b> – Recommended / Default</p> <p><b>Ranging</b> – The Display will show the temperature of the water in the tank.</p>	
1.	Enter the Programming Mode in “Accessing Programming Mode” instructions.
2.	<p><b>3</b></p>  <p>Press Hot Selection Button (No. 3) to see what the current setting is.</p>
3.	<p><b>2</b></p>  <p>Press Sparkling Selection Button (No. 2) to select “Static” or “Ranging”</p> <p><b>Recommended / Default Setting is STATIC</b></p>
4.	<p><b>3</b></p>  <p>Press Hot Selection Button (No. 3) to save the setting chosen.</p>
5.	<p><b>4</b></p>  <p>Press Extra Hot Selection Button (No. 4) to exit programming mode.</p>



## PROGRAMING – UV TIMER SETTING




Determines how long the UV Lamp stays on.


**3 minutes** – The UV Lamp comes on every time you take a glass of cold water, and stays on for 3 minutes. **Recommended / Default**

10 minutes – The UV Lamp comes on every time you take a glass of cold water, and stays on for 10 minutes.

Constant - The UV Lamp is set to be on all the time. **Not Recommended**

1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

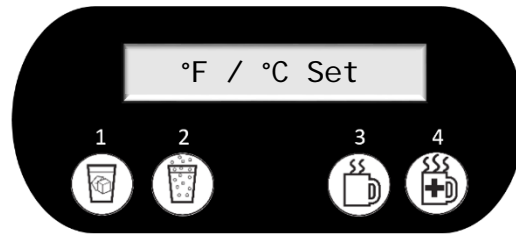
2.  Press Hot Selection Button (No. 3) to see what the current setting is.

3.  Press Sparkling Selection Button (No. 2) to select “3 minutes”, “10 minutes” or “constant”.  
**Recommended / Default Setting is 3 Minutes**

4.  Press Hot Selection Button (No. 3) to save the setting chosen.

5.  Press Extra Hot Selection Button (No. 4) to exit programming mode.

## PROGRAMING – TEMPERATURE DISPLAY SETTING





Determines how the Display shows all temperature settings options:

### °F- Fahrenheit – DEFAULT SETTING

°C - Celsius

1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

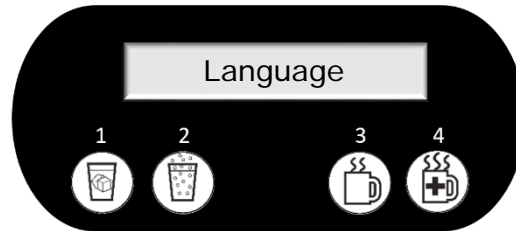
2.  Press Hot Selection Button (No. 3) to see what the current setting is.

3.  Press Sparkling Selection Button (No. 2) to select “Fahrenheit” or “Celcius”  
**Recommended / Default Setting is Fahrenheit**

4.  Press Hot Selection Button (No. 3) to save the setting chosen.

5.  Press Extra Hot Selection Button (No. 4) to exit programming mode.

## PROGRAMING – LANGUAGE DISPLAY SETTING



The language shown on the display options:

**English – Default**


French


German

Spanish

\*Many other languages.

1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

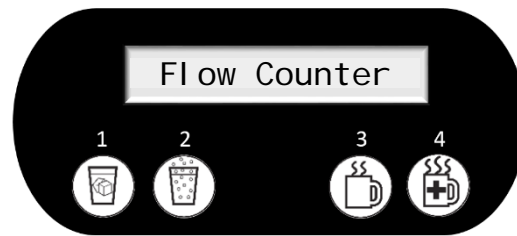
2.  Press Hot Selection Button (No. 3) to see what the current setting is.

3.  Press Sparkling Selection Button (No. 2) to select “Fahrenheit” or “Celcius”  
**Recommended / Default Setting is Fahrenheit**

4.  Press Hot Selection Button (No. 3) to save the setting chosen.

5.  Press Extra Hot Selection Button (No. 4) to exit programming mode.

## PROGRAMING – FLOW COUNTER



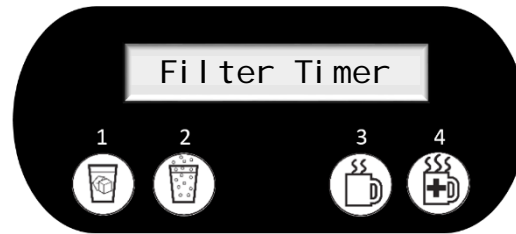
### Flow Counter

Do not use this setting – it will result in a “NO WATER SUPPLY” fault.

Use the Filters Timer instead.



## PROGRAMING – FILTER TIMER



Timer for Filters Life:


### **NONE – Timer for Filters turned off – Default Setting**

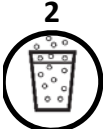
3 months – Displays “Change Filters” after 3 months

6 months – Displays “Change Filters” after 6 months

9 months – Displays “Change Filters” after 9 months

1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

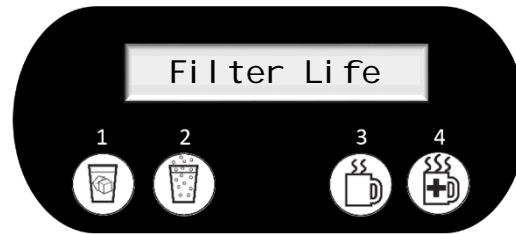
2.  Press Hot Selection Button (No. 3) to see what the current setting is.

3.  Press Sparkling Selection Button (No. 2) to select “None, 3 months, 6 months or 9 months)  
**Recommended / Default Setting is NONE**

4.  Press Hot Selection Button (No. 3) to save the setting chosen.

5.  Press Extra Hot Selection Button (No. 4) to exit programming mode.


## PROGRAMING – FILTER LIFE




Filter Life indicates the amount of water that has flowed (gallons / liters) or days elapsed since last reset.

Ensure Filter Timer is enabled, and Filters Life indicates DAYS.

1. **Enter the Programming Mode in “Accessing Programming Mode” instructions.**

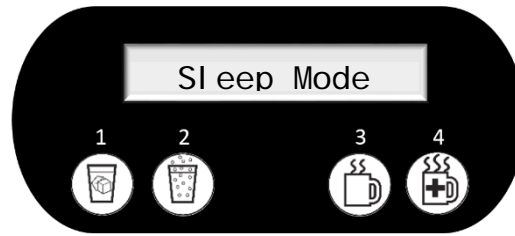
2.  Press Hot Selection Button (No. 3) to see what the current setting is.

