

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 **ECOSTREAM Water Treatment System**, 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.



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 Gage
- Water Pitcher or Container to collect water from the faucet
- 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
- 1. Unpack the Waterlogic ECOSTREAM Water Treatment System and check exterior for damage.

Flush Filters



CAUTION! FILTER FLUSH REQUIRED.

ECOSTREAM's 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

Ecostream Manual Page 39 - Revision: 11-13-2020



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.

- 2. Flush thoroughly per filter manufacturers' recommendation with fresh water to drain.
- 3. 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.

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.



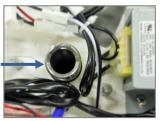
WARNING! USE PROPER PERSONAL PROTECTIVE EQUIPMENT

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).

- 4. Disconnect the UV Lamp wiring harness and carefully remove the UV Lamp from the quartz sleeve.
 - CAUTION! UV SYSTEM IS FRAGILE. Never handle the UV System with bare hands. UV Lamp and Quartz Sleeve must be free of oils and contaminants to ensure proper operation.
- 5. Unscrew Cold Tank/Quartz Sleeve retaining cap and remove the Quartz Sleeve. This will require Top Cover to be removed to access properly and facilitate removal.







Retaining Cap

- 6. Mix ½ gallon of sanitizer per directions or use Bleach Solution (1 teaspoon = 1/6 oz. = 5 ml = ½ cap full) of household bleach (Sodium Hypochlorite 5 - 10% Concentration) with 1/2 gallon of water. Always ensure sanitizer is compatible with stainless steel and acetyl plastic.
- 7. Pour sanitizer solution through UV Port into Cold Tank with a funnel or spout. You may add concentrated sanitizer (½ cap bleach) directly into empty cold tank instead of premixing.

Ecostream Manual Page 40 - Revision: 11-13-2020



- 8. Inspect and clean Quartz Sleeve and O-ring.
- 9. Reinstall the Quartz Sleeve and Quartz Sleeve Retaining Nut. Tighten firmly to ensure proper seal. Over-tightening can cause damage.

CAUTION! DO NOT INSTALL THE UV LAMP AT THIS TIME

The UV will interact with the sanitizer and could potentially cause taste.

10. Connect 40-60 psi regulated, potable water supply to the water inlet bulkhead fitting located on the back of the *ECOSTREAM Water Treatment System*. Turn on water supply and check for leaks.

DANGER! ELECTRICAL SHOCK HAZARD.

Do not plug in unit unless qualified. Only qualified personnel who have read and understand this entire manual should attempt to install or service this unit.

11. Connect *ECOSTREAM Water Treatment System* to power.

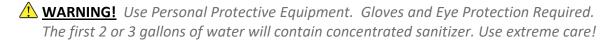
CAUTION! NEVER TURN ON HEATER BEFORE FILLING HOT TANK.

Red Heater and Compressor Power 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.



Fill the Cold Circuit with Sanitizer

12. 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.



Flushing the Sanitizer from the Machine

- 13. Place a pitcher, catch basin, or other container under the faucet of the *ECOSTREAM Water Treatment System*.
- 14. Flush the Cold Tank. Run several 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.
- 15. Once the sanitizer odor/taste has been flushed out of the cold side of the machine the sanitization process for the Cold Circuit is complete.

Ecostream Manual Page 41 - Revision: 11-13-2020



Fill the Hot Tank

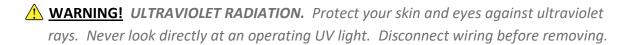
16. Press the Hot Water Select Button, followed by the main dispensing button to fill the hot tank. Water will dispense from the faucet once the hot tank is full. Flush until water is clear.



WARNING! 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



- 17. Reinstall the UV Lamp and connect the wiring.
- 18. Dim or shield the overhead lights and peer into the machine, on top of the Cold Tank, at the UV connector and retaining cap. The blue glow indicates that the lamp is lit.

