

DO NOT DISCARD. THIS MANUAL HAS IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS. LEAVE WITH THE HOMEOWNER.

MODEL:

SERIAL #:



Fire Ring

Models

Fire Ring Only	Fire Ring Kit	Description	Natural Gas
FG-FR-6SS	FG-FR-6SSK	6-inch Fire Ring Burner	50,000 Btu's
FG-FR-12SS	FG-FR-12SSK	12-inch Fire Ring Burner	50,000 Btu's
FG-FR-18SS	FG-FR-18SSK	18-inch Fire Ring Burner	75,000 Btu's
FG-FR-24SS	FG-FR-24SSK	24-inch Fire Ring Burner	125,000 Btu's
FG-FR-30SS	FG-FR-30SSK	30-inch Fire Ring Burner	250,000 Btu's
FG-FR-36SS	FG-FR-36SSK	36-inch Fire Ring Burner	250,000 Btu's
FG-FR-48SS	FG-RF-48SSK	48-inch Fire Ring Burner	250,000 Btu's

Outdoor Fire Pit Burners Installation and Operating Instructions

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

These burners are manufactured from the factory for Natural gas only. If you intend using LP gas then you must purchase a LP conversion kit. See Table of Contents for LP conversion kit information.

INSTALLATION PRECAUTION:

This system requires a minimum 18 square inches (per side) of cross ventilation. Failure to provide proper ventilation will 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.

	С	ARBON MONOXIDE HAZARD			
DANGER		pliance can produce carbon monoxide as no odor.			
	Using it	in an enclosed area can kill you.			
	Never use this appliance in an enclosed space such as a camper, tent, car or home.				
DANGER		WARNING			
If you smell gas: 1. Shut off gas to the appliance		Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or other appliances.			
 Extinguish any open flame. If odor continues, keep away the appliance and immediate your gas supplier or fire depa 	ly call	Any LP cylinder not connected for use shall not be stored in the vicinity of this or other appliances.			
WARNING Do not leave unattended during Do not use for cooking. Follow all gas leak procedures in 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.			
<u>WARNING</u> If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.					
		R SAFETY mable vapors and liquids in the vicinity			

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



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

CALIFORNIA PROPOSITION 65

This product can expose you to Chromium, 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)

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All media (i.e. lava rock, lava stones, lava boulders and fire glass) has the potential of thermal spalling. This is a process that 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 the fire feature.

WE HIGHLY RECOMMEND COVERING ALL FIRE FEATURES WHEN NOT IN USE

The use of a cover can lessen the impact of thermal spalling; however, heavy rains, high humidity and the presence of moisture may still cause the media to pop.

ALWAYS USE CAUTION WHEN USING THE FIRE FEATURE

Extra caution should be taken when lighting a fire feature when heavy rains, high humidity and moisture are present. Light the fire feature; leave the area allowing any moisture in the media to dissipate. We strongly recommend that during this drying out time that you monitor the fire feature from a distance. This drying out period should be no less than 30 minutes. Continue monitoring the flame from distance to ensure that all popping has ceased before fully enjoying the fire.



FIRE RING SPECIFICATIONS

Models	Center Hub Size	Pan/Disc Depth	A Fire Ring Diameter	Min. Inside Pan Dimension	B Combustible Side Wall	C Combustible Ceiling	D ^{Combustible} Floor
FG-FR-6SSK	1⁄2"	2 1⁄2" - 3"	6"	10"	36"	96"	18"
FG-FR-12SSK	1⁄2"	2 1⁄2" - 3"	12"	16"	36"	96"	18"
FG-FR-18SSK	1⁄2"	2 1⁄2" - 3"	18"	22"	36"	96"	18"
FG-FR-24SSK	1⁄2"	2 1⁄2" - 3"	24"	28"	36"	96"	18"
FG-FR-30SSK	3⁄4"	2 1⁄2" - 3"	30"	34"	36"	96"	18"
FG-FR-36SSK	3⁄4"	2 1⁄2" - 3"	36"	40"	36"	96"	18"
FG-FR-48SSK	3⁄4"	2 1⁄2" - 3"	48"	52"	36"	96"	18"

