P/N 900285-06
Rev. B 10/2020

GAS CONVERSION KIT
DIRECT GAS FIREPLACES

INSTALLATION INSTRUCTIONS FOR GAS CONVERSION KITS FOR USE WITH DIRECT VENT GAS FIREPLACES [MODELS ASTRIA GEMINI AND SUPERIOR DRT-DRC3000 AND MHD SERIES]

⚠ 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 the 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. The qualified service agency performing this installation assumes responsibility for this conversion.

⚠ AVERTISSEMENT

Cette trousse de conversion doit être installée par un technicien agréé, selon les instructions du fabricant et selon toutes les exigences et tous les codes pertinents de l'autorité compétente. Assurez-vous de bien suivre les instructions dans cette notice pour réduire au minimum le risque d'incendie, d'explosion ou la production de monoxyde de carbone pouvant causer des dommages matériels, des blessures ou la mort. Le tecnicien agréé est responsable de l'installation de cette trousse. L'installation n'est pas adéquate ni complète tant que le bon fonctionnement de l'appareil converti n'a pas été vérifié selon les instructions du fabricant fournies avec la trousse. Le fournisseur de service qualifié ayant réalisé l'installation assume les responsabilités liées à la conversion.

In Canada:

The conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the CAN/CGA-B149.1 Installation code.

La conversion devra être effectuée conformément aux recommandations des autorités provinciales ayant juridiction et conformément aux exigences du code d'installation CAN/CGA-B149.1.

Gas conversion kits are available to adapt your fireplace from the use of one type of gas to the use of another. These kits contain all the necessary components needed to complete the task including labeling that must be affixed to ensure safe operation.

Refer to the instructions provided with the conversion kit when performing any gas conversion.

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

— **Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**

— **WHAT TO DO IF YOU SMELL GAS:**

- **Do not try to light any appliance.**
- **Do not touch any electrical switch; do not use any phone in your building.**
- **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
- **If you cannot reach your gas supplier, call the fire department.**

— **Installation and service must be performed by a qualified installer, service agency or the gas supplier.**

⚠ WARNING

The gas supply shall be shut OFF prior to disconnecting the electrical power, before proceeding with the conversion.

⚠ AVERTISSEMENT

Avant d'effecteur la conversion, coupez d'abord l'alimentation en gaz, ensuite, coupez l'alimentation electrique.

Table 1: Millivolt Systems,Natural Gas To Propane Gas Conversion Kits

Models	Catalog Number
33" Models	F2168
35" Models	F2173
40" Models	F2174
45" Models	F2180

Table 2: Millivolt Systems, Propane Gas to Natural Gas Conversion Kits

Models	Catalog Number
33" Models	F2166
35" Models	F2171
40" Models	F2172
45" Models	F2178

Table 3: Electronic Systems, Natural Gas To Propane Gas Conversion Kits

Models	Catalog Number
33" Models	F2167
35" Models	F2175
40" Models	F2176
45" Models	F2179

Table 4: Electronic Systems, Propane Gas To Natural Gas Conversion Kits

Models	Catalog Number
33" Models	F2165
35" Models	F2169
40" Models	F2170
45" Models	F2177

KIT CONTENTS

Pilot Orifice, Burner Orifice, Gas Conversion Kit (containing Pressure Regulator Assembly, split-flow orifice (in electronic models), two (2) screws, Gas Conversion Identification Label, Installation Instructions

REQUIRED TOOLS

5/32 Allen Wrench, Torx Bit (T20 with 1/4" shank and center hole) or Flat Blade Screwdriver, 1/2" Open-End Wrench

Installing Gas Conversion Kits

1. TURN OFF THE GAS SUPPLY TO THE FIREPLACE and disconnect power supply at the circuit breaker. Ensure fireplace is cold.
2. Open the lower control compartment at the bottom front of the fireplace door by holding the control compartment door by the top and gently lifting it up, then rotating it away from the fireplace.
3. Remove the barrier and front glass door/frame from the fireplace.
4. Remove the logs / glass media. If necessary, remove the log grate.

