



Technical Data Sheet

Tudor Model 8120 NG Conversion Kit

Kit #91-56200

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Kit Components:

#7200-253: #53 NG Orifice Hood
#7211-152: 0.51mm Pilot Orifice
#7211-306: NG Regulator
White NG Sticker

TOOLS REQUIRED:

½" Wrench
Slotted Screwdriver
5/32 Allen Wrench
5/16" Wrench
Gas leak Detector
Manometer

Warning!

A qualified gas service agency must install this conversion kit 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 can 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 complete until the operation of the converted appliance is checked as specified in the owner instructions supplied with the 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'autorités avoir la juridiction. Si l'information dans cette Instruction n'est pas suivie exactement, un feu, explosion ou production de protoxyde de carbone peut résulter le dommages causer de propriété, perte ou blessure personnelle de vie. L'agence qualifiée de service est esponsible de l'installation propre de cet équipement. L'installation n'est pas propre et complète jusqu'à opération de l'appareil converti est chèque suivant les critères établis dans les instructions de propriétaire provisionnées avec l'équipement.

CAUTION: *Shut off the gas supply before making this conversion. If the stove is equipped with the optional blower, disconnect the electricity also.*

PROCEDURE:

1. Open the Valve Access Door on the front bottom of the stove.
2. Open the two front doors.
3. Lift the cast front (exposed by opening the front doors) up and off the stove.

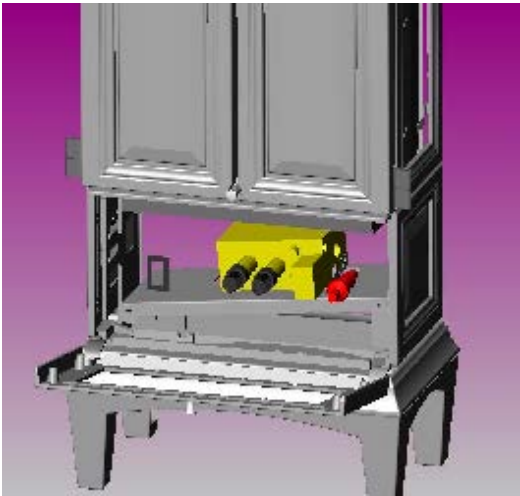


Illustration # 1
Tudor shown with the Valve
Access Door opened.

4. Using a flat screwdriver, pry up the two tabs on the top of the glass frame to allow the glass to come out of the stove. With the tabs pulled up, carefully lift the glass up and out of the stove. Set it aside until you are ready to reinstall it.
5. Carefully remove the two ceramic log pieces.
6. Locate and loosen the 10-24 nut under the firebox that holds the air shutter in place. Move the air shutter to the left approximately $\frac{1}{4}$ ".
7. You can now lift the entire pan burner out of the stove, and access the pilot assembly inside the firebox.

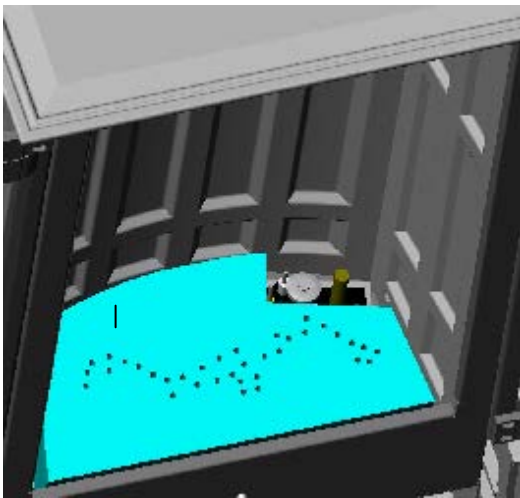


Illustration #2
Inside the Tudor firebox, logs
are removed – pan burner is
still in place.

8. Locate the pilot assembly inside the stove (see illustration #3). Remove the easy off top of the pilot burner hood by grasping it and pulling it up and off the pilot assembly.
9. Use the $\frac{5}{32}$ " allen wrench to unscrew and remove the LP pilot orifice. Insert the 0.51mm NG orifice provided with this kit and tighten it with the allen wrench.

