



## Technical Data Sheet

Tucson 8702 DX & Stowe DX 8322  
High Altitude Conversion for NG and LP  
Kit #97-56106



**Publish Date: October 2, 2013**

**KIT COMPONENTS:**

7200-243 - #42 Burner Orifice - NG  
7200-120 - #54 Burner Orifice - LP

**TOOLS REQUIRED:**

Phillips Screwdriver  
Pliers or Vise Grips  
T2 Torx or Flat-head Screwdriver  
½" (13mm) Socket or wrench  
5-32" (4mm) Hex Wrench

-  **CAUTION: TURN OFF THE GAS SUPPLY AND DISCONNECT ANY ELECTRICAL SOURCE TO YOUR STOVE BEFORE MAKING THIS CONVERSION.**
-  **IMPORTANT: This kit and these instructions apply to the Tucson 8702 and Stowe 8322 DX models only. DO NOT attempt this conversion on any other Tucson or Stowe model.**

 **WARNING:**

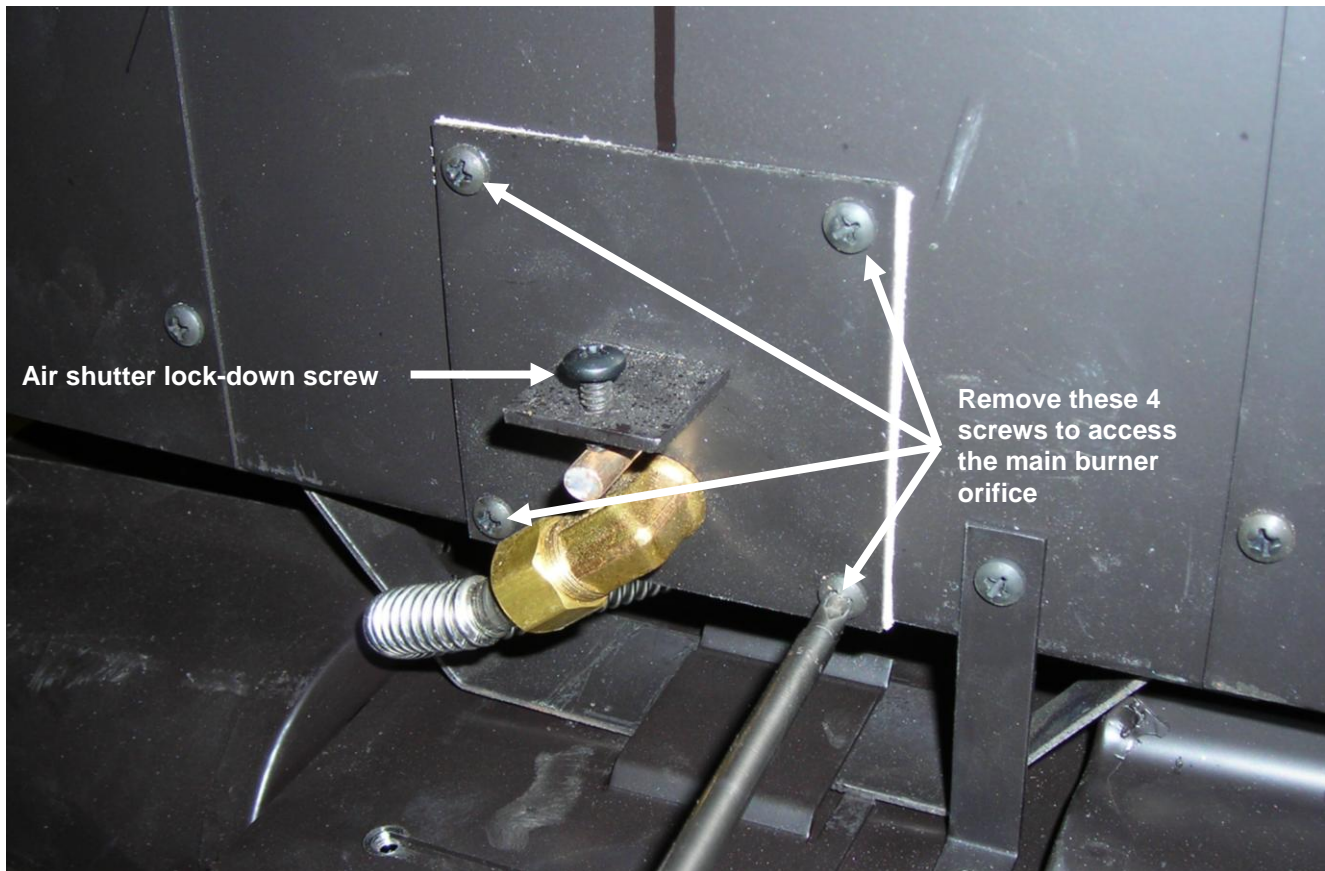
**THIS CONVERSION KIT MUST BE INSTALLED BY A QUALIFIED GAS SERVICE AGENCY IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND ALL APPLICABLE CODES AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION. IF THE INFORMATION IN THESE INSTRUCTIONS IS NOT FOLLOWED EXACTLY, A FIRE, EXPLOSION, OR PRODUCTION 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 ÉQUIPEMENT DE CONVERSION SERA INSTALLÉ PAR UNE AGENCE QUALIFIÉE DE SERVICE CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT ET TOUTES EXIGENCES ET CODES APPLICABLES DE L'AUTORISÉS AVOIR LA JURIDICTION. SI L'INFORMATION DANS CETTE 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 L'INSTALLATION PROPRE DE CET ÉQUIPEMENT. L'INSTALLATION N'EST PAS PROPRE ET COMPLÈTE JUSQU'À OPÉRATION DE L'APPAREIL CONVERTI EST CHÉQUE SUIVANT LES CRITÈRES ÉTABLIS DANS LES INSTRUCTIONS DE PROPRIÉTAIRE PROVISIONNÉES AVEC L'ÉQUIPEMENT.***

