



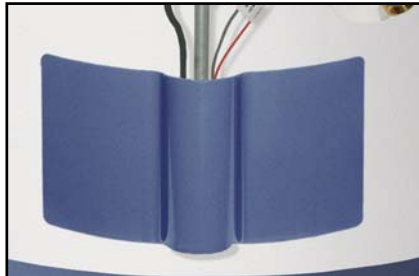
How to Remove the Guardian Burner Access Door -1

How to Remove the Guardian Burner Access Door

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



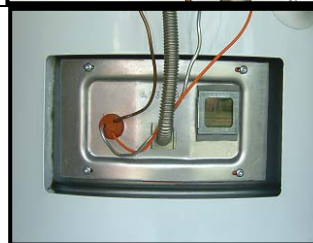
2. Remove jacket door.



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.

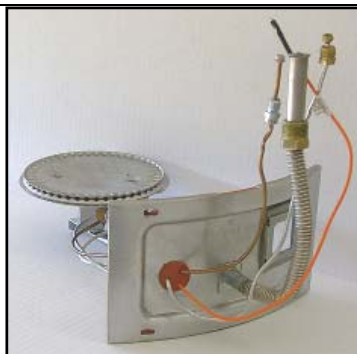


4. Remove the four tamper resistant screws at the corners of the burner. You will need a #20 size TORX head tool.



5. Remove burner access door. Remove the old door gasket. Clean metal surfaces.

(Gasket will be replaced during reinstallation of inner door. See gasket shipping package for more replacement instructions.)





How to Remove the Guardian Burner Access Door -2

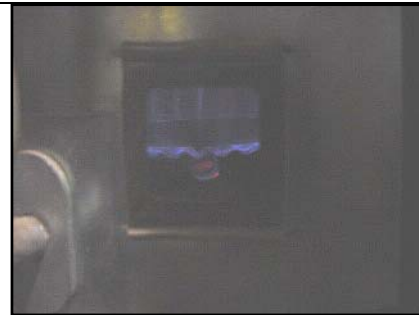
6. Reassemble in reverse order. Install new gasket.



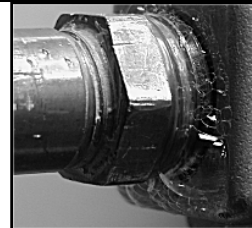
7. Turn gas supply back on. Relight pilot per the lighting instructions and turn gas valve to ON.



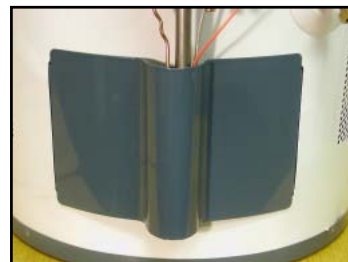
8. Verify main burner operation.



9. Check main supply tube and pilot supply tube at the gas control valve for gas leaks with a soap and water solution. Bubbles indicate a leak. Tighten all connections if a leak is found.



10. Set temperature not to exceed 120 degrees.





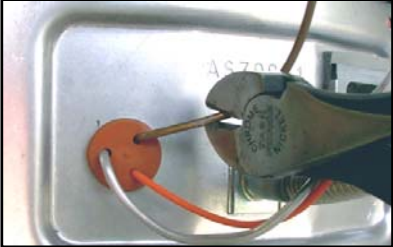






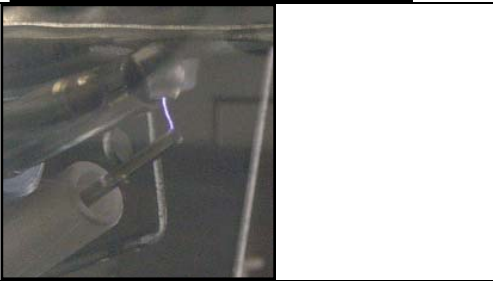
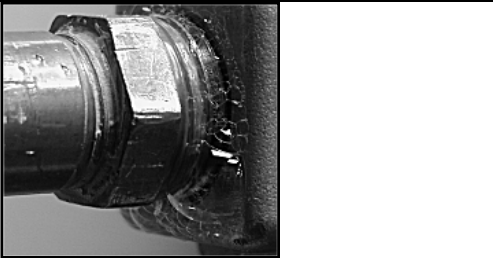

Replace jacket door.



