

# INSTALLATION INSTRUCTIONS

## FOR LPM-01 CONVERSION KIT

### GMPV, GMP, GMN, GMPN, GMPH, GPD & PGB

#### **WARNING**

This conversion kit must be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. **If these instructions are not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life.** The qualified service agency performing this work assumes responsibility for the proper conversion of this appliance with this kit.

#### **CONVERSION FROM NATURAL GAS TO PROPANE GAS INSTRUCTIONS**

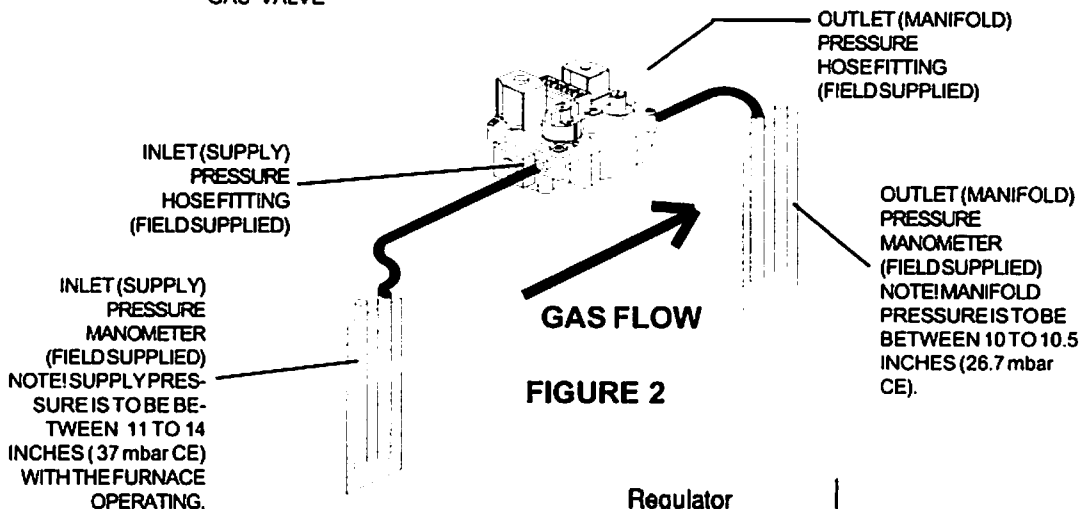
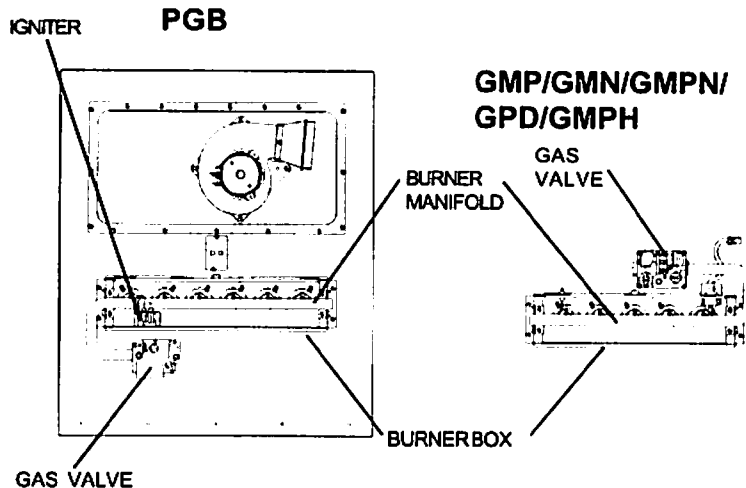
The GMP050,075,100,125 & 150 heaters have been CE marked to use propane gas. Before performing this conversion the following tools and supplies are required:

- (2) Pipe Wrenches. These wrenches shall be suitably sized to handle the supply piping and its ground union joint.
- (1) 7/16 (11mm) open or closed wrench. Do not use an adjustable wrench when removing or installing burner orifices.
- (1) 5/16 (8mm) nut driver.
- (1) Flat blade screw driver.
- (1) 3/16 Allen wrench. The Allen wrench is required to remove gas valve inlet and outlet plugs.
- (2) Water Column manometers. Manometers are to be capable of reading a range between 0 and 20 inches (0-50mbar). Pipe thread compound. Pipe thread compound used must be listed as appropriate material for L.P. gas. Soap solution and application brush. **NEVER USE AN OPEN FLAME WHEN CHECKING FOR GAS LEAKS.**

