# GAS CONVERSION INSTRUCTIONS OUTDOOR TRADITIONAL FIREPLACE

APPLIANCE MODEL NUMBER	NAT TO LP CONVERSION KIT NUMBER	LP TO NAT CONVERSION KIT NUMBER	
OP36FP72M, ONI24	31992	31993	
OP42FP72M, ONI30	31994	31995	

#### 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

Intermittent Ignition Systems (Intermittent Pilot) 100% Shutoff IP 90 Second Lockout

- 1. Using the remote control, select burner "OFF" 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. With the remote, re-light pilot burner and operate system through one complete cycle to make sure all controls operate properly.

PARTS LIST						
DESCRIPTION	31992 (NAT to LP)	31993 (LP to NAT)	31994 (NAT to LP)	31995 (LP to NAT)	QUANTITY SUPPLIED	
Model	OP36FP72M	OP36FP72M	OP42FP72M	OP42FP72M		
Main Burner Orifice	P-276 (# 45)	P-280 (#29)	P-276 (# 45)	P-280 (# 29)	1	
Minimum Rate Screw	R-10869 (# 42)	R-10868 (# 00)	R-10869 (# 42)	R-10868 (# 00)	1	
Gas Conversion Label	23442-2139	23442-2139	23442-2139	23442-2139	1	

OP36FP72M - 50,000 BTU/hr

OP42FP72M - 50,000 BTU/hr

- The gas fireplace when converted to Natural gas will have a manifold pressure of approximately 3.5" w.c. (.871kPa) at the valve outlet with the inlet pressure to the valve from a minimum 4.5"w.c. (1.120kPa) for the purpose of input adjustment to a maximum of 14.0"w.c. (3.484kPa).
- The gas fireplace 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).
- 1. If the fireplace is installed, turn OFF gas and the electric supply to the fireplace before making gas conversion.
- 2. Open the screen curtains, or remove the glass doors if installed.
- 3. Remove the concrete hearth ledges and set aside.
- 4. Remove all logs from the burner and set in a safe location.
- Remove the Rear Log support shelf by simply lifting off the pins on the burner leg brackets and set aside.
- 6. Remove (4) # 10 x  $\frac{1}{2}$ " hex head screws securing the Right and Left burner support legs to the firebox bottom.
- 7. Disconnect the gas supply line near the gas valve so the burner can be removed.
- 8. Remove the complete burner assembly from the firebox cavity.
- 9. Disconnect the manifold tubing at the orifice holder using a 7/16" wrench, then turn the orifice holder counter-clockwise out of the air shutter.
- 10. To remove the main burner orifice from the orifice holder, use a 3/8" wrench on the orifice while at the same time hold a 5/8" wrench on the orifice holder.
- Install the correct main burner orifice for the gas type being converted to. Verify that the orifice number included in the conversion kit matches the size specified for the fireplace model, and the gas type being converted to. Refer to the parts list chart above.
- 12. Re-install the orifice holder into the air shutter, then re-attach the manifold tubing to the orifice holder.
- 13. Adjust the air shutter setting. The air shutter is located on the end of the venture tube under the burner assembly. Using a ¼" nut driver, adjust the air shutter opening in accordance with the following settings:

	owing settings.
OP36FP72MN	1/8" open
OP36FP72MP	Full open
OP42FP72MN	1/8" open
OP42FP72MP	Full open

14. Once the air shutter setting is made, re-tighten the air shutter screw.

- 15. Locate the gas valve. Unscrew the knurled cap on the gas valve to gain access to the regulator stem. See Figure 1. Using your fingers gently push in and rotate the stem to the desired gas setting. For LP gas, the plastic stem will set to the inward position. See Figure 2. For Natural gas, the plastic stem will set to the outward position. See Figure 3. Do not force rotation of the regulator stem. Never use tools to make this adjustment.
- 16. Remove the brass minimum rate screw located on the front of the valve. Using a small straight blade screwdriver, unscrew the minimum rate screw as far as it will go. A rubber seal will keep it from falling out, so use a small pocket-knife blade or screwdriver to gently pry the plug out. Replace the minimum rate screw with the one in the Conversion kit intended for the gas type being converted to. Refer to chart above.
- 17. Re-install the burner assembly into the firebox.
- 18. Re-install the (4) # 10 x  $\frac{1}{2}$ " screws that secure the Right and Left burner brackets to the firebox bottom.
- 19. Re-connect the gas supply line near the gas valve.
- 20. Before replacing the Rear Log shelf and Log set, test fire the burner for proper operation.
- 21. Check all gas connections for leaks.
- 22. Verify the proper gas line and manifold pressures are correct. Natural gas manifold pressure to be at 3.5" WC, and LP (propane) gas manifold pressure to be at 10.0" WC.
- 23. Replace the Rear Log support shelf.
- 24. Replace the Log set. Refer to the fireplace Installation instructions for proper positioning and placement.
- 25. The converted fireplace must be connected to a supply of the conversion gas and checked for leaks at all connections.
- 26. Fill out the Conversion label with required information, then secure it near the existing fireplace rating label.
- 27. Gas conversion is complete.

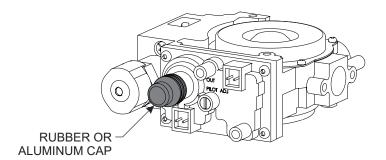
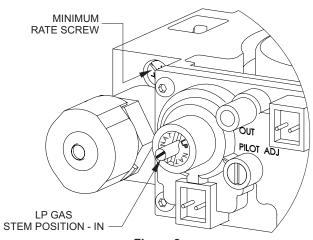
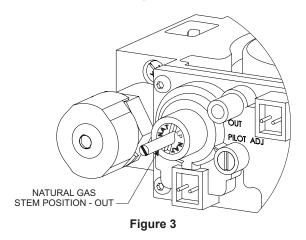


Figure 1









#### 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.

## www.empirecomfort.com