How to Replace the Guardian Thermocouple -3

How to Replace the Guardian Thermocouple







<p>1. Shut off gas supply to water heater. Turn gas valve to OFF.</p>	
<p>2. Remove jacket door. Unscrew the pilot supply tube, the thermocouple, main gas supply tube; and remove the ignitor wire from the bottom of the piezo ignitor striker.</p>	
<p>3. Remove the burner access door and burner.</p>	
<p>4. Remove the old thermocouple by slowly but firmly pulling and twisting it from the thermocouple bracket.</p>	
<p>5. Remove the thermocouple from the burner assembly by pulling it thru the orange plug. Pull from the outside of the inner door. (Removal is easier if you cut the thermocouple with wire cutters.)</p>	
<p>6. Install the new thermocouple by pushing the tip of the thermocouple thru the orange grommet. Remove and clean all old gasket material.</p>	

<p>7. Push the thermocouple into the thermocouple bracket until it stops. Position the thermocouple tip so that the pilot flame envelopes the top 3/8" to 1/2 " of the tip.</p>	
<p>8. Install new gasket. Place burner in combustion chamber. Reinstall the four tamper resistant screws to the door assembly. Do not over tighten the screws.</p>	
<p>9. Tighten the main burner supply tube, pilot supply tube and thermocouple connection to the gas control valve. Thermocouple should be no more than one quarter (1/4) turn beyond hand tight.</p>	
<p>10. Turn gas supply back on and relight pilot per the lighting instructions. Turn gas valve to ON.</p>	
<p>11. Check main supply tube and pilot supply tube at the gas control valve for gas leaks with a soap and water solution. Bubbles indicate a leak. Tighten all connections if a leak is found.</p>	
<p>12. Look thru the sight glass to visually verify the thermocouple is enveloped in the pilot flame. Replace jacket door.</p>	



How to Replace the Piezo Ignitor Striker, Ignitor Wire and Piezo Electrode -5

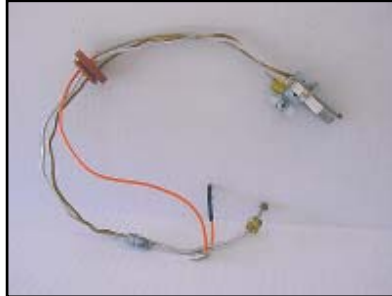
How to Replace the Piezo Ignitor Striker, Ignitor Wire and Piezo Electrode

<p>1. Shut off gas supply to water heater. Turn gas valve to OFF.</p>	
<p>2. Remove old piezo ignitor striker by detaching the wire and prying the striker away from the gas valve.</p> <p>(If this is all you need to do, simply replace the piezo striker and reattach the wire. Relight pilot.)</p>	
<p>(The ignitor wire and piezo electrode are one piece. To replace the wire and piezo electrode)</p> <p>3. Remove jacket door. Unscrew the pilot supply tube, thermocouple, and main gas supply tube.</p>	
<p>4. Remove the burner access door and burner assembly from the combustion chamber.</p>	
<p>5. Remove the piezo electrode and pilot assembly by unscrewing it from the bracket on the burner plate.</p>	
<p>6. Remove the entire pilot, thermocouple and piezo electrode assembly by pulling the orange grommet from the inner door. Work from the inside of the door.</p>	



How to Replace the Piezo Ignitor Striker, Ignitor Wire and Piezo Electrode -6

7. Install the new pilot/electrode assembly by threading the loose ends of the assembly thru the door hole and pushing the orange grommet into the hole from the backside.



8. Ensure the grommet is fully seated by tugging on it. The smaller rubber flange should penetrate to the front of the door.



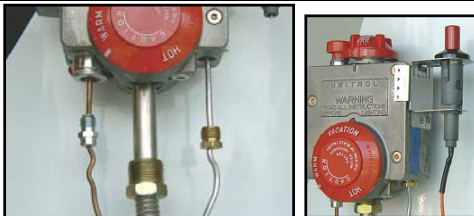
9. Reattach the pilot/electrode assembly to the burner plate.



10. Clean and remove the old gasket. Install new gasket. Place burner in combustion chamber. Reinstall the four retaining screws to the door assembly. Do not over tighten the screws.