3.  Press Sparkling Selection Button (No. 2) to select “00 DAYS”

4.  Press Hot Selection Button (No. 3) to save the setting chosen.

5.  Press Extra Hot Selection Button (No. 4) to exit programming mode.

## PROGRAMING – ENERGY SAVING SLEEP MODE





Energy Saving Sleep Mode

**On – Energy Saving Sleep Mode on. Shuts hear down (hot water) if not used in 3 hours. Default Setting**


**Off -** Hot water remains powered indefinitely.

1. Enter the Programming Mode in “Accessing Programming Mode” instructions.

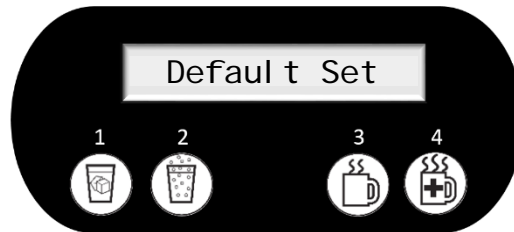
2.  Press Hot Selection Button (No. 3) to see what the current setting is.





3.  Press Sparkling Selection Button (No. 2) to select “On” or “Off”  
**Recommended / Default Setting is On**

4.  Press Hot Selection Button (No. 3) to save the setting chosen.

5.  Press Extra Hot Selection Button (No. 4) to exit programming mode.

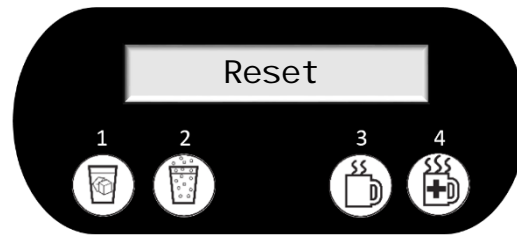
## PROGRAMING DEFAULT DISPLAY AND DISPENSE PROGRAMMING






Defaults Display and Dispense Selection after 3 seconds	
<b>Cold - Default</b>	
Sparkling	
1.	Enter the Programming Mode in “Accessing Programming Mode” instructions.
2.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p style="text-align: center;"><b>3</b></p>  </div> <p>Press Hot Selection Button (No. 3) to see what the current setting is.</p> </div>
3.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p style="text-align: center;"><b>2</b></p>  </div> <p>Press Sparkling Selection Button (No. 2) to select “On” or “Off”</p> </div> <p style="text-align: center;"><b>Recommended / Default Setting is On</b></p>
4.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p style="text-align: center;"><b>3</b></p>  </div> <p>Press Hot Selection Button (No. 3) to save the setting chosen.</p> </div>
5.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p style="text-align: center;"><b>4</b></p>  </div> <p>Press Extra Hot Selection Button (No. 4) to exit programming mode.</p> </div>

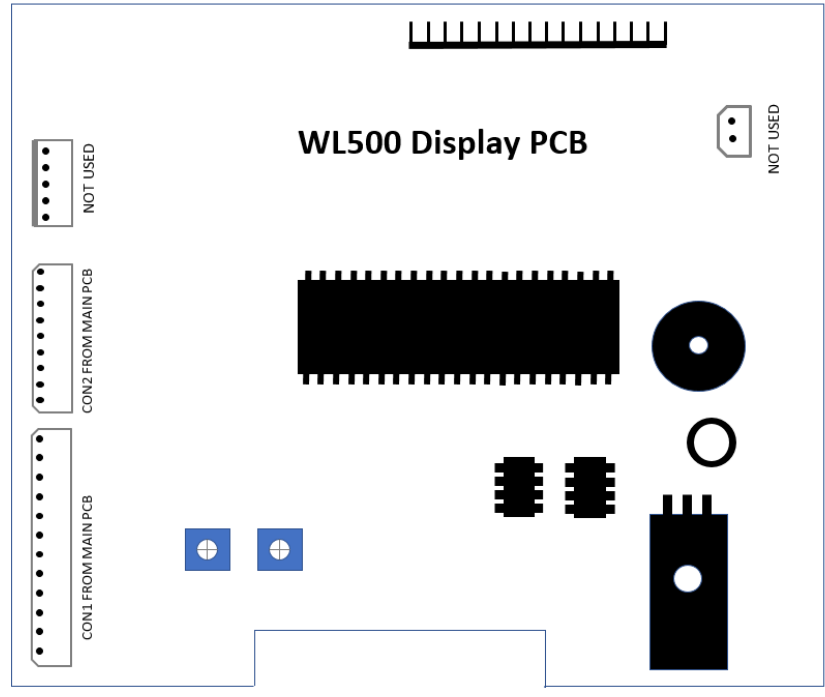
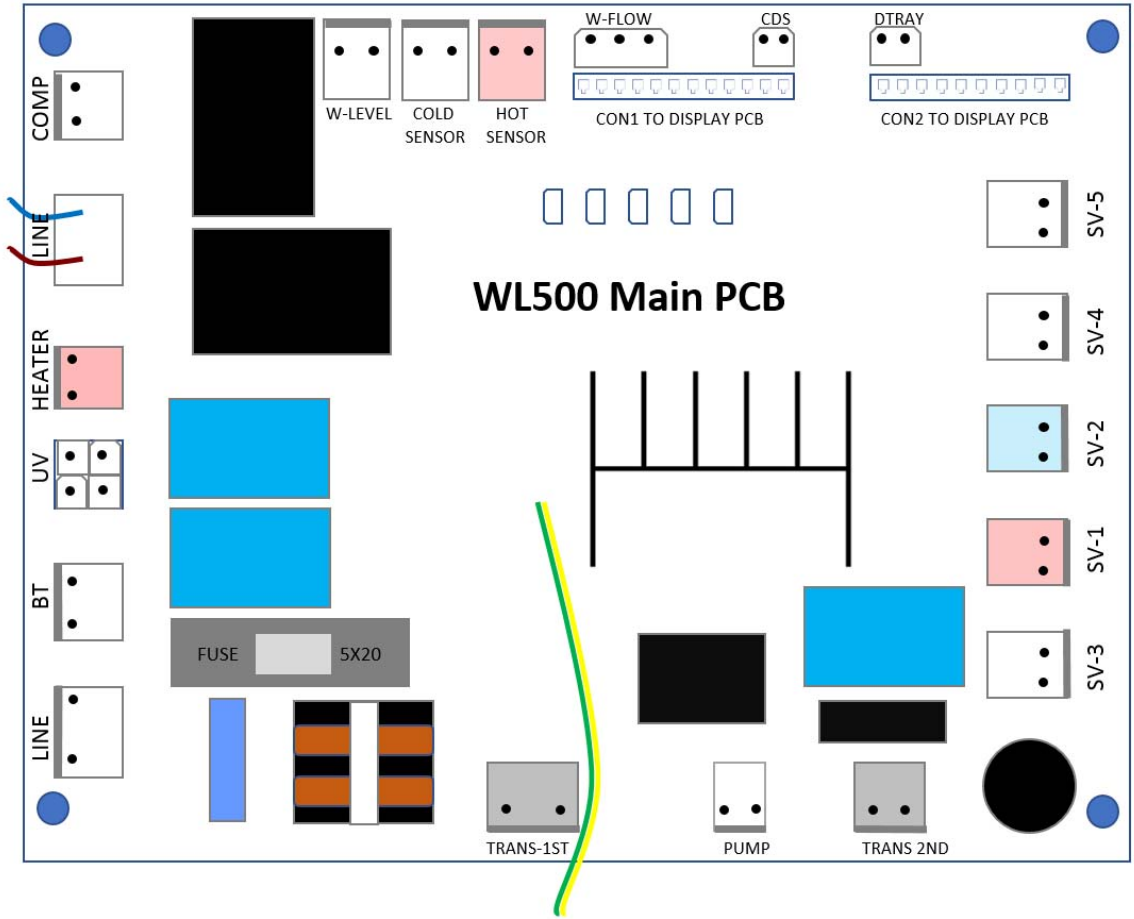


