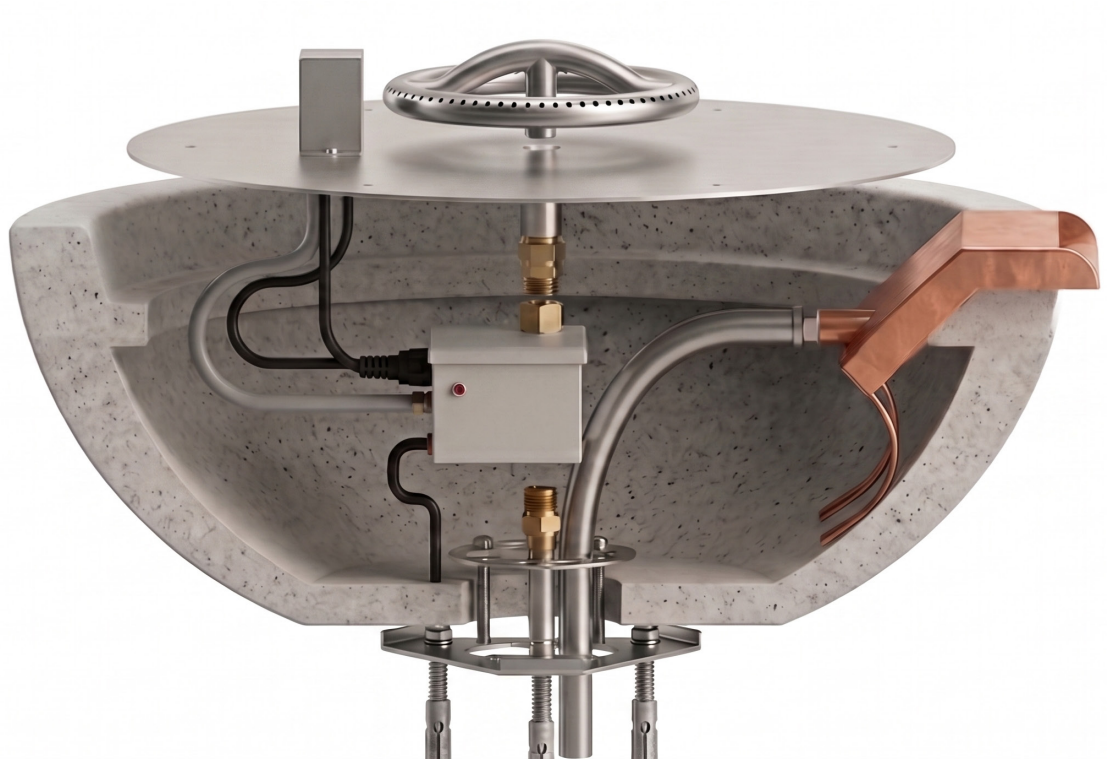
THE OUTDOOR PLUS™
AMERICAN MADE FIRE & WATER FEATURES



C US

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED

FIRE WATER BOWL INSTALLATION

LOW VOLTAGE IGNITION SYSTEM

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

WARNING:
Do NOT store or use gasoline or other flammable liquids or vapors 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. For use with Natural or Propane gas only.

WARNING LABELS & SYMBOLS

THIS IS A SAFETY ALERT SYMBOL

When you see this symbol on the fire feature or manual, look for one of the following signal word panels alerting you to the potential for personal injury, death, or major property damage.

WARNING
FOR OUTDOOR USE ONLY. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

CAUTION
IMPROPER USE. Use this equipment only for its intended purpose. Misuse or modification of the equipment may result in injury or damage to the equipment.

DANGER
FIRE OR EXPLOSION HAZARD. If you smell gas:
- Shut off gas to the appliance.
- Extinguish any open flame.
- Open lid.
- If odor continues, keep away from the appliance and immediately call your gas supplier or your fire department.

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
FIRE HAZARD. Maintain a clean area around your Fire Feature, ensuring it is free from flammable liquids and other combustible materials like mops, rags, brooms, solvents, cleaning fluids, lighter fluid, and gasoline.

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
Do not install the Fire Feature on combustible material, or material that can obstruct ventilation such as wood, grass, loose sand, and loose gravel.

WARNING
FIRE OR EXPLOSION HAZARD. If you smell gas: Shut off gas to the appliance and extinguish any open flame. If odor continues, leave the area immediately. After leaving the area, call your gas supplier or Fire Department.

WARNING
Do not use lighter fluid in the Fire Feature. Product is not intended to be a starter for wood or any other combustibles. Always have a fire extinguisher nearby.

WARNING
NEVER leave the Fire Feature unattended. Keep children and pets away from the Fire Feature at all times.

WARNING
The Outdoor Plus suggests that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping. Our products should be serviced annually by a professional certified in the US by the National Fireplace Institute (NFI) as Gas Specialists or in Canada by WETT (Wood Energy Technical Training).

WARNING
Only use gas/fuel type specified for this fire pit. See label on the fire pit control box. Gas pressure and type should be checked prior to use and installation.

WARNING
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.

WARNING
It is the installer's responsibility to ensure a safe installation and to educate the end user as to proper operation.

WARNING
NOT SUITABLE FOR USE BY CHILDREN. Only adults who understand the proper operation and safety precautions for the Fire Feature should handle it.

WARNING
For the safety of yourself and others, ensure that the Transformer is plugged into a GFCI Outlet.

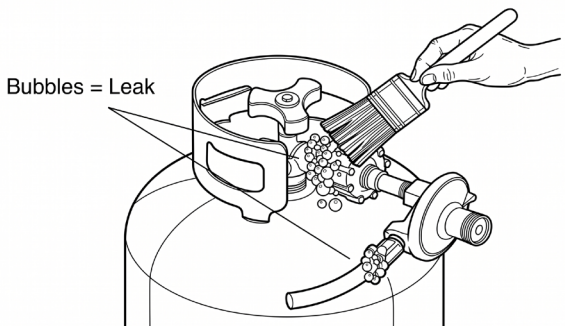
WARNING
The Outdoor Plus Company, Inc. is not responsible for your actions.

GAS SAFETY

- Finding and/or fixing a gas leak is NOT a “DO-IT-YOURSELF” procedure - ONLY USE A PROFESSIONAL.
- NEVER USE THE FIRE FEATURE WITHOUT FIRST LEAK TESTING THE GAS CONNECTIONS INCLUDING ALL OF THE VALVES, FITTINGS, LINES ETC. (ALL GAS CONNECTIONS SHOULD BE CHECKED).
- WARNING: DO NOT USE OPEN FLAME TO CHECK FOR LEAKS. USE OF AN OPEN FLAME COULD RESULT IN A FIRE, EXPLOSION AND BODILY HARM.
- DO NOT SMOKE WHILE PERFORMING THE LEAK TEST. Any open flame will ignite the gas.
- Check to ensure that flexible hoses do not have any cuts and wear that may affect the safety before each use. Only the factory supplied hose and regulator must be used. Use only replacement regulator and hose assemblies specified by The Outdoor Plus.

CHECKING FOR GAS LEAKS: Perform a leak test before each use. In addition, whenever the gas cylinder is connected to the regulator or whenever any part of the gas system is disconnected or replaced, perform a leak test. As a safety precaution, remember to always leak test your appliance outdoors in a well-ventilated area. Never smoke or permit sources of ignition in the area while doing a leak test. Do not use a flame, such as a lighted match to test for leaks. Use a solution of soapy water.

- Prepare a leak testing solution of soapy water by mixing in a spray bottle one part liquid soap to one part water.
- Make sure all the control knobs are in the OFF position.
- Turn on the gas:
  - On Natural Gas systems, turn the main feed valve to the appliance.
  - On LP systems, turn the cylinder valve knob counter clockwise one turn to open.
- Apply the leak-testing solution by spraying it on joints of the gas delivery system. This includes all valves, pipe connections, joints, lines, and every point from the gas source to the burners.
- Emerging bubbles in the soap solution or and/or if there is a faint gas smell (gas typically has an egg smell) indicates that a leak is present. Do not attempt to ignite the side burner.
- Turn all control knobs back to the full OFF position.



