



# GAS CONVERSION KIT INSTALLATION FOR HEAT MODULE

## MODEL HS

### GENERAL INFORMATION

These gas conversion kits are for converting natural gas units to propane. Follow all precautions in the literature, on tags, and labels provided with the equipment. Read and thoroughly understand the instructions provided with the equipment prior to performing the installation and operational checkout of the equipment. Before beginning the installation, verify the unit model number—printed on the data label—and verify that the conversion kit ordered is the appropriate size for the unit. Inspect packaging for damage, or forced entry.

#### Important Safety Information

Please read all instructions before servicing this equipment. Pay attention to all safety warnings and any other special notes. Safety markings are used frequently throughout these instructions to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

### ⚠ WARNING ⚠

- **ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD:** The information listed in these instructions must be followed during the installation, service, and operation of this unit. Unqualified individuals should not attempt to interpret these instructions or install this equipment. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury, or death.
- Improper servicing could result in dangerous operation, serious injury, death, or property damage.
- Use caution when handling this equipment or removing components. Personal injury can occur from sharp metal edges present in all sheet metal constructed equipment.
- Before servicing, disconnect all electrical power to the unit. Verify proper operation after servicing.

### ⚠ CAUTION ⚠

To avoid personal injury or property damage, make sure the motor leads do not come into contact with any metal components of the unit.

#### Conversion Kit Selection

Verify that all parts requested are accounted for (refer to [Table 1](#)).

Table 1. Natural Gas to Propane Conversion Kits and Kit Components				
Component	Model			
	HS0028	HS0038	HS0051	HS0064
	Kit PN			
	1012840	195479	195480	1954811
Component PN				
Air restrictor plate		196687		—
Flue wrapper assembly	1012836		—	
Regulator spring kit (Honeywell #393691)			98720	
Conversion tape			64391	
Manifold pressure label			179180	
Propane gas disk			37752	
Burner orifice			Refer to <a href="#">Table 2</a>	

**DO NOT DESTROY. PLEASE READ CAREFULLY. KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.**

## GENERAL INFORMATION—CONTINUED

### Conversion Kit Selection—Continued

Model	Kit PN	Orifice PN	Size
HS0028	1012840	1012829	#53
HS0038	195479	196845	#48
HS0051	195480	124967	2.1 mm
HS0064	1954811	1969521	#41

## INSTALLATION

### ⚠ WARNING ⚠

**Manifold gas pressure must never exceed 3.5 IN WC for natural gas or 10 IN WC for propane gas.**

**NOTE: IMPORTANT—** If heater will be operated above 6,000 feet (1,830 meters in elevation, a high-elevation switch must be installed.

1. Turn OFF gas and electric.
  - a. Turn OFF gas supply at shutoff valve upstream of combination valve.
  - b. Turn OFF electrical supply.
2. Open control panel to access controls shown in [Figure 1](#).

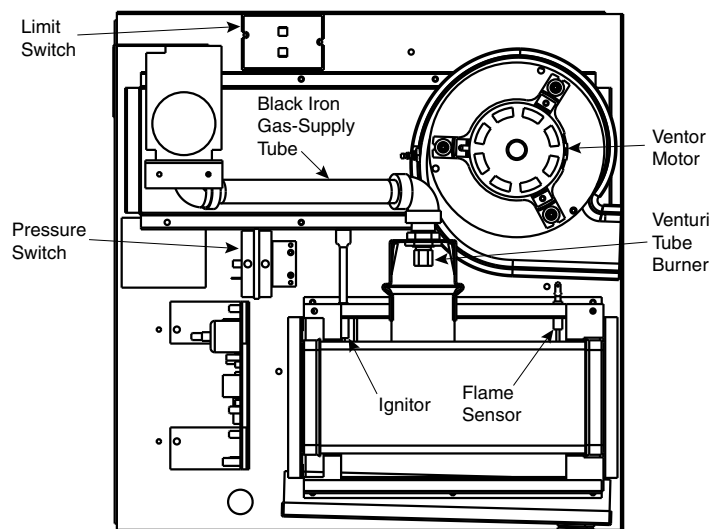


Figure 1. Control Locations

3. Install regulator spring conversion kit in accordance with valve manufacturer's installation instructions (included with kit). After new regulator spring kit is installed, it is necessary to adjust spring for correct manifold pressure. This adjustment can only be made after unit is in operation—refer to step 9.

