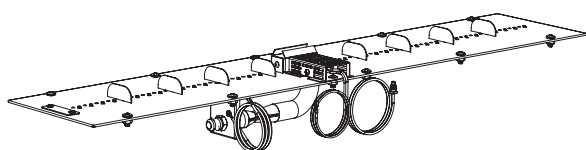
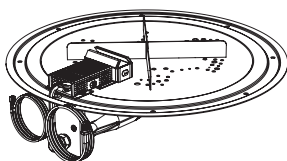


# INSTALLATION, OPERATION AND MAINTENANCE MANUAL



LINEAR GAS BURNER: **G37T**  
ESF.2.B.G37 7.5lbs/3.4kg



ROUND GAS BURNER: **G16T**  
ESF.2.B.G16 5.5lbs/2.5kg

**INSTALLER:** Leave manual with the appliance. **CONSUMER:** Retain this manual for future reference.

## CAUTION

### DO NOT DISCARD THIS MANUAL

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

## ! DANGER !

### If you smell gas:

- Shut off gas to the appliance.
- Extinguish any open flame.
- If odor continues, keep away from the appliance and immediately call your gas supplier or fire department.
- After leaving the area, call your gas supplier or fire department.
- Failure to follow these instructions could result in fire, or explosion, which could cause property damage, personal injury or death.

## ! WARNING !

Do not store or use gasoline, or other flammable vapors and liquids, in the vicinity of this or any other appliance.

An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

## ! 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.

## ! DANGER !



### CARBON MONOXIDE HAZARD

This appliance can produce carbon monoxide which has no odor.

Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car or home.

## ! 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.

## ! WARNING !

For outdoor use only. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

**⚠ DANGER: FLAMMABLE GAS UNDER PRESSURE.**  
**LEAKING LP-GAS MAY CAUSE A FIRE OR EXPLOSION IF IGNITED**  
**CAUSING SERIOUS BODILY INJURY OR DEATH.**  
**CONTACT LP GAS SUPPLIER FOR REPAIRS, OR DISPOSAL OF A**  
**CYLINDER OR UNUSED LP-GAS.**

**⚠ WARNING: FOR OUTDOOR USE ONLY.\***

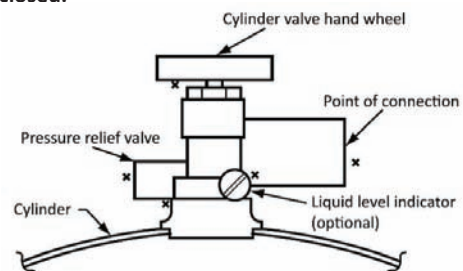
**DO NOT USE OR STORE CYLINDER IN A BUILDING,**  
**GARAGE, OR ENCLOSED AREA.**

**⚠ WARNING:**

- Know the odor of LP-gas. If you hear, see, or smell leaking LP-gas, immediately get everyone away from the cylinder and call the Fire Department. Do not attempt repairs.
- Caution your LP-gas supplier to:
  - Be certain cylinder is purged of trapped air prior to first filling.
  - Be certain not to over fill the cylinder.
  - Be certain cylinder requalification date is checked.
- LP-gas is heavier than air and may settle in low places while dissipating.
- Contact with the liquid contents of cylinder will cause freeze burns to the skin.
- Do not allow children to tamper or play with cylinder.
- When not connected for use, keep cylinder valve turned off. Self-contained appliances shall be limited to a cylinder of 30 lb. capacity or less.
- Do not use, store or transport cylinder where it would be exposed to high temperatures. Relief valve may open allowing a large amount of flammable gas to escape.
- When transporting, keep cylinder secured in an upright position with cylinder valve turned off.

**WHEN CONNECTING FOR USE:**

- Use only in compliance with applicable codes.
- Read and follow manufacturer's instructions.
- Consult manufacturer's instructions concerning the cylinder connection provided with your appliance.
- Be sure the regulator vent is not pointing up.
- Turn off all valves on the appliance.
- Do not check for gas leaks with a match or open flame. Apply soapy water at areas marked "X". Open cylinder valve. If bubbles appear, close valve and have LP-gas service person make needed repairs. Also, check appliance valves and connections to make sure they do not leak before lighting appliance.
- Light appliance(s) following manufacturer's instructions.
- When appliance is not in use, keep the cylinder valve closed.



**DO NOT REMOVE, DEFACE, OR OBLITERATE THIS LABEL**  
**\*EXCEPT AS AUTHORIZED BY ANSI/NFPA 58**

**⚠ DANGER:** Do not store a spare LP cylinder under or near a barbecue grill, or other heat sources. NEVER fill an LP cylinder beyond 80% full: a fire causing death or serious injury may occur.



## LISTING AND CODE APPROVALS

### A. Appliance Certification

**MODEL:** ESF.2.B.G37, ESF.2.B.G16  
**LABORATORY:** Underwriters Laboratories, Inc. (UL)  
**TYPE:** Decorative Gas-Fired Outdoor Fireplace  
**STANDARD:** Outdoor Decorative Gas Appliances  
 ANSI Z21.97-2017  
 CSA 2.41-2017

This appliance has been tested in accordance with ANSI Z21.97-2017 and CSA 2.41-2017 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, ANSI Z223.1 \* NFPA 54 National fuel gas code – Natural gas and propane installation code, CSA B149.1 – or propane storage and handling code, CSA B149.2

The appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70; or the Canadian Electrical Code, CSA C22.1, if applicable.

### B. BTU Specifications

Model	Orifice Size		Max Input BTU	
	LP	NG	LP	NG
G16T ESF.2.B.G16	#40 (Burner) #52 (Valve)	#29 (Burner) #43 (Valve)	Low: 25,000 BTU/h High: 65,000 BTU/h	
G37T ESF.1.B.G37				
	PROPANE		NATURAL GAS	
IDEAL INLET PRESSURE	11 in. WC (2.74 kPa)		7 in. WC (1.74 kPa)	
MAXIMUM INLET PRESSURE	14 in. WC (3.48 kPa)		10.5 in. WC (2.61 kPa)	
MINIMUM INLET PRESSURE	8 in. WC (2.00 kPa)		3.5 in. WC (0.87 kPa)	

## EDUCATE ALL USERS

Manuals can be found on our website or by contacting your local distributor.

## WHY REGISTER YOUR WARRANTY?

Registering your warranty achieves more than simply activating your warranty - it provides our head office with the information that we require in order to communicate important safety and regulatory information to you should the need arise.

This could include things like:

- Prompt notification in the unlikely event of a potential hazard,
- Reminders about regular safety steps and maintenance procedures,
- New model announcements or accessories that suit or enhance your purchase.

It is important that we are able to communicate effectively with our customers as part of our commitment to continual improvement, consumer safety and property protection.

If you purchased your product through an external distributor, retailer or agent. MAD Design USA does not have these details on file and may have trouble sourcing them as systems and best practices vary from business to business.

Please register your warranty today. You can do this online at [www.ecosmartfire.com](http://www.ecosmartfire.com) or by sending through your details as itemized on page 24 via email to [info@mad-usa.com](mailto:info@mad-usa.com).

### MAD Design USA

5875 Green Valley Circle, Suite 100  
 Culver City CA 90230  
 T + 1 (888) 590.3335  
 E [info@mad-usa.com](mailto:info@mad-usa.com)

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## Markings

### 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.

### DECORATIVE OUTDOOR GAS-FIRED BURNER



MH60943  
Outdoor Fireplace

**This burner is for installation within approved models ONLY and is not to be installed into custom designs.**

**Model:** EcoSmart Fire GB Series  
ANSI Z21.97-2017 and CSA 2.41-2017 for Canada. Installation must conform with local codes or in the absence of local codes, ANSI Z223.1 \* NFPA 54 National Fuel Gas Code – Natural gas and propane installation code, CSA B149.1 – or propane storage and handling code CSA B149.2

**Type of Gas:** Natural Gas, Propane Gas

**WARNING:** Must Not Be Used For Cooking.

**WARNING:** For Outdoor Use Only. If stored indoors, detach and leave cylinder outdoors. To be installed by an authorized person in accordance to appliance installation instructions.

**MINIMUM CLEARANCES:** Top: 6 Ft. [72"] (1829mm)  
Sides: 2 Ft. [24"] (610mm) Bottom: 8" (203mm)

Minimum clearance from sides and back of unit to adjacent combustible construction below top of unit is 8" (203mm) from sides and 8" (203mm) from back.

Minimum horizontal clearance from sides and back of unit to adjacent vertical combustible construction extending above top of unit is 24" (610mm) from sides and 24" (610mm) from back.

MFG. DATE XX/XX

SERIAL # XXXX DATE DE FAB. XX/XX

Model	Orifice Size		Max Input BTU	
	LP	NG	LP	NG
G16T ESF2.B.G.16	#40 (Burner) #52 (Valve)	#29 (Burner) #43 (Valve)	Low: 25,000 BTU/h High: 65,000 BTU/h	
G37T ESF1.B.G.37				

	PROPANE	NATURAL GAS
IDEAL INLET PRESSURE	11 in. WC (2.74 kPa)	7 in. WC (1.74 kPa)
MAXIMUM INLET PRESSURE	14 in. WC (3.48 kPa)	10.5 in. WC (2.61 kPa)
MINIMUM INLET PRESSURE	8 in. WC (2.00 kPa)	3.5 in. WC (0.87 kPa)

**⚠ WARNING ⚠**

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

**EcoSmart Inc**  
5875 Green Valley Circle  
Suite 100, Culver City  
CA 90230

### FOR YOUR SAFETY, READ BEFORE LIGHTING BURNER

**EcoSmart Inc**  
5875 Green Valley Circle  
Suite 100, Culver City  
CA 90230

**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 is equipped with a safety ignition and shutdown device, but must be lit manually. When lighting, follow these instructions exactly.

