



# GAS CONVERSION INSTRUCTIONS DIRECT VENT GAS FIREPLACE INSERTS

**DXL30IN9 CONVERSION KIT PART NUMBER 31764  
DXL35IN9 CONVERSION KIT PART NUMBER 31766**

## FOR CONVERSION TO PROPANE (LP) GAS

### ⚠ WARNING

This conversion kit is to be installed by an Empire Comfort Systems, Inc., distributor (or other qualified agency<sup>1</sup>)\*in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The qualified agency performing this work assumes responsibility for this conversion.

<sup>1</sup>National Fuel Gas Code Z223.1 (Latest Edition)

\*The term "qualified individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation of gas piping or (b) the connection, installation repair, or servicing of equipment, who is experienced in such work, familiar with all precautions required, and has complied with all the requirements of the authority having jurisdiction.

### CHECK SAFETY SHUTDOWN PERFORMANCE

### ⚠ WARNING

**Perform the safety shutdown test anytime work is done on a gas system to avoid the possibility of fire or explosion with property damage, personal injury or loss of life.**

### SAFETY SHUTDOWN SYSTEM

#### Full Function Control

1. Turn off unit with remote. Main burner and pilot should go off.
2. Pilot gas flow should stop within 30 seconds.
3. Relight pilot burner and operate system through one complete cycle to make sure all controls operate properly.

### PARTS LIST

PART DESCRIPTION	CONVERSION KIT 31764	CONVERSION KIT 31766	QUANTITY SUPPLIED
Pilot Orifice	R10426	R10426	1
Main Burner Orifice	P250	P245	1
SIT Gas Valve Conversion Kit	R11382	R11382	1
Gas Conversion Label	2139	2139	1

Tools Needed: Standard Screwdriver, 1/4" Hex Driver, 5/16" Hex Driver, 3/8" and 1/2" Wrenches

Gas input for direct vent fireplace insert converted to Propane gas:

DXL30IN9 - 30,000 BTU per hour

DXL35IN9 - 35,000 BTU per hour

The direct vent gas fireplace insert when converted to Propane gas will have a manifold pressure approximately 10.0" w.c. (2.49kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 10.8" w.c. (2.68kPa) for the purpose of input adjustment to a maximum of 14.0" w.c. (3.48kPa).

### INSTRUCTIONS FOR CONVERSION

1. If the fireplace insert is installed, turn OFF gas and electric supply to fireplace before making gas conversion.
2. Remove front and decorative surround. See Owner's Manual for more information.
3. Release to glass frame clamps on top using the glass frame tool.
4. Remove glass frame assembly.
5. Remove logs or burner media from burner assembly.
6. Remove liners and burner cover.
7. Remove four (4) 10 x 1/2" screws from burner. Grasp burner, lift and pull to the right to remove burner assembly.
8. Use a 3/8" and 1/2" wrench to remove burner orifice.
9. Remove Natural gas main burner orifice from orifice fitting.
10. Install Propane gas main burner orifice into orifice fitting:  
for DXL30IN9 USE ORIFICE **MARKED 1.65mm**  
for DXL35IN9 USE ORIFICE **MARKED #50**
11. Disconnect gas line from pilot to gain access to pilot injector.
12. Remove Natural gas pilot injector orifice from pilot burner.
13. Insert **Appropriate Propane gas pilot injector orifice** into pilot burner.
14. Re-install gas line to pilot.
15. Convert the gas valve as instructed in **S.I.T. Propane Gas Valve Conversion Kit**.
16. Adjust air shutter setting to **FULL Open** on all models.
17. Align burner assembly/grate base with the air shutter as you place burner assembly into the original position in firebox.
19. Attach burner assembly with four (4) 10 x 1/2" screws from Step 8.
20. Attach rear log support with (2) 10 x 1/2" screws from Step 7.
21. The converted fireplace must be connected to a supply of the conversion gas and checked for leaks at all connections.
22. Refer to Log and Ember Placement in your Installation Instructions and Owner's Manual to place logs onto burner assembly.
23. The fireplace must be checked to ensure it is operating at the correct pressure of 10.0" w.c.
24. Replace glass frame onto firebox.
25. Secure the two glass frame spring clamps at bottom of firebox to secure glass door assembly.
26. Replace decorative surround and front.
27. Gas conversion is completed.

The main burner flame and pilot burner flame must be checked for proper flame characteristics, as outlined in the Installation Instructions and Owner's Manual.

### Verifying Input Rate of Converted Fireplace

The input of the fireplace must be checked as follows:

1. Turn off all other gas appliances. Clock the gas meter and determine the number of seconds required to consume one cubic foot of gas.
2.  $3600 \div \text{time (in seconds)} = \text{cu. Ft. per hour.}$
3. Then  $\text{cu. Ft. per hour} \times \text{heating value of gas} = \text{input rate (Btuh)}$ . On installation without gas meters, check manifold for proper pressure.

If fireplace insert is not installed or warranty card has not been returned to Empire Comfort System's, Inc., check off type of gas converted to on card. Also, indicate conversion by adding "Conv." behind type of gas.