

MODELS

Natural Gas	Description	Propane
FPB-G25RBSTMS-N	25" G90 Black Pan & Spur Kit	FPB-G25RBSTMS-P
FPB-G29RBSTMS-N	29" G90 Black Pan & Spur Kit	FPB-G29RBSTMS-P
FPB-G33RBSTMS-N	33" G90 Black Pan & Spur Kit	FPB-G33RBSTMS-P
FPB-19RBSTMS-N	19" Round Stainless Pan & Spur Kit	FPB-19RBSTMS-P
FPB-25RBSTMS-N	25" Round Stainless Pan & Spur Kit	FPB-25RBSTMS-P
FPB-20SBSTMS-N	20" Square Stainless Pan & Spur Kit	FPB-20SBSTMS-P
FPB-26SBSTMS-N	26" Square Stainless Pan & Spur Kit	FPB-26SBSTMS-P
FPB-32SBSTMS-N	32" Square Stainless Pan & Spur Kit	FPB-32SBSTMS-P
FPB-38SBSTMS-N	38" Square Stainless Pan & Spur Kit	FPB-38SBSTMS-P

Outdoor Thermocouple Manual Safety Fire Pits

Installation and Operating Instructions

**IF YOU CANNOT READ OR UNDERSTAND THESE INSTALLATION INSTRUCTIONS
DO NOT ATTEMPT TO INSTALL OR OPERATE THIS APPLIANCE**

INSTALLATION PRECAUTION:

This fire pit requires a minimum 18-square inches (per side) of cross ventilation.
Failure to provide proper ventilation can void the warranty.



Warning: For Outdoor Use Only



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE



DANGER



CARBON MONOXIDE HAZZARD

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.



DANGER

If you smell gas:

1. Shut off gas to the appliance.
2. Extinguish any open flame.
3. If odor continues, keep away from the appliance and immediately call your gas supplier or fire department.



WARNING

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

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

WARNING

Do not leave unattended during use.
Do not use for cooking.
Follow all gas leak procedures in this manual prior to operation.



WARNING

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

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

FOR YOUR SAFETY

Do no store or use gasoline or other flammable vapors and liquids in the vicinity of this or another appliance.



Fuels used in gas fired appliances, and the products of combustion such as fuels, contain chemicals known to cause cancer, birth defects and/or other reproductive harm. This warning is issued pursuant to the California Health & Safety Code Sec. 25249.1

TABLE OF CONTENTS

Specifications	3
Preparation for Non-Combustible Structure	4
Hard Piping to Fire pit	4
Cross Ventilation Requirements	4
High Elevation	5
Installation into an Approved Enclosure	5
Installing Gas Valve	5-6
Typical Installation Drawings	6-7
Installation of Lava Rock/Media	6
Operation	8
Lighting Instructions	8
Replacement Parts	9
Replacement Parts List	10
Fire pit Maintenance/ Trouble Shooting	11
Optional Accessories	12

TMS SPECIFICATIONS

Model: Natural Gas (NG)	Model: Propane Gas (LP)	A Pan Depth	B Min/Max Install Opening	C Inside Pan	D Ground Level	E Side Wall	F Combustible Ceiling	G Combustible Floor
FPB-G25RBSTMS-N	FPB-G25RBSTMS-P	2.500"	25"/25.5"	23.875"	8"	19"	69"	18"
FPB-G29RBSTMS-N	FPB-G29RBSTMS-P	2.500"	30"/31.35"	29"	8"	19"	69"	18"
FPB-G33RBSTMS-N	FPB-G33RBSTMS-P	2.500"	34"/35.25"	33"	8"	19"	69"	18"
FPB-19RBSTMS-N	FPB-19RBSTMS-P	2.625"	19.25/21.5"	19"	8"	16"	54"	18"
FPB-25RBSTMS-N	FPB-25RBSTMS-P	2.625"	25.25"/27.5"	25"	8"	19"	69"	18"
FPB-20SBSTMS-N	FPB-20SBSTMS-P	2.625"	20.25"/21.75"	20"	8"	16"	54"	18"
FPB-26SBSTMS-N	FPB-26SBSTMS-P	2.625"	26.25"/27.75"	26"	8"	19"	69"	18"
FPB-32SBSTMS-N	FPB-32SBSTMS-P	2.625"	32.25"/33.75"	32"	8"	19"	69"	18"
FPB-38SBSTMS-N	FPB-38SBSTMS-P	2.625"	38.25"/39.75"	38"	8"	19"	69"	18"

