

PRE-INSTALLATION PROCEDURES

DANGER! ELECTRICAL SHOCK HAZARD.

Only qualified personnel who have read and understand this entire manual should attempt to install, or service this unit, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.



WARNING! ALWAYS SANITIZE BEFORE USE.

Sanitize before use to eliminate any potential microbiological contaminates.

Red Compressor/Heater Switch must be in the O=OFF position while the Hot Tank is empty. Damage could occur within one minute and the two Hot Tank Overload Devices (High Safety Limit) require manual reset if heater is turned on with an empty Hot Tank.



CAUTION! DRIP TRAY DRAIN.

If you intend to provide a drip tray drain for your customer, be aware that you will be called multiple times per month to service and unclog the tubing leading away from the drip tray to drain. Users will clog the drain with paper clips, erasers, napkins, tea bags, gum, and various other intended items. Waterlogic recommends you establish a minimum of weekly visits to the machine for cleaning of the drip tray drain.

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
- 16 Liter (5 gallon) container or drain basin
- Sanitizer Household Bleach (5.25% Sodium Hypochlorite) or Citric Acid Based Cleaner
- ¼" Plastic Tubing, at least 4 feet in length, and assorted ¼" quick connect fittings
- TDS Meter and Test Strips for measuring chlorine Optional
- Sanitizing Cartridge
- 1. Unpack the Waterlogic WL350 Water Treatment Systems and check exterior for damage.

Sanitizing

Sanitize using a Household Bleach (5.25% Sodium Hypochlorite solution) or other approved cleaner throughout the cold and sparkling water circuits. Follow all instructions on the sanitizer and flush with fresh water through the faucet until odor and taste is acceptable.



WARNING! USE PROPER PERSONAL PROTECTIVE EQUIPMENT

Always ensure proper ventilation and use proper personal protective equipment such as gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each chemical product. Take all necessary precautions to prevent sanitizer from contacting eyes, clothing, and any other surfaces in could damage (carpets).

- 2. Put 1 teaspoon of sanitizer per directions or use Bleach Solution (1 teaspoon = 1/6 oz. = 5 ml = $\frac{1}{2}$ cap full) of household bleach (Sodium Hypochlorite 5 - 10% Concentration) in the Sanitizing Cartridge. Always ensure sanitizer is compatible with stainless steel and acetyl plastic.
- 3. Connect sanitizing cartridge to inlet water supply and connect to inlet bulkhead fitting on back of unit. Turn on water supply.
- 4. Connect power to WL350 Water Treatment System. DO NOT TURN ON RED COMPRESSOR & HEATER SWITCH AT THIS TIME. O=OFF



Fill the Cold Circuit with Sanitizer

- 5. Depress the Main Dispensing Button on the Front Control Panel until cold water/sanitizing solution comes out the faucet. **NOTE:** Container and drain basin will be required to catch the water from the faucet.
 - **MARNING!** Use Personal Protective Equipment. Gloves and Eye Protection Required. The first 7.5 or 11.5 Liters (2 or 3 Gallons) of water will contain concentrated sanitizer. Use extreme care!
- 6. Turn off water supply and remove Sanitizing Cartridge from inlet water supply. Reconnect water supply to Inlet Bulkhead Fitting.

Flush Filters



CAUTION! FILTER FLUSH REQUIRED.

WL350 Water Treatment Systems are not supplied with filters. Filters should be configured to optimize your system. Filters need to be configured and specified to do the job given the local water conditions, usage, maintenance schedule, and placement restrictions.

In order for our filters to perform as represented and to provide the best quality water possible, it is essential that filters be replaced periodically. The frequency of filter changes depends upon your water quality and your water usage. For example, if there is a lot of sediment and/or particles in your water, then you will have to change your filters more frequently than a location with little to no sediment. Be sure to replace your filters whenever you notice a decline in the performance, whether it is a drop in flow rate and/or pressure or an unusual taste in the water.



