Res Tech Support

Gas - Honeywell

Status Light Does Not Blink

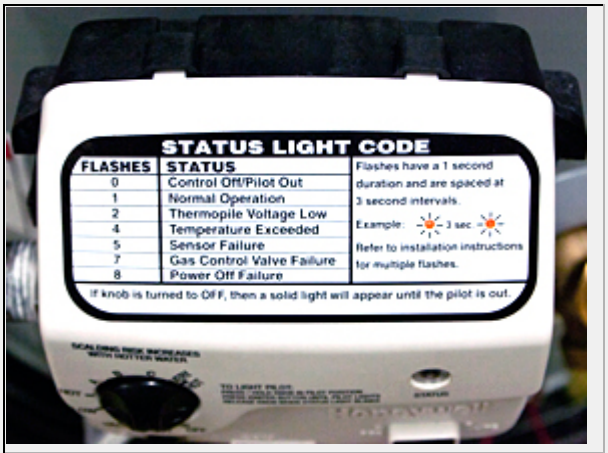
Dear Homeowner,

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, please contact 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.

Red Status Light Doesn't Blink



Status light code label.

There are several possible reasons why the status light may not be blinking:

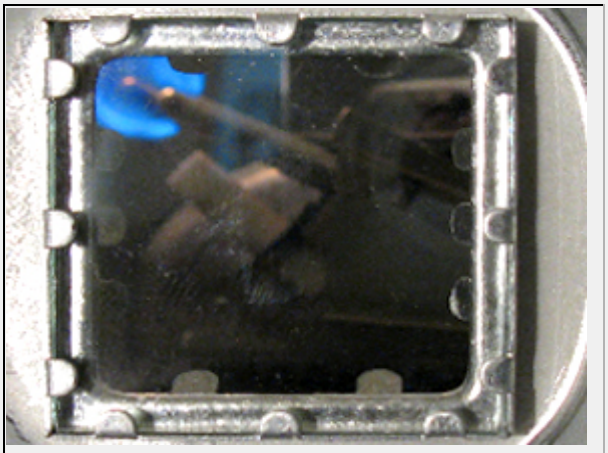
- the pilot is not lit
- air in the gas line
- the thermopile is not hot enough
- the thermal switch has tripped
- the gas control valve wiring is bad or the connectors are loose
- the thermopile is bad

This water heater uses a thermopile to generate electricity needed to power the gas control valve. Once the pilot is lit, it may take up to 90 seconds for the thermopile to get hot enough to power the gas control valve. When that happens, the status light will blink once every three seconds indicating normal operation. If the status light blinks more than once every three seconds, refer to the status light code label on the gas control valve.

WARNING: BEFORE LIGHTING THE PILOT!

Fire and Explosion Risk. Do not attempt to light the water heater if flammable vapors or liquids are present. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other gas appliance. Storage of or use of gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance can result in serious injury or death.

Is the Pilot Lit?



Confirm that the pilot is lit (it may be difficult to see).

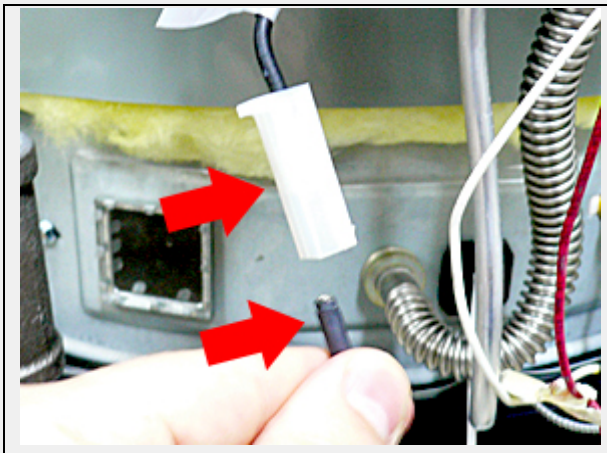
We recommend **watching this video** for help lighting this water heater.

Try lighting the pilot following the lighting instructions on the water heater and visually confirm the pilot can be lit. Set the gas control knob to PILOT. Hold the gas control knob in while clicking the igniter button and looking through the viewport (inside the water heater to the left). You may have to dim the room lights in order to see the pilot.

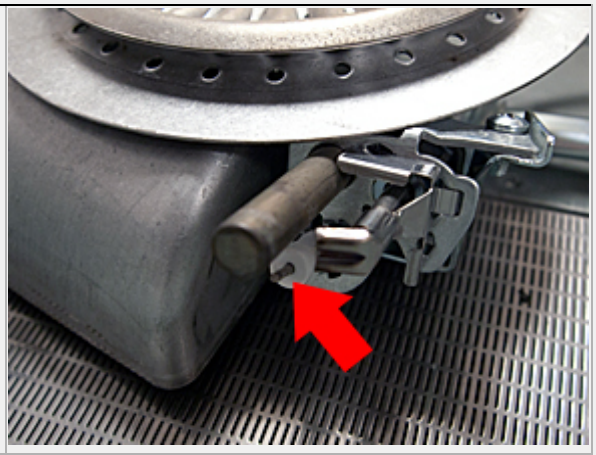
Since there may be air in the gas line, it may take up to 90 seconds before the pilot lights and the status light begins to blink. If the status light does not start blinking after 90 seconds, release the gas control knob, turn the gas valve off, and wait 10 minutes before attempting to relight the pilot. On newly installed water heaters, it may take up to 2-3 lighting attempts before the pilot lights and the status light starts blinking. If the pilot still does not light after three lighting attempts, go to **Checking the Igniter.**