- All gas connections should be made by a Professional qualified technician and in accordance with local codes and Ordinances. The installation must conform with local codes or, in the absence of local codes, with either the national Fuel Gas Code, ANSI Z223.1/NFPA 54, or CAN/CGA-B149.1, Natural Gas Installation Code or CAN/ CGA-B149.2, Propane Installation Code.
- The outdoor gas appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa).
- The outdoor gas appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).
- Check the rating label attached on the outside of the unit.
- Do not twist the gas supply hose.
- Before each use, visually inspect the gas supply hose for cracks, cuts or excessive wear. Replace the hose if necessary. Check for gas leaks before each use.
- Gas Specifications: A Natural Gas appliance requires natural gas to operate; an LP appliance requires liquid
- propane gas to operate.
- Never connect the appliance to an unregulated gas supply line. Appliances operated without a regulator are unsafe and will not be serviced until installed properly and safely. Unsafe operation without a gas regulator will void the warranty of the appliance.

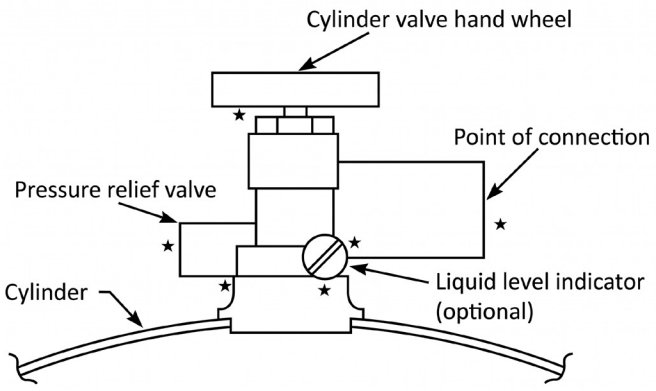
- Appliances operated with NG (natural gas) must be installed with the NG regulator supplied with the unit and set to 4.0” water column pressure.
- Appliances operated with LP (liquid propane) gas must be installed with an LP regulator set to 11” water column pressure.
- Please contact your dealer and use a licensed contractor or installer to convert your appliance to the different gas type.
- CHECK TO ENSURE THAT THE GAS SUPPLY HOSE DOES NOT COME IN CONTACT WITH ANY HOT SURFACE, SHARP OR ROUGH EDGES. DO NOT KINK THE GAS LINE WHEN INSTALLING.

DANGER
Flammable gas under pressure. Leaking LP-Gas may cause a fire or explosion if ignited causing serious bodily injury or death. Contact Gas Supplier for repairs, or disposal of this cylinder or unused LP-Gas.

DANGER
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 qualification 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 30lb 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 regulator vent is 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 bubble appears, 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 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 inquiry may occur.



IT IS THE RESPONSIBILITY OF THE INSTALLER TO FOLLOW:

- The National Fuel Gas Code, ANSIZ 223.1 /NFPA 54, ANSI STD Z21.58,-2022 CSA STD 1.6-2022
- The National Electrical Code, ANSI/NFPA 70

GAS AND ELECTRICITY REQUIREMENTS

FUEL TYPE: Before making gas connections, ensure appliance being installed is compatible with the available gas type. Check the label on the appliance to confirm appliance gas type.
GAS PRESSURE: Proper input gas pressures are required for optimum appliance performance

GAS PRESSURE REQUIREMENTS

PRESSURE	NATURAL GAS	PROPANE
Minimum	3.5” W.C .87 kPa	8.0” W.C. 1.99 kPa
Nominal	7.0” W.C. 1.74 kPa	11.0” W.C. 2.73 kPa
Maximum	14.0” W.C. 3.48 kPa	14.0” W.C. 3.48 kPa

WIRE GAUGE REQUIREMENTS BASED ON DISTANCE

DISTANCE IN FEET	10FT.	20FT.	30FT.	40FT.	50FT.	60FT.	70FT.	80FT.	90FT. +
6AWG	12VDC	12VDC	12VDC	13VDC	13VDC	13VDC	13VDC	13VDC	14VDC
8AWG	13VDC	13VDC	13VDC	13VDC	13VDC	14VDC	14VDC	14VDC	
10AWG	12VDC	13VDC	13VDC	14VDC	14VDC				
12AWG	13VDC	13VDC	14VDC						

GENERAL INFORMATION

Please carefully follow the instructions in this manual to prevent personal injury or property loss. Instructions are updated as

WARNING: Verify correct gas/fuel type and pressure. Never use an alternative fuel to include bio-fuel, ethanol, lighter fluid or any other fuel. Gas pressure and type should be checked prior to use and installation.

- Natural Gas Fire bowl: Supply Pressure: Minimum: 3.5” W.C.; Maximum: 7.0” W.C.
- Liquid Propane Gas: Supply Pressure: Minimum: 8.0” W.C.; Maximum: 11.0” W.C.

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COMPONENTS OVERVIEW

- Installation must conform with local codes or in absence of local codes, with the National Fuel Code, ANSI Z223.1 / NFPA 54, or International Fuel Gas Code.
- 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.
- When an appliance is connected to a fixed piped system, the installation must conform with local codes, or in the absence of local codes with the National Fuel Gas Code, 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, as applicable.

COMPONENTS OVERVIEW

- Certified to ANSI Z21.97 - (2017) / CSA 2.41 - (2017)
- -20° to 175° temperature range.
- Durable connections designed to resist outdoor conditions.
- LED diagnostics.

ELECTRONICS

- Electronics are certified for CAN/CSA-E60730-1, ANSI Z21.20 - 2014, CAN/CSA - C22.22 No.60730-2-5-14, UL 60730-2-5 Edition 3, & UL 60730-1.
- Transformer to GFCI Outlet connection for safety.
- Potted control module to protect against moisture and damage.
- Thermocouple Flame Sense, fast responding and resistant to wind, moisture, and corrosion.
- LED diagnostics for field service and troubleshooting.

GAS VALVE AND PILOT COMPONENTS

- The manual key valve is CSA Certified to ANSI Z21.15/CSA9.1.
- The pilot is CSA Certified to ANSI Z21.20.
- Coils are encapsulated to protect against moisture.
- Pilot has robust flame pattern, wind resistant.
- Pilot injectors are stainless steel.
- Thermocouple is nickel plated for durability.
- The Power Wire connector is waterproof.

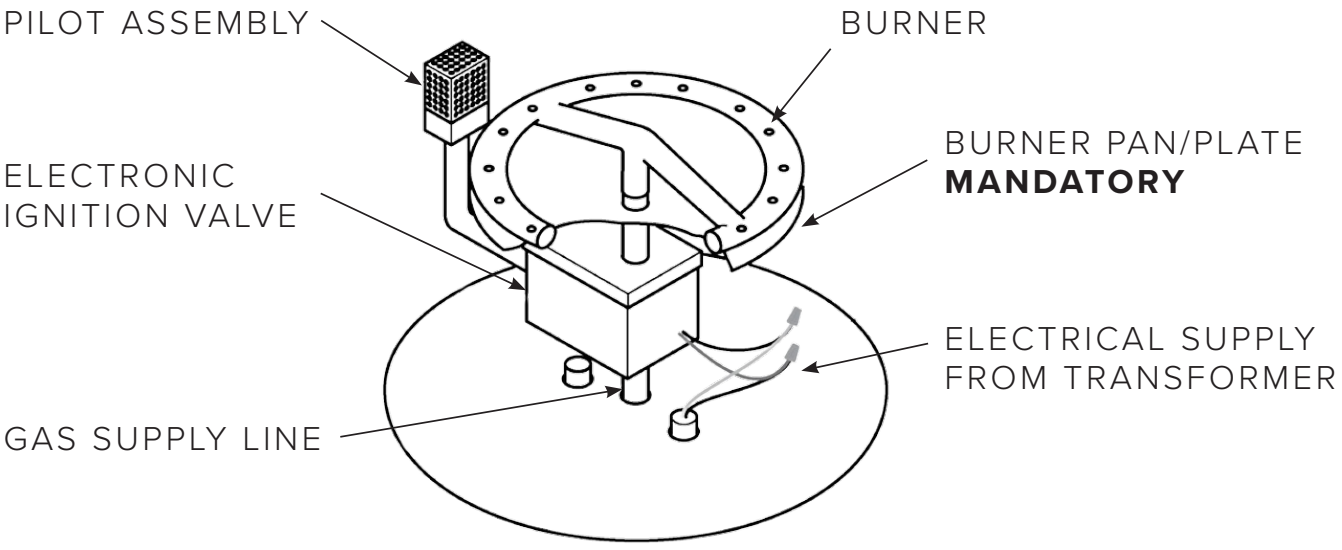
COMPONENTS OVERVIEW

GAS CONNECTION

- Installation or repair should be performed by a qualified service technician who is locally licensed. The appliance should be inspected before use and at least annually by a qualified technician.
- Do NOT remove any decal/rating plates from the Electronic Ignition Valve. A gas shut off must be installed outside the exterior of the fire feature for emergency shut off and maintenance. A sediment trap is highly recommended to alleviate any problems from debris or sediment in the gas line. It is the installers responsibility to ensure the fuel supply and line are adequate to supply the maximum BTU for the burner used.
- **NOTE:** A heat shield/plate MUST be installed between the Electronic Ignition Valve and the burner ring to avoid over heating.
- The Electronic Ignition Valve box is pre-mounted to the burner or burner & pan combination.
- The Electronic Ignition Valve is designed to automatically close the gas valve and shut down should temperatures exceed 175° Fahrenheit. To keep the unit cool, proper ventilation and a heat shield must be provided.
- The Outdoor Plus Recommends a Stainless Steel Whistle-Free Flex Hose to eliminate the noise

