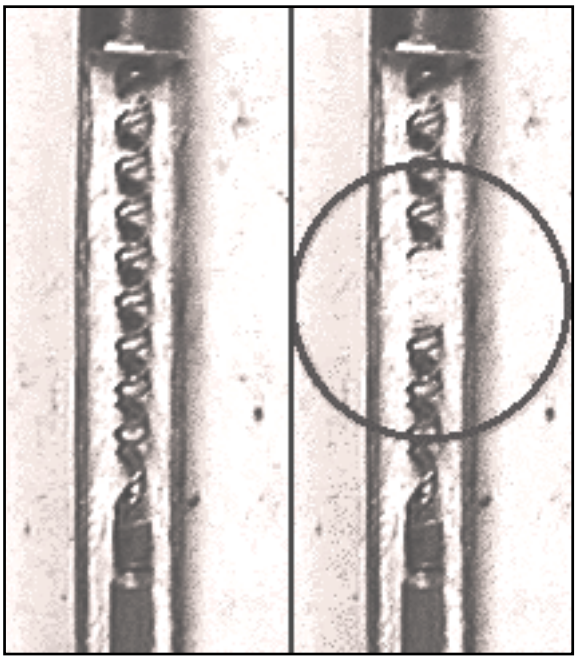
How to Check for an Open or Grounded Heating Element

How to Check for an Open Heating Element



An open element is a condition where the nichrome filament wire is broken somewhere on the inside of the heating element and you cannot tell by a visual inspection. The electrical connection is 'open' and the electrical current cannot flow along the path of the filament.

1. Turn off the power to the water heater. Check for the presence of power with a multimeter.

2. Remove both wires from the screw terminals of the heating element.

3. Place test probes of the OHM meter on both screw terminals. If the OHM meter does not register a resistance, the element is open and should be replaced.

How to Check for a Grounded Heating Element

4. With the power remaining off place one test probe on either of the screw terminals and the other test probe to the steel inner tank. If the OHM meter registers any resistance, the element is grounded and should be replaced.

Replacing the Heating Element

Heating elements in Rheem electric water heaters are screw in immersion type equipped with a one inch threaded pug. They can best be replaced with a standard 1 1/2 inch hex socket wrench.

See FaxBack Bulletin 1310 for step-by-step instruction on how to replace a heating element.