## PROGRAMING – RESET FILTERS LIFE TO ZERO





Resets the Filters life to zero.	
1.	Enter the Programming Mode in “Accessing Programming Mode” instructions.
2.	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> <b>2</b>   </div> <div>Press Sparkling Selection Button (No. 2) to select “OK?”</div> </div>
3.	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> <b>3</b>   </div> <div>Press Hot Selection Button (No. 3) to save the setting chosen.</div> </div>
4.	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> <b>4</b>   </div> <div>Press Extra Hot Selection Button (No. 4) to exit programming mode.</div> </div>

### PCB WIRE DRAWINGS



## REPLACEMENT COMPONENTS (CONSUMABLES)

Component	WLCP PN	Frequency of Replacement
8W UV Lamp Assembly	10-7020	Every 12 months, or as required Factory PN CT-2045
Sparkling Chamber Level Sensor Probe Assembly	10-7250	To be maintained and descaled at every filter change. Replace if needed. Factory PN CT-2023 
Hot Tank (with controls) 1.6L Factory Set Point 85°C (185°F)	10-7082	Every three to 3-5 years depending on usage.  Descaling hot tank may be required on a regular basis depending on filtration. Factory PN HT-3021
CO <sub>2</sub> Pressure Regulator with tamper proof adjuster, preset to 35-45 psi, single output pressure gauge, inline shut-off valve, ¼ quick connect fitting, safety relief, and CO <sub>2</sub> CGA-320 thread adapter.	AK-0003-L00	Needed to ensure input water pressure is adequate for machine performance. 

