WARMING TRENDS®

OWNER'S GUIDE AND INSTRUCTION MANUAL

ATTENTION

Due to product upgrades, our installation instructions for gas line connections have changed. Please be sure to read this manual in its entirety before installing.

SCAN TO VISIT
WARMING-TRENDS.COM

SCAN TO SEE AN
UPDATED ICC-ES LIST

ICC ES | ICC ES PMG | ICC ES LISTED

Version 6

IMPORTANT PRODUCT WARNINGS

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

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.

INSTALLER: Leave this user guide with the appliance.

CONSUMER: Retain this user guide for future reference.

The installer is responsible for using the correct fuel line sizing and/or regulation to provide gas within the specified minimum and maximum gas inlet pressures of the fire feature.

AVERTISSEMENTS IMPORTANTS CONCERNANT LES PRODUITS

⚠ **DANGER**
RISQUE D'INCENDIE OU D'EXPLOSION

S'il y a une odeur de gaz:

- **Coupez l'admission de gaz de l'arrareil.**
- **Éteindre toute flamme nue.**
- **Si l'odeur persiste, éloignez-vous de l'appareil et appelez immédiatement le fournisseur de gaz ou le service d'incendie.**
- **Si ces précautions ne sont pas respectées, cela pourrait provoquer un incendie ou une explosion, pouvant causer des dommages matériels, des blessures ou la mort.**

⚠ **AVERTISSEMENT**

- **Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de l'appareil, ni de tout autre appareil.**
- **Une bouteille de propane qui n'est pas raccordée en vue de son utilisation, ne doit pas être entreposée dans le voisinage de cet appareil ou de tout autre appareil.**

⚠ **AVERTISSEMENT: Pour utilisation à l'extérieur seulement.**
L'installation et l'entretien doivent être effectués par un installateur qualifié, une agence de service ou le fournisseur de gaz.

⚠ **AVERTISSEMENT: Si les informations de ce manuel ne sont pas suivies à la lettre, un incendie ou une explosion peut en résulter et causer des dommages matériels, des blessures corporelles ou la mort.**

⚠ **DANGER!**

MONOXYDE DE CARBONE

Cette appareil peut produire du monoxyde de carbone, un gaz inodore. L'utilisation de cet appareil dans des espaces clos peut entrainer la mort. Ne jamais utiliser cet appareil dans un espace clos comme un véhicule de camping, une tente, une automobile, ou une maison.

Ne pas utiliser cet appareil s'il a été plongé, même partiellement, dans l'eau. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de commande et toute commande qui a été plongée dans l'eau.

INSTALLATEUR: Laissez ce manuel ave l'appliance.

CONSOMMATEUR: Conserves ce manuel pour référence ultérieure.

Il incombe à l'installateur d'utiliser le dimensionnement et / ou la régulation corrects de la conduite de carburant pour fournir du gaz dans les pressions d'entrée minimum et maximum spécifiées pour la fonction incendie.

TABLE OF CONTENTS

WARMING TRENDS

Compliance with the following codes:
1. 2021, 2018, 2015, 2012, and 2009 International Fire Code® (IFC)
2. 2021, 2018, 2015, 2012, and 2009 International Fuel Gas Code® (IFGC)
3. 2024, 2021, 2018, 2015, 2012, and 2009 Uniform Mechanical Code® (UMC)*
4. 2020, 2015, and 2010 Natural Gas and Propane Installation Code**

Uniform Plumbing Code is a copyrighted publication of the International Association of Plumbing and Mechanical Officials
**Copyrighted publication of Canadian Standard Association*

Compliance with the following standards:
1. ANSI Z21.97/CSA 2.41-2017 Outdoor Decorative Gas Appliances

Product: Outdoor Decorative Gas Fire Feature and Fireplaces

ICC-ES Report PMG-1213

ALL THE BURNERS LISTED BELOW ARE CERTIFIED FOR USE IN OUTDOOR FIRE FEATURES AND OUTDOOR FIREPLACES.

MATCH LIT
Model # CFB60 NG/LP as match lit
Model # CFB60XL NG/LP as match lit
Model # CFB602XL NG/LP as match lit
Model # CFB84 NG/LP as match lit
Model # CFB100 NG/LP as match lit
Model # CFB120 NG/LP as match lit
Model # CFB180 NG/LP as match lit
Model # CFB240 NG/LP as match lit
Model # CFB290 NG/LP as match lit
Model # CFBL90 NG/LP as match lit
Model # CFBL110 NG/LP as match lit
Model # CFBL130 NG/LP as match lit
Model # CFBL150 NG/LP as match lit
Model # CFBL170 NG/LP as match lit
Model # CFBL190 NG/LP as match lit
Model # CFBL210 NG/LP as match lit
Model # CFBL250 NG/LP as match lit
Model # CFBL270 NG/LP as match lit
Model # CFBL320 NG/LP as match lit
Model # CFBH120 NG/LP as match lit
Model # CFBH160 NG/LP as match lit
Model # CFBH200 NG/LP as match lit
Model # CFBH240 NG/LP as match lit
Model # CFBH260 NG/LP as match lit
Model # CFBH300 NG/LP as match lit
Model # CFBH340 NG/LP as match lit
Model # CFBH420 NG/LP as match lit
Model # CFBT110 NG/LP as match lit
Model # CFBT170 NG/LP as match lit
Model # CFBT230 NG/LP as match lit
Model # CFBT290 NG/LP as match lit
Model # CFBT350 NG/LP as match lit
Model # CFBT410 NG/LP as match lit
Model # CFBT470 NG/LP as match lit
Model # CFBO140 NG/LP as match lit
Model # CFBO180 NG/LP as match lit
Model # CFBO280 NG/LP as match lit
Model # CFBO320 NG/LP as match lit
Model # CFBO360 NG/LP as match lit

SPARK IGNITER OPERATED UNITS
Model # WTV40 NG/LP with PBIK
Model # WTV60 NG with PBIK
Model # CFB60 NG/LP with PBIK
Model # CFB60XL NG/LP with PBIK
Model # CFB602XL NG/LP with PBIK
Model # CFB84 NG/LP with PBIK
Model # CFB100 NG/LP with PBIK
Model # CFB120 NG/LP with PBIK
Model # CFB180 NG/LP with PBIK
Model # CFB240 NG/LP with PBIK
Model # CFB290 NG/LP with PBIK
Model # CFBH120 NG/LP with PBIK
Model # CFBH160 NG/LP with PBIK
Model # CFBH200 NG/LP with PBIK
Model # CFBH240 NG/LP with PBIK
Model # CFBH260 NG/LP with PBIK
Model # CFBH300 NG/LP with PBIK
Model # CFBH340 NG/LP with PBIK
Model # CFBH420 NG/LP with PBIK
Model # CFBL90 NG/LP with PBIK
Model # CFBL110 NG/LP with PBIK
Model # CFBL130 NG/LP with PBIK
Model # CFBL150 NG/LP with PBIK
Model # CFBL170 NG/LP with PBIK
Model # CFBL190 NG/LP with PBIK
Model # CFBL210 NG/LP with PBIK
Model # CFBL250 NG/LP with PBIK
Model # CFBL270 NG/LP with PBIK
Model # CFBL320 NG/LP with PBIK
Model # CFBO140 NG/LP with PBIK
Model # CFBO180 NG/LP with PBIK
Model # CFBO280 NG/LP with PBIK
Model # CFBO320 NG/LP with PBIK
Model # CFBO360 NG/LP with PBIK
Model # CFBT110 NG/LP with PBIK
Model # CFBT170 NG/LP with PBIK
Model # CFBT230 NG/LP with PBIK
Model # CFBT290 NG/LP with PBIK
Model # CFBT350 NG/LP with PBIK
Model # CFBT410 NG/LP with PBIK
Model # CFBT470 NG/LP with PBIK

3V BATTERY OPERATED UNITS
Model # CFB60 NG/LP with 3VIK
Model # CFB602XL NG/LP with 3VIK
Model # CFB120 NG/LP with 3VIK
Model # CFB240 NG/LP with 3VIK
Model # CFBL90 NG/LP with 3VIK
Model # CFBL110 NG/LP with 3VIK
Model # CFBL130 NG/LP with 3VIK
Model # CFBL150 NG/LP with 3VIK
Model # CFBL190 NG/LP with 3VIK
Model # CFBL210 NG/LP with 3VIK
Model # CFBL250 NG/LP with 3VIK
Model # CFBH120 NG/LP with 3VIK
Model # CFBH160 NG/LP with 3VIK
Model # CFBH200 NG/LP with 3VIK
Model # CFBH240 NG/LP with 3VIK
Model # CFBH260 NG/LP with 3VIK
Model # CFBH300 NG/LP with 3VIK
Model # CFBH340 NG/LP with 3VIK
Model # CFBT110 NG/LP with 3VIK
Model # CFBT170 NG/LP with 3VIK
Model # CFBT230 NG/LP with 3VIK
Model # CFBT290 NG/LP with 3VIK
Model # CFBT350 NG/LP with 3VIK
Model # CFBT410 NG/LP with 3VIK
Model # CFBT470 NG/LP with 3VIK
Model # CFBO180 NG/LP with 3VIK
Model # CFBO280 NG/LP with 3VIK
Model # CFBO360 NG/LP with 3VIK

24 VOLT STANDARD ELECTRONIC IGNITION SYSTEM – Standard Capacity
Model # CFB60 NG/LP with 24VIKSC
Model # CFB602XL NG/LP with 24VIKSC
Model # CFB120 NG/LP with 24VIKSC
Model # CFB180 NG/LP with 24VIKSC
Model # CFB240 NG/LP with 24VIKSC
Model # CFBL90 NG/LP with 24VIKSC
Model # CFBL110 NG/LP with 24VIKSC
Model # CFBL130 NG/LP with 24VIKSC
Model # CFBL150 NG/LP with 24VIKSC
Model # CFBL190 NG/LP with 24VIKSC
Model # CFB60XL NG/LP with 24VIKSC
Model # CFBH120 NG/LP with 24VIKSC
Model # CFBH160 NG/LP with 24VIKSC
Model # CFBH200 NG/LP with 24VIKSC
Model # CFBT110 NG/LP with 24VIKSC
Model # CFBT170 NG/LP with 24VIKSC
Model # CFBO180 NG/LP with 24VIKSC
Model # CFBO280 NG/LP with 24VIKSC

24 VOLT STANDARD ELECTRONIC IGNITION SYSTEMS – High Capacity
Model # CFB240 NG/LP with 24VIKHC
Model # CFB290 NG/LP with 24VIKHC
Model # CFB300 NG/LP with 24VIKHC
Model # CFBL210 NG/LP with 24VIKHC
Model # CFBL250 NG/LP with 24VIKHC
Model # CFBL270 NG/LP with 24VIKHC
Model # CFBL320 NG/LP with 24VIKHC
Model # CFBH240 NG/LP with 24VIKHC
Model # CFBH260 NG/LP with 24VIKHC
Model # CFBH300 NG/LP with 24VIKHC
Model # CFBH340 NG/LP with 24VIKHC
Model # CFBH420 NG/LP with 24VIKHC
Model # CFBT230 NG/LP with 24VIKHC
Model # CFBT290 NG/LP with 24VIKHC
Model # CFBT350 NG/LP with 24VIKHC
Model # CFBT410 NG/LP with 24VIKHC
Model # CFBT470 NG/LP with 24VIKHC
Model # CFBO180 NG/LP with 24VIKHC
Model # CFBO280 NG/LP with 24VIKHC
Model # CFBO360 NG/LP with 24VIKHC

24 VOLT PREMIUM ELECTRONIC IGNITION SYSTEM – Standard Capacity
Model # CFB60 NG/LP with P24VIKSC
Model # CFB602XL NG/LP with P24VIKSC
Model # CFB120 NG/LP with P24VIKSC
Model # CFB180 NG/LP with P24VIKSC
Model #CFB240 NG/LP with P24VIKSC
Model # CFB290 NG/LP with P24VIKSC
Model # CFBL90 NG/LP with P24VIKSC
Model # CFBL110 NG/LP with P24VIKSC
Model # CFBL130 NG/LP with P24VIKSC
Model # CFBL150 NG/LP with P24VIKSC
Model # CFBL190 NG/LP with P24VIKSC
Model # CFBL210 NG/LP with P24VIKSC
Model # CFBL250 NG/LP with P24VIKSC
Model # CFBL270 NG/LP with P24VIKSC
Model # CFBH120 NG/LP with P24VIKSC
Model # CFBH160 NG/LP with P24VIKSC
Model # CFBH200 NG/LP with P24VIKSC
Model # CFBH240 NG/LP with P24VIKSC
Model # CFBH260 NG/LP with P24VIKSC
Model # CFBT110 NG/LP with P24VIKSC
Model # CFBT170 NG/LP with P24VIKSC
Model # CFBT230 NG/LP with P24VIKSC
Model # CFBT290 NG/LP with P24VIKSC
Model #CFBO180 NG/LP with P24VIKSC
Model #CFBO280 NG/LP with P24VIKSC

24 VOLT PREMIUM ELECTRONIC IGNITION SYSTEM – High Capacity
Model # CFB300 NG/LP with P24VIKHC
Model # CFBL320 NG/LP with P24VIKHC
Model # CFBH300 NG/LP with P24VIKHC
Model # CFBH340 NG/LP with P24VIKHC
Model # CFBH420 NG/LP with P24VIKHC
Model # CFBT350 NG/LP with P24VIKHC
Model # CFBT410 NG/LP with P24VIKHC
Model # CFBT470 NG/LP with P24VIKHC
Model # CFBO360 NG/LP with P24VIKHC

MERCURY IGNITION SYSTEM™
Model # CFB60 NG/LP with MERC
Model # CFB60XL NG/ LP with MERC
Model # CFB84 NG/LP with MERC
Model # CFB100 NG/LP with MERC
Model # CFB120 NG/ LP with MERC
Model # CFB180 NG/LP with MERC
Model # CFB240 NG/LP with MERC
Model # CFB290 NG/LP with MERC
Model # CFBH120 NG/LP with MERC
Model # CFBH160 NG/LP with MERC
Model # CFBH200 NG/LP with MERC
Model # CFBH240 NG/LP with MERC
Model # CFBL90 NG/LP with MERC
Model # CFBL110 NG/LP with MERC
Model # CFBL130 NG/LP with MERC
Model # CFBL150 NG/LP with MERC
Model # CFBL170 NG/LP with MERC
Model # CFBL190 NG/LP with MERC
Model # CFBL210 NG/LP with MERC
Model # CFBL250 NG/LP with MERC
Model # CFBL270 NG/LP with MERC
Model # CFBO140 NG/LP with MERC
Model # CFBO180 NG/LP with MERC
Model # CFBO280 NG/LP with MERC
Model # CFBO320 NG/ LP with MERC
Model # CFBT110 NG/LP with MERC
Model # CFBT170 NG/LP with MERC
Model # CFBT230 NG/LP with MERC
Model # CFBT290 NG/LP with MERC
Model # CFBT350 NG/LP with MERC

PLATINUM IGNITION SYSTEM™
Model # CFB60 NG/LP with PLAT
Model # CFB60XL NG/ LP with PLAT
Model # CFB84 NG/LP with PLAT
Model # CFB120 NG/ LP with PLAT
Model # CFB180 NG/LP with PLAT
Model # CFB240 NG/LP with PLAT
Model # CFB290 NG/LP with PLAT
Model # CFB300 NG/LP with PLAT
Model # CFBL90 NG/LP with PLAT
Model # CFBL110 NG/LP with PLAT
Model # CFBL130 NG/LP with PLAT
Model # CFBL150 NG/LP with PLAT
Model # CFBL170 NG/LP with PLAT
Model # CFBL190 NG/LP with PLAT
Model # CFBL210 NG/LP with PLAT
Model # CFBL250 NG/LP with PLAT
Model # CFBL270 NG/LP with PLAT
Model # CFBL320 NG/LP with PLAT
Model # CFBH120 NG/LP with PLAT
Model # CFBH160 NG/LP with PLAT
Model # CFBH200 NG/LP with PLAT
Model # CFBH240 NG/LP with PLAT
Model # CFBH300 NG/LP with PLAT
Model # CFBH340 NG/LP with PLAT
Model # CFBH420 NG/LP with PLAT
Model #CFBO140 NG/LP with PLAT
Model #CFBO180 NG/LP with PLAT
Model #CFBO280 NG/LP with PLAT
Model #CFBO320 NG/LP with PLAT
Model #CFBO360 NG/LP with PLAT
Model # CFBT110 NG/LP with PLAT
Model # CFBT170 NG/LP with PLAT
Model # CFBT230 NG/LP with PLAT
Model # CFBT290 NG/LP with PLAT
Model # CFBT350 NG/LP with PLAT
Model # CFBT410 NG/LP with PLAT
Model # CFBT470 NG/LP with PLAT

Scan to view the Most up-to-date Certified Burners List:

High Capacity (HC) ignitions may be substituted for Standard Capacity (SC) ignitions.

GENERAL INFORMATION

This Owner's Guide and User Guide contains critical information for the safe installation and operation of your Fire Feature System. **You must read this user guide in its entirety prior to installation and/or operation. Failure to follow these instructions may result in property damage, personal injury, or death.**

WARNING:
HOT! DO NOT TOUCH.
SEVERE BURNS MAY RESULT.
CLOTHING IGNITION MAY RESULT.

- **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.**
- **Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.**

Installation and service must be performed by a qualified installer, service agency, or the gas supplier. It is the installer's responsibility to read thoroughly before installing or servicing this equipment to ensure a safe installation and to educate the end user as to proper operation.

Warming Trends is not responsible for damage due to improperly installed or operated units. Installers must leave this user guide with the end user. Instructions are updated as needed, and it is the installer or owners' responsibility to periodically review Warming Trends website for applicable updates (www.Warming-Trends.com.) Please keep this with your important papers.

WARNING:
Do not use 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.

WARNING:
DO NOT USE OXYGEN MIXERS WITH YOUR WARMING TRENDS APPLIANCE. Mixers may create leakage in the cavity of the feature and could cause fire or explosion which could cause property damage, personal injury, or death.

WARNING:
Product is not intended to be used to burn wood or other combustibles. Solid fuels shall not be burned in the appliance.
Do not put any combustible materials into the fire feature.

