

## **DISPENSING TROUBLESHOOTING INDEX**

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*Also includes related instruction for Hot Tank Descaling*

## 1. Dispensing Won't Stop when Not Holding the Dispensing Button

Possible Reason	Solution
Too much water pressure. Recommend 40-60 psi for the <b>WL3 FX Water Treatment System</b> to operate properly.	The correct input water pressure is critical to the performance of the unit to allow solenoids to open.  Check water pressure at the inlet bulkhead with a water pressure gauge. Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button "click".  Adjust water pressure to 40-60 psi.
Bad Display PCB	Replace Front PCB Hot and Cold – P/N EN-6085 WLCP PN 12-8103 Cold Only – P/N EN-6086 WLCP PN 12-8615
Debris in the Solenoid	Inspect Solenoid for debris and clean out as needed.
Dispensing Button Stuck	Dirt or Foreign material is filling the gap around the push-buttons. Inspect the push buttons and clean surrounding area. Inspect faucet assembly inside the unit and clean as necessary.

## 2. Water does not dispense from Unit

Possible Reason	Solution
Too much water pressure. Recommend 40-60 psi for the <b>WL3 FX Water Treatment System</b> to operate properly.	The correct input water pressure is critical to the performance of the unit to allow solenoids to open.  Check water pressure at the inlet bulkhead with a water pressure gauge. Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button "click".  Adjust water pressure to 40-60 psi.
Closed water supply valve	Open the water supply valve.
The unit is not properly plugged into electrical outlet	Check electrical outlet connection, or for blown circuit breaker.
Green Heater and Compressor Switch on unit is in the off position	Turn Green Heater and Compressor switch on. <i>I = ON</i>
15 Amp Fuse Blown	Replace the 15 Amp Fuse as needed.



Hot and Cold Solenoid connections into the Display PCB are loose.	Turn power off; unplug the unit and visually inspect solenoid connections into the Display PCB. Verify the soldering points on connections are secure into the board. Remove the PCB to inspect the front of the board.
Exhausted Filter	Replace filters as needed.

### 3. Steady Drip Out of Faucet

Possible Reason	Solution
Debris in Solenoid	Inspect Solenoid for debris and clean out as needed.

### 4. Irregular / Intermittent Dispensing

Possible Reason	Solution
Too much water pressure. Recommend 40 to 60 psi for <b>WL3 FX Water Treatment System</b> to operate properly.	Check water pressure at the inlet bulkhead with a water pressure gauge.  Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button “click”.  Adjust water pressure to 40-60 psi.
Loose or bad connection on the Front Dispensing PCB or Solenoid Connector	Check that they are connected properly and tightened.
Solenoid	If both the Water Pressure and PCB have been ruled out, then it is the Solenoid. Replace Solenoid.
Dispensing button is broken on PCB	Check PCB for loose or damaged button. Replace PCB as necessary.

### 5. Small Amount of Water Periodically Dispenses from Faucet Automatically

Possible Reason	Solution
Cold or Hot Water Solenoid Valve malfunction`	Inspect valve components for proper function. Replace as necessary.
Obstruction in Solenoid housing is preventing proper sealing of component	Pre-determine whether water being dispensed is Hot / Cold. Isolate the water supply; push the DISPENSE button to release the line pressure, and remove the coil affixed to the Solenoid stem. Remove the stem from the solenoid housing and allow water from the tank to flush out the contaminate(s).

## 6. Low Flow of Water – Rated Service Flow: 1.9 L/min (0.5 gal/min)

Possible Reason	Solution
Determine Flow of Water	Rated Flow Rate is 1.89 Liters (0.5 gallons) per Minute. Check Flow Rate by dispensing into a container for one minute. Measure the amount of water that has been dispensed.
Feed Lines too small	Feed lines can restrict flow if run long distances from the supply. It may be necessary to increase the supply line (e.g. use 3/8" feed line versus 1/4").
Elbows and turns in the line	Minimize elbows and turns in the feed line.
Filters	Filters with high pressure drop due to fouling or just by design. Change filters more frequently or go to higher micron size filter for local water conditions.
Restrictions	Flow path to ensure there are no undiscovered restrictions due to debris or malfunctioning valves, including the supply valve at the source.
Booster Pump	Add a booster pump to the supply line if the feed is slower than needed.