Table 1. Fire pit Dimensions

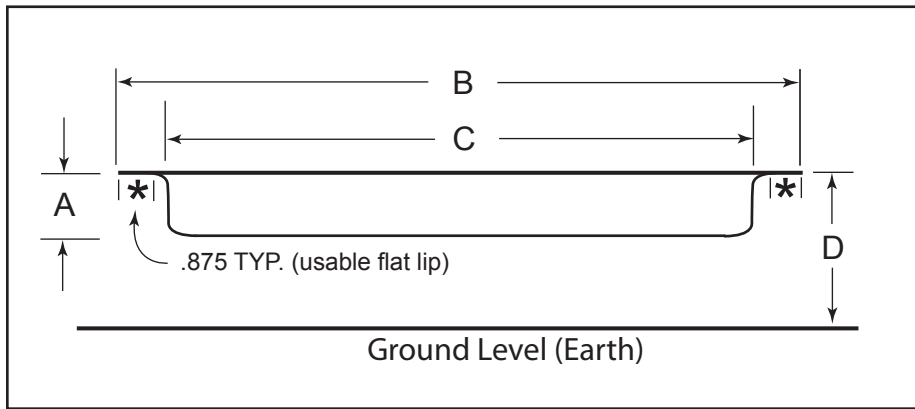


Figure 1. Fire pit dimensions; refer to Table 1. (Dimensions applicable to round or square pans)

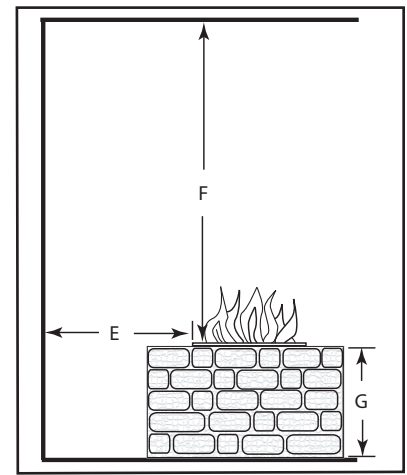


Figure 2. Clearance to Combustibles (Not to be used in an enclosed space)

Model: Match Throw NG	NG Factory Orifice	Model Match Throw LP	LP Factory Orifice	BTU Natural/Propane
FPB-G25RBSTMS-N	#29	FPB-G25RBSMT-P	#41	65,000
FPB-G29RBSTMS-N	#29	FPB-G29RBSMT-P	#41	65,000
FPB-G33RBSTMS-N	#29	FPB-G33RBSMT-P	#41	65,000
FPB-19RBSTMS-N	#29	FPB-19RBSMT-P	#41	65,000
FPB-25RBSTMS-N	#29	FPB-25RBSMT-P	#41	65,000
FPB-20SBSTMS-N	#29	FPB-20SBSMT-P	#41	65,000
FPB-26SBSTMS-N	#29	FPB-26SBSMT-P	#41	65,000
FPB-32SBSTMS-N	#29	FPB-32SBSMT-P	#41	65,000
FPB-38SBSTMS-N	#29	FPB-38SBSMT-P	#41	65,000

Table 2. Btu Specifications

Disclaimer: Btu listings are based on 7.0"WC for Natural Gas and 11.0"WC for Liquid Propane (LP) at the burner orifice. Flex line size and proper gas pipe sizing will also affect Btu's. As a result your Btu's may vary slightly from Table 2 specifications.

Pressure	NG	LP
Min. Inlet	3.5" WC	8.0" WC
Max. Inlet	10.5" WC	13.0" WC
Normal Inlet	7.0" WC	11.0" WC

Table 3. Gas Pressures

WARNING: Proper clearances from combustible materials must be maintained from all sides, top and bottom of this appliance. Use the specifications listed on page 3 for proper clearance to combustibles.

PREPARING A NON-COMBUSTIBLE STRUCTURE

Install fire pit on any level, outdoor non-combustible, flat stable surface or a combustible floor according to the clearances specified in this manual. **NOTE:** Do not place fire pit directly on grass, dirt, or rocks this may prevent proper ventilation (Fig. 3, pg. 5). **Ensure proper water drainage is also incorporated into the fire pit enclosure.**

HARD PIPING TO FIRE PIT WITHOUT GAS PROXIMITY

NOTE: We recommend using 3/4" black iron pipe; however, please refer to the NFPA54 (National Fuel Gas Code) for proper pipe sizing when exceeding 20-feet in length for fire pits rated above 100,000 Btu's.

