



## Fuel Conversion Kit

### Instructions

### for Intrepid Direct Vent Gas Stove

### Kits:

**Natural to LP: 20012921**

**LP to Natural: 20012910**

#### WARNING!

The installation of this conversion kit must only be undertaken by a qualified gas appliance installer.

This kit is designed for conversion of the Intrepid Direct Vent Gas Stove Models INDVR Series.

**Tools required:** 5/32" (4 mm) Allen wrench, 3/8" and 1/2" open end wrenches, needlenose pliers.

**Kit contents:** Pilot orifice, injector orifice, conversion label.

#### Conversion Precautions

Allow unit to cool completely before beginning conversion. Before proceeding, turn control knob on valve to OFF and turn gas supply to OFF. Turn OFF any electricity that may be going to the appliance.

#### Conversion Procedure

1. Remove stove front. Lift stove front up and then swing bottom out and away to disengage from the stove body. (Fig. 1)
2. Undo the right and left latches at the top of the glass frame. (Fig. 2)
3. Pull the top edge of the glass and frame assembly away from the firebox face. Place the assembly out of the way on a flat, padded surface such as a counter protected by a towel.
4. Remove the logset from the firebox.

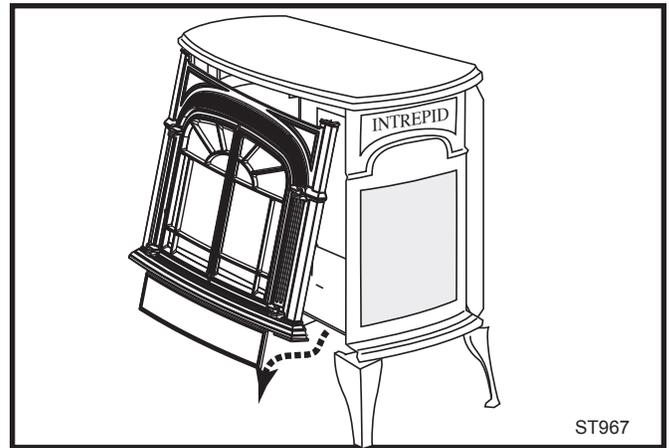


Fig. 1 Remove the stove front. (Top vent shown)

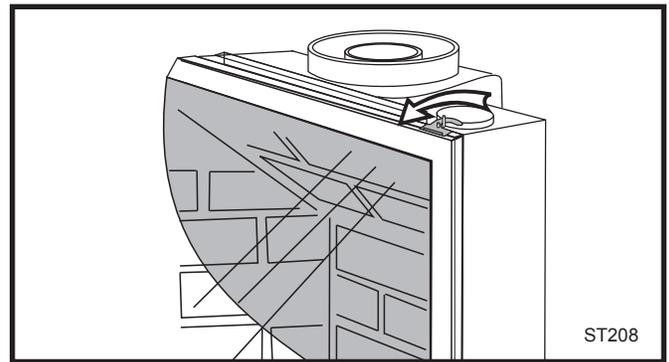
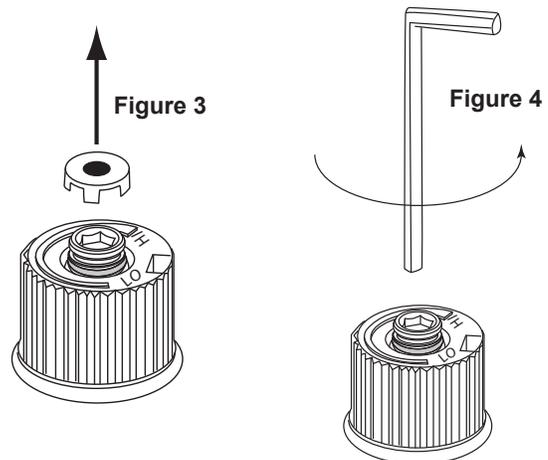