If the pilot lights but the red status light does not blink after 90 seconds, go to **Checking the Wiring.**

Checking the Igniter



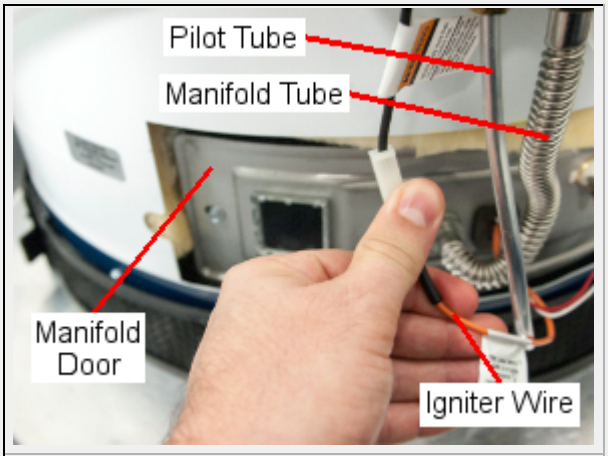
The igniter wire must be firmly inserted into the white connector.



The pilot assembly. Check for a spark at the tip of the igniter.

Look through the viewport while you click the igniter button and check for a spark (look inside the water heater to the left when checking for a spark). You may have to dim the room lights in order to see the spark. If you don’t see a spark, check to make sure the orange or white igniter wire is firmly inserted into the white connector. Click the igniter button several times, and if you see a spark go to **Checking the Pilot.**

If there’s no spark, make sure the white connector (where the orange or white igniter wire is inserted) is not touching the metal pilot tube, manifold tube, or manifold door (if necessary, bend the white connector away from the pilot tube, manifold tube, and manifold door). Click the igniter button again and look through the viewport for a spark. If there's still no spark, have a service technician replace the gas control valve.



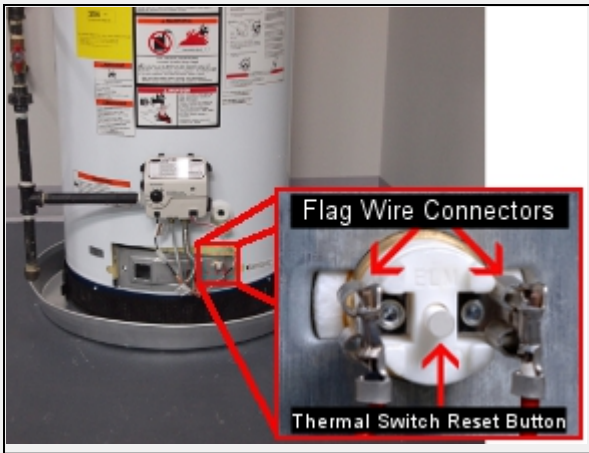
Bend the white connector away from the metal pilot tube, manifold tube, and manifold door.

Checking the Pilot

If you can see a spark, make sure the gas supply valve is turned on and try lighting the water heater again. If you still can’t get the pilot to light, you'll may want to call a service technician.

If the pilot lights, continue to hold the gas control knob in for 90 seconds. The status light should begin blinking once every 3 seconds (you may have to dim the room lights to see the red status light). If the pilot is lit and the red status light doesn’t blink after 90 seconds, go to **Checking the Wiring.**

Checking the Wiring



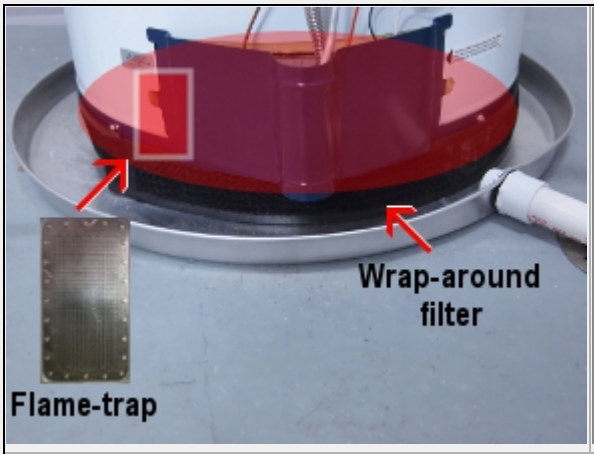
Make sure the two thermal switch wires are undamaged and the flag wire connectors are firmly attached to the thermal switch.

Make sure the black connectors are firmly attached to the gas control valve.