**⚠ 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.

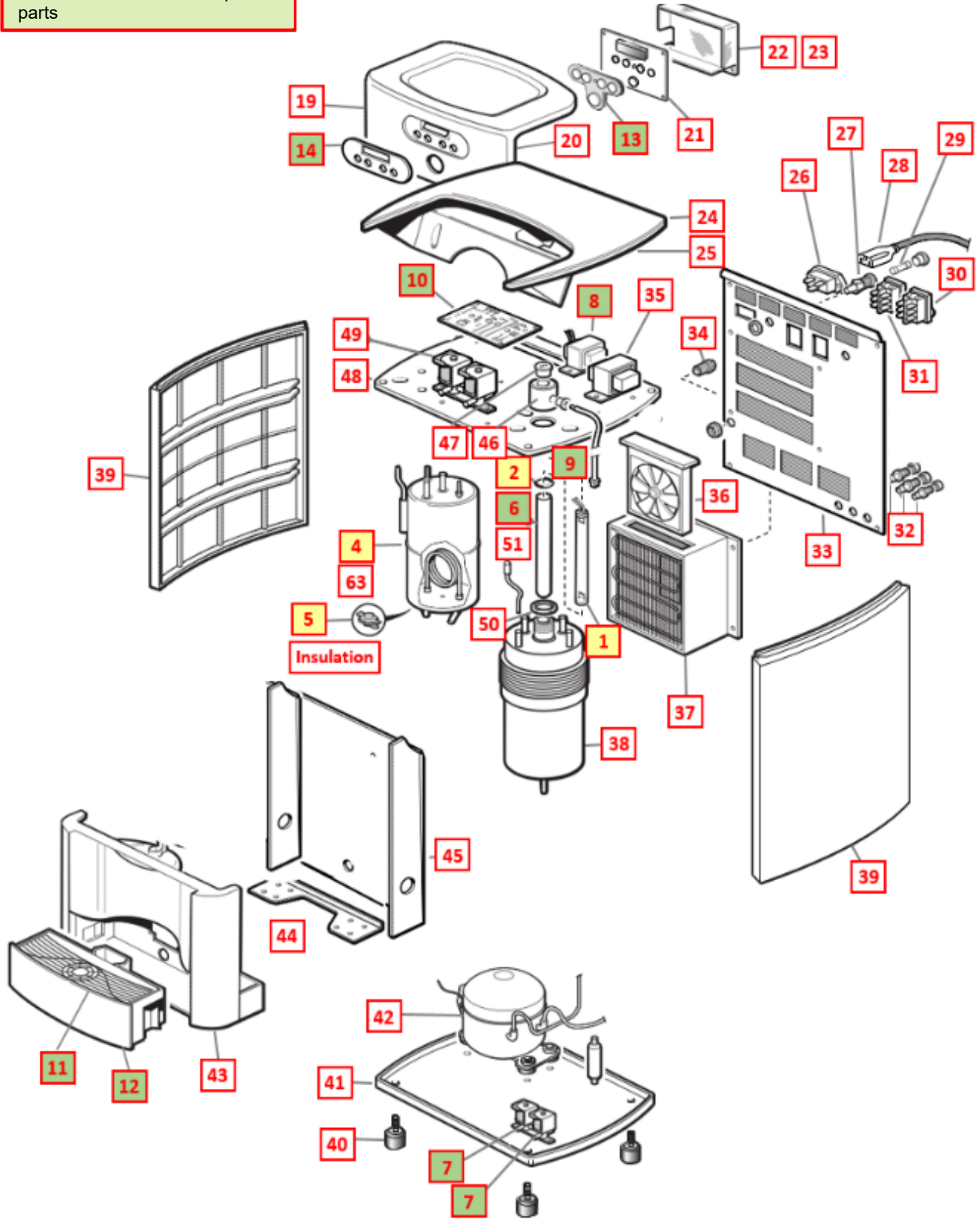
## DISPOSAL

### 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.

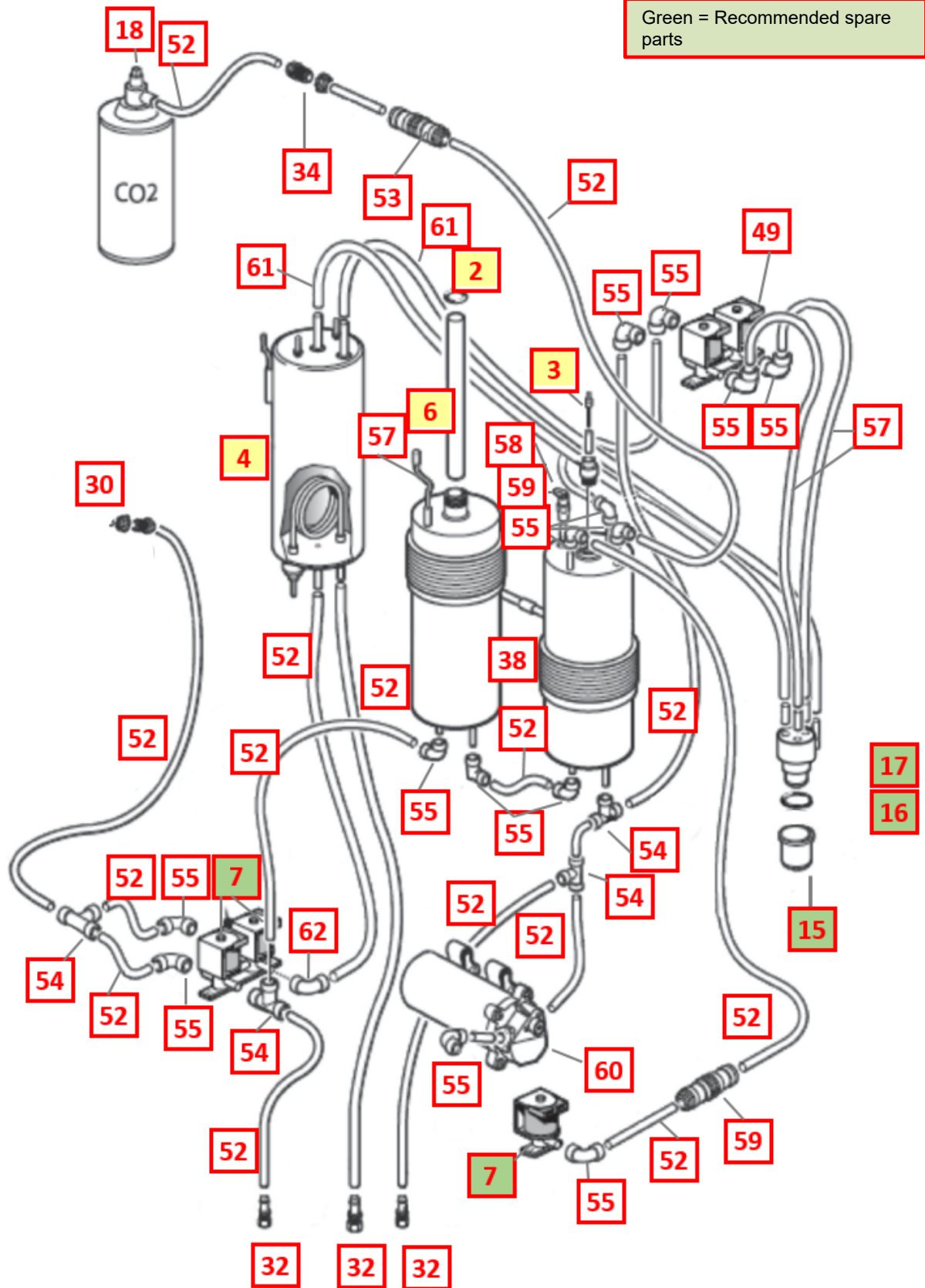
### WL500 DRAWINGS and PARTS LIST

Yellow = Consumables  
 Green = Recommended spare parts



**WETTED PARTS**

Yellow = Consumables  
 Green = Recommended spare parts



No	WLCP PN	Description	Factory PN	Stocked?	
<b>Consumables</b>					
1	10-7020	UV Lamp Assembly with Glow Starter	CT-2045	Yes	
2	10-2500	Black O-Ring for Quartz Sleeve	CT-2006	Yes	
3	10-7250	Sparkling Level Probe Assembly	CT-2036-L00-00	Yes	
4	10-7082	Stainless Tube Hot Tank 1.6 Liter	HT-3021	Yes	
4.1	NA	Hot Tank Thermistor <i>Part of the Hot Tank – cannot be purchased separately.</i>	HT-3002	No	
5	12-1360	Hot Tank <b>Overload</b> – Reset 105°C (221°F)	HT-3012	Yes	
Not Shown	01-2076	Scale Kleen	NA	Yes	
<b>Recommended Spare Parts</b>					
6	10-1400	Quartz Sleeve for 8W Lamp <i>Recommend stocking 1 each for every 10 units purchased</i>	CT-2002	Yes	
7	12-1500	Solenoid Valve <i>Recommend stocking 1 each for every 10 units purchased</i>	PU-4016	Yes	
8	10-3010	UV Lamp Ballast 110V/60Hz <i>Recommend stocking 1 each for every 10 units purchased</i>	EL-5006-A CN	Yes	
9	10-3011	UV Lamp Sensor (CDS) with wire <i>Recommend stocking 1 each for every 10 units purchased</i>	EL-5007	Yes	
10	10-7090	Main PCB <i>Recommend stocking 1 each for every 10 units purchased</i>	EN-6067-A	Yes	
11	12-8150	Drip Tray Grill – Charcoal <i>Recommend stocking 2 each for every 10 units purchased</i>	PL-1152	Yes	