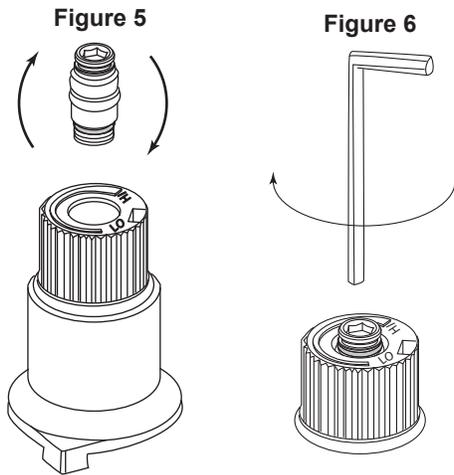
Fig. 2 Release the latches to remove the glass frame.

#### Valve Conversion

1. Turn control knob to the OFF position, and shut off the gas supply to the valve.
2. Allow the valve to cool to room temperature.
3. Remove the black protection cap by hand. (Fig. 3)
4. Insert a 5/32" or 4 mm Allen wrench into the hexagonal key-way of the screw (Fig. 4), rotate it counter-clockwise until it is free and extract it.

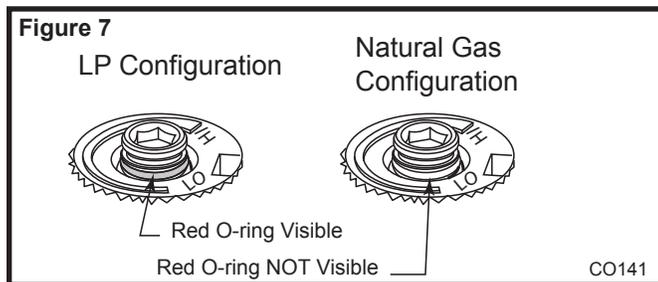


5. Check that the screw is clean and if necessary remove dirt.
6. Flip the screw. (Fig. 5)
7. Using the Allen wrench as shown in Figure 6, rotate the screw clockwise and tighten until snug.



**WARNING:** Do not overtighten the screw. Recommended to grip the wrench by the short side.

8. Verify that if the conversion is from NG to LP, the screw must be reassembled with the red o-ring visible. (Fig. 7)



9. Replace the black protection cap.

**WARNING:** Check that also the pilot and main burner injectors are appropriate for the gas type.

### Pilot Orifice Conversion

1. Locate pilot. (Fig. 8)

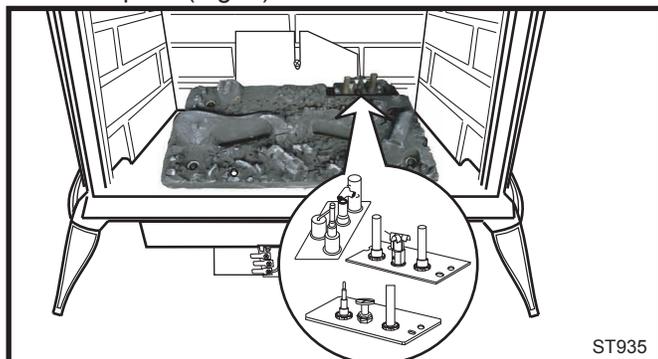


Fig. 8 Locate pilot.

2. Replace pilot orifice.

### Pilot Type 1

- Remove pilot hood by lifting up. (Fig. 9) Do not remove snap ring to remove pilot hood. **NOTE:** It is not necessary to remove the pilot tube for conversion.
- Remove pilot orifice with Allen wrench. (Fig. 10)
- Install the conversion orifice. Refer to Table 2.
- Reinstall pilot hood. Be sure to align hood with index tab.

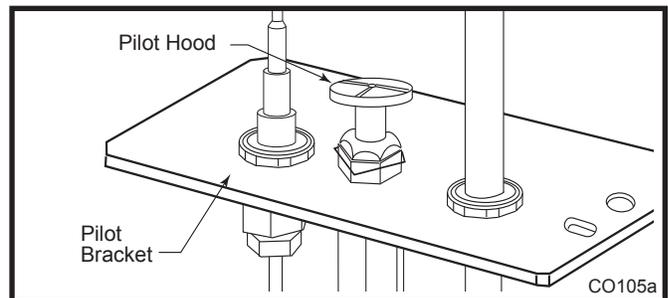


Fig. 9 Remove pilot hood.

