



OWNERS MANUAL

IMPORTANT, FAILURE TO CAREFULLY READ, UNDERSTAND AND FOLLOW EVERY PART OF THIS DOCUMENT MAY RESULT IN PROPERTY DAMAGE, SERIOUS BODILY INJURY OR DEATH



READ BEFORE USE!

INbd099V02_US
842-145



DANGER

FIRE OR EXPLOSION HAZARD

If you smell gas:

- Shut off gas to the appliance.
- Extinguish any open flame.
- If odor continues, leave the area immediately.
- After leaving the area, call your gas supplier or fire department.

Failure to follow these instructions could result in fire or injury, or death. explosion, which could cause property damage, personal

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 For outdoor use only.

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

WARNING

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

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.

the minimum inlet gas supply pressure for the purpose of input adjustment; 25psi

WARNING

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

WARNING

Turn off gas supply when the appliance is not in use. If the appliance is stored indoors, detach and leave LP-Gas cylinder outdoors.

WARNING

This appliance must be attended at all times!

WARNING

Battery may contain mercury. Do not deposit in fire or put in trash. Recycle the battery as hazardous waste.

WARNING

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

“WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.”



 **DANGER**

Failure to follow the Dangers, Warnings and Cautions contained in this Owner's Manual may result in serious bodily injury or death, or in a fire or an explosion causing damage to property. During ignition procedure, one should NEVER get his/her face close to and/or above the burner in a case an unnoticed flame were to suddenly light up and cause injury.

 **WARNING**

- Do not use this appliance for cooking.
- Remove the PVC Cover from the appliance before operating the appliance.
- Do not lay the PVC Cover over the appliance until it is turned off and completely cooled down.
- Do not burn any other materials than are supplied with and intended for use in this appliance.
- Do not pour water into appliance.
- The use and installation of this product must conform with local codes or, in the absence of local codes, use the National Fuel Gas Code, ANSI Z223.1/ NFPA5A, Natural Gas and Propane Installation code CSA B149.1 or Propane Storage and Handling code B149.2.
- Do not use this appliance if any part has been under water.
- Remove the battery when not using the appliance for an extended length of time.
- Do not store a spare or disconnected liquid propane cylinder under or near this appliance.
- After a period of storage, and/or non use, the propane appliance should be checked for gas leaks and burner obstructions before use.
- This propane appliance must be used ONLY in a well ventilated space and shall not be used inside a building or garage.
- Do not operate the propane appliance if there is a gas leak present.
- DO not use this outdoor gas appliance for indoor heating. TOXIC carbon monoxide fumes can accumulate and cause asphyxiation.
- Never use a flame to check for gas leaks.
- Do not locate this appliance under any overhead enclosure. Avoid using near or under overhanging trees and shrubs.
- Combustible materials should never be within 10 feet of the top, back or sides of your propane appliance.
- The propane appliance should never be operated by children. Children must be supervised and kept at a safe distance while the appliance is in use.
- Children and adults should be alerted to the hazards of high surface temperatures and keep a safe distance to avoid burns or clothing ignition.
- Do NOT use in windy conditions.
- Pay attention when operating the appliance. It is hot in use and should never be left unattended. Do not attempt to transport it while in operation.
- Do not attempt to transport this appliance until all parts are cooled or while it is in operation
- Should the fire go out while burning, turn the control knob to "off". Follow the instruction and wait five minutes before attempting to relight.
- Never use charcoal or any other solid fuel in the appliance. Never hang clothing or other flammable materials on or near the appliance.
- Never lean over the open appliance or place hands or fingers on the upper portion of an operational unit.
- Do not rest feet on the appliance.
- Do not enlarge valve orifices or burner ports when cleaning the valve or burner.
- Liquid propane gas is not natural gas. This appliance is manufactured and preset for use with propane gas ONLY.
- The conversion or attempted use of natural gas in a liquid propane unit or liquid propane gas in a natural gas unit is dangerous.
- Do not use this appliance on vehicles or boats. Always operate the appliance on flat ground outdoors.
- Keep any electrical supply cord and the fuel supply hose away from any heated surfaces.
- Do not use this appliance unless all parts are in place.
- Any guard or other protective device removed for servicing this appliance must be replaced prior to operating this appliance.
- This appliance is designed for use with a 20 lb. liquid propane gas (LP) tank, not included with this appliance. Never connect your appliance to an LP gas tank that exceeds this capacity.
- Storage of this outdoor appliance indoors is permissible only if the tank is disconnected and properly stored outdoors.
- Do not store or use gasoline or other flammable vapors and liquids within 25 feet (7.62m) of this or any other appliance.
- Cylinders must be stored outdoors in a well-ventilated area out of the reach of children.
The max. inlet supply pressure: 250psi
- Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the area of the appliance.
- Clothing or other flammable materials should not be hung from the appliance or placed on or near the appliance.
- Any guard or other protective device removed for servicing the appliance shall be replaced prior to operating the appliance.
- Installation and repair should be done by a qualified service person.
The appliance should be inspected before use and at least annually by a qualified service person.
More frequent cleaning may be required as necessary. It is imperative that the control compartment, burners, and circulating air passageways of the appliance are kept clean.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water."

