



Gas Conversion Kit

View these instructions online at www.lbwhite.com

Kit Contents:

DESCRIPTION	QTY.
Instructions	1
Burner orifice	1
Dataplate	1
Honeywell conversion kit	1
Pipe thread compound	1

Tools required:

- Standard Philips screw driver
- 3/16 in. Allen key
- 3/32 in. Allen key (2-stage gas valve)
- 2 – 1/8 in. NPT pressure barb fittings
- 2 – Low pressure gas gauges (0-30 in. w.c.)
- Adjustable wrench
- Pipe wrench
- Pliers

Qualifications for installation of the kit:

- You must read and understand these instructions before beginning the conversion.
- You must be properly trained and have sufficient experience to install the gas conversion kit and test the heater for proper operation.
- Ensure the installation's gas type and pressure conforms to the gas type and pressure requirements on the dataplate within the conversion kit.

CANADIAN REQUIREMENTS:

- The conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the CAN 1-B149.1 and .2 INSTALLATION CODES.

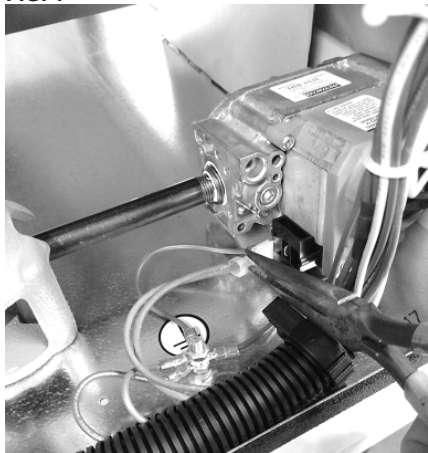
Discussion:

The following instructions are common for use when converting fuel gas for the Premier, GreenGro, and the ThermaGrow 120 electronic ignition heaters.

A. Initial Preparation

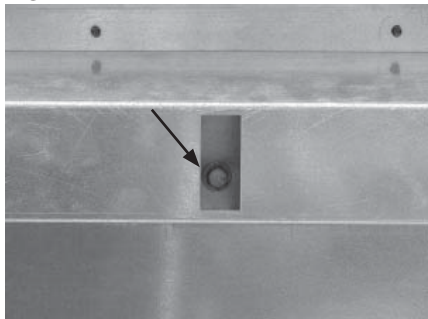
1. Close the main gas supply valve to the heater, and disconnect the heater's electrical supply.
2. Remove the gas hose from the heater.
3. Remove if applicable, any connector from the inlet of the gas control valve. Open the burner end door.
4. Disconnect the gas control valve's wiring. See Fig. 1.

FIG. 1



5. Remove the burner retaining bolt and washer from beneath the heater's base. See Fig. 2.

FIG. 2



6. Premier 80/170
 - Remove the four screws at the gas inlet, Premier 170 shown. See Fig. 3.

FIG. 3



7. Premier 350, GreenGro 120/220, and ThermoGrow 120: remove the two gas valve bracket mounting screws. Premier 350 ONLY: remove the burner access panel. See Fig. 4a & 4b.

FIG. 4a

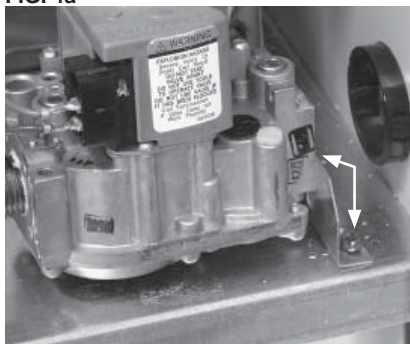
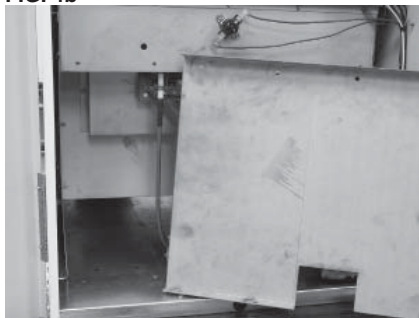
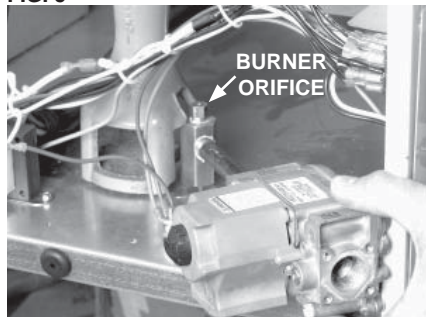


FIG. 4b



8. Lift and pivot the valve and manifold assembly as needed to remove it from the heater.

FIG. 5



9. Replace the existing burner orifice with the similar component from the kit. See Fig. 5. Apply a small amount of pipe thread compound on orifice threads, tightening securely.

10. Reinstall the gas valve assembly into the heater. Install the burner retaining bolt and washer removed earlier. Secure the gas valve assembly to the heater using screws removed earlier.

- Premier 80/170: secure the gas valve to the case side. See Fig. 3.
- Premier 350, GreenGro 120/220, or ThermaGrow 120: secure the gas valve to the base. See Fig. 4a.

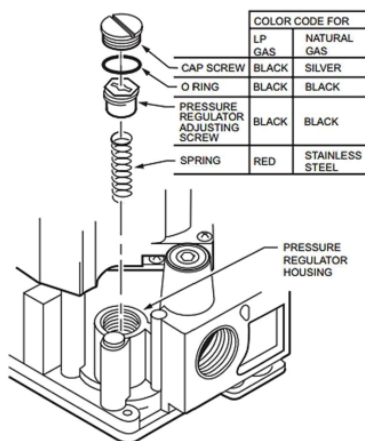
11. Premier 350: reinstall the burner access panel. See Fig. 4b.