PILOT ASSEMBLY CONNECTIONS

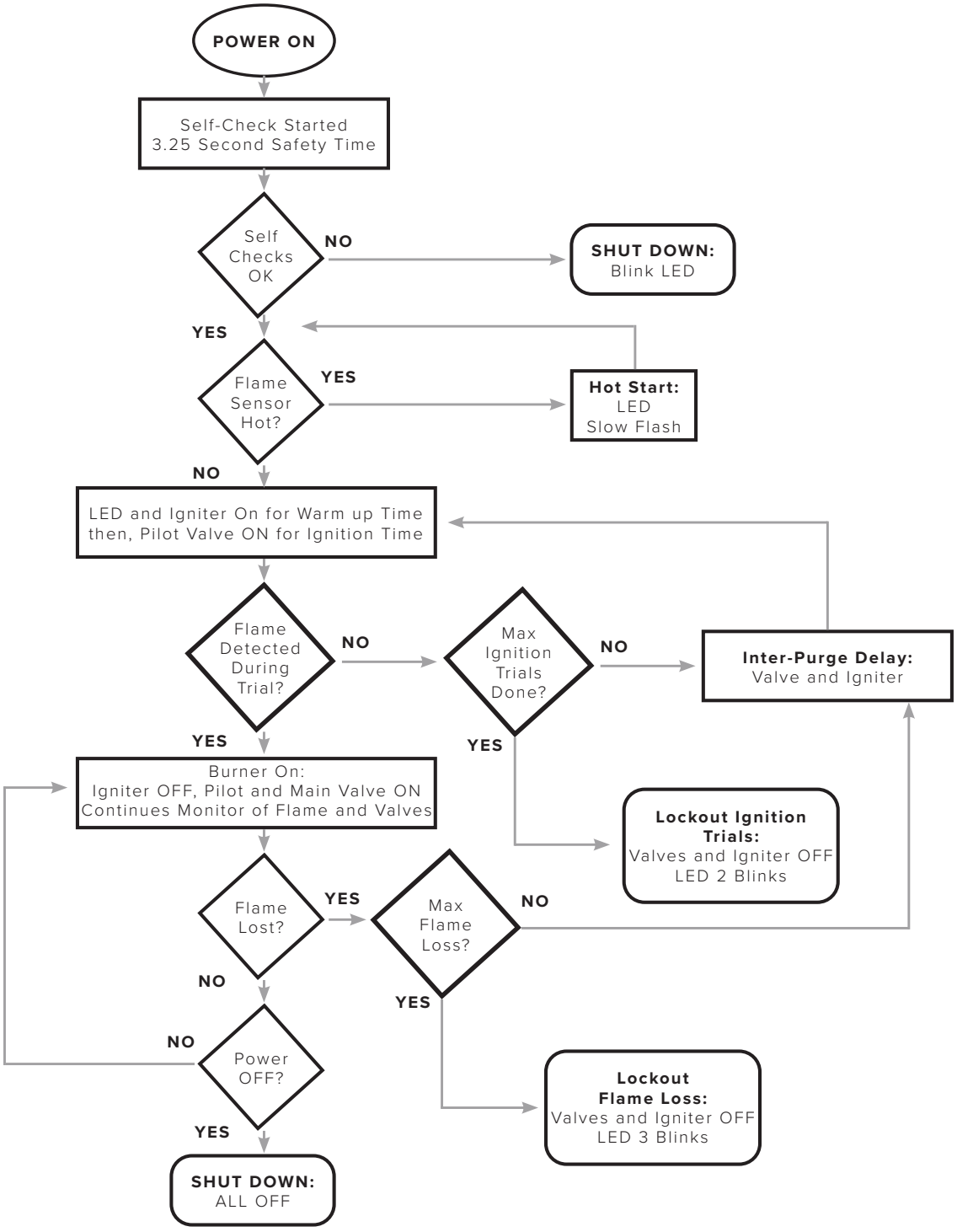
We pre-assemble the pilot on top of the burner pan and in that configuration, the pilot line, thermocouple, and igniter lead should be lowered through a hole in the pan prior to connecting to the control box. The pilot comes pre-assembled from the factory, so the installer can simply connect the assembly to the main control box. The igniter has a “shaped” push on waterproof connector ensuring that is can only be connected the correct way. Push the black plastic connector parts firmly together until it locks in place. Gently tug on wires to assure connection is secure. The flexible corrugated pilot tube has a flare fitting that should be connected 1/4 turn past hand tight. Please double check to ensure the fitting is snug both into the control box and the flare connection. The thermocouple should now be connected. It screws onto the 11/32” brass fitting on the control box closest to the black connector. It should be snug, but do not over-tighten.
Next, you may mount the pilot to the burner pan. The shield is designed with perforated material which you can use to secure to the pan with self tapping screws. The installer can determine the best placement for the pilot depending on the burner configuration keeping the pilot within 1” from a burner port for quick ignition. Once all connections are complete, it is highly recommended to perform a leak test. Turn on the gas supply and using gas test solution or soapy water solution, spray the gas connections on the Electronic Ignition Valve including the pilot connector to ensure it is leak free.



OPERATION SEQUENCE

SEQUENCE OF OPERATION

When activated, the unit initiates a pre-purge period upon detecting a call for heat. The hot surface igniter (HSI) is energized for warm-up duration, followed by activation of the pilot gas valve during the trial-for-ignition period. Once ignition is achieved, the HSI deactivates. If flame detection occurs before the trial-for-ignition period elapses, the HSI deactivates. The main valve opens, and the pilot valve remains active until power is cut or flame signal is lost. In case of flame loss, the control shuts off the gas valve, initiating a flame loss recycle delay before restarting the ignition sequence. If no flame is detected during the trial-for-ignition period and trials-for-ignition remain, both the pilot and HSI deactivate, entering an inter-purge period before the next ignition attempt. If flame detection occurs before the gas valve activates, the control halts the sequence and enters safety shutdown until the flame drops below the minimum threshold or continuously drops by the minimum threshold value before proceeding.



SELECTING THE LOCATION

WARNING: All fire bowls, match lit kits, and spark ignition systems are designed and intended for outdoor use only.
WARNING: All fire bowls must have a gas shutoff on the outside of the exterior of the fire bowl to allow for emergency shut off and maintenance.
WARNING: Select a location where the fire bowl can be attended during operation. Never leave an operating fire bowl unattended or by someone not familiar with its operation or emergency shut off locations.
WARNING: Both children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns and clothing ignition.
WARNING: Young children should be carefully supervised when they are in the area of fire bowl.
WARNING: Clothing or other flammable materials should not be placed on or near fire bowl.
WARNING: Fire bowls create very high temperatures - Combustibles must be located far enough away that there is no risk of ignition. (See Clearance From Combustibles diagram at the end of this document)

CLEARANCE FROM COMBUSTIBLES

UP TO 65K BTUS

Under Valve Box When Applicable	2” For Drainage
Sides Surrounding Fire Pit	Min. 36” From Structure, Combustibles, and Non-Combustibles
Overhead Clearance	Min. 96” Overhead Clearance

UP TO 66K - 200K BTUS

Under Valve Box When Applicable	2” For Drainage
Sides Surrounding Fire Pit	Min. 48” From Structure, Combustibles, and Non-Combustibles
Overhead Clearance	Min. 96” Overhead Clearance

UP TO 201K - 400K BTUS

Under Valve Box When Applicable	2” For Drainage
Sides Surrounding Fire Pit	Min. 48” From Structure, Combustibles, and Non-Combustibles
Overhead Clearance	Min. 96” Overhead Clearance, No overhead structures or obstructions allowed.