- The use of alcohol, prescription or non-prescription drugs may impair an individual's ability to properly assemble or safely operate this outdoor appliance
- Do not use in an explosive atmosphere. Keep gas appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- This outdoor appliance is NOT to be operated by children. Young children should be closely supervised when in the vicinity of this outdoor appliance.
- This outdoor appliance is not to be installed or used in or on recreation vehicles and/or boats
- Always use in accordance with all applicable local, state and national codes. Contact your local fire department for details on outdoor burning.
- Use the same precautions you would with any open fire when using this outdoor appliance
- Do not use this outdoor appliance until it is COMPLETELY assembled and all parts are securely fastened and tightened.
- Do not store another LP gas tank within 10 feet (3.05 m) of this outdoor appliance while it is in operation.
- Do not use this outdoor appliance near automobiles, trucks, vans or recreational vehicles.
- Certain areas of this outdoor appliance when in use will become too hot to touch. Do not touch hot surfaces until the unit has cooled unless you are wearing protective gear such as insulated pot holders or heat resistant gloves or mittens to avoid burns.
- Keep all electrical cords away from a hot outdoor appliance.
- Do not sit on the mantle when the unit is in operation.
- Do not throw anything onto the fire when the unit is in operation.
- Lava rocks are very hot; please keep the children or pets away at a safe distance.
- Place the hose out of pathways where someone might trip over it or it where it may be subjected to accidental damage.

FOR LIQUID PROPANE GAS UNITS



WARNING

This outdoor appliance is for use with liquid propane (LP) gas only. The conversion to or attempted use of natural gas in this outdoor appliance is dangerous and will void your warranty.

- LP gas is flammable and hazardous if handled improperly. Become aware of the characteristics before using any LP gas product.
Propane Characteristics:
 - Flammable, explosive under pressure, heavier than air and settles in pools in low areas.
 - In its natural state, propane has no odor. For your safety, an odorant has been added.
 - Contact with propane could burn the skin.
- A dented or rusty liquid propane cylinder may be hazardous and should be checked by your gas supplier prior to use.
- Do not use a liquid propane cylinder with a damaged valve and any other worn out parts.
- Transport and store the empty gas cylinders carefully and properly. Cylinders must be stored outdoors in a well-ventilated area out of the reach of children.
- Young children should be carefully supervised when they are in the area of the appliance.
- Disconnected cylinders must have threaded valve plugs tightly installed and must not be stored in a building, garage or any other enclosed area.
- Never use a propane cylinder with a damaged body, valve, collar or footing.
- If you see, smell or hear the hiss of gas escaping from the propane cylinder:
 - 1 Turn off the gas supply and get away from the gas cylinder at once.
 - 2 Do not attempt to correct the problem yourself.
 - 3 Contact your gas supplier and/or fire department for help.
The LP gas supply tank constructed and marked in accordance with the U.S. Department of Transportation (D.O.T.) Specifications for LP-Gas Cylinders, or the Standard for Cylinders, Transportation of Dangerous Goods and Commission, CAN/CSA-B339.
- LP gas tank must be arranged for vapor withdrawal.
- It is essential to keep the outdoor appliance's valve compartment, burners, and circulating air passages clean. Inspect outdoor appliance before each use. This outdoor appliance should be thoroughly cleaned and inspected on a regular basis. Clean and inspect the hose before each use of the appliance. If there is evidence of abrasion, wear, cuts, or leaks, the hose must be replaced prior to the appliance being put into operation.
- LP Tank used must include a collar to protect the cylinder valve
- The LP gas tank must have a listed overfilling prevention device (OPD) and a QCCI or Type I (CGA791) LP gas tank connection.
- The LP gas tank should not be dropped or handled roughly.

