



SUPPLYING DEMAND PILOT ASSEMBLY REPLACEMENT KIT INSTALLATION INSTRUCTIONS SP20127



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.

NOTICE: Knob cannot be turned from "PILOT" position unless pushed down slightly. Do not use force. Shut off the gas supply at the main gas supply line. Refer to the lighting instruction label located above the combination gas control and in the Use and Care manual for additional information on shutting off the gas supply.

Included in kit:

- (4) T20 Torx Head Screws
- (1) Pilot Assembly (Pilot Burner, Piezo, Electrode, Thermocouple, & Door Grommet)
- (1) Pilot Assembly Attachment Screw
- (4) Speed Clips
- (1) Burner Access Door Gasket
- (1) Installation Instructions

Tools Required:

- 3/8" Open-end wrench
- 7/16" Open-end wrench
- 3/4" Open-end wrench
- #20 Torx head tool
- Phillip's head screwdriver
- Fine wire brush
- Soap and water solution

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 thermostat dial to the lowest setting "PILOT LIGHTING" by rotating the thermostat dial on the water heater's combination gas control clockwise until it stops. Slightly depress the gas control knob on the combination gas control and rotate it clockwise to the "OFF" position.

2. DISCONNECTION OF THE THERMOCOUPLE, PILOT ASSEMBLY, 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 tube from the combination gas control. Using a 3/4" open-end wrench, disconnect the burner supply tube from the combination gas control. (LP water heaters have left hand threads.) Locate the piezo wiring, slide the protective wire insulator "boot" away from the piezo generator, and then carefully pull apart the connection.

3. T20 TORX HEAD SCREWS (USED TO SECURE BURNER ACCESS DOOR) REMOVAL: Using a #20 Torx head tool, remove the four tamper resistant 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. PILOT ASSEMBLY REMOVAL: Using a Phillip's Head Screwdriver, remove the screw which attaches the the pilot assembly to the burner supply tube, and discard it. Remove and set aside the clip that secures the thermocouple, pilot burner tube and piezo igniter wire to the burner supply tube. Pull the orange grommet with the pilot assembly through it's mounting hole, which is located on the burner access door.

6. NEW PILOT ASSEMBLY INSTALLATION: Insert the new pilot assembly by placing the connection ends through the hole (combustion chamber side) on the burner access door. Push the orange grommet into the hole of the door until it is properly sealed. **IMPORTANT:** Take care not to damage the orange grommet when you install it. Attach the new pilot assembly to the bracket on the main burner or the bracket on the burner supply tube and secure it with the new pilot assembly screw (supplied). **DO NOT** bend the thermocouple with one (1) inch of the weld joint and make sure there are no sharp bends when installing, as this may damage the thermocouple. While holding the orange grommet in place, snug up the thermocouple, pilot supply tubing and piezo igniter wiring so there is little to no slack between the main burner and the burner access door. Re-install the clip that secures the thermocouple tube, pilot supply tube and piezo igniter wire to the burner supply tube.

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 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, PILOT SUPPLY TUBE, THERMOCOUPLE AND PIEZO WIRING: 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.) 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 fitting using a 7/16" Open-end wrench. Install the end of 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 using a 3/8" Open-end wrench. Locate the wire coming from the piezo igniter and the wire out of the burner access door. Push the wire connectors together and slide the protective wire insulator "boot" over the connection. 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 (supplied). **IMPORTANT:** **DO NOT USE POWER TOOLS** and do not use more than 15-inch pounds of torque to tighten 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 rechecked again. **IMPORTANT:** If the leak(s) cannot be eliminated, shut off the gas supply to the appliance and contact the appliance manufacturer.

12. TEMPERATURE SETTING: DANGER: Hotter water increases the potential for Hot Water SCALDS. Turn the temperature dial to the desired setting. The recommended starting point temperature is 120 degrees F (49 degrees C).

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.