



THE OUTDOOR  
GREATROOM  
COMPANY

## Ready to Finish Outdoor Fireplace

Installation Instructions for All Ready to Finish  
See Through and Single-Sided Outdoor Fireplaces  
(RSTL & RLFP)





## IMPORTANT



Please consult your Crystal Fire® Plus instruction manual for detailed instructions and important information related to the burner installation including: lighting and operating instructions, safety information, and proper tightening of connections with two wrenches.

**DO NOT ATTEMPT TO INSTALL CRYSTAL FIRE® PLUS BURNER  
WITHOUT CONSULTING THE CRYSTAL FIRE® PLUS  
OWNER'S MANUAL.**

## CONTENTS

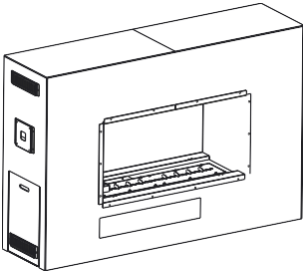
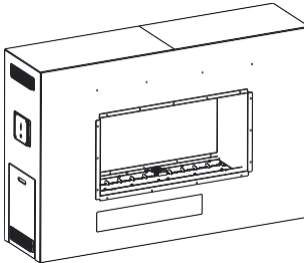


1. About Your Fireplace .....	2
a. Required Tools	
b. Included With Your Fireplace	
2. Assembly Instructions .....	3
a. Unpacking	
3. Setting Up Your Burner .....	4
a. VCSV System	
b. Natural Gas Connections	
c. Electrical Installation	
d. Burner Maintenance	
e. Self-Contained Propane Cylinder Installation	
f. Final Installation Steps	
4. Miscellaneous .....	8
a. Fire Media Installation	
b. Wind Guard Installation	
c. Finishing Free-Standing Installations	
d. Finishing Built-In Installations	
e. Finishing (Mantels and Special Cases)	
5. Operating Instructions .....	12
a. DSI Systems	
b. VCSV Systems	
6. Warnings .....	14

# 1. ABOUT YOUR FIREPLACE

## A. REQUIRED TOOLS

- Utility Knife -  
To cut and remove packaging
- 2 Open Ended Wrenches (*1X 7/8" Wrench and 1X 3/4" Wrench*)-  
To secure gas connections
- Phillips Screw Driver (*Do not use a drill to assemble*)-  
For assembly

## B. INCLUDED WITH YOUR FIREPLACE

RSTL	RLFP
 <p>Fully Assembled See-Through Fireplace with CFP DSI Burner (See Crystal Fire® Plus manual for size specifications) (1)</p>	 <p>Fully Assembled One-Sided Fireplace with CFP DSI Burner (See Crystal Fire® Plus manual for size specifications) (1)</p>
 <p>Set of Glass Wind Guards and Glass Guard Clip Hardware (1)</p>	 <p>Single Glass Panel and Glass Guard Clip Hardware (1)</p>

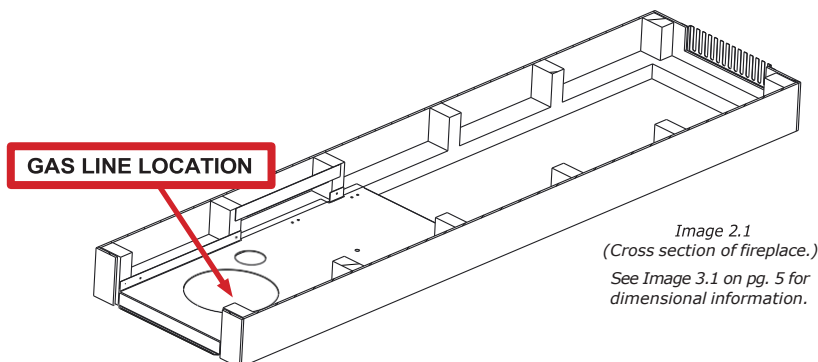
## 2. ASSEMBLY INSTRUCTIONS



Exposed edges may be sharp, use leather gloves when removing packaging and handling the base.