- Tanks must be stored outdoors out of the reach of children. Do NOT store in a building, garage, or any other enclosed area.
- Never store your LP gas tank where temperatures can reach over 125°F.
- Never keep a filled LP gas tank in a hot car or car trunk. Heat will cause the gas pressure to increase, which may open the relief valve and allow gas to escape.
- Place dust cap on valve outlet whenever the LP gas tank is not in use. Only install the type of dust cap on the LP gas tank valve outlet that is provided with the LP gas tank valve. Other types of caps or plugs may result in leakage of propane.
- Do not store a spare LP gas tank under or near this gas appliance.
- Never fill the tank beyond 80 percent full.
- LP gas cylinders should only be filled by a certified LP gas dealer.
- The pressure regulator is set for 11 inches of water column (pressure).
- Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.
- Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required as necessary. It is imperative that control compartment, burners and circulating air passageways of the appliance be kept clean.
- The appliance should be inspected before use and at least annually by a qualified service person.
- Do not attempt to disconnect the gas regulator from the tank or any gas fitting while the outdoor appliance is in use.
- Keep gas appliance away from location where it can get excessively wet. Do not use gas appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
- This appliance shall be used only outdoors in a well-ventilated space and shall not be used in a building, garage or any other enclosed area.
- The LP-gas supply cylinder must be disconnected when this appliance is not in use
- Only cylinder marked “propane” shall be used.
Be sure to use only one 20 lb (9.1 kg) LP gas cylinder with a Type 1 valve with this appliance as required by the American National Standards Institute (ANSI) and the Canadian Standards Steering Committee.
- Never attempt to attach this appliance to the self-contained LP gas system of a camper trailer, motor home or house.
- Hand turn the manual gas control valve. Never use tools. If the valve will not turn by hand, do not try to repair it. Call a Certified Gas Technician. The use of force or any self attempted repair may result in a fire or explosion.
- **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.

LP Hose and Regulator Assembly and Replacement

- 1 This appliance comes equipped with a standard LP gas hose and regulator including the appliance side connection for a CGA No 791 Cylinder Connection Device. The LP gas hose and regulator supplied with this appliance must be used. Only a hose and regulator specified by manufacturer can be used for replacement.
 - a) The CGA No791 connection incorporates an excess flow limiting device that acts to limit the flow of gas if a leak is detected between the regulator and the burner valve.
 - b) If the burner valve is open prior to the LP gas cylinder service valve being opened, the connection will interpret this free flow of gas to be a leak
 - c) The connection safety feature will reduce gas flow from the regulator to the appliance to a minimal level.
 - d) Be sure that the burner control valve is closed prior to opening the LP gas cylinder service valve to ensure that the connection flow limiting device is not triggered mistakenly.
 - e) If the connection flow limiting device is triggered mistakenly, close the LP gas cylinder service valve and the burner valve, wait 10 seconds to allow the device to reset, open the cylinder service valve, then open the burner valve and light the appliance as per lighting instructions.
- 2 Be sure to protect the hose from any hot surfaces. Serious danger may result if the hose contacts any hot surface.

3. Regular maintenance of the hose and regulator:
 - a) Inspect the hose before each use of the appliance. If the hose shows signs of cracks, abrasions, cuts or damage of any kind, do not operate the appliance. Fix or replace the hose as required before using the appliance. For assistance with repair or replacement of the hose, call Hero Manufacturing at 1-580-590-7341. Use only replacement parts from the manufacturer.
 - b) Inspect the seal inside the CGA No 791 service valve on the LP gas cylinder when replacing the cylinder or at least once per year. If there is any indication of damage, have the seal replaced by a certified gas dealer before operating the appliance.
4. Do not use tools to tighten the CGA No 791 connection nut onto the LP gas cylinder service valve. Hand tighten only.
5. Be careful to not cross the threads on the connection when tightening the CGA No 791 connection on to the LP gas cylinder service valve.
6. "Leak Test" should always be performed after attaching the connection to the LP gas cylinder service valve. (See "Leak Test" section of this manual)
7. For the connection of the hose and regulator to the LP tank, refer to the "Connection" section of the LP gas cylinder section above.



**WARNING
LAVA ROCK USE**

1. Do not light or use gas unit if lava rocks are wet. Ensure lava rocks are completely dry before lighting as intense heat could cause the lava rocks to crack.
2. Lava rocks could hit somebody's face or eyes during the initial start of this unit, so please keep away from the appliance for the first 20 minutes.

CSA (Canadian Standards Association) certified to ANSI Z21.97•CSA 2.41-2017 "Outdoor Decorative Gas Appliances".

