

# Fuel Conversion Kit Instructions

for the  
820 NOVA SIT Valve  
#154937 NG to LP Conversion Kit  
#154979 LP to NG Conversion Kit

## TOOLS REQUIRED:

- \* 1/4" nut driver,
- \* 7/16" & 1/2" (11 mm & 13 mm) open end wrenches
- \* Torx T20 or slotted screwdriver

## CONTENTS:

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1, Regulator Tower, labeled LP or NG  | 1, Injector - 2.61mm NG, or 1.55mm LP |
| 3, Regulator Tower screws             | 1, 4mm Hex Key                        |
| 1, Pilot Orifice - #51 NG, or #30 LPG | Label A - for Valve Compartment       |
|                                       | Label B - for Rating Plate            |

### 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 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 is responsible for the proper installation of 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 the kit.**

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'autorité ayant 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 responsable de l'installation propre de cet équipement. L'installation n'est pas propre et complète jusqu'à l'opération de l'appareil converti est cheque suivant les criteres établis dans les instructions de propriétaire provisionnées avec l'équipement.

### IMPORTANT:

**THE GAS SUPPLY MUST BE SHUT OFF FROM THE APPLIANCE BEFORE BEGINNING THIS PROCEDURE.**

1. **Lift off the doors** and/or decorative frame, if any.
2. **Remove the Glass Frame:** Release both glass frame latches and lift glass panel up to disengage it from the firebox. Fig.1.
3. **Remove the fettle, log set, logset base and orifice cover plate.** Fig. 2.
4. **Loosen the Air Shutter** wingnut located within the control compartment. See Fig. 1. Slide the Air Shutter to the right, as far as it will go.
5. **Remove the Burner Tube** by pulling it up and over to the left to disengage the inlet end from the Air Shutter.

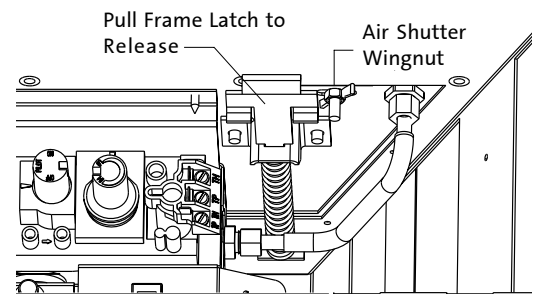


Figure 1. Frame latch and air shutter stem location.

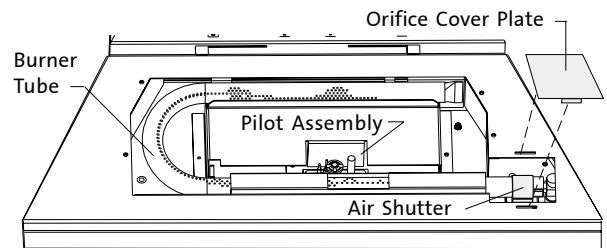


Figure 2. Burner assembly and orifice cover plate.

6. **Change the burner orifice:** Push the Air Shutter out of the way. Use a 1/2" open end wrench or deep well socket to remove the old burner orifice and replace it with the appropriate new orifice: Fig. 3.
7. **FROM WITHIN THE FIREBOX**, pull the Retainer Clip back to release the Pilot Hood from the Pilot Base. See Fig. 4. Using a 4mm hex key, remove the pilot orifice (counterclockwise). Replace with the appropriate orifice: #51 for natural gas, #30 for propane. Securely tighten the orifice into the base of the pilot assembly to prevent any potential for leakage. Replace pilot hood onto the pilot assembly.
8. **Replace the Burner Tube** by sliding the inlet end into the Air Shutter and engaging it fully with the burner orifice.
9. **Adjust the Air Shutter** on the burner tube: Slide the shutter stem left to open and right to close. See Fig. 3.
  - 1/4 OPEN for Natural gas
  - 1/2 OPEN for Propane.
 Tighten the wingnut to secure the Shutter.
10. **Replace the regulator:** Using a Torx 20 screwdriver, remove the three pressure regulator mounting screws, pressure regulator tower and gasket. **BE SURE TO REMOVE THE BLACK RUBBER GASKET FROM THE VALVE.** See Fig. 4.
11. **Install the new variable regulator tower** being sure that the gasket is properly positioned and tighten screws securely. (Apply the enclosed valve label to the **valve body** where it can be easily seen.) See Fig. 5.
12. **Make gas line connections** as outlined in the Installation and Operation Manual. Secure all joints tightly using the appropriate tools and sealing compounds. Turn gas on, but do not ignite the burner. Test for gas leaks using a 50/50 soapy water solution. **NEVER USE AN OPEN FLAME TO CHECK FOR LEAKS.**
13. **Use a manometer to check the manifold and supply pressures.** Adjust as necessary to comply with the specifications in the chart at right.
14. Using the lighting instructions in the manual or on the rating plate, light the pilot and main burner and test again for gas leaks using the soapy water solution.
15. Fill out Label A and apply it to the floor of the control compartment, under the Control Valve. Be sure it is plainly visible to anyone who may be servicing the burner.
16. **Apply Label B to the space provided on the burner Rating Plate that is attached by a wire cable within the control compartment.**
17. For reference: Gas pressures, pilot and burner flame appearance and derating of the appliance are all addressed in the owners installation and operation manual.