### A. UNPACKING

- Do not discard any packaging until assembly is complete and unit is tested.
- Keep all included manuals in a safe place for future reference.
- Two people are recommended to remove fireplace from packaging.
- Place fireplace in desired location. Refer to *Image 2.1* for recommended placement. It is recommended to place the large circular opening over the natural gas pipe if not using self-contained propane cylinder.



*Image 2.1*  
(Cross section of fireplace.)  
See *Image 3.1* on pg. 5 for  
dimensional information.

#### **NOTE:**

When installing over gravel/dirt, it is recommended that a vapor barrier be added under the appliance.

### 3. *SETTING UP YOUR BURNER*

#### ⚠ ATTENTION ⚠

Read and understand your Crystal Fire® Plus owner's manual before beginning burner hookups or using the device.

**DO NOT USE TEFLON TAPE OR PIPE DOPE ON FLARE FITTINGS.**

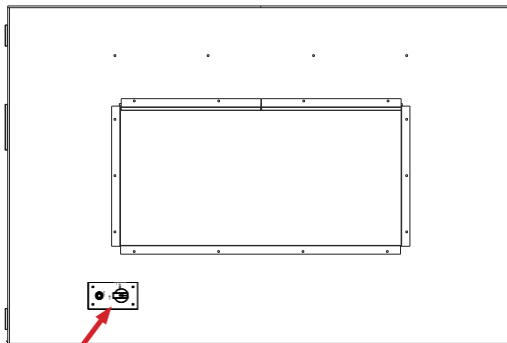
#### ⚠ IMPORTANT ⚠

Please consult your Crystal Fire® Plus instruction manual for detailed instructions and important information related to the burner installation including: lighting and operating instructions, safety information, and proper tightening of connections with two wrenches.

**DO NOT ATTEMPT TO INSTALL CRYSTAL FIRE® PLUS BURNER WITHOUT FIRST CONSULTING THE CRYSTAL FIRE® PLUS OWNER'S MANUAL.**

#### A. VCSV SYSTEM

- Fireplaces equipped with VCSV system, will have the control on the front face of the unit. It cannot be moved due to limitations of the thermocouple.
- VCSV-equipped fireplaces come setup standard for operation on LP and come with an NG conversion kit.

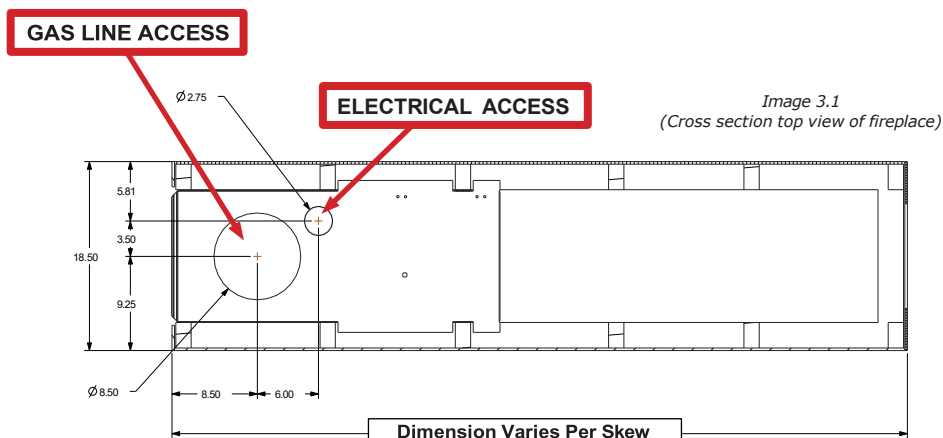


**CONTROL PANEL**

## B. NATURAL GAS CONNECTIONS

See Crystal Fire® Plus instructions for burner installation.