Table 1 Suggested pan sizes and clearance specifications

BEFORE INSTALLING A FIRE RING DETERMINE PAN SIZE TO BE USED:

Fire Ring Kits listed above are not provided with a burner pan for installation. We suggest you provide an appropriate non-combustible burner pan to install the Fire Ring. Suggested burner pans sizes in Table 1 are strictly recommended based on the Fire Ring model size. The pans can be round, square, flat disc or solid flat surface. **NOTE:** It is recommended to use 304 Stainless Steel. Burner pans should have ¹/₄" drainage holes to prevent standing water in pan and the center hole for burner connection should be 1-inch diameter for kits FG-FR-6SSK, FG-FR-12SSK, FG-FR-18SSK, and FG-FR-24SSK. The FG-FR-30SSK, FG-FR-36SSK, and FG-FR-48SSK models require a 1¹/₄" center hole. A recommended material thickness for any burner pan or disc is 16 gage. Once a burner pan has been determined then proceed with this manual to complete the installation.

CAUTION: <u>DO NOT use stiff screen/perforated metal as a burner pan. Some gases are heavier than air and</u> <u>screen/perforated metal can allow gas to flow downward in an enclosure which could cause delayed ignition or</u> <u>explosions.</u>



Fig. 1 Fire Ring Dimensions; refer to Table 1.

Model:	Orifice NG	BTU Ratings	Orifice LP
FG-FR-6SSK	OAS-NG34	50,000 (14.65kW)	OAS-LP47
FG-FR-12SSK	OAS-NG34	50,000 (14.65kW)	OAS-LP47
FG-FR-18SSK	OAS-NG29	75,000 (21.98kW)	OAS-LP41
FG-FR-24SSK	OAS-NG22	125,000 (29.31kW)	OAS-LP35
FG-FR-30SSK	OAS-NG25/64"	250,000 (73.26kW)	OAS-LP12
FG-FR-36SSK	OAS-NG25/64"	250,000 (73.26kW)	OAS-LP12
FG-FR-48SSK	OAS-NG25/64"	250,000 (73.26kW)	OAS-LP12

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.







NG	LP
5.0" WC	10.5" WC
(1.24kPa)	(2.61kPa)
10.5" WC	13.0" WC
(2.61kPa)	(3.23kPa)
7.0" WC	11.0" WC
(1.74kPa)	(2.73kPa)
	5.0" WC (1.24kPa) 10.5" WC (2.61kPa) 7.0" WC

PREPARING A NON-COMBUSTIBLE STRUCTURE

The fire pit can be installed on a flat, stable surface, away from any combustible materials. 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. In addition, do not recess the fire pit into the ground. **Ensure proper water drainage is also incorporated underneath the fire pit enclosure.**

HARD PIPING TO FIRE PIT WITHOUT GAS PROXIMITY

NOTE: Refer to the NFPA54 (National Fuel Gas Code) for proper pipe sizing. See gas line sizing chart on page 6 as a reference.

- 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.
- 2. Ensure all gas connections are snug, but do not over tighten! BE CAREFUL!
- 3. Consult a plumber for proper installation to ensure you are providing adequate gas supply for your application.
- 4. The primary gas shut-off (not supplied) will require a ½" male flared fitting to enable connection of the stainless steel flex gas line supplied with the fire pit (see Fig. 12 page 10).
- 5. Do not place an LP tank inside any fire pit enclosure. Locate all propane (LP) tanks outside the enclosure.
- 6. To prevent performance problems in Propane (LP) fire pits, do not use a Propane tank less than 100lbs. capacity.

WARNING: Proper clearances from combustible materials must be maintained from all sides, top and bottom of this appliance. Use the specifications listed in Table 1 and Fig. 2 for proper clearance to combustibles.

IMPORTANT

Installation of Natural or LP gas should be done by a qualified installer, service agency or gas supplier. 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 ½" psi (3.5kPa).

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 beyond 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.

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 (per side) of cross ventilation is required to keep the components in good working order. Use Fig. 3 as guide to assist to incorporate proper ventilation.





