

GAS CONVERSION INSTRUCTIONS DIRECT-VENT GAS FIREPLACE KITS

CONVERSION KITS: DVCT30CBN95P, PART NO. 38290 AND DVCT35CBN95P PART NO. 38500

FOR CONVERSION TO NATURAL GAS

A WARNING

This conversion kit must be installed by an Empire Comfort Systems, distributor (or other qualified agency¹)*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 conversion assumes responsibility.

1National Fuel Gas Code Z223.1 (Latest Edition)

AWARNING

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.

CHECK THE SAFETY SHUTDOWN PERFORMANCE Intermittent Pilot System

- 1. Turn "OFF" using remote control. Main burner and pilot should go off.
- 2. Pilot gas flow should stop within 30 seconds.

PARTS LIST			
Part Description -	Conversion Kits		Quantity Sumplied
	38290	38500	Quantity Supplied
Main Burner Orifice, Front	P185 (#52)	P245 (#50)	1
Main Burner Orifice, Rear	P311 (#47)	P319 (2.40 mm)	1
SIT Gas Valve Conversion Kit	R11381	R11381	1
Gas Conversion Label	1224	1224	1
Target	38042	38042	2

TOOLS NEEDED:

Standard screwdriver • 5/16 inch hex driv

5/16 inch hex driver • 7/16 inch deep socket

1/4 inch hex driver • 7/16-inch wrench

GAS INPUT FOR DIRECT VENT FIREPLACE CONVERTED TO NATURAL GAS:			
DVCT30CBN95P - 30,000 BTU per hour	DVCT35CBN95P - 39,000 BTU per hour		

The direct-vent gas fireplace when converted to Natural Gas will have a manifold pressure of approximately 3.5 inches w.c. (.871kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 4.5 inches w.c. (1.120kPa) for the purpose of input adjustment to a maximum of 14.0 inches w.c. (3.484kPa).

37919-1-0719 Page 1

INSTRUCTIONS FOR CONVERSION

- If fireplace is installed, turn OFF gas and electric supply to fireplace before making gas conversion. Allow fireplace to cool completely.
- Remove barrier screen, glass door, logs and embers, and liners. (See Homeowner's Manual, Log Set Instructions, and Liner Instructions).

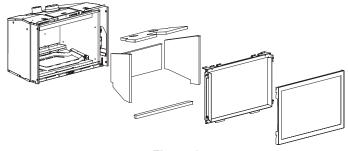


Figure 1

3. Remove front and rear burners by removing screws on left and pulling out towards left side. **See Figure 2.**

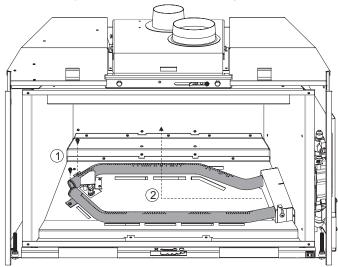


Figure 2

4. Remove (2) screws holding pilot assembly to burner pan. This will allow pilot assembly to drop. **See Figure 3.**

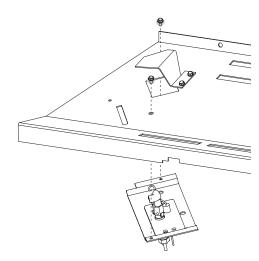


Figure 3

5. Remove (2) screws holding burner base in place. Lift burner base out of firebox. **See Figures 4 and 5.**

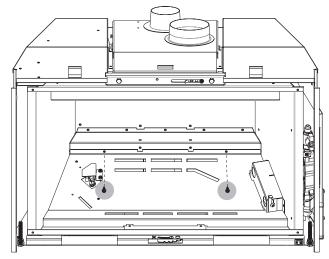


Figure 4

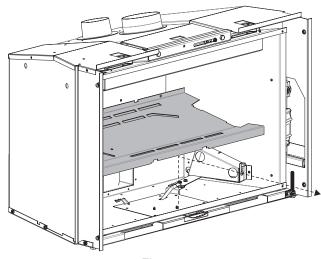


Figure 5

Use a 7/16 inch deep socket wrench to remove orifices.
See Figure 6.