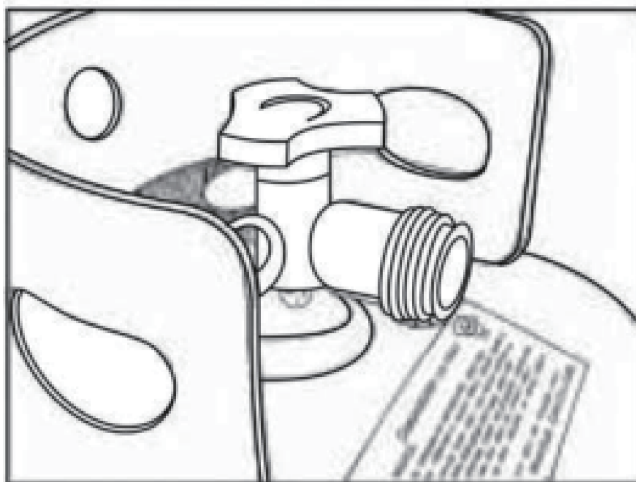
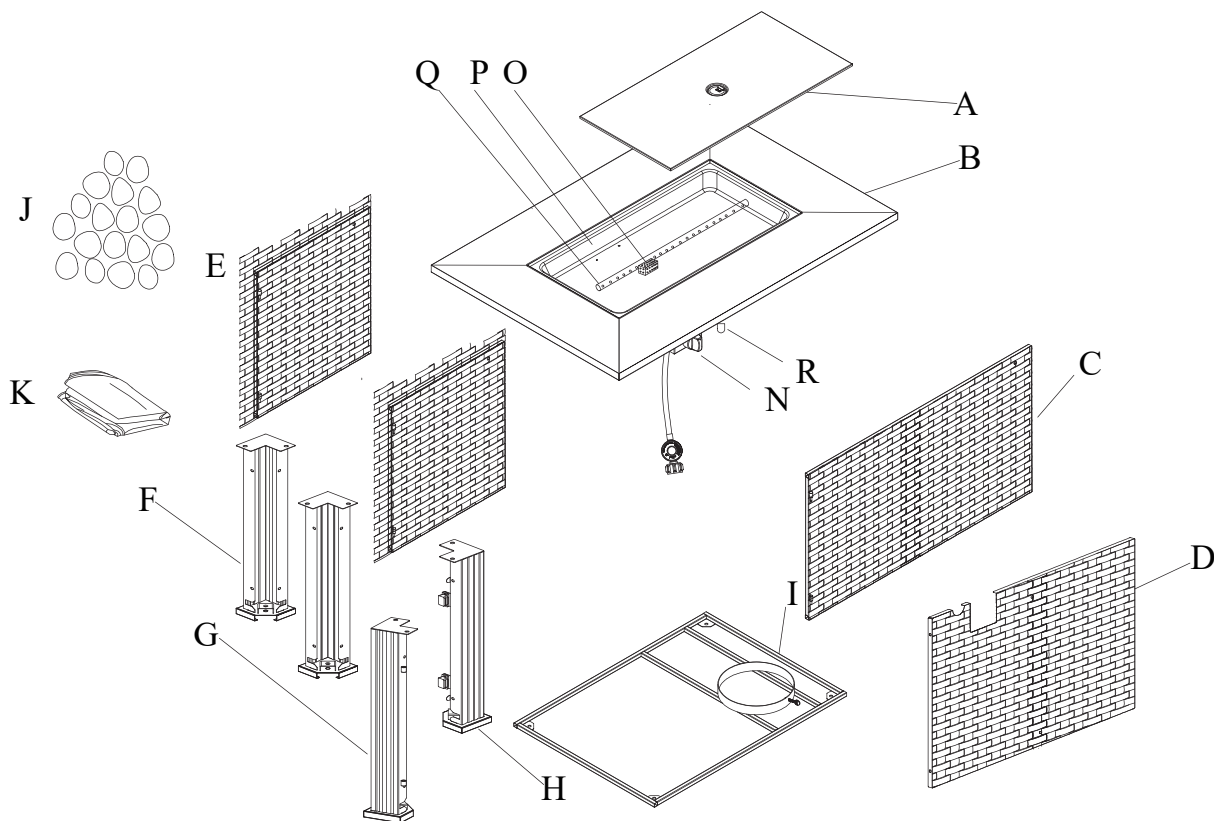


