



# Crystal Fire



User Manual for: CF-20-LP (NG) , CF-1224-LP (NG), CF-2424-LP(NG), CF-1242-LP(NG)

## CAUTION



### DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand, and follow these instructions for safe installation and operation.



GAS-FIRED



## WARNING



If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- Do not store gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.
- **What to do if you smell gas:**
  - Do not try to light any appliance
  - Do not touch any electrical switch. Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's Instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.



**HOT! DO NOT TOUCH.**

**SEVERE BURNS MAY RESULT.**

**CLOTHING IGNITION MAY RESULT.**

Glass and other surfaces are hot during operation and cool-down.

- Keep children away.
- CAREFULLY SUPERVISE children near this appliance.
- Alert children and adults to hazards of high temperatures.
- Keep clothing, furniture, draperies, and other combustibles away.



## WARNING



**For outdoor use only**



## WARNING



**It is imperative the burner be kept clean**



## WARNING



Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. Read the installation and maintenance instructions thoroughly before installing or servicing this equipment.



Installation and service of this appliance should be performed by qualified personnel. The Outdoor GreatRoom Company suggests NFI certified, factory-professionals, or technicians supervised by an NFI certified professional.

**Read this manual before installing or operating this appliance.**

**Please retain this owner's manual for future reference.**

## Congratulations

Congratulations on selecting an Outdoor GreatRoom Company decorative gas appliance. The Crystal Fire you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a Crystal Fire, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest you keep it with other important documents and product manuals.

This information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Crystal Fire will give you years of durable use and trouble-free enjoyment.

### Homeowner Reference Information

*We recommend that you record the following pertinent information about your appliance*

Model name: \_\_\_\_\_ Date of purchase/installation \_\_\_\_\_

Serial Number: \_\_\_\_\_ Location on appliance: \_\_\_\_\_

Dealer purchased from: \_\_\_\_\_ Dealer Phone: \_\_\_\_\_

Notes: \_\_\_\_\_

### Listing Label Information/Location

The model information regarding your specific appliance can be found on the rating plate attached to your burner via a metal chain. See the **sample** rating plate below for locations of specifications.

Model ●

Fuel Type ●

Orifice Size ●

Serial no. ●

**GAS-FIRED**  
**UL LISTED**

**DECORATIVE OUTDOOR GAS FIRED FIREPLACE**  
**42W4"™**

The Outdoor GreatRoom Company  
2015 Silver Bell Road Suite 195 Eagan  
MN 55122

Model Crystal Fire

MFG DATE  
DATE DE FAB

Natural Gas and Propane gas  
Input 60,000BTU (17.5KW)

Serial # 42435

IAS U.S. 4.96, Outdoor Fireplace  
For Canada CGA-CR-97-003, Outdoor Fireplace  
Type of Gas: Natural gas, Propane Gas

|                                | LPG  | NG   |
|--------------------------------|------|------|
| Min. Gas supply for input Adj. | 11.0 | 7.0  |
| Max Inlet Supply Pressure      | 14.0 | 14.0 |
| Manifold Pressure              | 10   | 3.5  |

ORIFICE SIZE: NG=#31 LPG=#43

In.w.c. (1.7kpa)  
In.w.c. (3.5kpa)  
In.w.c. (87kpa)

# Table of Contents

1. Listing and Code Approvals
  - a. Appliance certification
  - b. BTU specifications
2. Getting Started
  - a. Design and installation considerations
  - b. Tools and supplies required
  - c. Inspection of appliance and components
  - d. Step-by-step lighting instructions
3. Framing Clearances
  - a. Selecting a location
  - b. Required clearance to combustibles
  - c. Framing an enclosure for LP supply system
4. Fuel Information
  - a. Fuel
  - b. Gas pressure
  - c. Gas connection
  - d. LP Gas supply
5. Appliance Setup
  - a. Burner assembly
  - b. Glass installation
6. Operating Instructions
  - a. Before lighting
  - b. Lighting the fire
  - c. After the fire is lit
7. Finishing
8. Converting to Natural Gas
9. Troubleshooting
10. Maintaining and servicing the appliance
11. Reference Materials
  - a. Service parts list
  - b. Limited one-year warranty
  - c. Contact information

| What's included...  |   |   |
|---|---|---|
| CF20  | CF-1224   | CF-2424 , CF1242  |
| <ul style="list-style-type: none"> <li>• 20" Round burner</li> <li>• Black propane hose with regulator</li> <li>• Flexible metal gas line</li> <li>• Ball valve</li> <li>• Piezoelectric igniter</li> <li>• #43 Orifice (LP)</li> <li>• #31 Orifice (NG)</li> <li>• 2 bags of decorative glass</li> </ul> | <ul style="list-style-type: none"> <li>• 12"x24" burner</li> <li>• Black propane hose with regulator</li> <li>• Flexible metal gas line</li> <li>• Ball valve</li> <li>• Piezoelectric igniter</li> <li>• #43 Orifice (LP)</li> <li>• #31 Orifice (NG)</li> <li>• 2 bags of decorative glass</li> </ul> | <ul style="list-style-type: none"> <li>• 24"x24" <b>OR</b> 12"x42" burner</li> <li>• Black propane hose with regulator</li> <li>• Flexible metal gas line</li> <li>• Ball valve</li> <li>• Piezoelectric igniter</li> <li>• #36 Orifice (CF2424 only- home LP)</li> <li>• #31 Orifice (CF1242 only- Home LP)</li> <li>• #43 Orifice (20lb LP)</li> <li>• #17 Orifice (CF2424 only- NG)</li> <li>• #21 Orifice (CF1242 only -NG)</li> <li>• 4 bags of decorative fire glass</li> <li>• Remote *</li> <li>• U-shaped heat shield bracket (used for remote operation installs only)</li> </ul> <p>(*Included with remote-operated unit only)</p> |