B. BEFORE LIGHTING, smell around the appliance area for gas. Be sure to smell next to the floor 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 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.

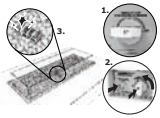
C. Use only your hand to operate the control valve. Never use tools. If the control valve will not operate by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in unwanted operation.

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 of the control system and any gas control which has been underwater.

**CAUTION:** The supplied propane regulator hose must be used for all 20lb (9kg), self-contained propane cylinder installations. The regulator is set for an outlet pressure of 10/5 in WC (2.61 kPa).

**OPERATING INSTRUCTIONS**

- STOP! Read the safety information above on this label.
- This appliance is equipped with a safety ignition and shutdown device, but must be lit manually. When lighting, follow these instructions exactly.
- Ensure that the control valve is in the "OFF" position
- For self-contained propane cylinder installations, slowly open the valve on the cylinder by rotating counter clockwise. For hard-piped installation, ensure that all manual shut-off valves on the supply line are open.
- Press and hold sparker button. Verify that an audible and visible spark is present inside the ignition wind guard.
- Gently press and turn the control knob counter-clockwise to the "LOW/IGNITION" position. Fully depress the knob and hold for 3-5 seconds until ignition is proven and the burner remains lit when the knob released.
- If burner does not light after 10 seconds of attempting ignition, turn the valve clockwise to the "OFF" position and wait 5 minutes to allow gas to dissipate before attempting ignition again. NO NOT attempt to light burner if the smell of gas is present.
- With proven ignition, the burner can be adjusted between "LOW" and "HIGH" by rotating the control knob.



**TO TURN OFF GAS TO APPLIANCE**

- Turn the control knob clockwise to the "LOW/IGNITION" position, if not already there. Then gently depress the knob and turn clockwise to the "OFF" position.
- For self-contained propane cylinder installations, turn the cylinder valve clockwise to close it completely and disconnect the propane regulator hose from the cylinder.

**⚠ WARNING ⚠**

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other gas appliance. An LP-cylinder not connected for use shall not be stored in the vicinity of this or any other gas appliance.

## Important Safety Information

### PROP 65 WARNING

#### Cancer and Reproductive Harm

The use of this product, as well as by-products of the combustion of propane, natural gas and/or ethanol, contain chemicals known to the State of California to cause cancer and/or other reproductive harm.

The Safe Drinking Water and Toxic Enforcement Act of 1986 referred to as Proposition 65, requires the State of California to publish a list of chemicals known to cause cancer, birth defects or reproductive harm. It also requires California business to warn the public of potential exposures to these chemicals which result from the products they use, make or distribute. This list, which must be updated at least once a year, has grown to include approximately 900 chemicals since it was first published in 1987.

The use of this product and/or the combustion of fuels, such as propane, natural gas, and/or ethanol in this product can expose you to harmful chemicals including formaldehyde, which are known to the State of California to cause cancer, and harmful chemicals including acetaldehyde, which are known to the State of California to cause birth defects and/or other reproductive harm. For more information go to [www.P65Warnings.ca.gov/](http://www.P65Warnings.ca.gov/).

The Company encourages you to use its products and propane, natural gas and/or ethanol safely. You must read and follow all use, care and manufacturer instructions for all products

## Important Safety Information

Congratulations on your purchase of this decorative gas appliance. The appliance you have selected is designed to provide safe operation, reliability and efficiency.

This manual contains instructions for the safe installation and use of your new gas appliance. Before installing and using this appliance, read the entire manual and follow the instructions and warnings carefully.

This owner's manual should be retained for future reference. If you are the installer (and not the owner) please ensure that this manual is given to the owner for them to learn about safe operation of the appliance and for future reference.

This appliance is a Decorative Gas Appliance for **OUTDOOR USE ONLY** and **MUST NOT** be used for cooking. Do not burn solid fuels in this appliance.

This gas burner is for installation within approved models **ONLY** and is not to be installed into custom designs.

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

Keep children away from the appliance. Never leave children unsupervised when the fire is operating.

In case of emergency, have on hand a multi purpose dry chemical type fire extinguisher (ABC in USA).



### 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.



### WARNING

It is imperative the burner be kept clean



### WARNING

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



Installation and service of this appliance should be performed by qualified personnel. We recommend NFI certified, factory-professionals, or technicians supervised by an NFI certified professional.

### 1. EXPLOSION/FIRE HAZARD

- i. Do not operate in an area with oxygen tanks in use or if flammable vapors are present.
- ii. Never smoke while lighting the appliance.

### 2. LOCATING THE FIRE

- i. Ensure there is enough ventilation for safe operation.
- ii. Locate the appliance away from combustible materials by observing the minimum clearance distances depicted in this manual especially for items susceptible to movement.
- iii. Locate the gas hose out of pathways where people may trip over it or in areas where the hose may be subject to accidental damage.
- vi. Place the appliance on solid, flat, level surface and where it will not get excessively wet or submerged in water.

### 3. OPERATING THE FIRE

- i. Do not use if damaged or malfunctioning.
- ii. For decorative purposes only. Not suitable for continuous operation. Do not use the appliance to heat or boil water or as a cooking appliance. Do not put wood, charcoal, paper or other combustible objects in the Fire.
- iii. MAD Design USA is not liable for any damage caused by using the incorrect type of fuel.
- vi. **NEVER** leave a fire unattended.

### 4. HOT SURFACE HAZARD

- i. Due to high surface temperatures, keep children, pets, clothing and furniture away from the unit for up to 1 hour of use, as the unit is hot while in operation, contact with the appliance may cause skin burns.

### 5. USING ACCESSORIES

- i. Use only *authorised* accessories with your appliance.
- ii. To reduce the risk of fire or injury, do not modify the appliance in any way.
- iii. The Burner has not been tested with an unvented gas log set. To reduce the risk of fire or injury, do not install an unvented gas log set into this appliance.

For decorative media you must:

- Ensure the decorative media does not interfere with the burner parts.
- Confirm quality and suitability to ensure the media will not explode, emit carbon monoxide or fumes when exposed to extreme temperature variations.
- Fire accessories must not be smaller than 1/2in (12.7mm) diameter so that the accessories cannot impede the burner parts.

- iv. Do not use fittings or spare parts, other than those available from or recommended by the manufacturer of this appliance.

If you have any questions regarding any of the above important safety information please contact your retailer or MAD Design USA.

Please store these warnings in a safe place for future reference.

## Clearances

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

### Environmental Conditions

**WARNING: Ensure that your fire is positioned away from flammable materials and other sources of ignition (combustible materials, gasoline and other flammable vapors and liquids) at all times. Pay very close attention to positioning the fire away from items that may move as a result of wind and drafts. For example trees/branches/curtains/paper and the like.**

The base of the burner within the model must never come into direct contact with flammable materials.

### Locating your appliance

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance and the LP tank cover on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of ½" (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

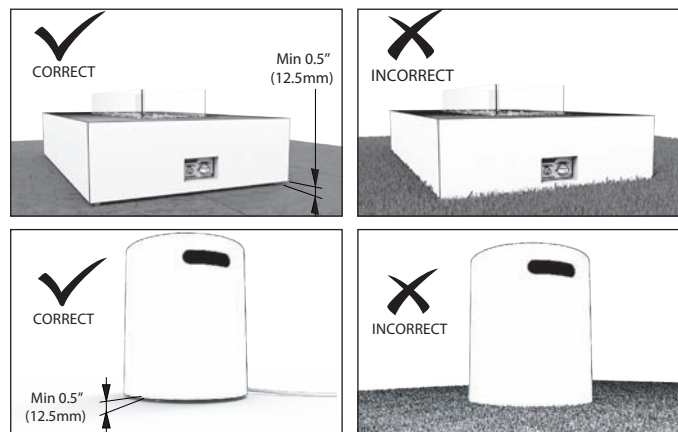


Figure 1

Position the appliance 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.

### Minimum Clearances

**Note: Measurements are distances closest to the flame**

Side clearances to fixed and stable furniture items that are not susceptible to movement such as lounges or patio furniture must remain a minimum of 24in (610mm) away from the flame at all times.

Overhead clearances to items that are susceptible to movement (e.g. Curtains/Trees) must remain a minimum of:  
- 78.7in (2000mm) away from the flame at all times.




Ceiling clearances must remain a minimum of:  
- 72in (1,829mm) to overhang from top of burner.




Please note that:

Any furniture items or fittings directly above or beside the Burner installation must be deemed suitable for heat tolerances by their manufacturer e.g. electronic items including screens and entertainment equipment, wallpaper, laminates, veneers, glues and reconstituted materials.

MAD Design USA is not liable for any injuries or damages sustained through any installation not in compliance with this manual.