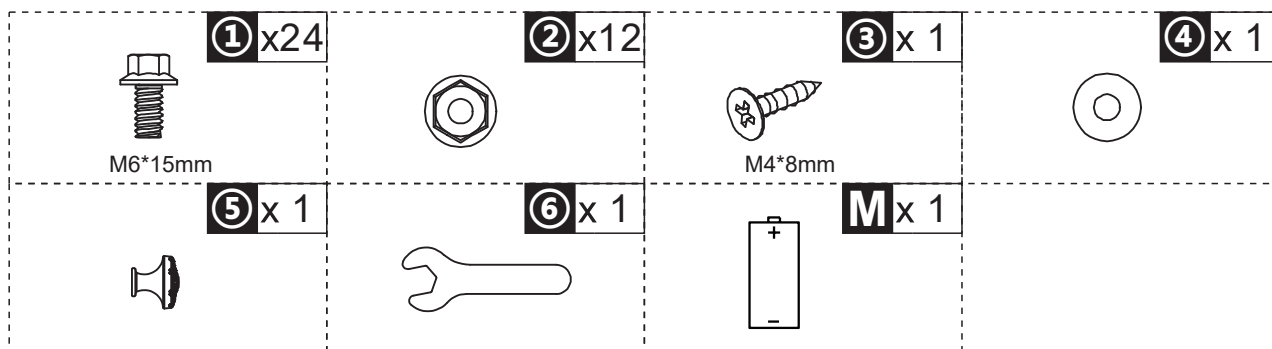
Figure 1

SPECIFICATIONS

INPUT	30,000 Btu/hr	
Propane Regulator Pressure	11 inches water column	
Natural Gas Minimum Inlet Pressure	7 inches water column	
Clearances to combustible surfaces	Sides: 48in. /121.9 cm	Top: 72 in. / 183 cm

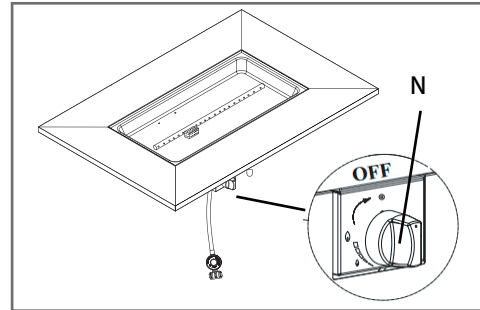


Item	Description	Qty
A	Lid	1
B	Table Top	1
C	Door	1
D	Front Panel	1
E	Side Panel	2
F	Left Leg	2
G	Right Front Leg	1
H	Right Back Leg	1
I	Metal Stand	1
J	Lava Rocks	1 box
K	PVC Cover	1
N	Control Knob (preassembled)	1
O	Guard (preassembled)	1
P	Fire bowl (preassembled)	1
Q	Burner (preassembled)	1
R	Electronic Igniter (preassembled)	1

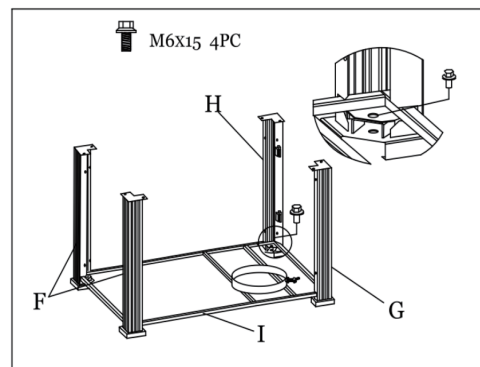


ASSEMBLY INSTRUCTIONS

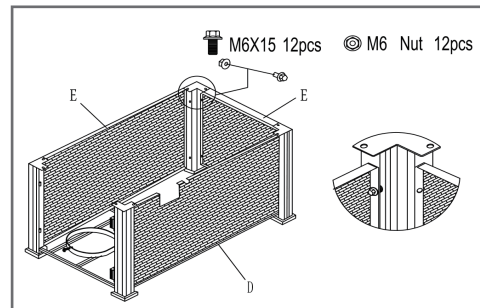
1. Check that the control knob (N) for the gas supply system is turned to the "OFF" position before starting any



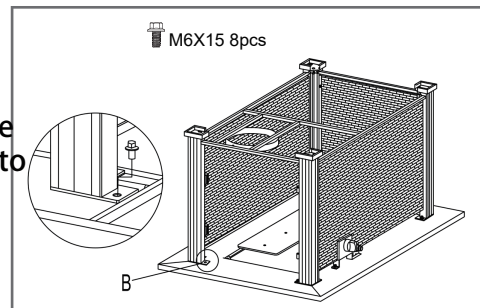
2. Attach right front leg (G), right back leg (H) and 2pcs left legs (F) to the metal stand (I) using 4pcs M6x15 screws. Tighten with sc rewdriver and w rench(FF).



3. Attach 2pcs side panels (E) and front panel (D) to the legs using 12pcs M6x15 screws and 12pcs M6 nuts. Tighten with sc rewdriver and w rench(FF).



4. Attach steel base to the bottom part of the table top (B) using 8pcs M6x15 screws. Do NOT tighten the screws until all parts are installed, it may cause some to not be able to be connected. Tighten all screws completely with screwdriver or wrench (FF) after all parts are connectd.



ASSEMBLY INSTRUCTIONS

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

*If you have opened the carton and removed all packages, please disregard the STEP 1. See the STEP 2 directly.