12	10-7074	Charcoal Drip Tray Body – Waterlogic Logo <i>Recommend stocking 2 each for every 10 units purchased</i>	PL-1253-CN	Yes	
12.1	10-7092	Drip Tray Harness <i>Recommend stocking 1 each for every 10 units purchased</i>	EL-5041	Yes	
12.2	10-4006	Drip Tray Body Clip (Metal) <i>Recommend stocking 2 each for every 10 units purchased</i>	EN-6038	Yes	
12.3	10-7057	Drip Tray Sensor & Retaining Bracket <i>Recommend stocking 2 each for every 10 units purchased</i>	ST-8102	Yes	
13	10-7225	Silicon Button Key Mat <i>Recommend stocking 1 each for every 10 units purchased</i>	PL-1098	Yes	
14	10-7077	Display Label <i>Recommend stocking 1 each for every 10 units purchased</i>	PL-1102	Yes	
15	10-3048	Faucet Nipple – Blue with Screen <i>Recommend stocking 1 each for every 10 units purchased</i>	PL-1013	Yes	
16	10-2600	Natural Faucet O-Ring – Silicon White <i>Recommend stocking 1 each for every 10 units purchased</i>	CT-2007	Yes	
17	12-5235	Faucet - 3-way <i>Recommend stocking 1 each for every 10 units purchased</i>	PL-1212-CN	Yes	
18	AK-0003-L00	CO2 Pressure Regulator with tamper proof adjuster, preset to 35-45 psi, single output pressure gauge, inline shut-off valve, ¼ quick connect fitting, safety relief, and CO2 CGA-320 thread adapter. <i>Recommend stocking 1 each for every 10 units purchased</i>	AK-0003-I00-00	Yes	

Remainder of Parts					
18.1	NA	C02 Pressure Regulator O-Ring	10-7036	Yes	
19	10-7070	Front Door Panel Charcoal <i>Sold Separately:</i> Display Label P/N 10-7077 Silicon Button Key Matt P/N 10-7225	PL-1092	Yes	
20	10-7069	Door Lock Bracket – Lower	ST-8104	No	
21	10-7210	Display PCB <i>*Use for replacement even on older units that may have a different Display PCB.</i>	EN-6073-A	Yes	
22	10-7096	Display PCB Cover	PL-1119	Yes	
23	10-7068	Hatch Panel Locking Support	ST-8103	Yes	
24	10-7073	Top Cover Charcoal	PL-1095	Yes	
25	10-7265	Electronics Cover Bracket <i>Under Top Cover</i>	ST-8278	Yes	
26	10-4013	Power Line Noise Filter, ElectroMagnetic Interference Filters (EMI)	EL-5016	Yes	
27	10-3014	Fuse Holder and Fuse 120V / 15A with One Wire	EL-5053	Yes	
28	10-3007	Power Cord 120V - 1840 mm	EL-5001-B	Yes	



29	10-3013	Fuse 120V / 15A	EL-5010	Yes	
30	10-3009	GREEN Heater/Compressor Switch	EL-5005	Yes	
31	10-3008	RED Power Switch	EL-5004	Yes	
32	14-5011	Drain valve 5/16"	CT-2031-A	Yes	
32.1	NA	Drain Valve Clamp 5/16"	CT-2046	No	
33	10-7051	Back Panel	ST-8094-A	No	
34	10-3067	Bulkhead Union 1/4" x 1/4" John Guest P/N PI1208S	PU-4028-A	Yes	
35	10-7220	Power Transformer for Sparkling	EL-5094	Yes	
36	10-1500	Fan Motor 110V (AC Axial fan)	CT-2011	Yes	
36.1	NA	Fan Bracket	ST-8227	No	
37	10-7081	Cooling Fan Condenser	CO-9023	Yes	

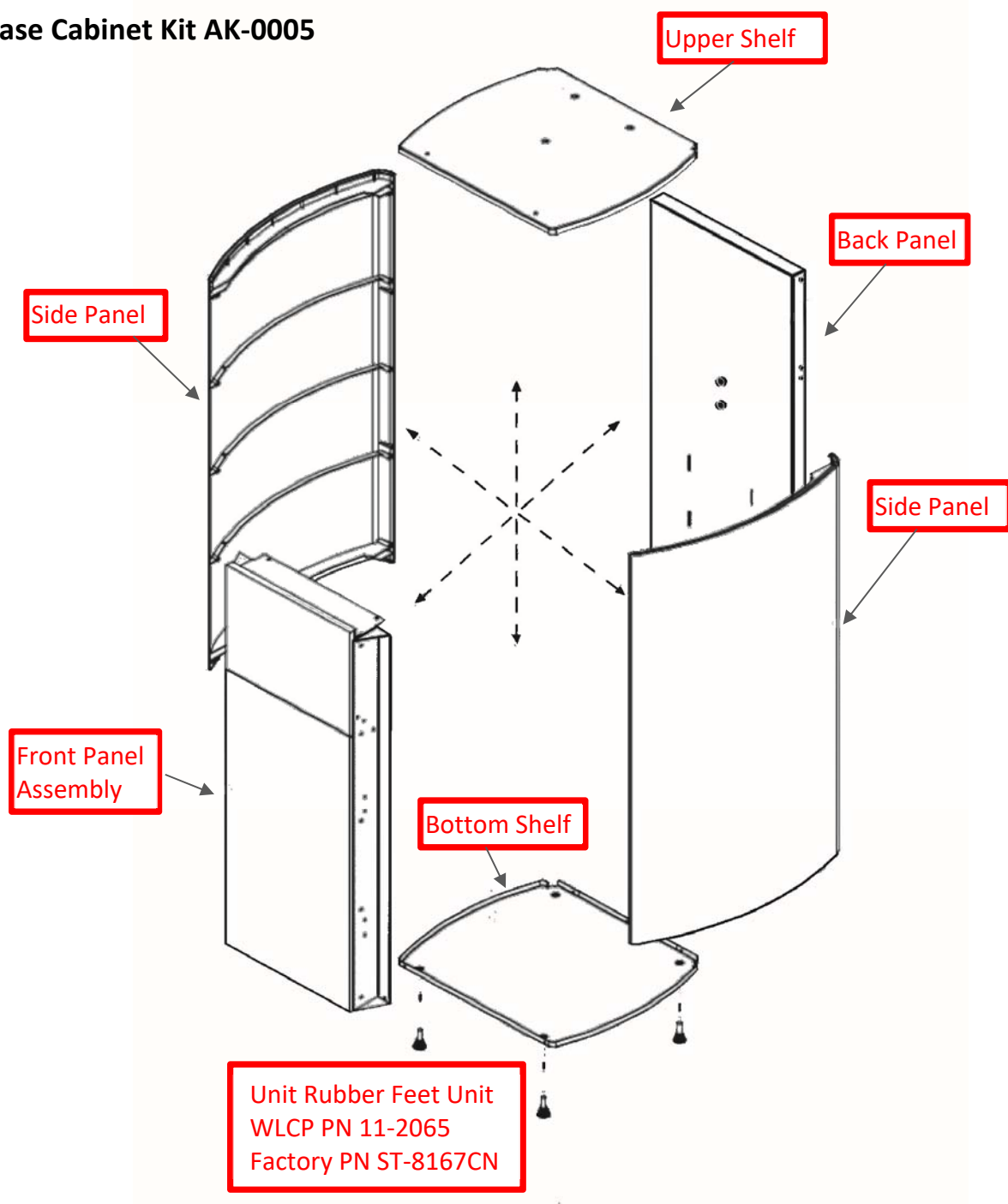
38	NA	Cold Tank Assly-4L Sparkling. Double Tank	CT-2032-A	No	
39	10-7072	Side Panel Silver	PL-1094	Yes	
39.1	NA	Frame Bracket - Gray Plastic	PL-1135	No	
40	10-3083	Adjustable Unit Rubber Feet	ST-8016	Yes	
41	10-7053	Bottom Shelf	ST-8096	Yes	
42	10-2200	Compressor (R134a 1/8HP) 120V/60Hz	CO-9001-A	Yes	
42.1	10-3003	Compressor Starter Relay	CO-9016	Yes	
42.2	10-5018	Compressor Overload	CO-9015	Yes	
42.3	12-1001	Filter Dryer	CO-9008	Yes	
43	10-7071	Front Hatch Panel <i>Hot Water Caution Label LP-7169 / 12-0001 required.</i>	PL-1093	Yes	
43.1	12-0001	Hot Water Caution Label – adhere to Front Upper Drip Tray Insert Panel	LP-7169	Yes	
44	10-7054	Filter Housing Bracket	ST-8097	Yes	