**A fire extinguisher is strongly recommended.**

 <b>WARNING</b> 	
	<p>MAD Design USA disclaims any responsibility for, and the warranty will be voided by, the following actions:</p> <ul style="list-style-type: none"> <li>• Installation and use of any damaged components.</li> <li>• Modification of the burner assembly or burner orifice.</li> <li>• Installation other than as instructed in this manual.</li> </ul>
<p><b>Any such action may cause a fire hazard</b></p>	

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

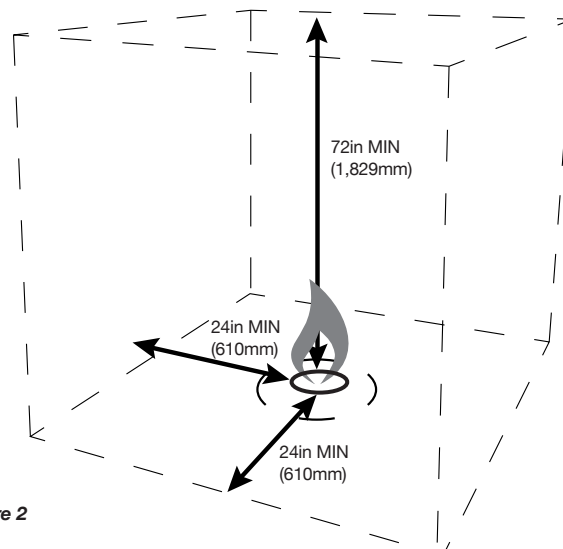


Figure 2

Clearance measurements are distances from the edge of the flame, not from the centre.



# Before You Start

## Tools and Supplies

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
- Adjustable wrenches (2X)
- 1 AAA battery
- 10mm Wrench
- 11mm Wrench (for NG conversion only)
- Flat screwdriver

## Initial Safety Inspections



Before assembling the appliance it is important to inspect the following and determine if it is safe to proceed:

- Carefully remove all burner components from packaging.
- 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. Do not use parts other than those 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. Do not use parts other than those 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.

The location for the installation must be out of the pathways where people may trip over it or in areas where the hose may be subject to accidental damage.

### In addition, for LP Gas Models:

- Be certain to mount or set the LP gas cylinder on a flat stable surface and restrain it to prevent it from tipping.
- 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.
- **Once assembled, position the hose** out of pathways where people might trip over it or in areas where the hose might be subject to accidental damage.

**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

**CAUTION**

**Sharp Edges**

Wear protective gloves and safety glasses during installation.

**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.



## Gas Hookup

### Fuel

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

### 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 PSI.

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

Manifold 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 must be disconnected from the gas supply piping system during any pressures in excess of ½ psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).

### 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) ¾ in (9.5mm). T-handle manual shut-off valve and flexible gas connector are connected to the ¾ in (9.5mm) control valve inlet.

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

Incoming gas line should be piped to the ¾ in (9.5mm) 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.

**CAUTION:** 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 Ignitor 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-check solution. Be sure to rinse off all leak-check solution.

Fittings and connections may have loosened during shipping and handling

## Gas Hookup

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### LP Gas Supply

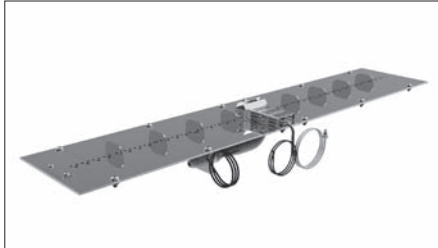
- The pressure regulator and hose assembly supplied with LP models must be used. Replacement pressure regulators and hose assemblies must be those specified in this manual.
- The LP gas supply cylinder used with LP models must be constructed and marked in accordance with the specifications for LP gas cylinders of the U.S. Department of Transportation (DOT). Specifications for LP-Gas Cylinders, or the Standard for Cylinders, Spheres and Tubes for Transportation of Dangerous Goods and Commission, CAN/CSA-B339, as applicable
- 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, LICENSED TECHNICIAN OR THE GAS SUPPLIER.**

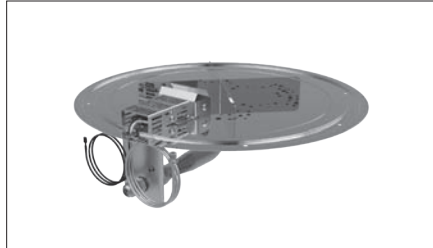
## Standard Equipment Received

Please ensure that all items have been received. The burners include the minimum equipment required to operate the burner safely.

### Burners

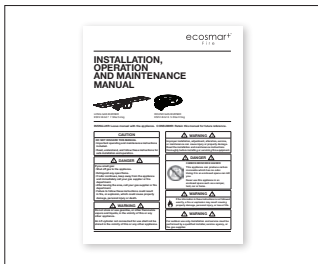


Linear Gas Burner - ESF.2.B.G37



Round Gas Burner - ESF.2.B.G16

### Included items



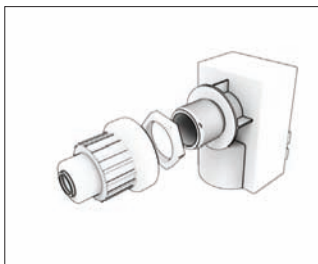
Operations Manual



**G16:** LP - Orifice #40 (burner), #52 (valve), NG - #29 (burner), #43 (valve)  
**G37:** LP - Orifice #40 (burner), #52 (valve), NG - #29 (burner), #43 (valve)



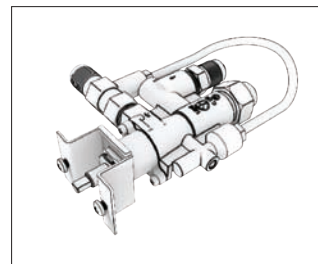
LP Hose & Regulator (10')



Sparker Box



Grounding Wire 36"  
 (ships connected to burner)



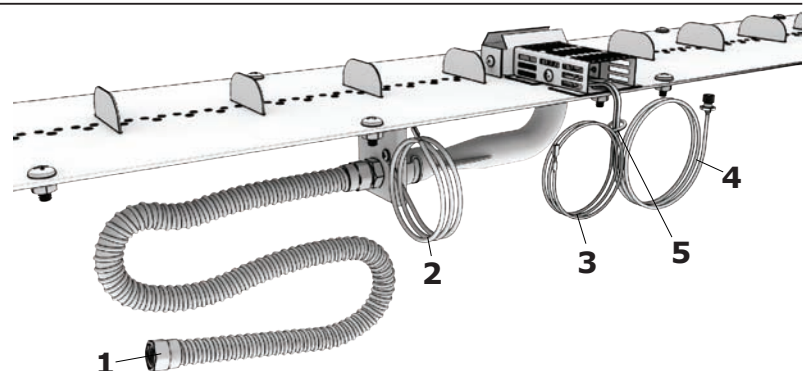
Valve and Screws  
 (to connect to the control panel plate)



Key and Control Knob

### Locating supplied parts

1. Flex hose
2. Grounding Wire
3. Ignition Wire
4. Thermocouple Wire
5. Silicone Grommet

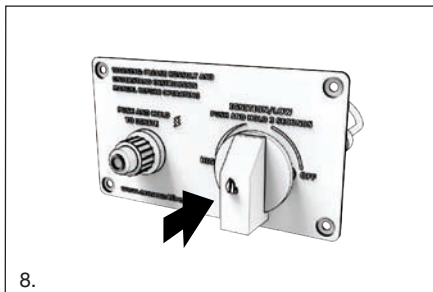
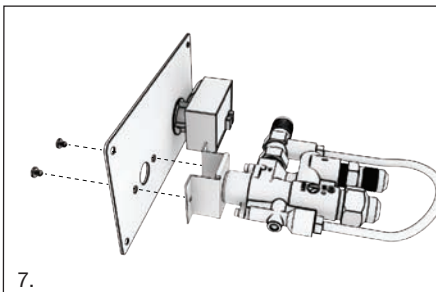
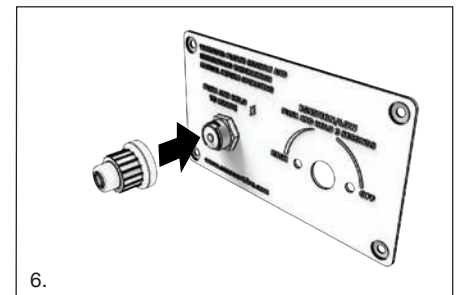
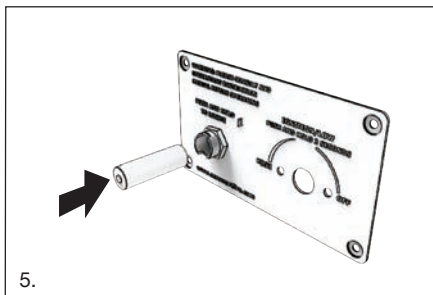
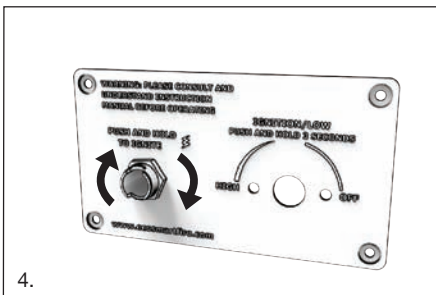
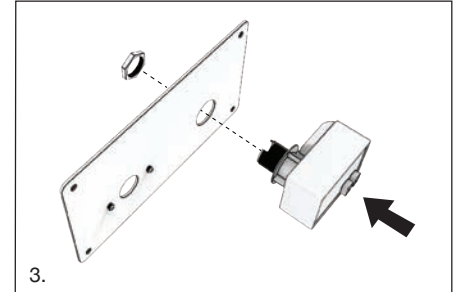
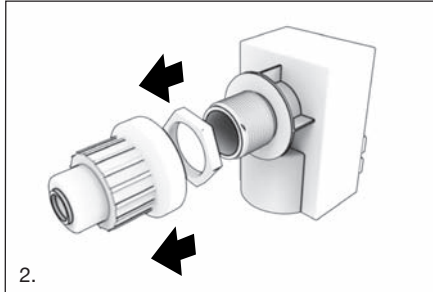
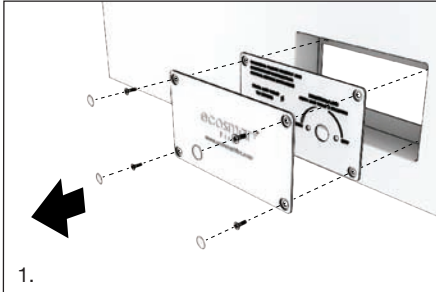


## Standard Equipment Received

### Assembling the control panel

Confirm you have received all necessary parts as illustrated on page 9.