Compressor Test

19. Switch Red Compressor / Heater to I=ON position. 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 **ECOSTREAM Water Treatment System** is warm, the refrigeration system is working.



20. Once the machine reaches its target temperature, the compressor will shut off. Draw a glass of cold water and verify it is has been chilled to proper temperature.

Heater Test

21. 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 85°C (185°F). Dispense a cup of hot water to ensure the temperature/odor/taste is acceptable.

WARNING! HOT WATER. Unit produces Hot Water up to 87°C (188°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.

Ecostream Manual Page 42 - Revision: 11-13-2020



ECOSTREAM COUNTER TOP DRAINING INSTRUCTIONS

Draining Notes

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



WARNING! STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE REUSE.

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 of hot water from the machine. As hot water is dispensed from the faucet of the ECOSTREAM 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

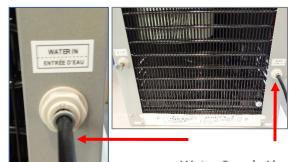
- 1. Turn off the Red Heater and Compressor Power Switch (O-OFF) to disable the heater and compressor.
- 2. Dispense 2 liters (1/2 Gallon) of water through the hot tank to cool the water temperature in the hot tank and avoid burns.



WARNING! HOT WATER. The ECOSTREAM Water Treatment System produces Hot Water up to 87°C (188°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 **ECOSTREAM 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 ECOSTREAM Water Treatment System.



Water Supply Line

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

Ecostream Manual Page 43 - Revision: 11-13-2020



ECOSTREAM TOWER DRAINING INSTRUCTIONS

Draining Notes

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



WARNING! STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE REUSE.

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 of hot water from the machine. As hot water is dispensed from the faucet of the ECOSTREAM 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 of water through the Hot Tank to cool the water temperature in the hot tank and avoid burns.





MARNING! HOT WATER. The ECOSTREAM Water Treatment System produces Hot Water up to 87°C (188°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 ECOSTREAM Water Treatment System from feed water by turning off the supply.

Ecostream Manual Page 44 - Revision: 11-13-2020



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

Bulkhead Fitting -



Ecostream Manual Page 45 - Revision: 11-13-2020



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.
- <u>WARNING!</u> 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 38°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 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 100° F (37°C) 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.

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

Ecostream Manual Page 46 - Revision: 11-13-2020



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

Always install indoors and place the *Waterlogic ECOSTREAM 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 *ECOSTREAM Water Treatment System. 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.
- Check to ensure that the Red Heater and Compressor Power Switch is the O=OFF position.

NOTE: Switches have internal LED that illuminates when placed in *I=ON* position.



- 3. Connect the power cord to the back of the *Waterlogic ECOSTREAM 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.
- <u>CAUTION!</u> NEVER TURN ON HEATER BEFORE FILLING HOT TANK.

Red Heater and Compressor Power 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 ECOSTREAM Water Treatment System* into its final operating position. Be sure that a minimum of 2" clearance is maintained around both sides and the back of the *ECOSTREAM Water Treatment System*.
- 8. This is important to allow proper airflow and heat exchange of refrigeration system.

Ecostream Manual Page 47 - Revision: 11-13-2020



- 9. Level *ECOSTREAM Water Treatment System* using the adjustable feet to level if necessary. Never install on incline.
- 10. Turn the Red Heater and Compressor Power Switch to *I=ON* position.
- 11. When the *ECOSTREAM Water Treatment System* has reached its Hot Temp Set Point, the heater will cycle off. When the *ECOSTREAM Water Treatment System* has reached its Cold Temp Set Point Temperature, the compressor will cycle off.



- 12. Once the **ECOSTREAM Water Treatment System** is at the target temperature(s), sample the water to ensure water meets expectations and additional rinsing or adjustment is not required.
- 13. Check the *ECOSTREAM Water Treatment System* for any leaks. External Leak Protection is always recommended.

Ecostream Manual Page 48 - Revision: 11-13-2020