45	10-7050	Metal Front Frame Panel	ST-8093	Yes	
46	10-4008	UV Lamp Retaining Nut	PL-1027	Yes	
47	10-3095	CDS Fixing Rubber (Silicon)	CT-2010	Yes	
48	10-7052	Upper Shelf - Inner	ST-8095	No	
49	10-7060	Double Solenoid Valve with wire harness assembled	PU-4056-B	Yes	
50	10-3096	Cold Tank Retaining Nut	CT-2001-C	Yes	
51	10-2650	Cold Water Sensor	CT-2081-A	Yes	
52	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	
53	Purchase from John Guest	JG Equal Straight Connector 1/4"(PI0408S)	PU-4010	No	
54	Purchase from John Guest	1/4" Union Tee John Guest P/N P10208S	PU-4011	No	
56	Purchase from John Guest	1/4" Union Elbow John Guest P/N P10308S	PU-4008-A	No	

57	Purchase from John Guest	JG LLDPE Tube - Blue 8mm John Guest P/N PE-0806-100M-B	PU-4014	Yes	
58	10-7245	Upper Safety Valve 1/4" for Sparkling Unit	CT-2037-I00-00	Yes	
58.1	NA	Silicon O-Ring for Upper Safety Valve (Red)	PL-1271	No	
59	10-7270	JG Non-Return Valve 1/4"(1/4SCV)	PU-4057	Yes	
60	10-7235	Booster Pump - Sparkling	CT-2035-E	Yes	
60.1	10-7240	Pump Bracket	ST-8098	Yes	
61	10-7040	Silicon Tube 5/16" for Hot Water	PU-4064	Yes	
62	Purchase from John Guest	5/16" x 1/4" Reducing Elbow John Guest P/N PI211008S	PU-4007	No	
63	12-8006	Hot Tank Fixing Bracket 400mm	ST-8120	Yes	
Not shown	Purchase from John Guest	JG Stem Elbow Connector 1/4" * 1/4" - Acetal PI220808S)	PU-4066	No	
Not shown	AK-0014	Flow Restrictor 1.2 mm Hole	AK-0014	No	
Not shown	10-3007	Power Cord 120V – 1840 mm	EL-5001-B	Yes	

## WL500 BASE CABINET DRAWING AND ASSEMBLY INSTRUCTIONS

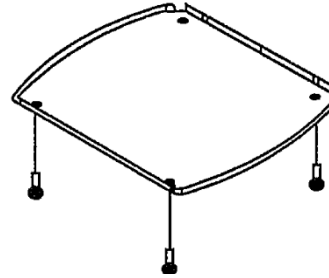
### Base Cabinet Kit AK-0005



## BASE CABINET (AK-0005) ASSEMBLY INSTRUCTIONS

### Step 1

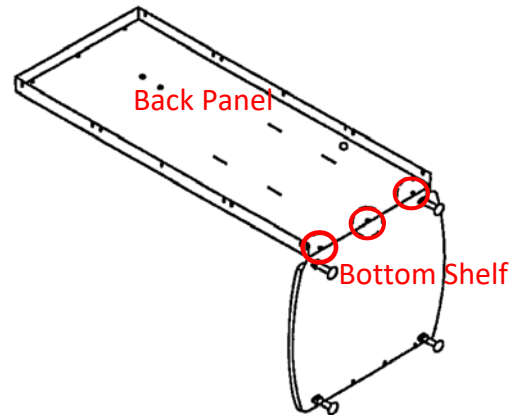
Install Unit Rubber Feed to the Bottom Shelf.



### Step 2

Attach the Back Panel to the Bottom Shelf using 3 of the screws provided.

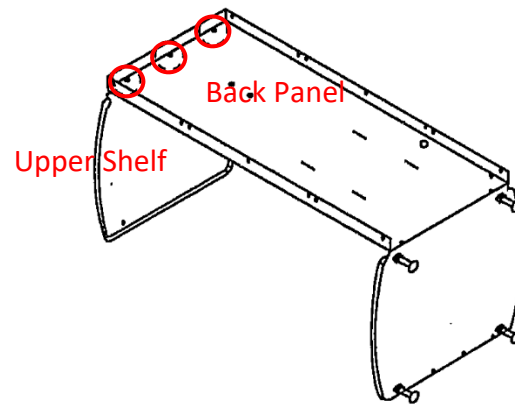
- The back lip of the Bottom Shelf has 3 holes.
- The front lip of the Bottom Shelf has 2 holes.



