

REPLACING THERMOCOUPLE AND FLUE SENSOR

**MODELS: 1000P, 1600P
260PN, 425PN**



WARNING

LP & NG ARE EXTREMELY FLAMMABLE SO TAKE EXTRA PRECAUTIONS WHEN PERFORMING ANY WORK TO THE HEATER

Tools needed:

Pliers, 8mm or adjustable wrench

Removing thermocouple and flue sensor

1. Turn off gas supply to the water heater.
2. Turn off water supply into the water heater using installer supplied cold water isolation valve.
3. Remove front cover as per instructions in the installation manual.
4. The thermocouple is located in the center of the burner rows directly behind the white ceramic spark electrode. Carefully, push down on the top on the thermocouple with a flat head screw driver until it clicks out of bracket. Pull down on thermocouple wires until it is free from burner bracket. (Fig. 1).
5. Loosen and remove only the 8mm brass nut from electromagnet on rear of gas valve. (Fig. 2)
6. Disconnect wire from thermocouple at the lower temperature limiter (ECO). (Fig. 2)
7. Disconnect wire from the flue gas sensor at the upper temperature limiter (ECO). (Fig. 3)
8. Remove Philips head screw attaching the flue gas sensor to the draft hood. (Fig. 3)
9. Remove thermocouple & flue gas sensor with wires from heater.

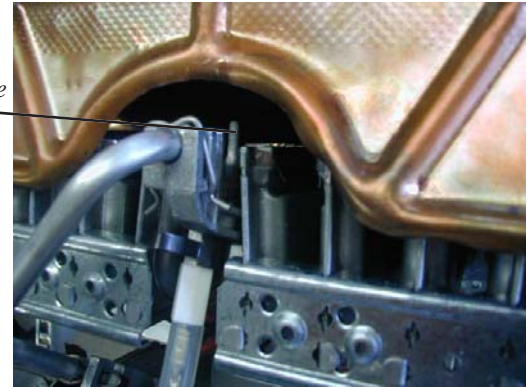
Installing thermocouple and flue sensor

Note: Replacement parts will come as two separate parts. Attach the thermocouple to the safety circuit wiring with the quick connect plug before proceeding.

1. Attach flue gas sensor to the upper right hand side of the draft hood using Philips head screw. Flue gas sensor should be on the inside of the draft hood in order to properly sense flue gas spillage. (Fig. 3)
2. Connect wire connection at upper temperature limiter (ECO). (Fig. 3)
3. Feed wires down the right hand side of the water heater and secure in wire tie on the lower right side of heater chassis. Make sure that none of the wires rest against the copper heat exchanger.
4. Connect wire connection from thermocouple to lower temperature limiter (ECO). (Fig. 2)
5. Feed replacement thermocouple from under neath burners into burner bracket. Push into bracket until it snaps in place. (Fig. 1)
6. Thread 8mm nut end from flue sensor wire into electromagnet and tighten. **Note: Do not over tighten.**
7. Reinstall heater cover as per instructions in the installation manual.
8. Reopen water and gas supplies and return heater to service.

FIGURE 1

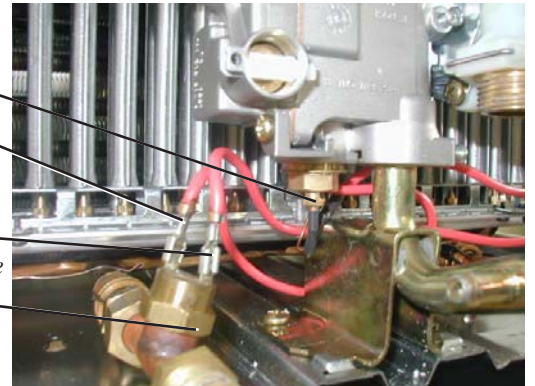
Thermocouple tip
(press down)



Thermocouple location

FIGURE 2

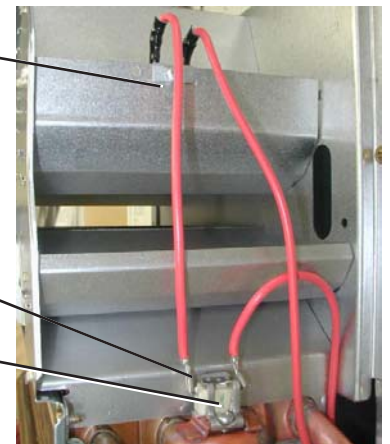
8mm nut
Lead from upper ECO
Lead from thermocouple
Lower temperature limiter



Electromagnet Location (view from bottom of heater)

FIGURE 3

Flue gas sensor
Lead from flue gas sensor
Upper temperature limiter



Flue sensor Location (view from right side of heater)