10. Snap the pilot burner hood back into place on the pilot stem, making sure the cutout of the hood aligns with tang on the orifice housing.
11. Use a ½" wrench or socket and remove the LP burner orifice. Replace this with the #53 NG orifice provided with this kit. Tighten with the ½" wrench or socket.

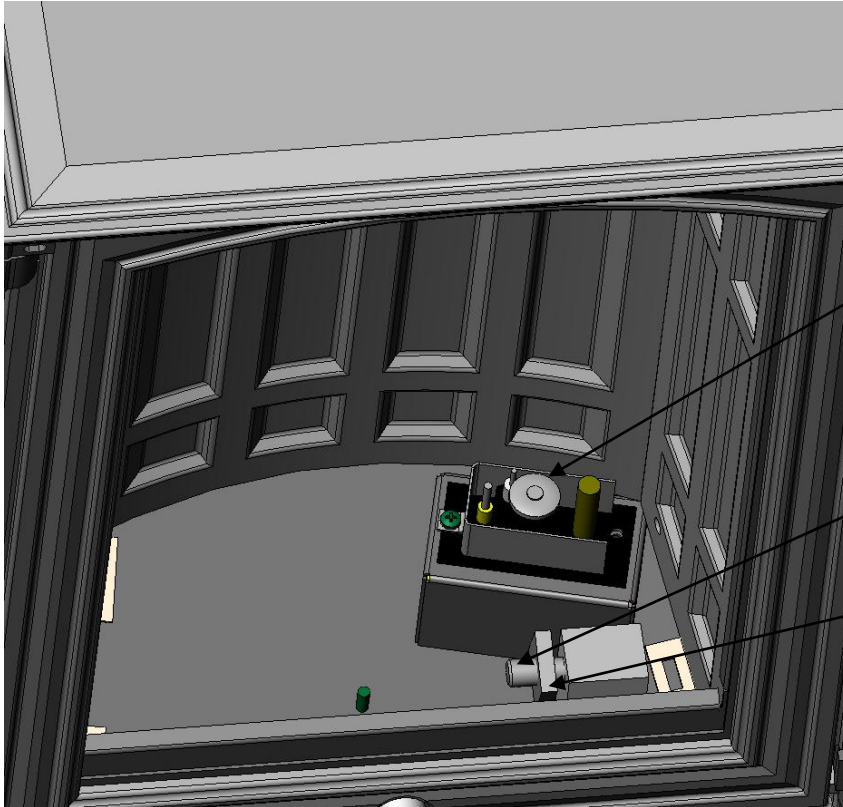


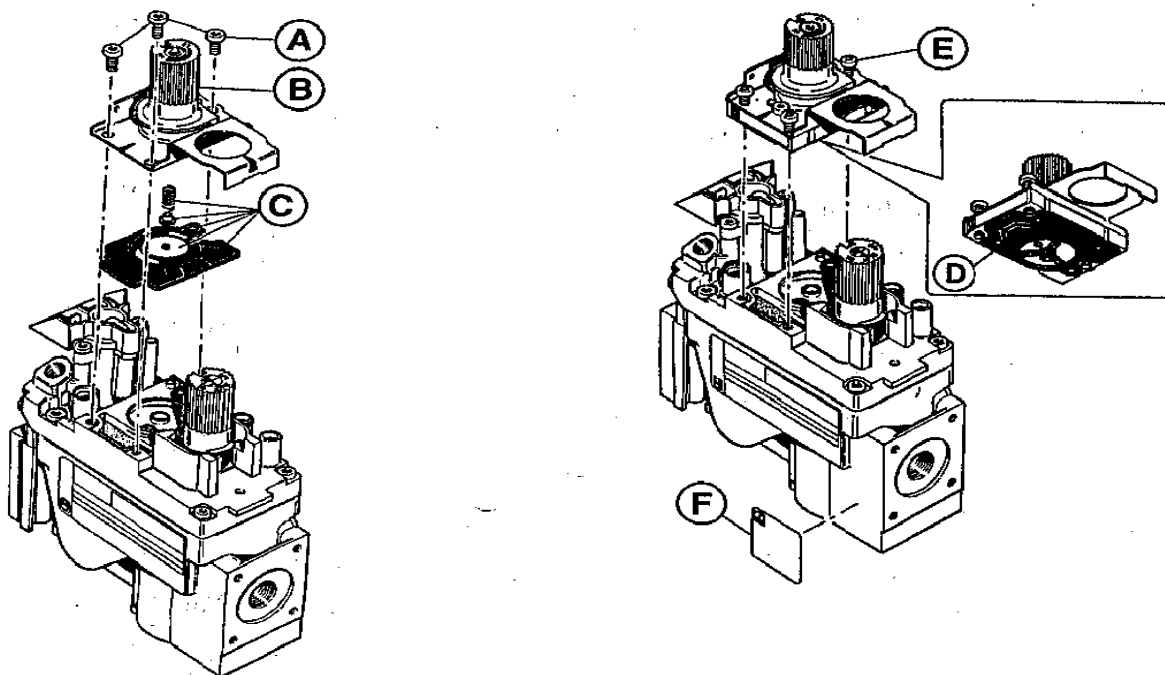
Illustration #3
Tudor without Burner

Top Convertible Pilot Hood

Burner Orifice

Orifice Gasket

12. Change the regulator on the valve as follows:



Converting the Valve

- a) Use a Torx T20 or slotted screwdriver and remove and discard the three pressure regulator mounting screws (A), the pressure regulator tower (B), and the diaphragm (C).
 - b) Ensure 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) provided with the kit. Tighten the screws securely.
 - c) Install the enclosed identification label (F) to the valve body where it is readily seen.
 - d) Placed the white NG sticker over the LP sticker on the valve door.
13. Adjust the air shutter by turning the screw in or out. Turning it out will open the shutter, and turning it in will close it. When properly adjusted the flame will have yellow tips. Avoid dark orange flames, as these will produce soot. **Once the shutter is set, tighten the 10-24 nut under the firebox which locks the shutter in place.**
14. Carefully place the logs back into the firebox. Refer to the owner's manual for exact placement if necessary.