WARNING:
Only use Liquid Propane or Natural Gas as specified for your Warming Trends appliance or burner.
Do not use an alternative fuel.

CODE REQUIREMENTS

It is the responsibility of the installer to consult with the local municipality and to **FOLLOW ALL LOCAL CODES** concerning the installation and operation of the fire feature.

For systems with Mercury Ignition Systems:

> **When the appliance is for connection to a fixed piping system, the installation must conform with local codes, or in the absence of local codes with the *National Fuel Gas Code,* ANSI Z223.1·NFPA54; *National Fuel Gas and Propane Installation Code,* CSA B149.1; or *Propane Storage and Handling Code,* CSAB149.2, as applicable.**

For systems with electronic ignition systems:

> **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.**

MINIMUM AND MAXIMUM GAS INLET PRESSURES

The installer is responsible for using the correct fuel lines and/or regulation to provide gas to the fire feature within the specified minimum and maximum gas inlet pressures below:

MATCH LIT	MINIMUM GAS INLET PRESSURE	MAXIMUM GAS INLET PRESSURE
Natural Gas	3.5" W.C. (.8718 Kpa)	7.0" W.C. (1.7436 Kpa)
Liquid Propane	11.0" W.C. (2.7399 Kpa)	13.0" W.C. (3.2381 Kpa)
MERCURY	**MINIMUM GAS INLET PRESSURE**	**MAXIMUM GAS INLET PRESSURE**
Natural Gas	3.5" W.C. (.8718 Kpa)	10.0" W.C. (2.4908 Kpa)
Liquid Propane	11.0" W.C. (2.7399 Kpa)	13.0" W.C. (3.2381 Kpa)
3V - 3VIK	**MINIMUM GAS INLET PRESSURE**	**MAXIMUM GAS INLET PRESSURE**
Natural Gas	4.5" W.C. (1.1209 Kpa)	10.0" W.C. (2.4908 Kpa)
Liquid Propane	11.0" W.C. (2.7399 Kpa)	13.0" W.C. (3.2381 Kpa)
STANDARD - 24VIKHC	**MINIMUM GAS INLET PRESSURE**	**MAXIMUM GAS INLET PRESSURE**
Natural Gas	3.0" W.C. (.7472 Kpa)	5.0" W.C. (1.2454 Kpa)
Liquid Propane	8.0" W.C. (1.9927 Kpa)	12.0" W.C (2.989 (Kpa)
PLATINUM / PREMIUM - P24VIKSC, P24VIKHC	**MINIMUM GAS INLET PRESSURE**	**MAXIMUM GAS INLET PRESSURE**
Natural Gas	3.5" W.C. (.8718 Kpa)	14.0" W.C. (3.4872 Kpa)
Liquid Propane	8.0" W.C. (1.9927 Kpa)	14.0" W.C. (3.4872 Kpa)

LOCATION CONSIDERATIONS

All appliances, match lit kits, spark ignition, and electronic ignition systems are designed and intended for outdoor use only.

All appliances must have a gas shutoff located outside of the appliance to allow for emergency shutoff and maintenance.

Select a location where the appliance can be attended during operation. Never leave an operating appliance unattended or by someone not familiar with its operation or emergency shutoff locations.

Appliances may create very high temperatures - combustibles must be located far enough away that there is no risk of ignition.

IMPORTANT: It is recommended that material such as granite, marble, or other dense stone be kept an appropriate distance away from flame due to risk of cracking. Manufacturer is not responsible for damage to any enclosure material for any reason.

FIRE FEATURE CLEARANCES

- 36" horizontally from any combustible structure or materials.
- Overhead clearance should be a minimum of 84" from combustible structures or materials.
- Choose a location that allows easy access for installation and maintenance of the fire feature.
- Pick a location that allows sufficient horizontal room to enjoy the appliance while allowing a safe distance from the heat and flame.
- Always consult with local municipality regarding any local code requirements.
- See Clearance Diagrams starting on page 11.

The enclosure must be constructed on a stable surface and must be level.

For models with electronic ignitions, the control/valve box must be above grade with adequate drainage to prevent water exposure to the controls inside the box. Additionally, the weight of the burner system must not be supported by or rest upon the control valve/box. A plate, pan, or other surface should be used to support the weight of the burner system.

Blocks, bricks, or metal collars (L-brackets) can be used to build a support for the system, plate, or pan. Larger plates and pans should include additional support to avoid bowing. A center support (using blocks, bricks or other non-combustible materials) is recommended for round or square plates and pans over 30" and for rectangular plates or pans over 40".

Warming Trends Burners, Ignitions, Media, and other Accessories may be installed in Outdoor Fire Places. The clearances, materials, venting, and construction standards for Outdoor Fire Places may be determined by Local or National Codes. Such Codes may incorporate or defer to the recommendations or requirements of the Outdoor Fire Place Manufacturer or the party designing the Fire Place. It is the installer's responsibility to ensure conformance to applicable local standards.

CONSTRUCTION OF ENCLOSURE

If located on the vessel, key valve should be mounted below the plate and through the side wall of the vessel. Key valves may be mounted remotely or on adjacent surfaces.

Always use proper materials and construction for gas supply, power, and enclosure. Materials must be non-combustible in both initial installations as well as over time.

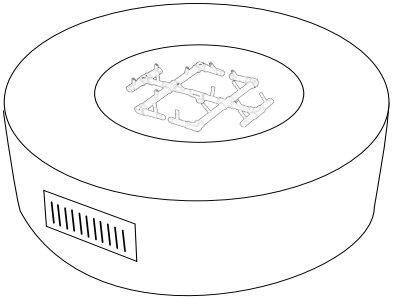
For electronic ignition models requiring a power supply - a qualified, licensed electrician must install power supply. The unit may be hardwired or an outdoor NEMA rated GFCI Receptacle outlet can be installed on the interior of the enclosure above grade to supply power to system.

The interior space of the enclosure cannot be filled with any material (gravel, crushed rock, concrete, etc.).
The appliance assembly should be recessed 4" - 6" from the top of the enclosure to protect flame from excessive wind. Some conditions may require deeper recession.

It is the responsibility of the installer to provide proper installation to allow for easy accessibility for service and/or repairs. Installer must not build capstone inner ledge over outer lip of plates or pans (unless access panel door or alternate access is incorporated). Building capstone inner ledge over outer edge of plates or pans will impede access to system and result in the need to crack or remove capstones to gain access. Warming Trends is not responsible for damage to enclosure for any reason whatsoever.

Minimum ventilation requirement: incorporate venting on at least 2 opposing sides (two (2) areas of venting) at a minimum of 18 sq inches of venting each. Installation of the vents in the mid-to-lower area of the enclosure is recommended. Ventilation allows for heat and/or residual fuel to escape. Failure to properly vent enclosure may result in appliance overheating or explosion. Overheating could lead to heat damage to internal components. Some enclosures may require more ventilation based upon material, size, and extended use. Always consult with local municipality regarding any code requirements.

Ready-to-Finish Kits come with Fire Feature Vent Kit (FPVK). Vents do not come pre-installed on Ready-to-Finish Kit as placement and installation depends on veneer. Vents to be installed by contractor on site.



WARNING:
All appliances must have a gas shutoff on the outside of the fire feature to allow for emergency shut off and maintenance.

WARNING:
For electronic ignition models, there must be an electrical shutoff (wall switch or breaker) on the exterior of the appliance or on adjacent structure to allow for emergency shutdown and maintenance. Verify correct power supply.

WARNING:
These instructions do not apply to vessels or appliances with self contained propane gas supply systems. Appliances or vessels with self contained propane gas supply systems have additional specific requirements which must be identified and met by the vessel installer or manufacturer. Please consult with a qualified installer for guidance and required installation procedures.

LIQUID PROPANE GUIDELINES

For safe operation of LP appliances, it is important to use LP cylinders that meet the following criteria:

- The cylinders must be constructed and marked in accordance with the LP-Gas Cylinders Standard of ANSI/NFPA or CAN/CSA which specifies the requirements for cylinders, spheres, and tubes for the transportation of dangerous goods.
- The cylinders must be equipped with a listed overfilling prevention device.
- The cylinder connection device must be compatible with the connector for outdoor appliances.

GENERAL INSTALLATION INSTRUCTIONS

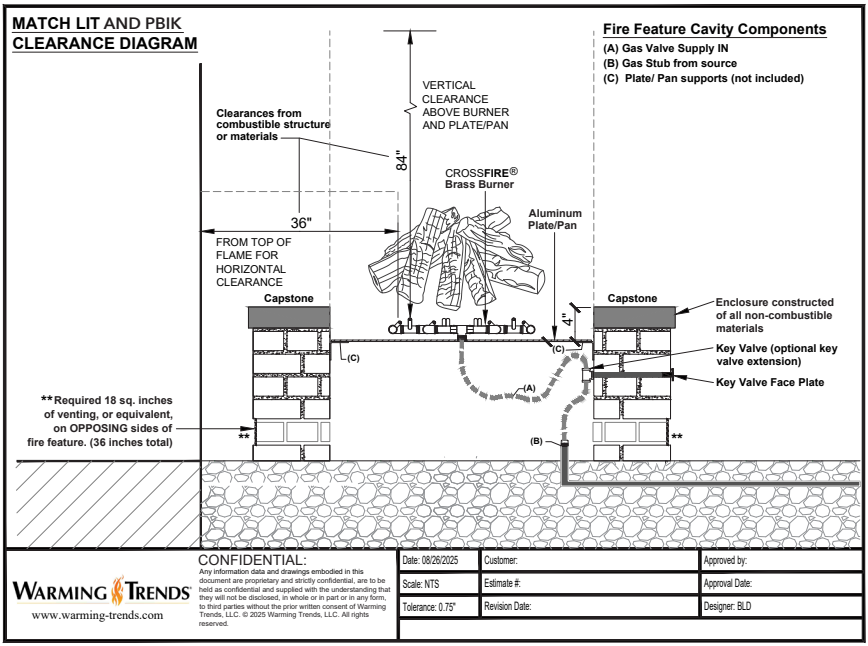
Use only joint compound, thread sealant, or tape specific to gas use that is resistant to all gases. Apply joint compound, thread sealant or tape to all male pipe fittings only and **DO NOT USE ON FLARED END OF FLARED FITTINGS.** Be sure to tighten every joint securely.

Ignition systems are recommended on any burner over 300K BTUs. If you are lighting manually be sure to maintain a minimum safe distance to avoid property damage, personal injury, or death. Please refer to match lit instructions.

1. Verify gas supply matches burner type.
2. Verify gas inlet pressure is within the specified minimum and maximum pressures. Consult Gas Inlet Pressures on page 7.
3. Purge gas lines of air, water, and debris.
4. Perform all leak tests with leak detector or leak reactant on main gas supply and repair leaks as necessary. Turn off gas supply.
5. For models that include electronic ignitions, be sure to have a qualified electrician install proper power supply following all local codes.
6. Inspect flex line(s) for punctures or breaks in line(s).
7. **Make sure the key turns in the key valve before installing.** Use only your hand to turn the gas key valve. Never use tools. If the key valve will not turn by hand, don't try to repair it. Force or attempted repair may cause a fire or explosion.
8. **Refer to Clearance Diagrams starting on page 11 for applicable gas connections.**
9. Position burner safely with access to all gas connections for testing. Position burner to allow sufficient clearance from the fire feature sides and capstone to avoid damage.
10. Turn on gas supply to perform repeat leak tests on main gas supply and all connections to appliance and repair as needed.
11. Do not use appliance if there is evidence of leaking gas. If leak is suspected, turn off main gas supply immediately.
12. For appliances for use with a fixed fuel piping system and equipped with an appliance gas pressure regulator, the appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of ½ psi (3.5kPa).

    The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).
13. Ignite burner. See applicable ignition instructions within Operating Instructions, page 48.
    After installation of any jet or end jet or the performance of any other service, the burner must be tested for leaks.
14. Electronic ignitions can either be hard wired into main power supply or plugged into a location-specific outlet/receptacle per local codes. **The electrical supply must be connected to an ON/OFF switch that is external to the pit.** Remote controls, emergency stops, and dial timers are optional add-ons.
15. Once appliance is lit, perform leak test on all gas connections and repair as needed.
16. Turn off appliance and allow to cool.
17. Set appliance into properly constructed, level, non-combustible enclosure. The enclosure must be on a stable surface. The weight of the appliance must be supported by the plate or pan and not by any control box or gas valve. Blocks, bricks, metal collars, or L-brackets can be used to build a support ledge for the system plate or pan. Control boxes and gas valves must be above grade with adequate drainage to prevent water damage. Installer is responsible for making sure there is enough space in the cavity for any electronics and piping. **The lower cavity of the enclosure cannot be filled with any material (i.e. gravel, crushed rock, concrete, etc).** The fire feature assembly should be recessed 4" to 6" from the top of the enclosure to protect flame from excessive wind and to allow coverage of burner. **See Clearance Diagrams on previous pages.**
18. To allow for regular maintenance, any capstone materials should not overhang the interior edge of the fire feature. See **Clearance Diagrams** starting on page 11 for placement. Warming Trends® is not responsible for any damages to the capstone.
19. Venting is required to avoid heat damage to internal components and to allow airflow in case of gas pooling. Incorporate one [1] vent on at least two opposing sides (two [2] vents total) at a minimum size of 18 sq inches each for 36" total (example: 3"x 6"). Installation of the vents in the mid to lower area of the enclosure is recommended. Some enclosures may require more ventilation based on material, size, and extended use. Ready-to-Finish Kits come with Fire Pit Vent Kit (FPVK). Vents do not come pre-installed on Ready-to-Finish Kits. Fire Pit Vent Kits must be installed on site.
20. Only use fire rated media (glass, lava rock, log sets, etc.) approved for use with high temperatures that have been manufactured for specific use in fire features. Never use any material for media that is non-porous and holds moisture such as gravel, pebbles, river rock, etc. Such material, when heated, may cause the trapped moisture to boil, fracture unexpectedly and/or explode and which could cause personal injury, damage, or death.
21. To avoid dust and clogs getting into the system, do not dump the media over the burner. Place the media onto the plate or pan. **Burner should be covered by approved media up to but no more than ½" above the jets. Excessive media coverage may cause back pressure and dangerous pooling of gas which can result in explosion which could cause property damage, personal injury, or death.**
22. Do not cover the ignition pilot assembly or wind cage more than halfway with any form of media. Do not place ceramic logs too close to the pilot assembly as this may cause excessive heat and system failure that is not covered by warranty.
23. Complete final verification of correct operation and lighting.
24. Review instruction manual with end user and instruct end user not to change/modify fire feature or media in any way.

MATCH LIT AND PBIK IGNITION CLEARANCE – FIRE FEATURE CLEARANCE DIAGRAM



MATCH LIT SYSTEM: CONNECTION DIAGRAMS

FK1 SYSTEMS

NEW CROSSFIRE® 2.0 ADAPTER CONFIGURATION

CROSS**FIRE®** 2.0 Brass Burners may be used with either Natural Gas or Liquid Propane and are shipped with both a Natural Gas Adapter (NGA) (See Photo 1a) for use when the system is to be operated with Natural Gas and a Liquid Propane Adapter (LPA) (See Photo 1b) when the system is to be operated with Liquid Propane. The appropriate adapter for the intended gas type must be installed prior to use in accordance with the following instructions. Notice, each LPA/NGA has a gas flow arrow showing the direction of gas flow (See Photo 1c). If your system does not include a flex line kit, make sure the applicable gas adapter is installed to the coupling on the bottom of the plate. We recommend that the extra adapter be saved for future use if the unit is relocated and/or the supplied gas type is changed.

Photo 1a: NGA

Photo 1b: LPA

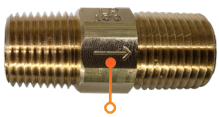
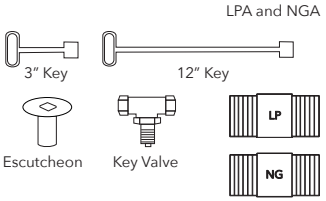
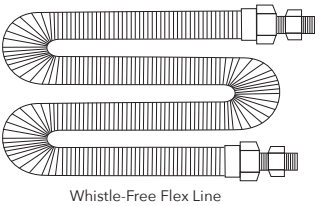


Photo 1c: gas flow arrow

1. LOCATE FK1

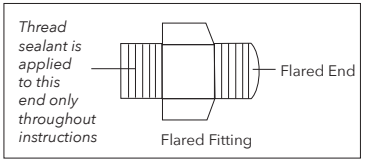
Parts include Whistle-Free Flex Line, Key Valve, Escutcheon Plate, and Keys.

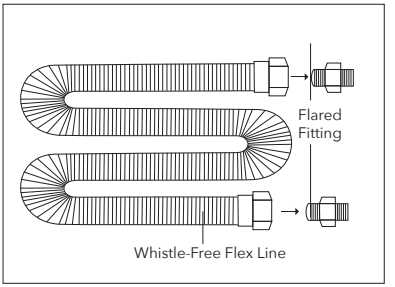




2. REMOVE FLARED FITTINGS FROM WHISTLE-FREE FLEX LINE

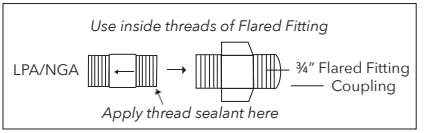
Removing flared fittings first makes installation easier.



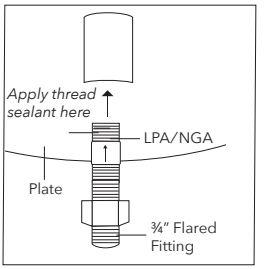


3(a) CONNECT TO GAS ADAPTER, THEN TO COUPLING

The applicable gas type adapter will be installed into the plate/pan coupling so that the gas direction arrow is pointed toward the burner, in the direction of gas flow. First, apply thread sealant to opposite threads of LPA/NGA and connect into the interior threads of the ¾" Flared Fitting removed in Step 2.

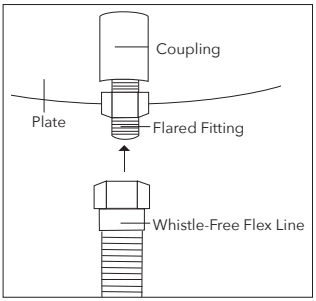


3(b) Then, apply thread sealant on the remaining exposed threads of LPA/NGA and insert LPA/NGA into the coupling of the plate or pan. Tighten the adapter/coupling connection and then the flared fitting/adapter connection.



