

# INSTALLATION INSTRUCTIONS

## (FVIR) Atmospheric SIT Combination Control Replacement Kit

**Read these instructions thoroughly and understand all steps and procedures before proceeding with the installation.**

### INSPECT SHIPMENT:

Inspect contents for possible missing or damaged components. See Figure 1. This kit includes:

Qty. 1 (one) - Combination Gas Control

Qty. 1 (one) - Installation Instructions

### TOOLS REQUIRED:

3/8" Open-end wrench

7/16" Open-end wrench

3/4" Open-end wrench

Pipe Wrench

Soap and water solution

Pipe Thread Sealant


(Certified for use with Natural and LP Gas/Liquefied Petroleum Gases)

**NOTICE:** Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum Gases.

### ADDITIONAL INSTRUCTIONS:

Refer to the Use and Care Manual supplied with the water heater for complete information on the installation, lighting, operation and maintenance of the water heater.

### 1. TURNING OFF GAS SUPPLY TO THE WATER HEATER:

Set the thermostat dial to the "OFF" position by rotating the thermostat dial on the water heater's combination gas control clockwise  until it stops.

Shut off the gas supply at the main gas supply line to the water heater. Refer to the lighting instruction label located above the water heaters combination gas control and the Use and Care manual supplied with the water heater for additional information on shutting off the gas supply.

- 2. DRAINING THE WATER HEATER:** Shut off the inlet water supply to the water heater. Connect a garden hose to the water heater's drain valve and route to a drain or suitable draining area. Open a hot water faucet to allow air to flow into the water heater tank then open the water heater's drain valve. See Figure 2.

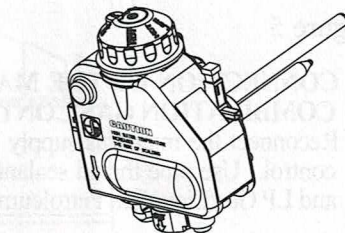


Figure 1

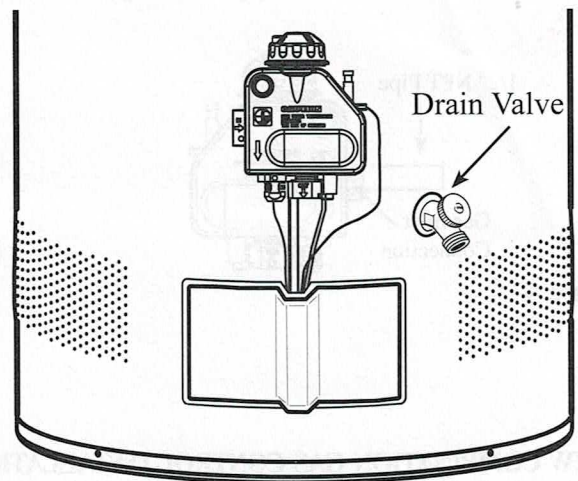


Figure 2

### 3. DISCONNECTION OF THERMOCOUPLE, PILOT SUPPLY TUBE, BURNER SUPPLY TUBE AND PIEZO WIRING FROM THE COMBINATION GAS CONTROL:

Using a 3/8" open-end wrench, disconnect the thermocouple from the combination gas control. Using a 7/16" open-end wrench, disconnect the pilot supply line from the combination gas control. Using a 3/4" open-end wrench, disconnect the burner supply tube from the combination gas control. Locate the piezo wiring, pull away from the piezo igniter, and connector. See Figure 3.

**NOTICE:** LP Gas Combination Controls use left-handed threads on the burner supply tube nut.

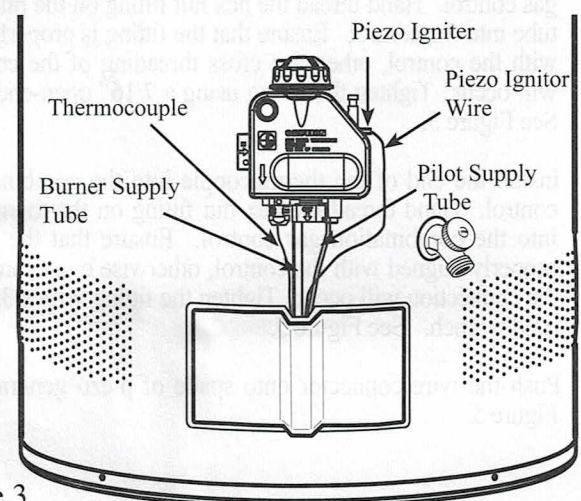


Figure 3



#### 4. COMBINATION GAS CONTROL REMOVAL:

With the gas supply shut off, disconnect the main gas supply piping from the combination gas control. After the water heater is completely drained, screw a suitable length of  $\frac{1}{2}$ " NPT pipe into the gas inlet connection of the combination gas control. Rotate the control counter clockwise  $\curvearrowright$  until removed. Remove the  $\frac{1}{2}$ " NPT pipe. See Figure 4.

