



# GAS CONVERSION INSTRUCTIONS

## DIRECT-VENT GAS FIREPLACE

| CONVERSION KITS     |       |                     |       |                     |       |
|---------------------|-------|---------------------|-------|---------------------|-------|
| MODEL & PART NUMBER |       | MODEL & PART NUMBER |       | MODEL & PART NUMBER |       |
| DVX36FP91LN-3       | 35445 | DVP36FP91N-7        | 35449 | DVP48FP91N-6        | 35445 |
| DVX42FP91LN-3       | 35447 | DVP42FP91N-6        | 35463 |                     |       |

### FOR CONVERSION TO PROPANE GAS

| ⚠ WARNING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>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.</p> <p>1National Fuel Gas Code Z223.1 (Latest Edition)</p> <p>*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.</p> |  |

### CHECK THE SAFETY SHUTDOWN PERFORMANCE

| ⚠ WARNING                                                                                                                                                                          |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>Perform the safety shutdown test any time work is done on a gas system to avoid the possibility of fire or explosion with property damage, personal injury or loss of life.</p> |  |

#### CHECK SAFETY SHUTDOWN SYSTEM

##### Intermittent Pilot System

1. Turn main switch to "OFF" position. 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 KITS |        |        |        |      |
|                          | 35445           | 35447  | 35449  | 35463  | QTY. |
| Burner Orifice           | P250            | P245   | P258   | P185   | 1    |
| Pilot Orifice            | R10426          | R10426 | R10426 | R10426 | 1    |
| Sit Valve Conversion Kit | R11382          | R11382 | R11382 | R11382 | 1    |
| Conversion Label         | 2139            | 2139   | 2139   | 2139   | 1    |

**Tools Needed:** Standard screwdriver, 1/4 inch hex driver, 5/16 inch hex driver, 7/16-inch wrench

## GAS INPUT FOR DIRECT VENT FIREPLACE CONVERTED TO PROPANE GAS:

- DVX36FP91 - 30,000 BTU per hour
- DVX42FP91 - 35,000 BTU per hour
- DVP36FP91 - 27,000 BTU per hour
- DVP42FP91 - 28,000 BTU per hour
- DVP48FP91 - 30,000 BTU per hour

The direct vent gas fireplace when converted to Propane gas will have a manifold pressure of 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 fireplace is installed, turn OFF gas and electric supply to fireplace before making gas conversion.
2. Remove top louver by lifting up and pulling forward. Remove bottom louver by lifting up and hinging forward.
3. For models that include a decorative front face accessory, remove decorative front doors (where applicable) by opening and lifting straight up. Next, remove decorative front by tilting lower portion forward to release ball catch and lifting the front off the mounting bracket. **See Figure 1.**

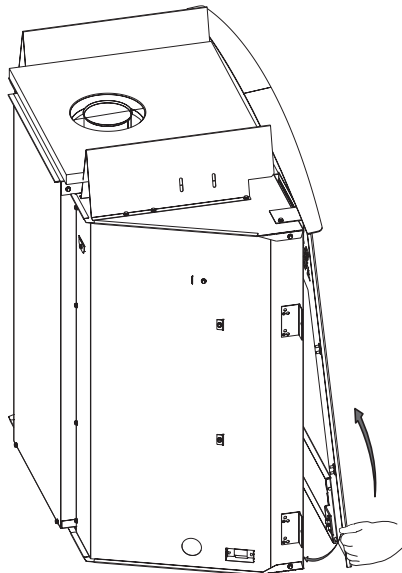


Figure 1

4. Release two glass frame spring clamps at bottom of firebox.
5. Remove glass frame assembly.
6. Remove logs from burner assembly.
7. Remove four (4) 10 x 1/2" screws from burner base and one (1) 8 x 1/4" screw from air shutter. Grasp burner assembly, lift and pull forward to remove burner assembly.
8. Remove air shutter from orifice fitting.
9. Remove Natural Gas main burner orifice from orifice fitting.

10. Install Propane Gas main burner orifice into orifice fitting:

- for DVX36 use orifice **MARKED #1.65MM**
- for DVX42 use orifice **MARKED #50**
- for DVP36 use orifice **MARKED #1.55MM**
- for DVP42 use orifice **MARKED #52**
- for DVP48 use orifice **MARKED #1.65MM**

11. Disconnect the gas line from the pilot to gain access to the 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 the 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 the burner assembly with the air shutter as you place burner assembly into the original position in firebox.
18. Attach air shutter to burner assembly with one (1) 8 x 1/4" screw from Step 7.
19. Attach burner assembly to firebox bottom with four (4) 10 x 1/2" screws from Step 7.
20. The flue vent baffle must be opened up when converting to Propane Gas from Natural Gas. Grasp edge of baffle and bend downward so that the bend is approximately at a 90° angle. **See Figure 2.**

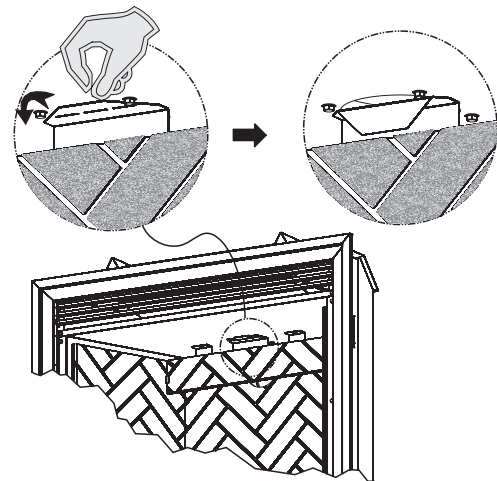
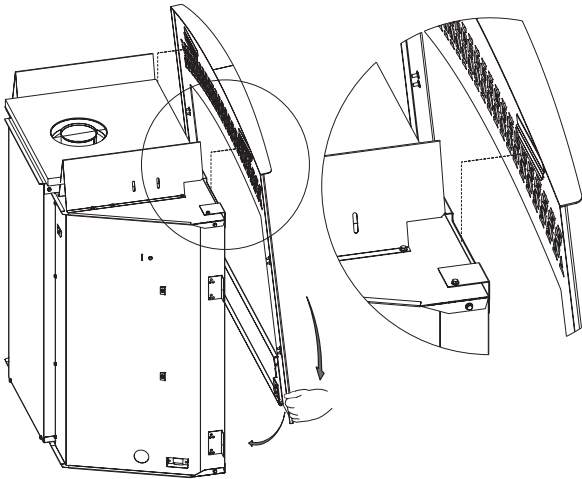


Figure 2

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.
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. Align the tabs on top louver brackets with slots in front posts to secure top louver. For models that incorporate a full decorative face accessory, close bottom louver. Lift slightly to engage the end tabs into the slots in fireplace sides to close bottom louver.
27. If applicable, replace decorative front by hooking front mounting brackets. Be sure to lower front with slight angle to keep ball clasp front scratching the front of appliance. Push in lower portion to lock ball clasp. Replace decorative front doors by aligning hinges over posts. **See Figure 3.**



**Figure 3**

28. 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 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.



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**Empire Comfort Systems Inc.**  
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If you have a general question  
about our products, please e-mail  
us at [info@empirecomfort.com](mailto:info@empirecomfort.com).

If you have a service or repair  
question, please contact your dealer.

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