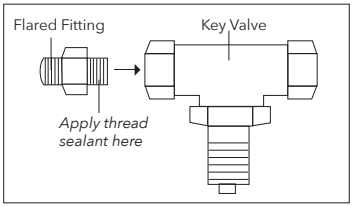
4. CONNECT WHISTLE-FREE FLEX LINE

(FK1) Connect the Whistle-Free Flex Line to the Flared Fitting previously attached to the coupling on the bottom of the aluminum plate.



5. LOCATE 2ND FLARED FITTING AND CONNECT TO KEY VALVE

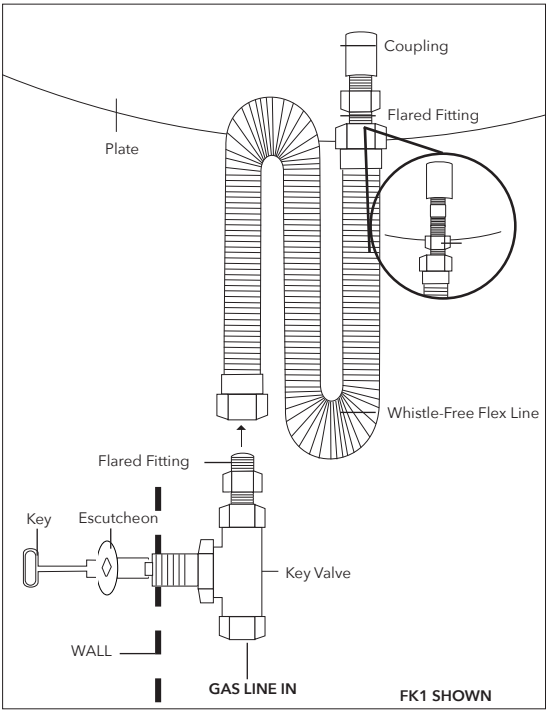
(FK1) Locate the second Flared Fitting removed in Step 2 and connect into the Key Valve, placing the non-flared end into the key valve. Tighten.



6. CONNECT FLEX LINE WITH KEY VALVE

(FK1) Connect the Whistle-Free Flex Line to the Flared Fitting that is now connected to the Key Valve.

Connect Escutcheon Plate to Key Valve through vessel wall. Tighten.



FK2 SYSTEMS

NEW CROSS**FIRE**® 2.0 ADAPTER CONFIGURATION

CROSS**FIRE**® 2.0 Brass Burners may be used with either Natural Gas or Liquid Propane and are shipped with both a Natural Gas Adapter (NGA) (See Photo 2a) for use when the system is to be operated with Natural Gas and a Liquid Propane Adapter (LPA) (See Photo 2b) when the system is to be operated with Liquid Propane. The appropriate adapter for the intended gas type must be installed prior to use in accordance with the following instructions. Notice, each LPA/NGA has a gas flow arrow showing the direction of gas flow (See Photo 2c). If your system does not include a flex line kit, make sure the applicable gas adapter is installed to the coupling on the bottom of the plate in accordance with step 3(b) below. We recommend that the extra adapter be saved for future use if the unit is relocated and/or the supplied gas type is changed.

Photo 2a: NGA

Photo 2b: LPA

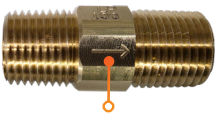
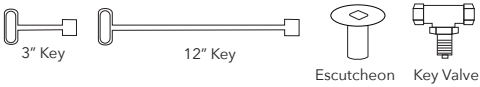
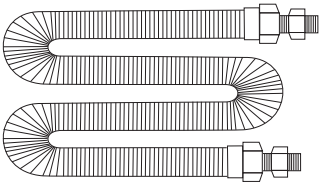


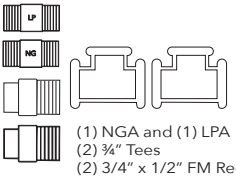
Photo 2c: gas flow arrow

1. LOCATE FK2

Parts include two Whistle-Free Flex Lines, Key Valve, Escutcheon Plate, and Keys.

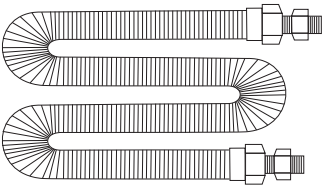






(1) NGA and (1) LPA
(2) ¾" Tees
(2) 3/4" x 1/2" FM Reducing Bushing

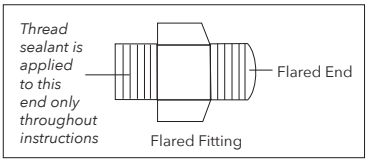
YOUR INSTALLATION MAY NOT REQUIRE ALL PARTS.

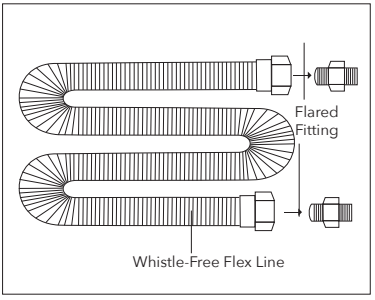


Whistle-Free Flex Lines

2. REMOVE FLARED FITTINGS FROM WHISTLE-FREE FLEX LINES

(FK2) Removing flared fittings first makes installation easier.



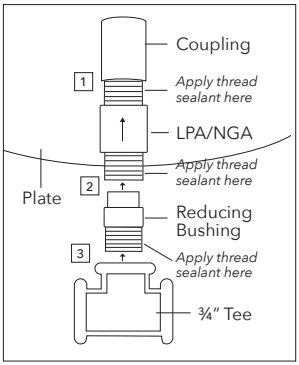


3(a). STANDARD ½" MANIFOLDS.

(1) Connect LPA/NGA to coupling located on bottom of plate with gas flow arrow pointing towards burner in direction of gas flow after applying thread sealant as shown in image.

(2) Then connect reducing bushing to exposed threads of LPA/NGA, applying thread sealant as shown in image.

(3) Then connect 3/4" tee to exposed threads of reducing bushing, applying thread sealant as shown in image.



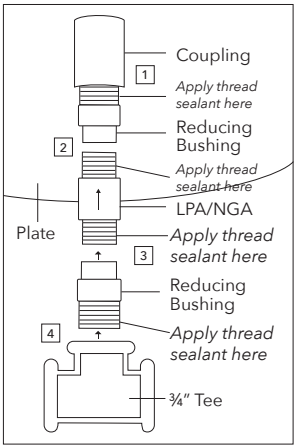
3(b). STANDARD ¾" MANIFOLDS.

(1) Connect reducing bushing to coupling located on bottom of pan, applying thread sealant as shown in image.

(2) Then connect LPA/NGA to female end of reducing bushing with gas flow arrow pointing towards burner in the direction of gas flow, applying thread sealant as shown in image.

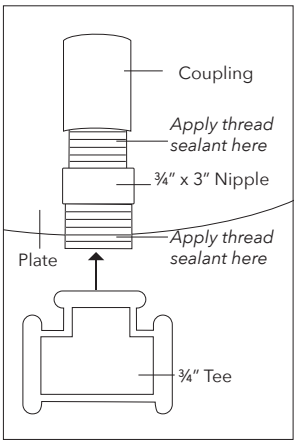
(3) Then connect additional reducing bushing to exposed threads of LPA/NGA, applying thread sealant as shown in image.

(4) Finally, connect 3/4" Tee to exposed threads of reducing bushing, applying thread sealant as shown in image.



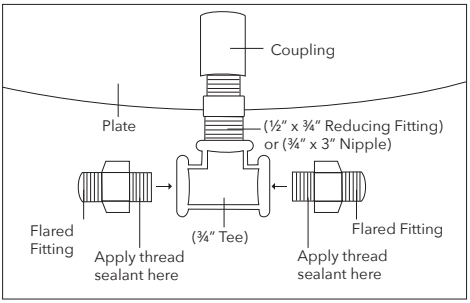
3(c). CUSTOM BURNER ¾" MANIFOLDS.

Please note, customer burner systems with ¾" manifolds will utilize a ¾" x 3" nipple fitting instead of an LPA/NGA. Then connect ¾" Tee to ¾" x 3" Nipple, applying thread sealant as shown in image.



4. CONNECT FLARED FITTINGS TO ¾" TEE

(FK2) Connect Flared Fittings to ¾" Tee.

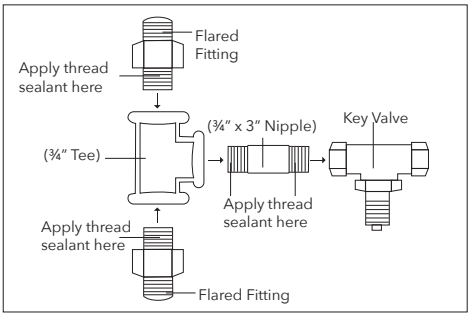


5. CONNECT FIT KIT TO KEY VALVE AND FLARED FITTINGS

(FK2) Connect ¾" x 3" Nipple to Key Valve.

Then connect the ¾" Tee to the connection just made.

Connect ¾" Flared Fittings to the ¾" Tee.

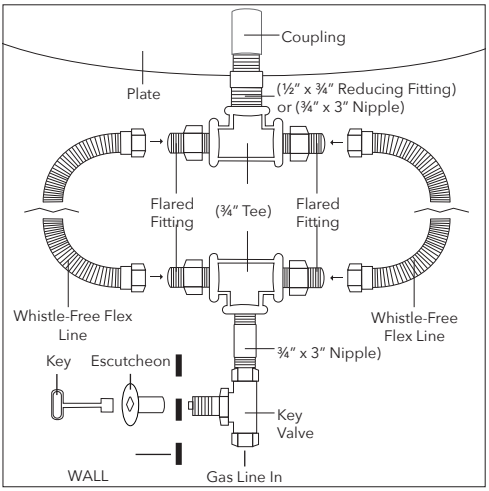


6. CONNECT FLEX LINES TO COUPLING AND KEY VALVE CONNECTION

(FK2) Connect ends of ¾" Whistle-Free Flex Lines to Flared Fittings connected to the aluminum plate and Coupling.

Then connect available ends of the Whistle-Free Flex Lines to the Key Valve Connection.

Connect Escutcheon Plate to Key Valve through vessel wall. Tighten.



LIGHTING INSTRUCTIONS: MATCH LIT IGNITION SYSTEM

TURNING ON YOUR MATCH LIT SYSTEM

STOP! Read all the safety information.

Any cover must be removed prior to operation of burner or appliance and must remain off during operation.

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 explosion, which could cause property damage, personal injury or death.

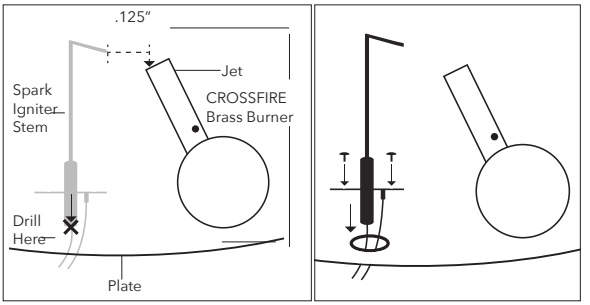
1. Confirm that your main Natural Gas or Liquid Propane supply to the appliance is open. **Do not open your key valve or gas control valve at this time.**
2. Before lighting, visually inspect fire feature and remove any accumulated leaves or other combustible debris.
3. Locate key valve or gas control valve controlling gas supply to your appliance.
4. Locate the closest jet tip on the exterior of the burner that can be easily accessed while operating key valve or gas control valve without reaching across other jets or the burner.
5. While holding the flame on or slightly above the jet tip as described in Step 5 above, slowly turn the key valve or gas control knob to the left to allow a minimal flow of gas to the burner and light the selected jet. While attempting to light jet, do not substantially increase gas supply. Excessive flow of gas before jet is lit can cause pooling of gas and result in sudden flare up. **Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal injury or death.**
6. Place a lit lighter or match flame on or slightly above the tip of the jet located in Step 6 while not reaching over it. A long reach lighter or match is recommended.
7. Once the selected jet (or other jets) is lit, continue to keep any body parts from above the feature or burner and slowly turn the key valve or gas control knob further to the left to increase the flow of gas to the burner. The other jets of the burner should ignite.
8. You may follow the same procedure described above to light additional jets only if able to do so without reaching across the burner or other jets which may ignite.
9. If the flame will not stay lit after several attempts, turn the key valve to the off position and call your local technician or gas supplier for service prior to re-attempting to operate your appliance.
10. Once lit, use the key valve to adjust the flame to the desired height.

TURNING OFF YOUR MATCH LIT SYSTEM

Use key to turn valve to OFF position by turning key to the right.

1. Verify flame is OUT.
2. If using LP bottle/tank – turn bottle/tank to CLOSED position.
3. Allow to cool completely, then cover the fire feature with waterproof/weatherproof cover.

1. TO PLACE THE SPARK IGNITER IN THE PROPER POSITION, INSTALLER WILL NEED TO DRILL A HOLE IN THE PLATE.
Measure where to drill hole by holding tip of Spark Igniter no further than .125" away from inside edge of jet. Drill hole where base of spark igniter sits. Thread wires through drilled hole and pull until Spark Igniter bracket is in place on plate. Screw Spark Igniter to plate.

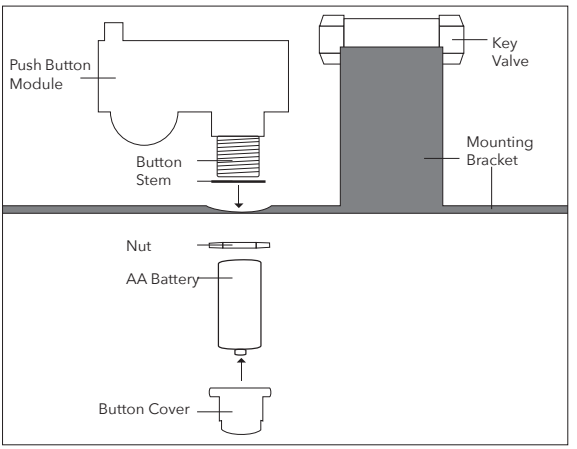


*If the distance to the jet is greater than .125", you can adjust the position by **gently** bending the spark igniter by the stem. Bending too far can result in breakage. Do not flex at the existing bend, this can result in breakage. If the spark igniter is too far away or too close to the jet, you will not get a strong enough spark to light the burner.*

---

2. INSTALL PUSH BUTTON MODULE INTO MOUNTING BRACKET
Unscrew Button Cover.
Remove plastic Nut.
Insert Push Button Stem through mounting bracket hole.

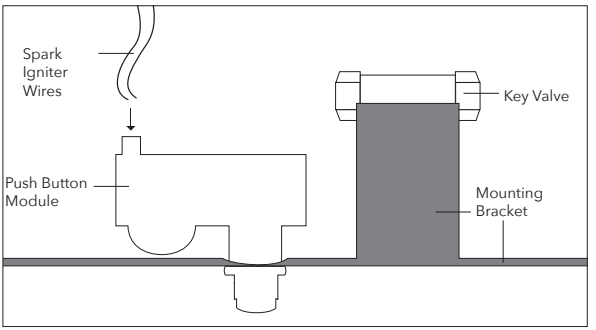
Put on plastic Nut and turn until Push Button Control has been secured to mounting bracket.
Insert AA Battery into Button Stem.
Screw on Button Cover.



---

3. CONNECT SPARK IGNITER WIRES
Crimp Spark Igniter Wires, then slide crimped wires on to connections using needle nose pliers. Be careful not to break connectors. Wires can go in either connection.

4. TEST WITHOUT GAS
Test Spark Igniter and Push Button Module WITHOUT gas, making sure spark arcs from electricity to jet.



5. TEST WITH GAS
Burner should light within 5 seconds or a few clicks.

LIGHTING INSTRUCTIONS: PUSH BUTTON IGNITION SYSTEM

STOP! READ ALL THE SAFETY INFORMATION.
LIGHTING YOUR PUSH BUTTON IGNITION SYSTEM

1. Confirm that your Natural Gas or Liquid Propane supply to the appliance is OPEN or on.
2. Press and hold the Ignition Button.
3. Slightly Rotate the Key Valve counterclockwise and turn to the ON position until a flame appears.
4. Once the Burner is lit, turn Key Valve counterclockwise to achieve desired flame height.
5. If burner does not light, turn Key Valve to the OFF position. Wait 3-5 minutes before repeating lighting instructions.

TURNING OFF YOUR PBIK IGNITION SYSTEM

Turn **Key Valve** to OFF position by turning key clockwise.

1. Verify flame is OUT.
2. If using a LP tank, be sure to turn tank to CLOSED position.

REPLACING THE BATTERY
If your Push Button Ignition System is not lighting, you may need to replace the battery.

To replace the battery in your Push Button Ignition System:

1. Turn battery cover counterclockwise to remove cover and set aside.
2. Remove the AA battery and replace with a new AA battery.
3. Replace the battery cover and turn clockwise to tighten.

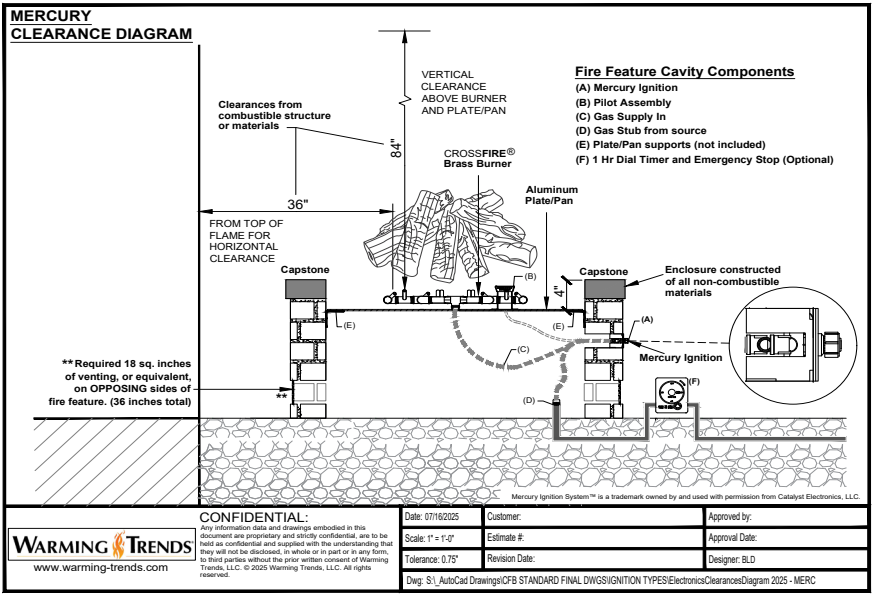
If using a LP tank, be sure to turn tank to CLOSED position.