# 1

# Listing and Code Approvals

## A. Appliance Certification

**MODEL:** CRYSTAL FIRE CF-20-LP, CF-1224, CF-2424,

**LABORATORY:** Underwriters Laboratories, Inc. (UL)

**TYPE:** Decorative Gas-Fired Outdoor Fireplace

**STANDARD:** IAS US requirements for Outdoor gas fireplaces, Draft 4-96 and CSA requirement for Outdoor Gas Fireplaces, CR-97-003

The Crystal Fire has been tested in accordance with IAS US requirements for Outdoor Gas Fireplaces, Draft 4-96 and CSA requirement for Outdoor Gas Fireplaces, CR-97- 003 for Canada and has been listed by Underwriters Laboratory (UL) for installation and operation as described in these installation and operating instructions.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1 or CAN/CGA-B149.1, National Gas Installation Code or CAN/CGA-B149.2, Propane Installation Code.

## B. BTU Specifications

| Model            | Orifice Size |            |
|------------------|--------------|------------|
|                  | LP           | NG         |
| CF-20            | <b>#43</b>   | <b>#31</b> |
| Max input<br>BTU | 60,000       | 60,000     |
| CF-1224          | <b>#43</b>   | <b>#31</b> |
| Max input<br>BTU | 55,000       | 51,000     |
| CF-2424          | Whole-house  | 20lb tank  |
|                  | <b>#36</b>   | <b>#43</b> |
| Max input<br>BTU | 79,000       | 61,000     |
| CF-1242          | Whole-house  | 20lb tank  |
|                  | <b>#31</b>   | <b>#43</b> |
| Max input<br>BTU | 100,000      | 60,000     |
|                  |              | 90,000     |

This appliance is a Decorative Gas Appliance for **OUTDOOR USE ONLY** and **MUST NOT** be used for cooking.

Place the Crystal Fire on a flat and stable surface in an outdoor location such as a patio or deck. This location must be adjacent to the gas supply line or LP gas supply cylinder. **DO NOT** locate the appliance where it will get excessively wet or submerged in water.

## A. Design and Installation Considerations

When planning an appliance installation, it's necessary to determine the following information before installing:

- Where will the appliance be installed? **See section 3**
- Gas supply piping. **See section 4**
- Framing and finishing details. **See sections 3,7**

## B. Tools and Supplies Required

Before beginning the installation, be sure that the following tools and supplies are at hand.

- Gloves
- Safety Glasses
- Phillips screwdriver
- Non-corrosive leak-check solution
- Wrenches
- 1 AAA battery



### WARNING



The Outdoor GreatRoom Company disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged components.
- Modification of the burner assembly
- Installation other than as instructed by the Outdoor GreatRoom Company.

**Any such action may cause a fire hazard**



### WARNING



#### Asphyxiation Risk

- This gas appliance is for outdoor use in a well-ventilated space.
- This unit must not be installed inside an enclosed structure or unvented appliance



### WARNING



Do **NOT** use this appliance if any part of it has been underwater. Have a qualified service technician inspect the appliance and replace any part of the control system and any gas control which has been underwater.

### CAUTION

#### Sharp Edges

Wear protective gloves and safety glasses during installation.



### WARNING



Do not burn solid fuels in this gas appliance

## C. Inspect the Appliance and Components



### WARNING



Inspect appliance and components for damage. Damaged parts may impair safe operation.

- Do **NOT** install damaged, incomplete, or substitute components
- Report damaged parts to your dealer.




- Carefully remove all burner components from packaging.
- Read all instructions before beginning installation. Follow these instructions carefully during installation to ensure maximum safety and benefit.

