

# 80% GAS FURNACE INSTALLATION INSTRUCTIONS

## HONEYWELL, ROBERTSHAW OR WHITE RODGERS RXGJ-FP15

**BEFORE INSTALLING THIS KIT, CHECK THE "CONVERSION KIT INDEX"  
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 FP15 (US/CANADIAN)**

PARTS LIST	DESCRIPTION	PART NUMBER	QUANTITY
	Installation Instructions	92-22999-81	1
	Conversion Label	92-18153-05	1
	Conversion Kit #54300 (Robertshaw)	60-23647-01	1
	Conversion Kit #92-06549 (White Rodgers)	60-21193-01	1
	Conversion Kit #396221-2 (Honeywell)	60-22513-01	1
	Burner Orifice	62-22175-54	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.**

### ▲ 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.**

**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 orifice in this kit is 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 the Conversion Kit Index.

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

**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 CAN 1-B149-1 & 2 installation codes for gas burning appliances and all provincial and local codes, Part 1 - CSA Standard C22.1 and all provincial and local codes.

### WHEN CONVERTING NOx MODELS:

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 (see Figure 1). 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 (SEE ILLUSTRATION):

1. Disconnect the gas line at the union ahead of the combination gas valve.
2. Remove burners from assembly.

#### A. To Change Burner Orifice

Remove each burner orifice from the manifold. See **Figure 1**. Refer to Chart 3 in the Conversion Kit Index and verify the correct burner orifice size required. Open the burner orifice envelope marked with the orifice drill size required and install in the burner when the unit is converted to LP gas.

#### B. Convert Gas Valve to LP Gas (See Figures 2, 3 & 4)

See Honeywell envelope kit #396221-2, White Rodgers envelope kit #F92-0659, or Robertshaw kit #54300 for proper LP regulator spring and instructions.

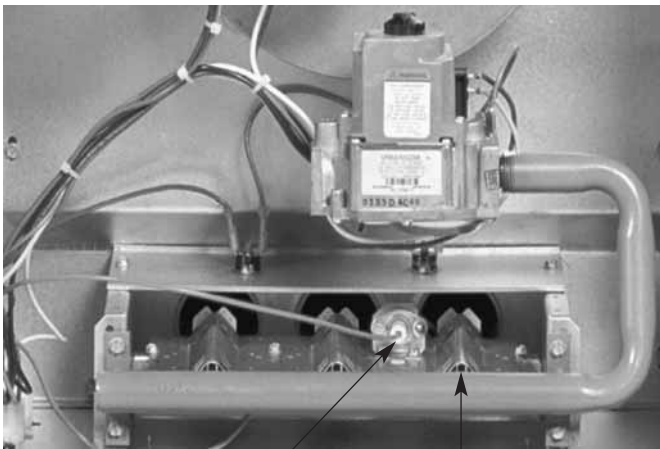
**Manifold gas pressure must be adjusted to 10" W.C. after valve conversion to LP gas with furnace in operation and proper gas supply pressure (see rating plate). The gas supply line pressure should be between 11" and 14" W.C. at the appliance.**

NOTE: Use a pipe compound resistant to the action of the liquefied petroleum gases at all threaded pipe connections.

3. Place the conversion label adjacent to the CSA rating plate.

**DO NOT REMOVE OR DEFACE ORIGINAL RATING PLATE.**

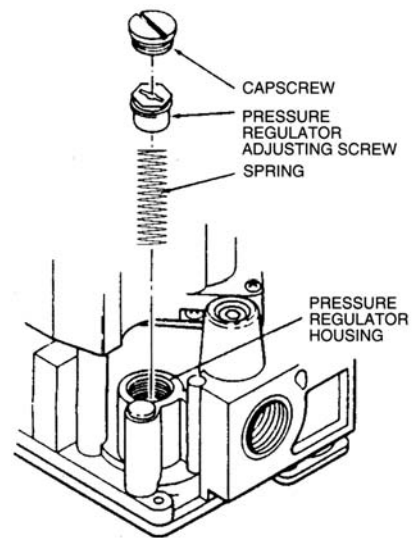
**FIGURE 1**  
DIRECT SPARK IGNITION LOCATION



DIRECT SPARK IGNITOR

MAIN BURNER ORIFICE

**FIGURE 2**  
CONVERTING HONEYWELL VR8205S CONTROLS FROM NATURAL GAS TO LP GAS OPERATION



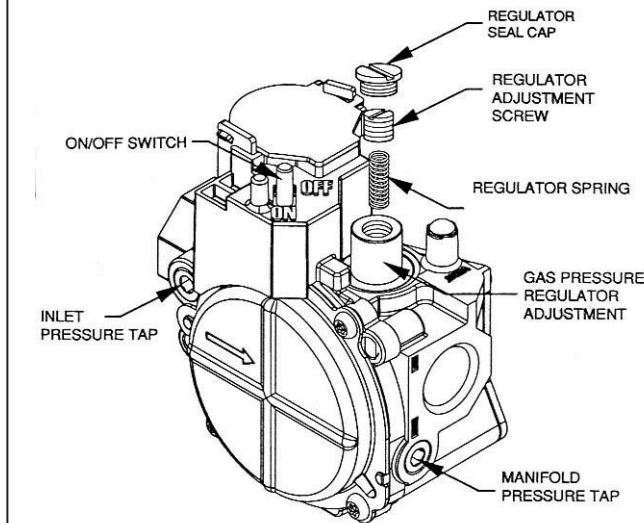
CAPSCREW

PRESSURE REGULATOR ADJUSTING SCREW

SPRING

PRESSURE REGULATOR HOUSING

**FIGURE 3**  
CONVERTING WHITE RODGERS 36E37-214 CONTROLS FROM NATURAL GAS TO LP GAS OPERATION



REGULATOR SEAL CAP

REGULATOR ADJUSTMENT SCREW

REGULATOR SPRING

ON/OFF SWITCH

INLET PRESSURE TAP

GAS PRESSURE REGULATOR ADJUSTMENT

MANIFOLD PRESSURE TAP

4. Turn on gas supply and electrical supply.
5. Check unit thoroughly for gas leaks – with soap and water – not with a flame.
6. Follow lighting instructions to put furnace into operation.
7. Operate thermostat to check unit operation for ignition and extinction characteristics.

### COMPLETING CONVERSION

1. Using a ballpoint indelible pen, record the following information on label 92-18153-05 provided in this kit.
  - a. Date of conversion.
  - b. Installer's name, address and telephone number.
  - c. Burner orifice size.
2. Place completed conversion label next to the rating plate.
3. Install the burner compartment access door.
4. Run furnace through a complete cycle to assure proper operation.

**FIGURE 4**  
CONVERTING ROBERTSHAW 7222 CONTROLS FROM  
NATURAL GAS TO L.P. GAS OPERATION