   NOTE: Exercise care so as not to break the logs.
5. If your unit has ceramic or porcelain panels, please remove. If there are no panels, please skip to the next step.
6. Remove the sub floor screws and subfloor.
7. Remove the two (2) screws securing the burner assembly with attached shutter assembly. Remove the burner assembly and air shutter assembly with the attached venturi tube by carefully sliding the burner tube to the left - clear the burner from the orifice.
8. Rotate the burner to release the air shutter adjustment rod from the air shutter lever. Set screws and burner aside for later reinstallation.

9. Refer to the instructions provided with the SIT Regulator Conversion Kit, and ***Figure 1***. Using a Torx T20 driver (with 1/4" shank) or slotted screwdriver, remove and discard the three pressure regulator mounting screws, pressure regulator tower, the diaphragm assembly (if applicable) and the spring. Discard all removed components.

Figure 1: Valve Regulator Conversion

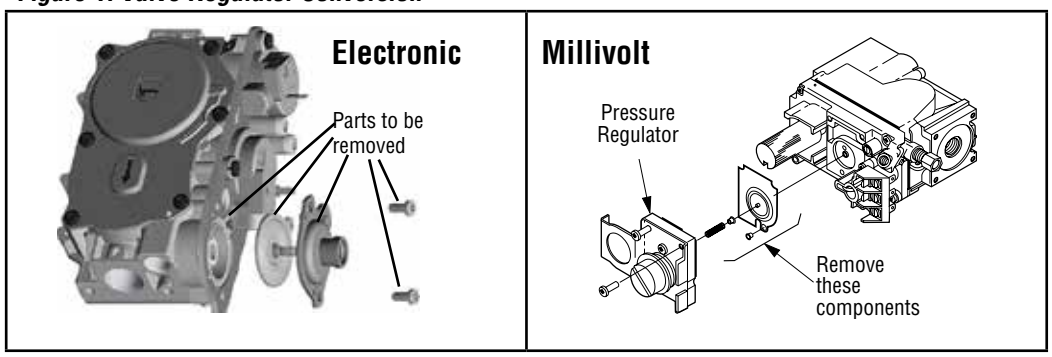


Figure 2: Electronic (left) and Millivolt (right) Pilots

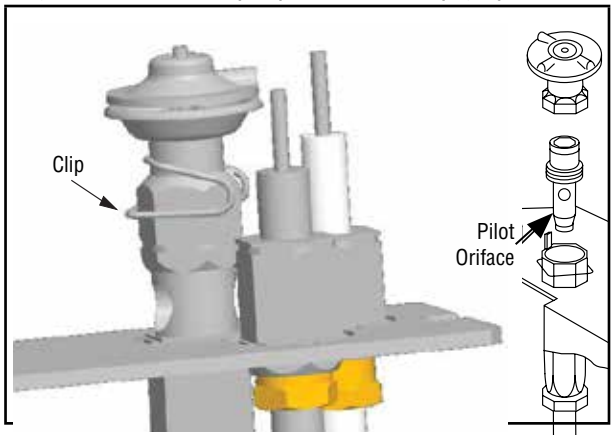
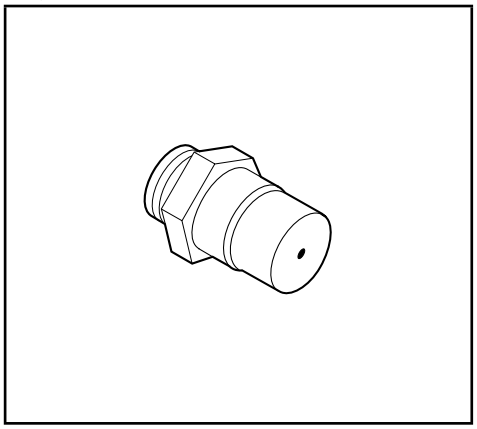


Figure 3: Burner Orifice



10. Remove the burner orifice from the manifold and replace it with the one provided in the kit (***Figure 3***).

NOTE: See ***Table 5*** for burner orifice sizes.