15. Place the glass front back on the firebox. Line up the bottom tabs, push the top flush, and lock it in place by slipping the tabs on the firebox securely into the slots on the glass frame.
16. Place the cast front back onto the firebox.
17. Close the front door.

BEFORE THE STOVE IS USED:

1) Turn on the gas supply. Check the manifold pressure using a manometer. Refer to the Owner's Manual for instructions.

2) LEAK TEST BEFORE AND AFTER LIGHTING THE STOVE.

3) The Input rate of the heater is verified by checking the manifold pressure. If the manifold pressure is correct, then the input rate is also correct. Refer to the Owner's Manual for:

- a. Details on adjustment for proper pilot and main burner flame appearance.
- b. Instructions for placing all markings provided in the kit in the appropriate location on the heater.
- c. Instructions for checking out the normal operating sequence of the ignition system.
- d. Location on valve to check manifold pressure.

18. Close the valve access door.

	<u>Natural Gas</u>	<u>LP</u>
Input rating (Btu/hr) 0-1370 m	11,500	11,200
Maximum output (BTU/hr) 0-1370 m	7,652	7,494
Minimum input rating (Btu/hr) 0-1370 m	7,000	8,500
Orifice size DMS 0-1370 m	53	63
Pilot orifice	0.51mm	0.35mm
Manifold pressure (in. w.c./kPa)	3.5/1.15	10.0/2.48
Man. Pressure-Lo setting (in.w.c./kPa)	1.6/0.42	6.5/1.59
Minimum inlet pressure (in. W.c./kPa)	5.0/1.24	11.0/2.88
Maximum inlet pressure (in. W.c./kPa)	10.5/2.62	13.5/3.36