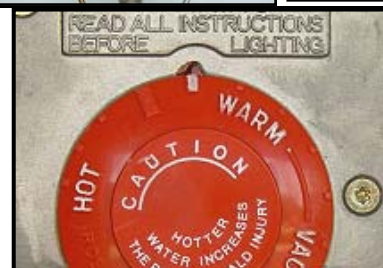


11. Tighten the main burner supply tube, pilot supply tube and thermocouple connection to the gas control valve. Connect the orange ignitor wire to the piezo striker.

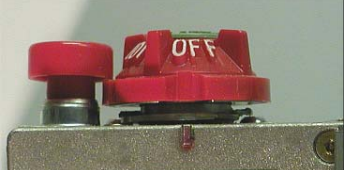
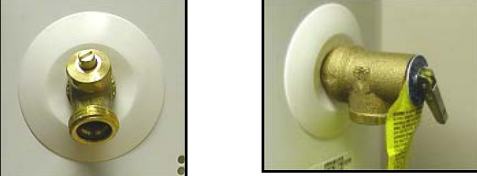




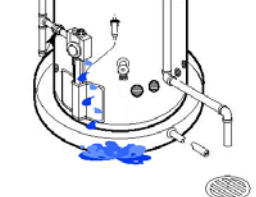




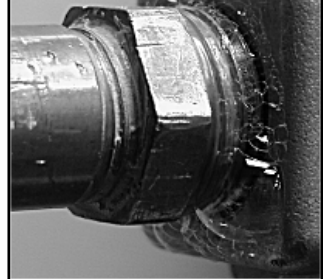

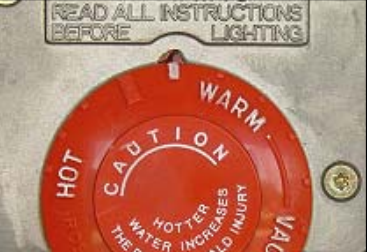
12. Turn gas supply back on and relight pilot per the lighting instructions. Verify pilot is lit. Turn gas valve to ON. Verify main burner is on.

Set thermostat not to exceed 120 degrees. Install jacket door.



How to Replace the Guardian Gas Control

<p>1. Turn gas valve to OFF. Shut off the gas to the unit. Shut off the water supply to the unit. Remove jacket door. Remove gas line.</p>	
<p>2. Connect a garden hose to the drain valve and open the drain valve. Lift the silver lever on the T&P valve to vent the unit and allow the tank to drain thru the drain valve.</p>	
<p>3. Unscrew the pilot supply tube, thermocouple, and main gas supply tube. Carefully bend these items out of the way of the gas valve. Remove piezo igniter striker from gas control.</p>	
<p>4. When the water is drained, unscrew the gas valve. It should loosen counter clockwise as you are looking at it.</p>	
<p>5. Install the piezo igniter striker back on the new gas valve. Put plenty of pipe dope (or other sealer required by local code) on the threads of the valve. Install gas control.</p>	
<p>6. Close drain valve; remove hose and turn water back on. Allow unit to refill. Leave T&P open until water comes out the drain line. Open a hot water faucet and allow it to run for about 30 seconds. This will evacuate all of the air from the tank.</p>	
<p>7. Check for water leaks and tighten the gas valve if necessary.</p>	

<p>8. Reconnect the thermocouple (do not over tighten), pilot supply tube, main gas supply tube, and ignitor wire to the gas valve. Do not use pipe dope or Teflon tape on the supply tube connections or thermocouple connections.</p>	
<p>9. Reinstall the gas line to the valve. You will need pipe dope suitable for gas supply (or other sealer required by local code) on the black pipe connection to the gas valve.</p>	
<p>10. Turn on the manual gas shut-off valve near the water heater. Use a soapy water solution to test for leaks at all connections and fittings to the gas valve. Bubbles indicate a gas leak that must be corrected.</p>	
<p>11. Relight pilot per the lighting instructions and turn gas valve to ON. After running main burner for 3 minutes, recheck for gas leaks at the gas valve connections. Don't forget the pilot and supply tube connections at the bottom of the valve.</p>	
<p>12. Set red temperature dial on thermostat to a safe position not to exceed 120 degrees.</p>	
<p>13. Replace jacket door.</p>	