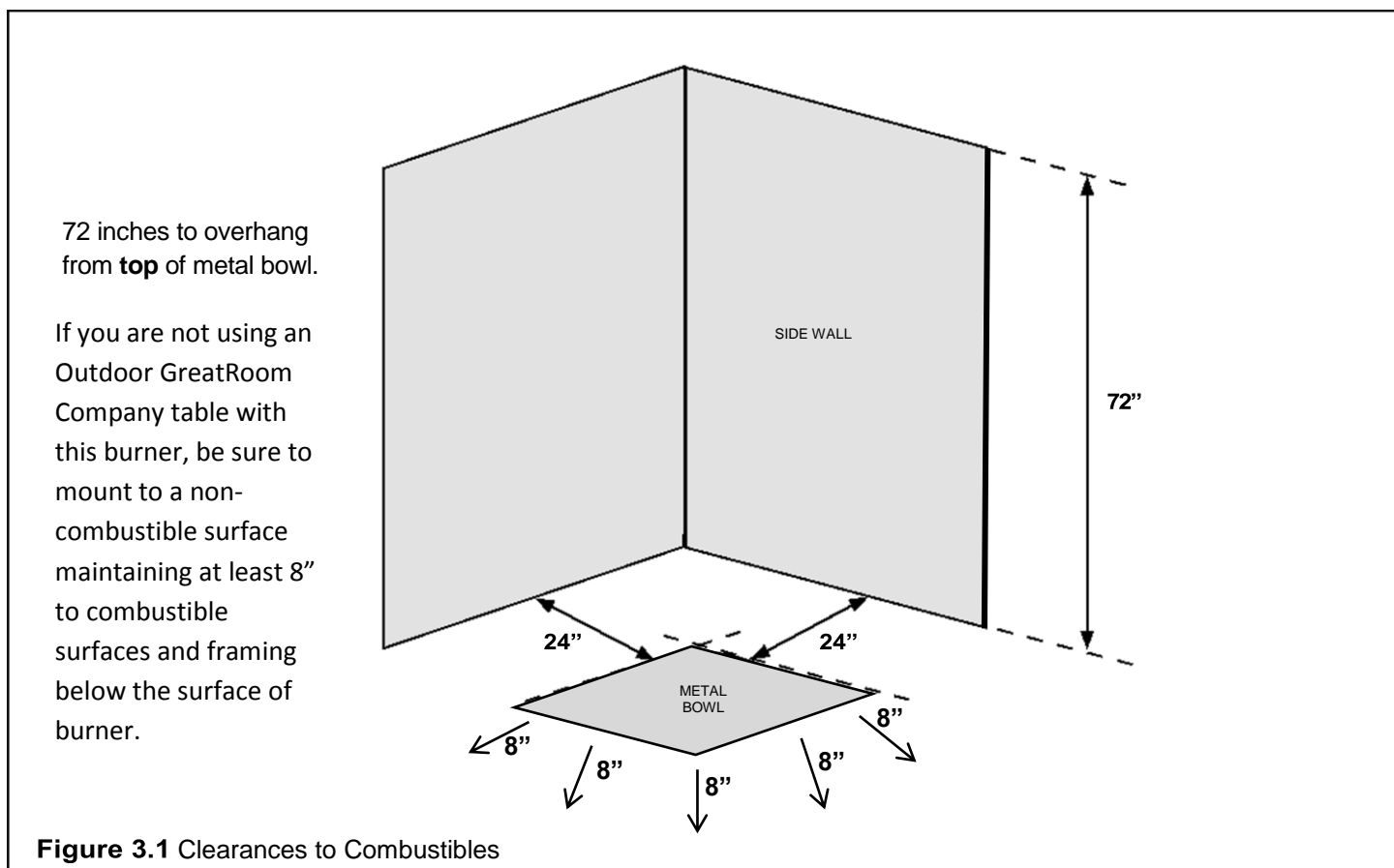
# 3

## Framing and Clearances

### Note:

- Illustrations reflect typical installations and are **FOR DESIGN PURPOSES ONLY.**
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

|   |  |   |
|---|--|---|
|  | <b>WARNING</b>   |  |
|  | <b>Fire Risk</b>   |   |
|   | Provide adequate clearance:  |   |
|   | <ul style="list-style-type: none"> <li>• Around air openings</li> <li>• For service access.</li> </ul> |   |
| Locate appliance away from traffic areas  |  |   |





## C. Framing Enclosure for LP Gas Supply System

If you build an enclosure for an LP gas cylinder, follow these recommended specifications and local codes:

### Ventilation

Enclosures must be ventilated by openings at the level of the cylinder valve and at floor level. Effectiveness must be determined with the cylinder(s) in place.

- One side of the enclosure must be completely open or,
- For an enclosure having four sides, a top and a bottom:
  - At least two ventilation openings at cylinder valve level shall be provided in the side wall, equally sized, spaced at 180 degrees (3.14 rad), and unobstructed. Each opening must have a total free area of not less than 1/2 square inch per pound (3.2 sq. cm/kg) of stored fuel capacity and not less than a total free area of 10 square inches (64.5 sq. cm).
  - Ventilation opening(s) must be provided at floor level and shall have a total free area of not less than 1/2 square inch per pound (3.2 sq. cm/kg) of stored fuel capacity and not less than a total free area of 10 square inches (64.5 sq. cm). If ventilation openings at floor level are in a side wall, there must be a least two openings. The bottom of the openings must be at floor level and the upper edge can't be more than 5 in. (127 mm) above the floor. The openings must be equally sized, spaced at 180 degrees (3.14 rad) and unobstructed.
  - Every opening must have minimum dimensions to permit the entrance of a 1/8 inch (3.2 mm) diameter rod.

### Accessibility

- Cylinder valves must be readily accessible for hand operation. A door on the enclosure to gain access to the cylinder valves is acceptable, provided it is **non-locking and can be opened without the** use of tools.
- The design of the enclosure must be such that:
  - The LP gas supply cylinder(s) can be connected, disconnected and the connections inspected and tested outside the cylinder enclosure.
  - Those connections which could be disturbed when installing the cylinder(s) in the enclosure can be leak tested inside the enclosure.
  - Be certain to mount or set the LP gas cylinder on a flat stable surface and retain it to prevent it from tipping.

### Minimum Clearances

- There must be a minimum clearance of 2 in. (50.8 mm) between the lower surface of the floor of the LP gas supply cylinder enclosure and the ground.

# 4

## Setting up your Burner

### A. Burner Assembly

#### All Models

- Check for damage. Do not use damaged components.
- The hose assembly must be replaced prior to the appliance being put into operation if there is evidence of excessive abrasion or wear, or if the hose is damaged. The replacement hose assembly specified by the manufacturer.
- The burner must be replaced prior to the appliance being put into operation if it is evident that the burner is damaged. The replacement burner assembly specified by the manufacturer.
- Position the assembly in the desired location. This location must be adjacent to the gas supply line. You must have easy access to the gas valve control knob after it is installed and connected to the gas supply because the ON/OFF gas valve is used to turn the burner on and off.