1. Turn **OFF** gas supply system. **NOTE:** All gas connections (except for brass to brass) require the following. Clean pipe threads using either a wire brush or steel wool. Apply pipe sealant to the fittings before making any connection.

BE CAREFUL! Ensure all gas connections are snug, but do not over tighten!

2. Extend the gas supply using minimum of 3/4" black iron pipe or an approved flexible gas line from existing house supply. This can be accomplished by teeing off or tapping into a gas line connection. Install necessary pipe for the distance required and then install a manual shut-off valve at the exterior house wall. If pipe is to pass through a foundation or house wall, make sure to re-seal the area around the pipe with weather sealant.

3. The primary gas shut-off (not supplied) will require a 1/2" Male flared fitting to enable connection of the stainless steel flex gas line supplied with the fire pit (see figure 9 page 7).

IMPORTANT

Installation of Natural or LP gas should be done by a qualified installer, service agency or gas supplier.

The appliance and its manual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2" psig (3.5kPa).

This appliance must be isolated from the gas supply piping system by closing its manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2" psig (3.5kPa)

VENTILATION FOR NON-COMBUSTIBLE ENCLOSURE

Fire pits are subjected to many outdoor elements such as rain, snow, wind, heat or cold. **A minimum of 18 square inches of cross ventilation (2 sides) is required to keep the components in good working order.** Use figure 3 as guide to assist to incorporate proper ventilation.

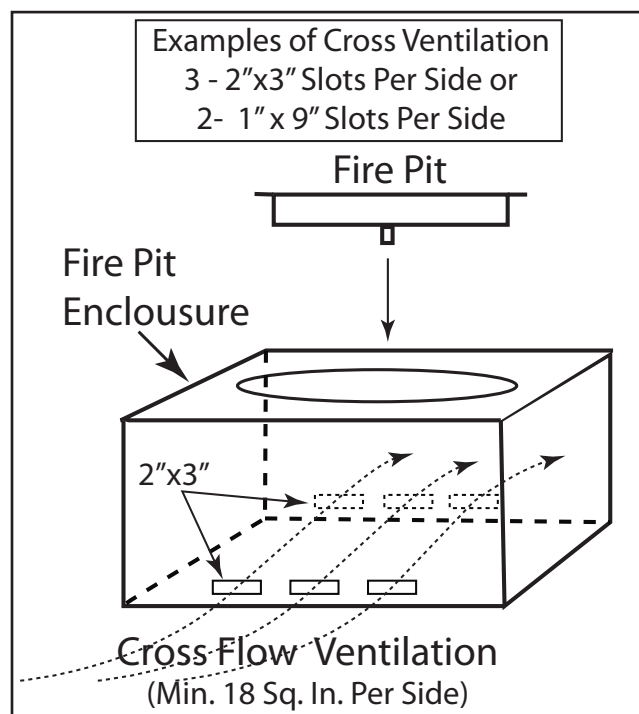


Figure 3. Cross Ventilation Example

INSTALLATION OF FIRE PIT INTO AN APPROVED ENCLOSURE

REQUIREMENTS

1. Only non-combustible materials should come in direct contact with any part of the fire pit. If the area underneath should be a flat level combustible surface according to the clearances specified in this manual on page 3.
2. We recommend using 3/4" black iron pipe; however, please refer to the NFPA54 (National Fuel Gas Code) for proper pipe sizing when exceeding 20-feet in length for fire pits rated above 100,000 Btu's.
3. Determine the size of the round or square fire pit you are preparing to install (Refer to page 4).
4. You must provide a round or square opening out to place the fire pit into the non-combustible enclosure. Do not exceed the maximum opening from Table 1, dimension B.
5. Follow the local code requirements for the gas type being used. This fire pit should be installed in accordance with local codes and ordinances or in the absence of local codes, with the latest National Fuel Gas Code, ANSI Z223.1 NFPA54 or CSA B149.1, Natural and Propane Installation Code in Canada.
6. Fire pits create high temperatures, it is very important to have any combustibles at a safe distance.
7. **CAUTION: A minimum of 18 square inches of cross ventilation (per side) is required to keep the enclosure dry.**
8. These products are designed for outdoor use only. Not approved for any indoor use.
9. This fire pit is designed to have lava rock completely covering the spur burner, so that the burner is not visible. Do not cover more than 1" above the top of the covered burner. When purchasing Lava Rock use minimum of 1-inch diameter as a base to fill the burner pan. **DO NOT COVER THE IGNITION HOOD WITH ANY ROCK OR MEDIA.**
10. Gas lines and fittings must be installed in to the non-combustible structure. All gas connections must be leak tested before installation of the fire pit. Soapy water leak detection is required before regular use of the fire pit.
11. Do not use material that will absorb moisture over time and will not release this moisture quickly. Moisture can boil in this material and can rapidly break apart and cause damage or personal injury.
12. Never leave any other combustible material on top of the fire pit. This could cause unsafe operation of this system and damage to the component that will not be covered under our warranty.

