

Installer's Guide

LP Conversion Kit for Single/Two Stage Gas 2/4YC** 1 1/2 - 5 Tons 4DC** 2 - 5 Tons

Models:

BAYLPKT100AA, BAYLPKT101AA, BAYLPKT102AA

⚠ WARNING: HAZARDOUS VOLTAGE - DISCONNECT POWER BEFORE SERVICING

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

IMPORTANT — This Document is **customer property** and is to remain with this unit. Please return to service information pack upon completion of work.

⚠ WARNING

Hazardous Voltage and Gas!

This conversion kit shall 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 the information in these instructions is 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. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with this kit.

GENERAL

These instructions describe converting single/two stage packaged gas/electric models 2/4YC* and dual fuel models 4DCY from natural gas to LP gas.

Conversion from natural gas to LP gas is a critical procedure, therefore, these INSTRUCTIONS MUST BE FOLLOWED CLOSELY. The conversion kit shall be installed by a qualified service agency.

INSPECTION

1. Unpack all components of the LP conversion kit.
2. Check the kit for damage. Report promptly to the carrier any damage found to the kit.
3. Check to be sure that the package contains the parts listed in Table 1. Any missing components should be reported to your supplier at once and replaced with authorized components only.

Table 1. Orifices Kit

Model	Orifice		LP Springs	Manifold Pressure		
	Qty	Size		Single Stage Models	2-Stage Models	
				1st Stage	2nd Stage	
BAYLPKT100 (all 40K and 120K models)	3	#49	2*	10.0	5.6	10.0
BAYLPKT101 (all 64K and 96K models)	3	#52	2*	10.4	5.8	10.4
BAYLPKT102 (all 75K models)	2	#50	2*	10.4	5.8	10.4

* Use 1 spring for single stage models

CONVERSION PROCEDURE

⚠ WARNING

Hazardous Voltage and Gas!

Turn off the gas supply and disconnect all electric power, including remote disconnects before servicing unit. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Failure to turn off gas or disconnect power before servicing could result in death or serious injury.

1. Set the thermostat to OFF.
2. Shut off gas supply to the unit.
3. Open the unit's electrical disconnect switch.
4. Remove the Controls/Heat access panel.
5. Remove the manifold from the burner bracket four (4) screws.
6. Remove the natural gas orifices from the manifold. See Figure 1.
7. Install LP gas orifices in manifold.
8. At the gas regulator, remove the natural gas spring located under the gas valve's regulator adjustment screw.
 - a. For single stage units with White-Rodgers model 36G gas valve only: remove the cap screw, then remove plastic adjusting screw, and lastly the regulator spring. Replace regulator spring with one of the springs from the kit.
 - b. For two stage units with White-Rodgers model 36G gas valve only: remove low fire cap screw, then plastic adjusting screw, and lastly the low fire regulator spring. Replace low fire regulator spring with one of the springs from the kit. Repeat this procedure for replacing the high fire regulator spring with the other spring from the kit.
9. Reverse the disassembly procedure and secure all components in their respective positions.

⚠ WARNING

Hazard of Explosion!

Never use an open flame to detect gas leaks. Explosive conditions may occur. Use a leak test solution or other approved methods for leak testing. Failure to follow recommended safe leak test procedures could result in death or serious injury or equipment or property-only-damage.

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10. Attach the "LP" nameplate supplied with this kit adjacent to the unit nameplate and apply the conversion label to the gas valve.
11. Check all piping joints and electrical connections for tightness.
12. Turn on the gas supply to the unit.
13. Measure the gas pressure. The incoming supply gas pressure should be 11" to 13" W.C.
14. Check for leaks at all joints with a soap solution.
15. Restore power to unit.
16. Place the thermostat selector switch to the HEAT position and adjust the set point indicator to its highest setting. The burners should light.
17. Refer to rating nameplate for proper input. Adjust the unit manifold pressure to the values shown in Table 1 (Refer to 2/4YCC3/YCX3, 4YCY4, 4DCY4, 4YCY6, or 4DCY6 Installer's Guide for proper adjustment instructions and input calculations). High-fire regulation should be adjusted first, followed by low-fire adjustment.
19. Inspect burner flames. Flame should be soft, stable, and blue. Flames should not lift off of burners or have significant yellow tipping.
20. Replace the access panel.
21. Refer to 2/4YCC3/YCX3, 4YCY4, or 4DCY4 Installer's Guide to verify proper unit sequence of operation.
22. At altitudes above 2000 feet derate application 4% per 1000 feet.

NOTE: Contact the LP gas supply company if the supply pressure is different than the supply pressure indicated on the unit nameplate.