IMPORTANT: It is recommended that material such as granite, marble or other dense stone be kept away from heat and especially flame due to risk of cracking. Manufacturer is not responsible for damage.

TIPS FOR CHOOSING LOCATION

- Select a location with good drainage.
- Choose a location that allows easy access for installation and maintenance of the fire bowl.
- Pick a location that allows sufficient room to enjoy the fire bowl while allowing a safe distance from the heat and flame.

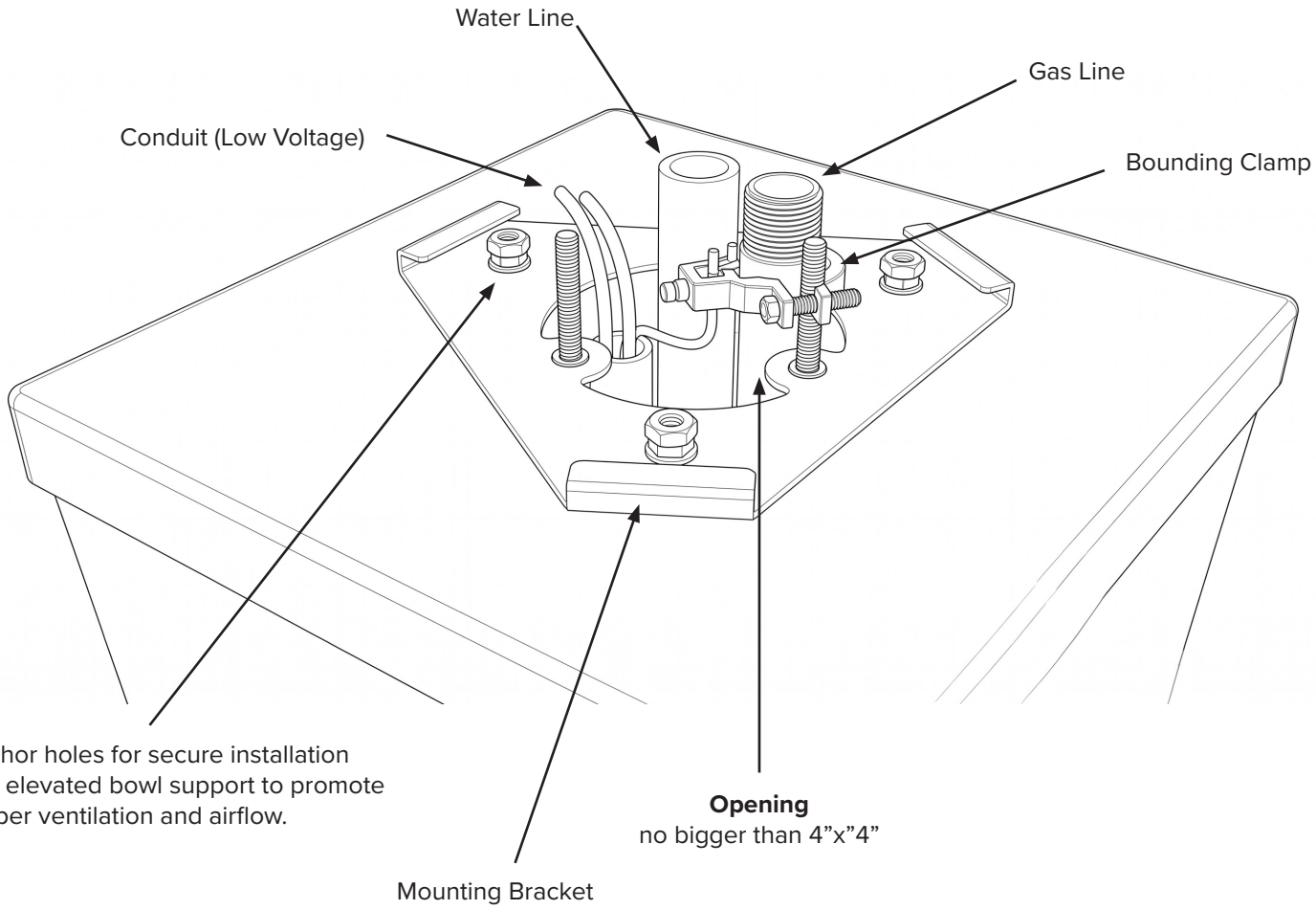
WARNING
Venting is required to dissipate heat and any residual fuel. Failure to provide proper ventilation could result in overheating and or explosion.

RUNNING GAS LINES

- The gas piping shall be installed underground between to each fire bowl. The piping shall be reduced to 1/2” NPT at each bowl.
- To eliminate unnecessary pressure drop, ensure the pipe length and amount of elbows used is minimized.
- Yellow corrugated flex lines should not be used. ONLY use stainless steel whistle free hoses

MOUNTING ON PILLAR/WALL

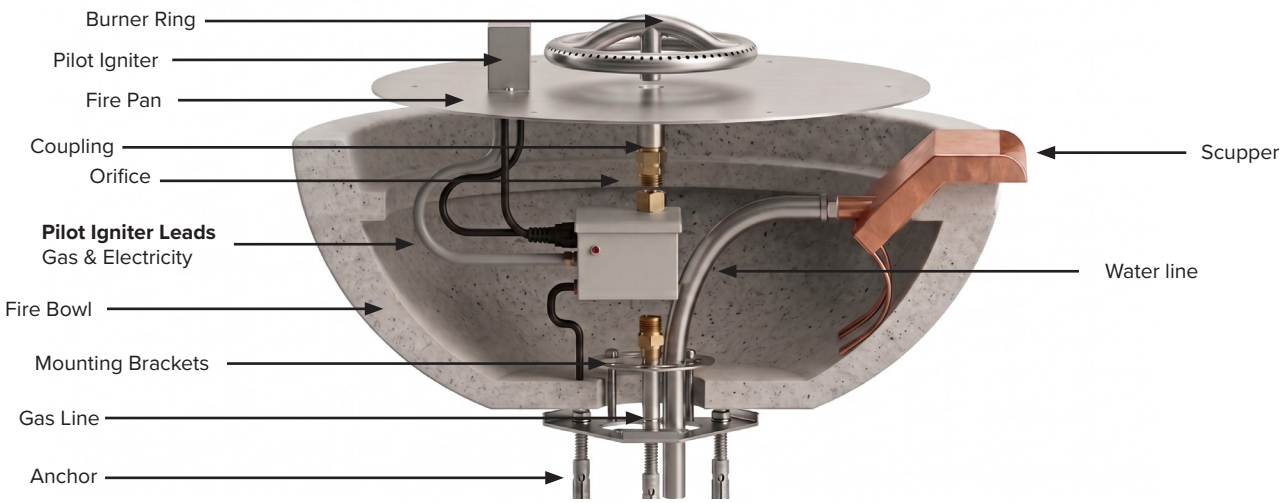
- Secure mounting bracket to mounting location with anchors rated for material being affixed. (Anchors not supplied by The Outdoor Plus.)
- Avoid grout seams when installing anchors
- Center cutout hole must be no larger than 4” inches square or diameter. Any larger and the mounting bracket will not have enough area to be properly secured.
- Use bracket to locate and mark the hole location.
- Do NOT kink or sharply bend any of the stainless steel gas lines.
- Do NOT use yellow corrugated gas lines.