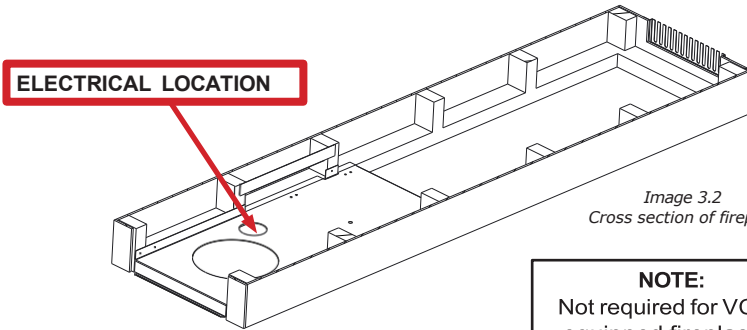
- All gas connections were completed at the factory. Performing a leak test on all connections is required.
- It is recommended that this unit is installed as hard piped.
- Check all connections for leaks. If needed, tighten connection with two wrenches and re-check for leaks.
- For hard piped installations: Position fireplace over gas line as shown in *Image 3.1*. Connect the gas supply line (*not included*) to the 1/2" male flare fitting on the valve. **USE TWO WRENCHES TO ENSURE A GAS TIGHT CONNECTION.**
- Run gas line pipe up through large round opening in bottom of base





## C. ELECTRICAL INSTALLATION

- Feed electrical wiring up through smaller hole in base pan as shown in *Image 3.2*. Wire electrical into junction box.

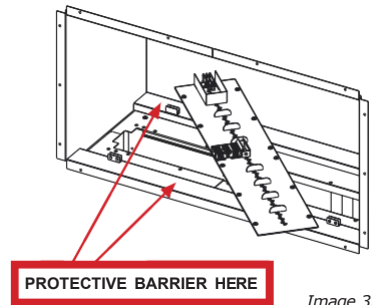


*Image 3.2*  
Cross section of fireplace.

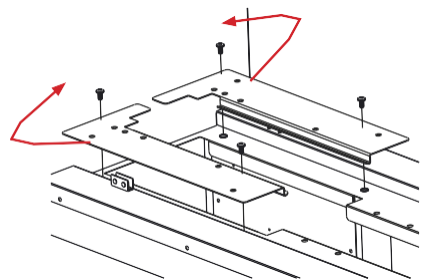
**NOTE:**  
Not required for VCSV  
equipped fireplaces.

## D. BURNER MAINTENANCE

- Before doing any maintenance on burner or DSI box, it is recommended to place a protective barrier, such as a towel or cardboard, over stainless steel caps.
- Carefully lift burner out of burner pan and rest on side caps as shown in *Image 3.3*.
- To access underneath burner, the access plate coverings can be removed. Using a phillips screwdriver, remove bolts holding access plate to pan as shown in *Image 3.4*. Carefully lift up both access plates and tilt inwards to remove. Take care not to scratch stainless steel interior side panels.
- Tighten all connections with two wrenches and perform a leak test after any burner or DSI maintenance.



*Image 3.3*



*Image 3.4*



## E. SELF-CONTAINED PROPANE CYLINDER INSTALLATION

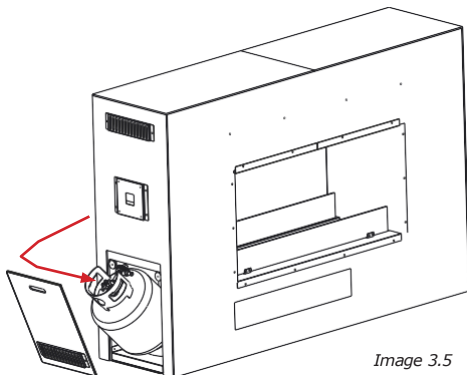


### ATTENTION



**HAND TIGHTEN, DO NOT USE A WRENCH FOR THIS CONNECTION.**

- Remove access door from end of fireplace.
- Using two wrenches, disconnect flex line and connect regulator hose. An adaptor can be purchased separately to allow propane regulator hose to attach to DSI. See reference materials at end of Crystal Fire® Plus Manual.
- Tilt self-contained propane cylinder and position within fireplace in large circular hole in base pan. As shown in *Image 3.5*.



