

# INSTALLATION INSTRUCTIONS

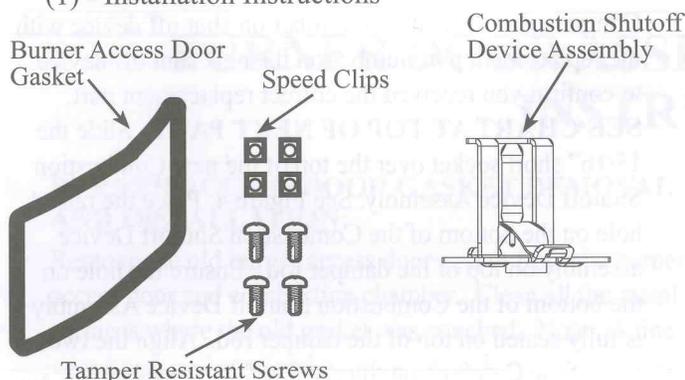
## Combustion Shutoff Device Assembly Replacement Kit

Read these instructions thoroughly and understand all steps and procedures before proceeding with the installation. Replacement of the combustion shutoff device should only be performed by a qualified service provider.

### INSPECT SHIPMENT:

Inspect contents for possible missing or damaged components. The kit includes:

- (1) – Combustion Shutoff Device Assembly
- (4) - Tamper Resistant Screws
- (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
- 15/16" short socket
- #20 Torx head driver
- Phillip's head screwdriver
- Fine wire brush
- Soap and water solution

**CAUTION :** Verify Replacement Combustion Shutoff Device Assembly part number matches the part number of the assembly removed. This part is unique to the water heater model. Contact technical services to verify correct part number, if necessary. The part number is stamped on the metal bracket as shown in Figure 2. See chart at top of next page.

**CAUTION:** The burner chamber is a sealed area. Removing the burner access door requires that the burner access door gasket be replaced. A certified gas service technician should only perform the replacement of the Combustion Shutoff Device Assembly.

**WARNING:** The Combustion Shutoff Device Assembly cannot be replaced after a flammable vapor incident has occurred. The Combustion Shutoff Device Assembly can be replaced when a flammable vapor incident does not occur and the Combustion Shutoff Device Assembly has been activated or broken.

### 1. TO TURN OFF GAS SUPPLY AND ELECTRIC POWER TO THE APPLIANCE:

Shut off the gas supply at the main gas supply line. If the unit requires electrical power shut off power to the unit. Refer to the lighting instruction label located above the water heater's combination gas control and 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.

### 2. REMOVE THE JACKET DOOR:

Remove the jacket door by grasping the round center of the door and pushing inward and to the left or right to release one side then release the opposite side from the jacket.

### 3. DISCONNECTION OF BURNER ASSEMBLY 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 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). Disconnect any wiring that connects from the burner assembly to the combination gas control.

### 4. TAMPER RESISTANT 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.

### 5. 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.

# COMBUSTION SHUTOFF DEVICE ASSEMBLY REMOVAL AND INSTALLATION INSTRUCTIONS

## 6. COMBUSTION CHAMBER INSPECTION:

If you see signs of carbon or overheating, inspect the Combustion Shutoff Device Assembly. If the Combustion Shutoff Device Assembly (glass bulb) is missing and it is evident that a flammable vapor incident has occurred replace the water heater. See Figure 1.

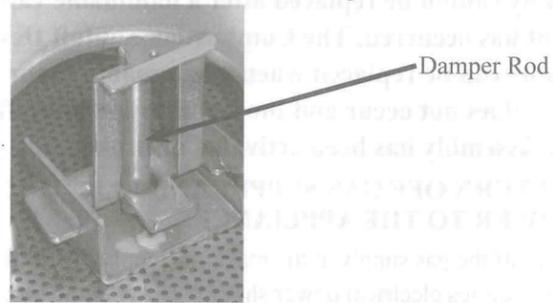


Figure 1 - Broken or Missing Combustion Shutoff Device

**NOTICE: If the glass bulb is still in place, refer to troubleshooting section in the Use and Care manual supplied with the water heater to determine the nature of the service complaint. See Figure 2.**

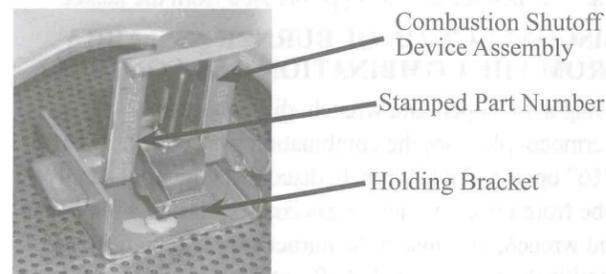


Figure 2 - Combustion Shutoff Device Assembly In Place

## 7. COMBUSTION SHUTOFF DEVICE ASSEMBLY REMOVAL:

Locate the Combustion Shutoff Device Assembly toward the rear center of the combustion chamber. Raise the device upward over the damper rod. Pressing down slightly, turn the Combustion Shutoff Device Assembly and turn the device a 1/4 turn clockwise. Remove and discard the Combustion Shutoff Device Assembly. Remove all debris from inside the combustion chamber burner area. Remove and place the flue baffle back into the flue pipe to remove any debris in the flue pipe. Make sure all air openings are clean on the jacket. See Figure 3.



