



MODEL LPTK06

Propane Conversion Kit Installation Instructions

ATTENTION INSTALLING PERSONNEL:

As a professional installer you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with this Instruction Manual. Pay special attention to all safety warnings. Often during installation or repair it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

Remember, it is your responsibility to install the product safely and to know it well enough to be able to instruct a customer in its safe use.

Safety is a matter of common sense...a matter of thinking before acting. Most dealers have a list of specific good safety practices...follow them.

The precautions listed in this Installation Manual should not supersede existing practices but should be considered as supplemental information.



RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION.

DESCRIPTION

This kit is for the purpose of converting Amana Air Command 80 SSE and SV furnaces (GUIA, GCIA, GUIB, and GCIB) from natural to propane gas. Any conversion to propane gas is the responsibility of, and at the risk of, the person making the conversion.



WARNING

This conversion kit shall be installed by a qualified agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon dioxide 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.



AVERTISSEMENT

Cet ensemble de conversion ne doit être installé que par le représentant d'un organisme qualifié et conformément aux instructions du fabricant et à tous les codes et exigences applicables de l'autorité compétente. Quiconque ne respecte pas à la lettre les instructions dans le présent manuel risque de déclencher un incendie ou une explosion entraînant des dommages matériels, des lésions corporelles ou la perte de vies humaines. L'organisme qualifié qui effectue les travaux est responsable de la conversion correcte de ce générateur d'air chaud à l'aide de cet ensemble.



WARNING

PERSONAL INJURY HAZARD

Iron oxide (rust) can reduce the level of odorant in propane gas. A gas detecting device is the only reliable method to detect a propane gas leak. Contact your propane supplier about installing a gas detecting warning device to alert you in the event that a gas leak should develop.

Failure to detect a propane gas leak could result in an **EXPLOSION** or **FIRE** which could cause **SERIOUS PERSONAL INJURY** OR **DEATH**.

IN CANADA "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/CGS B149.1 AND B149.2 INSTALLATION CODE."



WARNING

If your propane gas furnace is installed in a basement, an excavated area or a confined space, we strongly recommend that you contact your propane supplier about installing a warning device that would alert you to a gas leak.

...Propane gas is heavier than air and any leaking gas can settle in any low areas or confined spaces.

...Propane gas odorant may fade, making the gas undetectable except with a warning device.

An undetected gas leak would create a danger of explosion or fire. If you suspect the presence of gas, follow the instructions on the cover of the installation manual. Failure to do so could result in **SERIOUS PERSONAL INJURY** OR **DEATH**.

This kit includes: installation instructions, propane orifices, valve conversion kits with instructions, conversion rating plate, conversion date certificate, wire ties, and screen/turbulator removal warning tag.

INSTALLATION



CAUTION

The gas supply must be shut off prior to disconnecting the electrical power, before proceeding with the conversion.

1. Remove the gas manifold by removing the burner box front cover, cutting the wire ties, disconnecting the gas valve low voltage wires, and removing the four manifold mounting screws. See Figure 1.

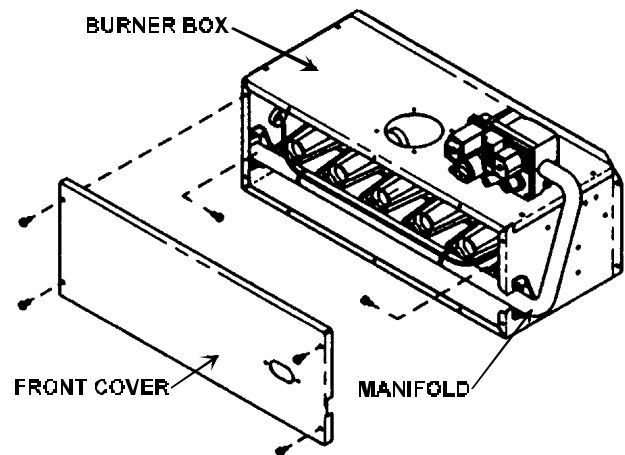


FIGURE 1 - GAS MANIFOLD REMOVAL

2. Replace natural gas orifices with the altitude appropriate propane orifices (Figure 2B) specified in Table 1. Tighten orifices with a box-end wrench. Do not use a socket wrench, as it could damage the orifices. Do not over-tighten. Do not cross thread.

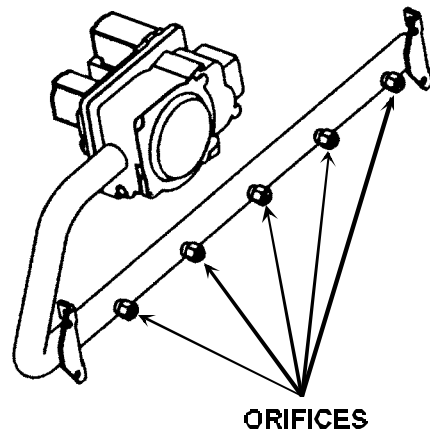


FIGURE 2A - REPLACING GAS ORIFICES



FIGURE 2B - PROPANE ORIFICES

TABLE 1 - PROPANE GAS ORIFICES

KIT NO.	ALTITUDE (ft.)	ORIFICE
LPTK06	0 - 7500	#55
HALP05 *	7500 - 11000	#56

Note: For altitudes above 7500 ft see the High Altitude Kit Installation Instructions.



CAUTION

To prevent premature heat exchanger failure, follow the instructions below to remove all metal inserts from the heat exchanger tubes during propane conversions.