CATALYST IGNITION SYSTEMS
CREATED BY WARMING TRENDS

When the appliance is for connection to a fixed piping system, the installation must conform with local codes, or in the absence of local codes with the *National Fuel Gas Code,* ANSI Z223.1·NFPA54; *National Fuel Gas and Propane Installation Code,* CSA B149.1; or *Propane Storage and Handling Code,* CSAB149.2, as applicable.

MERCURY IGNITION SYSTEM COMPONENTS – FIRE FEATURE CLEARANCE DIAGRAM

Vertical clearance of 84" from burner to combustible structure or materials is required. Horizontal or lateral clearance of 36" between edge of burner and combustible structure or materials is required.



If the Pilot Assembly for the Mercury Ignition System™ is not installed on the Plate or Pan, start here for complete installation instructions. If the Pilot Assembly has been installed on the plate or pan, skip to Step 3 below for installation instructions.

INSTALLATION OF THE MERCURY IGNITION PILOT ASSEMBLY TO THE PLATE USING PRE-CUT KNOCKOUTS
The Warming Trends plate/pan that was included with your Order should have pre-cut pilot assembly knockouts for various burners. The burner type and size are etched into the plate/pan next to the knockout for that burner's pilot assembly location.

1. LOCATE AND REMOVE THE APPROPRIATE KNOCKOUT

1.1 **Confirm the type and size of your burner on the Packing Slip for your Order.**

1.2 Locate the Pilot Assembly knockout on the plate/pan that matches your burner type and size. {See Photo 1}.

1.3 Remove the matching knockout by placing a screwdriver or other small tool in the opening at the edge of the knockout. Push one side of the knockout down to break the connector and remove the circular piece of aluminum with pliers. Do not remove any other knockouts. {See Photo 2}.

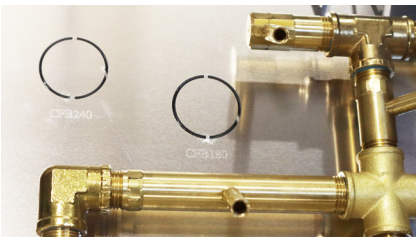


Photo 1: Pilot Assembly Knockouts

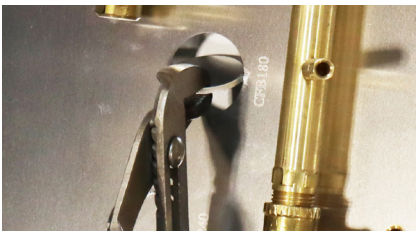


Photo 2: Breaking the Knockouts

2. INSTALLING THE PILOT ASSEMBLY ON THE PLATE/PAN

2.1 Locate the Pilot Assembly. This includes the Pilot Hood, the Electrode, and Thermocouple. {See Photo 3a and 3b}.

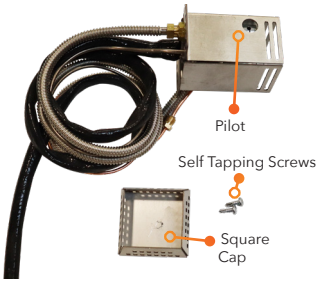


Photo 3a: Full Pilot Assembly

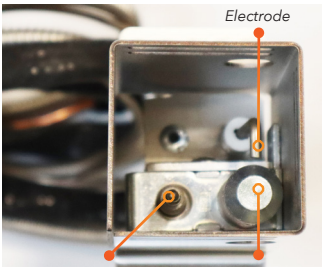


Photo 3b: Top-Down View of Pilot Assembly

2.2 Remove the square cap from the top of the Pilot Assembly and set it aside until the plate/pan is installed onto your fire feature.

2.3 Carefully unroll the wires coming from the bottom of the Pilot. Over handling of the thermocouple wire can cause breakage or malfunction. Feed the wires through the knockout opening created in Step 1.3.

2.4 Rotate the Pilot Assembly in the knockout opening until the circular opening on the Pilot Hood and Thermocouple are adjacent to the nearest jet with the Thermocouple nearest to the jet. Position the Pilot Assembly to cover the entire knockout opening. {See Photo 4a and 4b}.

Photo 4a: Thermocouple Positioning

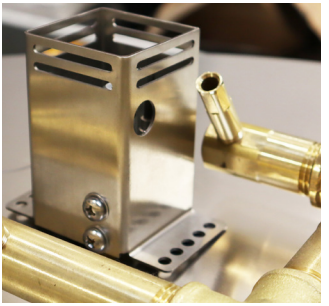


Photo 4b: Pilot Hood Circular Opening Positioning

2.5 Once the Pilot is properly aligned, use the self-tapping screws to secure the Pilot to the plate/pan. {See Photo 5}.

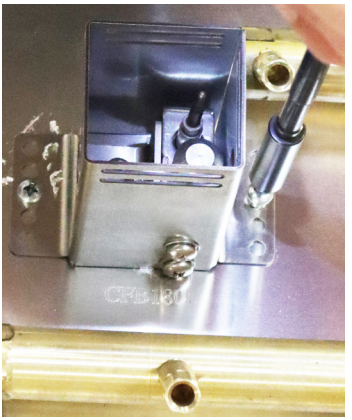


Photo 5: Securing the Pilot to the Plate/Pan

3. INSTALL THE VALVE ASSEMBLY IN THE VESSEL

3.1 Install the Ignition Control/Valve Assembly in the exterior wall of the vessel and secure in place. {See Clearance Diagram on page 20 of this Instruction Manual}.

4. CONNECTING THE FLEX LINE TO THE VALVE ASSEMBLY

FKM1

INSTRUCTIONS:

4.1 Identify the "outlet" on the Valve Assembly. The outlet should have a pre-installed ½" x 2" nipple attached. {See Photo 8a}. Apply joint compound, thread sealant, or plumbing tape to the threads of the exposed end of the ½" x 2" nipple. {See Photo 8b}.

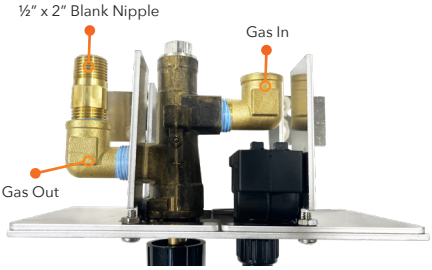


Photo 8a: Valve Assembly

Photo 8b: Applying Joint Compound

4.2 The Flex Line is provided with a male flare hose adapter loosely attached. Remove the flare hose adapter from the end of the Flex Line.

4.3 Thread the female, non-flared end, of the hose adapter on to the exposed end of the ½" x 2" nipple of the valve assembly "outlet". {See Photo 9}. Tighten with a wrench to avoid leaks.

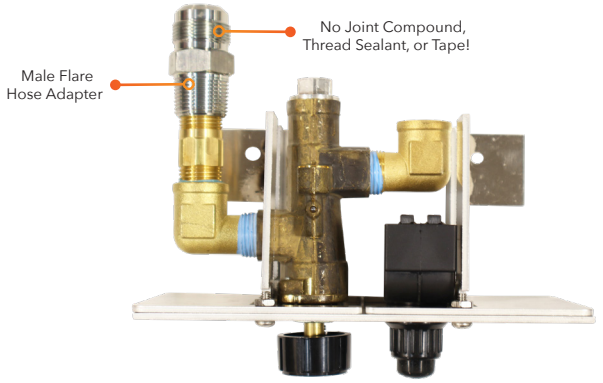


Photo 9: Attaching the Hose Adapter

4.4 DO NOT USE ANY JOINT COMPOUND, THREAD SEALANT, OR PLUMBING TAPE ON THE FLARED END OF FLARED FITTINGS – DOING SO CAN CAUSE LEAKS! Attach the female flared end of the Flex Line to the male flared end of the hose adapters on the Valve Assembly {See Photo 10}.

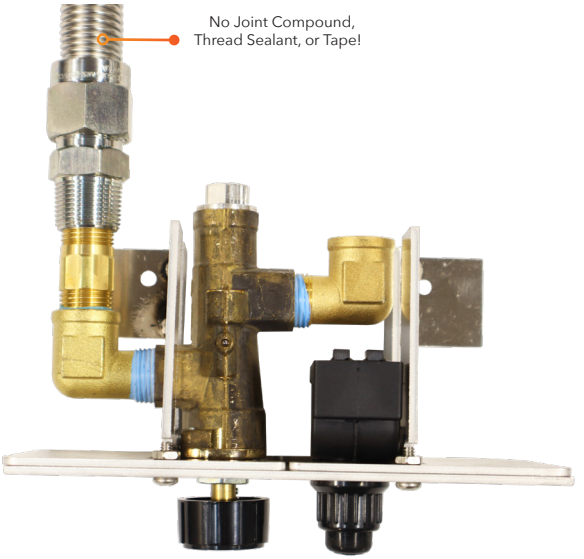


Photo 10: Connecting the Flex Line

5. CONNECT THE 4 PILOT CONNECTIONS TO THE VALVE ASSEMBLY

5.1 The Thermocouple connects to the female threaded bushing of the Valve Assembly. Thread the Thermocouple in place, tighten with a 9mm wrench, and confirm it is firmly seated. {See Photo 13}. Do not use pliers as this can put excess pressure on the connection, which could damage the thermocouple.

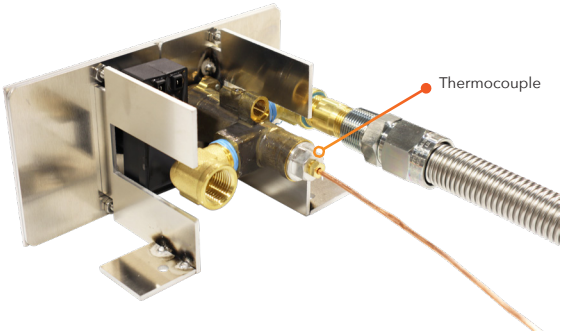


Photo 13: Connecting the Thermocouple

5.2 The pilot tube connects directly above the thermocouple. Thread the pilot tube into the brass fitting integrated into the valve body that is directly above the thermocouple connection. {See Photo 14}. Tighten with a 7/16 in wrench and confirm that the pilot tube is firmly seated to avoid leaks.

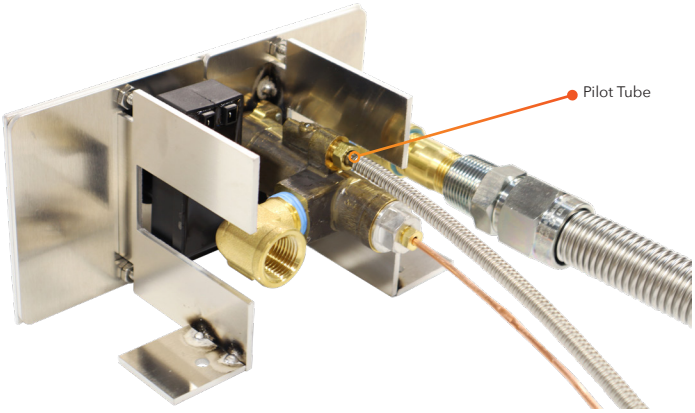


Photo 14: Connecting the Pilot Tube

5.3 Connect the loose ends of the spark generator to the push button module by the two wires within the thermal sleeve – one orange and one green. (The other ends of the wires are pre-installed to the Pilot Assembly). Push each wire firmly into one of the two (2) receptacles on the push button module, which is behind the valve inlet. {See Photo 15}. (Either wire will work in either receptacle). Confirm they are firmly secured.

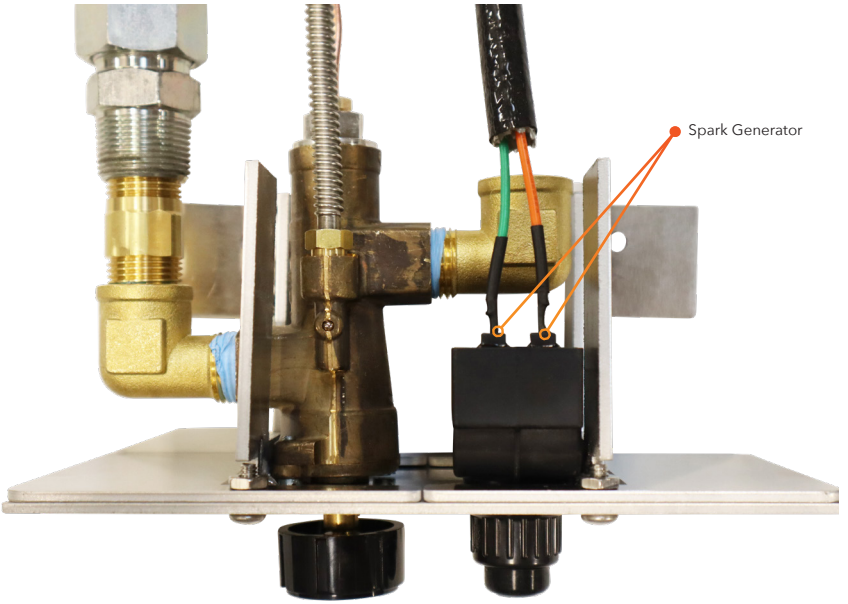


Photo 15: Connecting the Spark Generator to the Push Button Module

6. CONNECTING THE FLEX LINE TO THE PLATE

NEW CROSS**FIRE®** 2.0 ADAPTER CONFIGURATION

CROSS**FIRE®** 2.0 Brass Burners may be used with either Natural Gas or Liquid Propane and are shipped with both a Natural Gas Adapter (NGA) (See Photo 16a) for use when the system is to be operated with Natural Gas and a Liquid Propane Adapter (LPA) (See Photo 16b) when the system is to be operated with Liquid Propane. The appropriate adapter for the intended gas type must be installed prior to use in accordance with the following instructions. Notice, each LPA/NGA has a gas flow arrow showing the direction of gas flow (See Photo 16c). If your system does not include a flex line kit, make sure the applicable gas adapter is installed to the coupling on the bottom of the plate in accordance with step 3(b) below. We recommend that the extra adapter be saved for future use if the unit is relocated and/or the supplied gas type is changed.

Photo 16a: NGA

Photo 16b: LPA

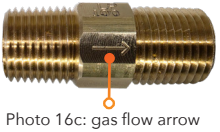


Photo 16c: gas flow arrow

Photo 16: Attaching the LPA/NGA

6.1 Identify the coupling under the plate. Apply joint compound, thread sealant, or plumbing tape to the threads of the exposed end of the provided LPA/NGA with the gas flow arrow pointing towards the burner in the direction of gas flow and tighten to the female end of the coupling with a wrench to avoid leaks. {See Photo 16}.

6.2 A male flare hose adapter is loosely attached flex line. Remove the male flare hose adapter from the end of the flex line.

6.3 Apply joint compound, thread sealant, or plumbing tape to the remaining exposed threads of the LPA/NGA. Thread the non-flared end of the hose adapter on to the LPA/NGA. {See Photo 17}. Tighten with a wrench to avoid leaks.

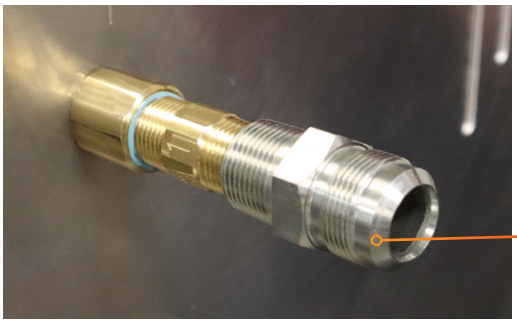


Photo 17: Attaching the Male Flare Hose Adapter

6.4 WITHOUT ANY THREAD SEALANT take the other end of the flex line attached to the valve assembly from Step 4 and attach the female flared end to the male flared end that is attached to the plate from Step 6.3. {See Photo 18}.

Photo 18: Connecting the Flex Line

7. PLACE THE PLATE/PAN WITH THE ATTACHED PILOT ASSEMBLY INTO THE FIRE FEATURE.

8. PUT THE TOP OF PILOT HOOD BACK IN PLACE.

9. REFER TO THE GENERAL INSTALLATION INSTRUCTIONS FOR ALL UNITS ON PAGE 10 OF THIS INSTRUCTION

LIGHTING INSTRUCTIONS: MERCURY IGNITION SYSTEM™

STOP! READ ALL THE SAFETY INFORMATION. LIGHTING YOUR MERCURY IGNITION SYSTEM

1. Confirm that your Natural Gas or Liquid Propane supply to the appliance is OPEN or on.
2. Press Control Knob and turn to the Pilot position.
3. Fully depress the Control Knob. Simultaneously, press the Ignition button until a flame appears.
4. Once pilot is lit, release the Ignition button. Continue to depress Control Knob for 30 seconds. Pilot should remain lit.
5. Once the pilot is lit, press Control Knob in and turn counterclockwise to achieve desired flame height.
6. If burner does not light, turn Control Knob to the OFF position. Wait 3-5 minutes before repeating lighting instructions.

TURNING OFF YOUR MERCURY IGNITION SYSTEM

Press **Control Knob** in and turn to OFF position and verify flame is out.

REPLACING THE BATTERY

If your Mercury Ignition System™ is not lighting, you may need to replace the battery.

To replace the battery in your Mercury Ignition System:

1. Turn battery cover counterclockwise to remove cover and set aside.
2. Remove the AA battery and replace with a new AA battery.
3. Replace the battery cover and turn clockwise to tighten.

WARNING
Carbon Low Voltage Ignition System operates on 3 Volts AC power ONLY

DO NOT Attempt to Power using 110 Volts AC Power – Damage WILL RESULT

BATTERY OPERATION

If you have purchased a battery operated Carbon Low Voltage Ignition System, it may only be operated with 2 Standard D Cell batteries which provide 3 Volts of electricity.