- 7. Flush thoroughly per filter manufacturers' recommendation with fresh water to drain.
- 8. Once flushed, install the filters. Following the flow direction on the filter.

NOTE: Filters should not be flushed prior to 24 hours before installation to limit Microbial Growth.

9. Connect WL350 Water Treatment System to power.

CAUTION! NEVER TURN ON HEATER BEFORE FILLING HOT TANK.

Red Heater & Compressor Switch must be in the O=OFF position while the hot tank is empty. Damage could occur within one minute and the overload (high limit) will require manual reset if heater is turned on with an empty hot tank. O=OFF



Flushing the Sanitizer from the Machine

- 10. Place a pitcher, catch basin, or other container under the faucet of the *WL350 Water Treatment System*.
- 11. Flush the Cold Tank. Run several liters (gallons) of water through the faucet by dispensing cold water to dilute and remove the sanitizer from the cold circuit. You can use chlorine test strips to evaluate the water.
- 12. Once the sanitizer odor/taste has been flushed out of the cold side of the machine the sanitization process for the Cold Circuit is now complete.

Fill the Hot Tank

13. Press the Hot Water Select Button, followed by the main dispensing button to fill the hot tank. Water will dispense from the faucet once the hot tank is full. Flush until water is clear.

<u>MARNING!</u> HOT CIRCUIT IS NOT SANITIZED.

Water in the hot circuit is not sanitary until the temperature exceeds 77°C (171°F) for at least 5 minutes.



UV System Functional Test

<u>WARNING!</u> ULTRAVIOLET RADIATION. Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light. Disconnect wiring before removing.

- 14. Remove UV Firewall Lamp from Firewall housing. Remove Top Cover from Firewall housing. Carefully remove Quartz Sleeve Spiral from Firewall Housing and inspect for cracks or other damage. Reinsert Quartz Sleeve Spiral, replace Top Cover of Housing. Inspect UV lamp and reinsert into Housing.
- 15. Press dispensing button and check for blue glow from top of Firewall Housing and at Faucet dispensing area to ensure UV lamp is operational.

<u>Note</u>: 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 unit for 5 minutes and allow sensor to cool before resuming operation

- 16. Disconnect UV lamp to test UV lamp sensor operation. Unit should alarm and green indication LED on front of unit should flash.
- 17. Disconnect power to WL350 Water Treatment System.
- 18. Reconnect UV lamp.
- 19. Connect power to WL350 Water Treatment System.

Compressor Test

20. Red Heater & Compressor to be in the on position *I=ON*. Always ensure tanks are full of water before turning on the heater or the overload (high limit) will open and require manual reset. If the wire condenser at back of the unit is warm, the refrigeration system is working. *I=ON*



21. Once the *WL350 Water Treatment System* reaches its target temperature, the compressor will shut off. Draw a glass of cold water and verify it is has chilled to proper temperature.

Heater Test

22. Always ensure tanks are full of water before turning on the Heater or the Overload (High Limit) will open and require manual reset. It will take the heater approximately 10 minutes to heat the water from ambient 24°C (75°F) to the factory set point of 87°C (187°F). Dispense a cup of hot water to ensure the temperature/odor/taste is acceptable.

<u>WARNING!</u> HOT WATER CAN BURN OR SCALD. The WL350 Water Treatment System produces Hot Water up to 87°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.



WL350 COUNTER TOP DRAINING INSTRUCTIONS

Draining Notes

Drain the **WL350 Water Treatment System** for transportation.



⚠ WARNING! STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE USE OR AFTER SYSTEM FAILURE.

The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbial growth).

Prior to draining the Hot Tank, turn off the Red Heater and Compressor Power Switch (O=OFF), and dispense 2 liters (½ gallon) of hot water from the machine. As hot water is dispensed from the faucet of the WL350 Water Treatment System, colder water will be introduced into the Hot Tank. Since the Red Heater and Compressor Power Switch is turned off, the Heater will not energize and heat the incoming tap water. Following this precaution prevents exposing personnel and equipment (drains, catch basin, etc.) to scalding hot water.