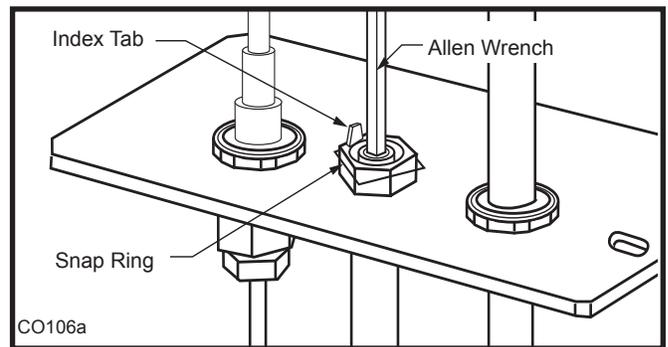


Fig. 10 Remove pilot orifice.

### Pilot type 2

- Loosen pilot hood turning counterclockwise using a 7/16" wrench. (Fig. 11) **NOTE:** You may use penetrating oil to prevent pilot hood threads from seizing up.

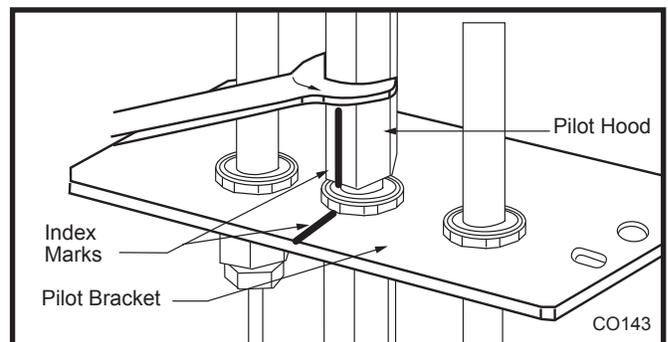
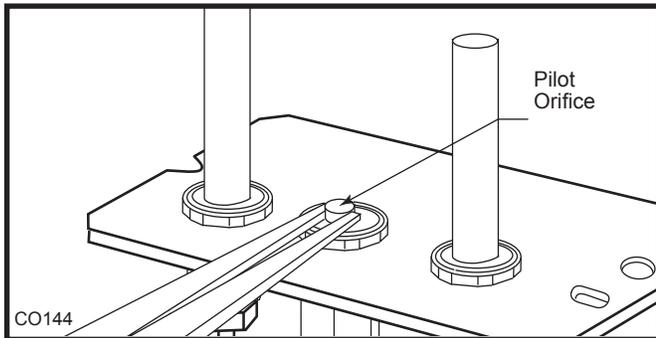


Fig. 11 Remove pilot hood. (Your pilot may have a different appearance.)

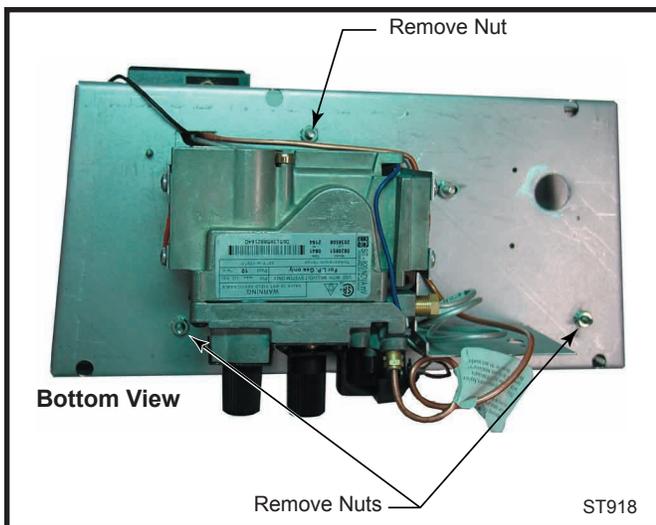
- Remove pilot orifice with needlenose pliers. (Fig. 12) **NOTE:** Use a wrench to hold pilot tube in place while removing the orifice.
- Install the conversion orifice.
- Reinstall pilot hood and tighten until mark on pilot hood aligns with mark on pilot bracket.



