

INSTRUCTIONS FOR REMOVING & REPLACING THE PILOT/THERMOPILE ASSEMBLY

Kit Contents: Pilot/Thermopile Assembly.

Important: For correct water heater operation, it is essential that the pilot/thermopile assembly be properly installed. If you lack the necessary skills to properly perform the installation, you should not proceed, but get help from a qualified person.

Removing the Pilot/Thermopile Assembly

1. Follow the "Removing the Burner Door Assembly" instructions on the following pages to remove the burner door assembly.
2. Lift the retainer clip straight up from the back of the manifold component block (using a flat-blade screwdriver), then remove the manifold component block from the burner door (Figure 2). **IMPORTANT:** Be careful not to bend or alter the position of the pilot tube. Note the placement/order of the wires in the manifold component block.
3. Locate and remove the phillips screw attaching the pilot to the pilot bracket and keep it for reuse later.
4. Using a 7/16" wrench, loosen the nut securing the pilot tube to the pilot assembly (right-hand threads).
IMPORTANT: Be careful not to bend or alter the position of the pilot assembly components during the following steps.
5. Pull the pilot tube from the pilot assembly.
6. Lift the pilot/thermopile assembly (including the igniter wire) from the burner assembly.

Replacing the Pilot/Thermopile Assembly

1. Route the pilot tube, new igniter wire and new thermopile wire through the opening in the burner door (See Figure 1).
2. Connect the pilot tube to the pilot and tighten the nut securely. To prevent any bending, use a pair of pliers to steady the pilot bracket (See Figures 3 & 4).
IMPORTANT: Keep the pilot orifice in the pilot when making the connection. **DO NOT** operate the water heater without the pilot orifice installed.
3. Using the pilot screw removed earlier, reattach the new pilot/thermopile assembly.
4. Reinstall the manifold component block in the burner door. (See Figures 1 and 2). Be sure that the thermopile wires are positioned through the top opening of the manifold component block. The igniter wire should be positioned through the middle opening and the pilot tube through the bottom opening.
5. Follow the "Replacing the Burner Door Assembly" instructions on the opposite side of this sheet to replace the burner door assembly.

Figure 1
Front View of Burner Door

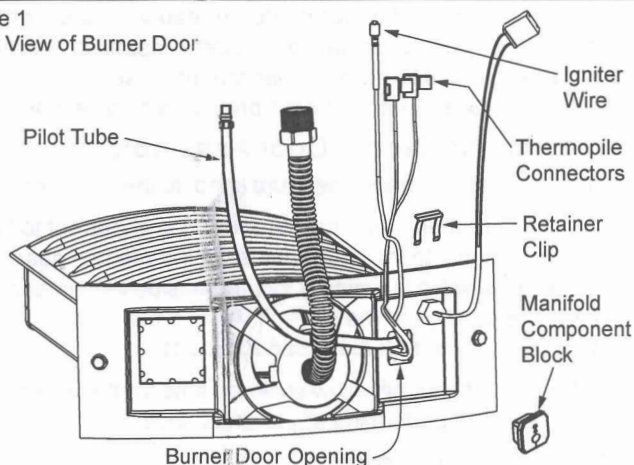


Figure 2
Removing the Manifold Component Block (View from Inside of Combustion Chamber)

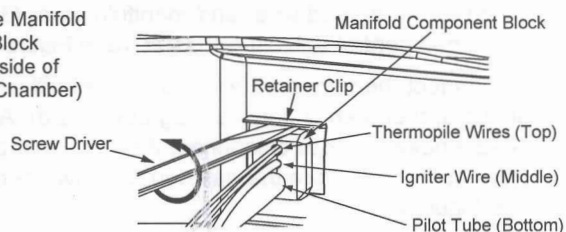


Figure 3
Pilot Assembly Removal

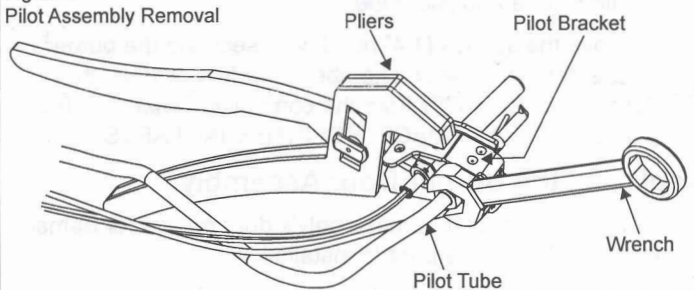
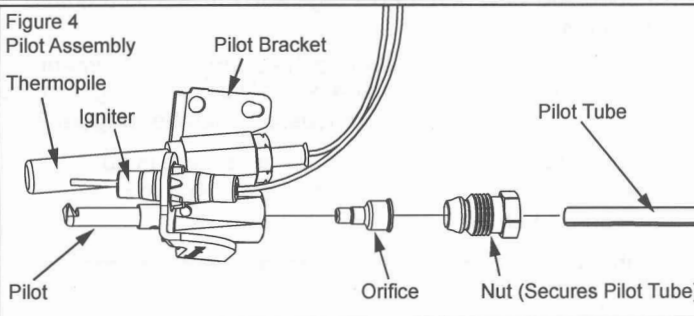


Figure 4
Pilot Assembly



INSTRUCTIONS FOR REMOVING & REPLACING THE BURNER DOOR ASSEMBLY

Important: For correct water heater operation, it is essential that the burner door assembly be properly installed. If you lack the necessary skills to properly perform the installation, you should not proceed, but get help from a qualified person.