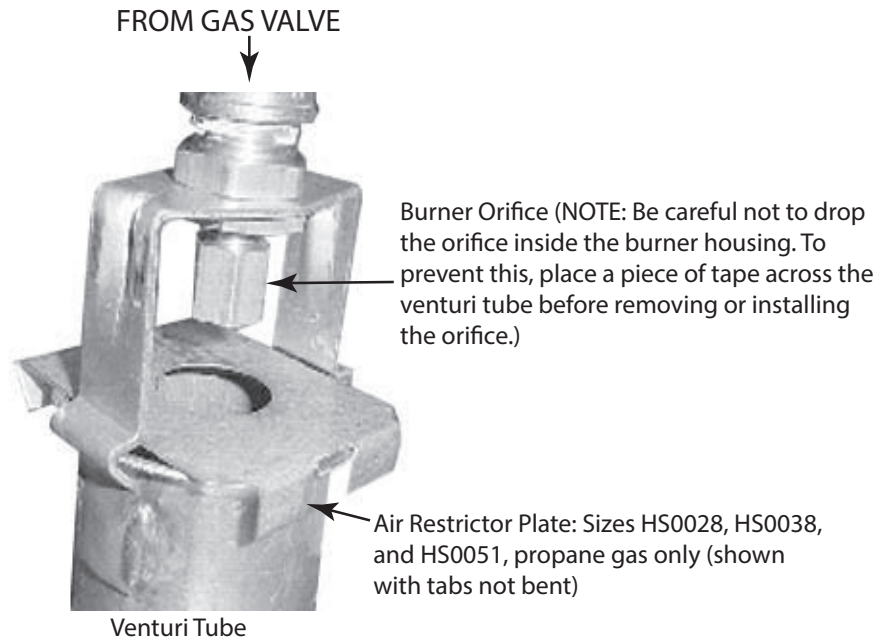
### ⚠ WARNING ⚠

**Do not attempt to drill the orifice. Use factory-supplied orifice only!**

4. Install burner orifice:
  - a. Place piece of tape across venturi tube opening. Carefully remove natural gas burner orifice supplied with furnace. Remove tape.

**NOTE: An air restrictor plate is not required on model HS0064.**

- b. Slide air restrictor plate over venturi opening, positioning as shown in **Figure 2**.



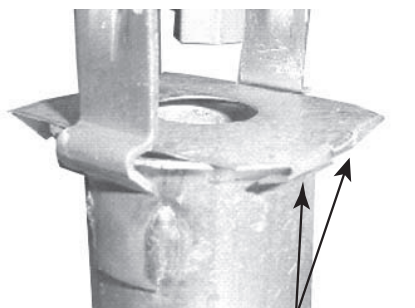
**Figure 2. Burner Orifice Location**

- c. Holding air restrictor plate in position, use pair of pliers to bend tabs (see **Figure 3**) to lock air restrictor plate to venturi tube.
- d. Place piece of tape across air restrictor plate opening. Install propane gas burner orifice from kit. Remove tape.

**⚠ WARNING ⚠**

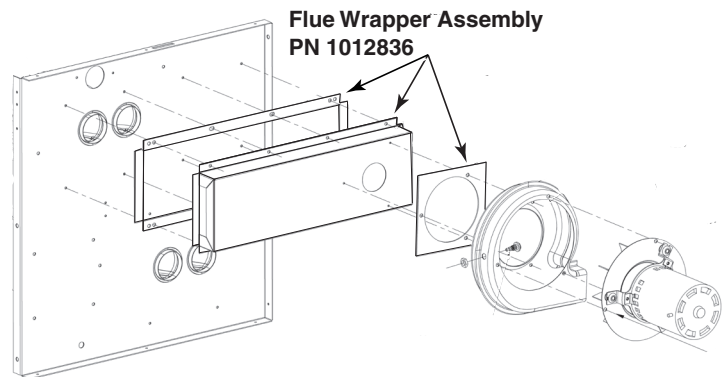
**You are servicing the flue passageways—any leaks can lead to carbon monoxide poisoning or death.**