B. Converting the Gas Control Valve

1. Single stage gas valve

- a. Remove the regulator cap and pressure regulating adjusting screw. Remove the existing spring from the gas control valve. Install the spring and adjusting screw from the kit. See Fig. 6.

FIG. 6



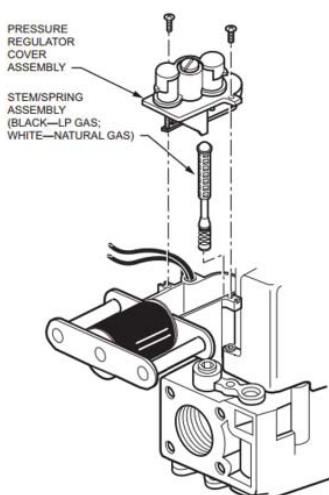
- b. Turn the adjusting screw clockwise 10 complete turns.

NOTE: This does not accurately set the pressure. It only allows the heater to light. See Section C – Setting Gas Pressures.

2. Two stage gas valve

- a. Remove the pressure regulator adjustment cover.
- b. Remove the existing stem/spring assembly. Install the stem/spring assembly from the kit. See Fig. 7.

FIG. 7



3. Apply the labels included in the kit to the heater. Clean the areas to allow adhesion.

- Apply dataplate from the kit over the existing dataplate.
- Apply language specific ATTENTION label to the gas control valve in the dotted area as shown in Fig. 8.

FIG. 8

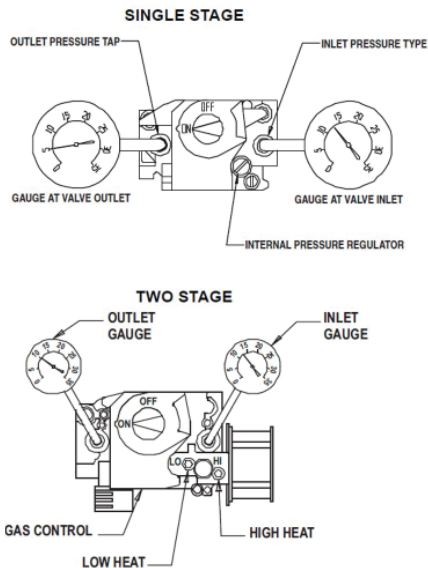


4. Reconnect the gas control valve's wiring.

C. Setting Gas Pressures

1. Using the 3/16 allen key, remove the pressure tap plugs at inlet and outlet of gas control valve. See Fig. 9

FIG. 9



2. Securely thread the 1/8 in NPT barbed fittings into the inlet and outlet pressure ports of the gas control valve.
3. Securely connect pressure gauges capable of measuring up to 30 in. w.c. gauges at both locations. See Fig. 9.
4. Reconnect if applicable, any connection to the inlet of the gas valve and the gas hose to the heater. Use pipe thread compound.
5. Open the gas supply valve to the heater.
6. Leak test the installation using approved leak detectors. Eliminate any gas leaks at threaded connections before proceeding.
7. Reconnect the heater's electrical supply and start the heater.

8. Refer to the dataplate supplied with the conversion kit. Ensure pressures are set according to required specifications given on the dataplate.

- Observe the pressure read at the inlet and outlet of the gas control valve.
- The pressure read at the inlet of the gas control is Inlet Pressure. The pressure read at the outlet of the control valve is Burner Manifold Pressure.
- Verify proper inlet pressure. If the inlet pressure to the gas control valve does not agree with the dataplate, then the regulator controlling gas pressure to the heater requires adjustment. Proceed after proper inlet pressure has been established.
- Verify proper burner manifold pressure.

Single stage gas valve

- Turn the regulator adjusting screw CW (increase) or CCW (decrease) to adjust pressure as needed.

Two stage gas valve

Low heat

- Turn the thermostat down to its lowest setting.
- Slowly turn up the thermostat until a pressure is read.
- If the pressure does not match the low-pressure setting on the dataplate, adjustment is required.
- Remove the cap from the high and low heat adjustment cover.
- Using the 3/32 inch Allen key, turn the inner adjustment screw for LO clockwise to increase, or counter-clockwise to decrease the pressure.

High heat

- Turn the thermostat up to its highest setting.
- If the pressure does not match the dataplate, adjustment is required.
- Using the 3/32 inch Allen key, turn the inner adjustment screw for HI clockwise to increase, or counter-clockwise to decrease the pressure.

D. Completion

1. Premier 80/170, GreenGro 120/220, or ThermoGrow 120: Install the O-ring into the groove on the regulator cap screw as shown on Fig. 10. Tighten cap screw on to the gas control valve.

FIG. 10



2. Premier 350, GreenGro 120/220 Plus, or ThermoGrow 120 Plus, install the pressure regulator cap on the pressure regulator cover assembly.
3. Close the heater's main gas supply valve.
4. Remove gauges and barb fittings. Install pressure tap plugs, tightening securely.
5. Open the heater's main gas supply valve. Check for leaks with an approved leak detector.
6. Close and latch the burner access door.
7. Start the heater, check for proper operation.
8. Set thermostat to desired temperature.

Notes

Service

Contact your local L.B. White dealer for replacement parts and service. You may also call the L.B. White Co., Inc. at 1-800-345-7200, for assistance, or email us at customerservice@lbwhite.com.

Be sure that you have your heater model number and configuration number when calling.



**WORLD PROVIDER - INNOVATIVE
HEATING SOLUTIONS**

411 Mason Street, Onalaska, WI 54650

800-345-7200 • 608-783-5691

608-783-6115 (fax)

www.lbwhite.com