- Remove metal screen inserts from the entrance of the heat exchanger tubes. See Figure 3 and follow the a,b,c directions.

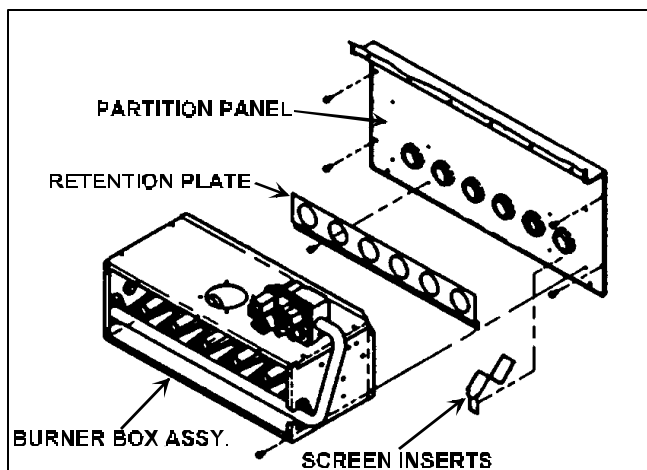


FIGURE 3 - REMOVAL OF METAL SCREEN INSERTS

- Remove entire burner box assembly, including burners, from the partition panel as one unit.
 - Hold assembly and remove the screen retention plate and tube inserts from each section of the heat exchanger.
 - Reinstall the retention plate and entire burner box assembly.
- Reinstall the gas manifold and reconnect the gas valve low voltage wiring. Install new wire ties making sure that wires do not droop between orifices and burners.



CAUTION

To prevent unsatisfactory furnace operation, the proper gas conversion kit must be used for each gas valve. Use the White-Rodgers kits only with the White-Rodgers gas valve, and use the Honeywell Spring kit only with the Honeywell gas valve. THE SPRING KITS ARE NOT INTERCHANGEABLE.

- Replace the gas valve regulator spring with one of two new springs included in this propane conversion kit. If the unit is equipped with a White-Rodgers 36E gas valve, (Figure 4a), use Spring Kit #92-0659 (Figure 4b). If the unit is equipped with a Honeywell VR8205 gas valve, (Figure 5a), use Spring Kit #393691 (Figure 5b). In each case, change the regulator spring per instructions included with that particular regulator spring. Discard whichever spring kits are not used.
- Leak check orifice threads using a soap solution.



WARNING

To avoid the risk of fire or explosion, do not use a flame to check for leaks.

- The position of the ignitor, relative to the burner, is not effected by this conversion procedure but the ignitor should be visually inspected for any damage at this point. Reinstall the burner box cover.
- Check inlet gas pressure. With the power and gas off, connect a water manometer or adequate gauge to the "inlet pressure tap" of the gas valve. With the power and gas on, put the furnace into heating cycle and turn on all other gas consuming appliances. For propane gas the inlet gas pressure should be between 11.0 and 14.0 inches of water.
- Required input rating at standard altitude.

MODEL	INPUT BTU/HR
GUIA, GCIA, GUIB, GCIB 045	41400
GUIA, GCIA, GUIB, GCIB 070	62100
GUIA, GCIA, GUIB, GCIB 090	82800
GUIA, GCIA, GUIB, GCIB 115	103500
GUIA, GCIA, GUIB, GCIB 140	124200

- Set the manifold pressure to 10.0" W.C. (Water column).

A tapped opening is provided in the gas manifold to facilitate measurement of the manifold pressure. A "U Tube" manometer having a scale range from 0 to 12 inches of water should be used for this measurement. The manifold pressure must be measured with the burners operating, and with the burner box cover in place.

To adjust the pressure regulator, remove the adjustment screw or cover on the gas valve. Turn out (counterclockwise) to decrease pressure, turn in (clockwise) to increase pressure. Only small variations in gas flow should be made by means of the pressure regulator adjustment. In no case should the final manifold pressure vary more than plus or minus 0.3 inches water column from the specified pressure. Any major changes in flow should be made by changing the size of the burner orifices.

11. Verify the gas input rate by checking that the appropriate orifices have been installed and the manifold pressure has been set as stated in these instructions.

12. Check burner flames through the view port in the burner box. Flames should be stable, soft and blue, (dust may cause orange tips but they must not be yellow). They should extend directly outward from the burners without curling, floating, or lifting off. Check furnace's temperature rise as described in the installation manual.
13. Check the normal operating sequence of the ignition system to insure burners light properly.
14. Attach to the gas valve the label (found in the spring kit) indicating propane conversion.
15. Attach conversion data plate, with correct input rating, adjacent to the unit rating plate.
16. Post "conversion date certificate" adjacent to the furnace.

Due to policy of continual product improvement, the right is reserved to change specifications and design without notice.



FIGURE 4a - WHITE-RODGERS 36E GAS VALVE



FIGURE 4b - WHITE-RODGERS SPRING KIT

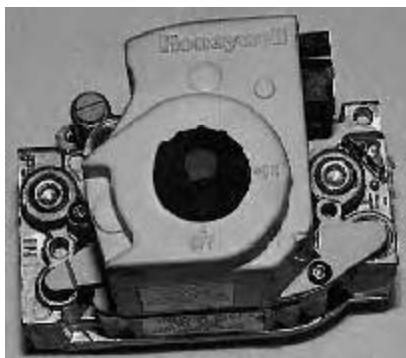


FIGURE 5a - HONEYWELL VR8205 GAS VALVE



FIGURE 5b - HONEYWELL SPRING KIT