Disable Cold and Hot Tanks

- 1. Turn off the Red Heater and Compressor Power Switch (O-OFF) to disable the Heater and Compressor.
- 2. Dispense 2 liters (½ gallon) of water through the Hot Tank to cool the water temperature in the Hot Tank and avoid burns.

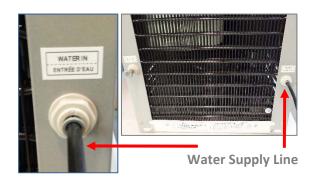




WARNING! HOT WATER. The WL350 Water Treatment System produces Hot Water up to 87°C (187°F). Water above 52°C (125°F) can cause severe burns or scalding. Hot water should be dispensed carefully into insulated container to avoid injury.

Turn off Water Supply and Bleed Water Pressure

- 3. Isolate the WL350 Water Treatment System from feed water by turning off the supply.
- 4. Dispense cold still water to relieve any pressure built up in the system.
- 5. Remove the water supply line from the inlet line bulkhead fitting at back of the WL350 Water Treatment System.



- 6. Depress Cold Water Dispense Button until all Cold Water has drained from the WL350 Water Treatment System.
- 7. Depress Hot Water Dispense Button until all Hot Water has drained from the WL350 Water Treatment Machine.



WL350 TOWER DRAINING INSTRUCTIONS

Draining Notes

Drain the **WL350 Water Treatment System** for transportation.



⚠ WARNING! STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE USE, OR AFTER SYSTEM FAILURE.

The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbial growth).

Prior to draining the Hot Tank, turn off the Red Heater and Compressor Power Switch (*O=OFF*), and dispense 2 Liters (½ Gallons) of hot water from the machine. As hot water is dispensed from the faucet of the WL350 Water Treatment System, colder water will be introduced into the hot tank. Since the Red Heater and Compressor Power Switch is turned off, the heater will not energize and heat the incoming tap water. Following this precaution prevents exposing personnel and equipment (drains, catch basin, etc.) to scalding hot water.

Disable Cold and Hot Tanks

- 8. Turn off the Red Heater and Compressor Power Switch (O-OFF) to disable the heater and compressor.
- 9. Dispense 2 liters (1 gallon) of water through the hot tank to cool the water temperature in the hot tank and avoid burns.





MARNING! HOT WATER. The WL350 Water Treatment System produces Hot Water up to 84°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.

Turn off Water Supply and Bleed Water Pressure

10. Isolate the **WL350 Water Treatment System** from incoming feed water by turning off the supply.



- 11. Dispense cold still water to relieve any pressure built up in the system.
- 12. Insert approx. 3 inches of blue tubing into the Line Bulkhead fitting at back of the *WL350 Water Treatment System* to allow water to drain.
- 13. Depress Cold Water Dispense Button until all Cold Water has drained from the *WL350 Water Treatment System*.

Bulkhead Fitting

14. Depress Hot Water Dispense Button until all Hot Water has drained from the *WL350 Water Treatment System*.





INSTALLATION PROCEDURES

Safety and Installation Guidelines

Ensure all Local, State, and Federal Laws and Codes including health and safety guidelines are met when installing *Waterlogic* Equipment. Only qualified service technicians should attempt installation and service of *Waterlogic* Equipment.

- <u>WARNING!</u> ELECTRICAL SHOCK HAZARD. Always unplug (isolate from power supply) to prevent electrical shock except where electrical tests are specified.
- <u>MARNING!</u> IMPROPER SUPPLY OR CONNECTION CAN RESULT IS RISK OF SHOCK.