1. Locate the EcoSmart cover plate on the unit, remove the four(4) plastic screw caps and unscrew the cover plate from the unit.  
Keep the four screws and screw caps. The gas control panel plate should be directly behind the EcoSmart cover plate. The EcoSmart cover plate is no longer needed.
2. Remove the sparker cover and plastic nut from the sparker box.
3. Place the sparker box behind the control panel plate and insert the sparker box into the control panel plate.
4. From the front of the control panel plate, secure the sparker box by attaching the plastic nut.
5. Insert AAA battery, ensuring the + direction of the battery is facing outward when installed.
6. Screw on the sparker cover to hold the battery in place.
7. Attach the control valve to the back of the control panel plate using the provided screws. The valve must be installed with orientation as shown.
8. Install the turn Knob.

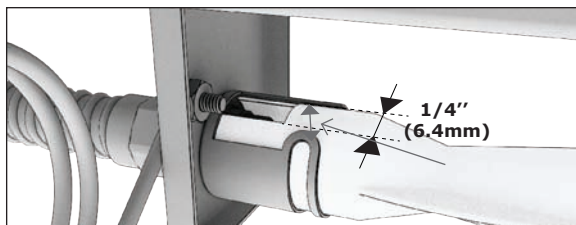


## Burner Assembly - Propane

### PROPANE

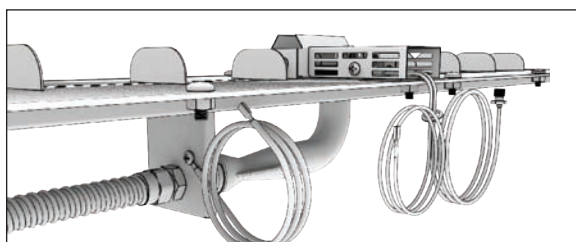
1. Unpack burner box. Remove all items and check against the items listed on page 9 of the manual to ensure all parts needed are ready.

2. **THE BURNER IS SHIPPED FOR PROPANE FUEL SOURCE.** Verify that you have the correct orifice installed by checking it against the fuel orifice chart on page 1. The orifice has the number stamped on the side. Once confirmed, check that the attached flexible gas line is tightly attached. Ensure that the air shutter is open 1/4" (6.4mm) on each side of the air shutter.

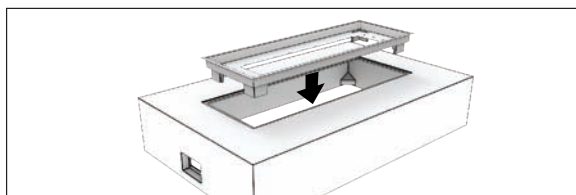


3. Ensure ignitor wire is secured to bottom of Ignitor.

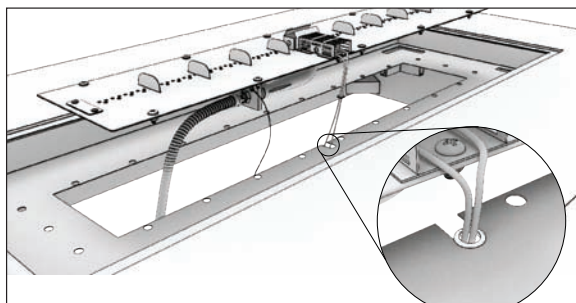
4. Ensure grounding wire is secured to bottom of burner.



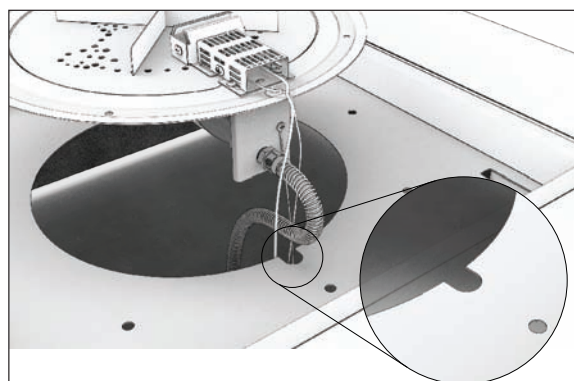
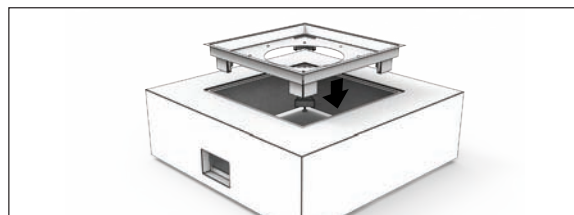
5. **Linear burners only:** (this step is not required for round burners) Carefully place the Metal tray into the unit opening.



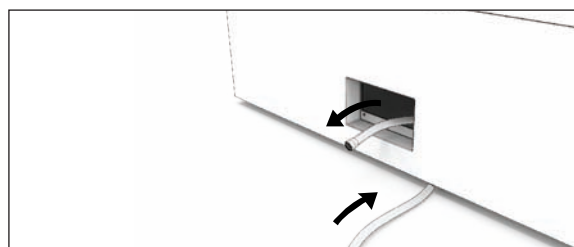
6. Position the burner assembly so that the gas input flexible line (where the orifice is located) is pointing towards the control plate cutout location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible gas line, thermocouple tube, grounding wire and the ignitor wire through the burner location opening first then place lower the burner into its final location. Install the grommet by sliding it into the slot, place the burner into its final position.



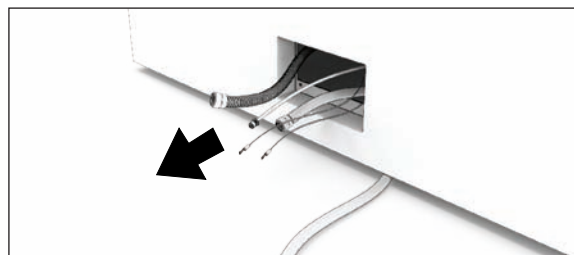
7. **Round burners only:** (this step does not apply to linear burners) insert the metal tray to the Surround Unit. Carefully place the burner on the Surround Unit near the tray opening – without inserting the burner into the final location. Rotate the burner to make sure the thermocouple tube is aligned with the slot on the tray/surround. The gas input flexible line should be pointing 90 degrees from the gas control valve location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible line, thermocouple tube, grounding wire and the ignitor wires through the burner location opening first then lower the burner into its final location.



8. Slide the black propane tank hose under the surround unit and out through the control panel opening. The other end of the black propane hose with the regulator will attach to the propane tank.



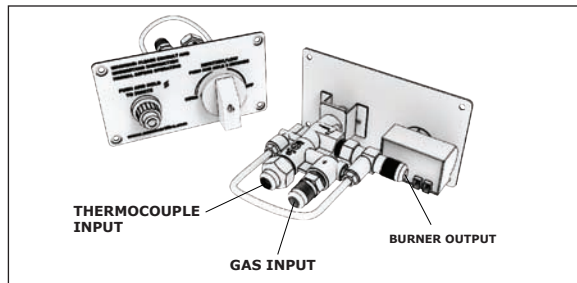
9. Pull all hoses and wires from inside the unit out through the control plate cutout.



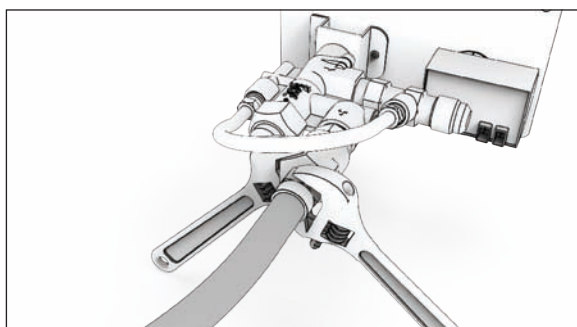


## Burner Assembly - Propane

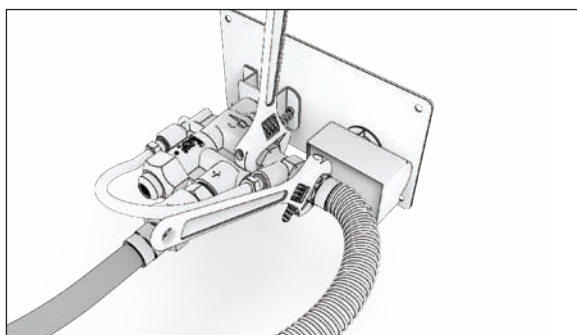
10. Ensure you have assembled the control panel, as outlined on page 10.



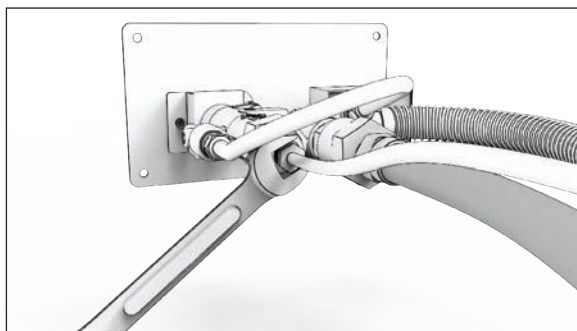
11. Using two adjustable wrenches, attach the flexible propane gas line to the inlet valve fitting (arrow pointing in). Do not overtighten.



