

# INSTALLATION INSTRUCTIONS

## (White-Rodger's Hot Surface Igniter Replacement Kit)

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

**⚠ CAUTION:** The burner chamber is a sealed area. If the burner access door is removed, the burner access door gasket must be replaced. This should only be done by a qualified service technician.

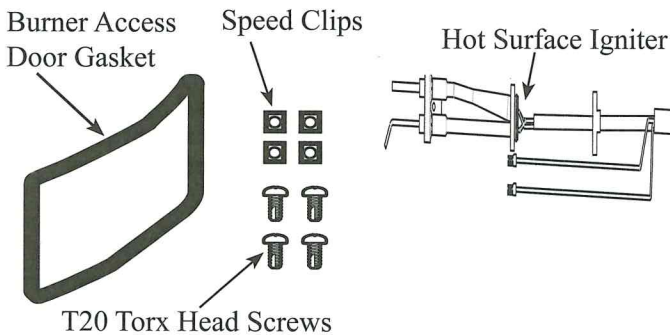
### INSPECT SHIPMENT:

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

- Qty. 4 (four) - T20 Torx Head Screws
- Qty. 1 (one) - Hot Surface Igniter Assembly
- Qty. 1 (one) - Hot Surface Igniter Attachment Screw (Not shown)
- Qty. 4 (four) - Speed Clips
- Qty. 1 (one) - Burner Access Door Gasket
- Qty. 1 (one) - Installation Instructions

### TOOLS REQUIRED:

- 3/4" Open-end wrench
- #20 Torx head tool
- Phillip's head screwdriver
- Fine wire brush
- Soap and water solution



**Figure 1**

### ADDITIONAL INSTRUCTIONS:

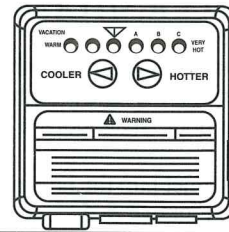
Refer to the Use and Care Manual supplied with the water heater for complete information on the installation, lighting instructions, operation and maintenance of the water heater.

#### 1. TO TURN OFF GAS TO THE APPLIANCE:

Set the combination gas control to its WARM setting by pressing the COOLER and HOTTER buttons at the same time for one second allowing a temperature light indicator to activate.

Depress the COOLER button to the WARM indicator light. The illustration in Figure 2, shows the recommended temperature setting.

Turn off the main gas supply to the water heaters electronic control. Toggle the ON/OFF switch on the blower to the off position.

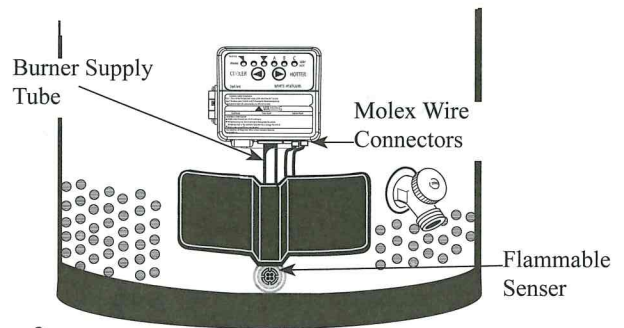


Temperature Setting	Display ▼ A B C	Burns on Adult Skin
WARM = approx. 70°F (21°C)	● ○ ○ ○ ○ ○	-----
▼ = approx. 120°F (49°C)	○ ○ ● ○ ○ ○	More than 5 minutes
A = approx. 130°F (54°C)	○ ○ ○ ● ○ ○	About 30 seconds
B = approx. 140°F (60°C)	○ ○ ○ ○ ● ○	Less than 5 seconds
C = approx. 150°F (66°C)	○ ○ ○ ○ ○ ●	About 1-1/2 seconds
C-Flashing = approx. 160°F (71°C)	○ ○ ○ ○ ○ ●	About 1/2 seconds

**Figure 2**

#### 2. DISCONNECTION OF 6 (SIX) PIN MOLEX CONNECTOR, 4 (FOUR) PIN MOLEX CONNECTOR, FLAMMABLE VAPOR SENSOR TERMINALS, AND BURNER SUPPLY TUBE:

Remove the outer jacket door of the water heater. remove and set aside the clip (not shown) that secures the wires to the burner supply tube. Disconnect the wire connector funnel from the bottom of the combination control valve (not shown). Disconnect the 4 (four) pin and 6 (six) pin molex connectors from the combination gas control. Detach the flammable vapor sensor located under the jacket door opening by pulling on the plastic cover which is snapped to the outside of the jacket. Disconnect the 2 (two) terminals from the flammable vapor sensor. See Figure 3.



**Figure 3**

#### 3. T20 TORX HEAD SCREWS (USED TO SECURE BURNER ACCESS DOOR) REMOVAL:

Using a #20 Torx head tool, remove the four T20 Torx head screws at the corners of the Burner Access Door Assembly and discard them.

#### 4. BURNER ACCESS DOOR ASSEMBLY REMOVAL:

Grasp the burner supply tube and carefully remove the burner access door assembly with burner assembly from the water heater.



**5. HOT SURFACE IGNITER ASSEMBLY REMOVAL:**  
Using a Phillip's Head Screwdriver, remove the screw which attaches the hot surface igniter assembly to the burner supply tube, and discard it. Pull the orange grommet with the hot surface igniter assembly through its mounting hole, which is located on the burner access door.