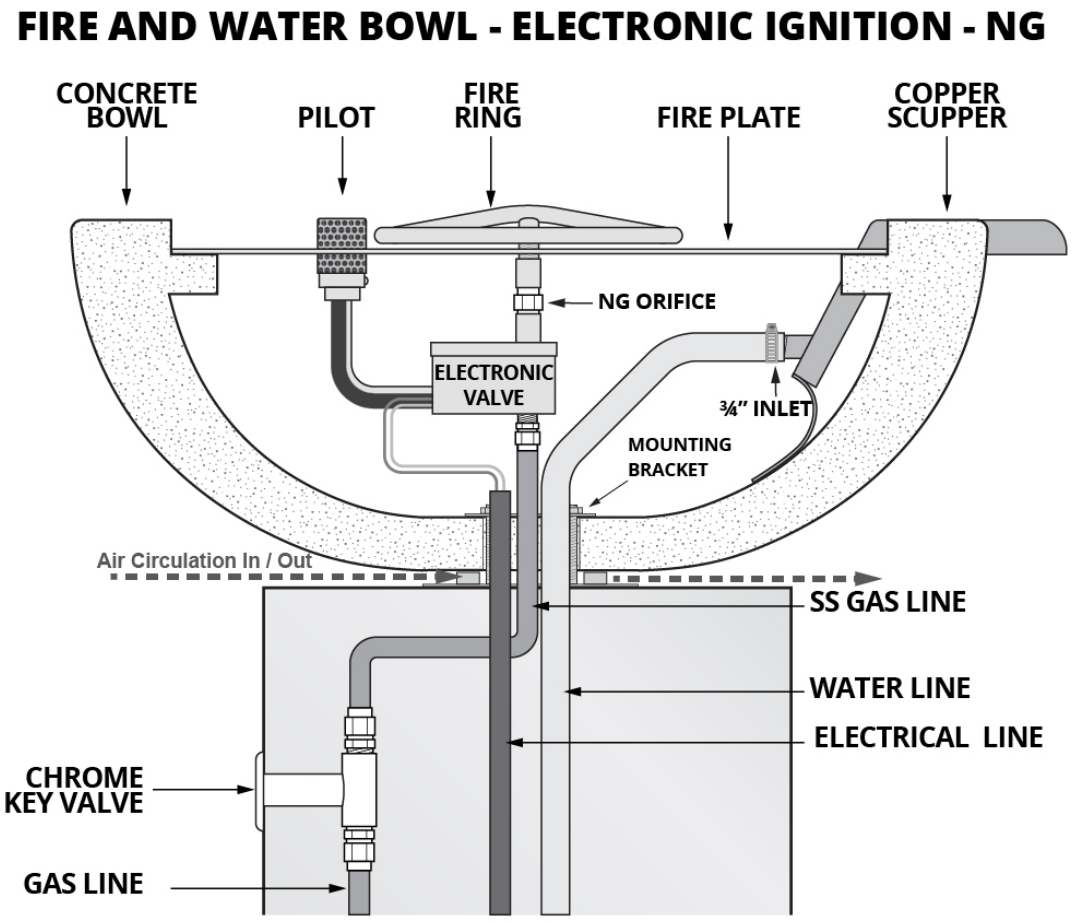
INSTALLATION OF FIRE BOWLS

- **WARNING:** We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping.
- **WARNING:** We suggest that our products be serviced annually by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists.
- **WARNING:** Confirm this appliance is built for gas used – natural gas or propane. Do not use natural gas appliance with propane. Do not use propane appliance with natural gas.
- **WARNING:** To prevent damage, unhook fire bowl from gas supply for pressure leak tests.
- **WARNING:** Fuel line sizing is the responsibility of the installer and must be able to supply the stated maximum BTU for the product.
- **WARNING:** Burn Testing- It is the responsibility of the qualified installer to test for gas leaks at all connections.
- **WARNING:** When filling the pan with lava rock and/or decorative glass, follow directions on the following page
- **WARNING:** Gas Plumbing Connections: Use only joint compound or tape that is resistant to all gases. Apply joint compound to all male pipe fittings only- do not use joint compound onto flared/tapered fittings. Be sure to tighten every joint securely.
- **WARNING:** For systems with an extended or detached valve box the area in which the valve box is installed must conform with all installation requirements to include but not limited to location, construction, venting and local codes. Failure to do so may result in personal injury property damage or explosion.

- Plan your project well in advance to comply with all instruction and codes and allow for access and serviceability of the product.
- Purge gas lines of air.
- Perform all leak test with leak detector or leak reactant.
- Verify correct gas type and pressure.
- Perform leak test on main gas supply. Repair leaks as necessary.
- Shut Off Gas Supply and Power to fire-pit.
- Connect fire-pit to main gas supply.
- Turn on gas supply and perform leak test on all inlet connections. Repair as needed.
- Position fire bowl safely with access to all gas connections for testing.
- Light fire bowl. It may take several cycles to purge air from the lines.
- Once fire bowl is lit perform leak test on all gas connections. Repair as needed.
- Turn off fire bowl and allow to cool.
- Apply media
- Turn on fire bowl again and perform leak test with media correctly installed. If gas leak is detected verify correct media application and repair as needed.
- If key valve is installed, adjust flame to desired height. (Never alter the product configuration)
- Set fire bowl in properly constructed enclosure
- Verify correct operation and lighting.
- Review safety manual with end user and instruct not to change/ modify fire bowl or media.
- Leave manual with end user.



INSTALLATION OF FIRE BOWLS



WARNING:

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

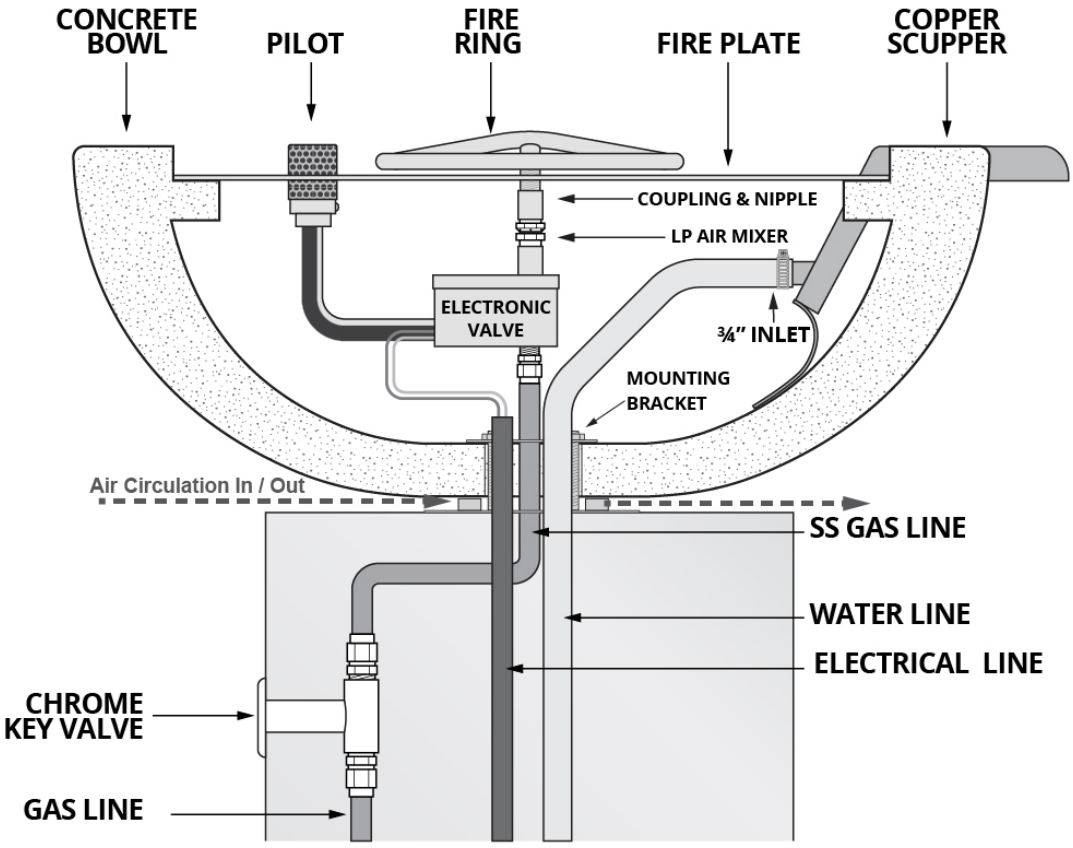
For Propane Installations:

1. Cross Ventilation is REQUIRED! A minimum of 1 square inch of ventilation is required for every 25,000 BTUs on each side of installation.

2. Propane tank must be placed in/on a propane tank retainer/non-tip base to ensure the propane tank will not tip over.

3. NOTE: Propane cylinder NOT included. Make sure to properly locate the gas hose including locating the hose out of pathways where people may trip over it or in areas where the hose may be subject to accidental damage.