**Fig. 12** Remove pilot orifice.

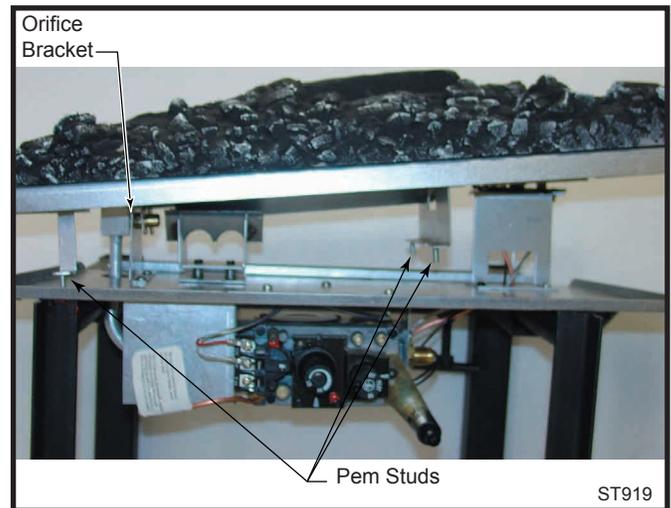
### Burner Orifice Conversion

1. Remove three (3) 3/8" nuts on bottom side of burner pan. (Fig. 13)



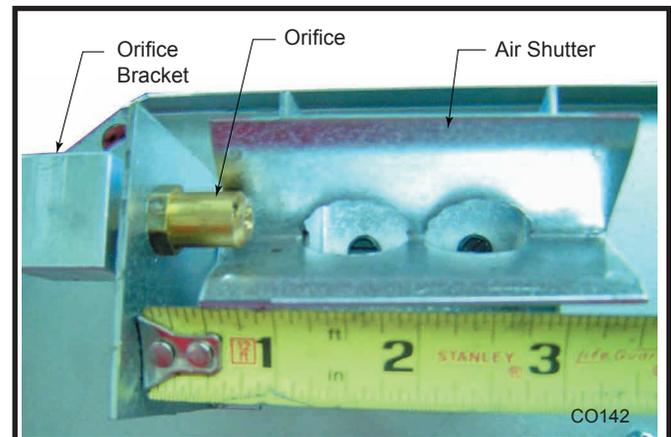
**Fig. 13** Remove three (3) nuts securing ember bed in place.

2. Carefully remove ember bed by tilting the right side up and lifting out toward the right side of the unit. (Fig. 14)
3. Remove injector orifice from left burner bracket with a 1/2" wrench.
4. Install conversion orifice. (Refer to Table 2)
5. The air shutter is factory set according to Table 1 and should not need adjustment. The air shutter opening may be verified by measuring as shown in Figure 15.



**Fig. 14** Tilt ember bed slightly to correctly place on venturi and air shutter.

Model	Natural Gas	LP
Direct Vent	1/2" Open	1/2" Open



**Fig. 15** The air shutter setting is 1/2" (13 mm) from the orifice bracket to the edge of the air shutter.

### All Models

1. Replace burner making sure venturi on bottom of ember bed aligns with orifice and is seated properly on air shutter assembly. (Fig. 14) Make sure burner is slid into place at a slight angle and opposite to how it was removed. When burner is slid into place, the three (3) pem studs should slide down through clearance holes into the bottom of the control panel.
2. Thread and tighten 3/8" nuts back onto pem studs on underneath side of control panel, reversing Step 1 shown in Figure 13.

