

# SERIES 2 – Q3452 Spark Pilot Retrofit KIT# 550003057 ( Natural and LP Gas) INSTALLATION INSTRUCTIONS

## ⚠ WARNING

Fire, explosion, asphyxiation and electrical shock hazard. Improper installation could result in death or serious injury. Read this instruction and understand all requirements, including requirements of authority having jurisdiction, before beginning installation. Installation not complete until appliance operation is verified per Installation, Operation & Maintenance Manual provided with boiler.

Kit is for provided with a natural gas pilot assembly. An LP gas conversion package is included with this kit. Follow all instructions for installation of Q3452 Spark Pilot Retrofit Kit for Series 2 Boilers.

1. Follow instructions to TURN OFF GAS TO APPLIANCE found on Operating Instructions label on boiler or in Installation, Operation & Maintenance Manual. Verify all electrical power to boiler is turned off.

## ⚠ WARNING

Electrical shock hazard. Turn OFF electrical power supply at service panel.

2. Allow boiler to cool for 30 minutes before starting installation.

## ⚠ WARNING

Burn hazard. Verify heat exchanger and igniter have cooled or use appropriate personal protection equipment before removing pilot.

3. Remove front boiler door.
4. Disconnect spark cables from control board.
5. Loosen compression fitting located on top of gas valve. Disconnect pilot tube from gas valve.
6. Locate current pilot assembly in front of base. See Figure 1.
7. Remove top burner door and burner tubes.
8. Remove two pilot bracket mounting screws holding pilot assembly in place. Remove entire pilot assembly and discard.
9. Locate supplied pilot assembly.
  - A. For **Natural Gas boiler**, replace entire pilot assembly as shipped. **DO NOT** use provided LP orifice.
  - B. For **LP boiler**, convert pilot assembly to LP using provided LP pilot orifice. After converting replace entire pilot assembly.
10. **This step is for 2 section boiler only.** Bend pilot tubing as shown in Figure 2 (tight 180°, then 90° back) in order to get it in between upper and lower burner doors.

## NOTICE

Verify correct pilot assembly is used for the type of fuel used. Use of the wrong pilot Will result in improper operation of the boiler.

Kit# 550003057 Contents	Qty
Natural Gas Pilot Assembly	1
Pilot Assembly Mounting Screws (1/2" L)	2
Gas Valve Compression Fitting	1
LP Pilot Orifice BBR 11 - for LP use only	1

Figure 1 - Base Front (3 Section Shown)

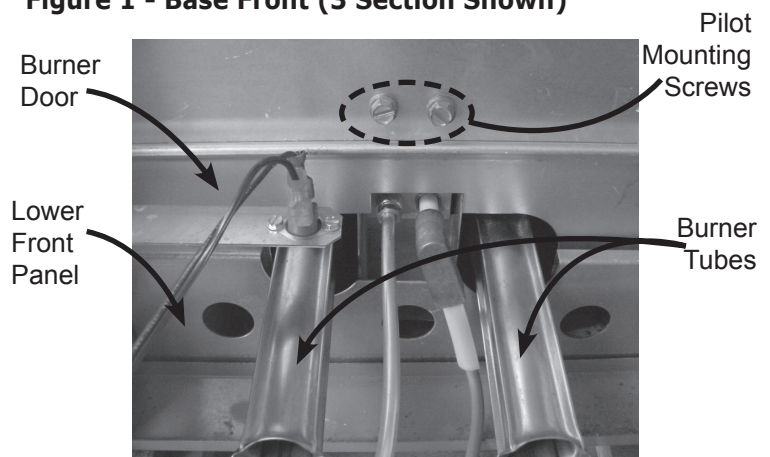
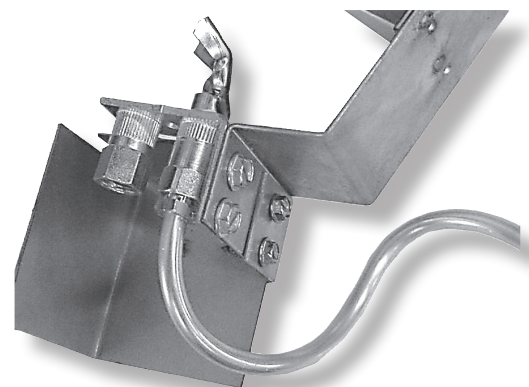