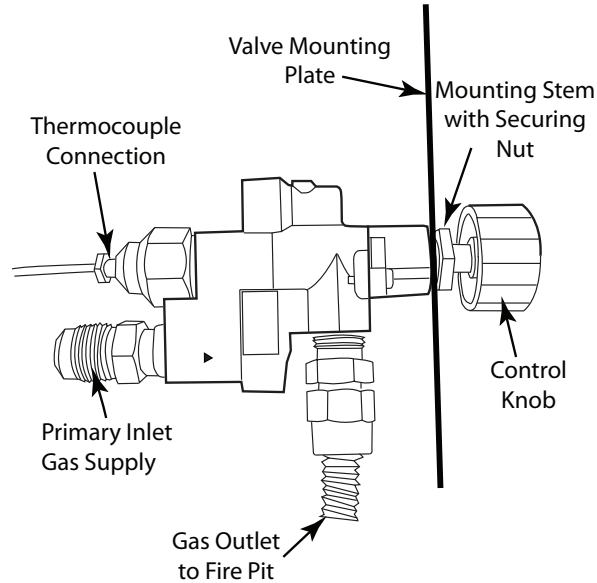
HIGH ELEVATION INSTALLATION

This appliance is listed for elevations from 0-4500 feet in Canada and the U.S. If elevation exceeds 4500 feet it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input should be reduced 4% for each 1000 feet above the 4500 feet above sea level. Check with your local gas utility for assistance in determining the proper orifice in your location. In some cases the heating value may already be reduced and downsizing the orifice may not be necessary.

INSTALLING GAS VALVE

The gas valve is secured into the mounting plate with a nut. Figure 9 shows an example of a typical installation.

Fig. 4 Gas valve components.



IGNITOR ALIGNMENT

It is important check that the ignitor probes be properly aligned over-top of the burner port holes and did not move during shipping. Use the Fig.7 as a guide. Before lighting remove the screen cover of the ignition hood to burner and ensure the thermocouple is directly over-top of a burner port hole. The sparking probes and the thermocouple must be in the path of a flame to ignite the gas for proper ignition of the flame. Replace the screen cover and follow the operating instructions.

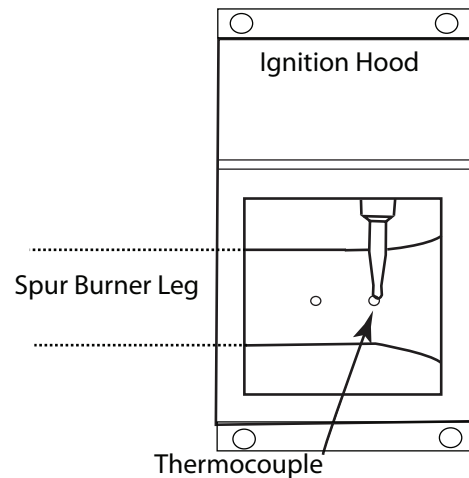


Fig. 7 Proper alignment of probes and thermocouple.

INSTALLATION OF LAVA ROCK/MEDIA INTO BURNER PAN

Install lava rock into the burner pan. Ensure the lava rock is a 1-inch diameter for proper operation. **Note:** Do not pour Lava Rock directly from bag. It should be placed naturally and NOT packed in tight. Loose fitting is important to ensure robust flames. Be sure rocks are free of any excessive dust. This prevents the burner pan weep holes from being plugged and holding water. **IMPORTANT: Do not place rock over top or under the screen cover.** The screen must be free of any debris to ensure proper lighting of burner and good flame sense (See fig. 8).

Cover the burner completely with media but do not make the depth greater than 1-inch overtop of the burner portholes.

Do NOT cover the screen mesh with any rock or glass. It must be free an any debris to operate properly.