 Connect to a 15 amp 120V 60Hz properly grounded outlet (GFI is recommended). Ensure polarity is correct and always use a 3-prong outlet. Consult a qualified electrician if you have any questions.
- **WARNING!** USE ONLY Waterlogic SUPPLIED POWER CORD. Locate system within 5 feet of power supply. Never use an extension cord or adapter. Do not use a damaged power cord or plug. Keep power cord out of heavy traffic areas and away from heat sources. Do not, under any circumstances, remove ground prong or alter the power cord. Never pull the power plug from the outlet with a wet hand or allow the plug to get wet. Failure to use the supplied power cord will void UL Certification and Warranty.
- CAUTION! INDOOR USE ONLY. Never expose to direct sunlight, heat sources, or ambient air temperature above 37°C (100°F) or below 2°C (35°F). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures. Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 2-inches. Installs where the ambient temperature exceeds 27°C (80°F), require a minimum of 4-inches clearance for proper heat dissipation and efficient operation.
- <u>CAUTION!</u> USE A WATER PRESSURE REGULATOR. Waterlogic will not be responsible for injury or damage caused by excessive water pressure. Operating pressure must be 40 psi to 60 psi. Be aware any of potential pressure surges caused by building/municipal pumping stations.
- <u>CAUTION!</u> USE UV STABILIZED SUPPLY LINES. Feed the unit with a potable ambient or cold water supply only. Feed water over 37°C (100°F) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible.
- <u>WARNING!</u> STORE AND TRANSPORT UNIT EMPTY. ALWAYS SANITIZE BEFORE USE, OR AFTER SYSTEM FAILURE

The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Sanitize before use, or after system failure to eliminate any potential microbiological contaminates

Pre-installation and sanitization procedures as prescribed in this manual must be performed before installing the *WL350 Water Treatment Systems*.



Always install indoors and place the *Waterlogic WL350 Water Treatment System* on a firm, flat and stable surface.

- 1. Attach the water supply line to the 1/4" feed water inlet bulkhead fitting on the back of the unit. **Waterlogic** requires the use of a water pressure regulator. Water feed pressure must be between 40-60 psi. Turn on the water supply and check for leaks.
- 2. Check to ensure that the Red Compressor & Heater switch is the *O=OFF* position.

NOTE: Switch has internal LED that illuminates when placed in *I=ON* position.

- 3. Connect the power cord to the back of the *Waterlogic WL350 Water Treatment System* and to a 120 Volt supply.
- 4. Fill the Cold Tank. Hold a container under the dispensing faucet, press and hold the main dispensing button until a continuous flow of water is obtained. Once a continuous flow is obtained, release the dispensing button. Cold Tank is now full.
- 5. Fill the Hot Tank. Hold a container under the dispensing faucet. Press the Hot Select Button followed by the main dispensing button until a continuous flow of water is obtained. Once a continuous flow is obtained, release the main dispensing button. Hot tank is now full.
 - **CAUTION!** NEVER TURN ON HEATER BEFORE FILLING HOT TANK.

Red Compressor/Heater Switch must be in the O=OFF position while the hot tank is empty. Damage could occur within one minute and the overload (high limit) will require manual reset if heater is turned on with an empty hot tank.



- 6. Verify that the UV lamp operates as expected.
 - <u>WARNING!</u> ULTRAVIOLET RADIATION. Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light. Always disconnect before removal.
- 7. Move the *Waterlogic WL350 Water Treatment System* into its final operating position. Be sure that a minimum of 2" clearance is maintained around both the sides and the back of the unit. This is important to allow proper airflow and heat exchange of refrigeration system.
- 8. Level unit using the adjustable feet to level if necessary. Never install on incline.
- 9. Turn the Red Compressor & Heater Power Switch to *I=ON* position.
- 10. When the unit has reached its Hot Temp Set Point, the heater will cycle off.

 When the unit has reached its Cold Temp Set Point Temperature, the compressor will cycle off.
- 11. Once the unit is at the target temperature(s), sample the water to ensure water meets expectations and additional rinsing or adjustment is not required.
- 12. Check the *WL350 Water Treatment System* for any leaks. External Leak Protection is always recommended.