

## 7- GENERAL OPERATING INSTRUCTIONS

Operating your new tankless water heater is similar to using any traditional water heating system. However, it is very important that you carefully read all of the setup procedures and operating instructions and tips to ensure the maximum performance and energy savings from your new water heater. We recommend that all members of the household read these General Operating Instructions.

**How your new water heater works:** Your tankless water heater does not store hot water like a conventional tank-type water heater. It contains high powered heating elements that are capable of heating water on-demand. As soon as you turn on a hot water faucet, a sophisticated flow sensor recognizes that you have turned on the water. This sensor measures flow rate while another sensor measures the incoming water temperature. This information is transmitted continually to the computer logic controls which decide how much power to send to the heating elements to heat the water to your desired temperature. Once the water faucet is turned off your water heater will turn off as well.

## 8- MAINTENANCE

To ensure maximum performance of your water heater and to reduce the risk of a water leak, we recommend the following maintenance:

Inspect the connections on the inlet and outlet of the water heater at least on an annual basis for any signs of damage or failure. Any signs of damage, cracks, leakage or weakness should be addressed. Take care not to over tighten the connections. Serious internal damage to your water heater can occur if you over tighten the water heater connections at the unit.

### IMPORTANT NOTES:

As with all electrical appliances, under no circumstances should you attempt to install, repair or disassemble this water heater without first shutting off all power to the unit directly at the fuse or breaker box. **SERIOUS BODILY INJURY OR DEATH COULD OCCUR IF YOU IGNORE THIS WARNING.**

When any maintenance is performed on the water heater or the home's plumbing system that may introduce air into the plumbing pipes, it is important to turn the power off to the water heater and purge the air out of the lines before allowing the unit to power up. **FAILURE TO DO SO COULD CAUSE PERMANENT DAMAGE TO THE HEATING ELEMENT AND VOID YOUR WARRANTY.**

If you have a water supply with a high level of mineralization (hard water), you should increase the frequency of your maintenance.

## 9- TROUBLE SHOOTING GUIDE

### Are you having problems with your water heater?

Please call or email our customer service and technical support team for any help you may need.

**TOLL FREE 1-877-474-6473**

**support@ecosmartUS.com**

The following table represents some of the most common technical support questions we receive. Before calling us, please read thoroughly to see if your question or problem is addressed.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Water heater is not heating at all (water is flowing but the unit is not heating - the outgoing water temperature is the same as the cold water supply) - the digital display does NOT light up.	No power or incorrect wiring.	Make sure the breakers at main electrical panel are ON. You may have a faulty breaker or unit may be wired incorrectly.
	Flow rate is too low / water pressure is too low.	Your water heater has an activation flow rate of approximately 0.3 GPM. If your water flow rate is less than this level, your unit will not activate. Increase the flow rate.
Water heater is not heating at all (water is flowing but the unit is not heating - the outgoing water temperature is the same as the cold water supply) The digital display DOES light up.	Internal part failure.	Please call us for technical assistance.
Water heater is heating, but the water temperature is not hot enough.	User temperature setting too low.	Turn up the temperature setting on the unit.
	Flow rate is too high.	Depending on your incoming water temperature and the power output of your model, your water flow rate may exceed the physical heating capacity of your water heater. Reduce the flow rate by installing an EcoSmart Flow Regulator. Use the chart in section 6 to find out which flow regulator works best for your particular model.
	Crossed wires.	If it's a new installation, have your electrician double check the wiring. Is possible that the wiring is incorrect.
	Voltage less than 240 volts.	The heating elements on your water heater are design for 240 volts. When used with a lower voltage, they produce less heating power. You may need to upgrade to a larger model.
	Mixing too much cold water.	You do not need to mix as much cold water with your tankless water heater compared to when you use a conventional water heater. You may also have an anti-scald feature on your faucet that is mixing cold water. These types of faucets can usually be adjusted to reduce the amount of cold water mixed.
The water temperature at the faucet is less than the temperature setting of my water heater.	Voltage less than 240 volts.	The computer chips in your tankless water heater are programmed with the expectation that your incoming line voltage is 240 volts. If you have less than 240 volts, it may affect the reading on your water heater's digital display and cause it to read slightly higher than the actual output temperature. To compensate for this, increase the setting on your water heater if you need / want hotter water.
	Anti-Scald pressure/balancing valve or tempering valve.	Your faucet may have an anti-scald feature or a tempering valve that automatically mixes cold water even when you turn your control lever or handle to full hot. These devices are usually adjustable so you can turn off the cold mix completely. You can compensate for this by increasing the setting on your water heater if you need/want hotter water.
	Thermal loss due to long pipe run	As the hot water from the heater runs through the hot water delivery system to your faucet, some heat will be lost especially if it has long distance to travel or the pipes are cold. This is normal. You can compensate for this by increasing the setting on your water heater if you need/want hotter water.