Res Tech Support

Electric Water Heaters

Tank Leak

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** for help with leaks around your water heater.

In most cases, what appears to be a water heater tank leak could be:

- a leak in the plumbing connections
- a loose element
- a dripping T&P relief valve

The amount of water that's leaking and the source of the leak can help determine the cause and how to stop it.

Check Plumbing Connections

If there's water on the floor around the bottom of the water heater, check the plumbing connections on top of the water heater. Use a dry paper towel to wipe around the hot and cold pipe connections on top of the water heater. If the paper towel is wet after wiping a connection, have a service technician repair the leak. **Click here** to find a service technician in your area.

Check T&P Relief Valve

WARNING!

Do not cap or plug the T&P relief valve or discharge pipe, and do not operate the water heater without a functioning T&P relief valve—this could cause an explosion.

Watch this video for help with a dripping T&P relief valve.

The T&P relief valve discharge pipe.

If the hot and cold water connections are not leaking, check the T&P relief valve discharge pipe. In most cases, drips from your water heater's T&P relief valve discharge pipe mean the home's water pressure is too high. Use a pressure gauge with a recording hand to check your home's water pressure over a 24-hour period. If the water pressure is over 80 PSI, install a pressure reducing valve (PRV). Adjust the pressure to 50-60 PSI.

Since water expands when heated, most homes require a thermal expansion tank. Install a thermal expansion tank on the cold water line to prevent nuisance drips from the T&P relief valve. We recommend **watching this video** for help understanding Thermal Expansion Tanks. Have a service technician install the thermal expansion tank if you cannot perform the work safely. **Click here** to find a service technician in your area. Please note the need for a thermal expansion tank is not a water heater defect, and therefore is not covered under your water heater's warranty.

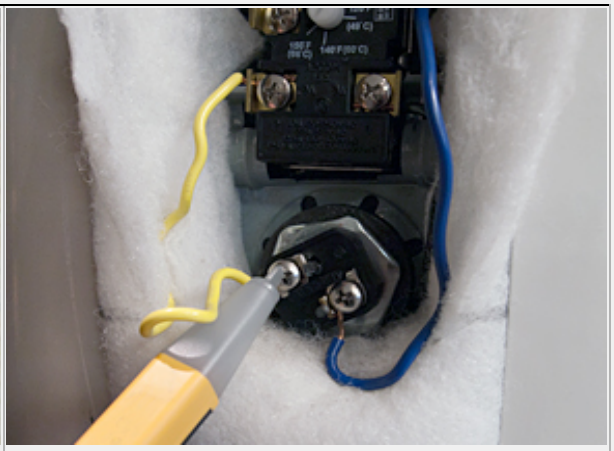
If there are several gallons of water on the floor around the T&P relief valve discharge pipe, turn the water heater's circuit breaker off, or remove the fuses, and contact a service technician to check the thermostats and elements. **Click here** to find a service technician in your area.

Check the Elements

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.

Use an element wrench to tighten a loose element.



Use a non-contact circuit tester to confirm power is off.

If there's water dripping from one of the element access panels, there may be a leak around one of the elements.

1. Turn the water heater’s circuit breaker off or remove the fuses.
2. Find electrical junction box on top of water heater, remove cover, and check both incoming power wires with a non-contact circuit tester to make sure power is off.
3. Remove the access panels, insulation, and plastic covers for both elements.
4. Use a non-contact circuit tester on one of the element wire screws to make sure power is off.
5. If water is leaking from around one of the elements, the element may not be securely tightened.
6. With the power still off, remove the two element wires and use an element wrench (available at most retail home centers) to gently tighten the element.
7. Dry the insulation and area around the element wires.
8. Reattach the two element wires and replace the plastic covers, insulation, and access panels.
9. Turn the water heater’s circuit breaker back on or replace the fuses.
10. If the leak around the element continues, replace the element.

We recommend **watching this video** for help replacing an element. Have a service technician install this part if you cannot perform the work safely. **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.