FIRE AND WATER BOWL - ELECTRONIC IGNITION - LP



ELECTRONIC IGNITION SYSTEM INSTALLATION

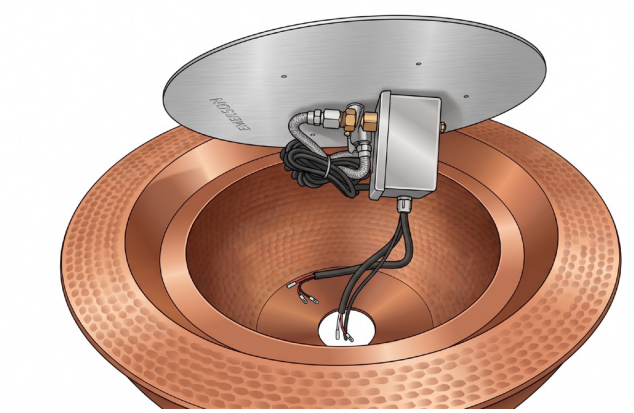
All bowls arrive pre-installed with the Electronic Ignition System already mounted inside the unit. This allows for a faster and simpler installation process in the field.

Before installation, ensure both the gas line and electrical conduit have been properly stubbed to the designated location where the bowl will be installed.

NATURAL GAS INSTALLATION

Units ordered for **Natural Gas (NG)** applications come with the Electronic Ignition System pre-installed from the factory.

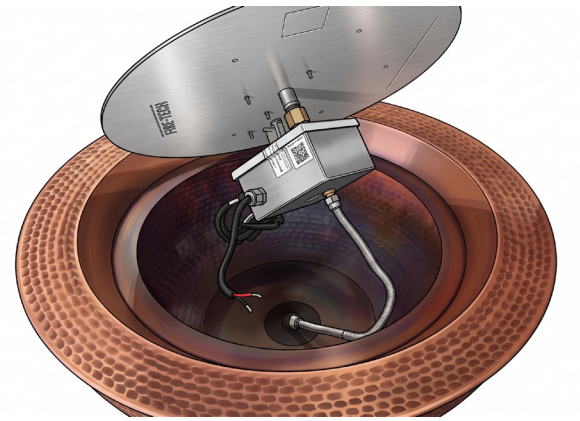
The Ignition System will arrive positioned sideways inside the bowl. This is the correct factory-installed orientation and does not require adjustment.



PROPANE INSTALLATION

Units ordered for **Propane (LP)** applications also come with the Electronic Ignition System pre-installed from the factory.

The Ignition System will arrive positioned upright inside the bowl. This configuration is required because propane systems utilize a ProFuel™ Air Mixer.



IMPORTANT

DO NOT DISCONNECT THE IGNITION BOX FROM THE BURNER ASSEMBLY. The Electronic Ignition System **HAS BEEN FACTORY ASSEMBLED AND TESTED PRIOR TO SHIPMENT.** Only connect the end electrical lines and gas supply line to your installation setup.

Ensure all installation requirements are properly followed, including:

- Correct wire gauge for the electrical connection
- Proper gas pressure for the specified gas type
- Outdoor-rated electrical connectors
- Approved gas fittings and sealants

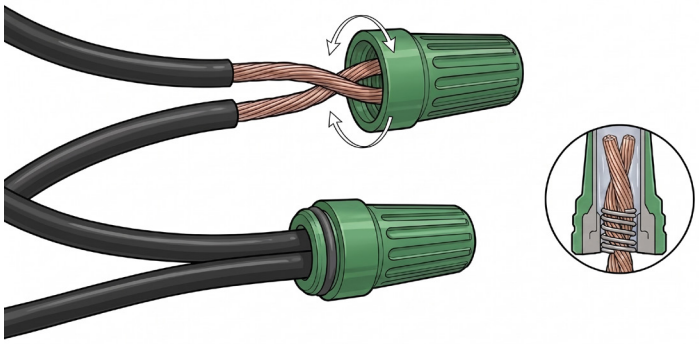
The bowl MUST be installed using the provided bowl mounting brackets to allow proper airflow and ventilation beneath the unit. Proper ventilation is required for safe operation of the Electronic Ignition System.

ELECTRONIC IGNITION SYSTEM INSTALLATION

ELECTRICAL CONNECTION

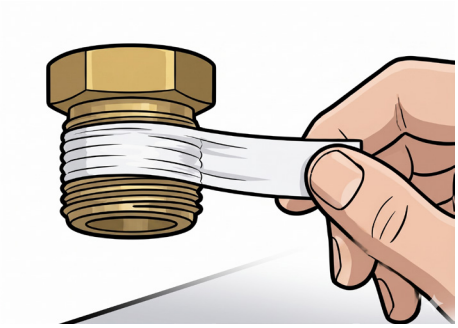
Connect the appropriate gauge low-voltage wire to the Electronic Ignition System using outdoor-rated wire nuts (wire connectors). It is recommended to use weather-resistant connectors suitable for outdoor installations.

Verify incoming power before making electrical connections. Incorrect voltage or improper wire sizing may damage the Electronic Ignition System and void the warranty.



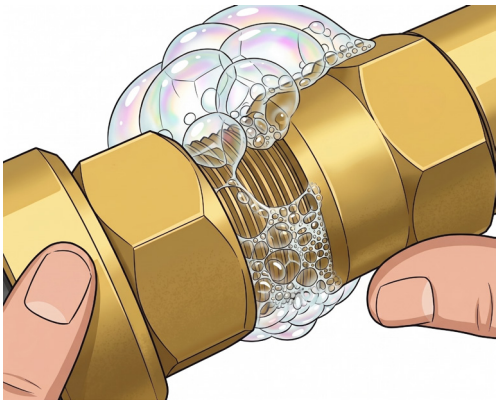
GAS CONNECTION

Connect the gas supply line to the bottom of the Electronic Ignition System. **Before threading the gas connection, apply approved pipe dope or plumber's tape to the gas stub and threaded fittings to ensure a proper seal.**



LEAK TEST

After completing the gas connection, perform a gas leak test using a soapy water solution on all gas fittings and connections. Verify that no leaks are present before operating the system.



FINAL CHECK

Once the electrical and gas connections have been completed correctly and all fittings have been tested, the Electronic Ignition System is ready for operation.

SCUPPER INSTALLATION INSTRUCTIONS

Follow these steps to connect the water supply to the scupper assembly:

1. Align the Components

Position the incoming water line inside the concrete bowl so that it aligns directly with the threaded inlet on the back of the copper scupper.

2. Connect the Fitting

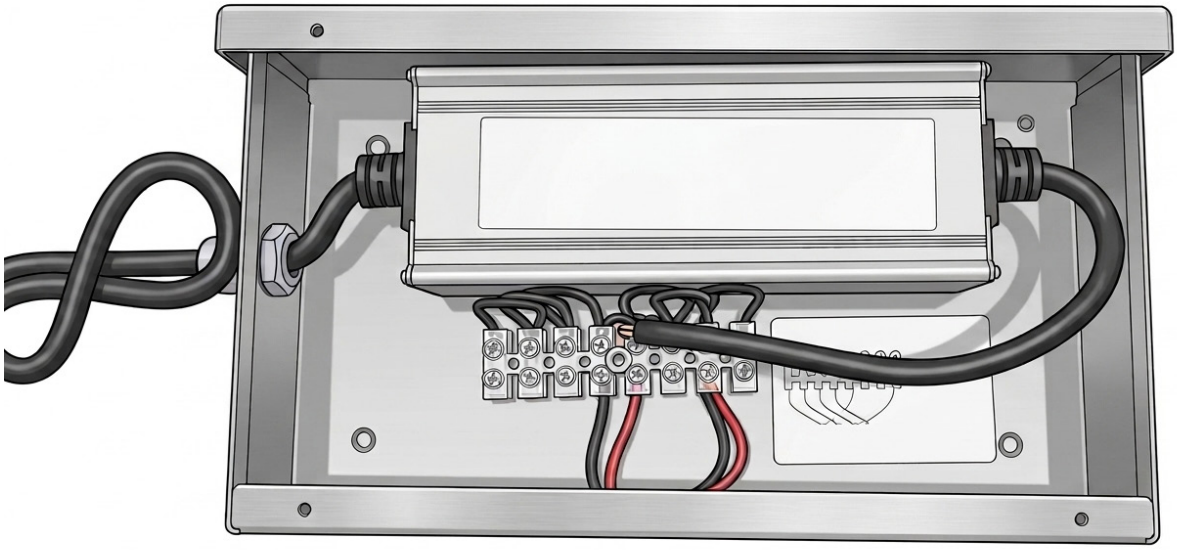
- Thread the female connector of the water line directly onto the 3/4” male fitting of the scupper.
- Hand-tighten the connection first to ensure the threads are properly engaged and to avoid cross-threading.