NATURAL TO LP CONVERSION TROUBLESHOOTING FOR TWO STAGE UNITS ONLY

Valve does not respond to adjustment

Make sure that furnace is in proper mode for adjustment, i.e., low-fire mode for low-fire adjustment, high-fire mode for high-fire adjustment

Low-fire does not respond to adjustment (in low-fire mode)

Ensure that low-fire screw is being adjusted, and that actual high-fire setting is currently greater than desired low-fire setting.

High-fire regulator must be converted and adjusted to new setting before low-fire regulator can be properly adjusted.

High-fire does not respond to adjustment (in high-fire mode)

Ensure that high-fire screw is being adjusted, and that valve is in high-fire mode by checking for proper current to 2-stage solenoid (at HI terminal).

Low-fire adjustment should have no effect when in high-fire mode.

Valve only responds to high-fire adjustment (in low-fire mode)

This indicates that actual low-fire adjustment is greater than the current high-fire adjustment. Ensure that LP spring is in high-fire regulator. Increase high-fire adjustment until valve no longer responds, then adjust low-fire setting.

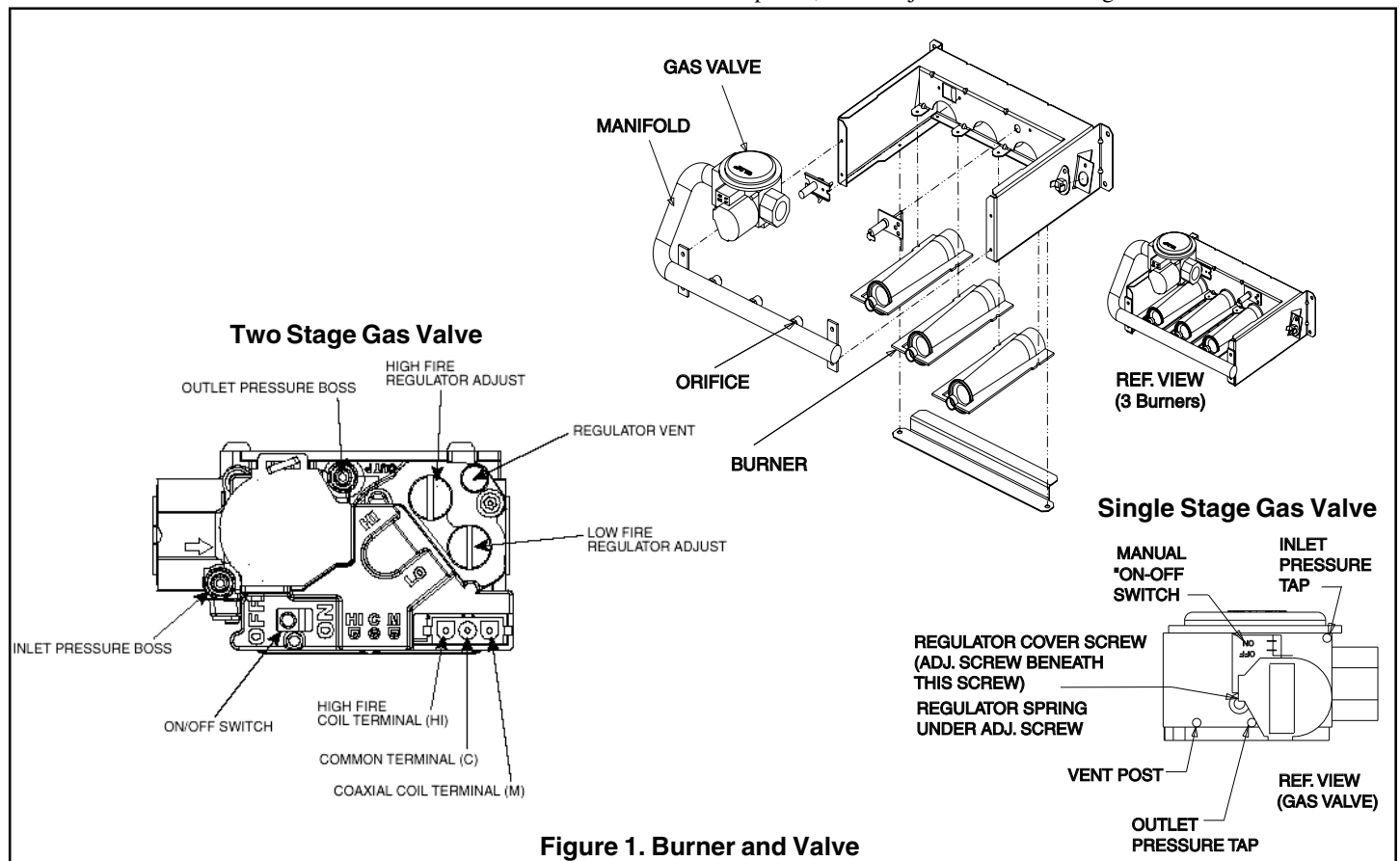


Figure 1. Burner and Valve