ELECTRICAL CONNECTIONS

To ensure proper operation and to maintain warranty coverage of the Carbon Low Voltage Ignition System, it is required to use the supplied Class 2 power supply rated for AC 3V, 200mA output (Input: AC 120V, 60Hz, 0.1A, Efficiency Level VI). Use of any power supply other than the unit provided may result in improper operation, damage to the ignition system, and void the product warranty. If an alternative power supply is utilized, it must be a listed Class 2 unit rated specifically for AC 3V, 200mA output, with an input of AC 120V, 60Hz, and equal or greater efficiency rating to meet the system's requirements.

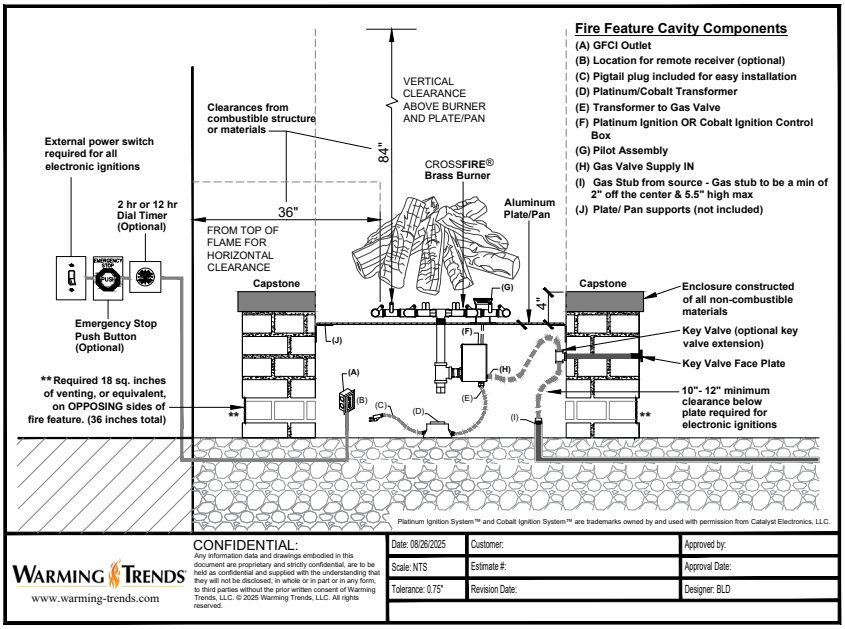
For installations with a total line length up to 50 feet, a minimum of 16 gauge wire must be used, while 14 gauge wire is required for installations up to 100 feet to prevent voltage drop and ensure reliable performance. For optimal performance and to protect against moisture-related failures, it is strongly recommended to utilize dielectric grease or silicone to fully seal all wire nuts employed during the Carbon Low Voltage installation. Failure to follow these installation requirements may result in system malfunction and is not covered under warranty.

WIRING OF MULTIPLE CARBON LOW VOLTAGE IGNITIONS

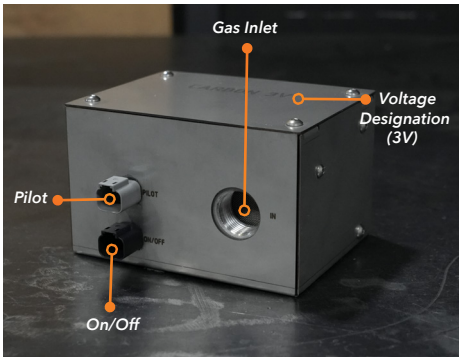
Note: When connecting two units, it is essential to use a higher output transformer.

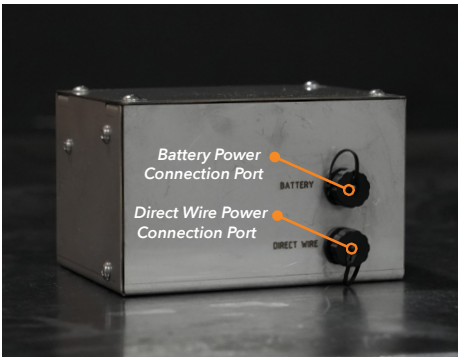
CARBON DIRECT WIRE IGNITION SYSTEMS – ELECTRONICS AND CLEARANCE DIAGRAM

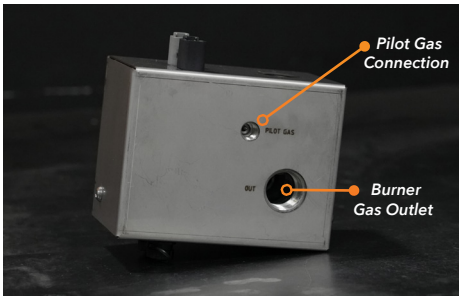
Vertical clearance of 84" from burner to combustible structure or materials is required. Horizontal or lateral clearance of 36" between edge of burner and combustible structure or materials is required.



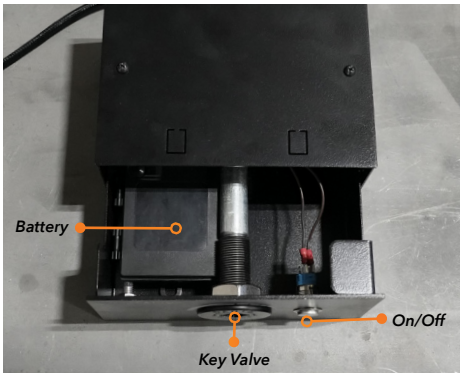
VALVE BOX LAYOUT – CARBON DIRECT WIRE

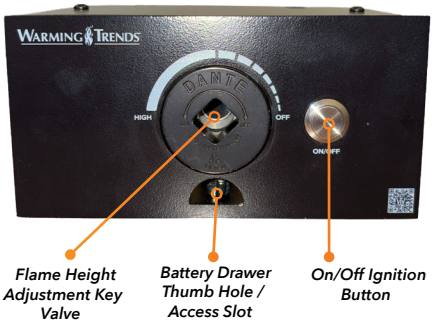






BATTERY DRAWER & FACEPLATE LAYOUT – CARBON BATTERY





If the Pilot Assembly for the Carbon Ignition System™ is not installed on the Plate or Pan, start here for complete installation instructions. If your Plate or Pan does not have Precut Knockouts, skip to Step 2. If the Pilot Assembly has been installed on the plate or pan, skip to Step 3 below for installation instructions.

INSTALLATION OF THE IGNITION SYSTEM PILOT ASSEMBLY TO THE PLATE USING PRE-CUT KNOCKOUTS

The Plate or Pan that was included with your burner should have pre-cut pilot assembly knockouts for various burners. The burner type and size are etched into the plate/pan next to the knockout for that burner's pilot assembly location. To install the pilot assembly:

1. LOCATE AND REMOVE THE APPROPRIATE KNOCKOUT

1.1 Confirm the type and size of your burner on the Packing Slip for your Order.

1.2 Locate the Pilot Assembly knockout on the plate/pan that matches your burner type and size. (See Photo 1)

1.3 Remove the matching knockout by placing a screwdriver or other small tool in the opening at the edge of the knockout. Push one side of the knockout down to break the connector and remove the circular piece of aluminum with pliers. Do not remove any other knockouts. (See Photo 2)

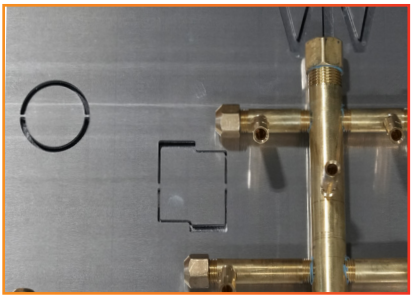


Photo 1: Pilot Assembly Knockouts

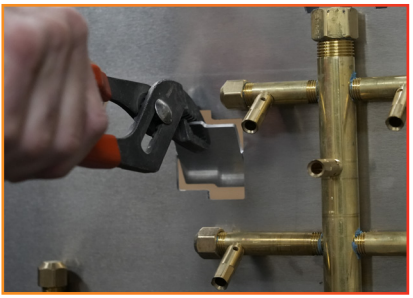


Photo 2: Breaking the Knockouts

2. INSTALLING THE PILOT ASSEMBLY ON THE PLATE/PAN

2.1 Locate the Pilot Assembly. The Pilot Assembly consists of a wind cage, wind cage cap, pilot burner, and self-tapping screws. On the pilot assembly, you will see a spark igniter, a pilot burner, and a thermopile.

Photo 3a: Pilot Assembly

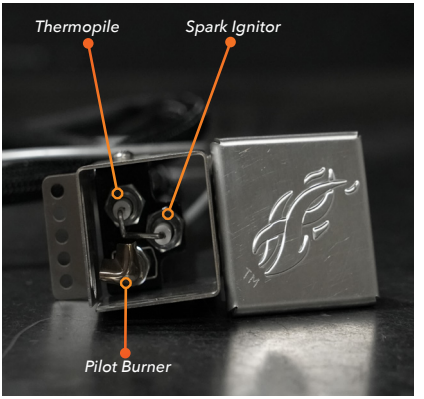


Photo 3b: Top-Down View of Pilot Assembly

2.2 Remove the wind cage cap from the top of the pilot assembly and set it aside until the plate/pan is installed onto your fire feature.

2.3 Carefully, unroll the wires coming from the bottom of the pilot. Feed the wires through the knockout opening created in step 1.3.

2.4 Rotate the pilot assembly in the knockout opening until the circular opening on the wind cage and thermopile are adjacent to the nearest jet with the thermopile nearest to the jet. Position the pilot assembly to cover the entire knockout opening. (See Photo 4a and 4b)

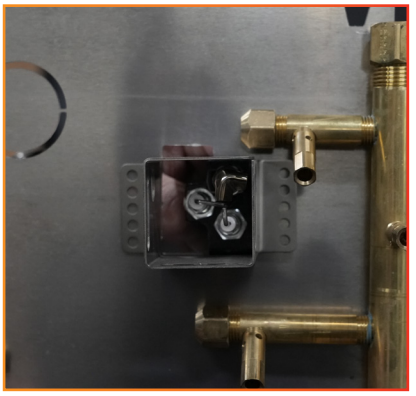


Photo 4a: Wind Cage Positioning

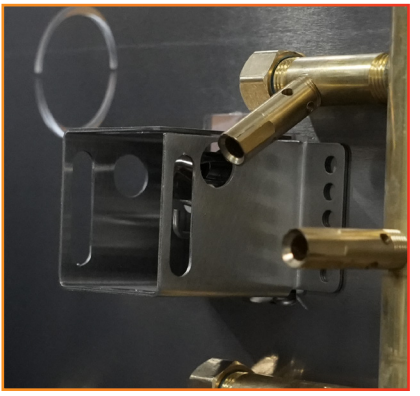


Photo 4b: Wind Cage Circular Opening Positioning

2.5 Once the wind cage is properly aligned, use the self-tapping screws to secure the wind cage to the plate or pan. (See Photo 5)

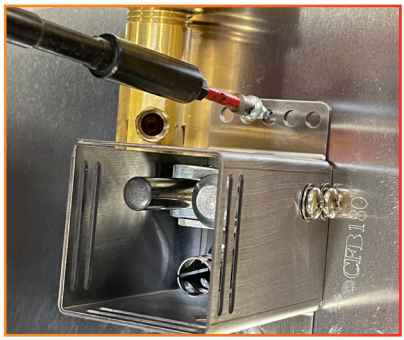


Photo 5: Securing the Wind Cage to the Plate/Pan

3. INSTALLING THE VALVE INTO THE PLATE/PAN

CROSS**FIRE**® 2.0 Brass Burners may be used with either Natural Gas or Liquid Propane and are shipped with both a Natural Gas Adapter (NGA) (See Photo 6a) for use when the system is to be operated with Natural Gas and a Liquid Propane Adapter (LPA) (See Photo 6b) when the system is to be operated with Liquid Propane. The appropriate adapter for the intended gas type must be installed prior to use in accordance with the following instructions. Notice, each LPA/NGA has a gas flow arrow showing the direction of gas flow (See Photo 6c). If your system does not include a flex line kit, make sure the applicable gas adapter is installed to the coupling on the bottom of the plate. We recommend that the extra adapter be saved for future use if the unit is relocated and/or the supplied gas type is changed.

Photo 6a: NGA

Photo 6b: LPA

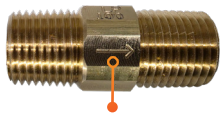


Photo 6c: gas flow arrow

3.1 Identify the coupling under the plate. Apply joint compound, thread sealant, or plumbing tape to the threads of the exposed end of the provided 5" nipple on the drip leg assembly and tighten to the female end of the coupling with a wrench to avoid leaks. Align the tee so it is facing away and perpendicular to the two small holes cut out on the plate. (See Photo 7b)

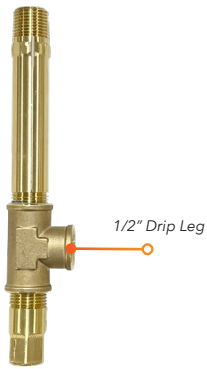


Photo 7a: Drip Legs

Photo 7b: Installing the Drip Leg

3.2 Identify the gas outlet on the valve box assembly. The outlet will have a LPA/NGA with a reducing bushing attached (See Photo 8.).

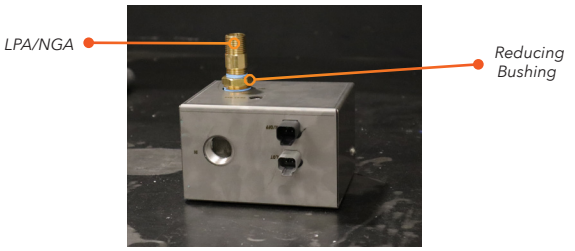


Photo 8

3.3 Apply joint compound, thread sealant, or plumbing tape to the threads of the exposed end of the LPA/NGA on the valve and tighten to the female end of the tee on the drip leg. Tighten with a wrench to avoid leaks. Orient the valve box so that the gray and black connection recepticals are closest to the plate (as shown in Photo 10 below)

4. CONNECTING THE PILOT AND ON/OFF BUTTON TO VALVE ASSEMBLY

4.1 Identify the connector ports on the valve. One is black and labeled "On/Off" and one is gray and labeled pilot. Locate the connectors of the same color on the pilot assembly and rear of push button (See Photo 9). Plug them in to the matching connectors. (See Photo 10)

4.2 Identify the port labeled "Pilot Gas" on the valve. Locate the corresponding brass male thread on the metal pilot tube extending from the wind cage. Join the male end on the pilot assembly to the port on the valve using a 7/16" wrench (DO NOT APPLY ANY THREAD SEALANT). (See Photo 11)

Photo 9: Rear of push button and On/Off connector

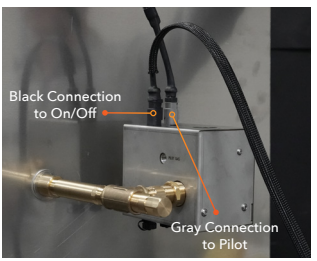


Photo 10: Electronic Connections from the Pilot and On/Off Button to Valve

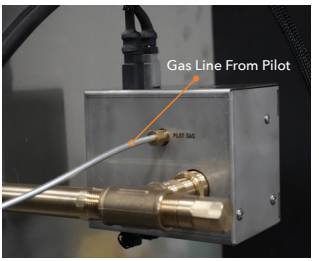


Photo 11: Connecting the Gas Line From the Pilot to the Valve

5. CONNECTING THE TRANSFORMER TO THE VALVE BOX

5.1 Valve Boxes for Carbon 3 Volt Ignitions are labeled "Carbon" and designated as 3 Volt. For direct-wire configurations, the transformer supplied with the system is also designated as 3 Volts. See photos 12 and 13 below. When operating a Carbon Ignition with an alternate transformer, that transformer must meet the 3 Volt requirements specified below.

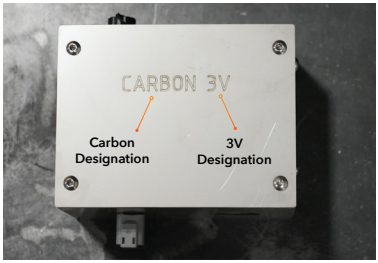
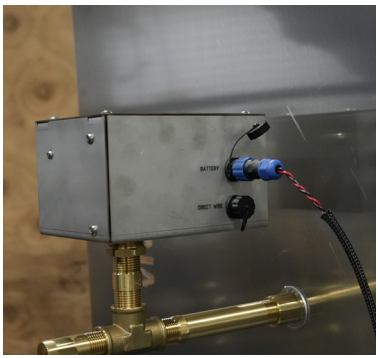


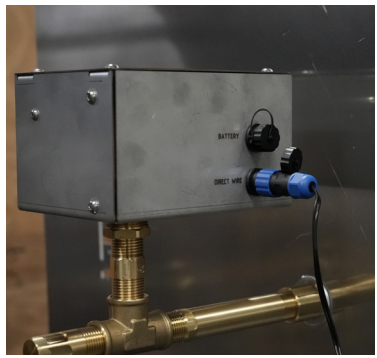
Photo 12

Photo 13

5.2 The transformer, or battery pack for battery operated units, supplied with your Ignition System has a threaded two prong circular connector that inserts into a compatible receptacle on the Ignition Box. Simply insert the two prong circular connector into the appropriately labeled receptacle on the Ignition Box and hand tighten to provide a secure connection.