### B. Glass Installation

Spread glass out evenly over burner area. Use all glass provided for best affect. Keep glass clear of spark to avoid accidental blockage.

#### Note:

A percentage of glass beads may arrive split in half. This is normal. Additional beads may split after use. This is also normal due to the physical properties of glass.

#### LP Gas Models

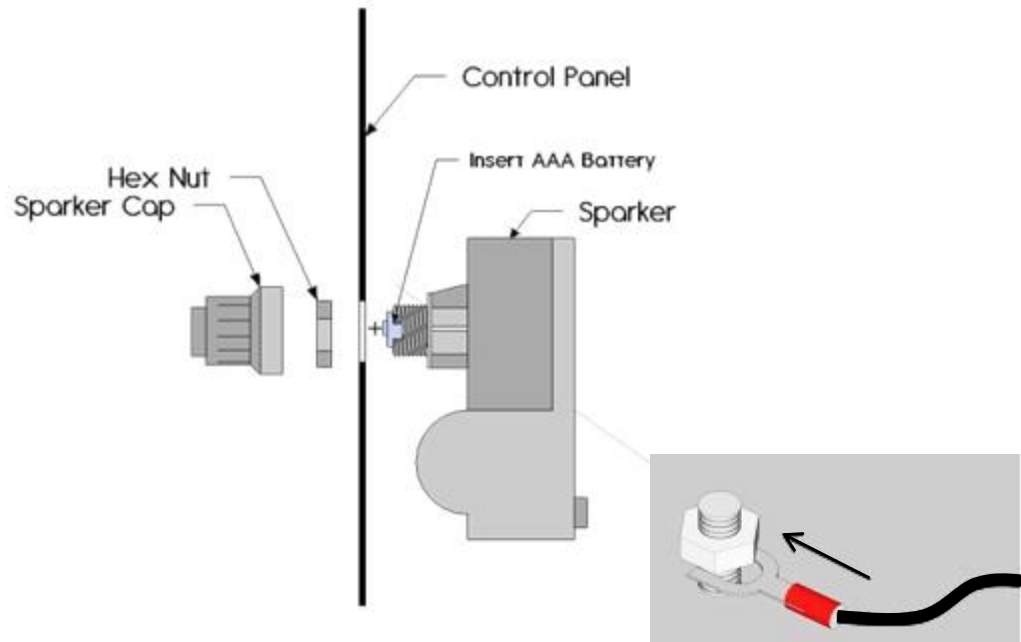
- Make sure the tank valve is turned completely off (clockwise).
- Ensure the tank valve has the proper external mating threads (tank valve marked "USE WITH TYPE 1").
- Inspect the hose shipped with the appliance for any damage. Do not use if there is evidence of damage.
- Connect the end of the hose onto the ON/OFF gas valve of the appliance. Make sure it is secured tightly.
- Connect the regulator assembly to the tank valve. Hand-tighten only (clockwise). Do not use a wrench to tighten! Use of a wrench may damage the quick closing nut and result in a hazardous condition.
- Position the hose out of pathways where people might trip over it or in areas where the hose might be subject to accidental damage.

**DO NOT BURN WITHOUT GLASS OR  
OTHER SUBSRATE SUCH AS LAVA  
ROCK IN BURNER.**



## C. Igniter Installation and Grounding

Your burner includes one of two styles of igniter box. These can be distinguished by the number of wire connector prongs on the back side. If one prong is present, proceed to instructions for “Style A” . If two prongs exist, proceed to “Style B” . *Note: Before installing ignition system, ensure that gas valves are closed and gas is disconnected for safety.*



### Style A (One prong, self-grounding)

To properly install this igniter style, see diagram above. Self-grounding igniters are designed to be installed mounted to a metal surface such as an Outdoor GreatRoom Company control panel. If a control panel was not purchased with your burner, an external grounding wire (SPK-GND on page 17 of this user manual) can be purchased to relocate the grounding contact point of this igniter to a nearby metal surface.

Once properly grounded, located the black wire hanging from your burner and insert it into the port on the back side of the igniter.

### Style B (two prongs, externally grounded)

This igniter relies on external grounding for proper operation. A thin surface is required for mounting such as an Outdoor GreatRoom Company control panel. See above diagram for mounting for proper installation.

A grounding wire is included with your igniter. To install, locate the black wire hanging from burner and plug it into either port on backside of igniter box.

Locate a nearby nut and bolt on bottom of burner and loosen the nut enough to slide the forked end of the included grounding wire underneath the nut as shown above and retighten nut.

Plug the free end of grounding wire into the back of the igniter box to complete installation.

# 5


## Gas Hookup and Information

### A. Fuel


Before making gas connections, ensure the appliance being installed is compatible with the available gas type.


### B. Gas Pressure

Proper input pressures are required for optimum performance. Gas line sizing requirements need to be made following NFPA54



### WARNING






**Fire Risk**  
**Explosion Risk**

Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating



Install regulator upstream of valve if line pressure is greater than ½ psig.

Pressure requirements for appliance are shown in table below. Minimum pressures must be met when other household gas appliances are operating.

| Pressure               | Natural Gas  | Propane     |
|------------------------|--------------|-------------|
| Minimum Inlet Pressure | 7 in w.c.    | 11 in. w.c. |
| Maximum Inlet Pressure | 10.5 in w.c. | 14 in. w.c. |

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressures in excess of 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).