- 5. For model HS0028:
  - a. Replace flue wrapper (see **Figure 4**).
  - b. Remove two (2) screws that secure vent tube extension tube to venter housing.
  - c. Remove three (3) screws that secure venter motor wheel assembly to venter housing.
  - d. Remove three (3) screws that secure venter housing to flue wrapper.
  - e. Remove eight (8) screws that secure flue wrapper to heat exchanger plate. Discard flue wrapper and remove any trace of old gasket material residing on heat exchanger.
  - f. Install new flue wrapper assembly and all removed components.



To install air restrictor plate, bend tabs (two on each side) to hold it in place.

**Figure 3. Location of Holding Tabs**



**Figure 4. Flue Wrapper Assembly (Model HS0028)**

## INSTALLATION—CONTINUED

6. Turn ON electric and gas.

### ⚠ WARNING ⚠

**Wait at least five minutes before attempting to relight the heater in the event of improper ignition.**

7. Follow instructions on unit to relight.

8. Check for gas leaks using commercial leak detecting fluid or rich soap and water solution. Leaks are indicated by presence of bubbles. Check all connections that have been worked on during conversion. If leak cannot be stopped by tightening, replace part.

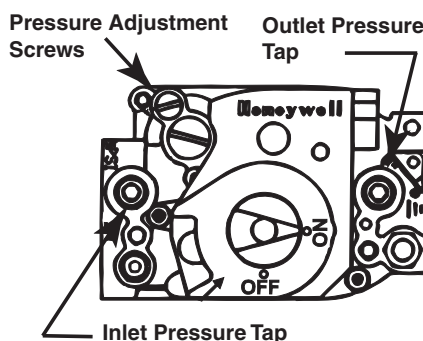
**NOTE: Correct pressure adjustment depends on the installation elevation. If elevation is not known, check with local gas company. If the unit has been adjusted for high-elevation operation, the input rate will be affected. Refer to the installation manual provided with the unit for high-elevation input ratings and capacities.**

9. Adjust manifold pressure—refer to [Table 3](#) to determine required manifold pressure.

<b>Table 3. Required Propane Manifold Pressures</b>								
Installation Location	Elevation (Feet (Meters))							
	0–2000 (0–610)	2001–3000 (611–915)	3001–4000 (916–1220)	4001–5000 (1221–1525)	5001–6000 (1526–1830)	6001–7000 (1831–2135)	7001–8000 (2136–2440)	8001–9000 (2441–2745)
	Required Pressure (IN WC)							
US	10.0	7.7	7.1	6.4	5.8	5.2	4.6	4.1
Canada	10.0	8.1	—					

**NOTE: Use a water column manometer that is readable to the nearest tenth of an inch.**

a. With manual valve positioned to prevent flow to main burners, connect manometer to outlet pressure tap in valve (see [Figure 5](#)).



**Figure 5. Top View of Single-Stage Valve**

b. Remove cap from pressure-adjusting screw and adjust pressure to setting selected from [Table 3](#).

c. Cycle main burners once or twice to properly seat adjustment spring in valve.

d. Recheck pressure. If necessary, readjust spring in valve. Recheck pressure, and readjust if necessary. When pressure is correct remove manometer and replace cap. Check for leaks at pressure tap fitting.

e. With heater operating, determine if inlet pressure is between 10 and 13.5 IN WC for propane gas. Take reading as close as possible to unit (see [Figure 5](#) for inlet tap location on valve). If inlet pressure is not within specified range, inlet pressure must be corrected and manifold pressure must be rechecked.

10. If gas valve has been adjusted for operation above 2,000 feet (610 meters), use permanent marker to fill in appropriate information on manifold pressure label from kit. Ensure that surface is clean and dry and adhere on outside of heat module access panel in location where it will be conspicuous to anyone operating or servicing unit.