

Res Tech
Support

Electric Water Heaters No Hot Water

Dear Homeowner,

This article, the website, videos, and other documents contain *supplementary information* and are not intended to replace the printed Instructions. For complete details, read and follow the printed Installation Instructions that came with your water heater or parts kit. The printed Instructions and product labels contain model-specific information, important warnings, and safety notices.

Based on the symptoms you described during your call, we believe the following information may be helpful. For additional help, [click here](#) to find a service technician in your area.

Please read the safety information in the Owner's Manual and the labels on the water heater before attempting any of these procedures.

We recommend [watching this video](#) to help determine why you have no hot water.

There are several possible reasons why you may have no hot water:

- a faulty shower control or faucet valve
- no electrical power to the water heater
- a burned out upper heating element
- a tripped energy cutoff (ECO)
- a leak in your home's plumbing system

Faulty Shower Control Valve / Faucet Valve

Check the hot water at all faucets in your home. Some faucets and shower controls have built-in thermostatic or pressure balance mixing valves which may need adjustment or replacement. If you get hot water from some faucets but not others, have a service technician repair the faucet or shower control. [Click here](#) to find a service technician in your area.

WARNING!

Working on an energized circuit can result in severe injury or death from electrical shock. Turn power off. Check wires with a circuit tester to make sure power is off. When you are finished, be sure all covers are secured to reduce the risk of fire and electric shock.

No Electrical Power to the Water Heater

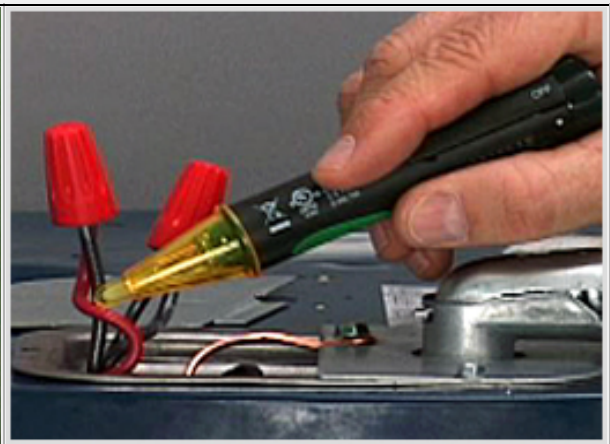
To check for power, you'll need a non-contact circuit tester.

Follow these steps:

1. Find and turn off the water heater's circuit breaker, or remove the fuses.
2. Find electrical junction box on top of water heater, remove cover, and identify the two power wires.
3. Turn circuit breaker back on (or re-install the fuses) and check for power on both incoming power wires using a non-contact circuit tester.
4. Again, turn off water heater's circuit breaker, or remove circuit fuses, and replace electrical junction box cover.
5. If power is not getting to the water heater, have a service technician check your home's wiring or circuit breakers. [Click here](#) to find a service technician in your area.



Electrical Junction Box (on top of water heater).



Use a non-contact circuit tester to check for electrical power.

Burned out Upper Heating Element

Checking the resistance of the upper heating element will tell you if it's bad. You'll need a multimeter capable of measuring resistance (Ohms) and a non-contact circuit tester.

Follow these steps:

1. With power to the water heater still off, remove the upper element/thermostat access panel, insulation, and plastic cover.
2. Loosen the two screws on the upper heating element and remove both power wires.
3. Set multimeter to Ohms and measure resistance between the two upper heating element screws (reading should be between 5 and 25 Ohms).
4. If the resistance reading is either below 5 Ohms or above 25 Ohms, replace upper element. [Watch this video](#) for help replacing an element. Have a service technician replace this part if you cannot perform the work safely. [Click here](#) to find a service technician in your area.
5. If the element's resistance is good, reattach the two power wires and replace the plastic cover, insulation, and access panel.



Upper Element/Thermostat Access Panel.



Use a multimeter to measure the resistance of the upper heating element. A good element will have a resistance of between 5-25 Ohms.

WARNING!

A non-functioning thermostat or a shorted heating element can cause the water heater to produce extremely hot water and trip the ECO. This water heater can make water hot enough to cause severe burns instantly, resulting in severe injury or death. If the ECO trips, do not turn the power back on until the cause of overheating has been identified and repaired.

Tripped Energy Cutoff (ECO)

To check if your water heater's ECO switch has tripped, follow these steps:

1. With power to the water heater still off, remove the upper element/ECO reset button access panel, insulation, and plastic cover.
2. Locate and press the red ECO reset button on the upper thermostat (on some models, there is a second ECO on the lower thermostat). If you hear the ECO reset button click, the ECO was tripped. A tripped ECO usually indicates your water heater overheated due to a problem with one of the elements or thermostats. If the ECO tripped, you'll need a service technician to determine the cause and repair it. [Click here](#) to find a service technician in your area.
3. When you're finished checking the ECO, replace the plastic cover, insulation, and access panel.



ECO Reset Button Access Panel.



With the power off, press the red ECO button. If it clicks, that usually means there's a problem with one of the elements or thermostats.

Leak in Your Home's Plumbing System

A leak in your home's plumbing system can overload the water heater's ability to heat water. In that case, your water heater can be working but you'll have no hot water. You'll need to have a service technician locate and repair the leak. [Click here](#) to find a service technician in your area.

For additional help, [click here](#) to find a service technician in your area.

[Please take a moment to tell us how we did today.](#)