### C. Gas Connection

**Note:** Have the gas supply installed in accordance with local building codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.


**Note:** A listed (and Commonwealth of Massachusetts approved) 3/8 in. T-handle manual shut-off valve and flexible gas connector are connected to the 3/8 in. control valve inlet.


If substituting for these components, please consult local codes for compliance.

Incoming gas line should be piped to the ½ inch connection on the manual shutoff valve.




### WARNING






**Fire Risk**  
**Explosion Risk**

- Gas build-up during line purge may ignite.
- Purge should be performed by qualified technician.





Ensure adequate ventilation.  
Ensure there are no ignition sources such as sparks or open flames.

- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. Subsequent lighting of the unit will not require such purging. **Never allow the ON/OFF valve to remain in the open position without pressing and continuing to hold igniter button FIRST.**




### WARNING





**CHECK FOR GAS LEAKS**  
**Fire Risk**  
**Explosion Risk**  
**Asphyxiation Risk**

- Check all fittings and connections.
- Do not use open flame.
- After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially available leak-sheck solution. Be sure to rinse off all leak check solution following testing.



Fittings and connections may have loosened during shipping and handling

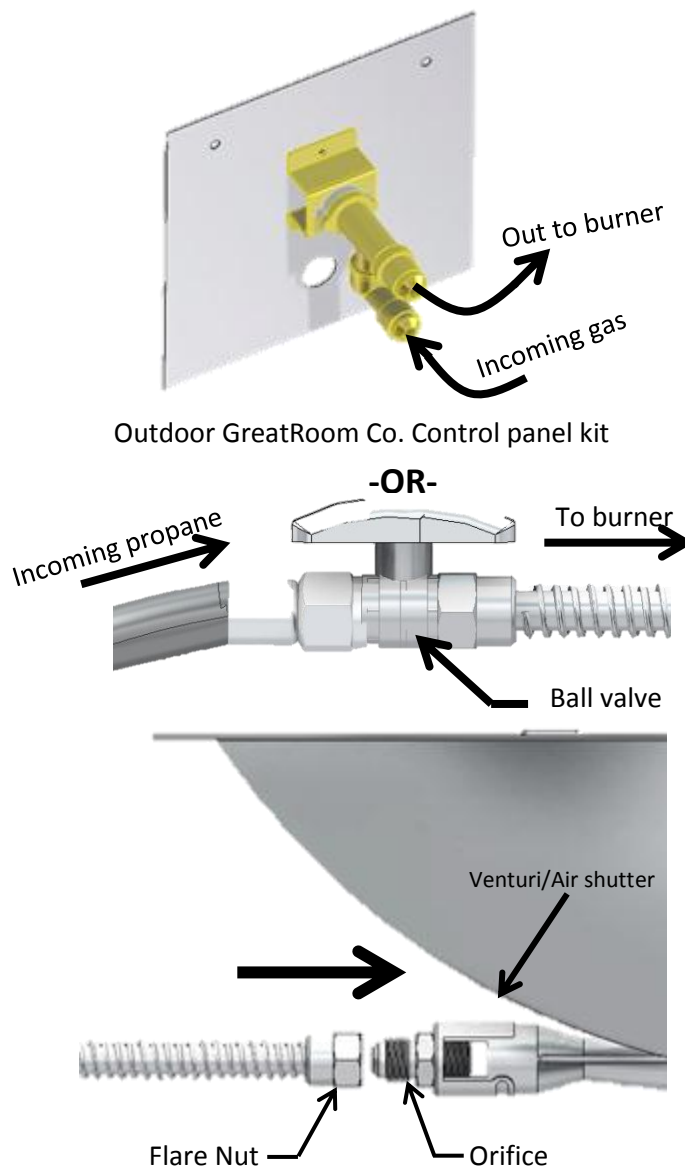
## D.LP Gas Supply

- The pressure regulator and hose assembly supplied with LP models must be used. Replacement pressure regulators and hose assemblies must be those specified in this manual.
- The LP gas supply cylinder used with LP models must be constructed and marked in accordance with the specifications for LP gas cylinders of the U.S. Department of Transportation (DOT).
- Cylinders must be stored outdoors in a well ventilated area out of the reach of children. Disconnected cylinders must have threaded valve plugs tightly installed and must not be stored in a building, garage or any other enclosed area.
- Storage of this appliance indoors is permissible only if it has been disconnected from its fuel supply (natural gas line or LP gas cylinder).
- The LP gas cylinder supply system must be arranged for vapor withdrawal.
- The LP gas cylinder used must include a collar to protect the cylinder valve.
- When an LP model is not in use, the LP gas must be turned off at the supply cylinder.
- The specific size and capacity of the cylinder(s) to be used: 20 lb. or hard plumbed to propane tank.

**IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION SERVICES, OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO AND UNDERSTAND THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY, LICENSED TECHNICIAN OR THE GAS SUPPLIER.**

## Gas Setup for Liquid Propane

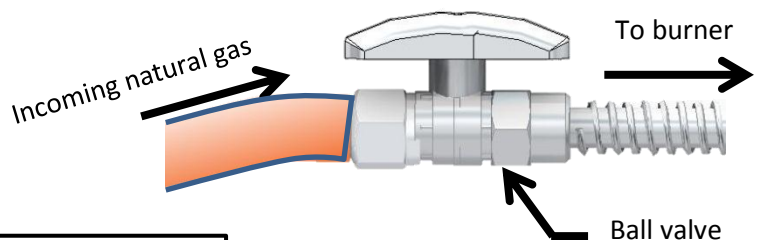
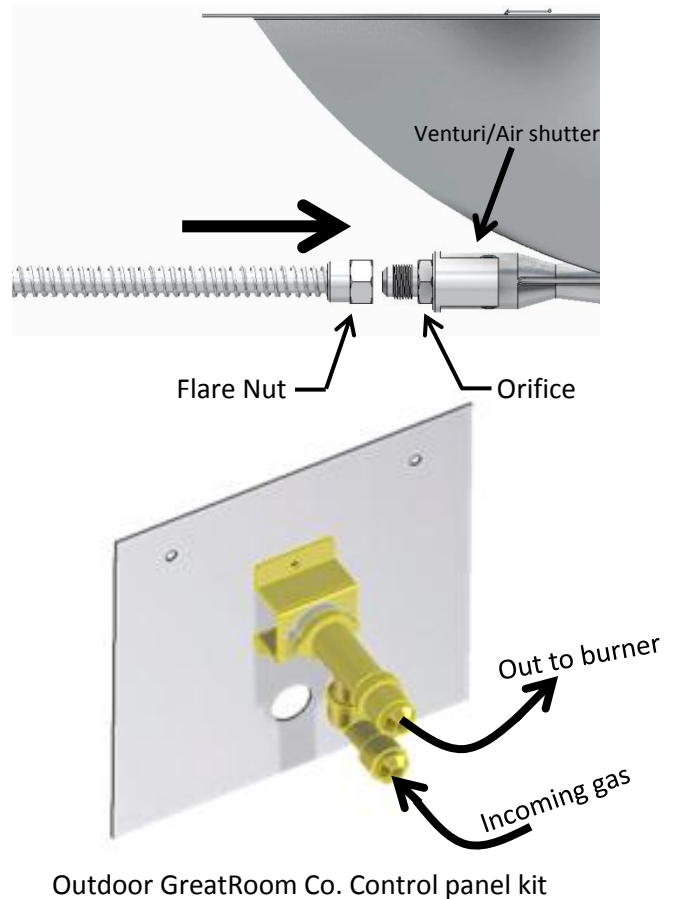
1. With burner in place in Outdoor GreatRoom Company fire pit table or other installation location and proper sized orifice inserted in burner neck (see chart on p.4 for orifice sizing), locate flexible rubber propane hose and regulator supplied with this burner.
2. Attach the propane hose to incoming gas fitting on the gas valve. For Outdoor GreatRoom Company gas valves and control panels, this is the lower fitting. Using two wrenches, one to hold the valve and one to turn the valve fitting. Tighten securely. If not using this type of valve, the included ball valve can be used as shown at right.
3. Locate the metal flex-line gas hose and tighten securely to the top valve fitting following the method described in step 2.
4. Using two wrenches, securely tighten the flare nut on the free end of the metal flex hose to the orifice on the burner.
5. **For liquid propane installations, the air shutter may be left open as shown at right to prevent sooting.** To adjust air shutter, loosen the small securing screw and rotate air shutter to allow more or less airflow. Closing the shutter will produce a more yellow flame but may soot.



**CHECK ENTIRE SYSTEM FOR LEAKS BEFORE OPERATING**

## Gas Setup for Natural Gas

1. With burner in place in Outdoor GreatRoom Company fire pit table or other installation location and proper sized orifice inserted in burner neck (see chart on p.4 for natural gas orifice sizing), adjust air shutter to a closed position (as shown at right, no light visible through the shutter) by loosening the small screw on the air shutter and rotating it to a closed position and re-tightening screw.
2. Locate the included metal flex-line hose and thread one end onto orifice and tighten securely with two wrenches.
3. At this point you have two options for plumbing natural gas. If using a valve assembly such as The Outdoor GreatRoom Company's valve kit, proceed to step 3a. If plumbing directly to a natural gas line proceed to 3b.
  - a. Attach the free end of flex hose to the top (outgoing) flare fitting of control valve and tighten fully with two wrenches. Plumb incoming natural gas to the incoming side of the valve using a 3/8" flare nut. It is strongly recommended that a manual shutoff valve is placed in the natural gas line **before** it reaches the fire pit's control valve.
  - b. Thread the included ball valve onto the free end of the metal flex line and plumb incoming natural gas line to the ball valve with a 3/8" flare nut.



**CHECK ENTIRE SYSTEM FOR LEAKS BEFORE OPERATING**

FOR YOUR SAFETY, READ BEFORE LIGHTING

**WARNING!**

**If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, and/or loss of life.**

- A.** This appliance can be lit electronically or with a match. When lighting, follow these instructions exactly.
- B.** **Before lighting**, smell all around the appliance area for gas. Be sure to smell next to the base of the appliance because some gas is heavier than air and will settle on the floor.

**WHAT TO DO IF YOU SMELL GAS:**

- Do not try to light any appliance.
- Do not touch any electric switch, do not use any phone nearby.
- Immediately call your gas supplier from a neighbors phone. Follow gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department

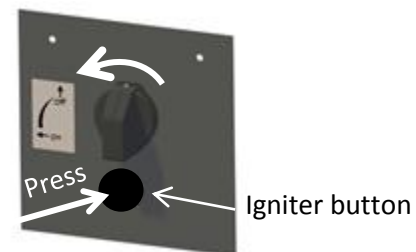
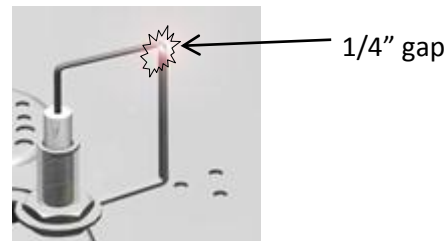
**C.** Use only your hand to turn the gas control knob on propane tank (if equipped), never use tools. If the valve won't turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

**D.** Do not use the appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and replace any part which has been underwater.