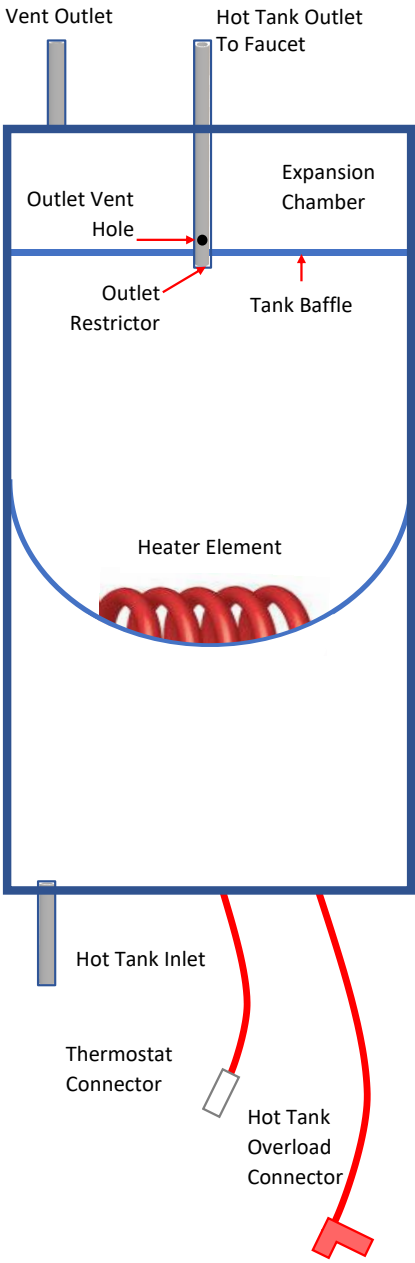
## 7. Hot Water Intermittently Forced Out through the Faucet, or a Dual Stream out of the Faucet

Possible Reason	Solution
Mineral deposits on the expansion slot inside the Hot Tank vent chamber which blocks the normal path of water to expand.	Descale the Tank. <u>See Hot Tank Descaling Instructions that are included further below in this Troubleshoot Section.</u>

## 8. Hot Water Coming out of Faucet Vent Hole

Possible Reason	Solution
<p>Too much water pressure. Recommend 40 to 60 psi for <b>WL3 FX Water Treatment System</b> to operate properly.</p>	<p>Check water pressure at the inlet bulkhead with a water pressure gauge.            Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button "click".            Adjust water pressure to 40-60 psi.</p>
<p>Improper tubing attachment from the tank to faucet or vice versa.</p>	<p>Verify tubing is connected properly from tank outlets to correct faucet attachments.</p>
<p>Hot Tank outlet hole is scaled over.</p>	<p>Inspect and Descale Tank as needed.  <u><b>See Hot Tank Descaling Instructions that are included further below in this Troubleshooting Section.</b></u>            See instructional video on the Partner Area of the Waterlogic.com website for more information.</p>
<p>Expansion chamber is not sealed properly.</p>	<p>Replace the Hot Tank.</p>

## 9. Hot Water Drip out of Faucet

Possible Reason	Solution
<p>Small Outlet Vent Hole susceptible to scale build up.</p>	<p>Descalc Tank.  <u>See Hot Tank Descaling Instructions that are included further below in this Troubleshooting Section.</u>            See instructional video on the Partner Area of the Waterlogic.com website for more information.</p>
	<p>All <b>Waterlogic</b> Hot Tanks have a built in Vent or Expansion Chamber in the top of the tank except for WL270 (GF) units.</p> <p>The Vent Chamber allows for expansion of the water when it is heated.</p> <p>The chambers are separated by a welded-in tank baffle.</p> <p>Water always flows into the bottom of the tank and out the top to the faucet.</p> <p>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.</p> <p>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.</p> <p>Water in the vent chamber is suctioned back through the outlet tube vent hole when water is dispensed.</p> <p>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.</p> <p>The small Outlet Vent Hole is susceptible to scale build up and is a key indicator that descaling is required.</p> <p>It is critical to descale the hot tank through the vent line and outlet line on a regular basis to prevent this problem.</p> <p>Descaling through the inlet and/or outlet lines only will not clean the vent chamber and outlet vent hole properly.</p>