**PROCEDURE:**

1. Lift the top off the stove. Lift off the front assembly (Tucson 8702 DX only). Remove the front glass assembly. To remove the glass assembly pull the spring mounted handle forward and up to free the glass frame. Carefully set it aside. Remove the logs and set them aside. Remove the one screw that mounts the ember burner to the front center of the firebox. Carefully remove the ember burner.
2. From behind the stove loosen (but do not remove) the screw that locks the air shutter in place. Locate and remove the (4) 8-32 screws that mount the orifice plate to the firebox body. See Figure 1 below.

**Figure 1**

3. Find the main burner orifice which is located inside the orifice plate. Using a 1/2" (13mm), socket or wrench remove the existing orifice. Use pliers or vise grips to hold the brass elbow while loosening the orifice. If converting to LP, locate the #54 LP orifice and install where original orifice was. If converting to NG, locate the #42 NG orifice and install where the original orifice was. Replace the orifice mounting plate using the 4 screws removed earlier. Ensure the gasket is in place when reinstalling the plate. **NOTE:** Stoves installed above 2,000 feet (610m) may require a derated orifice (see specifications on page 3).
4. Slide the shutter rod through the hole in the back of the stove. Reinstall the ember burner and screw to lock it in place. Reinstall the logs according to the instructions in the owner's manual. Adjust the air shutter by sliding the rod on the outside back of the stove. Pushing the rod into the firebox opens the shutter, pulling it out closes the air shutter. When the shutter is in the desired position tighten the locking bolt finger tight. **Do not over-tighten this screw as it may cause the shutter to lift inside the stove.** After the conversion is complete, make adjustments to the flame from outside the stove. **Important:** Ensure that orange flames are not present, as this is a sign of incomplete combustion and will produce soot.



5. Replace and secure the front glass assembly and casting. Set the top back in place.

** LEAK TEST ALL FITTINGS WITH A GAS SNIFFER BEFORE AND AFTER LIGHTING THE STOVE.**

1. Once the leak tests are complete, replace the modesty panel and record this change by filling out the fuel conversion label on the stove

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

Specification	NG	LP
INPUT RATING (Btu/hr) 0-2000 ft	25,000	25,000
INPUT RATING (Btu/hr) 2000-4500 ft	24,200	24,800
ORIFICE SIZE (DMS) 0-2000 ft	41	53
ORIFICE SIZE (DMS) 2000-4500 ft	42	54
MANIFOLD PRESSURE - LO SETTING (in. W.c./kpa)	1.6/0.4	6.4/1.59
MANIFOLD PRESSURE - HI SETTING (in. W.c./kpa)	3.5/0.87	10.0/2.48
INLET PRESSURE - MINIMUM (in.w.c./kpa)	5.0/1.24	12.0/2.99
INLET PRESSURE - MAXIMUM (in. w.c./kpa)	7.0/1.74	13/3.22
MINIMUM INPUT RATING LO SETTING (btu/hr)	18,000	21,600
MAXIMUM OUTPUT (btu/hr) 0-2000 ft	17,350	19,100

**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 PARTS REMOVED FROM THE STOVE!**