# CONVERSION INSTRUCTIONS NATURAL GAS TO PROPANE (SEA LEVEL TO 2000 FEET)

# FOR 2 SECTION THRU 9 SECTION SERIES 2, GAS FIRED, HOT WATER & STEAM BOILERS

Conversion kit applies to gas fired boilers produced on or after June 1, 2012.

## **AWARNING**

Conversion kit shall be installed by qualified service agency in accordance with manufacturer's instructions and all applicable codes and requirements of authority having jurisdiction. If information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result in serious injury or death. Qualified service agency is responsible for proper installation of this kit.

# **A** CAUTION

#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

COMPONENTS	
Models	Description
XEB, FSB, SVB, OSVB, CSVB, GMPVB, BW3 at sea level (0-2000 ft)	Four (4) 1/8" #51 drill size orifices for 3-5 section boilers. Use as required, one (1) for each main burner.
	Eight (8) 1/4" #51 drill size orifices for 6-9 section boilers. Use as required, one (1) for each main burner.
	One (1) 1/8" #49 drill size main burner orifice. Use instead of 1/8" #51 drill size, on 2 section induced draft boilers only.
WPSB, MGC, OMGC, MCC, PSB, 16 Series, and 18 Series at sea level (0-2000 ft)	Propane gas input rate varies from natural gas input rate, specific kits per boiler size are made with appropriate #51 drill size main burner orifices.
	WPSB & 18 series boilers: four (4) 1/8" #51 drill size main orifices for 2-5 section boilers & eight (8) 1/4" #51 drill size main burner orifices for 6-9 section boilers.
Included all Models	One (1) LP gas regulator spring (Honeywell #393691) to be used to convert the natural gas valve to operate with propane gas pressures.
	One (1) BDR-12 insert type pilot for Q3452 pilot burner
	One (1) 1/8" brass compression fitting. Use as new pilot tube to pilot burner fitting should tubing break during gas conversion.
	One (1) conversion kit data plate.

### **INSTALLATION INSTRUCTIONS**

1. Turn off gas supply to boiler.

# **AWARNING**

Electrical shock hazard. Turn OFF electrical power supply at service panel before making electrical connections. Failure to do so could result in death or serious injury.

- 2. Turn off electrical to boiler.
- **3.** Remove main burners, do not disturb insulation on inside of combustion chamber or damage pilot burner assembly.
- **4.** Determine pilot burner type (stamped on pilot burner bracket) either Q314A, Q3451B, or Q3452B.
  - Replace natural gas pilot orifice with correct propane gas pilot orifice. See Figure 1.
- **5.** Replace natural gas main burner orifices with enclosed propane gas main burner orifices.
  - Some kits depending on boiler size include extra orifices.
- **6.** Reinstall all burners. Verify burner mounting tabs sit squarely in burner support bracket.
- 7. Replace natural gas regulator spring on gas valve with enclosed propane gas regulator spring. Verify tapered spring on gas valve is inserted correctly. See Figure 2.
- **8.** Adhere conversion kit data plate to right side jacket panel, adjacent to boiler's rating plate.

# **A** DANGER

Fire Hazard. Do not use matches, candles, open flames, or other methods providing ignition source. Failure to comply will result in death or serious injury.

- **9.** Check for gas leaks around all gas connections using commercially available soap solution specifically made for leak detection. See "What to Do if You Smell Gas" Caution on previous page.
- **10.** Follow lighting instructions. Place boiler in operation.
- 11. Confirm gas inlet supply pressure to gas valve is within specified range as shown on conversion kit data plate.
- **12.** Regulator spring #393691 requires adjustment at installation. Adjust manifold pressure to 10.0 inches water column. Check for proper CO<sub>2</sub> and CO levels.

Figure 1 - Q314A (Shown), Q3452B (Similar)

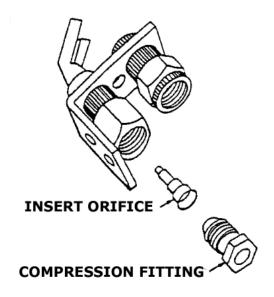


Figure 2 - VR8200, VR8204, VR8300 & VR8304 GAS Valves