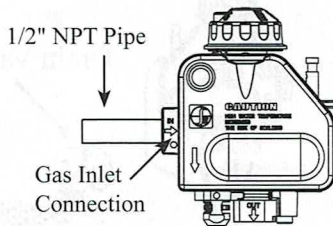


Figure 4

#### 5. NEW COMBINATION GAS CONTROL INSTALLATION:

Ensure the replacement combination gas control is correct for the gas usage of the water heater. Hand start threading the control into the water heater. Install the suitable length of  $\frac{1}{2}$ " NPT pipe previously used to the gas inlet of new control. Rotate the control by turning clockwise  $\curvearrowleft$  until the control is tight and in the upright position. Remove the  $\frac{1}{2}$ " NPT pipe.

#### 6. CONNECTION OF THERMOCOUPLE, PILOT SUPPLY TUBE, BURNER SUPPLY TUBE AND PIEZO WIRING TO THE COMBINATION GAS CONTROL:

Install the inverted flare end of the burner supply tube into the combination gas control. Hand thread the hex nut fitting on the burner supply tube into the control. Ensure that the fitting is properly aligned with the control, otherwise cross threading of the connection will occur. Tighten the fitting using a  $\frac{3}{4}$ " open-end wrench. See Figure 5.

**NOTICE:** LP Gas Combination Controls use left-handed threads on the burner supply tube nut.

Install the end of the pilot supply tube into the combination gas control. Hand thread the hex nut fitting on the pilot supply tube into the control. Ensure that the fitting is properly aligned with the control, otherwise cross threading of the connection will occur. Tighten the fitting using a  $\frac{7}{16}$ " open-end wrench. See Figure 5.

Install the end of the thermocouple into the combination gas control. Hand thread the hex nut fitting on the thermocouple into the combination gas control. Ensure that the fitting is properly aligned with the control, otherwise cross threading of the connection will occur. Tighten the fitting with a  $\frac{3}{8}$ " Open-end wrench. See Figure 5.

Push the wire connector onto spade of piezo generator. See Figure 5.

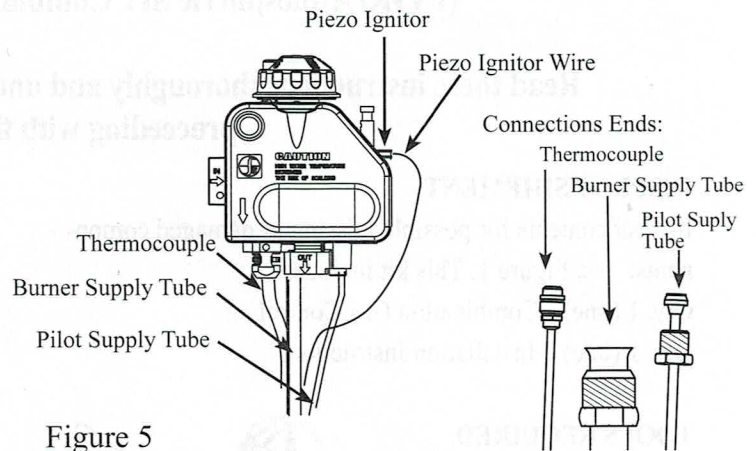


Figure 5

#### 7. CONNECTION OF THE MAIN GAS SUPPLY TO THE COMBINATION GAS CONTROL:

Reconnect the main gas supply piping to the combination gas control. Use pipe thread sealant certified for use with Natural and LP Gas/Liquefied Petroleum Gases.

**NOTICE:** Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum Gases.

#### 8. REFILLING THE WATER HEATER:

Disconnect the garden hose from the water heater's drain valve. Close the drain valve and turn on the inlet water supply to the water heater. Open all hot water faucets to allow all trapped air to escape. Let the water heater fill until a steady stream of water is observed coming from all hot water faucets then close all faucets.

#### 9. TURN ON GAS TO THE WATER HEATER:

Turn on the main gas supply to the water heater. Check for leaks on the inlet supply piping using a soap and water solution.

**NOTICE:** If the soap and water solution bubbles up, there is a leak and the inlet supply piping must be tightened and checked again.

#### 10. LIGHTING AND OPERATION INSTRUCTIONS:

Follow the "FOR YOUR SAFETY READ BEFORE OPERATING" and "LIGHTING INSTRUCTIONS" on the label above the combination gas control or in the Use and Care Manual supplied with the water heater:

With the pilot and main burner in operation, use a soap and water solution to check for gas leaks at the burner supply and pilot tube connections.

**NOTICE:** If the soap and water solution bubbles up, there is a leak and the fittings must be tightened and checked again.

**IMPORTANT:** If the leak(s) cannot be eliminated, turn off the gas supply to the water heater and contact the water heater manufacturer at 1-800-432-8373.

# 11. TEMPERATURE SETTING:

**▲DANGER: Hotter water increases the potential for Hot Water SCALDS.**

Turn the temperature dial to the desired setting. A temperature setting of 120° F (49°C) or less is recommended as a usable water temperature.

The illustration in Figure 6 details the approximate water temperature for each mark on the Gas Control Temperature Dial.