1. Prior to performing this conversion refer to Installation & Operation Instructions supplied with the equipment, the National Fuel Gas Code (ANSI Z223.1) or in Canada CAN/CGA-B149.2-M91), local codes and rules in force to ensure that this appliance is installed correctly and in compliance with these codes/manuals.
2. Caution: the gas supply must be shut off prior to disconnecting the electrical power, before proceeding with the conversion.
3. Remove the furnace control access door.
4. Loosen the gas supply ground union, and remove the gas valve supply line. Use one pipe wrench as a back-up to prevent damage/rotation of any controls.
5. Remove the (4) sheet metal screws which fasten the gas manifold to the burner box. See Figure 1 for component location.
6. Using the 7/16 (11mm) wrench remove the existing natural gas orifices from the burner manifold. Discard the natural gas orifices.
  - 7a. **GMP, GMN, GMPH, GPD & PGB ONLY:** Install the #55 (#12 for CE) LP orifices supplied with this kit into the gas manifold. Tighten these orifices adequately to prevent gas leakage. (For installations in excess of 2,000 feet (610m) above sea level refer to table 1 for the correct LP burner orifices.)
  - 7b. **GMPN ONLY:** INSTALL THE 1.25mm ORIFICES (B25899-125).

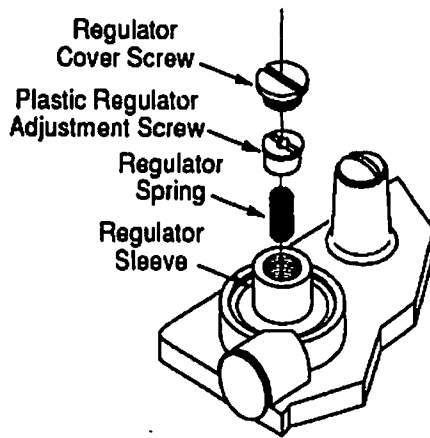
8. Using the 3/16 Allen wrench remove both the gas valve inlet and outlet pressure plugs. Retain these plugs. (N. America only)
9. Install a barb hose connector into both the gas valve inlet and outlet pressure ports. Note! The gas valve pressure ports are threaded to accept a 1/8 NPT fitting. Do not use a barbed hose connector that is threaded for anything other than 1/8 NPT.
- 10a. Reinstall gas manifold assembly into furnace.
- 10b. **GMPN ONLY:** REMOVE BURNER AIR SHUTTERS AND DISCARD. INSTALL NEOPRENE WASHERS BETWEEN MANIFOLD BRACKET AND BURNER BOX SIDE OF THE MANIFOLD, USING THE SUPPLIED SCREWS. See Figure 4.
11. Connect both the inlet and outlet gas valve barb fittings (installed in step 9) to (2) separate manometers. See figure 2.
12. Using a flat blade screwdriver remove the gas valve regulator cover and the gas valve regulator adjustment screw. Retain these parts.
13. Remove the gas valve's natural gas regulator spring and discard.
14. Select the proper LP regulator spring for your White Rodgers or Honeywell gas valve and install per instructions enclosed with the spring.
15. **PGB Units Only:** If equipped with a Honeywell HSP System, the pilot orifice must be changed. This pilot orifice is packaged with the Honeywell required spring. **Remove the sensor/igniter assembly shown in Figure 3 before attempting to loosen the pilot tubing from the pilot assembly.** Once the sensor/igniter assembly has been safely removed, remove the pilot tubing and replace the pilot orifice. Reinstall the pilot tubing and then attach the sensor/igniter to the pilot as shown in Figure 3.
16. Install the gas valve adjustment screw. Turn adjustment screw clockwise approximately 7 turns, finer adjustments are to be performed in step 23.
17. Apply a liberal quantity of pipe thread compound to all threaded portions of the gas supply piping. Pipe compound must be resistant to the effects of LP gas.
18. Install the gas supply piping and its ground union joint using a pipe wrench. Use a second pipe wrench as a back up.
19. Turn on the gas supply to the furnace. Leak check all joints.
20. Turn on the electric supply to the furnace.
21. Adjust the room thermostat to obtain continuous burner operation.
22. **After the burner is in operation,** adjust the gas supply pressure to obtain a pressure range of between 11 and 14 inches supply pressure. In Europe, supply pressure is 37mbar.
23. Using the gas valve regulator screw adjust the manifold pressure to obtain a manifold pressure of between 10 (25 mbar) and 10.5 inches (26.7 mbar) water column on the outlet manometer.
24. **GMP, GMN, GMPV, GMPH, GPD & PGB ONLY:** Adjust the burner air shutters to obtain a burner flame consistent with the flame shown in the furnace Installation Instructions. (CE does not require air shutter adjustment).
25. Turn off the gas and electrical supply to the furnace.
26. Apply the conversion label found in the gas valve regulator spring envelope to the gas valve.
27. Apply the conversion label (B10259-108). This label must be attached adjacent to the rating plate.
28. Install the gas valve regulator cover.
29. Remove the barb fittings and manometers installed on the gas valve. Install the gas valve inlet and outlet pressure plugs, applying pipe joint compound. Check for leaks in the gas supply line using a soap solution.
30. Turn on the gas and electrical supply. Adjust the room thermostat to ensure continuous burner operation.
31. Using a soap solution check the gas supply line, gas valve inlet and outlet pressure areas, threaded portions of the burner orifices, and pressure taps for leaks. **DO NOT USE AN OPEN FLAME.** Repair any gas leaks detected.
32. Observe at least three ignition cycles to ensure smooth and quiet ignition.
33. Install the control access panel.