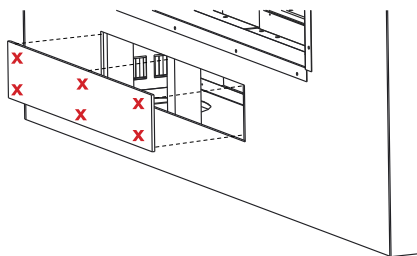
*Image 3.5*

### NOTE:

Self-contained propane cylinders can only be used with the RLFP-40 and RSTL-40

## F. FINAL INSTALLATION STEPS

- Once gas, electrical connections are made, and a leak test is performed, replace access panel on front of fireplace.
- Using supplied screws attach access panel to frame. Reference red "X's" in *Image 3.6* for screw locations.



*Image 3.6*





## 4. MISCELLANEOUS

### A. FIRE MEDIA INSTALLATION



#### WARNING

DO NOT OPERATE CRYSTAL FIRE® PLUS BURNER WITHOUT GLASS BEADS OR OTHER APPROVED FIRE MEDIA.

**Media not included with fireplace, a separate order is needed to obtain media.**

- Scatter glass beads, lava rock, or other approved fire media evenly across entire burner surface. See *Image 4.1*

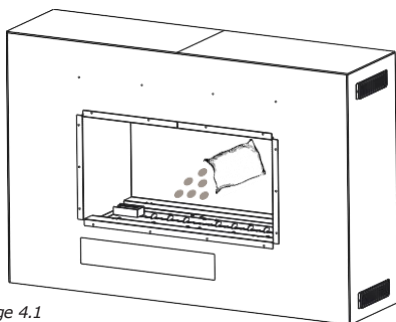


Image 4.1

#### Recommended Media Amounts

RLFP-40 RSTL-40	30 LBS.
RLFP-60 RSTL-60	40 LBS.
RLFP-72 RSTL-72	50 LBS.

### B. WIND GUARD INSTALLATION

- Install glass guard clip screws into backside of glass guard clips.
- Place spacer into glass guard clip as shown in *Image 4.2*.
- Carefully lower glass wind guards into glass guard clips as shown in *Image 4.3*.

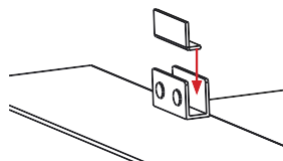


Image 4.2

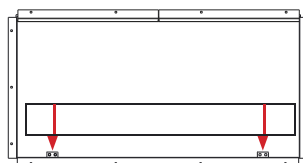


Image 4.3

Using a Phillips screwdriver, lightly tighten the clip screws.

Do not overtighten.

## C. FINISHING FREE-STANDING INSTALLATIONS

### ⚠ ATTENTION ⚠

Care must be taken around stainless steel interior parts.  
Stainless steel can be easily scratched.

Fireplace is designed to be custom finished. Interior frame studs can be located by screw location on front and back of fireplace. Reference the red "X's" in *Image 4.4* below.