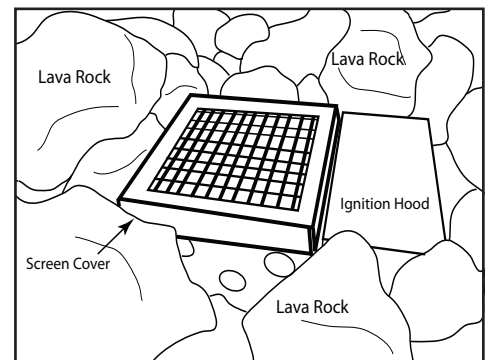


Fig.8 Keep screen cover exposed

Ready to Finish (RTF) Enclosure Illustration

Cement Block Illustration

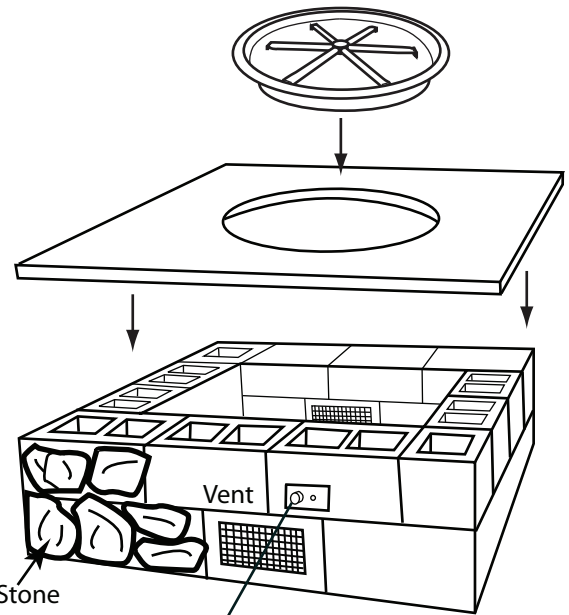
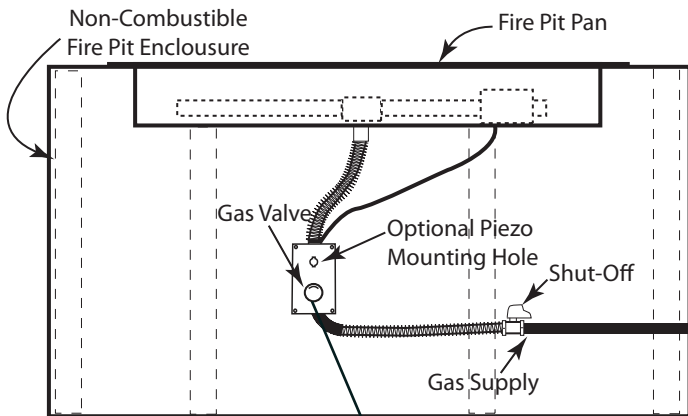
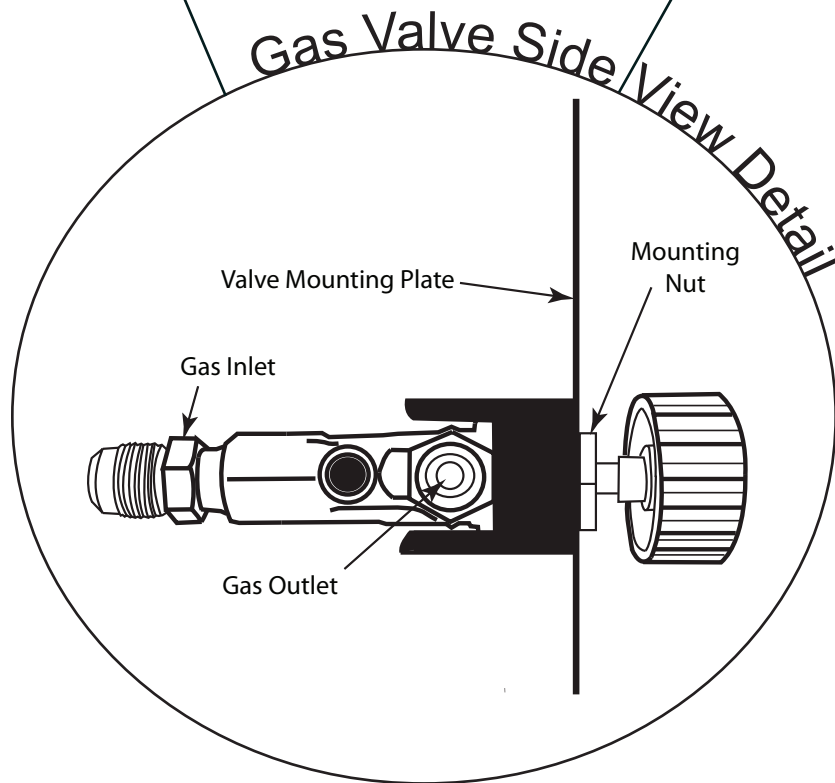


Fig. 9 Typical installation.