GAS PIPE SIZING CHART

Length of Pipe in Feet	1/2"	3/4″	1″	1 - 1/4″	1 · 1/2"	2″	2 - 2 1/2"	3″	4″	
10	108	230	387	793	1237	2259	3640	6434	-	 Natural Gas (NG) flow is given in thousands of BTU/hr. = 1 cubic
20	75	160	280	569	877	1610	2613	5236	9521	foot of NG gas - 1000 BTU
30	61	129	224	471	719	1335	2165	4107	7859	 Nominal pressure at the burner
40	52	110	196	401	635	1143	1867	3258	6795	for Natural Gas is 3.5" of water
50	46	98	177	364	560	1041	1680	2936	6142	column. (Typical machine supply 5"-7")
60	42	89	159	336	513	957	1559	2684	5647	 Pipe length must include
70	38	82	149	317	476	896	1447	2492	5250	additional length for all fittings.
80	36	76	140	239	443	840	1353	2315	4900	Add approximately 5 feet of pipe
90	33	71	133	275	420	793	1288	2203	4667	per fitting.
100	32	68	126	266	411	775	1246	2128	4518	Natural Gas Example: A machine
125	28	60	117	243	369	700	1143	1904	4065	with a burner that requires 440,000 BTU would need a 1 -1/4"
150	25	54	105	215	327	625	1008	1689	3645	pipe for a 20" long run.
175	23	50	93	196	303	583	993	1554	3370	
200	22	47	84	182	280	541	877	1437	3160	
300	17	37	70	145	224	439	686	1139	2539	

NATURAL GAS : PIPE SIZING CHART

LIQUID PROPANE : PIPE SIZING CHART

Length of Pipe in Feet	1/2″	3/4″	1″	1 - 1/4″	1 - 1/2″	2″	2 - 2 1/2″	3″	4″	
Length of Pipe in Feet 10 20 30 40 50 60 70 80	1/2" 275 189 152 129 114 103 89 78	3/4" 567 393 315 267 237 217 185 162	1" 1071 732 590 504 448 409 346 307	1 - 1/4" 2205 1496 1212 1039 913 834 724 630	1 - 1/2" 3307 2299 1858 1559 1417 1275 1086 976	2" 6221 4331 3465 2992 2646 2394 2047 1811	2 · 2 1/2" 10140 7046 5695 4778 4343 3908 3329 2991	3" 17990 12510 10110 8481 7708 6936 5908 5309	4 " 35710 25520 20620 17300 15730 14150 12050 10830	 Liquid Propane (LP) Gas flow is given in thousands of BTU/hr. = 1 cubic foot of LP gas - 2500 BTU. This chart refers to low pressure LP, after regulation, Standard nominal pressure at the burner for Liquid Propane Gas is 11° of water column. Pipe length must include additional length for all fittings. Add approximately 5 feet of pipe per
90 100 125 150 175 200	69 63 54 48 43 40	146 132 112 100 90 83	275 252 209 185 168 155	567 511 439 390 353 325	866 787 665 590 534 491	1606 1496 1282 1138 1030 947	2654 2412 2083 1808 1637 1505	4711 4281 3618 3210 2905 2671	9613 8736 7382 6549 5927 5450	 approximately 5 feet of pipe per fitting. LP Example: A machine with a burner that requires 440,000 BTU would need a 1" pipe for a 20' long run.
300	37	77	144	303	458	887	1404	2492	5084	

NOTE: The sizing charts above list the specific pipe sizes required for the amount of BTU's for a new gas line installations. If you are using an existing gas line you must take into consideration the existing gas line capacities to ensure you will have proper pressure. This chart is for reference only, we recommend you consult with a Licensed Plumber/Gas Fitter or NFPA54 (National Fuel Gas Code - current edition) for more details.