Figure 2 - Bend Pilot Tubing (Side Shield Not Shown for Clarity)



## KIT INSTALLATION INSTRUCTIONS

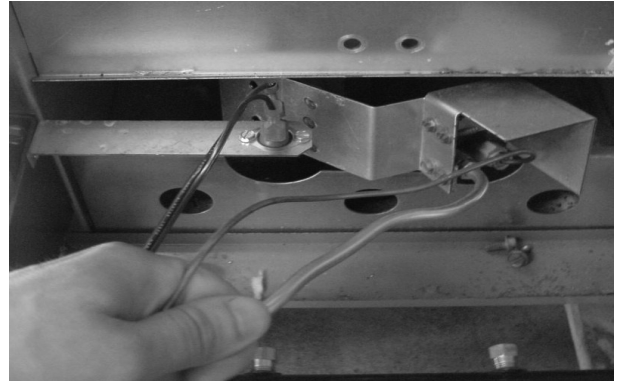
### **⚠ WARNING**

Fire, burn hazard. Do not operate boiler without burner doors in place. Failure to follow these instructions could result in death or serious injury.

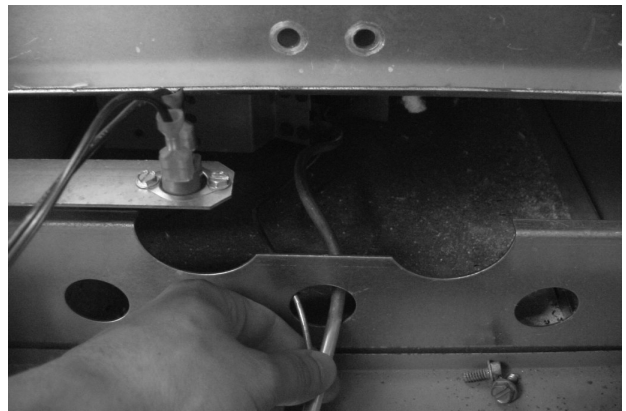
**NOTE:** Refer to **Figure 6** final pilot tubing configuration.

11. Spin assembly so it enters base between lower front panel and top of base. See Figure 3.
12. Push assembly into base. If needed, slide pilot tube and spark wire through hole in lower front panel. See Figure 4.
13. Rotate pilot assembly until it is vertical and holes in pilot bracket assembly line up with pilot mounting holes in top of base. Verify base insulation is over top of pilot bracket, not in between bracket and base top. See Figure 5.
14. Fasten assembly using screws provided. After fastening assembly, reach in base above bracket and **verify insulation is laying flat against base front.**
15. Verify pilot assembly is correctly angled; at right angle with top of base.
16. Attach compression fitting to tube connection on gas valve. Insert tubing and tighten until ferrule is gas tight.
17. Install burner tubes in base by sliding crimped end into slots in back of base. Rest front of burner on orifices. Replace upper burner door. See Figure 5.
18. Final pilot tubing configuration after completion of all steps see Figure 6.
19. It may be necessary to adjust the pilot sleeve at the base of the pilot to protect spark and sensor wiring from excess heat.
20. Refer to Installation, Operation and Maintenance Manual and labels affixed to boiler for lighting instructions.

**Figure 3 - Install Pilot Assembly**



**Figure 4 - Installed Pilot Assembly (3 Section Shown)**



**Figure 5 - Install Burner Door and Tubes (3 Section Shown)**



**Figure 6 - Series 2 Final Pilot Tubing Configuration (2 Section Shown)**

