

# GAS CONTROL VALVE REPLACEMENT INSTRUCTIONS



## WARNING

**WATER HEATERS EQUIPPED FOR ONE TYPE GAS ONLY:** This water heater is equipped for one type gas only. Check the rating plate near the gas control valve for the correct gas. **DO NOT USE THIS GAS CONTROL VALVE WITH ANY GAS OTHER THAN THE ONE SHOWN ON THE MODEL RATING PLATE.** Failure to use the correct gas can cause problems which can result in **DEATH, SERIOUS BODILY INJURY OR PROPERTY DAMAGE.** If you have any questions or doubts consult your gas supplier or local utility.



## WARNING

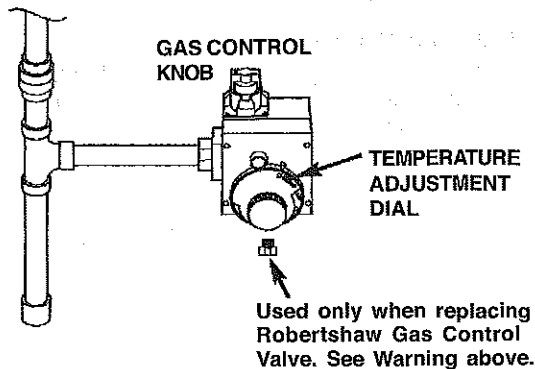
**Commercial Propane (L. P.) gas control valves cannot be used on Residential Propane (L. P.) water heaters.** Commercial Propane (L. P.) gas control valves are labeled 180° on the left side of the gas valve. Using a commercial gas valve on a residential water heater can cause problems which can result in **DEATH, SERIOUS BODILY INJURY OR PROPERTY DAMAGE.**

THIS CONTROL SHOULD NOT BE USED WHEN THE CONTROL IS USED TO SUPPORT A COVER OR DOOR. IT SHOULD NOT BE USED TO REPLACE A (UNITROL) ROBERTSHAW CONTROL USED IN A DIRECT VENT (SEALED COMBUSTION CHAMBER) WATER HEATER WHICH REQUIRES SEALING AROUND THE MANIFOLD PIPE.

**IMPORTANT:** All left hand threaded outlet gas control valves are for use on residential L. P. or light duty commercial water heaters. Do not use on mobile home water heaters.

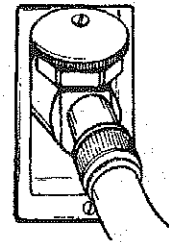
1. Turn the water heater gas supply OFF. Most installations will have a shut-off valve near the water heater or in the main line to the house. **WARNING: If the main line shut-off is used, also shut off the gas at all appliances. After the main gas supply has been shut off, leave all gas appliances OFF until the gas control valve replacement is complete.**

GAS SUPPLY TO  
WATER HEATER

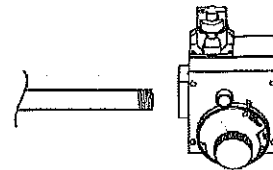


TYPICAL GAS CONTROL SHOWN.

**WARNING:** The water passing out of the drain valve may be extremely hot. Make sure all connections are tight and that the water flow is directed away from your person.



4. Open the outside door, if needed, to gain access to the gas control and remove the inner door. **WARNING: Make sure gas has been shut OFF. CAUTION: Take note of the placement of the burner inside the combustion chamber.**
5. Using the proper size wrenches, disconnect the 1/2" inlet gas supply line installed in the left side of the gas control valve.



2. When possible, run a hot water faucet until the water runs cold. Then turn the water off going to the water heater. Some installations require that the water be turned off to the entire house.
3. Connect a hose suitable for hot water to the drain valve of the water heater and open the valve. Water should be drained outside or to a suitable floor drain. Draining can be speeded up by opening a hot water faucet.
6. Using the proper size wrenches, disconnect the thermocouple, main burner manifold and pilot line from the bottom of the gas control valve.
7. Holding the thermocouple, main burner manifold and pilot line, carefully remove the burner assembly from the combustion chamber, making sure that you do not force it through the access opening.

8. Turning the gas control valve counterclockwise (↺) remove the valve from the water heater.
9. Apply pipe dope or teflon tape to the threads of the new gas control valve and tank connection. Screw the gas control valve into the tank. Tighten the gas valve sufficient enough to prevent leaking and at a position that is straight. Install ADAPTER - if replacing the Robertshaw Gas Control Valve. SEE NOTE ABOVE. Replace burner, manifold and pilot assembly using the proper size wrench. Tighten sufficiently to prevent leakage.
10. Apply pipe dope approved for use with liquefied petroleum (Propane L. P.) gases (even if the unit is for Natural gas) to the threads of the 1/2" inlet gas supply line. Tighten the inlet gas line to the gas control valve.
11. Close the water heater drain valve and open the cold water supply valve to the water heater.
12. To insure the water tank is completely filled with water, open the nearest hot water faucet to allow air to escape. Allow the water to run until a constant flow is obtained. This will let any air out of the water heater and the piping. **CAUTION: Operating an empty or partially filled water heater will result in damage to the tank and could be a safety hazard to you.**
13. Check for water leaks and repair as necessary.

NOTE: Follow step 14 ONLY for Mobile home gas control valve replacements. Proceed to step 15 for all other gas control replacements.

**WARNING**

**Make sure the New gas control valve is set for the type gas you are using. Failure to set the gas control valve for the correct gas can result in DEATH, SERIOUS BODILY INJURY, OR PROPERTY DAMAGE. If you have any questions or doubts, consult the gas supplier or the local utility.**

14. Propane (L. P.) /Natural Control Adjustment Procedure. Place slotted screwdriver in slot "B" for Propane (L. P.). See Figure 1. Push and turn counterclockwise (↺) to stop.

Control screw must be set to the "IN" position for Propane (L. P.) gas and set to the "OUT" position for Natural Gas.

Max. Supply Pressure  
 14 in. W. C. for natural Gas  
 14 in. W. C. for Propane (L. P.) Gas

Min. Supply Pressure: for Input Adjustment  
 5 in. W. C. for Natural Gas  
 11 in. W. C. for Propane (L. P.) Gas

When converting from one type gas to another refer to instructions permanently attached to the water heater.

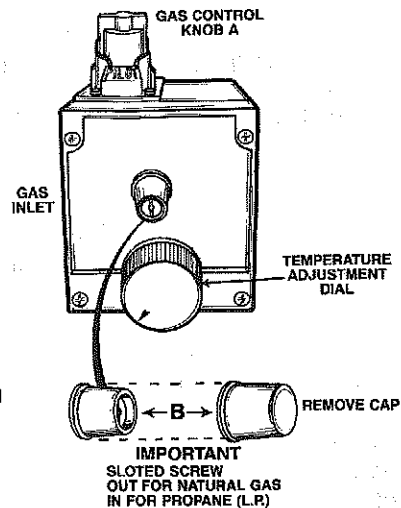


Figure 1

15. Place the new lighting instruction label OVER the lighting instructions on the water heater. Do not cover any warnings, cautions or other important information.
16. Follow the New Lighting Instructions. Be sure to check all your gas pipes for leaks before lighting the water heater. Use a soapy water solution, not a match or open flame. Check the factory gas fittings and your gas connections made during replacement after the pilot is lit and the gas control knob is still in the "PILOT" position. Then, check the fittings when the main burner is turned ON. Use a soapy water solution for this too.