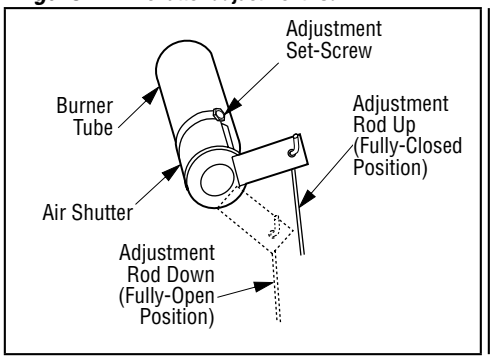
11. Remove and replace split-flow orifice (in electronic units, see ***Table 8***).

12. Use pipe joint compound or Teflon® tape on all pipe fittings before installing.

NOTE: Ensure propane resistant compounds are used in propane applications, do not use pipe joint compounds on flare fittings.

13. Retrieve the burner and hold the venturi tube above the orifice. Place the shutter adjusting rod in the slot of the shutter arm (***Figure 4***). Set the burner assembly into its position and secure with the two screws previously removed.

Figure 4: ***Air shutter adjustment rod***



NOTE: ALWAYS REFER TO YOUR INSTALLATION INSTRUCTION AND CARE AND OPERATIONS MANUAL (IICO) FOR COMPREHENSIVE INSTRUCTIONS ON THIS INSTALLATION AS IT MAY RELATE TO OTHER TOPICS.

Table 5: Burner Orifice Sizes, Elevation 0–4500 ft (0–1372 m)

Model	Natural Gas drill size	Propane drill size
33” Models	#49 (0.073”)*	#57 (0.043”)*
35” Models	#48 (0.076”)*	#56 (0.0465”)*
40” Models	#44 (0.086”)*	#55 (0.052”)*
45” Models	#43 (0.089”)*	#54 (0.055”)*

*** Standard size installed at factory**

14. Reinstall the sub floor with screws.

15. Reassemble the remaining components.

16. Turn on gas supply and test for gas leaks. **Never check for leaks with a flame!**

17. Relight the main burner. Verify proper burner ignition and operation.

18. Inspect the pilot system for proper flame. The pilot flame should engulf the flame sensor.

19. Using a manometer, test the inlet and manifold gas pressures (***Table 4*** and ***Table 5***). **NOTE**: Always test pressures with the valve regulator control at the highest setting.

Table 6: Inlet Gas Supply Pressure

Fuel	Minimum	Maximum
Natural Gas	5” WC / (1.25 kPa)	10.5” WC / (2.61 kPa)
Propane	11.0” WC / (2.74 kPa)	13.0” WC / (3.23 kPa)

Table 7: Manifold Gas Supply Pressure

Fuel	Pressure
Natural Gas	3.5” WC / (0.87 kPa)
Propane	10.0” WC / (2.49 kPa)

20. Affix the appropriate conversion label (See ***Figure 5***).

21. Replace door and barrier - insure proper operation with both door and barrier in place.

Figure 5: ***Conversion Label (sample)***

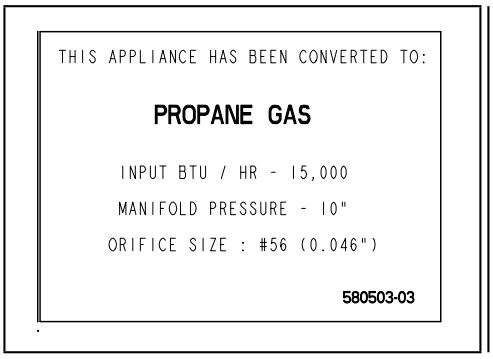


Table 8: Split Flow Orifices in Electronic Models

Fuel	33” and 35” Models	40” and 45” Models
Natural Gas	#51 (0.067”)	#49 (0.073”)
Propane	#61 (0.039”)	#56 (0.047”)

Innovative Hearth Products reserves the right to make changes at any time, without notice, in design, materials, specifications, and prices, and also to discontinue colors, styles, and products.
Consult your local distributor for fireplace code information.

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