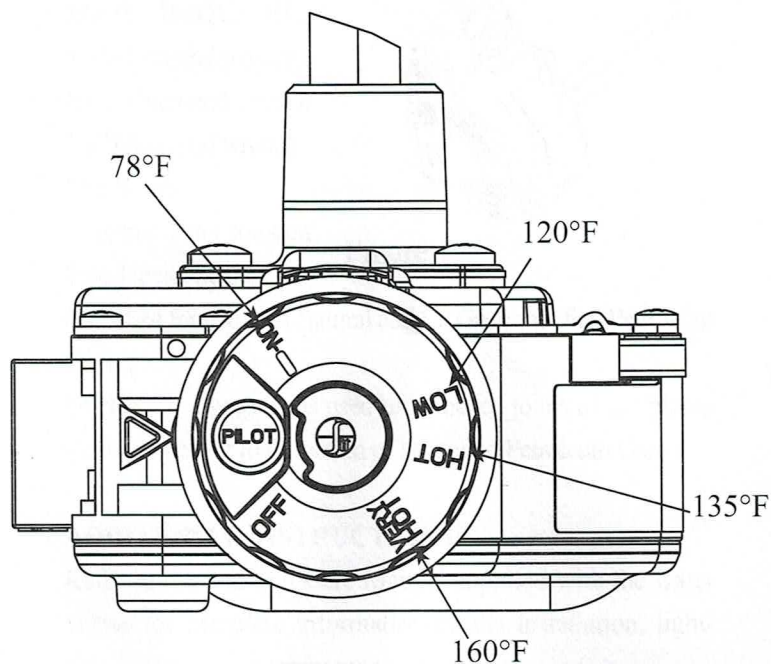


Figure 6 Temperatures are approximate



## FOR YOUR SAFETY READ BEFORE OPERATING

**⚠ WARNING:** If you do not follow these instructions and the Use & Care Manual instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which is lit by a piezo-electric spark gas ignition system. **Do NOT open the inner door of this appliance and try to light the pilot by hand!**
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.  
**WHAT TO DO IF YOU SMELL GAS:**
  - Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified installer or service agency to replace a flooded water heater. Do not attempt to repair the unit! It must be replaced!

## LIGHTING INSTRUCTIONS

- 1) **STOP!** Read safety information above on this label.
- PILOT FLAME IGNITION:**
- 2) Wait (5) five minutes to clear out any gas. If you smell any gas, **STOP!** Follow "B" in the safety information above on this label. If you do not smell gas, go to the next step.
- 3) Remove the outer door from the water heater. Do not attempt to remove the inner door.
- 4) Locate the piezo-electric spark generator which is located on top of the combination gas control (Fig. 3).
- 5) Start from the "OFF" position (Fig.1). Rotate the control knob counter-clockwise ⤴ to the "PILOT" position.
- 6) Depress the ignition button "PILOT" all the way down. Immediately depress the Piezo Igniter button several times until the pilot is lit. The pilot flame can only be seen through the sight glass window located on the inner door.
- 7) Continue to hold down the ignition button "PILOT" for about one (1) minute after the pilot is lit. If it goes out repeat steps 2-7.

- If the igniton button "PILOT" does not pop up when released, stop and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the control knob clockwise ⤵ to "OFF" and call your service technician or gas supplier.

- 8) Once the pilot flame is established, replace the outer door.

### MAIN BURNER IGNITION:

- 9) Turn the control knob counter-clockwise ⤴ to the "ON" position (Fig. 4). Gas will flow to the main burner when the water temperature stored within the appliance is lower than the set-point temperature.

### TEMPERATURE SETTING:

- 10) To increase the water temperature set-point rotate the control knob counter-clockwise ⤴ to the desired temperature setting (Fig. 5). The preferred starting point for temperature is indicated by "HOT" on the control knob.

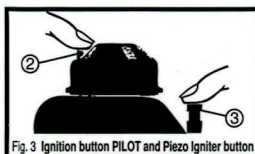


Fig. 3 Ignition button PILOT and Piezo Igniter button

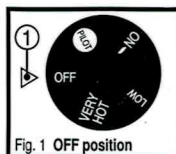


Fig. 1 OFF position

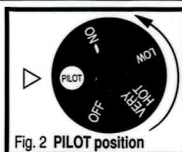


Fig. 2 PILOT position

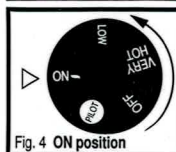


Fig. 4 ON position

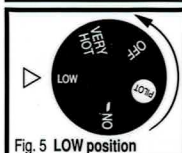


Fig. 5 LOW position

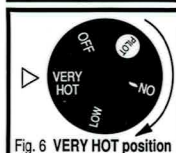
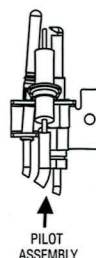


Fig. 6 VERY HOT position



## TO TURN GAS OFF TO THE APPLIANCE

### STAND-BY:

- 1) To maintain a flame at the pilot burner with the main burner off, turn the control knob clockwise ⤵ to the "PILOT" position (Fig. 2).

### TURNING OFF:

- 2) Turn the control knob clockwise ⤵ to the "OFF" position (Fig.1).