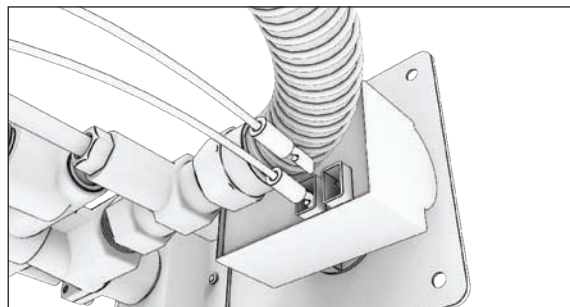
12. Using two adjustable wrenches, attach the flexible gas line from the burner to the outlet valve fitting (arrow pointing out). Do not overtighten.



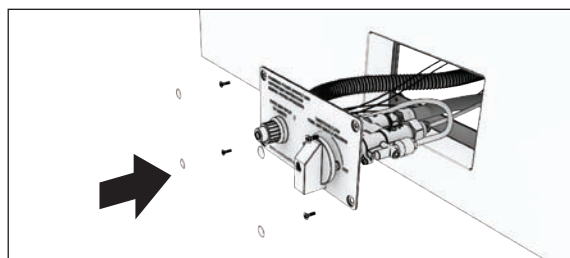
13. Connect the thermocouple to the control valve. Hand-tighten first then securely tighten (1/2 turn) with a 10mm wrench. Damage to the thermocouple and/or loose connections will cause operation issues.



14. Plug the Ignitor wire and grounding wire into the back side of the sparkers. These wires can be plugged into either port on the back side of the sparkers box.

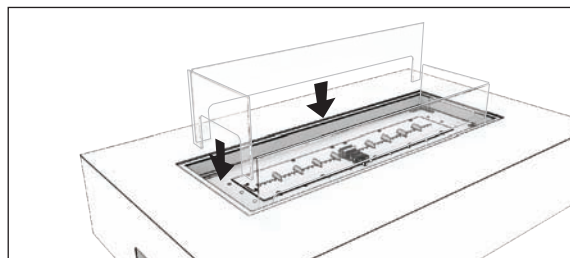


15. Insert the fully assembled Control Panel into the side of the Surround Unit, feeding the cables and wires back into the unit as needed until the Control Panel is properly positioned in place.

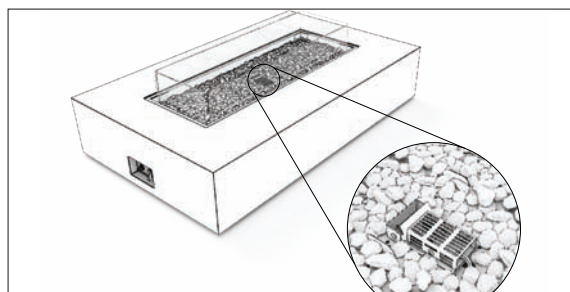


16. Secure the control panel assembly with the 4 screws. (Install the four black plastic screw caps on the screw heads)

17. Install the glass screens.

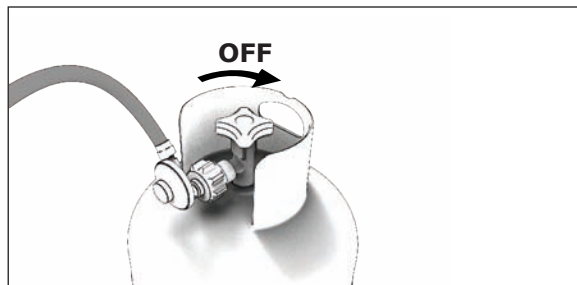


18. Spread the glass media evenly over the burner surface. Use all black glass media provided for best effect. Glass media CANNOT be present inside the igniter wind guard. Remove the cardboard cover from inside ignition wind guard.



## Burner Assembly - Propane

19. Ensure propane tank is in the OFF position. Attach propane hose and included regulator to propane tank.



20. Ensure the control knob (or “key”) is in the OFF position.



21. Use a leak detecting solution to check all connections before operation.

22. Slowly open main gas supply shut-off valve and check for any bubbles on inlet side of gas system. If bubbles are present, close main gas supply shut-off valve immediately and tighten all fittings again using adjustable wrenches.

23. If no leaks are present, a first lighting and final leak check can be performed.

24. With main gas supply shut-off valve open, turn control valve to LOW/IGNITION position. Press and hold sparker button, slowly depress control knob and hold in for 3-5 seconds. Burner should be ignited. Verify no bubbles are present on outlet side of gas system.

25. If no leaks are present on outlet side of gas system, the burner is ready for normal operation. If leaks are present, turn control valve to the OFF position and close main gas supply shut-off valve. Re-tighten all fittings and repeat 24.

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance and the LP tank cover on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of  $\frac{1}{2}$ " (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

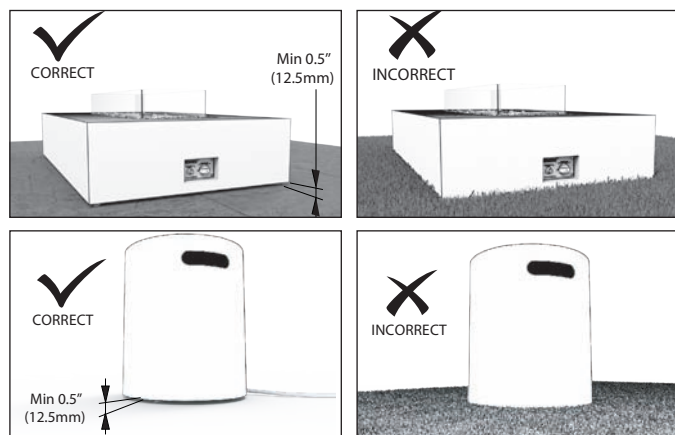


Figure 1





## Burner Assembly - Natural Gas

### NATURAL GAS

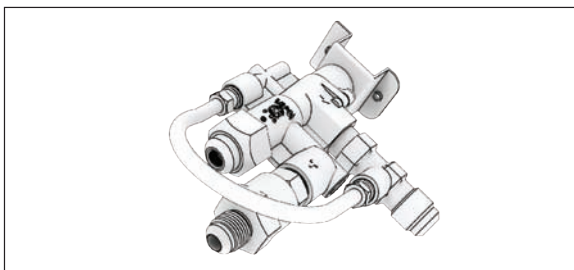
**VERY IMPORTANT:** Connection of this product to Natural Gas must be completed by a licensed gas plumber / installer only. Do not attempt to install this product with Natural Gas without a licensed installer present.

1. Unpack burner box. Remove all items and check against the items listed on page 9 of the manual to ensure all parts needed are ready.

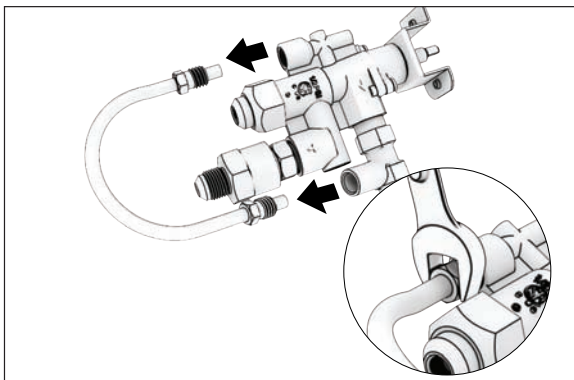
2. THIS BURNER IS SHIPPED FOR PROPANE FUEL SOURCE. TO CONVERT IT FOR NATURAL GAS, THERE ARE 2 ORIFICES THAT NEED TO BE REPLACED WITH THE INCLUDED MARKED ORIFICES. FOLLOW THE INSTRUCTION BELOW:

### Conversion from Propane to Natural Gas

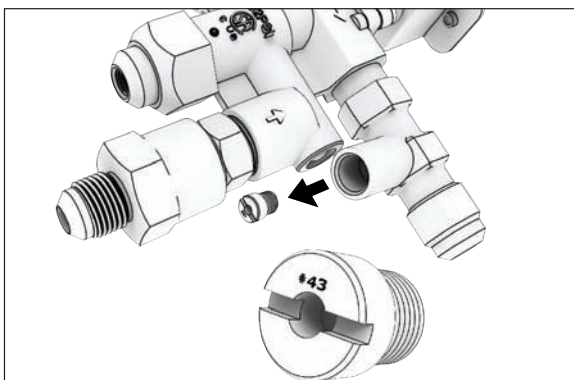
3. Locate the control valve.



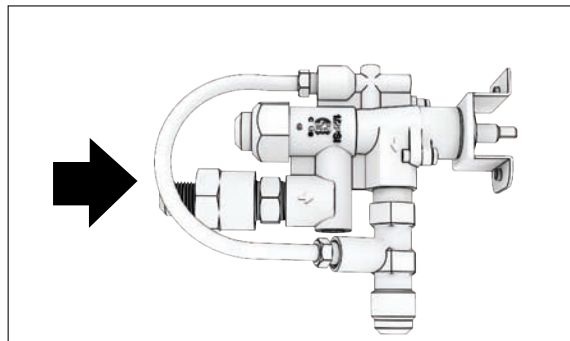
4. Using an 11mm wrench, remove low-rate bypass tube from the control valve.