STEP 1

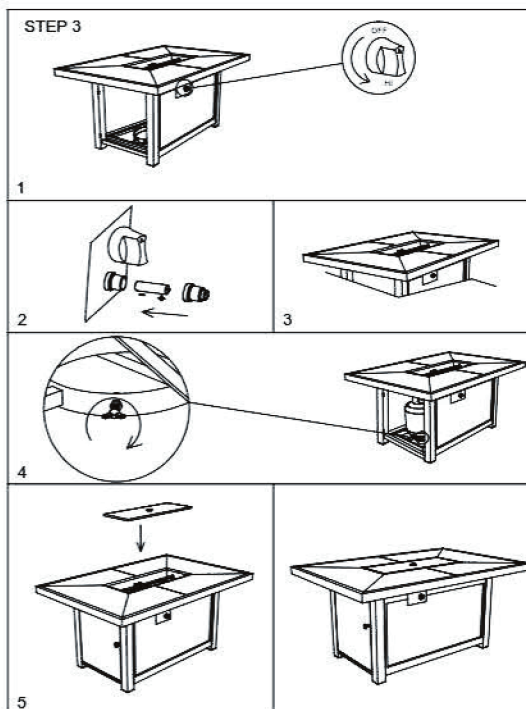
Unpack and identify all parts using the parts list provided.



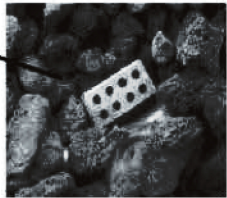
STEP 2

- 1) Check each part before using the product. Make sure the gas supply system is turned "OFF" before assembling. See Figure 1
- 2) Locate the battery, remove the plastic cover first. Unscrew the rubber cap of the Electric Ignitor, place a AAA battery into the battery case. Make sure the positive pole ("+") is towards the cap. Screw the cap back to the battery case tightly. See Figure 2
- 3) Place the lava rocks evenly in the fire bowl on the top of the firebowl. See Figure 3
- 4) Open the storing door on the firebowl for the gas tank.
- 5) Put the gas tank in the metal stand. Make sure the gas tank sits on the metal stand completely. Turn the wing screw on the outer part of metal stand clockwise to secure the gas tank tightly.

See Figure 4.5

See "LP (Liquid Propane) gas supply connection" for tank connection



 WARNING	<p>Screen </p> <p>Do not place lava rocks on screen. Keep screen clear</p> 
<p>** DO NOT COVER THE IGNITION SCREEN when placing the lava rocks into the fire bowl. Always keep Ignition Screen visible. This screen must be clear and free of obstructions at all times to insure proper operation.</p>	

The burner of the firebowl must be covered by lava rocks completely. Otherwise the flame may be extinguished occasionally. See the Figure CORRECT and INCORRECT for reference.



CORRECT



INCORRECT

LP (Liquid Propane) gas supply connection

- Always confirm that the burner control knob is in the OFF position before connecting the gas supply.
- Do not obstruct the flow of combustion air and ventilation air to the appliance.

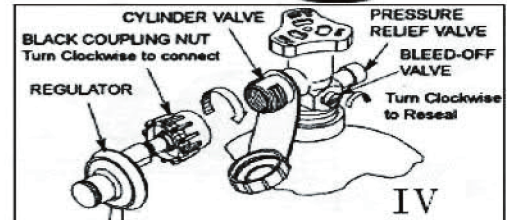
To Connect:

- 1 Ensure that there is no debris caught in the head of gas cylinder, head of the regulator valve.
- 2 Insert the nipple of the valve coupling into the cylinder valve and tighten the black coupling nut by turning it clockwise with one hand while holding the regulator with the other hand. (See diagram.) **Hand tighten only.**



To Disconnect:

- 1 Always confirm that the cylinder valve is in the OFF position before disconnecting the gas supply.
- 2 Hold the regulator with the one hand and loosen the black coupling nut by turning it counter-clockwise with the other hand. (See diagram.)



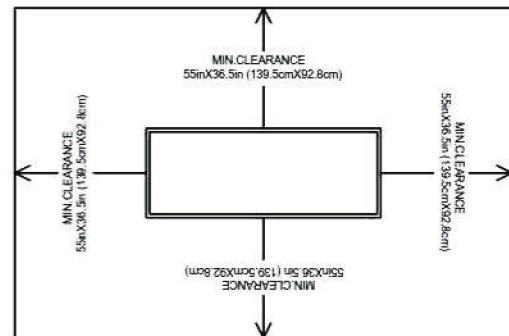
IMPORTANT

Disconnect the propane cylinder from the regulator valve when the appliance is not in use.