3. Secure and Seal

- Use an appropriate wrench to tighten the fitting until it is secure.
- **Note:** Apply plumber’s tape (Teflon tape) or an approved thread sealant to the 3/4” male threads prior to tightening to ensure a completely leak-free seal.



This illustration is for demonstration purposes only, serving as a conceptual example of how a scupper connects to the water line.



LOW VOLTAGE TRANSFORMER

Designed to power up to four fire features, from a single transformer.

SPECIFICATIONS

Input	100-277V ~ 50/60Hz 3.0A
Output	30V ⎓ 8000mA 240W

TRANSFORMER INSTALLATION

The low-voltage transformer is designed to safely power the Electronic Ignition System and must be installed correctly to ensure proper system operation.

Transformer Placement & Location

The transformer must be installed in a dry, well-ventilated location and connected to a properly protected GFCI outlet.

IMPORTANT

- Do NOT install the transformer inside the fire feature.
- Do NOT expose the transformer to standing water, flooding, or direct water contact.
- The transformer must be installed a minimum of 5 feet away from the fire feature, pool, spa, or any water source.
- **The transformer is commonly installed near pool equipment pads or other protected service locations.**
- Ensure the transformer remains accessible for future service and inspection.
- Do NOT bury or fully enclose the transformer.

Electrical Installation

- Ensure all unused taps (leads) are individually insulated.
- Use the Wire Gauge Chart to determine the proper wire size for your installation.
- Proper wire sizing is critical to maintain correct voltage output and system performance.
- All electrical connections must comply with local electrical codes.

Voltage Requirements

The voltage at the Electronic Ignition System after installation should read:

- 30V DC ± 0.3V

Incorrect voltage may result in improper system operation or transformer shutdown.

IMPORTANT

Voltage above the recommended output range may cause the transformer's internal safety protection to cycle on and off. To prevent this, always follow the recommended wire gauge and installation requirements.

DO'S:

- Do ensure proper airflow and ventilation around the Ignition Box at all times.
- Do mount the bowl using the provided mounting brackets.
- Do use the correct wire gauge for all electrical connections.
- Do use outdoor-rated wire connectors and electrical components.
- Do verify proper gas pressure before operating the system.
- Do perform a gas leak test on all gas connections prior to operation.
- Do apply approved pipe dope or plumber's tape to all threaded gas fittings.
- Do keep the interior of the bowl clean and free from debris.
- Do allow the Ignition Box to remain accessible for inspection and maintenance.
- Do ensure all installations comply with local gas and electrical codes.
- Do have installation performed by a qualified licensed professional.

DONT'S:

- Do NOT daisy chain multiple fire features together.
- Do NOT connect the Ignition Box directly to 110V power.
- Do NOT enclose or permanently box in the Ignition Box.
- Do NOT bury the Ignition Box in sand, dirt, water, or other materials.
- Do NOT restrict airflow around the Ignition Box.
- Do NOT operate the system without proper ventilation.
- Do NOT seal the bottom of the bowl.
- Do NOT install the bowl without the provided mounting brackets.
- Do NOT fill the inside of the bowl with sand, dirt, gravel, or other materials.
- Do NOT block the ventilation openings beneath the bowl.
- Do NOT disconnect the Ignition Box from the burner assembly.

IMPORTANT WARRANTY NOTICE

Failure to follow proper installation requirements and safety guidelines will VOID the manufacturer warranty.

Any of the following actions may result in system failure, unsafe operation, fire hazard, electrical damage, or permanent damage to the Electronic Ignition System:

- Daisy chaining multiple fire features together
- Connecting the Ignition Box directly to 110V power
- Enclosing, boxing in, or restricting airflow around the Ignition Box
- Burying the Ignition Box in sand, dirt, water, or other materials
- Sealing the bottom of the bowl or preventing ventilation
- Installing the bowl without the provided mounting brackets
- Filling the interior of the bowl with sand, dirt, gravel, or debris
- Modifying, disconnecting, or altering the factory-installed Ignition System
- Using improper wire gauge, incorrect gas pressure, or non-approved installation materials

Proper airflow and ventilation are REQUIRED for safe operation of the Electronic Ignition System. Failure to maintain proper ventilation may cause overheating, system malfunction, component failure, or irreversible damage not covered under warranty.

FIRE BOWL OPERATION

WARNING: Before use, be sure to test all gas connection for leaks. Do not use fire bowl if there is any evidence of leaking gas. If leaking gas suspected, turn off the main gas supply and repair immediately
WARNING: Do not use the fire bowl if any part has been submerged under water.
Immediately call a qualified technician to inspect the fire bowl
WARNING: Never use any material that is non-porous and holds moisture such as gravel, pebbles, river rocks, etc. This material, when heated, will cause moisture trapped inside to boil and fracture unexpectedly. This material is not sufficiently porous to allow heated steams to readily escape which can break and cause personal injury or damage
WARNING: solid fuels shall not be burned in the fire bowl. Leaves, sticks, wood, paper, clothing, food, should be kept away from the fire bowl. Fire bowl is not for cooking. Make sure that there is no vegetation or other objects over the top or sides of the fire bowl that could interfere with safe operation. See “Clearance from Combustibles” diagram at the end of this document.
WARNING: If lava rock is wet, allow fire bowl to burn for 45 prior to coming within 15 feet of the fire bowl.
WARRANTY REQUIREMENT: When not in use, the fire bowl must be covered.

FIRE FEATURE START UP

1. Prior to turning appliance on visually inspect fire feature to ensure debris such as leaves or other combustible material has not collected inside the feature which could burn and emit embers once the fire feature is turned on. Also ensure any person standing close to the fire feature is aware you will be turning the fire feature on prior to actually turning it on.

2. Turn fire feature on by turning on the electrical device used to power the fire feature.

SEQUENCE OF OPERATION DURING IGNITION

- Power is applied
- Hot Surface Igniter (Glow Plug) becomes hot and 4 seconds later the Pilot Gas Valve opens
- Within 10 seconds of power application Pilot Flame should be visible (at night only)
- Within 10 seconds of Pilot Flame Ignition burner (fire ring/burner bar) should ignite

FIRE FEATURE SHUTDOWN

Turn fire feature off by turning off the electrical device used to initially power the fire feature

WARNING

If the fire feature fails to TURN OFF completely (small flames still visible)
TURN OFF GAS SUPPLY using the manual gas shutoff.

MAINTENANCE

WARNING: Maintenance should be done by a qualified service technician. The appliance should be inspected before use and at least annually by a qualified service technician.
WARNING: Ensure gas and power are shut off and appliance is cool before servicing.
WARNING: Any guard or protective device removed for servicing must be replaced prior to operation.

PRIOR TO EACH USE

1. Inspect for debris in Fire Feature – remove debris prior to use

SEMI-ANNUALLY

1. Visually inspect Pilot Burner for debris/insect infestation (spider webs)
2. Visually inspect burner holes for debris/insect infestation
3. Clean either of the above as necessary using compressed air.

ANNUALLY

1. Visually inspect Pilot Burner for excess corrosion due to heat and moisture.
2. Turn fire feature on to ensure proper operation.

TROUBLE SHOOTING

I installed the Electronic Ignition System, turned it on and nothing happened

When this occurs it is usually due to an electrical wiring / power issue. Check all your electrical connections thoroughly to ensure all wires at the transformer and inside the fire feature are connected properly. If it appears all wiring is connected properly, disconnect the wires at the fire feature, attach a Multimeter to the wires to confirm a minimum of 12 volts when the fire feature is turned on. If you determine that you do not have a minimum of 12 volts at the fire feature conduct the same test at the transformer to ensure the transformer is in fact producing a minimum of 12 volts. If you do have a minimum of 12 volts at the fire feature contact us for further assistance.

I installed the Electronic Ignition System, turned it on and I can see the glow plug glowing orange and I can hear gas flowing but it will not ignite.

There are two possible causes to this problem; Air in the Gas Line or not enough Electrical Current to the fire feature.