**E.** The gas pressure regulator provided with this appliance must be used. This regulator is set for an outlet pressure of 10.5 inches water column.

**Lighting Instructions**

1. Depress button on igniter and verify a spark is being produced between the electrode tip and receiving probe.
2. **Ensure control panel valve is in the "OFF" position** and slowly open valve on propane tank. If using natural gas or whole-house LP, open ball valve. If not using a control valve, skip this procedure until step 3.
3. Depress igniter button and continue holding button while turning control valve (or ball valve if not using a control knob valve) to the on position. Release button once flame is present.



**To Extinguish:** Turn control valve to "OFF" position or close ball valve. Close valve on propane tank while not in use.

**Initial break-in procedure:** When you light the appliance, you may notice that it produces heat which may have an odor. If you feel this odor is excessive it may require an initial three to four hour continuous burn on high.



## WARNING



### FIRE RISK – HIGH TEMPERATURES

Keep combustible household items away from appliance.

- Do NOT obstruct combustion and ventilation air.
- Do NOT place combustible items on top of or near appliance.
- Keep furniture, draperies away from appliance.
- Do NOT use, lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this appliance.
- Combustible materials, flammable liquids, or vapors may ignite.

# 7

## Finishing

Personalize your Crystal Fire by building a decorative surround from **noncombustible** material such as bricks, landscaping blocks, or rocks. The Outdoor GreatRoom Company also sells a variety of fire pit tables to fit each of our burners as shown below (not all models shown, see more at OutdoorRooms.com)



42" Black Glass fire pit table  
with CF-20 burner



Key Largo fire pit with  
CF-1242 burner



Napa Valley fire pit table  
with CF-1224 burner



Sierra fire pit table  
with CF-2424 burner



Uptown fire pit table with  
CF-1224 burner



| Symptom |   | Possible Causes |   | Corrective Actions  |
|---------|---|-----------------|---|---|
| 1.      | Crystal Fire won't light.                                     | A.              | No LP in tank, or NG main not turned on.  | Check the LP (propane) tank. You may be out of gas. Or check Natural Gas valve at main.   |
|         |   | B.              | Plugged burner orifice.   | Check the burner orifice for stoppage. Remove stoppage.   |
| 2.      | Low flames or won't stay lit.                                 | A.              | Manual shutoff valve (on/off control knob) open or not in-stalled between LP tank and appliance.  | Close LP tank and manual shutoff valves. Open LP tank valve first, THEN the manual shutoff valve.                                       |
| 3.      | Blue Flames   | A.              | This is a result of normal operation and flames will begin to yellow as unit is allowed to burn for 16-20 minutes.  | Do nothing.   |
|         |   | B.              | Improper air/fuel mixture related to air shutter position.  | Close air shutter. (for LP, leave ¼" open, Natural gas 1/16" open)  |
| 4.      | Metallic noise  | A.              | Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance. | Do nothing.   |
| 5.      | Decorative Beads cracking or splitting                        | A.              | Heat and/or abrupt temperature changes.   | This is a property of glass and may happen occasionally. Do nothing. This is completely normal.   |
| 6.      | Sparker makes clicking sound but no visible spark is produced | A.              | Sparker is improperly grounded  | Refer to section 4-C on Page 9 for grounding instructions . Check all wire connections.   |
|         |   | B.              | Ignition or ground wire not plugged in.   |   |
|         |   | C.              | Igniter tip set too far from grounding probe  | Check that tip of sparker is within ¼" of grounding probe. Gently bend igniter tip or grounding probe by hand to achieve a smaller gap. |

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up annual.

Storage of an appliance indoors is permissible only if the cylinder is disconnected and removed from the appliance.

**The use of a vinyl table cover is highly recommended to keep your table and burner looking new and ensuring extended trouble-free operation.**



### WARNING

#### Risk of injury or property damage

##### Before servicing:

- Turn off utilities to appliance.
- Ensure appliance is completely cooled.



### WARNING



Annual inspection by qualified technician recommended.

#### Check:

- Obstructions of combustion and ventilation air.
- Condition of burner assembly.
- Burner ignition and operation.
- Burner air shutter adjustment.
- Gas connections and fittings.



#### Risk of:



- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors

## Maintenance and Service Tasks

For service calls: Contact the dealer your product was purchased from first.  
Contact the Outdoor GreatRoom Company at 1-866-303-4028 if further assistance is needed.

| Inspect                       | Maintenance Tasks |  |
|-------------------------------|-------------------|--|
| Burner Assembly               | 1                 | Remove decorative glass and examine burner. Vacuum and wipe out as needed. Use caution when cleaning these areas   |
|                               | 2                 | Inspect for warping and corrosion. Repair as necessary   |
|                               | 3                 | Check the hose connecting the LP gas cylinder to ensure it is not damaged. Replace as necessary.   |
|                               | 4                 | Verify air shutter area is clean   |
| Burner Ignition and Operation | 1                 | Verify all gas connections are tight and leak-free   |
|                               | 2                 | Clean burner top, inspect for plugged ports, corrosion, or deterioration. Replace burner if necessary.   |
|                               | 3                 | Inspect for flame problems.  |
|                               | 4                 | Verify air shutter is clear of dust and debris and is in correct position for the gas type being used.   |
|                               | 5                 | Inspect orifice for soot, dirt, or corrosion   |
|                               | 6                 | Verify manifold and inlet pressures. Adjust regulator as required.   |
| Gas Hose with Regulator       | 1                 | The gas hose with regulator supplied with appliance must be used for LP installations. The replacement must be those specified by the appliance manufacturer |