SELECTING A LOCATION

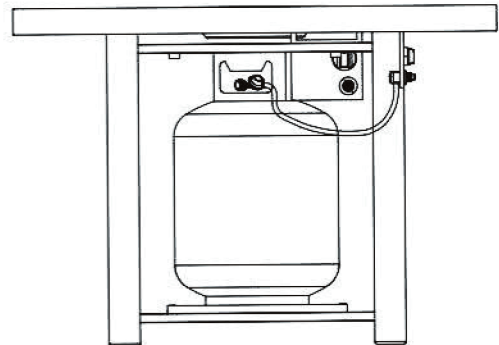
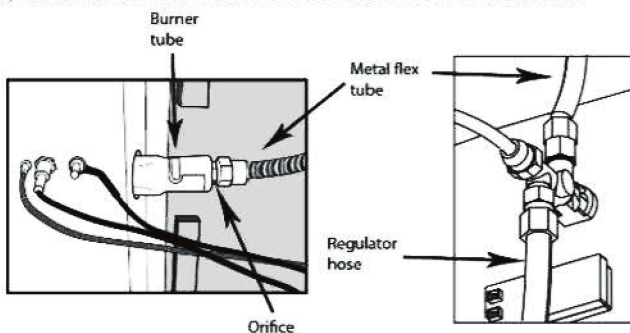
Always place this outdoor appliance on a hard, level non-combustible surface such as concrete, rock or stone.

Minimum Clearance from Unit to Combustible Materials
72" (182.9cm) from the top; 48" (121.9 cm) from all sides and back.
Do not locate this appliance under any overhead enclosure.
Position the appliance so that you have easy access to the control knob.



VISUAL CHECK

Prior to each use, check the hose and valve for excessive wear or abrasions.



LEAK TEST

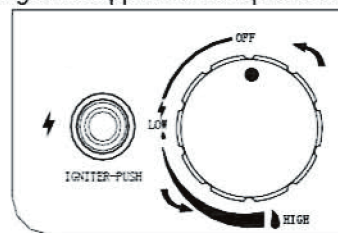
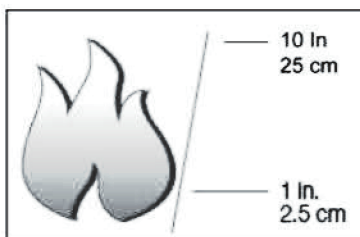
- 1 Perform a leak test in a well ventilated area outside
- 2 Make sure any open flames or cigarettes are extinguished.
- 3 Remove the battery.
- 4 Ensure the burner control knob is in the "OFF" position
- 5 In a bowl, create a soap solution using 1 part water and 1 part liquid detergent
- 6 Apply the soapy water solution to all connections.
- 7 Open LP tank valve.
- 8 A gas leak will be detected by expanding bubbles originating from the point of the leak
- 9 If a leak is found at any connection point or if you smell gas, close the tank valve, disconnect the tank and do not use the appliance until repairs can be made.

TO LIGHT

TIPS: Before Beginning ● Read and understand the instructions thoroughly.

- Check and make sure that all parts are present.
- For future reference, save this instruction sheet.

- 1 Locate the burner control knob and make sure it is in the "OFF" position.
- 2 Connect propane (LP) cylinder. (See above pages).
- 3 Open LP tank valve slowly.
- 4 Push in igniter button to create sparks at the electrode and hold.
- 5 Push and turn burner control knob to the "LOW" position. Continue to push the control knob for 5 seconds after ignition.
- 6 If ignition does occur within 5 seconds, turn the burner control knob to "OFF", wait 5 minutes for gas to clear and repeat the lighting procedure. If burner still will not light, refer to the Troubleshooting Section.
- 7 Once the appliance is lit, flame height can be changed by adjusting the burner control knob between the "High" and "Low"
- 8 Always check burner flames periodically to ensure proper operation. Flames should be mostly yellow with some blue for best performance. (See diagram)
- 9 inspect the burner everytimes before use, if evident that the burner is damaged, or the burner can not lighting, pls contract the manufactory to get the appliance to replace it.

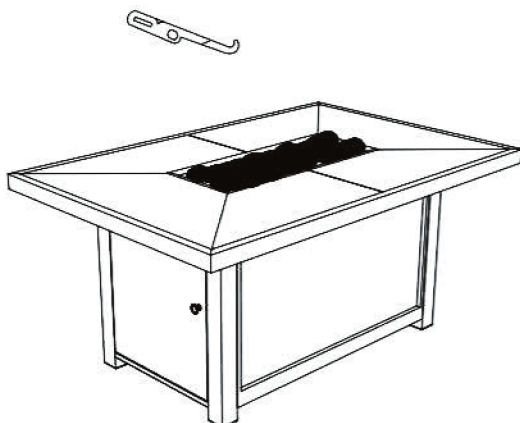


▲ Improper lighting procedure will cause injury or damage

If the burner does not ignite with the burner control valve open, gas will continue to flow out of the burner and could accidentally ignite causing injury or property damage.