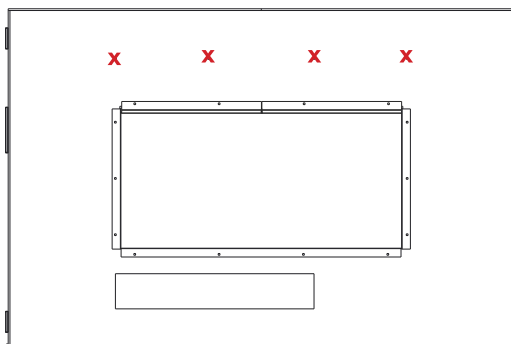


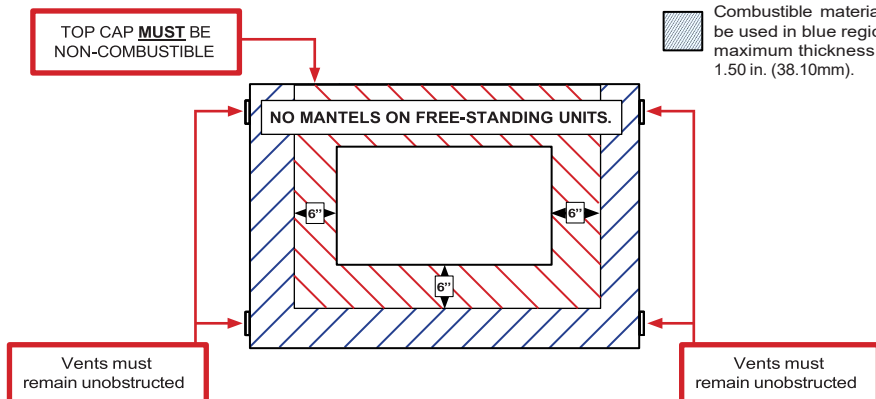


Image 4.4

### ⚠ WARNING ⚠

If these clearance requirements are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

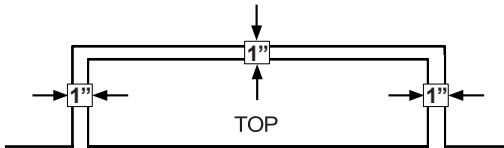
-  Non-combustible materials **ONLY** in red region
-  Combustible materials can be used in blue region with maximum thickness of 1.50 in. (38.10mm).



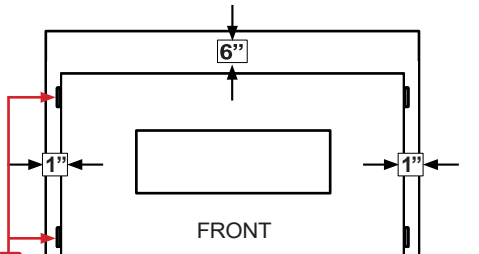
## D. FINISHING BUILT-IN INSTALLATIONS

### ⚠ WARNING ⚠

If these clearance requirements are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.



- 1 in. clearance on back and sides for single-sided units.
- 1 in. clearance on sides for see through units.
- Side gaps should be filled with non-combustible sheeting material.



- 6 in. clearance are required above appliance.
- 1 in. clearance on sides for see through units.

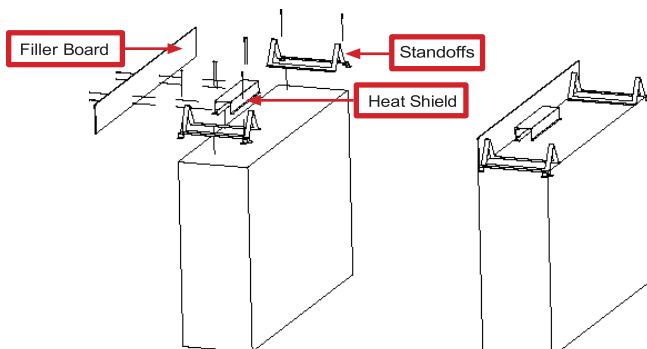
Vents must remain unobstructed

- Vents can be moved to front or near of appliance to provide for required air movement.

If built into an enclosure/chase, the enclosure/chase needs to be ventilated to the outside. The vents on the appliance can be removed and applied to enclosure.

