

INSTALLATION INSTRUCTIONS FOR REPLACING THE MANIFOLD/BURNER ASSEMBLY

Kit Contents: 1 Manifold/Burner Assembly, 1 Ferrule Nut, 1 Insulating Sleeve
IMPORTANT: For correct water heater operation, it is essential that the Manifold/Burner 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 technician.

Removing the Old Manifold/Burner Assembly

1. 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 (Figure 1).
2. On the lower front of the water heater, locate the gas control valve/thermostat (see Figure 1). Before performing any maintenance, it is important to turn the temperature dial on the gas control valve/thermostat to its lowest setting.
3. On top of the gas control valve/thermostat, turn the gas control knob to the "OFF" position. **NOTE:** On the White Rodgers gas control valve/thermostat, the knob stop must first be depressed before turning the gas control knob. See Lighting Instructions on the water heater.
4. Remove the outer door.
5. Disconnect the thermocouple (right-hand thread), pilot tube, the igniter wire from the igniter button, the two wire leads attached to the thermal switch, and manifold tube at the gas control valve/thermostat. (Figures 2.) **NOTE:** L.P. Gas systems use reverse (left-hand) threads on the manifold tube.
6. Remove the two screws securing the manifold door assembly to the combustion chamber (Figure 1).
7. Grasp the manifold tube and push down slightly to free the manifold, pilot tube, and thermocouple.
8. Carefully remove the manifold/burner assembly from the burner compartment. **NOTE:** Be sure not to damage internal parts.

Installing the New Manifold/Burner Assembly

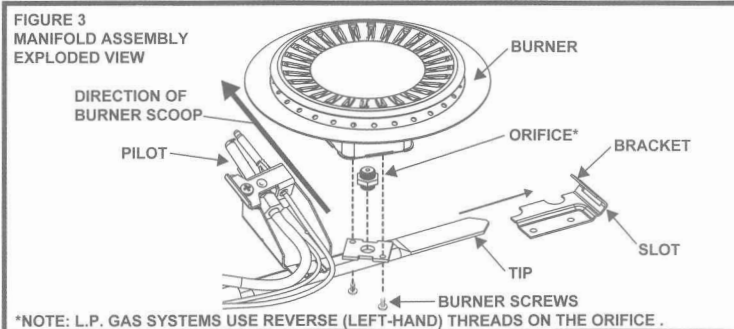
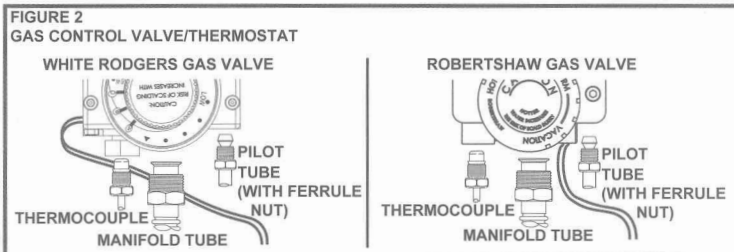
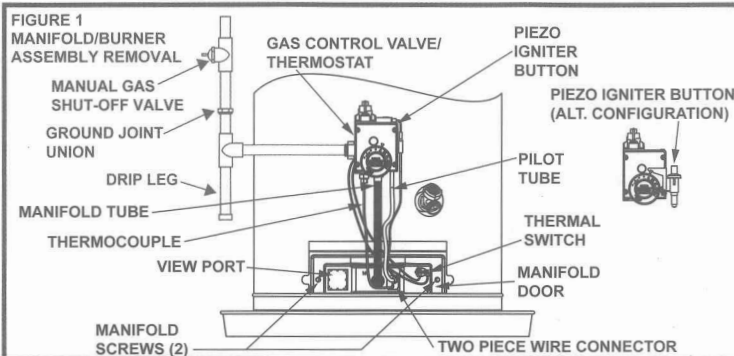
1. Check the door gasket for damage or imbedded debris prior to installation. **IMPORTANT:** DO NOT operate the water heater if the door gasket is damaged.
2. Inspect the view port for damage and replace as required.
3. Insert the new manifold/burner assembly into the combustion chamber, making sure that the tip of the manifold tube engages in the slot of the 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. Replace the two screws, which secure the manifold/burner assembly door to the combustion chamber and tighten securely. Once the manifold/burner assembly door is tightened, visually inspect the door gasket between the manifold/burner assembly door and the combustion chamber for spaces or gaps that would prevent a seal. **IMPORTANT:** DO NOT operate the water heater if the door gasket does not create a seal between the manifold door and the combustion chamber.
6. During the following procedure, do not cross-thread or apply any thread sealant to any of the fittings listed below. First, reconnect the manifold tubing to the gas control valve/thermostat. **NOTE:** L.P. gas systems use reverse (left-hand) threads on the manifold tube. Second, install the provided ferrule nut in the gas control valve/thermostat at the pilot location, hand tight only. Next, insert the pilot tube into the ferrule nut until it bottoms out. **NOTE:** Hold the tube in this position. Tighten the ferrule nut with a wrench until the crimp connection seals to the pilot tube. Continue to tighten until the nut is tight in the gas control valve/thermostat. Finally start the thermocouple nut and turn it all the way in by hand. An additional quarter turn with a 3/8" open-end wrench will then be sufficient to seat the thermocouple. When you are finished, connect the igniter wire to the piezo igniter. (If this leaves the wire connector exposed, unplug the igniter wire and slide the insulating sleeve onto the wire. Reconnect the igniter wire

⚠ WARNING



Explosion Hazard

- Tighten both manifold door screws securely.
- Remove any fiberglass between gasket and combustion chamber.
- Replace viewport if glass is missing or damaged.
- Replace two piece wire connector if missing or removed.
- Replace door gasket if damaged.
- Failure to follow these instructions can result in death, explosion, or fire.



7. Reconnect the two wire leads that go to the thermal switch.
8. Turn gas supply on and refer to the Lighting Instructions.
9. With the burner lit, check the gas control valve/thermostat supply line, manifold tube, and pilot tube connections for leaks. Check for leaks 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.
10. Replace the outer door.