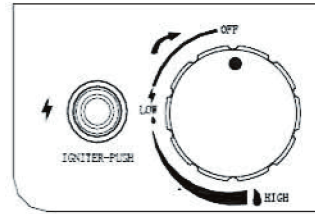
USING A LONG MATCH OR LIGHTER

- 1 Connect propane (LP) cylinder (see above pages).
- 2 Before lighting, move the lava rocks with a small shovel to allow access to the burner.
WARNING: Lava rocks can become very hot. DO NOT touch unless they are completely cooled.
- 3 Locate the burner control knob and make sure it is in the "OFF" position.
- 4 Wearing heat resistant gloves, position a long lit match or lit long neck lighter close to the burner ports. DO NOT lean over the burner while lighting.
- 5 Push and turn burner control knob to the "LOW" position. The burner should lit within 5 seconds.
- 6 If ignition does occur within 5 seconds, turn the burner control knob to "OFF", wait 5 minutes for gas to clear and repeat the lighting procedure. If burner still will not light, refer to the Troubleshooting Section.
- 7 Flame height can be changed by adjusting the burner control knob between the "LOW" and "HIGH" positions.
- 8 Always check burner flames periodically to ensure proper operation. Flames should be mostly yellow with some blue for best performance.



TO EXTINGUISH

- 1 Push and turn burner control knob to the "OFF" position.
- 2 Close the LP tank valve.
- 3 Disconnect the regulator from the LP tank to close the gas supply when not in use.
- 4 Make sure that the unit is completely cooled before touching any of the components or putting on the cover.



ROUTINE CARE

- Keep your appliance free and clear from combustible materials.
- Visually inspect burner for obstructions, keep tank enclosure free and clear from debris.
- After the burner and lava rocks are completely cooled down, use a soft brush to get rid of the mild stains, loose dirt and soil. Wipe with a soft cloth.

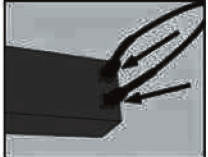
STUBBORN STAINS

- Stubborn stains, discoloration and possibly rust pitting can occur from exposure to harsh outdoor conditions.
- Be careful not let any powder or solvent come in contact with painted or plastic components as damage may occur.

MAINTENANCE

- Store the appliance in a cool dry place away from direct sunlight.
- Make sure both the gas and the appliance are turned off before changing battery. Please refer to the process of inserting battery.
- Protect your appliance with the cover when not in use.
- The propane cylinder must be disconnected and stored outdoors before the appliance can be stored indoors.
- Use Manufacturer approved or supplied replacement parts and accessories only. Otherwise may void the warranty of this product and result in a hazardous condition.
- Please contact the Manufacturer for information regarding replacement hoses, thermocouples, ignitors, lava rocks, ceramic logs, etc.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTIVE ACTION
Appliance won't light	Igniter pin and burner are wet	Wipe dry with a cloth
	Igniter battery is incorrectly inserted.	Check that battery is correctly inserted.
	Igniter pin cracked or broken	Call customer service for replacement part
	Electrode wire is loose or disconnected	Reconnect wire to the igniter box located inside the table base behind the igniter button 
	Electrode wire is shorting between valve and igniter pin	Call customer service for replacement part
Burner will not light using a match	No gas flow	Check if gas cylinder is empty. If yes, replace.
	Regulator is not fully connected to the tank	Check LP tank connection.
	Gas flow is obstructed	Check hose for bends or kinks
	Spider webs or insect nest in the venturi (end of burner tube)	Clean the venturi
	Burner ports are clogged	Insert an opened paperclip into each of the burner ports to clean them. Ensure the appliance is off and all parts are cooled before attempting to clean the burner ports
Appliance emits a lot of black smoke when lit	Flame is obstructed at burner ports	Make sure all the gas burner ports are free of any lava rocks or debris to allow the gas to flow freely.
	Regulator hose is pinched	Check the regulator hose for bends or kinks
Sudden drop in gas flow	No gas flow	Check if gas cylinder is empty. If yes, replace.
	Excess flow safety valve has been activated	Turn the control knob to "OFF", Close the LP tank valve and disconnect the regulator from the tank. Turn the control knob to "HIGH". Wait 1 minute. Turn the control knob to "OFF". Reconnect regulator to LP tank. Open tank valve slowly. Light appliance as indicated in "To Light" section.
Flame blow out	High or gusting winds	Increase flame to "High"
	No gas flow	Check if gas cylinder is empty. If yes, replace.
	Excess flow safety valve has been activated	See "Sudden drop in gas flow" above
Irregular flame pattern or flame does not come out of the entire length of the burner	Burner ports are clogged	See "Burner will not light using a match" above.