NOTE: Gas valve, flexible gas lines and TMS components supplied.
Gas shut-off is not supplied.



Ensure you determine how to mount valve bracket into place before completing fire pit. Valve mounting bracket can be installed in a vertical or horizontal position.

OPERATION

CAUTION: Children and adults should be alerted to the hazards on high surface temperatures and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the area of the appliance.

WARNING: Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of control system and any gas control, which has been under water.

SAFETY WARNINGS

1. Never leave the fire pit unattended during operation.
2. Clothing or other flammable materials should not be placed on or near the appliance.
3. Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.
4. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required as necessary. It is imperative the control compartment, burners and circulating air passageways of the appliance be kept clean.
5. Inspect the fuel supply connection before each use of the appliance.
6. Temporary storage of this appliance indoors is permissible only if it has been disconnected from its fuel supply (Natural or L.P. gas line).

WARNING

1. This appliance is hot when operated and can cause severe burns if contacted.
2. Do not burn any solid fuels in this appliance.

READ ALL LIGHTING INSTRUCTIONS BEFORE ATTEMPTING TO LIGHT FIRE PIT

LIGHTING INSTRUCTIONS

TURNING ON FIRE PIT

CAUTION: Ensure you have leak tested the fire pit before operating.

1. Light a long match or Butane lighter and hold it near the burner.
2. Rotate control knob on gas valve in the counter clockwise to ON position. (See Fig 10).
2. Depress control knob inward and push the light the burner at the same time. (See Figures 10 & 11).
3. After the fire pits lights continue to depress control knob for 30 seconds then release knob. If fire pit does not light within 30 seconds, release control knob, turn knob clockwise to turn **OFF** and wait 5 minutes before trying again.
4. Repeat steps 1-3.

TURNING OFF FIRE PIT

1. Slight push inward on control knob and turn clock wise until it stops. Fire pit will turn OFF.
2. After cooling off install cover.

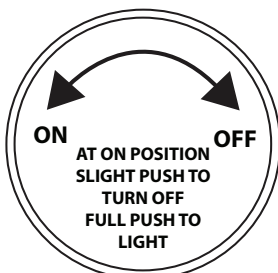


Fig. 10. Gas Valve Knob

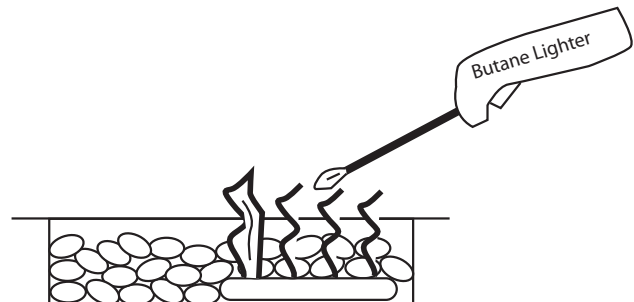
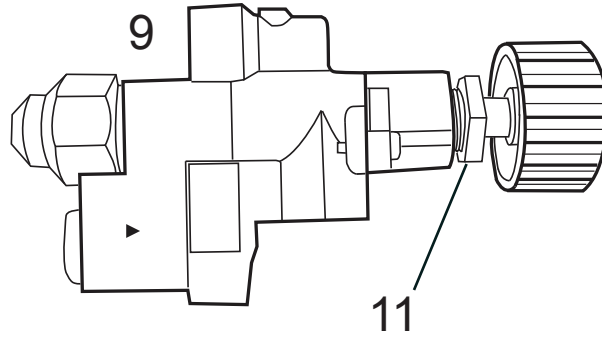
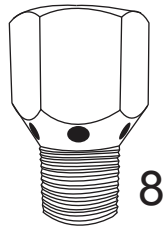
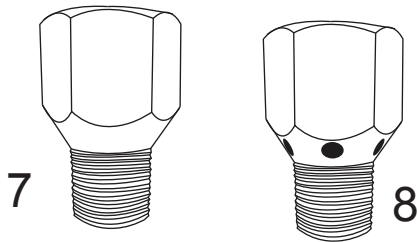
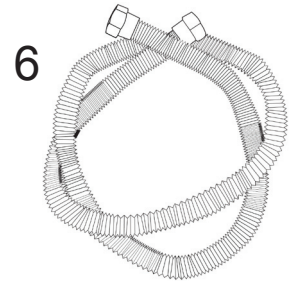
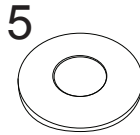
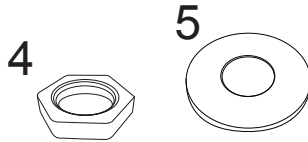
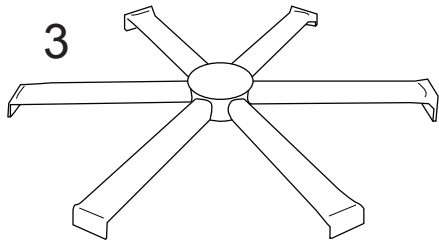
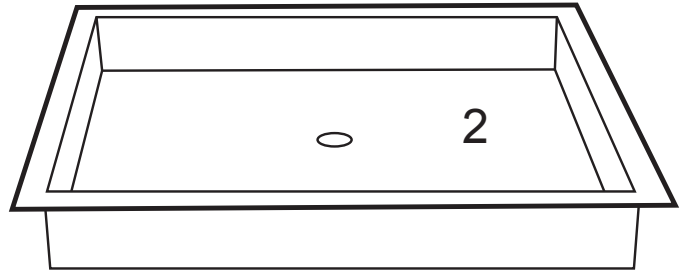
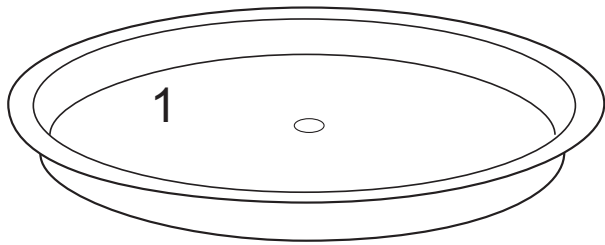