#### NOTE:

Standoff kits are available for purchase to assist in the framing process to ensure compliance with these clearance to combustible requirements. **They are specific to the length and configuration of the fireplaces.**



#### Part Numbers:

RSTL-40-SO

RSTL-60-SO

RSTL-72-SO

RLFP-40-SO

RLFP-60-SO

RLFP-72-SO

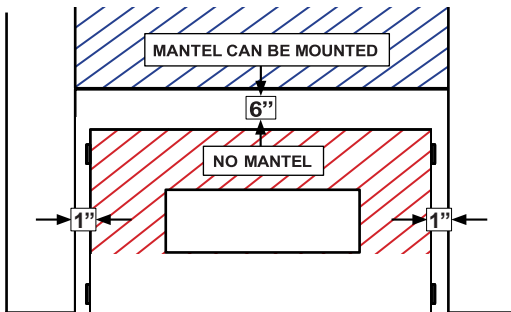


## E. FINISHING (MANTELS AND SPECIAL CASES)

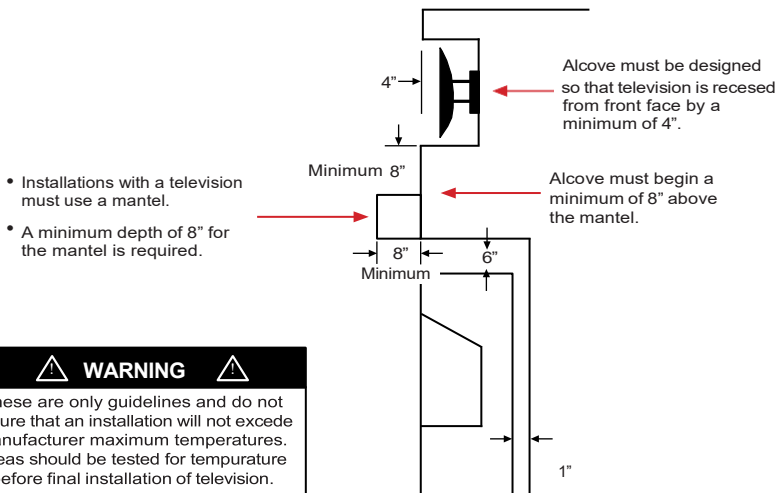
### ⚠ WARNING ⚠

If these clearance requirements are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Mantels should not be mounted directly to appliance. ONLY NON-COMBUSIBLE mantels should be installed above appliance firebox opening.



- A hearth can be installed below fireplace opening, but all other clearance requirements must be met.
- If installing a television over the appliance, these guidelines will serve as a best practice guide, but each television is different and may have different temperature requirements. Refer to television manufacturer for specific installation guidelines.



### ⚠ WARNING ⚠

These are only guidelines and do not ensure that an installation will not exceed manufacturer maximum temperatures. Areas should be tested for temperature before final installation of television.

The Outdoor Greatroom Company accepts no liability for installations with televisions that do not meet the manufacturers maximum temperature requirements.



## 5. OPERATING INSTRUCTIONS



### IMPORTANT



**Before operating your fireplace, ensure all gas connections are properly tightened and thoroughly leak checked. Refer to the Crystal Fire® Plus manual for information on proper leak checking and other critical safety information.**



### WARNING



#### FIRE OR EXPLOSION HAZARD

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

### A. DSI SYSTEM

Verify control switch is in OFF position. *See Image 5.1.*

If operating on a self-contained propane cylinder, ensure cylinder valve is CLOSED. If operating on a hard-piped system, ensure main gas supply shut-off valve and all other valves in gas system are OPEN.

If operating on a self-contained propane cylinder, slowly open cylinder valve.

Turn control switch to ON position. A 1-2 second delay will occur while control module runs diagnostics. Sparking will then occur at the ignition electrodes. *See Image 5.2.* Gas valve will open and burner will ignite.

If burner does not ignite within 12 second ignition window, turn control switch to OFF position and wait 5 minutes to allow gas to dissipate before attempting ignition again. **DO NOT ATTEMPT TO LIGHT BURNER IF YOU SMELL GAS.**

While burner is operating, the DSI system will continuously monitor the presence of a flame. If flame signal is lost, the system will attempt re-ignition for up to 12 seconds. If flame signal is lost for more than 12 seconds, the system will shut down.

