

# **GAS 30L NG/LP**

**GAS TANKLESS WATER HEATER**

## **SELF TROUBLESHOOTING GUIDE**





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## WARNING

*We recommend installation, repair and maintenance be performed by a professional for safety and compliance.*

*Working with gas can be dangerous. If you are not familiar with local building codes and basic gas plumbing practices, please employ a professional to install, repair and/or maintain your water heater.*

*Do not install water heater on a wooded surface.*

## ERROR CODE > E0

### OUTLET WATER TEMPERATURE SENSOR FAILURE

- Clean outlet temperature sensor
- Place outlet temperature sensor

## ERROR CODE > E1

### IGNITION FAILURE

- Check gas pressure, no gas or pressure too low
- Assure all valves on system are opened
- Assure gas supply is within range
- Press ON/OFF to reset

## ERROR CODE > E2

### FLAME FAILURE (WHILE UNIT RUNNING)

- Check gas pressure, no gas or pressure too low?
- Assure all valves on system are opened
- Assure gas supply is within range
- Press ON/OFF to reset

## ERROR CODE > E3

### DRY BURNING (OVER TEMPERATURE) PROTECTION

- Temperature above 85°C/185°F detected
- Increase water flow and pressure
- Confirm enough water flow and pressure
- Check system for closed valves and clogs
- Clean inlet screen of water heater, clean fixtures, clean shower head

## ERROR CODE > E4

### INLET WATER TEMPERATURE SENSOR FAILURE

- Clean temperature sensor
- Replace inlet temperature sensor

## ERROR CODE > E5

### FAN FAILURE

- Contact technician

## ERROR CODE > E6

### WATER SENSOR OVERHEAT PROTECTION

- Inlet temperature equals or above 75°C/167°F, check temperature sensor
- Outlet temperature equals or above 85°C/185°F, check temperature sensor
- Clean temperature sensor
- Replace temperature sensor



## ERROR CODE > E7

PROPORTIONAL VALVE OR SOLENOID VALVE FAILURE

- Contact technical support

## ERROR CODE > E8

FLUE PIPE EXHAUST BLOCKAGE

- Check and clean venting installation
- Press ON/OFF to reset

## ERROR CODE > E9

FALSE FLAME

- Press ON/OFF to reset
- Contact technical support

## NO POWER: POWER INDICATOR LAMP IS NOT LIT

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Power outage.	Unit requires 120V power. Use unit when power is restored. Check circuit breaker and reset if needed. Check ground fault circuit interrupter (GFCI) if circuit includes one and reset if necessary.
Unit is unplugged.	Check power plug and ensure properly. Plug the power plug properly.

## HOT WATER IS NOT THE RIGHT TEMPERATURE (TOO HOT OR TOO COLD)

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
No/empty fuel source.	Fuel gas valve needs to be open. Refill source tank (if applicable).
Water valve closed.	Open the water inlet valve.
Power outage.	Unit requires 120V power to operate.
Flow is too low or became too low. (less than 0.66 gallons per minute (gpm) or 2.5 liters per minute (l/m).	Flow is below the lower limit necessary for stable burner operation and proper temperature control. Increase the hot water flow to enable system.

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Freezing temperatures may have frozen water in the heater or hot water system.	See "No Flow Due to Expected Frozen Heater" section of this manual for procedure to thaw unit.
Fuel gas meter special control restrictions.	Some fuel gas valves may have special restrictions or digital controls that use. Consult your gas supplier and/or a service professional for assistance.
Distance from heater to source is long.	Allow time for hot water to travel through system to reach the point of use.

## HOT WATER IS NOT THE RIGHT TEMPERATURE (TOO HOT OR TOO COLD)

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Temperature set point was reset due to power outage.	Power outage restores default settings and custom set points must be reentered to unit
Flow is beyond capacity.	Desired water flow is above maximum capacity of unit. Reduce user flows to re establish control of temperature
Incoming water is too warm.	Incoming water to unit is very warm and the flow is just above minimum requirements, the heat generated by the burner while operating at minimum capacity can make the water hotter than desired. Increase the hot water user flow so that the burner system can control the temperature.

**THE HOT WATER COMING APPEARS WHITE AND TURBID**

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Small bubbles may appear when water is heated. Air dissolved in water may evolve when water is heated.	None. Normal operation.

**VENT SYSTEM TROUBLE**

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Vent system is restricted in some manner.	Check air intake and exhaust ducts to ensure they are not damaged, corroded, blocked, etc.

**"SMOKE" OBSERVED COMING FROM EXHAUST SYSTEM DURING COLD TEMPERATURES**

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Water vapor produced during combustion is condensed in the exhaust as the hot gas is cooled by the outside air.	None. Normal operation.

## WATER LEAKING FROM SAFETY VALVE OUTLET

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Water system is operating above design pressure.	Consult professional for system review.
Safety valve is damaged.	Replace safety valve. Consult professional as required.

## BLOWER FAN NOISE CAN BE HEARD FOR SOME TIME AFTER OPERATION STOPS

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
The blower is designed to run for 30 seconds after burner shuts off.	None. Normal operation.

## THE VOLUME ALARM DOES NOT SOUND EVEN THOUGH THE VOLUME APPEARS TO BE ADEQUATE

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Units incorrect during input.	Refer to "H2O SAVER TECHNOLOGY™ - Set a Desired Volume" section to ensure units (metric vs. English) and volume (displayed volume number represents 1/10th of the actual total flow) are correctly set.

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Measuring flow of only hot water instead of hot water and cold water combined.	The volume measurement only keeps track of the water volume that passes through the water heater. If hot water going to a tub is combined with cold water, the volume computed would not be representative of the total amount that may have been dispensed.

## UNRESOLVED PROBLEM

<i>POSSIBLE CAUSE</i>	<i>SOLUTION</i>
Other assistance required.	Consult Marey or contact an authorized service professional.