

## WL900 INSTALLATION, FILTER FLUSHING, AND SANITIZING PROCEDURES

### **DANGER!** ELECTRICAL SHOCK HAZARD.

Only qualified personnel who have read and understand this entire manual should attempt to install, or service this WL900 Water and Ice Machine, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed. Always unplug (isolate from power supply) to prevent electrical shock except where electrical tests are specified.

### **WARNING!** ALWAYS SANITIZE BEFORE USE.

Sanitize before use to eliminate any potential microbiological contaminates.

### **CAUTION!** DRIP TRAY DRAIN.

The WL900 Water and Ice Machine has a built-in, pre-plumbed drain line running from the drip tray to an external bulkhead. This connection must be completed to a drain for proper operation.

## **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).

## **CAUTION!** 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.

### **CAUTION!** INDOOR USE ONLY.

The WL900 Water and Ice Machine has a built-in, pre-plumbed drain line running from the drip tray to an external bulkhead. This connection must be completed to a drain for proper operation.

### ... CAUTION! DRIP TRAY DRAIN.

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.



## **CAUTION!** 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.

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### **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
- Sanitizer Household Bleach (5.25% Sodium Hypochlorite) or Citric Acid Based Cleaner
- 1/4" Plastic Tubing and assorted 1/4" quick connect fittings
- 1/2" Plastic Tubing and assorted 1/2" quick connect fittings
- TDS Meter and Test Strips for measuring chlorine Optional

# **WARNING!** THE FILTRATION SYSTEM MUST BE USED.

The **Waterlogic WL900 Water and Ice Machine** must utilize the filtration system built into the machine. Any attempt to circumvent this filtration will cause flooding and damage to the machine and voids the manufacturer's warranty.

- 1. Unpack the Waterlogic WL900 Water and Ice Machine and check exterior for damage.
- 2. Identify the ports on the back of the machine.



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- 3. Connect a 1/2" line to the drain port and a 1/4" line from the brine port and route both to the floor drain or drain outlet. Connect the water supply line (1/4)" to the "IN" port.
- 4. At the very bottom of the front of the unit, there are two screws recessed back from the front lower panel. Remove these two screws, then remove the front lower panel by pushing down, then pulling out. The panel should hinge outward and be free to remove and set aside. This will allow access to the filter bank.





- 5. Once inside, the water inlet line runs from the bulkhead, through a leak detection valve and up to the inlet of the filter bank on the left side. Close the manual shutoff valve plumbed into this line and turn the water on from the source.
- 6. Disconnect the white tube from the front left of the filter bank and connect a separate piece of 1/4" tubing, and route to drain. In this configuration, water will flush through the first filter slot only and out to drain.

**CAUTION!** FILTER FLUSH REQUIRED.



Disconnect, and plumb to drain for filter flushing.

MANUAL SHUTOFF VALVE

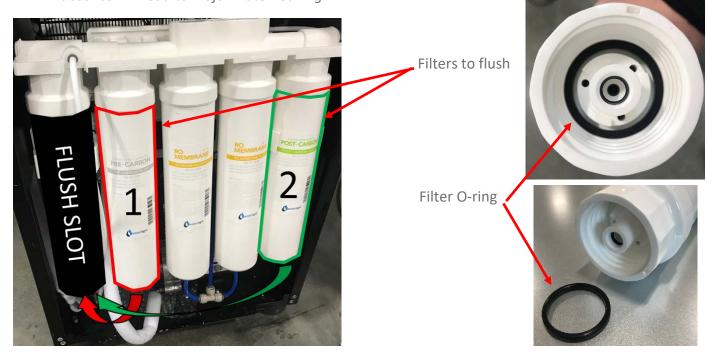
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7. Only the post and pre carbon filters need to be flushed, and only the first slot will flush its connected filter. The sediment cartridge must be removed, and the post and pre carbon filters be placed into the first filter slot one at a time to be flushed. Swap either the pre or post carbon filter into the first filter slot. Open the manual shutoff valve (previously shut off) to flush water through the filter and out to drain. After flushing, close valve and return the filter to its original position and repeat the process for the other carbon filter. Return the sediment filter to its original position once both carbon filters have been flushed, leave the manual shutoff valve closed. Remove the drain tube from the front of filter bank and reconnect the white tube.

