

80% AFUE SINGLE-STAGE GAS FURNACE
NATURAL GAS TO L.P. CONVERSION KIT
FOR STANDARD OR HIGH ALTITUDE APPLICATIONS

INSTALLATION INSTRUCTIONS

Installer: Save these instructions for future use!
**FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS CAREFULLY
INSTALLING OR OPERATING THIS CONTROL COULD CAUSE
INJURY AND/OR PROPERTY DAMAGE.**

⚠ WARNING

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 instruction is not followed exactly, fire, explosion, or production of carbon monoxide may causing property damage, personal injury, or loss of life. The qualified service agency performing the work assumes the responsibility for the proper conversion of this appliance with this kit.

APPLICATION

This conversion kit is only applicable to 80M1 gas valves, It is a single stage furnace utilizing 2-stage gas valve, the factory connection of Lo and Hi Fire tied together allows it to run only in High Fire for single stage operation.

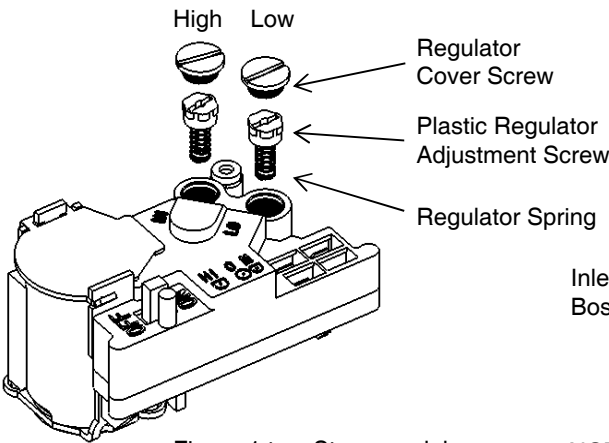
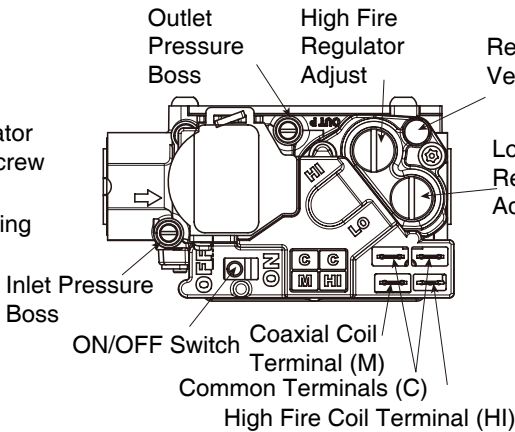


Figure 1.two-Stage models



NOTE: M terminal is used to give power supply for main coil to adjust the whole gas airflow, HI terminal is used to adjust the high and low fire.

Figure 2

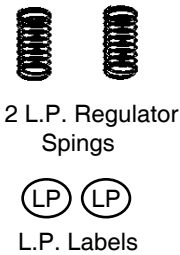


Figure 3. Contents of kit

No.	Item	Contains	Notes
1	LP Conversion Kit(80% Only)	LP springs, orifices, and conversion labels	Shipped with unit

⚠ WARNING

VALVE CONVERTED FOR USE ON L.P. GAS, IMPROPER OPERATION COULD RESULT IN DEATH OR SERIOUS INJURY.

TO CONVERT FROM NATURAL TO L.P. GAS

- Step 1: Remove the original natural gas orifice counterclockwise with an adjustable wrench or electric screwdriver and replace it with a liquefied petroleum gas orifice. Place the gas valve horizontally, and unscrew the HI and LO pressure regulating screw;
- Step 2: Take out plastic screws and original natural gas springs and place the liquefied petroleum gas springs in the HI and LO ports;
- Step 3: Screw the HI and LO plastic screws clockwise for 14 turns;
- Step 4: Install the gas pipe assembly and gas valve and connect the gas pressure gauge, and then check the gas leakage;
- Step 5: Adjust HI stage outlet pressure to the appliance manufacturers requirements;
- Step 6: Attach the WARNING label(provided in the kit) to the gas valve where it can be readily seen. Also attach the small round L.P. labels to the top of the regulator cover screws;
- Conversion back to Natural Gas use maybe made at a later date by retaining the Natural Gas springs and orifices(removed in step 3, above)and following the same procedures.

