
Gas Conversion Kit Instructions

Hazard definitions

DANGER Hazards that **will cause severe** personal injury, death or substantial property damage.

WARNING Hazards that **can cause severe** personal injury, death or substantial property damage.

CAUTION Hazards that **will or can cause minor** personal injury or property damage.

NOTICE Special instructions on installation, operation or maintenance that are important but not related to personal injury or property damage.

WARNING This conversion kit must only be installed by a **qualified heating installer/service technician** in accordance with these instructions and all applicable codes and requirements of the authority having jurisdiction. The qualified installer/service technician performing this work assumes responsibility for this conversion.

WARNING **INSTALLER — Read these instructions completely before beginning the installation.** If the information in these instructions is not followed exactly, a fire, explosion, carbon monoxide emission or other hazardous conditions can result, causing severe personal injury, death or substantial property damage.

NOTICE When calling or writing about the boiler— Please have the boiler model number from the boiler rating label and the CP number from the boiler jacket.

WARNING **USER — Please read the following.** Failure to comply could result in severe personal injury, death or substantial property damage.

- **These instructions are for use only by your qualified heating installer/service technician.**
- Please see the User's Information Manual for your reference.
- We recommend regular service by a qualified service technician, at least annually.

Parts

Table 1 Natural to propane kit contents

Part description	Boiler model number	International Comfort Products part number
Conversion kit, natural to propane	GWA052 through GWA175 GWA210 and GWA245 GSA075 through GSA175 GSA200 and GSA250	510811808WT 510811809WT 510811900WT 510811901WT
Kit consists of:		
Pilot burner assembly, consists of: Pilot burner Main burner with pilot bracket Propane gas pilot orifice		
Propane gas valve set for 10" w.c. ½" x ½", Honeywell VR8200 ¾" x ¾", Honeywell VR8300	GWA052 through GWA175 GSA075 through GSA175 GWA210 and GWA245 GSA200 and GSA250	
Thermocouple		
Pilot tubing		
Main burner orifices 1.3 mm 1.55 mm	GWA052 through GWA175 — qty: 10 GWA210 and GWA245 — qty: 14 GSA075 through GSA175 — qty: 7 GSA200 and GSA250 — qty: 10	
Gas valve manufacturer's instructions		
Conversion kit instructions		
Conversion label, natural to propane		
Lighting instructions label		

Conversion instructions

DANGER Verify contents of kit are correct size and fuel type for your boiler. Failure to install parts that are correct size and fuel type will result in severe personal injury, death or substantial property damage.

WARNING For your safety, turn off electrical power supply and turn off external gas supply valve before attempting to work on the boiler. Failure to do so can cause severe personal injury, death or substantial property damage.

Replace gas parts

1. Disconnect wires, gas inlet piping, pilot gas tubing and thermocouple from gas valve on boiler.
2. Remove and discard the existing gas valve.
3. Remove access panel.
4. On gas manifold, mark location of main burner with attached pilot assembly. Remove and discard:
 - main burner with attached pilot assembly
 - thermocouple
 - 1/8" pilot gas tubing

NOTICE On **GWA052** and **GWA070** do not discard pilot pressure regulator, fittings and 1/4" tubing.

5. Remove all remaining burners.

DANGER You must replace both the existing pilot burner and gas valve with the pilot burner and gas valve provided in the conversion kit. Failure to use the correct components will result in severe personal injury, death or substantial property damage.

6. Remove and discard all main burner orifices in gas manifold. Replace with main burner orifices provided (see Table 1 on page 2), using pipe dope sparingly only to male ends. Use pipe dope compatible with propane gases. Do not overtighten orifices (maximum 50 in.-lb. torque).

WARNING Use only pipe dope compatible with propane gas, even if boiler is to be operated on natural gas. Failure to comply could result in severe personal injury, death or substantial property damage.

DANGER You must replace all burner orifices with the correctly-sized conversion kit orifices. Failure to do so will result in severe personal injury, death or substantial property damage.

7. Install new 1/8" pilot gas tubing and thermocouple to new pilot assembly.
8. Install new main burner with attached pilot assembly in location marked on gas manifold.
9. Check main burners to make sure they are clean. Install all remaining burners.

DANGER When replacing, main burners must be seated firmly in slots in rear support with openings in burners face up. Failure to properly seat burners will cause severe personal injury, death or substantial property damage.

10. Install new gas valve with arrow on body in direction of gas flow.
11. Connect new pilot tubing and thermocouple to new gas valve. Refer to gas valve manufacturer's instructions, if necessary, for proper location of connections.

NOTICE On **GWA052** and **GWA070** be sure to reconnect pilot pressure regulator as shown in Figure 1.

12. Replace access panel.

Finish the installation

1. Connect gas piping — Follow "Install gas piping" in Boiler Manual.
2. Connect wiring — Wire gas valve per wiring diagram on boiler.
3. Affix new labels:
 - Attach conversion label next to boiler rating label.
 - Place new lighting instruction label over old label inside jacket.
4. Verify parts installation — Verify that the following parts have been installed per instructions.
 - Gas valve
 - Pilot assembly, pilot tubing and thermocouple
 - Main burner orifices

5. Operate boiler

NOTICE Before placing boiler in operation, check boiler and its gas connection for leaks, as described in:

- GWA Boiler Manual, page 13
 - GSA Boiler Manual, page 12
- a. Follow lighting instructions on boiler or in Boiler Manual for proper start-up.
 - b. Check burner flames per "Start-up" section in Boiler Manual.
 - c. Follow "Checkout procedure" in Boiler Manual.

Figure 1 GWA052 and GWA070 pilot pressure regulator installation