**6. NEW HOT SURFACE IGNITER ASSEMBLY INSTALLATION:**  
Insert the new hot surface igniter assembly by placing the connection ends through the hole (combustion chamber side) on the burner access door. See Figure 4.

Push the orange grommet into the hole of the door until it is properly seated. See Figure 4 & 5.

**IMPORTANT:** Take care not to damage the orange grommet when you install it.

Attach the new hot surface igniter assembly to the bracket on the burner supply tube and secure it with the new pilot assembly attachment screw (supplied).  
Re-install the clip that secures the wire connections to the burner supply tube.

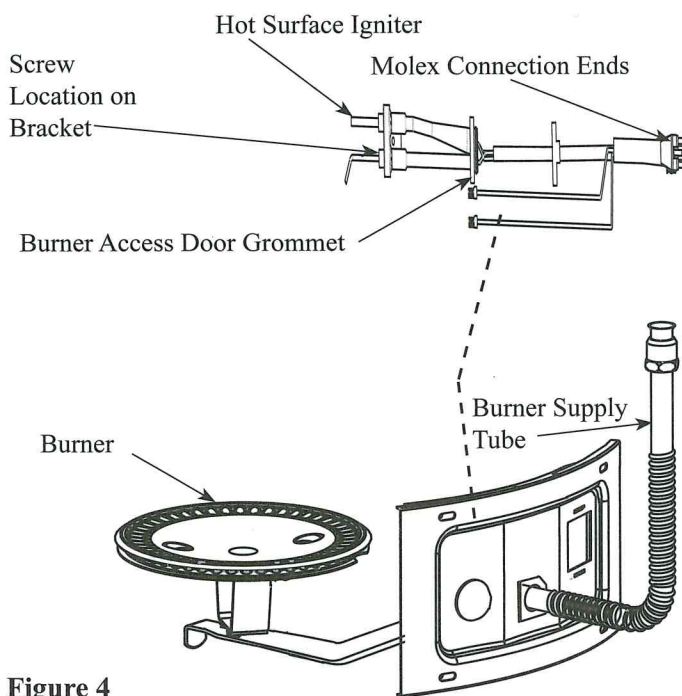


Figure 4

*Push the grommet into the burner access door from this side.*



Figure 5

**7. BURNER ACCESS DOOR GASKET REMOVAL AND INSTALLATION:**  
Remove the old burner access door gasket from the combustion chamber and burner access door. Clean the surfaces to which the gasket was attached.  
Note: A fine wire brush and soap and water solution may be used to remove the old gasket material and adhesive.

**▲ WARNING! DO NOT use any flammable liquids such as gasoline, paint thinners, or solvents to remove the old gasket material and adhesive.**

Peel off the pull away backing from the new burner access door gasket and install the gasket on the clean and dry side (combustion chamber side) of the burner access door. Ensure that the holes in the gasket used for the T20 Torx head screws align with those in the burner access door.

**IMPORTANT: A new gasket MUST be used every time the burner access door assembly is removed.**

**8. INSTALLING THE BURNER ACCESS DOOR ASSEMBLY:**

Remove the 4 (four) speed clips that are located at the inner door opening attached to the combustion chamber and discard them. Install the 4 (four) new speed clips (supplied). Re-install the burner access door assembly to the water heater. Ensure that the burner access door gasket is seated properly.

**9. CONNECTION OF BURNER SUPPLY TUBE, FLAMMABLE VAPOR SENSOR TERMINALS AND MOLEX CONNECTIONS:**

Install the flared 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 3/4" Open-end wrench. (LP water heaters have left hand threads.)

Insert the 2 (two) flammable vapor terminals through the sensor hole starting from the back side (inside) of the jacket. Connect the terminals to the vapor sensor and install the assembly back into the jacket sensor hole ensuring the 4 (four) holes of the sensor are facing away from the water heater. Insert 4 (four) and 6 (six) Molex connectors through the small end of the wire connector funnel and complete the connections to the gas control valve. See Figure 3.

Install 4 (four) new T20 Torx head screws (supplied) through the holes at the corners of the Burner Access Door Assembly gasket and into the speed clips. Tighten the screws using the #20 Torx head tool.

**IMPORTANT: DO NOT USE POWER TOOLS** and do not use more than 15-inch pounds of torque to tighten the screws.

**▲ WARNING: Failure to properly install the burner access door assembly could result in a potentially hazardous situation resulting in death or serious injury and/or property damage.**

**10. TO TURN ON GAS TO THE APPLIANCE:** Turn on the gas supply at the main gas supply line. Follow the "FOR YOUR SAFETY READ BEFORE OPERATING" and "LIGHTING INSTRUCTIONS" label located above the water heater's combination gas control.

**11. CHECKING FOR GAS LEAKS:**

With the pilot and main burner in operation, use a soap and water solution to check for gas leaks at the connections. Note: If the soap and water solution bubbles up there is a leak and the fittings should be tightened and checked for leaks again.

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

## **12. TEMPERATURE SETTING:**

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

A temperature setting of 120° F (49°C) or less is recommended as a useable water temperature.

Set the combination gas control to its lowest setting by pressing the **COOLER** or **HOTTER** buttons at the same time for one second allowing a temperature light indicator to activate. Depress the **COOLER** or **HOTTER** button until the 120°F temperature indicator light is displayed.

The illustration in Figure 2 (page 1) shows the recommended temperature setting.

## **13. REPLACE JACKET DOOR:**

Replace the jacket door by inserting one end of the door behind the jacket edge then insert the opposite end of the door behind the jacket edge and release the door.