Removing the Burner Door Assembly

1. Turn the gas control/temperature knob to the "OFF" position.
2. Before performing any maintenance, it is important to turn off the gas supply to the water heater at the manual gas shut-off valve. This valve is typically located beside the water heater. Note the position of the shut-off valve in the open/on position then proceed to turn it off (See Figure 1).
3. With the unit shut-off, allow sufficient time for the water heater to cool before performing any maintenance.
4. Remove the outer door.
5. Disconnect the pilot tube (7/16" wrench), the igniter wire from the igniter lead wire, and manifold tube (3/4" wrench) at the gas control valve/thermostat. (See Figure 2).
6. Disconnect the temperature sensor wires (lift white lever outward, then gently pull the plug downward). Also, use needle nose pliers to disconnect the red (+) and white (-) thermopile wires from the gas control valve/thermostat. See Figure 2.
7. Grasp the manifold tube and push down slightly to free the manifold tube and pilot tube.
8. Remove the screws (1/4" nut driver) securing the burner door to the combustion chamber. Carefully remove the burner door assembly from the combustion chamber. **BE SURE NOT TO DAMAGE ANY INTERNAL PARTS.**

Replacing the Burner Door Assembly

1. Check the burner door assembly's door gasket for damage or imbedded debris prior to installation.
2. Inspect the view port for damage and replace as required (Figure 4).
3. Insert the burner assembly into the burner compartment, making sure that the burner assembly sits firmly against the burner bracket inside the combustion chamber (Figure 3).
4. Inspect the door gasket and make sure there is no fiberglass insulation between the gasket and the combustion chamber.
5. Tighten the two screws which secure the burner door assembly to the combustion chamber. There should be no space between the gasket part of the burner door and combustion chamber.
IMPORTANT: Do not operate the water heater if the door gasket does not create a seal between the burner door and the combustion chamber.
6. Reconnect the manifold tube (3/4" wrench) and pilot tube (7/16" wrench) to the gas control valve/thermostat.
IMPORTANT: Do not cross-thread or apply any thread sealant to the fittings.

⚠ WARNING



Explosion Hazard

Use a new CSA approved gas supply line.

Install a shut-off valve.

Do not connect a natural gas water heater to an L.P. gas supply.

Do not connect an L.P. gas water heater to a natural gas supply.

Failure to follow these instructions can result in death, explosion, or carbon monoxide poisoning.

Figure 1
Gas Piping

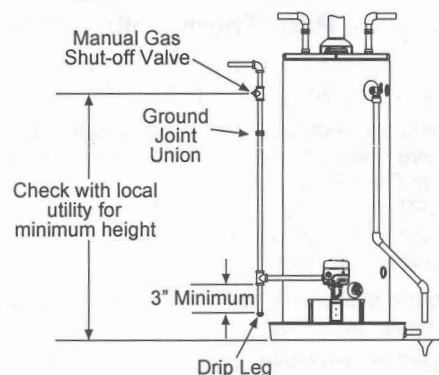
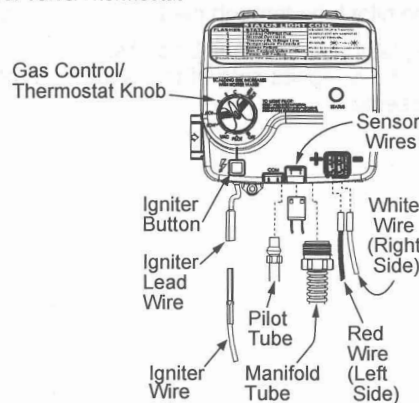


Figure 2
Gas Control Valve/Thermostat



7. Reconnect the temperature sensor and thermopile wires to the gas control valve/thermostat. (See Figure 2 for the correct position of the white and red thermopile wires.)
8. Reconnect the igniter wire. See Figure 2.
9. Turn on the gas supply to the water heater at the manual gas shut-off valve (Figure 1).
10. Follow the lighting instructions on the front of the water heater. With the water heater lit, check for leaks at the manifold and pilot connections by brushing on an approved noncorrosive leak detection solution. Bubbles forming indicate a leak. Correct any leak found.
IMPORTANT: All leaks must be fixed immediately.
11. Verify proper operation and then replace the outer door.

