How to Verify an Activated TRD

This process will guide you thru the steps to determine if the TRD needs to be replaced; or there is some other mechanical problem with the Guardian Water Heater. Make sure the unit has gas; has sufficient gas pressure; and all the shut-off valves are turned ON. The shut-off valve should be parallel with the pipe; not perpendicular to the pipe.

1. Does the unit go to main burner and stay lit for at least 3 minutes?
   - Yes: Unit appears to be working fine. 
     Assume there is proper gas pressure and proper venting and properly installed to local code.
   - No:
     - Does the unit go to pilot and stay lit for at least 3 minutes?
       - Yes: Try main burner again. If you have pilot, then you have gas and the gas valve should work.
         Hold down the red plunger at the top of the gas valve to light the pilot. You may need to purge air from the gas line so it may take a couple of minutes to get the pilot going. Verify shut-off valves are ON. See document 1424.
       - No:
         - Is the TRD tripped?
           - Yes: Replace Thermal Release Device and inner door Gasket.
             To determine if the TRD is tripped, you will need to remove the inner door assembly. See instructions on next page.
           - No:
             - Replace inner door gasket and reassemble.
               If the TRD is not tripped, then the problem is the gas supply, gas valve or thermocouple. Conduct tests for each of these components to determine problem part. See document 1424.
### How to Verify an Activated TRD

1. Shut off gas supply to water heater. Turn gas valve to **OFF**.

2. Remove jacket door.

3. Unscrew the pilot supply tube (7/16"), the thermocouple (3/8"), main gas supply tube (3/4"), and remove the ignitor wire from the bottom of the piezo ignitor striker.

4. Remove the four tamper resistant screws at the corners of the burner. You will need a #20 size TORX head tool.

5. Remove burner access door.
   (Gasket will be replaced during reinstallation of inner door.)
6. You can tell if the TRD has been activated. Normally, there is a small glass bulb in the assembly.

7. If the assembly has been activated, then the bulb is missing. You will also see the damper rod penetrating into the assembly.

8. Look inside the combustion chamber and locate the TRD housing. It is in the middle of the combustion chamber. Grab the housing and rotate it counter clockwise 90 degrees. Lift, remove and discard.

9. Locate the spring clip. When the TRD activated, the glass bulb link broke allowing the spring clip to free. Look under the arrestor plate if not in plain view. Discard used spring clip.

10. Order a TRD replacement kit. Do not attempt to re-assemble the water heater.