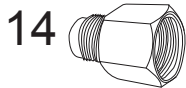
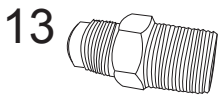
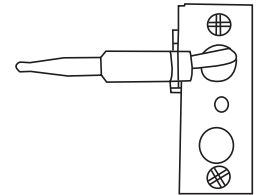
Fig. 11 Lighting with Butane lighter

TMS REPLACEMENT PARTS

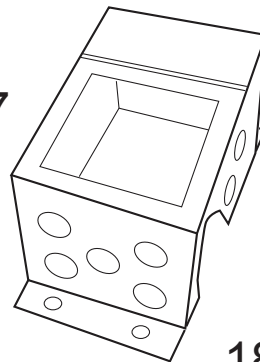
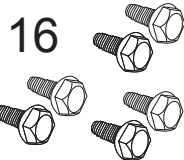


10

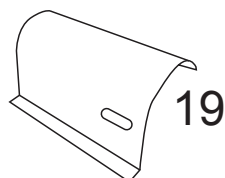
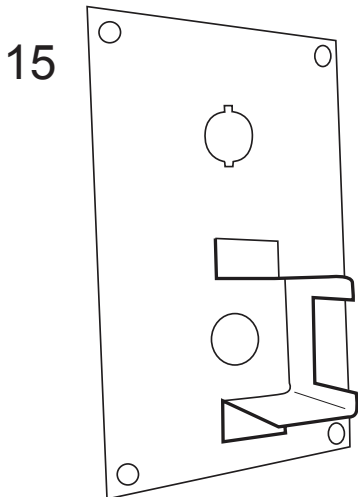
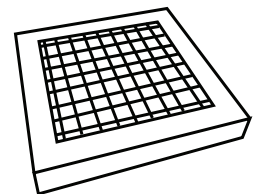
12