Make sure the flag wire connectors (on the two red wires) are firmly attached to the thermal switch. In addition, press the two black connectors (red and white wires) on the gas control valve in firmly.

Next, press the thermal switch reset button in fully. If the thermal switch has tripped, the water heater's air supply may be restricted, there may be negative air pressure in the home, the vent system may be blocked, or there may be flammable vapors or liquids near the unit.

Thoroughly check the area near the water heater for any substances that may give off flammable vapors such as gasoline, paint, thinners, cleaning agents, solvents, or glue. If any flammable vapors or liquids are found near the water heater, remove them and do not relight the unit. Have a service technician inspect the flame-trap for discoloration. If the water heater has been subjected to a flammable vapors incident, the entire water heater must be replaced. Please note that the water heater's warranty does not cover a flammable vapors incident.



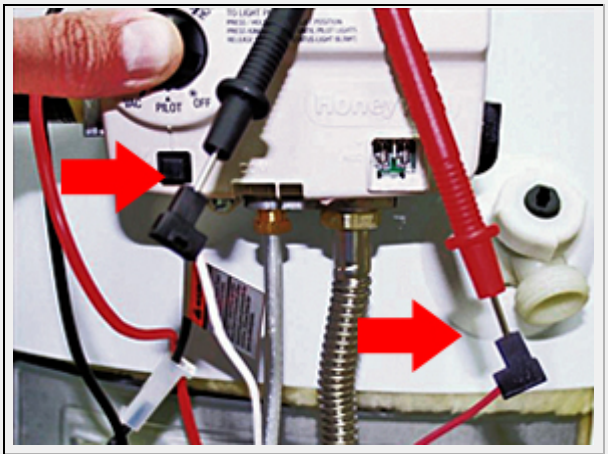
Flame-trap and Wrap-around filter locations.

Use a household cleaning brush with plastic bristles to clean the flame-trap.

If there are no flammable vapors or liquids near the water heater, check the black, wrap-around filter (around the base of the unit) and flame-trap (underneath the base of the unit) for dust or dirt. If the wrap-around filter is dirty, clean it using a vacuum cleaner with a brush attachment. If the flame-trap is dirty, clean it using a household cleaning brush with plastic bristles. Next, have a service technician check to make sure the vent system isn't blocked and that the water heater is getting enough air.

Relight the pilot. If the status light still does not blink, have a service technician test the thermopile.

Testing the Thermopile



Use a multimeter to test the millivolt output of the thermopile.

1. Remove the black connectors from the gas control valve (red and white wires). Attach multimeter leads to the black connectors and set your multimeter to read millivolts DC (on a scale that can read 750 millivolts).

2. Light the pilot. Once the pilot is lit, continue to hold the gas control knob in until this test is complete (you may need assistance from another person to do this). You should see the millivolts gradually rise as the thermopile heats up.

3. After a few minutes of continuous pilot operation, you should get a reading of at least 350 millivolts. If you get a reading of less than 350 millivolts, replace the pilot/thermopile assembly. Have a service technician replace the pilot/thermopile assembly if you cannot perform the work safely. If you get a reading of 350 millivolts or higher, securely reconnect the black connectors to the gas control valve and release the gas control knob. If the status light still doesn't blink once every 3 seconds, replace the gas control valve. Have a service technician replace the gas control valve if you cannot perform the work safely.

Air Supply and Vent Test

Smoke from the extinguished match is not being drawn into the draft hood's opening. This condition may be caused by negative pressure in the house or a blocked vent and must be corrected.

Smoke should be drawn into the draft hood's opening after five minutes of main burner operation. A good draft indicates the water heater is getting adequate air and the vent system is operating properly.

If the pilot is going out frequently, you'll want to have a service technician do the following air supply and vent test:

First, close all windows and doors and turn on all exhaust fans including range hoods, bathroom exhaust fans, attic fans, clothes dryer, etc. in your home. Also, close any fireplace dampers.

Light the pilot. Once the pilot is lit, adjust the thermostat to HOT to light the main burner (look through the viewport to make sure the main burner is lit). Please refer to the "Adjusting the Temperature" section of the Owner's Manual for instructions on how to adjust the thermostat. Allow the main burner to run for exactly 5 minutes before performing the test.

Pass a newly extinguished match approximately 1" from the draft hood's opening. Smoke from the match should be steadily drawn into the draft hood's opening indicating the water heater is getting adequate air and the vent system is working.

WARNING!

Carbon Monoxide Risk. This water heater requires an adequate source of clean air for combustion and ventilation. Without sufficient air, this water heater may emit carbon monoxide that could result in death or carbon monoxide poisoning.

If the match smoke hovers around or is blown away from the opening, there may be negative pressure in the house, the water heater may not be getting enough air, or the vent may be blocked. Turn the gas control knob OFF, shut the gas supply OFF, and do not operate the water heater. A service technician should make sure there isn't negative pressure in the house, the water heater has adequate access to air, and the vent is not blocked.

If you need to contact a service technician for assistance, please call A&E at 1-800-676-5589.

Please take a moment to tell us how we did today.