Battery Operated Configuration



Direct Wire Configuration

6. ASSEMBLE FLEX LINE KITS FOR IGNITION

FK1 Installation:
6.1 Identify your FK1 flex line kit. (See Photo 18)

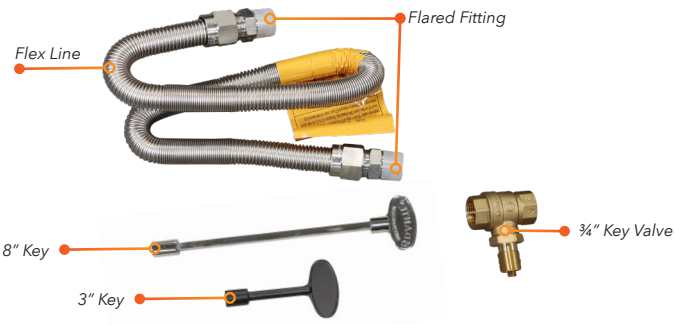


Photo 18: FK1 Flex Line Kit

6.2 Identify the flared fitting that comes on the end of your flex line. There should be two total. Unscrew the flared fitting from the flex line, then apply thread sealant to the non-flared end of the fitting (See Photo 19) and screw into the "IN" side of the valve. Tighten with a wrench to avoid leaks. (See Photo 20)

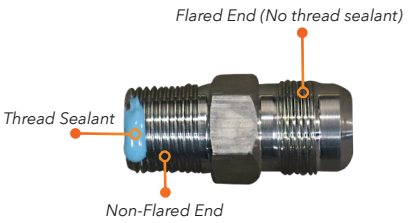


Photo 19: Flared Fitting with Thread Sealant

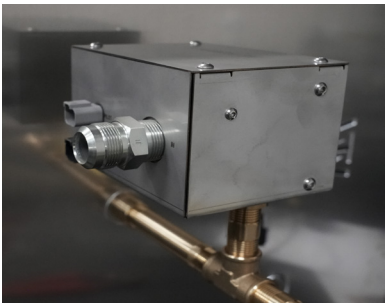


Photo 20: Connecting the Flared Fitting to the Carbon Valve

6.3 Screw the flex line onto the flared end of the flared fitting that is attached to the valve. DO NOT USE THREAD SEALANT. Tighten with a wrench to avoid leaks. (See Photo 21)

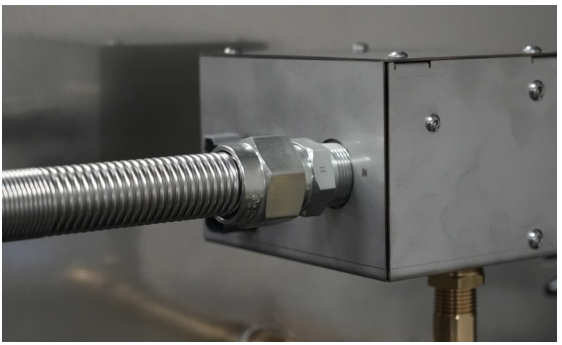


Photo 21: Attaching the Flex Line

6.4 Apply thread sealant to non-flared end of the second flared fitting and screw into one side of the t-shaped fitting on the rear of the Carbon unit. Tighten with a wrench to avoid leaks. (See Photo 22)

Photo 22: Connecting the Flared Fitting to the T Fitting

6.5 Mount the faceplate to your fire pit, and then take the other end of the flex line and screw it into the flared end of the flared fitting on the key valve, connecting the key valve to the Carbon Valve. DO NOT USE THREAD SEALANT. Tighten with a wrench to avoid leaks. (See Photo 23)
The other end of the key valve will then connect to your gas supply.

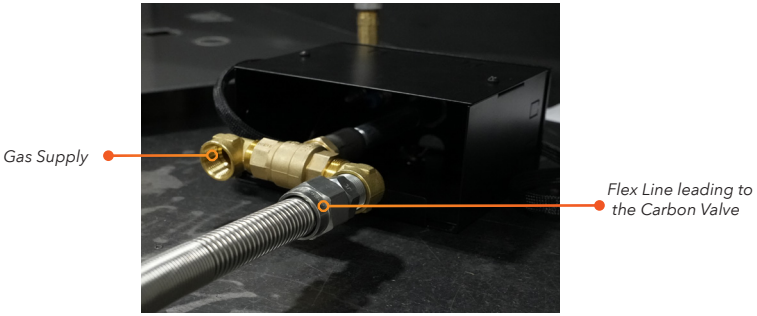


Photo 23: Connecting the Flex Line from the Carbon Valve to the Key Valve

7. FINISHING UP

7.1 Once all connections have been completed, place the burner system in the fire feature. Put the wind cage cap back on the wind cage. This must be done before any media is added to the feature to prevent any pieces from falling into the wind cage. For direct wire configurations, plug the transformer into the GFCI outlet. Turn the power on to ignite.

LIGHTING INSTRUCTIONS: CARBON IGNITION SYSTEMS™

STOP! READ ALL THE SAFETY INFORMATION.
LIGHTING YOUR CARBON IGNITION SYSTEM

WARNING: A qualified, licensed electrician must install power supply for the Carbon Low Voltage Ignition System. An outdoor NEMA rated GFCI Receptacle outlet should be installed within the interior of the enclosure above grade to supply power to system.

1. Confirm that your Natural Gas or Liquid Propane supply to the appliance is OPEN or on.
2. If you do not smell gas, use the key to turn the Key Valve to the ON position by turning the key to the left.
3. Turn on power to the fire feature with the On/Off button. Within 10 seconds, flame should ignite.
4. Use Key Valve to adjust flame to desired height.

TURNING OFF YOUR CARBON IGNITION SYSTEM

1. Push On/Off button to extinguish flame.
2. Turn Key Valve to OFF position by turning key to the right.
3. If using LP bottle/tank – turn bottle/tank to CLOSED position.
4. Verify flame is OUT.

WARNING: FOR REMOTE CONTROL USE: To prevent unwanted startup, turn off power to the appliance when not in use.

WARNING: If Fire Feature fails to turn off completely (small flames still visible), turn off gas supply using the main valve by your meter, and contact your gas supplier or qualified technician.

CATALYST IGNITION SYSTEMS
CREATED BY WARMING TRENDS

WARNING
Platinum Ignition System operates on 24 Volts AC power ONLY

DO NOT Attempt to Power using 110 Volts AC Power - Damage WILL RESULT

ELECTRICAL CONNECTIONS

To ensure proper operation of the Platinum Ignition System, it is crucial to use the supplied 24 Volt Class II 50-Watt Transformer. If an alternative transformer is utilized, it must be a Class II 24 VAC, 3 amp, 50 Watt, or larger to meet the unit's requirements. For installations with a total line length up to 50 feet, a minimum of 14 gauge wire should be used, while 12 gauge wire is recommended for installations up to 100 feet. For optimal results, it is highly recommended to utilize dielectric grease or silicon to fill all wire nuts employed during the Platinum installation.

WIRING OF MULTIPLE PLATINUM IGNITIONS

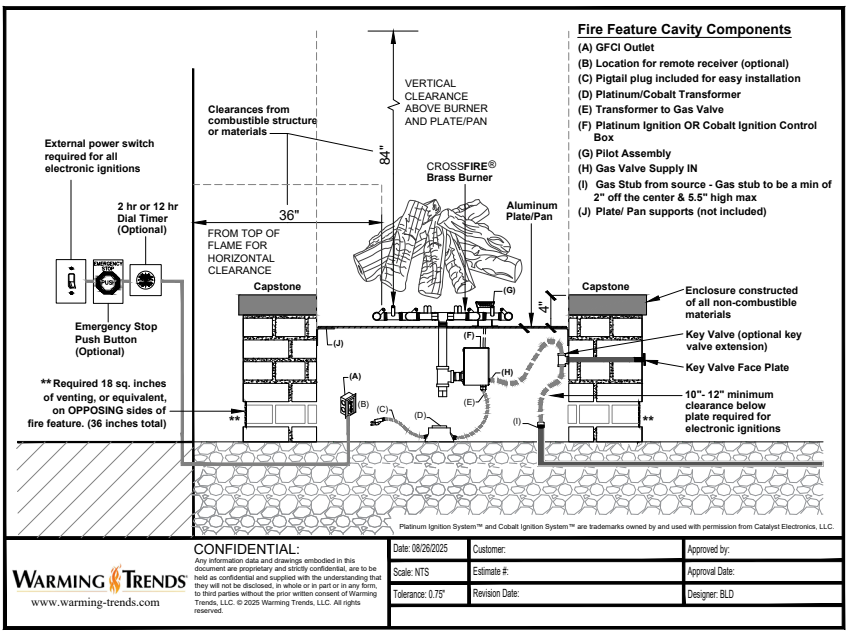
When connecting multiple Platinum Ignition Systems, each unit has a blue and a yellow wire for power connection. These are the power wires. When multiple Platinum Ignition Systems are connected, the polarity between them must be the same.

To maintain correct polarity, it is necessary to connect all the blue wires to one wire from the transformer, and all the yellow wires to the other wire from the transformer.

Note: When connecting two units, it is essential to use a higher output transformer.

PLATINUM AND COBALT IGNITION SYSTEMS – ELECTRONICS AND CLEARANCE DIAGRAM

Vertical clearance of 84" from burner to combustible structure or materials is required. Horizontal or lateral clearance of 36" between edge of burner and combustible structure or materials is required.



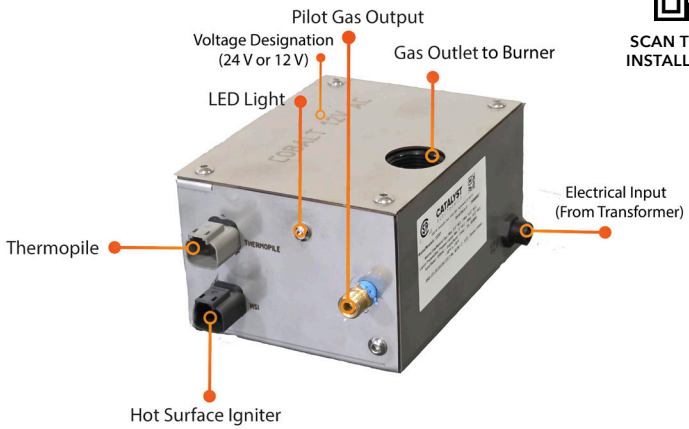
WARMING TRENDS
www.warming-trends.com

CONFIDENTIAL:

Date: 08/26/2025	Customer:	Approved by:
Scale: NTS	Estimate #:	Approval Date:
Tolerance: 0.75"	Revision Date:	Designer: BLD

CONTROL BOX LAYOUT FOR PLATINUM AND COBALT

SCAN TO WATCH AN INSTALLATION VIDEO



INSTALLATION INSTRUCTIONS FOR PLATINUM AND COBALT

If the Pilot Assembly for the Ignition System™ is not installed on the Plate or Pan, start here for complete installation instructions. If your Plate or Pan does not have Precut Knockouts, skip to Step 2. If the Pilot Assembly has been installed on the plate or pan, skip to Step 3 below for installation instructions.

INSTALLATION OF THE IGNITION SYSTEM PILOT ASSEMBLY TO THE PLATE USING PRE-CUT KNOCKOUTS

The Plate or Pan that was included with your burner should have pre-cut pilot assembly knockouts for various burners. The burner type and size are etched into the plate/pan next to the knockout for that burner's pilot assembly location. To install the pilot assembly:

1. LOCATE AND REMOVE THE APPROPRIATE KNOCKOUT

1.1 **Confirm the type and size of your burner on the Packing Slip for your Order.**

1.2 Locate the Pilot Assembly knockout on the plate/pan that matches your burner type and size. (See Photo 1)

1.3 Remove the matching knockout by placing a screwdriver or other small tool in the opening at the edge of the knockout. Push one side of the knockout down to break the connector and remove the circular piece of aluminum with pliers. Do not remove any other knockouts. (See Photo 2)

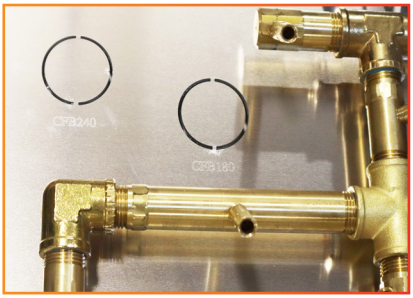


Photo 1: Pilot Assembly Knockouts

Photo 2: Breaking the Knockouts

2. INSTALLING THE PILOT ASSEMBLY ON THE PLATE/PAN

2.1 Locate the Pilot Assembly. The Pilot Assembly consists of a wind cage, wind cage cap, pilot burner, and self-tapping screws. On the pilot assembly, you will see a hot surface igniter, a pilot burner, and a thermopile.

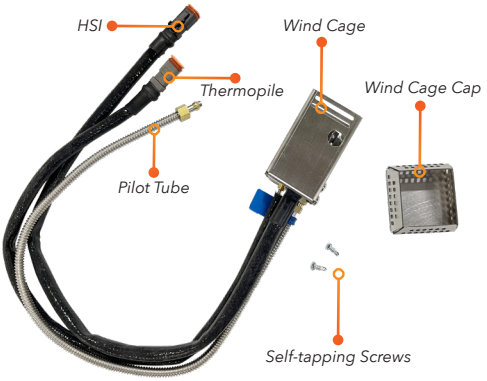


Photo 3a: Pilot Assembly

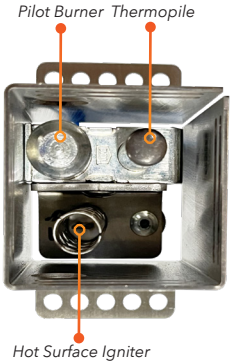


Photo 3b: Top-Down View of Pilot Assembly

2.2 Remove the wind cage cap from the top of the pilot assembly and set it aside until the plate/pan is installed onto your fire feature.

2.3 Carefully, unroll the wires coming from the bottom of the pilot. Feed the wires through the knockout opening created in step 1.3.

2.4 Rotate the pilot assembly in the knockout opening until the circular opening on the wind cage and thermopile are adjacent to the nearest jet with the thermopile nearest to the jet. Position the pilot assembly to cover the entire knockout opening. (See Photo 4a and 4b)

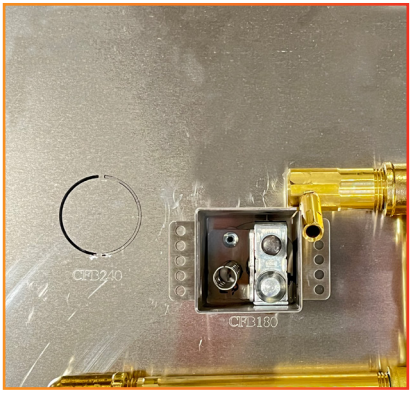


Photo 4a: Wind Cage Positioning

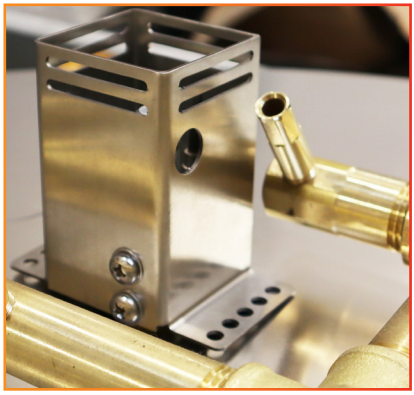


Photo 4b: Wind Cage Circular Opening Positioning

2.5 Once the wind cage is properly aligned, use the self-tapping screws to secure the wind cage to the plate or pan. (See Photo 5)

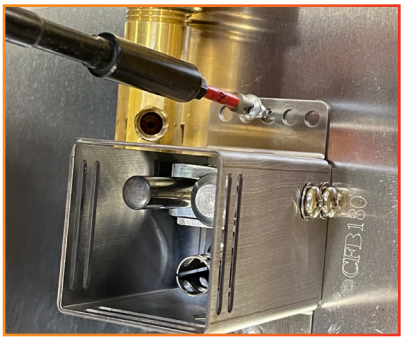


Photo 5: Securing the Wind Cage to the Plate/Pan

3. INSTALLING THE VALVE INTO THE PLATE/PAN

CROSS**FIRE®** 2.0 Brass Burners may be used with either Natural Gas or Liquid Propane and are shipped with both a Natural Gas Adapter (NGA) (See Photo 6a) for use when the system is to be operated with Natural Gas and a Liquid Propane Adapter (LPA) (See Photo 6b) when the system is to be operated with Liquid Propane. The appropriate adapter for the intended gas type must be installed prior to use in accordance with the following instructions. Notice, each LPA/NGA has a gas flow arrow showing the direction of gas flow (See Photo 6c). If your system does not include a flex line kit, make sure the applicable gas adapter is installed to the coupling on the bottom of the plate. We recommend that the extra adapter be saved for future use if the unit is relocated and/or the supplied gas type is changed.

Photo 6a: NGA

Photo 6b: LPA

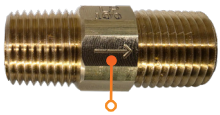


Photo 6c: gas flow arrow

Warming Trends has two different drip legs for the Platinum Ignition System depending on the BTU supply of the burner. Depending on the BTU output of your burner system, your drip leg will be made of either ½" or ¾" piping. (See Photo 7a)

3.1 Identify the coupling under the plate. Apply joint compound, thread sealant, or plumbing tape to the threads of the exposed end of the provided 5" nipple on the drip leg assembly and tighten to the female end of the coupling with a wrench to avoid leaks. Align the tee so it is facing away and perpendicular to the two small holes cut out on the plate. (See Photo 7b)

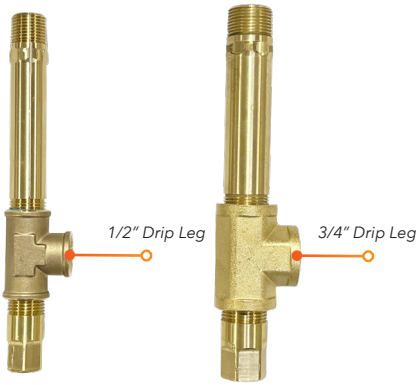


Photo 7a: Drip Legs

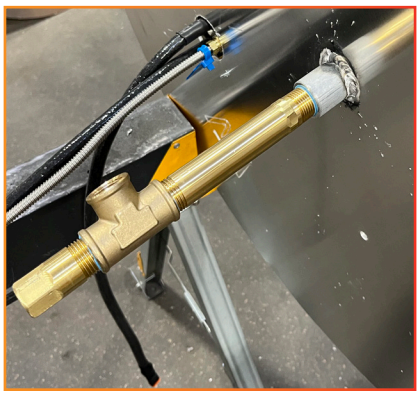


Photo 7b: Installing the Drip Leg

3.2 Identify the gas outlet on the valve box assembly. Based on your burner selection, the outlet will have a LPA/NGA with a reducing bushing attached (See Photo 8a), a LPA/NGA with two reducing bushings attached (See Photo 8b), or a 3/4" x 3" nipple attached (See Photo 8c).