## **CAUTION!** DO NOT LOSE THE SEALING O-RING IN THE TOP OF FILTER CARTRIDGE

The filter cartridges contain a black sealing O-ring in the top of the filter that can easily come loose and be lost. Be sure to keep this O-ring in place during filter flushing, as its absence will lead to major water leaking.



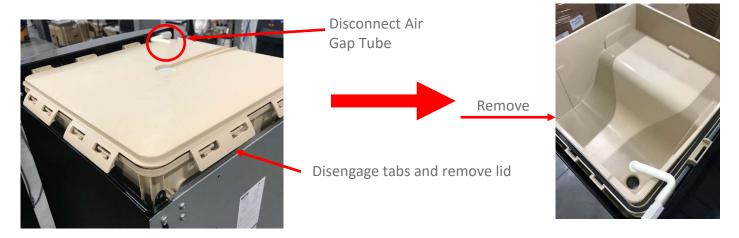
8. After the filters have been flushed, the Waterlogic WL900 Water and Ice Machines tanks can be sanitized. To do this, remove the top cover of the machine to access the Ambient Tank. Remove two screws at the back of the machine and the cover should slide back and disengage.

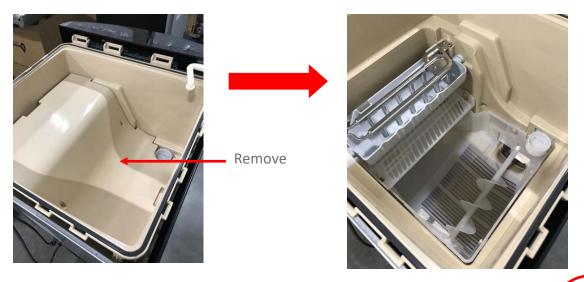


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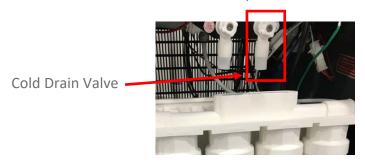


9. Pop the tabs around the perimeter of the ambient tank lid and disconnect the air gap hose plugged into the lid. Remove lid and set aside. Pull up on the edges of the ambient tank to remove. Wash with soap and water or sanitizing agent and set aside. Remove plastic divider underneath ambient tank to access the ice bin.





10. At this time, before further sanitizing the inside of the machine, locate the drain valves in the lower compartment of the machine. Connect a section of poly hose to the cold drain and route to a drain and open the cold drain valve.



