80% GAS FURNACE INSTALLATION INSTRUCTIONS WHITE RODGERS TWO-STAGE VALVE WITH DIRECT SPARK IGNITION RXGJ-FP22

BEFORE INSTALLING THIS KIT, CHECK THE "CONVERSION KIT INDEX" (92-21519-52) TO BE SURE YOU HAVE THE RIGHT KIT FOR THE FURNACE MODEL YOU ARE CONVERTING.

TO CONVERT FROM NATURAL TO LP GAS USE KIT NUMBER FP22 (US/CANADIAN)

PARTS LIST		
DESCRIPTION	**PART NUMBER**	**FP22**
Installation Instructions	92-22999-75	1
Conversion Label	92-18153-05	1
L P Gas Valve – White-Rodgers #36G55-522	60-101921-02	1
Orifice - Burner (#54)	62-21551-54	6

⚠ Recognize this symbol as an indication of Important Safety Information!

⚠ WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED, LICENSED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS UNIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING ANY MAINTENANCE OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE RESULTING IN FIRE, ELECTRICAL SHOCK, CARBON MONOXIDE POISONING, EXPLOSION, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

FOR CANADIAN INSTALLATIONS, THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REPRESENTATIVE, IN ACCORDANCE WITH REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

IMPORTANT: DAMAGE TO THE PRODUCT RESULTING FROM FAILURE TO FOLLOW INSTRUCTIONS OR USE OF UNAUTHORIZED PARTS MAY BE EXCLUDED FROM THE MANUFACTURER'S PRODUCT WARRANTY COVERAGE.

IMPORTANT NOTE FOR ALTITUDES ABOVE 2,000 FEET: The main burner orifices in this kit are sized for nameplate input and intended for installations at elevations up to 2,000 feet only. For elevations above 2,000 feet, the burner orifices must be sized as shown in Chart 3 in Conversion Kit Index 92-21519-52.

$$\text{Input BTU/HR} = \frac{\text{Heating Value of Gas (BTU/Ft}^3\text{) x 3600 x correction factor}}{\text{Time in Seconds (for 1 cu.ft.) of Gas}}$$

In USA: All gas piping must comply with the latest NFPA 54 National Fuel Gas Code and all state and local codes. All electrical wiring must comply with the latest NFPA 70, National Electrical Code and all state and local codes.

In Canada: All gas piping must comply with the latest CAN1-B149-1 & 2 installation codes for gas burning appliances and all provincial and local codes, Part1-CSA Standad C22.1 and all provincial and local codes.

WHEN CONVERTING NOx MODELS

⚠ WARNING

TURN OFF ELECTRICAL POWER AND MAIN GAS SUPPLY BEFORE BEGINNING MODIFICATION. FAILURE TO DO SO CAN RESULT IN ELECTRICAL SHOCK OR EXPLOSION CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

This furnace does not require the stainless steel inserts located in the burner tube in order to meet SCAQMD Nox emission levels when run on LP gas. Carefully remove these inserts and 1/8″ diameter retaining rod before firing this furnace on LP gas with the Nox inserts in place.

To remove the inserts, **carefully** remove the hot surface ignitor mounted to the furnace center panel. The Nox inserts will follow the burner tray assembly out as they are hooked over the 1/8″ diameter retaining rod.

Discard the Nox inserts and rod.

Replace the burner tray assembly first and **carefully** reattach the hot surface ignitor to the center panel.

KIT INSTALLATION

1. Disconnect union ahead of combination gas valve.
2. Disconnect leads from gas valve and replace with valve from the kit.
3. Remove the 4 screws holding the manifold assembly to the main burner assembly.
4. Remove each orifice from the manifold assembly and replace with orifices from the kit.
5. Reinstall the manifold assembly and gas piping. Connect valve leads and electrical power to furnace.
6. Turn on gas and electrical supply.
7. Check unit thoroughly for gas leaks using soap solution and not flame.
8. Follow lighting instructions to put furnace into operation.
9. Operate thermostat to check unit operation.

   NOTE: The furnace will always start in low fire. If you have a single stage thermostat it will remain in low fire for 12 minutes and change to high fire. With a 2-stage thermostat it will start in low fire and go to high fire when 2nd stage of the thermostat calls for heat.

CHECKING AND ADJUSTING GAS PRESSURE

1. The LP gas supply pressure must be set between 11″ and 14″ W.C. by means of the tank or branch supply regulators.
2. The furnace manifold pressure should be 10″ W.C. for high fire and 4.9″ W.C. for low fire. The valve comes from the factory preset at these pressures. These pressures can be checked by connecting a properly calibrated manometer or gauge to the manifold pressure tap on the outlet end of the valve. Check and adjust pressures as follows:
   a. For full input pressure remove adjustment screw cover on outlet end of valve and turn adjustment screw clockwise to increase pressure and counterclockwise to reduce pressure. Replace the adjustment cover screw securely.
   b. For low fire pressure, remove the regulator cover on top of valve and adjust as noted above.

      NOTE: Use 3/32″ allen wrench for making pressure adjustments. See Figure 1.

COMPLETING CONVERSION

1. Using a ball point indelible pen, record the following information on the conversion label.
   a. Conversion kit number.
   b. Date of conversion.
   c. Installer's name, address and telephone number.
   d. Burner orifice size.
2. Place completed conversion label adjacent to the rating plate.
3. Install the burner compartment access door.
4. Run furnace through complete cycle to check operation.

FIGURE 1
GAS VALVE 60-101921-02