Photo 8a

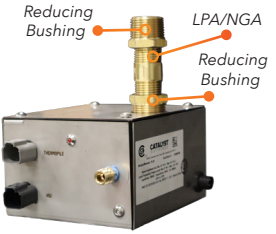


Photo 8b

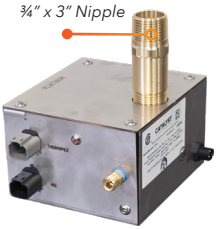


Photo 8c

3.3 Apply joint compound, thread sealant, or plumbing tape to the threads of the exposed end of the LPA/NGA, reducing bushing, or nipple on the valve and tighten to the female end of the tee on the drip leg. Tighten with a wrench to avoid leaks. Orient the valve box so that the gray and black connection recepticals are closest to the plate as shown in Photo 9.

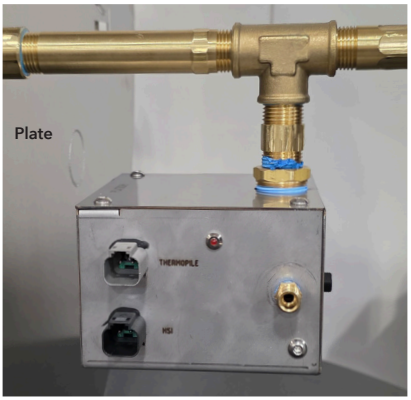


Photo 9

4. CONNECTING THE PILOT TO THE VALVE ASSEMBLY

4.1 Identify the connector ports on the valve. One is black and labeled Hot Surface Igniter and one is gray and labeled Thermopile. Locate the connectors of the same color on the pilot assembly and plug them in to the matching connectors. (See Photo 10)

4.2 Identify the brass male thread on the valve. Locate the corresponding brass female thread on the metal pilot tube extending from the wind cage. Join the female end on the pilot assembly to the male end on the valve using a ½" wrench (DO NOT APPLY ANY THREAD SEALANT). (See Photo 11)

Photo 10: Electronic Connections from the Pilot to Valve

Photo 11: Connecting the Gas Line From the Pilot to the Valve

5. CONNECTING THE TRANSFORMER TO THE VALVE BOX

5.1 Valve Boxes for Platinum 24 Volt Ignitions are labeled "Platinum" and designated as 24 Volt. The transformer supplied with the system is also designated as 24 Volts. See photos 12 and 13 below. When operating a Platinum Ignition with an alternate transformer, that transformer must meet the 24 Volt requirements specified below.

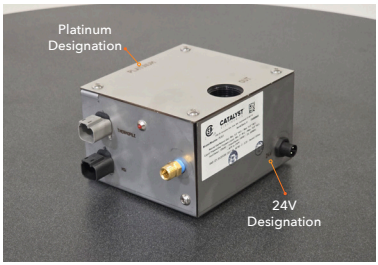


Photo 12

Photo 13

5.2 Valve Boxes for Cobalt 12 Volt Ignitions are labeled "Cobalt" and designated as 12 Volt in two locations. The transformer supplied with the system is also designated as 12 Volts. See photos 14 and 15 below. When operating a Cobalt Ignition with an alternate transformer, that transformer must meet the 12 Volt requirements specified below.

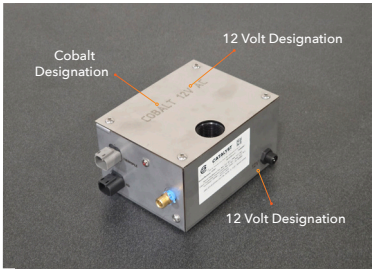


Photo 14

Photo 15

5.3 The transformer supplied with your Ignition System has a threaded two prong circular connector that inserts into a compatible receptacle on the Ignition Box. Simply insert the two prong circular connector into the receptacle on the Ignition Box and hand tighten to provide a secure connection.

Photo 16 below is the end of the threaded two prong circular adapter of the transformer and Photo 17 shows the insertion of the circular connector into the receptacle of the Ignition Box.

Photo 16

Photo 17

6. CONNECTING THE TRANSFORMER TO THE VALVE BOX

FK1 INSTALLATION:

6.1 Identify your FK1 flex line kit for units up to 249K BTUs. (See Photo 18)

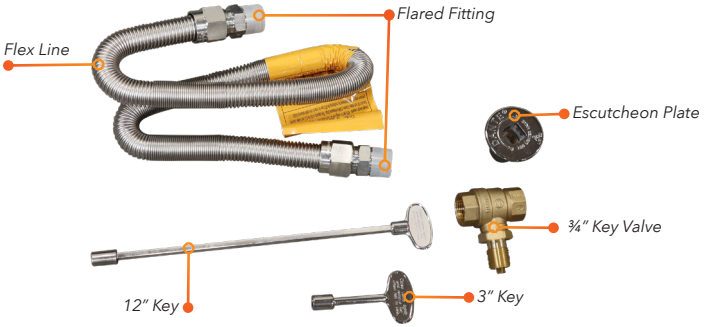


Photo 18: FK1 Flex Line Kit

6.2 Identify the flared fitting that comes on the end of your flex line. There should be two total. Unscrew the flared fitting from the flex line, then apply thread sealant to the non-flared end of the fitting (See Photo 19) and screw into the "IN" side of the valve. Tighten with a wrench to avoid leaks. (See Photo 20)

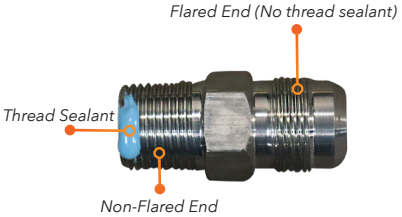


Photo 19: Flared Fitting with Thread Sealant

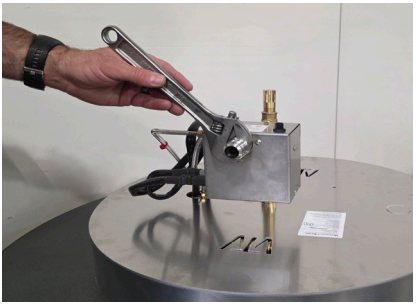


Photo 20: Connecting the Flared Fitting to the Platinum Valve

6.3 Screw the flex line onto the flared end of the flared fitting that is attached to the valve. Do not use thread sealant. Tighten with a wrench to avoid leaks. (See Photo 21)

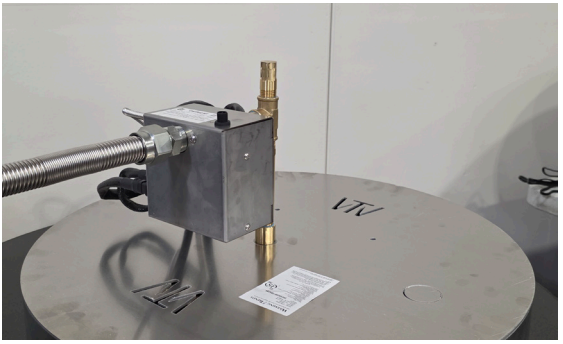


Photo 21: Attaching the Flex Line

6.4 Apply thread sealant to the non-flared end of the second flared fitting and screw into one side of the provided key valve using thread sealant. Tighten with a wrench to avoid leaks. (See Photo 22)

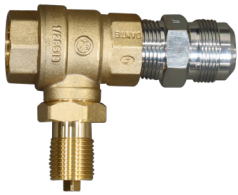


Photo 22: Connecting the Flared Fitting to the Key Valve

6.5 Mount the key valve and escutcheon plate to your fire pit, and then take the other end of the flex line and screw it into the flared end of the flared fitting on the key valve, connecting the key valve to the Platinum or Cobalt Valve. Do not use thread sealant. Tighten with a wrench to avoid leaks. (See Photo 23) The other end of the key valve will then connect to your gas supply.

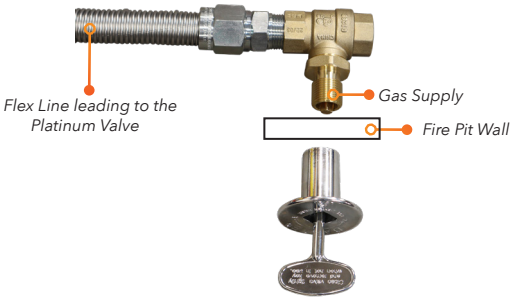


Photo 23: Connecting the Flex Line from the Platinum or Cobalt Valve to the Key Valve

FK2 Installation:

6.6 Identify your FK2 for 250K BTU and above units. (See Photo 24)

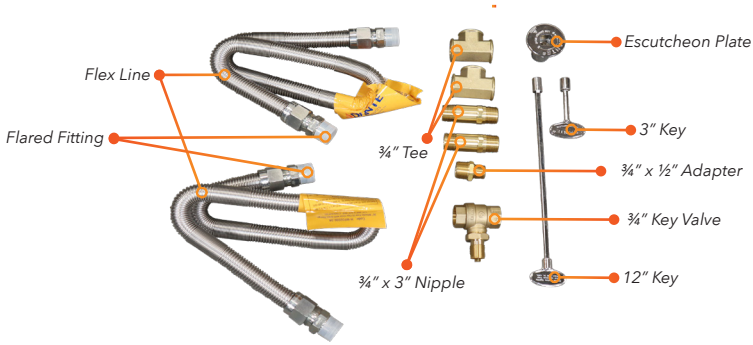


Photo 24: FK2 Flex Line Kit

6.7 Identify one of the 3/4" x 3" nipples that comes with your kit. Apply thread sealant to one end of the nipple and screw into the "IN" side of the valve. Tighten with a wrench to avoid leaks. (See Photo 25)

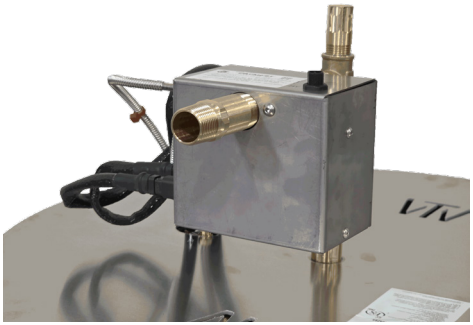


Photo 25: Connecting the ¾" x 3" nipple to the Platinum Valve

6.8 Your FK2 kit should have two flex lines. Each flex line comes with two flared fittings screwed onto the end. Remove these from the flex line. Identify the 3/4" tee that comes with your kit. Screw this onto the end of the 3/4" x 3" nipple attached to the valve. Then, screw the non-flared ends of two of the flared fittings into the tee. Use thread sealant on all connections and tighten all connections with a wrench to avoid leaks. (See Photo 26) for complete installation. Refer back to Photo 19 for sealant detail.

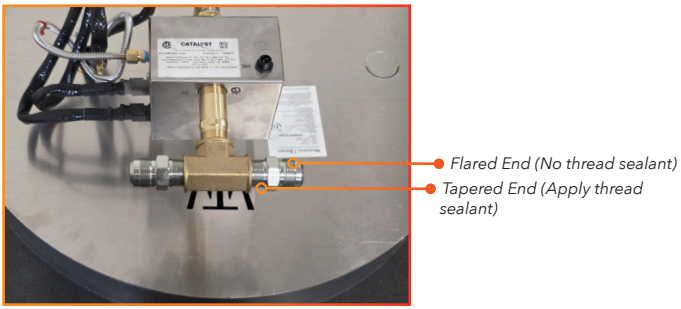


Photo 26: Connecting the Flared Fittings and ¾" Tee to the 3" Nipple

6.9 Take the ends of your two flex lines and screw them into the flared ends of the two flared fittings seen in Photo 26. Do not use thread sealant. Tighten with a wrench to avoid leaks. (See Photo 27)

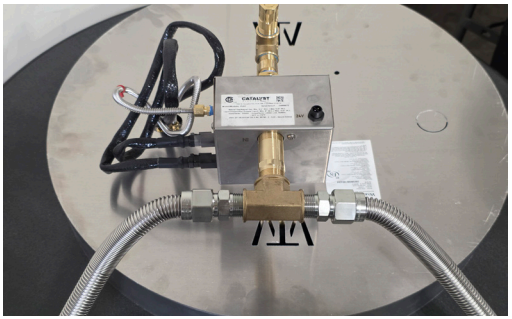


Photo 27: Connecting the Flex Lines to the Flared Fittings

6.10 Identify your other tee, nipple, remaining two flared fittings, and 3/4" key valve that come with the kit. Using thread sealant for all joints, assemble these components. Tighten with a wrench to avoid leaks. (See Photo 28)

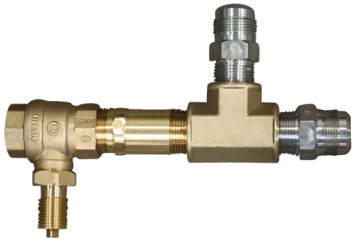


Photo 28: Constructing the Key Valve assembly that will connect to the Platinum or Cobalt Valve

6.11 Mount the key valve assembly from Step 6.10 as well as the provided escutcheon plate to your fire pit. Then, take the two open ends of the flex lines from Step 6.9 and connect them to the flared fittings on the see attached to your key valve assembly. This will connect the Key Valve to the Platinum or Cobalt Valve (See Photo 29). The other end of the key valve will then connect to your gas supply. Do not use thread sealant. Tighten with a wrench to avoid leaks.

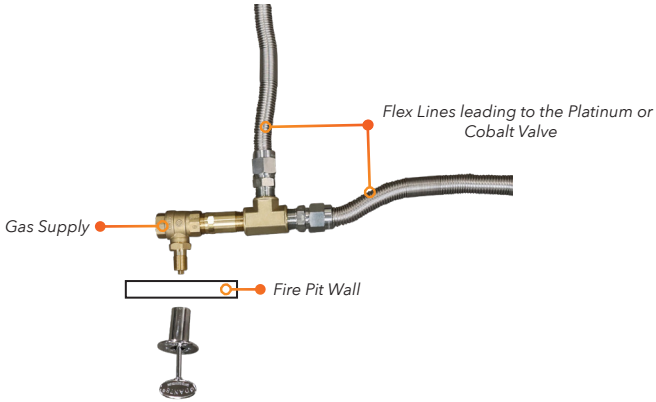


Photo 29: Connecting the Flex Lines from the Platinum or Cobalt Valve to the Key Valve

7. FINISHING UP

7.1 Once all connections have been completed, place the burner system in the fire feature. Put the wind cage cap back on the wind cage. This must be done before any media is added to the feature to prevent any pieces from falling into the wind cage. Make sure the power to the feature is turned off. Plug the 6' pigtail into the GFCI outlet. Turn the power on to ignite.

LIGHTING INSTRUCTIONS: PLATINUM AND COBALT IGNITION SYSTEMS™

STOP! READ ALL THE SAFETY INFORMATION.
LIGHTING YOUR PLATINUM AND COBALT IGNITION SYSTEM

WARNING: A qualified, licensed electrician must install power supply for the Platinum Ignition System. An outdoor NEMA rated GFCI Receptacle outlet should be installed within the interior of the enclosure above grade to supply power to system.

1. Confirm that your Natural Gas or Liquid Propane supply to the appliance is OPEN or on.
2. If you do not smell gas, use the key to turn the Key Valve or gas control valve to the ON position by turning the key to the left.
3. Turn on power to the fire feature with switch, button, or remote. Within 10 seconds of power application Pilot Flame should be lit and visible. Once the pilot is lit, the main burner will ignite shortly after.
4. Use Key Valve to adjust flame to desired height.

TURNING OFF YOUR PLATINUM AND COBALT IGNITION SYSTEM

1. Turn off power to the Outdoor Fireplace – with remote control or wall switch.
2. Turn Key Valve to OFF position by turning key to the right.
3. If using LP bottle/tank – turn bottle/tank to CLOSED position.
4. Verify flame is OUT.

WARNING: FOR REMOTE CONTROL USE: To prevent unwanted startup, turn off power to the appliance when not in use.

WARNING: If Fire Feature fails to turn off completely (small flames still visible), turn off gas supply using the main valve by your meter, and contact your gas supplier or qualified technician.

WARNING: For Platinum Ignition Systems, which have an extended or detached valve box, the area in which the valve box is installed must conform with all installation requirements, including, but not limited to location, construction, venting and local codes. Failure to do so may result in property damage, personal injury, or death.

OPERATING INSTRUCTIONS

Keep the area clear and free from combustible materials, gasoline, and other flammable vapors and liquids.

Solid fuels shall not be burned in the fire feature. Leaves, sticks, wood, paper, clothing, food material, etc. should be kept away from the fire feature. Make sure that there is no vegetation or other objects over the top or sides of the fire feature that could interfere with safe operation. If there are any questions as to clearances, refer to CLEARANCE DIAGRAMS starting on page 11 in your Installation User Guide for specific clearance allowances.

Wind and gusty conditions may cause the flame to behave in an unpredictable manner. If conditions exist, turn off the fire feature.

All media (lava rock, volcanic stone, fire glass, etc.) has the potential of thermal spalling. This process may occur when media is wet and moisture gets trapped inside of the material due to rapid temperature differences. When this happens, the media has the potential to crack or pop outside of the fireplace. Extra caution should be taken when lighting in high humidity or moisture. After igniting, allow 30 minutes to dry out the media and monitor from a distance until all popping has ceased before fully enjoying the fire.

WARNING LABEL

The following label has been provided with the appliance. Affix the label in a conspicuous location adjacent to the appliance.

WARNING: Improper installation, adjustment alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Refer to the owner's user guide provided with this appliance. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

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

AVERTISSEMENT: Une installation, un ajustement, une modification, une réparation ou un entretien inapproprié peuvent être la cause de blessures ou de dommages. Veuillez lire attentivement les instructions d'installation, d'utilisation et d'entretien avant d'installer ou de réparer ce matériel.

AVERTISSEMENT: Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de l'appareil, ni de tout autre appareil.

MEDIA INSTALLATION

Only use approved decorative media (glass, lava rock, ceramic log sets, steel log sets, etc.) that have been manufactured for specific use in outdoor fire features.

Media must be ½" or larger in size to prevent media from falling into gas orifices and blocking flow of gas out of jets. Use approved media only. **To avoid media dust or debris from getting into the system, do not dump the media over the burner.** Place the media onto the plate or pan.