Figure 3 - Combustion Shutoff Device Assembly in 15/16" Socket on Wrench

## 8. NEW COMBUSTION SHUTOFF DEVICE ASSEMBLY REPLACEMENT:

Compare the original part number on shut off device with the replacement part number on the new shut off device to confirm you received the correct replacement part. **SEE CHART AT TOP OF NEXT PAGE.** Slide the 15/16" short socket over the top of the new Combustion Shutoff Device Assembly. See Figure 4. Place the raised hole on the bottom of the Combustion Shutoff Device Assembly on top of the damper rod. Ensure the hole on the bottom of the Combustion Shutoff Device Assembly is fully seated on top of the damper rod. Align the two tabs of the Combustion Shutoff Device Assembly bracket with the open ends of the holding bracket. Press down and turn the Combustion Shutoff Device Assembly 1/4 turn counterclockwise until the tabs "click" into the flanges of the holding bracket.

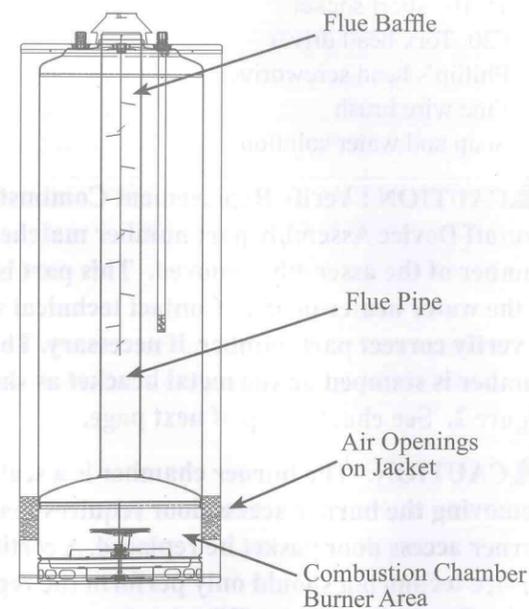


Figure 4 - Cutaway view of inside the Water Heater

Original Part Number	Color of paint stripe	Replacement Part Number	Replacement Kit Part Number
AP12657	Yellow - 500°	AP12657	SP20246B SP20280A
AP13197	White - 485°	AP13197	SP20246A
AP13199	Orange - 435°	AP13199	SP20246D
AP14216	Blue - 600°	AP14216	SP20280C SP20280D
AP14217	Red - 550°	AP14217	SP20280B
AP14390	Red - 550°	AP14390	SP20246C

# BURNER DOOR ASSEMBLY INSTALLATION INSTRUCTIONS

## 9. BURNER ACCESS DOOR GASKET REMOVAL AND INSTALLATION:

Remove the old burner access door gasket from the burner access door and combustion chamber. Clean all the metal surfaces where the old gasket was attached. Note: A fine wire brush and soap and water solution is recommended 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 tamper resistant screws align with those in the burner access door.

**IMPORTANT: Removing the burner access door requires that the burner access door gasket be replaced.**

## 10. INSTALLING THE BURNER ACCESS DOOR ASSEMBLY:

Remove the (4) speed clips that are located at the inner door opening attached to the combustion chamber and discard them. Install the (4) new speed clips (supplied). Insert the burner into the combustion chamber and ensure that the burner access door gasket is seated properly. Install (4) new tamper resistant screws (supplied) through the holes at the corners of the burner access door assembly 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.**

## 11. CONNECTION OF BURNER SUPPLY TUBE, PILOT SUPPLY TUBE, THERMOCOUPLE AND PIEZO WIRING:

Re-connect all of the burner assembly connections and wiring to the combination gas control.

## 12. TO TURN ON GAS SUPPLY AND ELECTRICAL POWER TO THE APPLIANCE:

Turn on the gas supply at the main gas supply line and re-connect power supply if used by the appliance.

## 13. LIGHTING PILOT AND TURNING ON THE APPLIANCE:

Refer to the lighting instruction on the unit and in the Use and Care Manual to light the pilot and then turn on the main burner to the unit.

## 14. 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 again.