Checking the Manifold Pressure:

The manifold pressure can be measured by installing a pressure gauge or U-tube manometer to the outlet end of the gas valve as follows:

1. With a small flat head screwdriver, loosen the manifold pressure tap plug located on the outlet side of the gas valve. Refer to Fig. 1.
2. Install the pressure gauge or U-tube manometer according to the manufacturer's supplied instructions.
3. Set the room thermostat to a point above room temperature to start the furnace.
4. Allow the furnace to operate for three (3) minutes and then check the manifold pressure. For LP gas installations, the manifold pressure should be set to appropriate manifold pressure. If the manifold pressure is not set to the appropriate pressure, then it must be adjusted. The pressure is adjusted after calibrating the specific gas valve according to the pressure value specified on the gas furnace's nameplate.

No.	Items	Contains	Notes
1	Accessory-High Altitude Kit ACHAKFURN801VB	#47 Drill Size Burner Orifice Kit*6 #48 Drill Size Burner Orifice Kit*6 #51 Drill Size Burner Orifice Kit*3 #52 Drill Size Burner Orifice Kit*3 #56 Drill Size Burner Orifice Kit*6 #57 Drill Size Burner Orifice Kit*6 #59 Drill Size Burner Orifice Kit*3 #60 Drill Size Burner Orifice Kit*3	Not Shipped With Unit, For Altitude 0-6000ft
2	Accessory-High Altitude Kit ACHAKFURN801VC	#50 Drill Size Burner Orifice Kit*6 #58 Drill Size Burner Orifice Kit*6 #59 Drill Size Burner Orifice Kit*6 #62 Drill Size Burner Orifice Kit*3 #49 Drill Size Burner Orifice Kit*6 #53 Drill Size Burner Orifice Kit*3 #54 Drill Size Burner Orifice Kit*3 #63 Drill Size Burner Orifice Kit*3	Not Shipped With Unit, For Altitude 6000-10000ft

High Altitude Orifice Size and Manifold Pressure.

Model	Number of Burners	High Altitude Derate Orifice Size Chart (Natural Gas)					
		0-2000Ft	2000-4000Ft	4000-6000Ft	6000-8000Ft	8000-10000Ft	
40A	3	50	51	52	53	54	Orifice Size
		3.3					Manifold Pressure
60A/60B	3	45	47	48	49	50	Orifice Size
		3.8					Manifold Pressure
80B/80C	4	45	47	48	49	50	Orifice Size
		3.8					Manifold Pressure
100C	5	45	47	48	49	50	Orifice Size
		3.8					Manifold Pressure
120D	6	45	47	48	49	50	Orifice Size
		3.8					Manifold Pressure

Model	Number of Burners	High Altitude Derate Orifice Size Chart (LP Gas)					
		0-2000Ft	2000-4000Ft	4000-6000Ft	6000-8000Ft	8000-10000Ft	
40A	3	57	59	60	62	63	Orifice Size
		10.8					Manifold Pressure
60A/60B	3	55	56	57	58	59	Orifice Size
		10					Manifold Pressure
80B/80C	4	55	56	57	58	59	Orifice Size
		10					Manifold Pressure
100C	5	55	56	57	58	59	Orifice Size
		10					Manifold Pressure
120D	6	55	56	57	58	59	Orifice Size
		10.5					Manifold Pressure

ACiQ



Since the manufacturer has a policy of continuous product and product data improvement, it reserves the right to change the design and specification without notice.