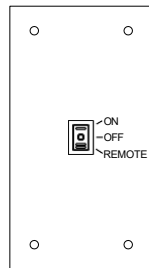


Image 5.1

SPARK LOCATION

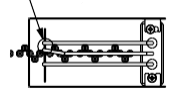


Image 5.2

### TO EXTINGUISH

Turn control switch to OFF position. *See Image 5.1*

If using a self-contained propane cylinder, close valve.  
outdoorrooms.com

## B. VCSV SYSTEM



### WARNING



#### FIRE OR EXPLOSION HAZARD

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

Verify control valve is in OFF position. *See Image 6.1.*

If operating on a self-contained propane cylinder, ensure cylinder valve is CLOSED. If operating on a hard-piped system, ensure main gas supply shut-off valve and all other valves in gas system are OPEN.

If operating on a self-contained propane cylinder, slowly open cylinder valve.

Press and hold sparker button. Verify an audible and visible spark is present within the ignition wind guard. *See Image 6.2.*

Gently press and turn control knob to LOW/IGNITION position. Fully depress control knob and hold for 3-5 seconds. *See Image 6.3.* Burner should ignite and continue to operate when control knob is released.

If burner does not light or remain lit after 20 seconds of attempting ignition, turn control valve to OFF position and wait 5 minutes to allow gas to dissipate before attempting ignition again. **DO NOT ATTEMPT TO LIGHT BURNER IF YOU SMELL GAS.**

With burner lit and operating, the flame height can be adjusted between LOW and HIGH at any time. *See Image 6.4.*

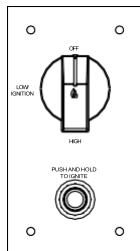


Image 6.1

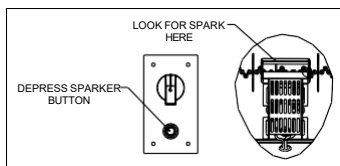


Image 6.2

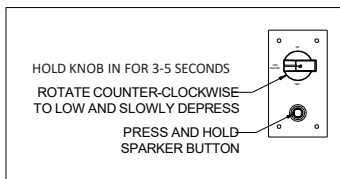


Image 6.3

### TO EXTINGUISH

Turn control knob to LOW/IGNITION position. Then gently depress control knob and turn to OFF position. *See Image 7.1.*

If using a self-contained propane cylinder, close valve.

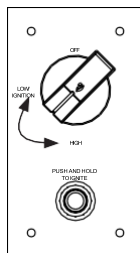


Image 6.4



## 6. WARNINGS



### IMPORTANT



Please consult your Crystal Fire® Plus instruction manual for detailed instructions and important information related to the burner installation including: lighting and operating instructions, safety information, and proper tightening of connections with two wrenches.

**DO NOT ATTEMPT TO INSTALL CRYSTAL FIRE® PLUS BURNER WITHOUT FIRST CONSULTING THE CRYSTAL FIRE® PLUS OWNER'S MANUAL.**



### WARNING



**After consulting the manual and following instructions, remember: before operating, all gas connections must be fully checked for leaks.**



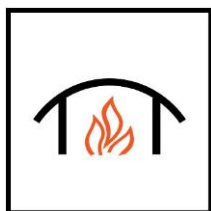
WARNING: This product can expose you to chemicals including Carbon Monoxide and Benzene which are known to the State of California to cause cancer or birth defects or reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Thank you for purchasing an  
Outdoor GreatRoom Company  
product! This outdoor fireplace  
was made with pride in the USA.



**Warranty:** Outdoor fireplaces are covered under a 5-year  
manufacturer's warranty.

Please visit <http://www.outdoorrooms.com/product-registration>  
to register your product.



14400 Southcross Drive West • Suite 100 • Burnsville, MN 55306  
Toll Free: 1-866-303-4028 • [Sales@OutdoorRooms.com](mailto:Sales@OutdoorRooms.com)