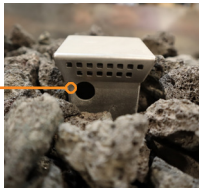
The appliance is designed to use approved media that is correctly installed over the burner to achieve proper combustion. Use of any media outside of the approved media may void warranty and affect proper operations.
Burner may be covered by approved media up to ½" above the jets. PLEASE NOTE - Covering jets by more than ½" of media may create back pressure and gas leakage resulting in pooling of gas under the fire feature which can result in explosion which could cause property damage, personal injury, or death.

Media should be piled no more than halfway up the pilot of assembly so that pilot gas orifice opening and the pilot cooling holes are above the media allowing for pilot flame to easily reach gas jet orifice. Incorrect media installation that blocks pilot cooling holes will cause the pilot flame to stifle, blocking of thermal sensor and/or a delay in burner ignition. (See pictures below for examples of proper installation heights).

For Ceramic Log Sets: Place logs on top of lava rock or media base according to preference and desired flame pattern. Do not block, cover, or obstruct the pilot assembly. Blocking, covering, or placing ceramic logs too close to the pilot assembly may cause excessive heat on pilot causing system to fail. This is not covered under warranty.

Example of proper media height on pilot assembly.

Pilot Cooling Hole



Thank you for your purchase of a FireStorm® Steel Gas Log from Warming Trends. We appreciate your business and hope that you enjoy your FireStorm for many years to come!

BURNER SYSTEM INSTALLATION AND OPERATING INSTRUCTIONS
Please read and follow the entire Warming Trends Owner's Guide and Instruction Manual to install and operate your outdoor gas burner system. **During the installation of your burner system, for safe lighting, orient the burner so that one end of it is easily reachable while operating the key valve.**

Please follow all instructions of this Owner's Manual regarding the use of approved media coverage over the burner. The approved media will form a bed upon which to place the FireStorm Steel Gas Log. It is recommended that a flat bed of media two inches wider and longer than the FireStorm Steel Gas Log be formed.

INSTALLATION OF THE FIRESTORM STEEL GAS LOG
Your FireStorm Steel Gas Log may have sharp edges. Please handle carefully or wear appropriate gloves whenever handling gas log.

Once your approved media has been installed, place your FireStorm Steel Gas Log over the burner so that the burner is centered underneath it. Your steel log has a "lighting opening" at each end to aid in lighting the burner. {See Photo 1}. Orient the steel log so that one end of the log is near the key valve. Press down upon the log to seat the log in the media to create a level and stable foundation. Adjust media as necessary.

Adjust your media so that the tip of the jet nearest the end of the log to be used for lighting is exposed. Use this jet for lighting the burner pursuant to Steps 6 and 7 below.

Photo 1: Lighting Opening

LIGHTING AND TURNING OFF YOUR MATCH LIT FIRESTORM STEEL GAS LOG SYSTEM
These instructions supplement the Lighting Instructions within your Owner's Manual related to Turning On Your Match Lit System. Light your FireStorm Steel Gas Log using a "lighting opening" to access your burner as described below.

TURNING ON YOUR MATCH LIT SYSTEM
1. **STOP!** Read all the safety information.
2. Any cover must be removed prior to operation of burner or appliance and must remain off during operation. **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 explosion, which could cause property damage, personal injury, or death.**
3. Confirm that your main Natural Gas or Liquid Propane supply to the appliance is open. **Do not open your key valve or gas control at this time.**
4. Before lighting, visually inspect fire feature and remove any accumulated leaves or other combustible debris.
5. Locate key valve or gas control valve controlling gas supply to your appliance.
6. **Locate the jet tip nearest the "lighting opening" described above** that can be easily accessed while operating key valve or gas control without reaching across other jets or the burner. Reorient burner if necessary to allow such access.
7. Place a long reach lighter through the "lighting opening" of the gas log slightly above or on the tip of the jet located in Step 6 above. {See Photo 1}. Do not use a match or cigarette lighter.
8. While holding the flame on or slightly above the jet tip as described in Step 7 above, **slowly** turn the key valve or gas control knob **slightly** to the left to allow a minimal flow of gas to the burner and light the selected jet. While attempting to light jet, do not substantially increase gas supply. Excessive flow of gas before jet is lit can cause pooling of gas and result in sudden flare up. **Failure to follow these instructions could result in fire or explosion, which could cause property damage, personal injury, or death.**
9. Once the selected jet (or other jets) is lit, continue to keep any body parts from above the pit or burner and slowly turn the key valve or gas control knob further to the left to increase the flow of gas to the burner. The other jets of the burner should ignite.
10. If the flame will not stay lit after several attempts, turn the key valve or gas control to the off position and call your local technician or gas supplier for service prior to re-attempting to operate your appliance.
11. Once lit, use the key valve or gas control to adjust the flame to the desired height.

TURNING OFF YOUR MATCH LIT BURNER
1. Use key to turn valve to OFF position by turning the valve to the right.
2. Verify flame is OUT.
3. If using LP bottle/tank, turn bottle/tank to CLOSED position.
4. Allow to cool completely, then cover the fire feature with waterproof/weatherproof cover.

APPEARANCE
Your steel log should patina over time by forming a layer of rust or oxidation. The coloring may change and the log will look more natural. Each log develops a unique patina pattern based upon use and weather conditions. Heat will also create distinctive color changes to your log's surface.

GENERAL MAINTENANCE

CLEANING STEEL LOG

Soot may build up along the openings in the log or on its surface in general. Annual cleaning is recommended. However, if soot restricts or reduces normal flame performance, clean openings immediately. **Prior to any cleaning or handling, wait for log to cool completely and then remove the log from the system.** Soot is then easily removed by spraying the log with water or by lightly brushing with a plastic brush. Do not allow water or soot to fall into burner system.

Any guard or protective device removed for servicing must be replaced prior to operating the appliance.

Installation and repair should be done by a qualified technician. Appliances should be inspected prior to each use and inspected at least once annually by a qualified gas appliance service professional.

Ensure gas and power (if applicable) are shut off and fire feature is cool before servicing.
Keep fire feature covered at all times when not in use.
Keep any debris out of appliance - clean as needed. If debris is found, remove before lighting system.

JET ORIFICE CLEANING

Annual inspection and cleaning of the fire feature is recommended. If at any time the flames exhibit any abnormal shapes or behavior or if burner fails to ignite properly, the holes located in the base of the gas jet orifices may require cleaning. The appliance can be cleaned by carefully removing the logs and media to allow access to burner. Use a brush to carefully remove dust, spider webs, and loose particles. Periodical inspection by a qualified service technician of the air-intake on the side of the jet is recommended to ensure your fire feature performs properly.

If a jet is clogged, use a wire or small puncture tool and carefully insert in jet. Tool should be the size of a small paper clip.

SEMI-ANNUALLY

Every six months, or as needed, remove media, lava rock, or glass from around the pilot assembly. Clean the thermocouple of any soot using a soft brush. Be careful not to damage the igniter element. Be sure when returning your media to the feature to avoid over covering the jets or the pilot assembly as detailed on page 35.

If the gas is not consistently flowing from the pilot gas orifice, it should also be cleaned. Remove the wind cage cap and clean the opening on the side of the orifice of any debris or soot that may be obstructing gas flow from the pilot gas orifice. Replace the wind cage cap when done.

WARNING:
Fire feature should be inspected by user prior to each use and inspected at least once annually by a qualified gas appliance service professional.

TROUBLESHOOTING

IGNITION SYSTEMS

Below are some potential causes and countermeasures to the symptoms.

- **NO PILOT FLAME - PILOT SPARKS BUT PILOT WON'T LIGHT**
  - Air in the gas line - If this is a new install, it may take several attempts to purge the air.
  - Debris is in the gas line - Clear the gas line.
  - Water/Moisture is in the gas line - Clear the gas line.
  - Incorrect Gas pressure - Confirm proper gas pressure.
  - Pilot gas orifice is dirty - Remove the pilot head and clean.
  - Wind conditions might be too severe.

- **PILOT LIGHTS BUT BURNER WILL NOT LIGHT**
  - Gas pressure is incorrect - Confirm proper gas pressure.
  - Small pilot flame - Remove the pilot head and clean pilot gas orifice.
  - Dirty thermal sensor - Clean using soft brush.
  - CROSS**FIRE**® burner has an obstruction - Confirm there is no debris blocking gas orifice jets in burner, purge water and air from gas lines or in the burner, and confirm there is no debris in gas lines.

- **BURNER TURNING OFF UNEXPECTEDLY**
  - Improperly applied media - Make sure your media is not covering the pilot assembly and that your logs are not placed over or too near the wind cage.
  - Gas pressure is incorrect - Confirm proper gas pressure by checking at the gas stub to the feature and the Gas Inlet Pressure.
  - Wind conditions – Confirm the burner is properly located 4" - 6" inside the feature, and be sure the wind conditions are not too severe for safe use.

- **FIRE FEATURE IS MAKING A WHISTLING SOUND**
  - Flex line issue - Confirm the correct size flex line is installed and there are no kinks or tight bends in the line.
  - Gas pressure is in correct - If the whistling is coming from the jets, confirm the gas pressure is within the ranges recommended on the Gas Pressure Inlet chart provided on page 7. Adjust as needed.

Please contact your retailer or certified technician for service and repair if these suggestions do not solve the issue. If replacement parts are required – contact your retailer or licensed technician for authorized replacement parts. Warranty is null and void if unauthorized parts are used.

FULL LIFETIME WARRANTY FOR CROSSFIRE® BURNERS

Warming Trends warrants that each Warming Trends® Crossfire® and other jetted-flame-brass burners sold through Warming Trends' distribution network (each as "Burner") is free from defects in materials and workmanship and conforms to its specifications, which are available upon request.
We offer a lifetime, full warranty for our Burners, regardless of ownership, beginning on the date of purchase ("Warranty Period"). This warranty is transferable, but we reserve the right to require proof of ownership for any transferred burners including proof that the Burner was not acquired through improper means or unauthorized re-sellers. During the Warranty Period, Warming Trends provides repair and exchange services for the Burners, without charge. If a Burner does not function as warranted during the Warranty Period and, after a reasonable number of attempts, Warming Trends is unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to Warming Trends and your money will be refunded. The warranty stated above will not apply to the extent that there has been misuse or use contrary to specifications or the appropriate user or operating manual, installation defect, accident, modification, unsuitable physical or operating environment, operation in other than the specified operating environment (e.g., outdoor burners should only be used outdoors) improper maintenance by you, or failure caused by a product for which Warming Trends is not responsible. With respect to Burners, the warranty is voided by removal or alteration of any identification labels or marks on any Burner or part.

ITEMS NOT COVERED BY FULL WARRANTY FOR BURNERS

OTHER THAN AS EXPRESSLY STATED ABOVE, WARMING TRENDS DOES NOT WARRANT UNINTERRUPTED OR ERROR-FREE OPERATION OF ANY BURNER, OR THAT WARMING TRENDS WILL CORRECT ALL DEFECTS.
This warranty is specific to Burners and does not apply to any other product sold by Warming Trends, which may be covered by separate warranties with different terms. Warming Trends does not warrant any services related to our Burners, including installation, unless we provided those services to you. You may have warranty rights from the service provider, but we make no representations or warranties express or implied regarding any third-party service provider and our warranties do not apply to failures caused by their work.

IGNITION SYSTEMS WARRANTIES

RESIDENTIAL INSTALLATIONS

Platinum Ignition Systems™, Cobalt Ignition Systems™, Carbon Ignition Systems™, and Mercury Ignition Systems™ are warranted for three (3) years from date of purchase. In the event a Platinum Ignition Systems™ and Cobalt Ignition Systems ™ must be replaced due to a defect or malfunction of the system, Warming Trends® will repair or replace the system at no cost for the first three (3) years.

This warranty does not cover labor costs.

Push Button Ignition Systems are warranted for one (1) year from date of purchase. In the event a Push Button Ignition System must be replaced due to a defect or malfunction of the system, Warming Trends will repair or replace the system at no cost.

COMMERCIAL INSTALLATIONS

Platinum Ignition Systems™, Cobalt Ignition Systems™, Carbon Ignition Systems™, and Mercury Ignition Systems™ are warranted for one (1) year from date of purchase. In the event a Platinum or Cobalt Ignition System must be replaced due to a defect or malfunction of the system, Warming Trends will repair or replace the system at no cost.

Push Button Ignition Systems are warranted for six (6) months from date of purchase. In the event a Push Button Ignition System must be replaced due to a defect or malfunction of the system, Warming Trends will repair or replace the system at no cost. This warranty does not cover labor costs.

ITEMS NOT COVERED BY WARRANTIES FOR IGNITION SYSTEMS

Warming Trends does not warrant any services related to our Electronic and Manual Ignition Systems, including, without limitation, installation, unless we provided those services to you. You may have warranty rights from the service provider, but we make no representations or warranties express or implied regarding any third-party service provider and our warranties do not apply to failures caused by their work. Problems or defects in the functioning of the systems due to gas plumbing or electrical installed by others are not covered by any warranty offered by Warming Trends. The warranty stated above will not apply to the extent that there has been misuse or use contrary to specifications or the appropriate user or operating manual, installation defect, accident, modification, unsuitable physical or operating environment, operation in other than the specified operating environment (e.g., outdoor burners should only be used outdoors) improper maintenance by you, or failure caused by a product for which Warming Trends is not responsible.

AON COLLECTION WARRANTIES

RESIDENTIAL INSTALLATIONS
Warming Trends warrants the fabrication and structure of each AON™ fire table, capstone fire table, architectural concrete vessel, or architectural metal vessel (each, an "AON") for 3 years from the purchase date. This warranty is transferable, but we reserve the right to require proof of ownership for any transferred AONs including proof that the AON was not acquired through improper means or unauthorized re-sellers. Warming Trends warrants the powder coating on AONs for 12 months from date of delivery. Warming Trends does not warrant against any damage occurring during or after installation or for normal wear and tear, including fading due to exposure to sunlight. The flush-mounted lids are susceptible to damage due to their intended use. Chips may occur on the corners and edges of the lids over time and are not covered by warranty. Warming Trends recommends covering your AON during inclement weather or seasonal changes.

COMMERCIAL INSTALLATIONS
Warming Trends warrants the fabrication and structure of each AON for 1 year from the purchase date. This warranty is transferable, but we reserve the right to require proof of ownership for any transferred AONs including proof that the AON was not acquired through improper means or unauthorized re-sellers. Warming Trends warrants the powder coating on AONs for 12 months from date of delivery. Warming Trends does not warrant against any damage occurring during or after installation or for normal wear and tear, including fading due to exposure to sunlight. The flush mounted lids are susceptible to damage due to their intended use. Chips may occur on the corners and edges of the lids over time and are not covered by warranty. Warming Trends recommends covering your AON during inclement weather or seasonal changes.

ITEMS NOT COVERED BY WARRANTIES FOR AON PRODUCTS

Media made from ceramic or steel must be at least 4" from edges of the AON as excessive heat can cause warping and damage to the structure of the AON. Incorrect use of media shall void the above warranties. Warming Trends does not warrant against the natural process of steel aging or rusting. Warming Trends does not warrant any services related to our AONs, including installation, unless we provided those services to you. You may have warranty rights from the service provider, but we make no representations or warranties express or implied regarding any third-party service provider and our warranties do not apply to failures caused by their work. Warming Trends does not warranty against damage caused by improper ventilation. In some cases, AON's are equipped with leveling feet which are to be used to create ventilation around the entire base perimeter of up to 2" of clear space. The warranty stated above will not apply to the extent that there has been misuse or use contrary to specifications or the appropriate user or operating manual, installation defect, accident, modification, unsuitable physical or operating environment, operation in other than the specified operating environment (e.g., outdoor burners should only be used outdoors) improper maintenance by you, or failure caused by a product for which Warming Trends is not responsible.

DISCLAIMER OF ADDITIONAL WARRANTIES

OTHER THAN THE SPECIFIC WARRANTIES SET FORTH IN THIS WARRANTY POLICY, WARMING TRENDS MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO ITS BURNERS OR IGNITION SYSTEMS, WHETHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

RETURN POLICY

RETURNS

We hope that you truly enjoy your Warming Trends purchase. If you are not satisfied, we accept product returns for thirty (30) days of date of purchase, subject to the conditions below.

Purchases made between December 1st and December 24th may be returned for forty-five (45) days from the date of purchase, subject to the conditions below.

We only accept returns for products purchased directly from Warming Trends. Proof of Purchase from Warming Trends is required. For products purchased elsewhere, please contact that business regarding your return.

Please email your request for return together with the Proof of Purchase to Orders@Warming-Trends.com Upon receipt of your request, we will email you our return address. All returns must be shipped by the customer to Warming Trends at the customer's expense and risk of loss.

Upon receipt of your return, we will process it within 7 – 10 business days. Depending on your bank's processing time, it may take up to 10 days after we process the return to reflect on your account.

DAMAGED, DEFECTIVE, OR INCORRECT ITEMS

Once you receive your order, you have seven (7) days to open and inspect the product(s). If anything is missing or damaged, or not what you ordered, please contact us at Orders@Warming-Trends.com with photos/videos of the issue. One of our team members will reach out to assist you with a return/replacement.

LIKE-NEW CONDITION

Items must be in like-new condition upon our receipt. Items that are damaged, unsanitary, dented, scratched, or missing parts will not be accepted for return.

PRODUCT ACCESSORIES AND PACKAGING

Product returns must include all accessories and packaging. If not included, we may either deny the return, or allow a return with a nonrefundable deduction on your refund for what is missing.

CALIFORNIA RESIDENTS: PROP 65 WARNING

⚠ WARNING: This product can expose you to chemicals including nickel, which is known to the State of California to cause cancer, carbon monoxide and Bisphenol A, which are known to the State of California to cause birth defects or other reproductive harm, and lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

CONTACT US

Replacement Parts, Questions, or Need Assistance? Our team is happy to help.

Call our Flame Specialists at (303) 346-2224 or email us at Orders@Warming-Trends.com.

For more information about Warming Trends products, please visit us at www.Warming-Trends.com.

SCAN QR CODE FOR AVAILABLE RESOURCES ON WARMING-TRENDS.COM

SCAN TO VIEW
OUR INSTAGRAM

THANK YOU FOR CHOOSING WARMING TRENDS®

We appreciate your business and look forward to seeing your finished project.

Tag us on Instagram! @warmingtrends