## A. Service Parts List

| #  | Description of Part   | Part Number                                | Qty. |
|----|---|--|------|
| 1  | Burner Assembly   | SRV-BA-CF 20/1224/2424/1242                | 1    |
| 2  | Flex Tube   | SRV-FT-CF                                  | 1    |
| 3  | Orifice – NG/LP (#31) For CF-20(NG), CF-1224 (NG), CF-1242(whole-house LP)          | NGK-CF                                     | 1    |
| 4  | Orifice – NG (#17) For CF-2424  | NGK-17                                     | 1    |
| 5  | Orifice – LP (#36) For CF-2424  | LPK-36                                     | 1    |
| 6  | Orifice – NG(#21) For CF-1242   | NGK-21                                     | 1    |
| 7  | Orifice – LP (#43) For CF-1242 and CF-2424 (LP- 20lb tank) ,CF-20 (LP), CF-1224(LP) | LPK-43                                     | 1    |
| 9  | Red-handled replacement ball valve  | SRV-BV-CF                                  | 1    |
| 10 | Control panel for DIY or Outdoor GreatRoom Co. fire pit tables                      | CT-Control Panel                           | 1    |
| 11 | Electronic Piezo  | CF-Sparker                                 | 1    |
| 12 | Gas Hose with Regulator   | SRV-Hose-CF                                | 1    |
| 13 | Ignition Electrode CF-20/CF-1224/CF-2424/CF-1242                                    | CF-Electrode CF-20/CF-1224/CF-2424/CF-1242 | 1    |
| 14 | Replacement Glass for Crystal Fire (4lb bag)  | CF20-Glass                                 | 1    |
| 15 | CF20 Log Set  | CF20-Logs                                  | 1    |
| 16 | Grounding wire for Crystal Fires (All models)                                       | SPK-GND                                    | 1    |



For more information, you can visit us online at

[Http://www.OutdoorRooms.com](http://www.OutdoorRooms.com)

Or Call Us At:

1-866-303-4028

## B. Limited One Year Warranty



### The Outdoor GreatRoom Company Outdoor Products Limited Warranty

The Outdoor GreatRoom Company extends the following warranty for Outdoor GreatRoom outdoor products used in the United States of America or Canada. Dealers and employees of The Outdoor GreatRoom Company have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty. This warranty gives you specific legal rights. You may also have other rights that vary from state to state.

The Outdoor GreatRoom Company warrants that this Outdoor GreatRoom Outdoor Product (the "Product") will be free from defects in material and workmanship for a period of one year from its date of purchase. Stainless steel parts and assemblies carry a limited lifetime warranty. This warranty is subject to the conditions, exclusions and limitations described below.

This warranty applies only to the original owner of the Product and is non-transferable. The Outdoor GreatRoom Company obligation under this warranty does not extend to damages resulting from (1) assembly, operation or maintenance of the Product not in accordance with the Installation/Assembly Instructions, Operating Instructions and the Listing Agency Identification Label furnished with the Product; (2) installation or use which does not comply with local building codes and ordinances; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) use of fuels other than those specified in the Operating Instructions; (5) Installation or use of components not supplied with the Product or any other components not expressly authorized and approved in writing by The Outdoor GreatRoom Company; and/or (6) modification of the Product not expressly authorized and approved in writing by The Outdoor GreatRoom Company. Any of the circumstances described in the previous sentence voids this warranty. This warranty is void if the Product or any component has been removed, repaired, or replaced before The Outdoor GreatRoom Company has been afforded a reasonable opportunity to inspect the Product.

This warranty is limited to the replacement or repair of defective components or workmanship and The Outdoor GreatRoom Company may fully discharge its obligations under this warranty by repairing or replacing, at its discretion, the defective components. The Outdoor GreatRoom Company will provide replacement parts at no charge and will pay reasonable and necessary labor and freight costs related to replacing or repairing defective components under this warranty. The maximum amount recoverable under this warranty is limited to the purchase price of the Product and, if The Outdoor GreatRoom Company is unable to provide replacement or repair in an expedient and cost-effective manner, The Outdoor GreatRoom Company may discharge all obligations under this warranty by refunding the purchase price of the Product.

EXCEPT TO THE EXTENT PROVIDED BY LAW, THE OUTDOOR GREATROOM COMPANY MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO THE DURATION OF THE WARRANTY SPECIFIED ABOVE. IN NO EVENT SHALL THE OUTDOOR GREATROOM COMPANY BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY DEFECTS IN THE PRODUCT. Some states do not allow limitations on how long an implied warranty lasts, or do not allow exclusion or limitation of incidental or consequential damages, so these limitations may not apply to you.

#### **To obtain service under this warranty, you must:**

1. Send written notice of the claimed condition to: The Outdoor GreatRoom Company, 2015 Silver Bell Road, #195, Eagan, MN 55122.
2. Affirm that you are the original owner of the Product.
3. Provide The Outdoor GreatRoom Company reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Product prior to any repair or replacement work and before the Product or any component of the Product has been removed.