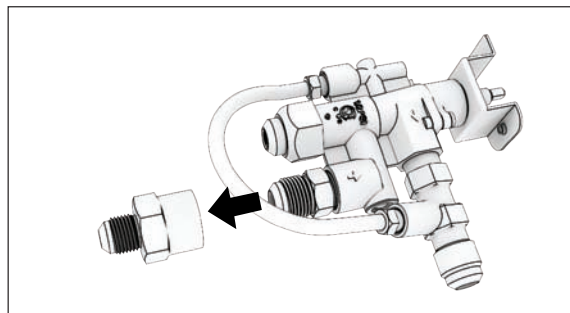
5. With a flat blade screwdriver, remove the valve orifice (#52) and replace with the natural gas orifice (#43).



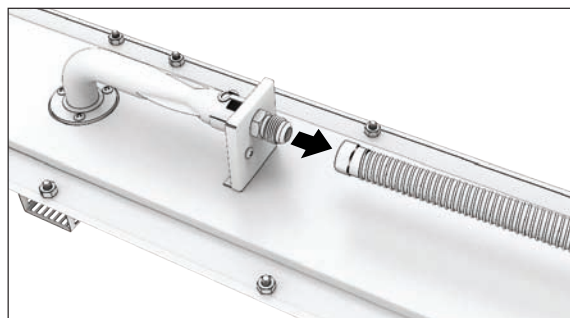
6. Re-install the low-rate bypass tube.



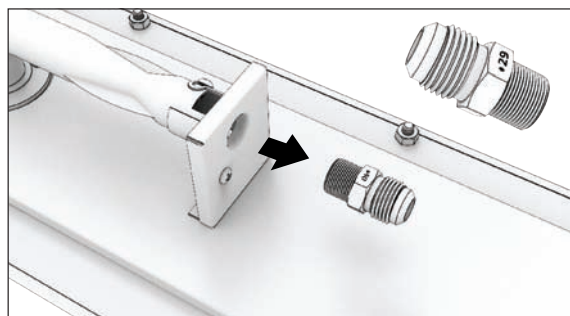
7. Remove the flare fitting adaptor from the valve gas input valve.



8. Turn the burner over so that the flexible hose is easily accessible.

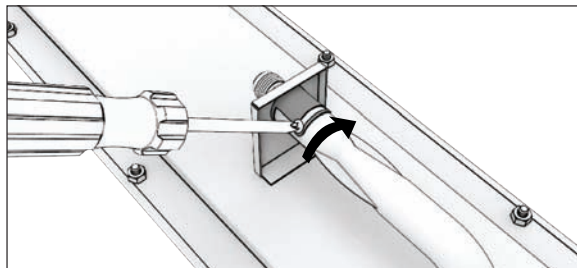


9. Using adjustable wrenches, remove the burner flex line from the burner orifice. Remove the propane burner orifice installed in the burner (#40) and replace with the included natural gas orifice (#29).

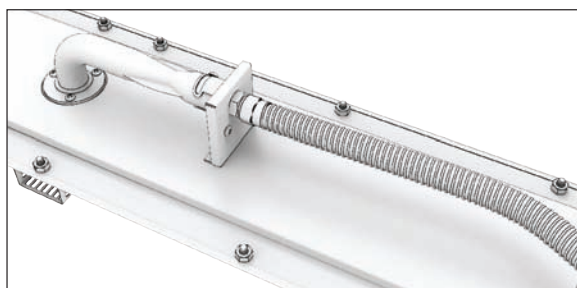


## Burner Assembly - Natural Gas

10. Loosen the air-shutter with a Phillips head screwdriver and fully close the air shutter. Retighten the air shutter screw.

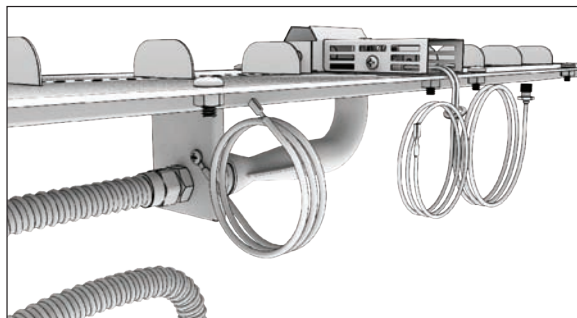


11. Using adjustable wrenches, connect the burner flex-line to the natural gas burner orifice and tighten securely. THE BURNER AND CONTROL VALVE ARE NOW CONVERTED FOR NATURAL GAS.



12. Ensure ignitor wire is secured to the bottom of the ignitor.

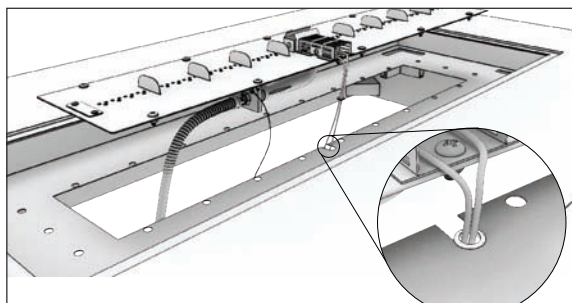
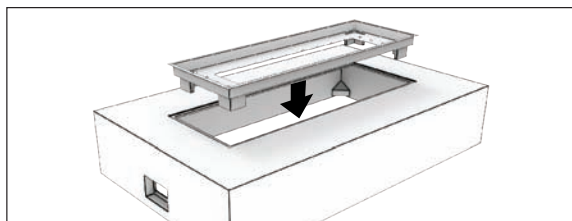
13. Ensure grounding wire is secured to bottom of burner.



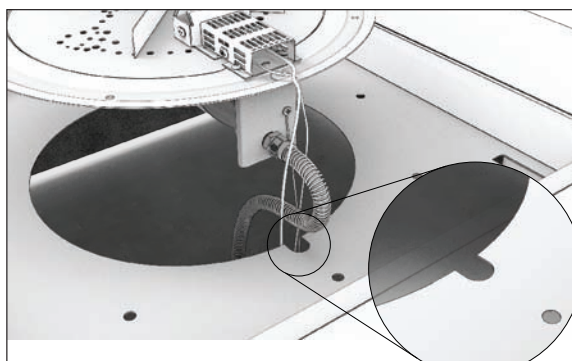
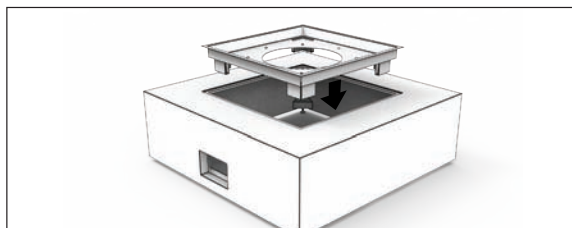
14. Install a flexible gas hose to your natural gas line (supplied by the licensed plumber).

15. **Linear burners only:** (this step is not required for round burners) Carefully place the Metal tray into the unit opening.

Position the burner assembly so that the gas input flexible line (where the orifice is located) is pointing towards the control plate cutout location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible gas line, thermocouple tube, grounding wire and the ignitor wire through the burner location opening first then place lower the burner into its final location. Install the grommet by sliding it into the slot, place the burner into its final position.

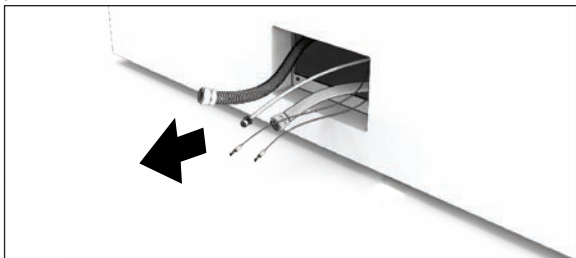


16. **Round burners only:** (this step does not apply to linear burners) Insert the metal tray to the Surround Unit. Carefully place the burner on the Surround Unit near the tray opening – without inserting the burner into the final location. Rotate the burner to make sure the thermocouple tube is aligned with the slot on the tray/surround. The gas input flexible line should be pointing 90 degrees from the gas control valve location of the surround. Carefully uncoil the thermocouple tube. Feed the flexible line, thermocouple tube, grounding wire and the ignitor wires through the burner location opening first then lower the burner into its final location.



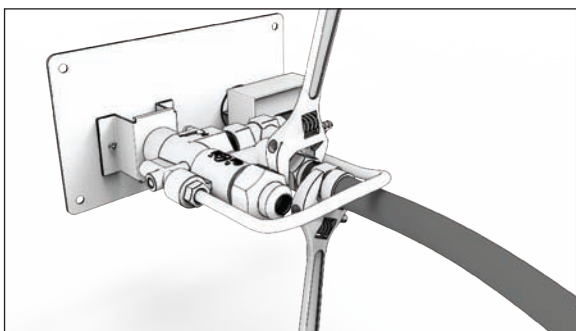
# Burner Assembly - Natural Gas

17. Pull all hoses and wires from inside the unit out through the control plate cutout.

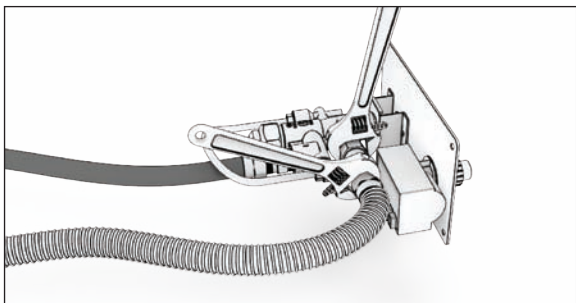


18. Ensure you have assembled the control panel, as outlined on page 10.

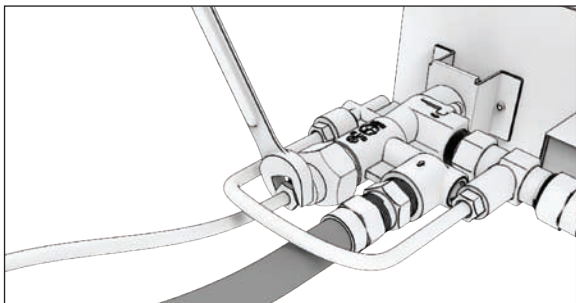
19. Using two adjustable wrenches, attach the flexible natural gas line to the inlet valve fitting (arrow pointing in). Do not overtighten.