## 10. Dispenses Hot and Cold Water at the Same Time

Possible Reason	Solution
Too much water pressure. Recommend 40 to 60 psi for <b>WL3 FX Water Treatment System</b> to operate properly.	Check water pressure at the inlet bulkhead with a water pressure gauge. Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button “click”. Adjust water pressure to 40-60 psi.
Hot or Cold solenoid is stuck open.	Remove Top cover. Check Hot Solenoid: Dispense cold water and visually inspect tubing for water flow from both tanks. Check Cold Solenoid: Disconnect elbow from outlet of cold solenoid. Select hot water and dispense (quickly releasing dispensing button to avoid much water coming out of cold solenoid). Replace solenoid as necessary.

## 11. No Cold Water Available

Possible Reason	Solution
Too much water pressure. Recommend 40 to 60 psi for <b>WL3 FX Water Treatment System</b> to operate properly.	Check water pressure at the inlet bulkhead with a water pressure gauge. Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button “click”. Adjust water pressure to 40-60 psi.
Closed Water Supply Valve	Open the Water Supply Valve
Cold Water Solenoid Valve malfunction	Inspect the valve components for proper functionality.
Green Heater and Compressor Switch on unit is off.	Turn Green Heater and Compressor Switch on. <i>I = ON</i>
Loose connection(s) on the Display PCB	Turn power off; unplug the unit and visually inspect solenoid connections into the Display PCB. Verify the soldering points on connections are secure into the board. Remove the PCB to inspect the front of the board.
Exhausted Filter	Replace filters as needed.



## 12. No Ambient Water Available

Possible Reason	Solution
Too much water pressure. Recommend 40 to 60 psi for <b>WL3 FX Water Treatment System</b> to operate properly.	<p>Check water pressure at the inlet bulkhead with a water pressure gauge.</p> <p>Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button “click”.</p> <p>Adjust water pressure to 40-60 psi.</p>
Closed Water Supply Valve	Open the Water Supply Valve
Ambient Water Solenoid Valve malfunction	Inspect the valve components for proper functionality.
Loose connection(s) on the Display PCB	Turn power off; unplug the unit and visually inspect solenoid connections into the Display PCB. Verify the soldering points on connections are secure into the board. Remove the PCB to inspect the front of the board.
Exhausted Filter	Replace filters as needed.

## 13. Cold Water Dispenses from Faucet and Vent Outlet Simultaneously

Possible Reason	Solution
Improper tubing attachment from the tank to faucet or vice versa	Verify tubing is connected properly from tank outlets to correct faucet attachments.
Scale has formed inside cold tank outlet tube.	Remove cold water outlet tube from tank to faucet. Pour some scale remover into cold tank.
Expansion chamber in Cold Tank is not sealed properly.	Replace Cold Tank.

## 14. Dispense Buttons Stick

Possible Reason	Solution
Dirt or Foreign material is filling the gap around the push-buttons.	<p>Inspect the push buttons and clean surrounding area.</p> <p>Inspect faucet assembly inside the unit and clean as necessary.</p>



## **15. Run On – Water continues to dispense out of faucet after releasing the dispense button**

### **Reason**

“Run On” or “Carry On” is present in all Waterlogic pressure fed units without outlet solenoids.

“Run On” is defined as the amount of water that continues to dispense out of the faucet after releasing the dispense button.

Run On exists because the tanks pressurize as water is being dispensed. Every Waterlogic tank has an outlet restrictor to ensure the tanks remain full of water and water is controlled as it is released to the faucet. The inlet solenoid controls flow into the tanks. The tanks will “depressurize” once the dispense button is released the inlet solenoid closes. A small amount of water will “Run On” through the faucet as the tank depressurizes to atmospheric conditions.

Typical “Run On” is 2-3 seconds.

**“Run On” can be reduced by installing a pressure limiting device.**

The amount of inlet or supply pressure directly impacts the amount of “Run On” as quantified below.

WLCP Lab Testing of Rn On 7-31-2013				
Pressure	Pressure	Time	Flow Rate	Run On
Static PSI	Dynamic PSI	4 Liters	l/min	Seconds
68	40	61	2.9508197	3
50	30	72	2.5	2.5
32	20	92	1.956217	2
Pressure measured at inlet line to unit. Static with unit closed. Dynamic with unit dispensing cold water.				
No filters were installed in unit.				