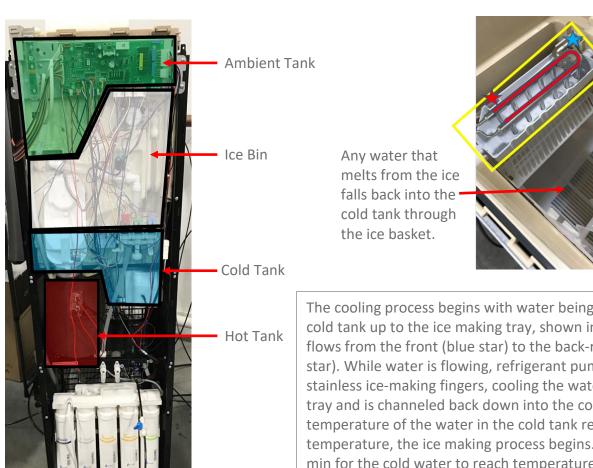


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- 11. The cold tank and ice bin are now ready to sanitize. Wash the inside of the ice bin, ice tray, ice basket, etc., with soap and water or sanitizing agent. Rinse the inside, and all water and solution will be flushed out of the drain line connected to drain in the last step. Once flushing of cleaning agent is complete, close the cold drain valve and remove poly hose. Replace divider and ambient tank, ensuring the gasket at the nozzle of the tank makes a proper seal. Reattach lid and connect the air gap tube. Reinstall the top cover and replace two screws at the rear of the cover.
- 12. Now that the filters have been flushed, and the tanks sanitized, the machine is ready to be powered on. Open the manual shutoff valve used during the filter flushing process to allow water to flow to the filter bank and plug the machine into a power outlet. Power will be directed to the booster pump, and the filling process will begin. Allow 30 minutes for tanks to fill and another 15min for first batch of ice.

Water will flow through the filters and begin to fill the tanks from the bottom up, starting with the hot tank, then the cold tank, and then the ambient tank. Once the cold tank is filled, the chilling process will begin.



The cooling process begins with water being pumped from the cold tank up to the ice making tray, shown in yellow. Water flows from the front (blue star) to the back-runoff point (red star). While water is flowing, refrigerant pumps through the stainless ice-making fingers, cooling the water. Water exits the tray and is channeled back down into the cold tank. When the temperature of the water in the cold tank reaches a set temperature, the ice making process begins. It can take 30-40 min for the cold water to reach temperature. The same process takes place to make ice, except the water in the tray is still and the cubes form on the fingers. 12 cubes are produced every 12 minutes and then the process repeats until the optical ice full sensors are triggered.

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### WL900 DRAINING PROCEDURES

## **CAUTION!** STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE REUSE.

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

### DANGER! HOT WATER.

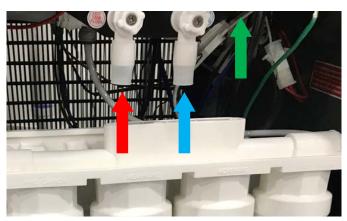
The Waterlogic WL900 Water and Ice Machine produces Hot Water up to 87oC (188oF). Water above 52°C (125°F) can cause severe burns or scalding. Hot water should be dispensed carefully into insulated container to avoid injury.

1. To drain the tanks of the Waterlogic WL900 Water and Ice Machine, first shut off water supply to the unit. Remove the lower front panel to access the lower compartment. To do this remove the two screws under the lower lip of the panel, then push down and pull out. The panel should hinge outward and be free to remove and set aside. This will allow access to the lower compartment.



2. With access to the lower compartment, locate the drain switch and the hot and cold drain valves mounted to the black shelf just above the filter bank. Activate the drain switch to put the machine in drain mode. This will disable the booster pump and water will not be allowed to flow to the tanks without having to shut off water and power. Remove the silicone cap and connect a section of 1/2" poly hose to the hot drain valve and route to drain.

NOTE: Activating the drain switch will sound an audible alarm, that will continue until it is deactivated. This is normal and is only to indicate to the technician that the unit is in drain mode.



**DRAIN SWITCH** (Hidden from view)

**HOT DRAIN VALVE** 

**COLD DRAIN VALVE** 

SILICONE CAPS

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3. Open the hot drain valve. Hot water will drain from the hot tank. Once draining is complete, shut off the hot drain valve and swap the poly hose over to the cold drain valve, and repeat the process. Once the water has drained from the system, shut off the drain valve and remove the poly hose. Replace the silicone caps on the drain valve nipples as needed. Leave the drain switch activated until maintenance is complete.

**NOTE:** Draining water from the hot drain valve will drain water from BOTH the ambient AND hot cold tanks.

**NOTE:** Even when the system has been completely drained, any ice still in the ice bin will remain. Over time, the ice melt off will drain into the cold tank. If draining for storage, quickly remove the ice after draining.

4. To return, the unit to normal operation, replace the silicone caps on the nipple of each drain valve and ensure both valves are closed. Deactivate the drain switch. This will enable the booster pump, and water will be allowed to flow again through the filters and begin filling the tanks.

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