17



18



Drawings are not in proportion

TMS REPLACEMENT PARTS

Item	Description	Qty.	Part Number
1	16-inch G90 Round Galvanized Black Pan	1	Pan-GV16R
1	25-inch G90 Round Galvanized Black Pan	1	Pan-GV25R
1	29-inch G90 Round Galvanized Black Pan	1	Pan-GV29R
1	33-inch G90 Round Galvanized Black Pan	1	Pan-GV33R
1	19-inch Round Stainless Pan	1	Pan-SS19R
1	25-inch Round Stainless Pan	1	Pan-SS25R
2	20-inch Square Stainless Pan	1	Pan-SS20S
2	26-inch Square Stainless Pan	1	Pan-SS26S
2	32-inch Square Stainless Pan	1	Pan-SS32S
2	38-inch Square Stainless Pan	1	Pan-SS38
3	12-inch Spur (used on 16" Pans)	1	B-Spur12
3	16-inch Spur (used on 19" & 20" Pans)	1	B-Spur16
3	22-inch Spur (used on 25", 26", 29", 32", 38" Pans)	1	B-Spur22
4	1/2" NPS Brass Nut	1	ST3-113-1032
5	7/8" Flat Washer/Spacer	1	ST3-113-1026
6	1/2" Flex Gas Line (46-inch Length)	1	T-200-9898-46
7	Air Shutter Orifice NG (Used on Natural Gas Models)	1	OAS-NG30
8	Air Shutter Orifice LP (Used on Propane Models)	1	OAS-LP42
9	Manual Gas Valve	1	ST3-080-1009
10	Manual Gas Valve Knob	1	ST3-050-1024
11	Gas Valve Mounting Nut	1	ST3-110-1005
12	Thermocouple	1	ST3-040-1025
13	1/2" NPT to 1/2" Male Flare Fitting	1	U1-8D-S
14	1/2" NPT Female to 1/2" Male Flare Fitting	1	U3-8D-S
15	Valve Mounting Plate	1	ST3-100-1058
16	Thread Cutting Screws #10-24x 1/2"	6	ST3-113-1028
17	Ignitor Hood	1	ST3-100-1057
18	Mesh Screen Cover (for ignition hood)	1	ST3-100-1027
19	Rain Shield for Spur Burner Leg	1	ST3-100-1064

FIRE PIT MAINTENANCE

1. The fire pit should be inspected and cleaned before initial use at least annually by a qualified field service person.
2. Any component that is found faulty must be replaced with an approved component.
3. Any tampering or modifying with the fire pit is dangerous and voids all warranties.
4. During winter months in cold climates and various seasons operation the fire pit may be affected by weather conditions. It is recommended to use a ventilated cover overtop of your fire pit to protect it from humid/rainy weather conditions when not in use. Heavy rains/downpours could affect the fire pit operation if not covered; if this occurs ensure you allow the fire pit time to dry out before attempting to operate. **NOTE:** If a combustible type cover is used over the fire pit when not in use be sure to remove it before operation to prevent a severe safety hazard.
5. Carbon (soot) may build up on the surface of logs (if installed) during heavy use. Sooting may also occur periodically on the screen of the ignitor hood. To clean, brush off with a dry bristle brush or cloth. Keep soot away from clothing or furniture.
6. Over time stainless steel or galvanized parts can discolor when heated, usually a golden or brown hue. This discoloration is normal and does not affect the performance of the appliance.

TROUBLE SHOOTING

Sympton

Remedy

Fire pit won't light

1. Bleed gas line.
3. Ensure all gas supply lines are turned ON.
4. Ensure there is not too much media overtop of burner; it can inhibit gas from flowing.

Low Flame

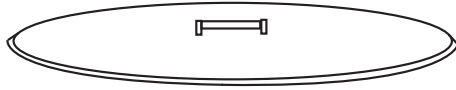
1. Ensure the base media is at least 1-inch in diameter and top media is no more than 1-inch over top of burner.
2. Ensure all shut-off valves and valve is fully open. See page 8; figure 10.

Water in my fire pit

1. Excess dust/sand material from media may be blocking the weep holes to relieve water. Remove all media and unplug weep holes. Clean or install new media free of dust and dirt.
2. Ensure fire pit enclosure has proper drainage for water and proper ventilation to dry out.

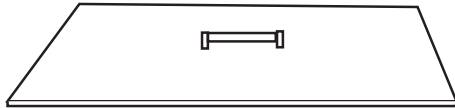
OPTIONAL ACCESSORIES

The following accessories are available from your local Firegear dealer/distributor.
Each accessory comes with a separate installation manual. Read each instruction thoroughly before installing.



Stainless lid for 19", 25", 29", 33" round fire pits.

Models: LID-19R or LID-25R



Models: LID-14S, LID-20S, LID-26S, LID-32S, LID-38S
Stainless lids for 14 to 32" square fire pits.



Model: FG-LS20

Lava Stones 1" to 2" size. (20lbs.)



Model: FG-LB30

Lava Boulders 6" to 12" size (30lbs.)



Model: LPK#41

LP Conversion Kit is for use with all models in this manual.

Includes: OAS, rating plate sticker and instructions.

FOR TECHNICAL SERVICE, CALL: (855) 498-8324

Firegear Outdoors
9230 Conservation Way
Fort Wayne, IN 46809
For Sales: (888) 672-8929

WEB SITE: www.firegearoutdoors.com