# Removing & Replacing the Gas Control Valve/Thermostat

#### INSTALLATION INSTRUCTIONS

#### **Kit Contents:**

Gas Control Valve/Thermostat

## When Installing This Product...

- 1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condi-
- 2. Verify that the ratings for this gas control valve/thermostat are suitable for your application. Refer to the gas control valve/thermostat label and the water heater rating plate.
- 3. Installer must be a trained, experienced service technician.
- 4. After replacement is complete, check out product operation as provided in the appliance instructions.

### Removing the Gas Control Valve/ **Thermostat**



Fire or Explosion Hazard. Can cause severe injury, death or property damage.

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

- 1. To avoid dangerous accumulations of fuel gas, turn off gas supply at the appliance service valve before servicing. The gas supply 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)
- 2. Turn the gas control/temperature knob to the "OFF" position.

- Open a nearby hot water faucet until the water is no longer hot.
- Close the cold water inlet valve.
- Connect a hose to the drain valve and terminate it to an adequate drain or external to the building.
- Open the water heater drain valve and allow all of the water to drain from the tank. Close the drain valve and remove the hose.

#### **IMPORTANT**

DO NOT proceed to the following steps until the water heater is completely drained.

- 7. Disconnect the igniter wire from the igniter lead wire. Use needle nose pliers to disconnect the red (+) and white (-) thermopile wires. Disconnect the temperature sensor wire connector. Disconnect pilot tube (7/16" wrench) and manifold tube (3/4" wrench) at the gas control valve/thermostat (Figure 2).
- Disconnect the ground joint union in the gas piping. Disconnect the remaining pipe from the gas control valve/ thermostat (See Figure 1).
- To remove the gas valve, thread a 4" section of gas pipe into the gas inlet and use it with a pipe wrench to turn the gas valve (counterclockwise). Do not use a pipe wrench or equivalent to grip body. Damage may result, causing leaks. Do not insert any sharp objects into the inlet or outlet connections. Damage to the gas valve may result.



**Explosion Hazard** 

Use a new CSA approved gas supply line. 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.

Customer Part Number: 320204-000 October 2010



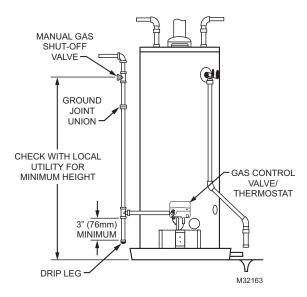


Fig. 1. Gas Piping.

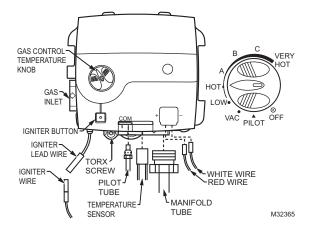


Fig. 2. Gas Control Valve/Thermostat

## Replacing Gas Control Valve/ Thermostat

- Screw the new gas control valve/thermostat into the water heater hand tight. Use an approved Teflon tape or pipe joint compound on the threaded portion of the gas control valve that screws into the tank.
- 2. Thread a 4" section of gas pipe into the gas inlet and use it with a pipe wrench to turn the gas valve (clockwise). Do not use a pipe wrench or equivalent to grip body. Damage may result, causing leaks. Do not insert any sharp objects into the inlet or outlet connections.

- Damage to the gas valve may result. Tighten the valve into the tank, 4 to 6 turns. Use a maximum torque of 31 ft.-lbs. plus one turn. DO NOT OVER TIGHTEN or damage may result.
- Open the cold water inlet valve and allow the tank to completely fill with water. Open a nearby hot water faucet and allow the water to run for at least 3 minutes to ensure the tank is completely filled. Once filled, shut off the nearby faucet.
- 4. With the tank filled, check for any water leaks where the gas control valve/thermostat connects to the tank. Fix any leaks immediately.
- Reconnect the manifold tube (3/4" wrench), pilot tube (7/16" wrench), white (-) wire, red (+) wire, temperature sensor wires, and igniter wire.
- Reconnect the gas piping to the gas control valve/thermostat and at the ground joint union.

NOTE: Use an ANSI -approved teflon tape or ANSI approved pipe compound on the gas piping connection. Use care to ensure that Teflon tape or pipe compound is applied only to the pipe threads. Loose Teflon tape or pipe compound can contaminate the inlet filter if not applied neatly.

7. Turn the gas on at the manual gas shut-off valve and check the gas supply and gas valve for leaks. Test the supply connections by brushing on an approved noncorrosive leak-detection solution. If such a solution is not available, use a mixture of dish washing soap and water (one part soap to 15 parts water) or children's soap bubble solution. Bubbles forming indicate a leak. Correct any leak found.



Fire or Explosion Hazard Can cause severe injury, death or property damage.

Check for gas leaks with soap and water solution any time work is done on a gas system.



Water Damage Hazard.

Can damage electrical components in the WV8840.

Do not spray soap and water solution on the WV8840 housing. Do not use an excessive amount of soap and water to perform the gas leak test.

8. Follow the "Lighting Instructions" on the heater. With the water heater's main burner lit, check for leaks at the manifold and pilot connections by brushing on an approved noncorrosive leak-detection solution. Bubbles will show a leak. Correct any leak found.