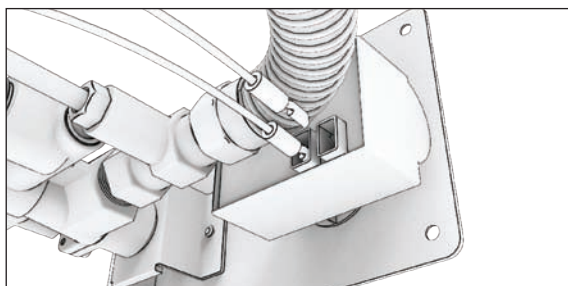
20. Using two adjustable wrenches, attach the flexible burner gas line to the outlet valve fitting (arrow pointing out). Do not overtighten.



21. Connect the thermocouple to the control valve. Hand-tighten first then securely tighten (1/2 turn) with a 10mm wrench. Damage to the thermocouple and/or loose connections will cause operation issues.

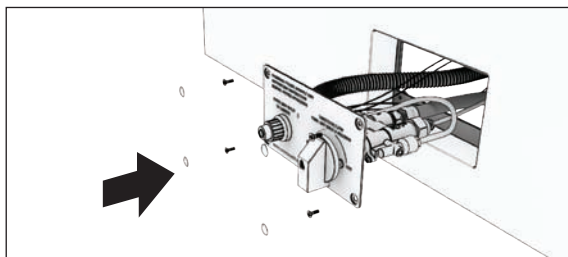


22. Plug the ignitor wire and grounding wire into the back side of the sparkers. These wires can be plugged into either port on the back side of the sparker box.

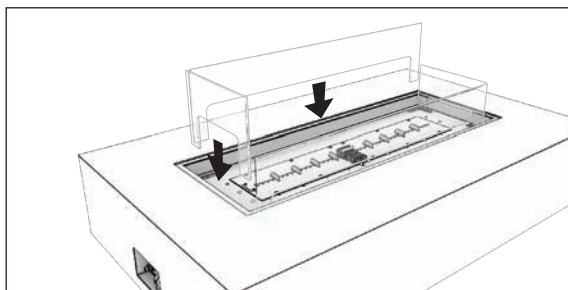


23. Insert the fully assembled Control Panel plate into the side of the Surround Unit, feeding the cables and wires back into the unit as needed until the Control Panel is properly positioned in place.

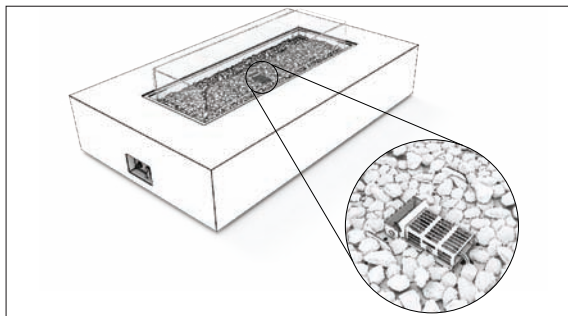
24. Secure the control panel assembly with the 4 screws.



25. Install the glass screens.



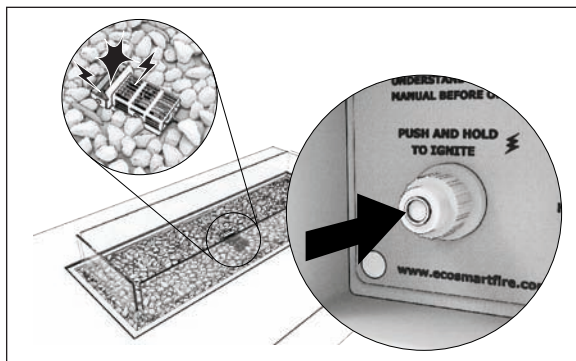
26. Spread the glass media evenly over the burner surface. Use all black glass media provided for best effect. Glass media CANNOT be present inside the igniter wind guard. Remove the cardboard cover from inside ignition wind guard.





## Burner Assembly - Natural Gas

27. Press and hold sparker button to verify presence of spark. Look inside ignition wind guard for visible spark.



28. Ensure the control knob (or "key") is in the OFF position.



29. Use a leak detecting solution to check all connections before operation.

30. Slowly open main gas supply shut-off valve and check for any bubbles on inlet side of gas system. If bubbles are present, close main gas supply shut-off valve immediately and tighten all fittings again using adjustable wrenches.

31. If no leaks are present, a first lighting and final leak check can be performed.

32. With main gas supply shut-off valve open, turn control valve to LOW/IGNITION position. Press and hold sparker button, slowly depress control knob and hold in for 3-5 seconds. Burner should be ignited. Verify no bubbles are present on outlet side of gas system.

33. If no leaks are present on outlet side of gas system, the burner is ready for normal operation. If leaks are present, turn control valve to the OFF position and close main gas supply shut-off valve. Re-tighten all fittings and repeat 32.

Adequate and constant ventilation is important to keep the appliance functioning properly and safely, including ventilation of the appliance undersides. Setting the appliance without air circulation underneath can cause heat build up and improper combustion. Do not remove the feet or operate the appliance with missing feet.

1. Locate the appliance and the LP tank cover on hard, flat surface that extends the full length and width of the appliance. The appliance and the LP tank cover can be placed on combustible surface (such as wood deck) or on non-combustible material (such as concrete). Ensure all clearances to the sides and clearances above the appliance are observed at all times (see figures 1 and 2).
2. Maintain a minimum air space of  $\frac{1}{2}$ " (12.5mm) between the ground surface and the underside of the appliance sidewalls by adjusting the articulating feet up or down as necessary.
3. Do not place the appliance over grass, artificial turf, carpet or any uneven surface, as this will block the airflow underneath the appliance. See figure 1.
4. Follow the same instructions above for the LP tank cover (if purchased). See figure 1.

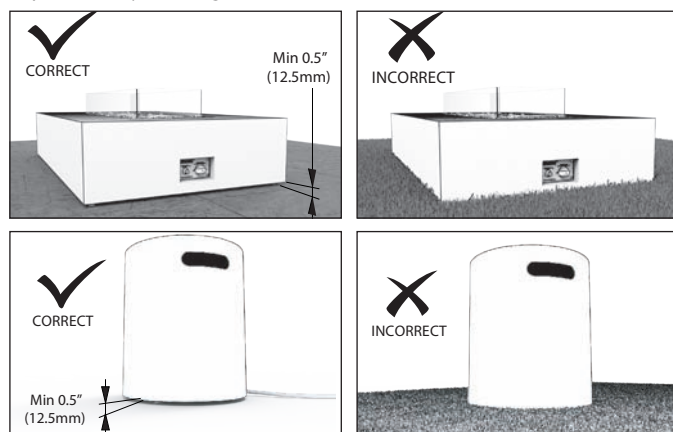


Figure 1



## Installation - Natural Gas

### Natural Gas Supply Installation Guidelines

1. The gas supply line must have enough capacity to supply the burner with its rated gas output.
2. The flame output may be too low if the gas line is too small.
3. Smooth walled pipe should be used as a supply line. Excessive corrugated line will cause unwanted restriction and potential noise due to gas flow.
4. Gas pressure at the unit should be within 5-7 in. WC to keep restriction to a minimum.
5. Ensure that the length of the gas line and pipe diameter is properly sized for the burner output (see Pipe Sizing Chart below). Add 1' to 5' to the line length for every elbow or additional fitting. If you have another natural gas appliance sharing the same line, add the BTU output to provide to provide the proper pipe size.

### Natural Gas Pipe Sizing Chart\*

Length of Pipe in Feet	Size of Pipe in Inches (inside diameter)		
	1/2"	3/4"	1"
10	108,000	230,000	387,000
20	75,000	160,000	280,000
30	61,000	129,000	224,000
40	52,000	110,000	196,000
50	46,000	98,000	177,000
60	42,000	89,000	159,000
70	38,000	82,000	149,000
80	36,000	46,000	140,000
90	33,000	71,000	133,000
100	32,000	68,000	125,000
125	28,000	60,000	117,000
150	25,000	54,000	105,000
175	23,000	50,000	93,000

\*Maximum delivery capacity of pipes in BTU/hour at different diameters and lengths for an initial pressure of 7-inch water column. **Note: 1 cubic feet per hour = 1000 BTU**

As an example, to install a Brown Jordan Fires FLO with a G37 burner (65,000 BTU) and located about 90 feet from the natural gas supply line with 2 elbow fittings, you would need at least a 3/4" pipe minimum.

## Lighting and 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 10.5in (267mm) water column.

### To Extinguish

1. Turn control knob to LOW/IGNITION position. Then gently depress control knob and turn to OFF position.
2. If using propane cylinder, close valve.