Air in the Gas Line - If a new gas line was installed and the air was never purged from it prior to installing the Electronic Ignition System then it may take several times of turning the fire feature on and off before the air is purged from the gas line. Here is how our system works; after you turn it on the glow plug will come on first followed by the Pilot Gas Valve opening 4 seconds later. For the next 180 seconds (3 minutes) the glow plug will cycle on and off every 30 seconds while the Pilot Gas Valve will remain on the entire time. Therefore if you are attempting to purge air from the gas line, turn the system on and leave it on for approximately 3 minutes. Then turn it off and then back on (no need to wait to turn it back on). Let the system run for another 3 minutes. Usually when purging air from a new gas line you will need to cycle the power several times as described above before gas begins to flow. If at any point you smell gas but still don't have ignition, attempt to light the pilot flame with a hand-held lighter. If the flame ignites when you light it by hand, go to the section below, "Electrical Current".
Electrical Current - If you have determined that air in the gas line is not the problem then most likely the failure to ignite is due to the fact the glow plug is not getting hot enough to ignite the gas. The reason a glow plug will not get hot enough is due to the fact it is not getting enough amps. Often times when troubleshooting electricians will check the electrical power and when they see they have a minimum of 12 volts they think everything is fine electrically so there must be a problem with the Electronic Ignition System. The problem is not due to the volts but rather the amps. The number of amps reaching the fire feature is heavily dependent on the gauge wire used between the transformer and the fire feature. Our Install Instructions require no less than 12 gauge wire be run for all fire features. Often times we learn that in many cases less than 12 gauge wire has been used and herein lies the cause of the problem.
Here is how you check to determine if enough Electrical Current (amps) are getting to the fire feature:

1. CAUTION: Turn off the gas supply prior to the next step.
2. Using a clamp on ammeter, clamp the ammeter around one of the wires providing power to the Electronic Ignition System.
3. Turn the fire feature on.
4. The amps you should see will range between 1.4 to 1.6 amps initially. Four seconds after being turned on the amps will jump to approximately 2.0 amps.

If you do not see the amps listed above AND the wire gauge used was less than 12 gauge wire – change the wiring. Otherwise contact us for further assistance.

I turned the Fire Feature off but I still see small flames emanating from the fire feature.

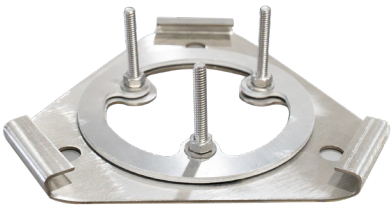
Turn the fire feature on, let the main fire ring light and then turn it off again – do this several times. Small pieces of debris from the gas line can get caught in the main or pilot valve thereby preventing it from closing all the way. This will sometimes happen with a new gas line. By cycling power you can often times dislodge the debris. If cycling power does not rectify the problem, turn the gas off using the manual gas shutoff and contact us for further assistance.

REPLACEMENT PARTS



Pilot Igniter
(TOP-500PI)

The pilot hood appearance may vary by manufacturing year, but this does not affect operation. The manufacturer reserves the right to update components at any time.



Mounting Bracket
(OPT-INBR)



Transformer
(TOP-500PI)



8” Burner
(OPT-158-8)

12” Burner
(OPT-159)

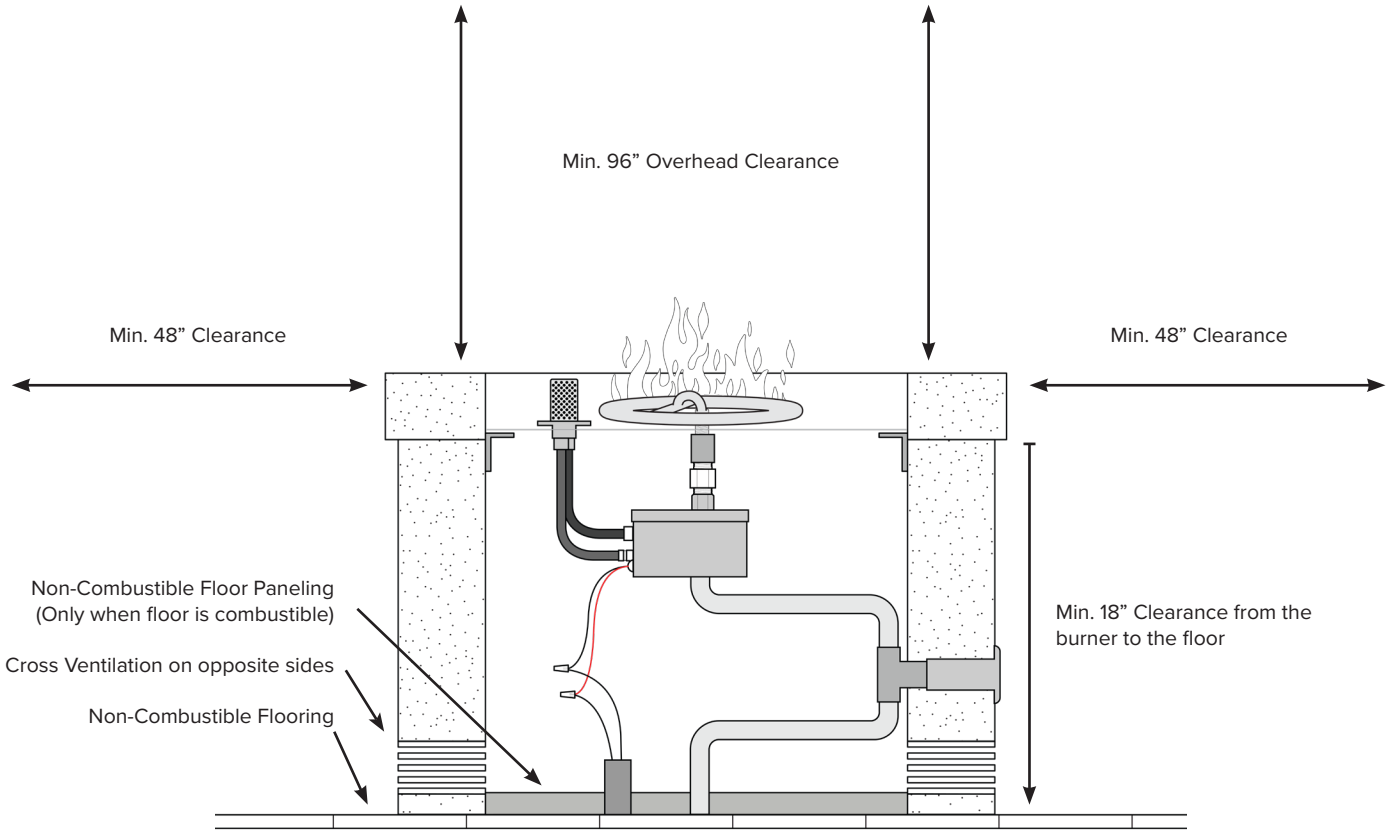
CLEARANCE FROM COMBUSTIBLES DIAGRAM

THIS DIAGRAM APPLIES TO ANY GAS FIRE FEATURE

Installation - We suggest that our products be installed by professionals that are locally licensed by the authority having jurisdiction in gas piping

Flooring - All fire pits and fire features must be installed on non-combustible flooring. If the fire feature is installed on a combustible floor, such as wood decking, a non combustible floor paneling MUST be properly installed underneath.

Service - We suggest that our products be serviced by a professional certified in the US by the National Fireplace Institute (NFI) as NFI Gas Specialists



LIMITED WARRANTY

The Outdoor Plus Company (TOP) warranties all bowls against manufacturing defects that prevent safe and correct function as follows:

- Electronics, Gas Valve, & Pilot Assembly: Commercial-6mos; Residential- 1 yr.
- Stainless Steel Pan, Fire Ring, & Valve Box: Commercial-1yr.; Residential 3yrs.
- This commences from the date of original sale / shipment from The Outdoor Plus.
- This warranty is for parts and in-house (TOP) labor. The defective product must be sent back to TOP with a Return
- Merchandise Authorization (RMA) issued by TOP for that specific product and any other additional information for the nature of the defect or warranty claim.
- The warranty does not cover items that have been damaged by overheating, modification, abuse, or improper storage. Also any labor involving installation or maintenance with the unit is not covered.
- This warranty excludes claims for consequential, indirect-collateral expenses arising from product defects or warranty recovery.

THE OUTDOOR PLUS™

AMERICAN MADE FIRE & WATER FEATURES

FIRE WATER BOWL INSTALLATION MANUAL (E12V)