3. Reinstall logs.

- a. Install the rear log by mating the notch on the bottom of the log with the raised notch on the back left side of the ember bed. (Fig. 17) Ensure the cutout in the right side of the log is sitting around the pilot assembly and pilot is not obstructed. (Fig. 16)
- b. Install the left front log by mating the hole on the bottom of the log with the pin in the ember bed. (Fig. 18) Position the log over air hole in ember bed.
- c. Install the right log by mating the notch on the bottom of the log with the raised notch on the ember bed. (Fig. 18) Position the log over air hole in ember bed.

- d. Install top log by mating hole on bottom of log with locating pin on top right side of rear log. (Fig. 19) Position log so it is angled down toward the area where the front two logs meet.
4. Place conversion label on valve.
  5. Replace glass and stove front.
  6. Restore gas to system and relight appliance according to Lighting Instructions in Homeowner's Manual or on the rating label.
  7. Leak check the system using a gas leak detector solution.
  8. Relight the main burner in both the "HI" and "LO" positions to verify proper burner ignition and operation. Conversion is complete.

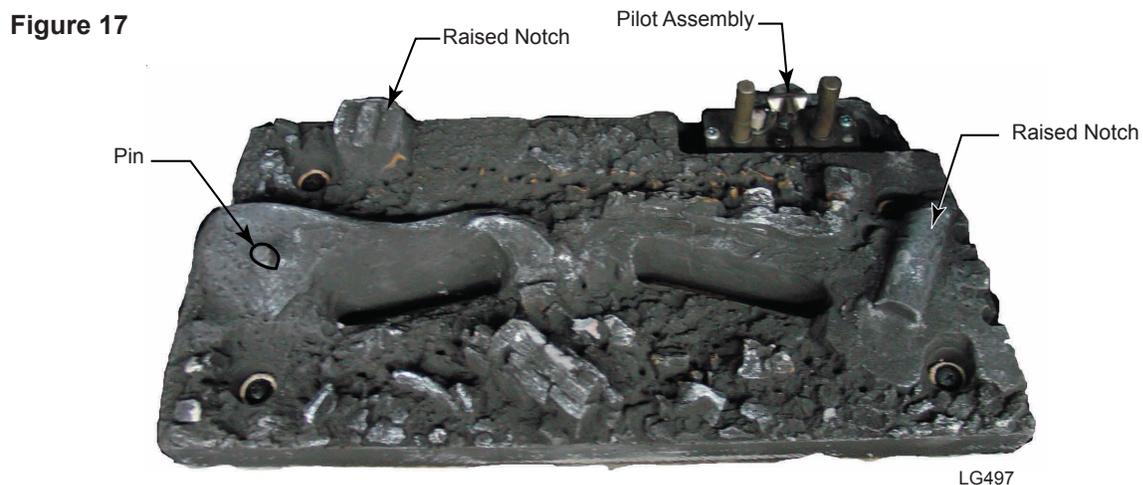
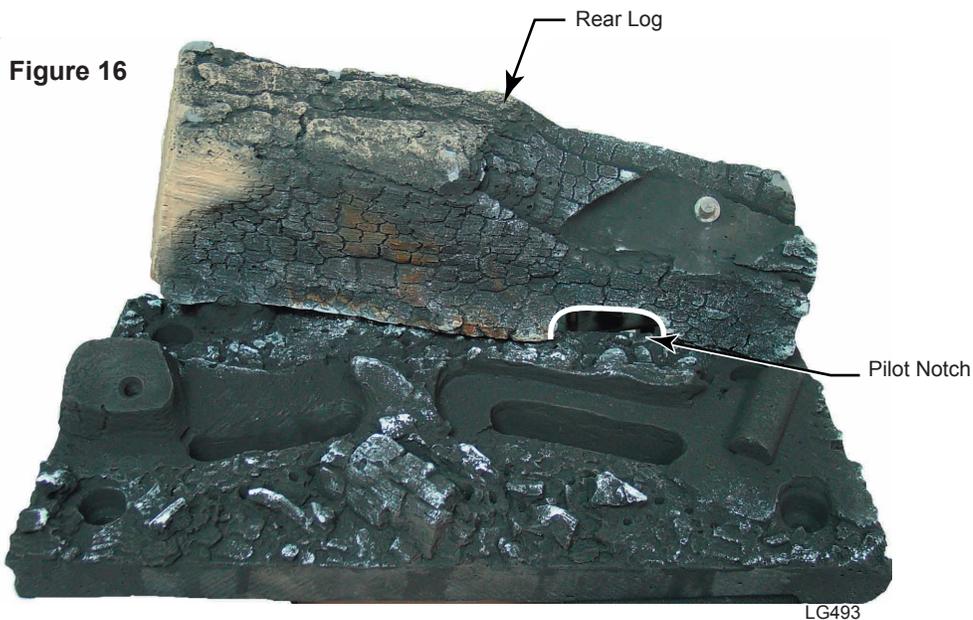
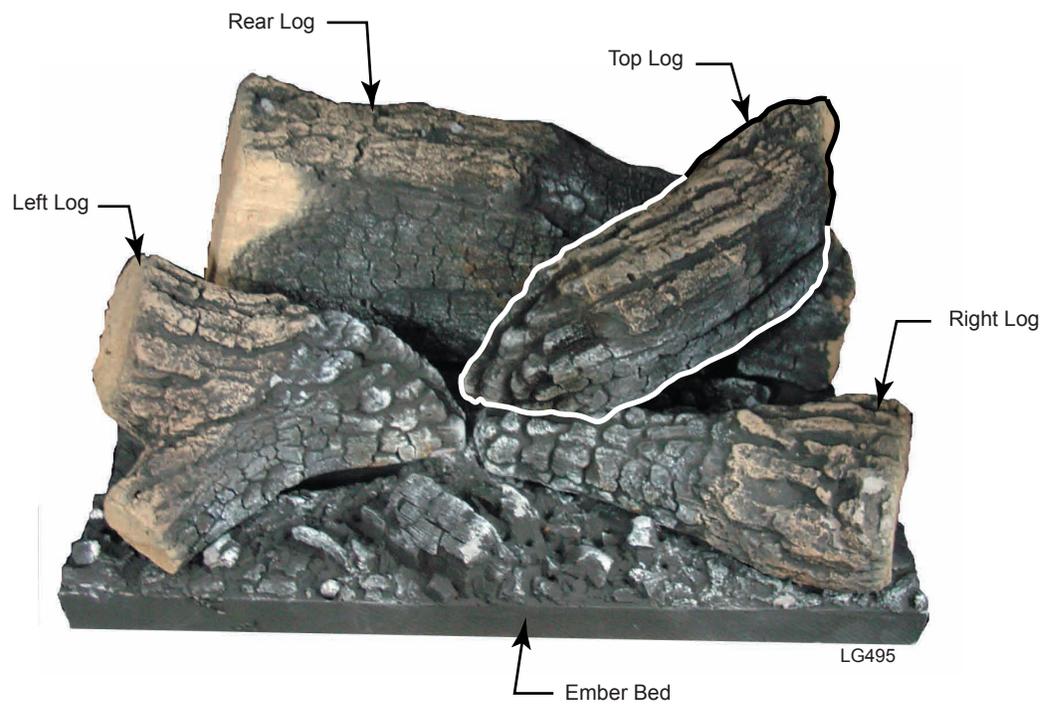


Figure 18



Figure 19



<b>Table 2. Injector Orifice Size Matrix</b>				
<b>Conversion to LP</b>				
			<b>Input (BTU/h)</b>	
<b>Kit #</b>	<b>Orifice</b>	<b>Part #</b>	<b>Minimum</b>	<b>Maximum</b>
20012921	#56 (.0465")	30000336	12,000	16,000
<b>Conversion to Natural Gas</b>				
			<b>Input (BTU/h)</b>	
<b>Kit #</b>	<b>Orifice</b>	<b>Part #</b>	<b>Minimum</b>	<b>Maximum</b>
20012910	#47 (.0785")	20003054	12,500	18,500



**CFM Corporation**

---

410 Admiral Blvd. • Mississauga, Ontario, Canada L5T 2N6  
800-668-5323 • [www.cfmcorp.com](http://www.cfmcorp.com)