### Step 3

Attach the Upper Shelf to the Back Panel using 3 screws provided.

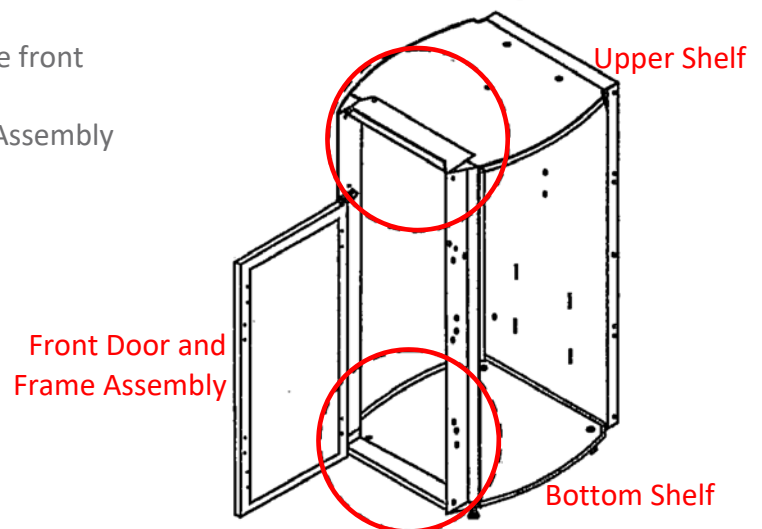
- The back lip of the Upper Shelf has 3 holes.
- The front lip of the Upper Shelf has 2 holes.



### Step 4

Mount the Front Door and Frame Assembly to the front edges of the Upper and Bottom Shelves. Upper and Bottom Shelf edges fit inside of Door Assembly edges.

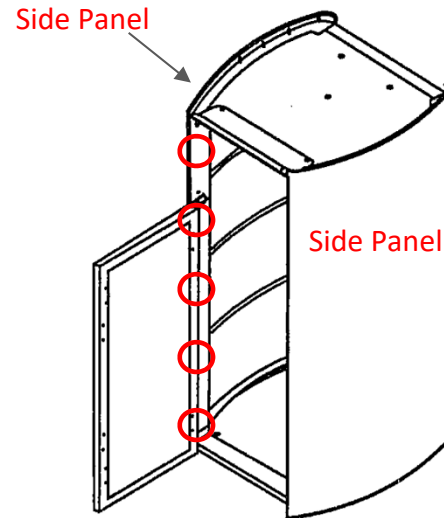
- 5 screws each at front and back edges
- 11 screws per Side Panel



### Step 5

Fasten the Side Panels to the frame.

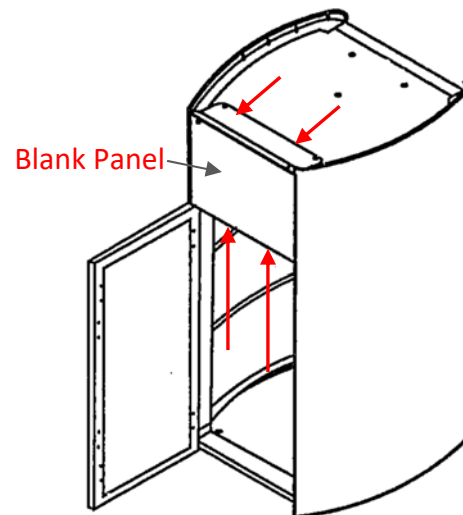
- The Side Panels fit either side, with the sharper curved edge placed toward the rear.
- Align the side Panels using the plastic tabs that protrude through the metal frame.



### Step 6 - Front Panel Assembly Installation Assembly

*Skip this step if the optional Cup Holder will be installed*

- Attach the Blank Panel using 4 screws provided.

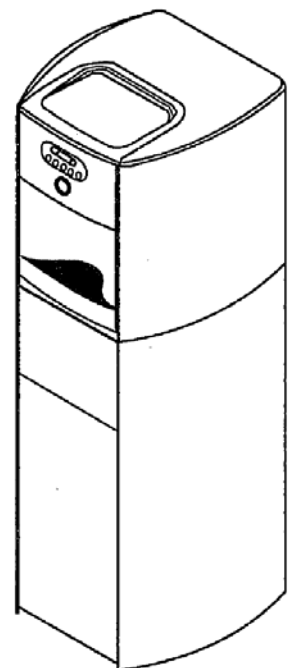


**⚠ WARNING! DISPENSER COULD TIP OR FALL.** *Install unit on a firm, flat, and level surface and secure the **WL500 Water Treatment System** to the Base Cabinet with the Safety Screw (aka Lock Screw) provided to lock the components together. Never place heavy items on top of unit and never climb, stand, or hang on unit or storage cabinet to prevent injury and damage.*

