



# GAS CONVERSION INSTRUCTIONS DIRECT VENT STOVES

FOR USE ON DIRECT VENT STOVE MODELS:  
DVP20CC70-1, DVP30CC70-1

CONVERSION KITS	
MODEL	PART NUMBER
DVP20CC70-1	31054
DVP30CC70-1	31060

FOR CONVERSION TO PROPANE 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), Natural Gas and Propane Installation Code, CSA B149.1

\*The term "qualified agency" means any 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

### Continuous Ignition Systems (Standing Pilot)

1. Place gas control knob in PILOT position. Main burner should go off and pilot should remain lit.
2. Extinguish pilot flame. Pilot gas flow should stop within 30 seconds. Safety shutoff of pilot gas proves complete shutdown since safety shutoff valve blocks flow of gas to main burner and pilot.
3. Relight pilot burner and operate system through one complete cycle to make sure all controls operate properly.

PARTS LIST - CONVERSION KIT 31054		
Part Description	Part Number	Quantity Supplied
Pilot Orifice	R10426	1
Regulator Kit, SIT 886 (Propane Gas)	R11169	1
Main Burner Orifice - DVP20CC	P182 (#55)	1
Gas Conversion Label	R1321	1
Conversion Label	R1322	1

PARTS LIST - CONVERSION KIT 31060		
Part Description	Part Number	Quantity Supplied
Pilot Orifice	R10426	1
Regulator Kit, SIT 886 (Propane Gas)	R11169	1
Main Burner Orifice - DVP30CC	P258 (#1.55)	1
Vent Flue Baffle - DVP30CC	30879	1
Gas Conversion Label	R1321	1
Conversion Label	R1322	1

GAS INPUT FOR APPLIANCE CONVERTED TO PROPANE GAS:	
DVP20CC70-1	19,500 Btu per hour
DVP30CC70-1	26,500 Btu per hour

The converted appliance when converted to Propane Gas will have a manifold pressure approximately 10.0" w.c. (2.49kPa) for maximum input or 5.9" w.c. (1.469kPa) for minimum input at the valve outlet with the inlet pressure to the valve from a minimum of 11.0" w.c. (2.739kPa) for the purpose of input adjustment to a maximum of 13.0" w.c. (3.237kPa).

### INSTRUCTIONS FOR CONVERSION

1. If appliance is installed, turn off gas and electric supply to appliance before making gas conversion.
2. Remove casting top from outer casting.
3. Remove casting front from outer casting.
4. Release two door latches at bottom of firebox.
5. Lift off glass frame from the bottom channel.
6. Carefully remove logs and set aside.
7. Remove the log shelf by removing the two screws securing the log shelf to the rear wall.
8. Remove four 10 x 1/2" screws from burner base and one 8 x 1/4" screw from air shutter. Grasp burner assembly, lift and pull forward to remove burner assembly.
9. Remove air shutter from orifice fitting.
10. Remove Natural Gas main burner orifice from orifice fitting.
11. Install Propane Gas main burner orifice into orifice fitting:  
for DVP20CC ORIFICE **MARKED 55**  
for DVP30CC ORIFICE **MARKED 1.55mm**
12. Thread air shutter onto orifice fitting.
13. Remove the screws holding the pilot in place; carefully flex the pilot backwards to clear the bracket.
14. Remove the burners by sliding both burners to the right to disengage the orifice holders.
15. Replace the pilot orifice with the one included in the kit. DO NOT overtighten.
16. Replace the screws that secure the pilot to the burner bracket.
17. Convert gas valve as instructed in the S.I.T. Gas Valve Conversion kit.
18. Align burner assembly with air shutter as you place burner assembly into original position in firebox.
19. Adjust air shutter setting to **Full Open**.
20. Attach air shutter to burner assembly with one 8 x 1/4" screw from Step 8.
21. Attach burner assembly to firebox bottom with four 10 x 1/2" screws from Step 8.
22. Remove flue vent baffle (17-5/16" wide). Install new flue vent baffle (6-5/8" wide, DVP30CC only). **See Figure 1.**
23. Replace the log shelf and secure to the rear wall by replacing the two screws removed in step 7.
24. Replace logs per instruction in Owner's Manual.
25. Place glass frame onto firebox and attach two door latches to bottom of firebox.
26. The converted appliance must be connected to a supply of the conversion gas and checked for leaks at all connections.
27. The appliance must be checked to ensure it is operating at the correct pressure of 10.0" w.c.
28. Conversion is completed.

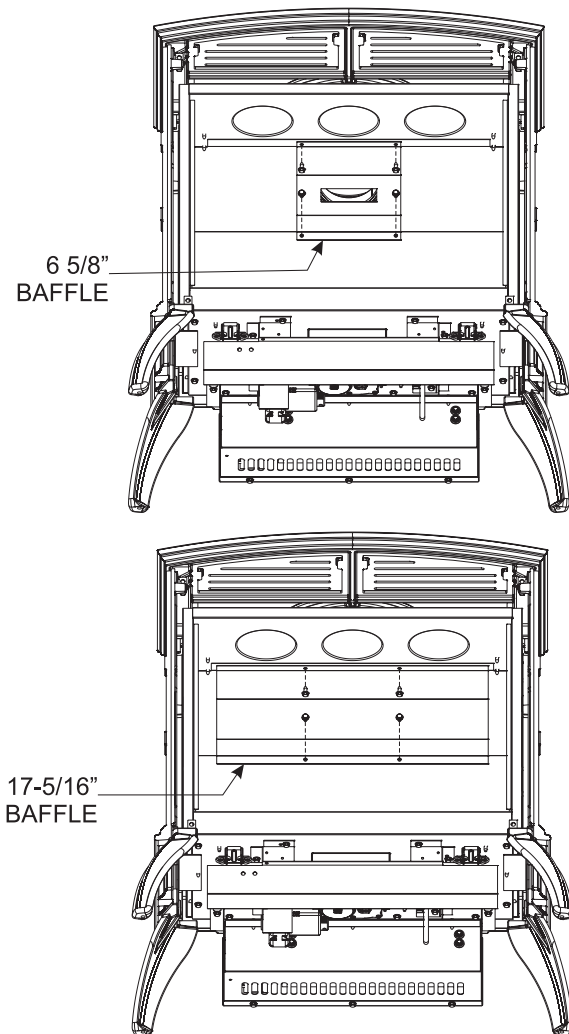


Figure 1

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

#### **VERIFYING INPUT RATE OF CONVERTED APPLIANCE**

The input of the appliance 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.

#### **PLACEMENT OF CONVERSION LABELS**

1. Conversion label R1322 is to be placed in a location visible when all appliance panels are installed.
2. Gas conversion label R1321 is to be placed near the gas valve.

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

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, indicated conversion by adding "Conv." behind type of gas.



**Empire Comfort Systems Inc.  
Belleville, IL**

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.

SINCE 1932

**[www.empirecomfort.com](http://www.empirecomfort.com)**