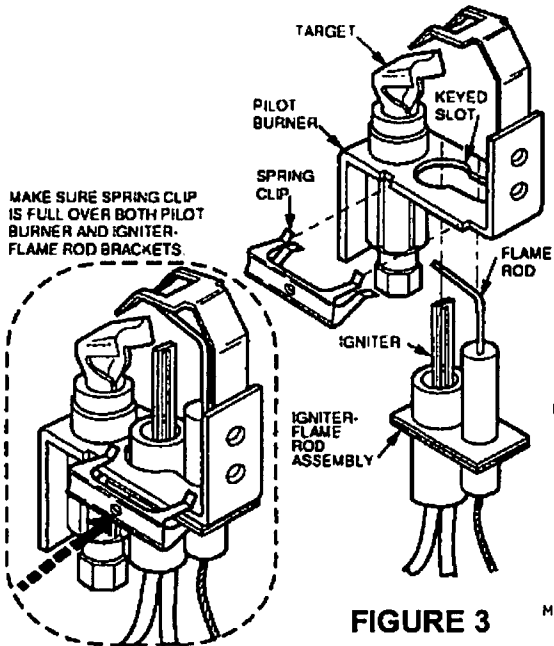
**FIGURE 1**



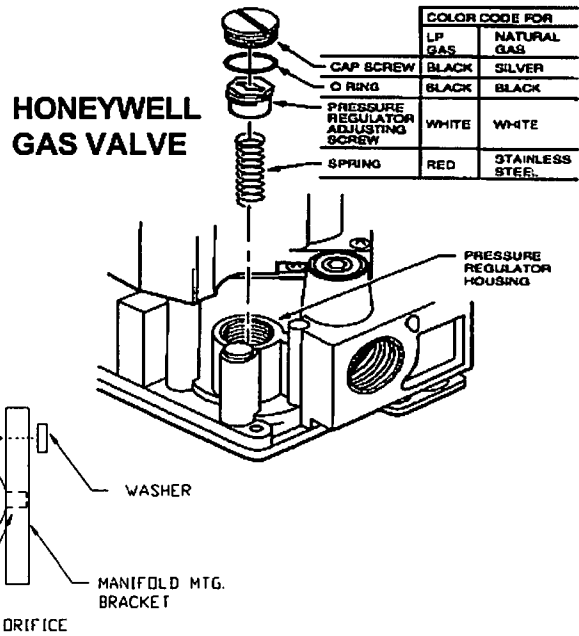
**FIGURE 2**

**WHITE ROGERS  
GAS VALVE**





**FIGURE 3**



**FIGURE 4**  
GMPN FURNACE ONLY  
(SHOWN IN UPFLOW POSITION)

UNIT	NAT	L.P.	L.P. KIT	ORIFICE
GMP050	22,500			43
		20,000	LPM-01	55
GMP	25,000			42
		20,000	LPM-01	55
GMPN	20,000			45
		18,333	LPM-01	1.25mm
GPD	25,000			42
		20,000	LPM-01	55

TABLE REFLECTS INPUT PER CELL (North America Only).

**FOR INSTALLATIONS OVER 2,000 FT. (610m) ABOVE SEA LEVEL (U.S. ONLY). REFER TO INSTRUCTIONS CONTAINED IN THE HA-02 KIT OR ANSI Z223.1 (TABLE F- 4)**

Table 1

GMP,GMN,GPD, & PGB		GMPN	
ALTITUDE		ORIFICE SIZE	ORIFICE SIZE
0 - 2,000	0 - 610m	55*	1.25mm*
2,000 - 3,000	610m - 915m	55*	1.25mm*
4,000	1220m	55*	56
5,000	1525m	56	56
6,000	1830m	56	57
7,000	2135m	56	57
8,000	2440m	56	57

\* #55 AND 1.25mm orifices are provided in this kit. (20,000 BTUH/Burner @ 10.5" W.C. (26 mbar) manifold pressure)

Table 1 is based upon the furnace input being reduced 4% per 1000 feet (305m) above sea level. See your distributor for high altitude burner orifices.