

# TECHNICAL DATA SHEET KIT #93-56201

Tucson Direct Vent Model 8700, Tucson B-Vent Model 8720, or Stowe Model 8320 Conversion From Natural Gas (NG) to Liquid Propane (LP) Using the Top Convertible Pilot (serial # 004556 to 006292)

### TOOLS REQUIRED

Phillips Screwdriver Slotted Screwdriver Straight Handled T20 Torx 1/2" Deep Socket or Wrench 3" Socket Extension (optional) 5-32 Allen Wrench

## KIT COMPONENTS

1-LP Valve Conversion Kit 1-#53 Burner Orifice 1-#30 Pilot Orifice LP Sticker (Red) Instructions

**NOTE:** Some Valves may require a tamper proof T20 Torx

## !!WARNING!!

This conversion kit must be installed by a qualified gas 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.

# **!!ATTENTION!!**

Cet équipment de conversion sera intallé par une agence qualifiée de service conformément aux instructions du fabricant et toutes exigences et codes applicables de l'autorisés avoir la iuridiction. Si l'information dans Instruction n'est pas suivie exactment, un feu, explosion ou production de protoxyde de carbone peut résulter le dommages causer de propriété, perte ou blessure personelle de vie. L'agence qualifiée de service est esponsable de propre de cet équipement. l'installation L'installation n'est pas propre et compléte jusqu'à opération de l'appareil converti est chéque suivant les critéres établis dans les instructions de propriétaire provisionnées avec l'équipement.

CAUTION: The gas supply must be shut off prior to making this conversion. If the stove is

equipped with the optional blower, disconnect it from the electrical source before

making this conversion.

IMPORTANT: DO NOT attempt this conversion on a Vent Free Tucson.



#### **PROCEDURE:**

- 1) Open the front of the stove. For the Tucson use a phillips screwdriver to remove the screw that holds the front door closed. For the Stowe, use the allen wrench provided or a standard 5-32 allen key to remove the 4 bolts in the front facade. Note: some early models will have phillips screws holding the front on. You will need to drop the ash lip down to remove the 2 lower bolts. Carefully hold the facade as the top 2 bolts are removed. Lift the facade off and place it in a safe place until it is required for reassembly.
- 2) Carefully remove the log set and the burner tube. Refer to the illustration at right and note the positions of the firebox components. Before the conversion is complete verify that all components are placed correctly.
- 3) Using a 1/2" deep socket with a 3" extension (or 1/2" wrench), remove the NG gas orifice(#40), located on the inside of the back of the firebox. Install the LP orifice(#53). To prevent damage to the main gas line, hold the elbow, which the orifice is attached to when removing and installing the orifices.
- 4) Locate the pilot assembly inside the stove. Remove the top of the pilot burner hood by grasping it and pulling it up.
- 5) Using a 5/32" allen wrench, unscrew and remove the NG pilot orifice. Drop in the LP (#30) orifice provided with this kit and tighten it with the allen wrench.
- 6) Snap the pilot burner hood back into place on the pilot stem, making sure the cut out of the hood aligns with tang on the orifice housing.
- 7) Adjust the air shutter on the end of the burner tube so that it is fully open. Tighten the retaining screw to hold the shutter in this position.
- 8) Replace the burner tube, logs, ember screen, and embers. Refer to the owner's manual for the proper placement of these parts. Precise location is important to both the look and operation of the stove. Replace and secure the front door (Tucson) or Glass front (Stowe).

**NOTE:** The remainder of this conversion will be done to the valve and pilot assembly underneath the stove. Access can be increased by placing the stove on a raised surface or by blocking the unit up.

## **VALVE CONVERSION:** See illustrations on page three.

- 9) Using a Torx T20, or slotted screwdriver, remove and discard the three pressure regulator mounting screws (A), pressure regulator tower (B) and diaphragm (C).
- 10) Insure that the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten screws securely.

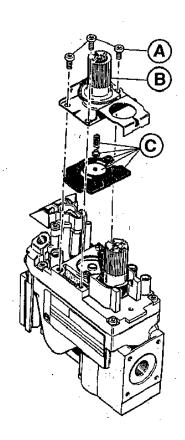


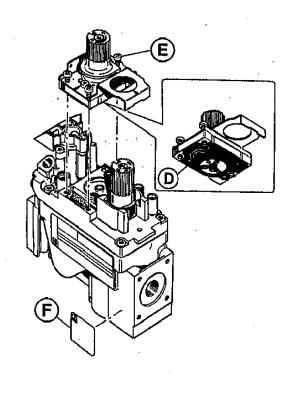
- 11) Install the enclosed identification label (F) to the valve body where it can be easily seen. Place the red LP sticker over the white NG sticker on the valve door.
- 12) Turn on the gas supply. For checking and properly adjusting the manifold pressure, refer to the appliance owner's manual for instructions.

# LEAK TEST BEFORE AND AFTER LIGHTING THE STOVE.

The input rate of the heater can be verified by checking the manifold pressure. If the manifold pressure is correct, then the input rate is correct.

13) Record this change by filling out the fuel conversion label on the back of the stove.







	<u>Natural Gas</u>	<u>LP</u>
Input rating (Btu/hr) 0-610 m	26,000	26,000
Maximum output (BTU/hr) 0-610 m	20,000	20,500
Minimum input rating (Btu/hr) 0-610	14,700	14,700
Orifice size DMS 0-610 m	40	53
Input rating (Btu/hr) 610-1370 m	24,500	24,000
Orifice size DMS 610-1370 m	41	54
Manifold pressure (in. w.c./kPa)	3.5/0.9	10.0/2.5
Man. Pressure-Lo setting (in.w.c./kPa)	1.2/0.3	3.3/0.8
Minimum inlet pressure (in. W.c./kPa)	5.0/1.25	11.0/2.75
Maximum inlet pressure (in. W.c./kPa)	10.5/2.62	13.5/3.36

**Note:** Refer to the owner's manual for the:

- a. Details on adjustment for the proper pilot and main burner flame appearance.
- b. Instructions for checking out the normal operating sequence of the ignition system.
- c. Location on the valve to check manifold pressure.

# DO NOT REUSE THE PARTS THAT HAVE BEEN REMOVED FROM THE STOVE.

WARNING: Make sure proper replacement orifices have been used.		
LP ORIFICES:	Main Burner	

0 - 610m #53 (Standard) 610 - 1370m #54 (High Altitude)

**Pilot #30** 

NAT. GAS ORIFICES: Main Burner

0 - 610m #40 (Standard) 610 - 1370m #41 (High Altitude)

**Pilot #51**