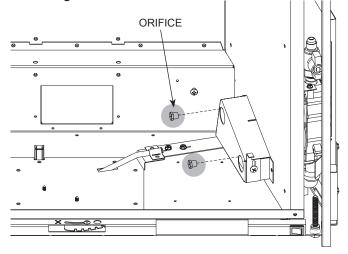
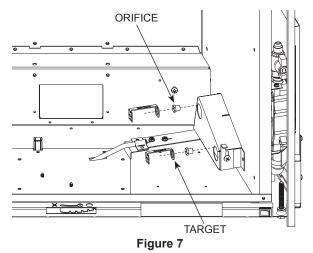


Figure 6

Page 2 37919-1-0719

- 7a. Use a 7/16 inch deep socket set to install orifice marked #47 onto rear orifice holder. Use needle-nose pliers to screw rear target onto rear orifice holder (30 only). See Figure 7.
- 7b. Use a 7/16 inch deep socket set to install orifice marked 2.40 mm onto rear orifice holder. Use needle-nose pliers to screw rear target onto rear orifice holder (35 only). See Figure 7.
- 8a. Use a 7/16 inch deep socket set to install orifice marked #52 onto front orifice holder. Use needle-nose pliers to screw front target onto orifice holder (30 only). See Figure 7.
- 8b. Use a 7/16 inch deep socket set to install orifice marked #50 onto front orifice holder. Use needle-nose pliers to screw front target onto orifice holder (35 only). See Figure 7.



- Loosen rear air shutter screw and rotate handle to the left until 1/8 inch opening is achieved. Tighten screw. See Figures 8 and 9.
- 10. Loosen the front air shutter screw and lower the air shutter until it stops. Then tighten the screw. **See Figure 10.**

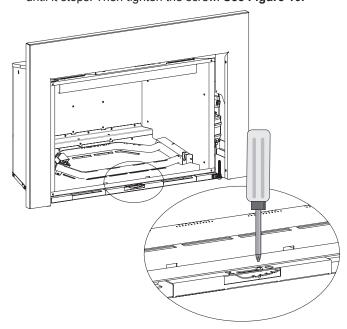


Figure 8 - Rear Burner Air Shutter

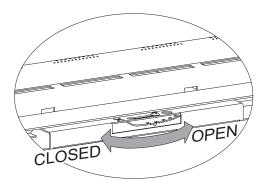


Figure 9 - Rear Burner Air Shutter

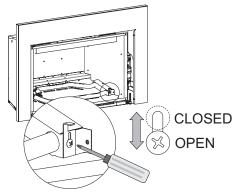


Figure 10 - Front Burner Air Shutter

11. Use a 7/16 inch open wrench to loosen pilot body by slightly turning counter clockwise. Slide orifice bracket to other side and tighten pilot body clockwise. **See Figure 11.**

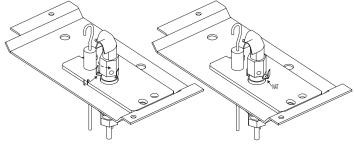


Figure 11

- 12. Replace items removed in steps 2-5 in reverse order.
- 13. Adjust damper and air shutter for perfect burn.
- 14. Gas conversion is completed.

Check the main burner flame and pilot burner flame must be checked for proper flame characteristics, as outlined in the Installation Instructions.

Verify Input Rate of Converted Fireplace

Check the input of the fireplace:

- 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 ÷ time (in seconds) = cu. ft. per hour.
- 3. Then cu. ft. per hour x heating value of gas = input rate (Btu/hr). On installation without gas meters, check manifold for proper pressure.

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

37919-1-0719 Page 3



Empire Comfort Systems Inc. Belleville, IL

If you have a general question about our products, please e-mail us at info@empirecomfort.com.

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

SINCE 1932

www.empirecomfort.com

Page 4 37919-1-0719