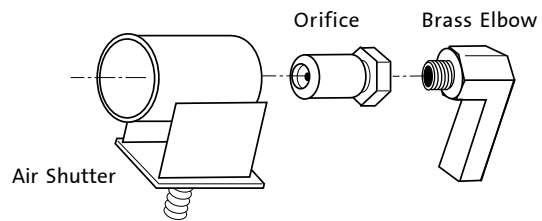


Figure 3. Air Shutter and Burner Orifice Removal.

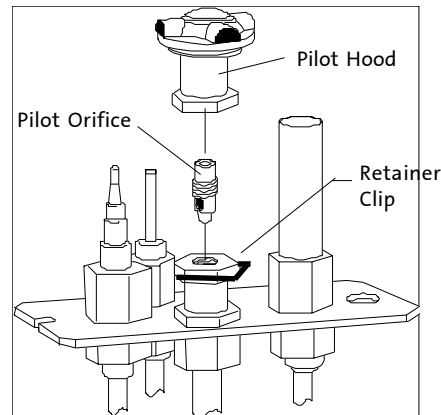


Figure 4. Pilot assembly and orifice removal.

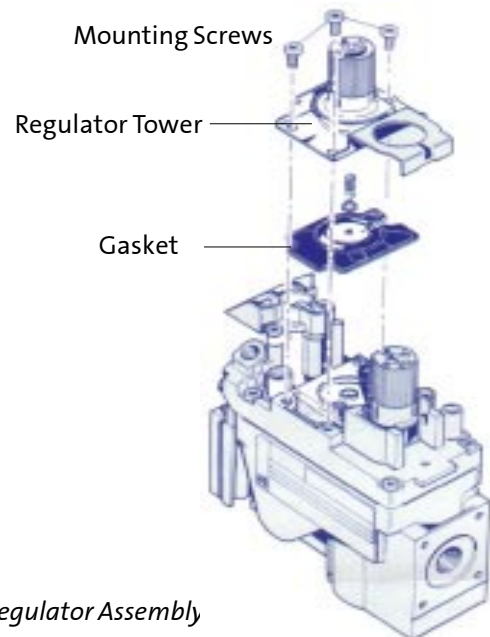


Figure 5. Regulator Assembly

## Burner Specifications / GZ550 DV Acadia

|                               | NATURAL         | PROPANE           |
|-------------------------------|-----------------|-------------------|
| Min. Input Rate at 0 - 2000'  | 18,000 BTU      | 21,000 BTU        |
| Max. Input Rate at 0 - 2000'  | 28,000 BTU      | 28,000 BTU        |
| Max. Input Rate up to 4500'   | 25,200 BTU      | 25,200 BTU        |
| Manifold Pressure up to 4500' | 1.6 wc - 3.5 wc | 6.4 wc - 10.0 wc  |
| Min. Supply Pressure          | 5.0 wc - 7.0 wc | 11.0 wc - 13.5 wc |
| Orifice Size, 0 - 2000'       | #37 (2.6 mm)    | 1.55 mm           |
| Orifice Size, 2000' - 4500'   | #38 (2.45 mm)   | 1.50 mm           |