### WARNING



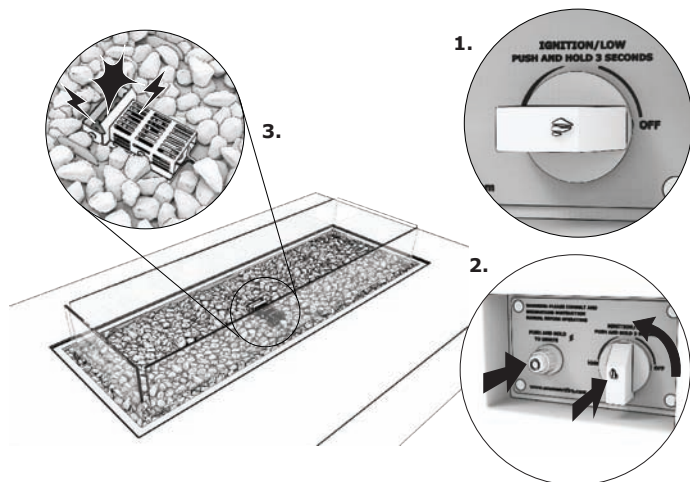
#### FIRE RISK – HIGH TEMPERATURES

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, bioethanol or similar liquids in this appliance.
- Combustible materials, flammable liquids, or vapors may ignite.

### Lighting Instructions

1. Verify control valve is in OFF position.
2. Ensure the gas supply valve is in ON position.
3. Press and hold sparker button. Verify an audible and visible spark is present within the ignition windguard.
4. Gently press and turn control knob to LOW/IGNITION position. Fully depress control knob and hold for 3-5 seconds. Burner should ignite and continue to operate when control knob is released.
5. 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 to ignition again. **DO NOT ATTEMPT TO LIGHT BURNER IF YOU SMELL GAS.**
6. With burner lit and operating, the flame height can be adjusted between low and high at any time.



## Troubleshooting - General

Symptom		Possible Causes		Corrective Actions
1.	Appliance 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.
		C.	No spark igniting burner.	Refer to ignitor in section 6.
		D.	Excessive media build up around igniter.	Ensure that media installation instructions are followed, and media or debris is not present inside the ignition wind guard.
2.	Low flames or won't stay lit	A.	Manual shutoff valve (on/off control knob) open or not installed between LP tank and appliance.	Close LP tank and manual shutoff valves. Open LP tank valve first, THEN follow instructions for lighting up.
		B.	Improper air shutter adjustment.	The air shutter is adjusted from the factory for optimal performance. For NG, air shutter should be closed. For LP, air shutter should be 1/4" open.
		C.	Improper gas supply pressure.	Ensure that the appliance is operating at the ideal inlet gas pressure detailed on Page 1. This should be done by a licensed plumber.
		D.	Burner was not converted for natural gas.	Both valve orifice and burner orifice must be changed, and the air shutter must be closed. Follow conversion instructions on Page 14.
		E.	Thermocouple not properly secured to valve.	Ensure the thermocouple is tightened to control valve using 10mm wrench.
3.	Blue Flames	A.	This is a result of normal operation and flames will begin to yellow as unit is allowed to burn for 15-20 minutes.	No action required.
		B.	Improper air/fuel mixture related to air shutter position.	The air shutter is adjusted from the factory for optimal performance. For NG, air shutter should be closed. For LP, air shutter should be 1/4" open.
		C.	Burner was not converted for natural gas.	Both valve orifice and burner orifice must be changed, and the air shutter must be closed. Follow conversion instructions on Page 14.
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.	No action required.
5.	Ignitor makes clicking sound but no visible spark is produced	A.	Ignitor is improperly grounded.	Check all wire connections at back of sparker box.
		B.	Ignition or ground wire not plugged in.	Ensure ignitor wire and grounding wire are securely attached to burner.
		C.	Ignition electrode set too far from grounding probe.	Check that ignition electrode and ignition wind guard wall is within 1/8" to 3/16".
		D.	Excessive media build up around igniter.	Ensure that the media installation instructions are followed, and media is not present inside the ignition wind guard.



## Troubleshooting - General

6.	Ignitor does not spark or make a ticking sound	A.	Battery is dead or not installed, installed incorrectly.	Ensure that a new AAA battery is installed in the push-button sparker switch.
		B.	Corrosion on battery contacts.	Check contact at the bottom of the battery cavity for corrosion. Clean with a small piece of sandpaper or a file.
		C.	Battery cap not screwed down completely.	If the cap cannot be screwed down tight enough, the battery will not make a proper connection with the sparker and it will not work. Be sure to use a thin surface such as 20-22 gauge sheet metal to mount sparker in.
		D.	Ignition electrode or ground wire not connected to sparker.	Ensure that ignition electrode and ground wire leads are properly connected to sparker.

## Troubleshooting - Loud Gas Flow

### Excessive Rushing and Whistling noise

There are multiple causes for excess noise coming from the gas appliance. The more gas (maximum control valve setting) the more likely you are to hear excess noise. This is due to the larger volume of gas flowing at a higher velocity through the plumbing of the appliance. Gas flowing noise is inevitable so this is intended for excessively loud rushing or whistling.

#### 1. Do you hear a whistling or rushing noise in the appliance flex-line?

The internal structure of the flex-line and the path the gas follows inside of the flex-line can be the cause. When installing a flex-line, do your best to avoid sharp bends and angles.

You may be able to remedy a noisy flex-line that is already installed by carefully repositioning the line to remove sharp bends and angles.

Using commercially available appliance gas connectors (yellow corrugated flex-lines from hardware stores) are not recommended for gas fire pits or fireplaces. These hoses are not intended for the higher gas input rates of these appliances and produce large amounts of noise. There are various sizes and lengths of whistle-free flex lines available. The licensed plumber doing the installation can help recommend one.

#### 2. Is the whistling coming from the orifice?

The orifice is what controls the amount of gas that your appliance is using. Sometimes the shape of an orifice can produce a whistling depending on the gas flow rate and gas pressure.

If repositioning the flex-lines in your appliance did not fix the whistling noise, disconnect the gas supply to the burner and remove the orifice. Blow through the orifice to check for a whistle. If your orifice whistles, call our customer service at 1-888-590-3335 so we can ensure you have the specific orifice installed.

#### 3. Ensure your air shutter is properly adjusted according to the EcoSmart Gas Installation Manual.

A properly adjusted air shutter will give the brightest flame and quietest performance.

For **natural gas** the air shutter should be completely closed.



For **liquid propane**, the air shutter should be open between 3/16" and 1/4".

Service and maintenance

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 annually.



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


Stainless steel will rust or corrode over time if contamination or debris is not cleaned or removed immediately. When not in use, it is recommended that you protect your fireplace from water damage or corrosion with a protective cover.

**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

Like all fire and fireplace systems, it's important to run through regular safety checks. Please take the time to familiarise yourself (and any other users) with the safety procedures associated with using your fire pit.

Inspect	Maintenance Tasks	
Burner Assembly	1	Remove decorative black glass charcoal 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

## Reference materials

### Service Parts List

Replacement Parts	SKU
<b>LP / NG BURNER</b>	
Control Key	ESF.1.P.KEY
Control Knob	ESF.1.P.KNB
Variable Control Safety Valve	ESF.2.P.VAL
Control Panel	ESF.3.P.CPF
1/2" Female Flare x 3/8" Male Flare Adaptor	ESF.2.P.FMA
22" Whistle-free Stainless Steel Flex Line 1/2" Fittings	ESF.2.P.F22
Grounding Wire (36")	ESF.1.P.G36
Flame Sensor Assembly	ESF.2.P.FSA
LP Hose & Regulator (10')	ESF.1.P.H10
LP Low Rate Valve Orifice #52	ESF.2.P.LR.O52
LP Burner Orifice #40	ESF.2.P.O40
NG Low Rate Valve Orifice #43	ESF.2.P.LR.O43
NG Burner Orifice #29	ESF.2.P.O29
Sparker Box	ESF.1.P.GSB

## Warranty

### Limited One Year Warranty

MAD Design USA extends the following warranty for GB Series decorative outdoor gas fire products used in the United States of America or Canada. Dealers and employees of MAD Design USA 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.

MAD Design USA warrants that this GB Series decorative gas appliance (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. MAD Design USA 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 MAD Design USA; and/or (6) modification of the Product not expressly authorized and approved in writing by MAD Design USA. 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 MAD Design USA 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 MAD Design USA may fully discharge its obligations under this warranty by repairing or replacing, at its discretion, the defective components. MAD Design USA will provide replacement parts at no charge and will pay reasonable 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 MAD Design USA is unable to provide replacement or repair in an expedient and cost-effective manner, MAD Design USA may discharge all obligations under this warranty by refunding the purchase price of the Product.

EXCEPT TO THE EXTENT PROVIDED BY LAW, MAD DESIGN USA 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 MAD DESIGN USA 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:  
5875 Green Valley Circle, Suite 100, Culver City CA 90230
2. Affirm that you are the original owner of the Product.
3. Photos or video of issue will be required in order to assess the warranty claim.
4. Provide MAD Design USA 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.

The Warranties set out above are express Warranties given by MAD Design USA and are in addition to the rights and remedies which are conferred upon consumers by Trade Practices Act 1974 of the Commonwealth and other Commonwealth, State or Territory legislation.

**Service under the warranties set out above must be provided by MAD Design USA Authorised Customer Service Centre which shall provide service during their normal working hours.**

**This warranty certificate along with proof of date of purchase must be produced when making any claim.**

FIRST NAME \_\_\_\_\_

LAST NAME \_\_\_\_\_

EMAIL \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

COUNTRY \_\_\_\_\_

DATE OF PURCHASE \_\_\_\_\_

PURCHASED FROM \_\_\_\_\_

PRIMARY USE \_\_\_\_\_

MODEL NAME \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

*You will find this on the data plate on the side of the burner.*

For warranty claims please contact your local distributor. If there is not a local distributor in your country please visit **[www.ecosmartfire.com](http://www.ecosmartfire.com)** to source the details of the country closest to you.

\*Do not return this form to MAD Design USA, please retain for your own reference.





**MAD Design USA**

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Culver City CA 90230

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