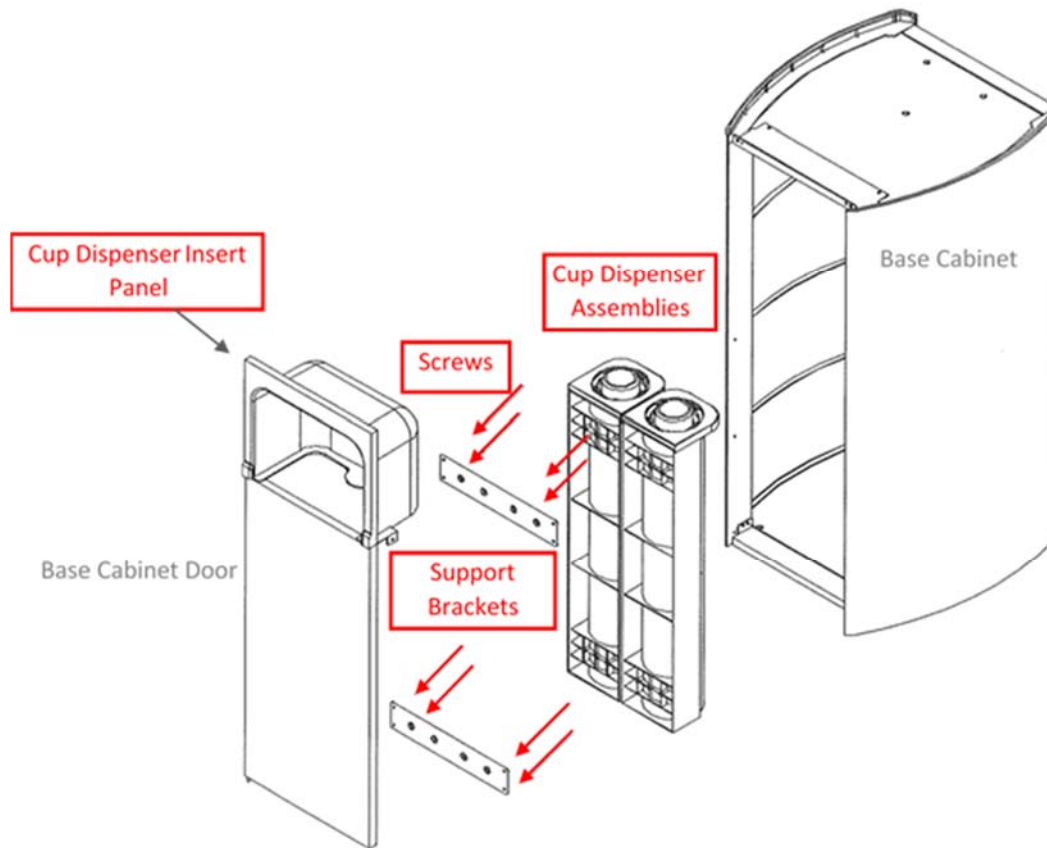
### Step 7

Locate and align the **WL500 Water Treatment System** on top of the Base Cabinet.

- Lock together using the safety bolt (aka locking bolt) provided.



## WL500 CUP DISPENSER (AK-0007) DRAWING AND ASSEMBLY INSTRUCTIONS



### Step 1

Fasten Support Brackets to the back-side of the cup holders as shown with the 8 screws provided.

### Step 2

Fasten the Cup Dispenser Insert Panel into the Base Cabinet.

*Note: This will require maneuvering of the Insert Panel for proper alignment. Take care not to break the plastic tabs on the Insert Panel.*

### Step 3

Fasten the Cup Holder Assemblies to the Base Cabinet Door.

#### Cup Dispenser Kit AK-0007 Contents:

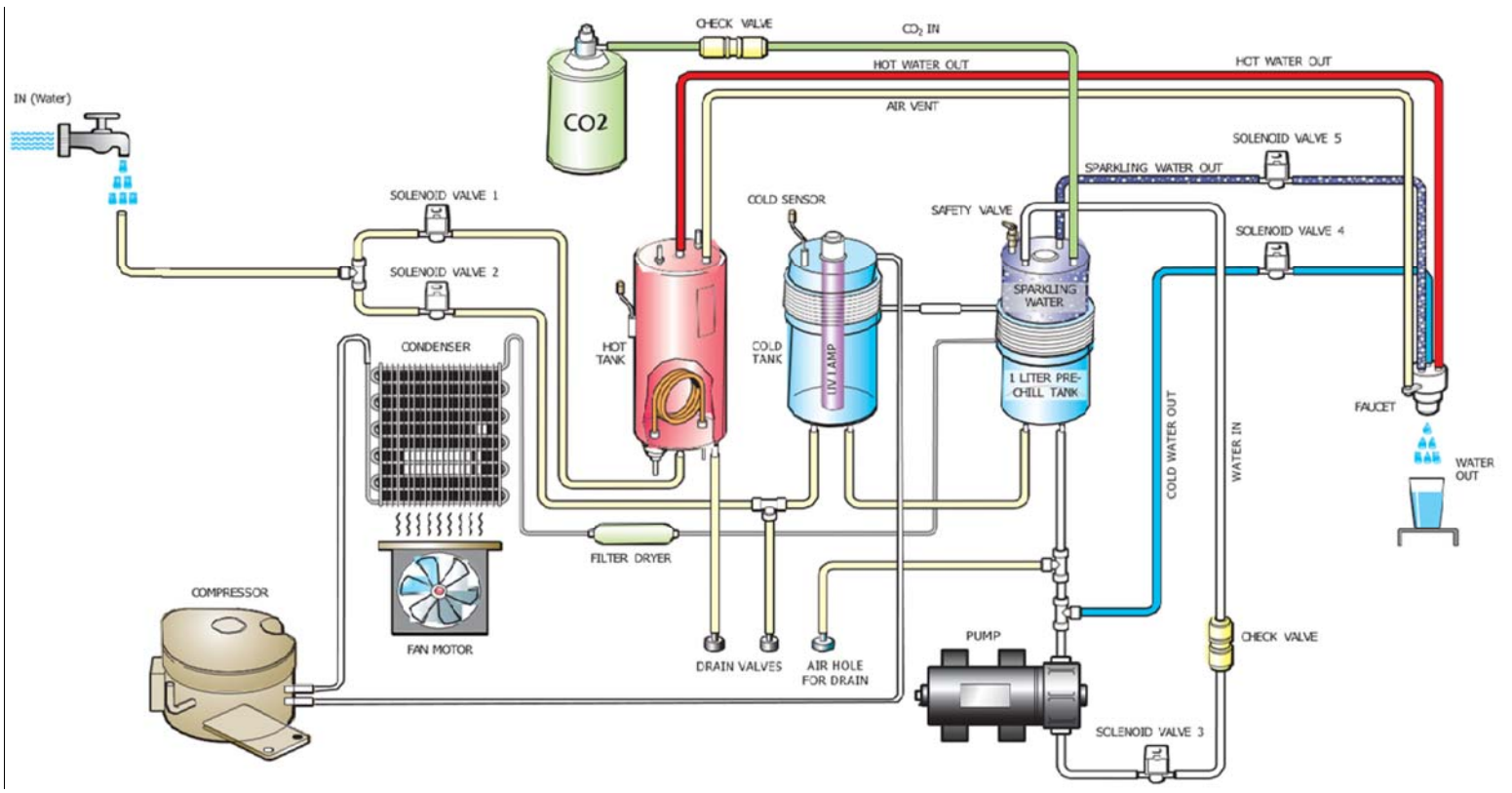
- Cup Dispenser Insert Panel
- (2) Support Brackets
- (2) Cup Dispenser Assemblies
- (8) Screws

#### Cup Dispenser Specifications

- Accepts cups from 4 oz. to 14 oz.
- Cup Opening Minimum Diameter is 2 ½" (66 mm)
- Cup Opening Maximum Diameter is 3 ¼" (84 mm)



### WL500 FLOW DIAGRAM



## WL500 ELECTRICAL DIAGRAM

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