Table 4 Gas Pipe Sizing Chart

Fire Ring Burners

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. Underneath area should be non-combustible or a flat level combustible surface according to the clearances specified in this manual.
- 2. Refer to the NFPA54 (National Fuel Gas Code) for proper pipe sizing. Determine the size of the fire pit you are preparing to install (Refer to page 6, Table 4).
- 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 to place the fire pit into the non-combustible enclosure. A minimum burner pan dimension is listed in Table 1.
- 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. Do not fill the enclosure with gravel, rock or sand. The enclosure requires free flowing air underneath to keep enclosure cool, provide ventilation to prevent moisture, and provide an outlet for gas in the case of a gas leak.
- 8. <u>CAUTION:</u> A minimum of 18 square inches of cross ventilation (opposite sides) is required to keep the enclosure dry.
- 9. These products are designed for outdoor use only. Not approved for any indoor use or any enclosed space.
- 10. This fire pit is designed to have Firegear Outdoors lava rock or glass media completely covering the burner tube, so that the burner is not visible. Do not cover more than 1" above the top of burner. Use lava rock a minimum of 1" diameter as a base to fill the burner pan. <u>DO NOT USE STONE OR RIVER ROCK</u>.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. Ensure proper water drainage is also incorporated into the fire pit enclosure.

FIRE RING INFORMATION

Fire Ring Kits include a manual key valve with 12-inch key, a flex line, and a plug to seal off one end of the top center hub in the burner. Models FG-FR-6SSK, FG-FR-12SSK, FG-FR-18SSK, and FG-FR-24SSK use a ¹/₂" female center hub. Models FG-FR-30SSK, FG-FR-36SSK, and FG-FR-48SSK use a ³/₄" female center hub. The top center hub (port holes side) must be plugged to allow gas to flow into the burner. Each Fire Ring is designed for the port holes facing upward for both Natural Gas (NG) and Liquid Propane (LP) gasses. All Fire Rings are provided with a main burner orifice as listed in Table 2 on page 4.





Fig. 5 Non-Port Hole Side

FIRE RING ASSEMBLY

CAUTION: Do not assemble the OAS and U3-8D-S until you are ready to install the fire ring into the burner pan. The OAS is 1¹/₂" in diameter and would not fit the recommended center hole size per Fig. 6 and Fig. 9.

FG-FR-6/12/18/24 MODELS

Before you begin installing the fire ring into a burner pan ensure the center hole is a minimum of 1-inch in diameter (See Fig. 6). Models FG-FR-6SSK, FG-FR-12SSK, FG-FR-18SSK, and FG-FR-24SSK are supplied with a ½" plug, ½" nipple, OAS and FIP x MIP flare fittings (U3-8D-S) and key valve. **Note**: Burners only do not contain key valve. These items must be installed into the fire ring as shown in Fig. 7. Position the Fire Ring port holes facing upward for both Natural Gas and LP Gas. **Ensure to seal each NPT fitting with thread tape or pipe compound. NOTE:** Flared fittings will not require tape or compound on the flared side.

Step 1: Install $\frac{1}{2}$ " plug on top of fire ring and assemble the remaining parts as shown in Fig. 7.

Step 2: Install the fire ring through the pan (See Fig. 8) then install the OAS and U3-8D-S to the nipple connect inlet gas line as shown in Fig. 12 on page 10.







Fig. 7 Natural gas models 6/12/18/24-inch fire ring parts.





Fig. 8 Fire Ring Installed into Burner pan/disc.

FG-FR-30/36/48 MODELS

Before you begin installing the fire ring into your burner pan ensure the center hole is a minimum of 1¼ -inch in diameter (See Fig. 9). Models FG-FR-30SSK, FG-FR-36SSK, and FG-FR-48SSK come with a ¾" plug, ½" nipple, OAS and FIP x MIP flare fittings (U3-8E-S) and ¾" to ½" reducer (S4100-128) and key valve. **Note**: Burners only do not contain key valve.

Note: The ½" reducer may not be needed depending on the size of the inlet gas line coming into the fire ring. These items must be installed into the fire ring as shown in Fig. 10. Position the Fire Ring port holes facing upward if using Natural or Propane (LP) gas. **Ensure each NPT fitting has thread tape or pipe compound. Note:** Flared fittings do not require tape or compound on

the flared side.

Step 1: Install ³/₄" plug on top of fire ring and assemble the remaining parts as shown in Fig. 10.

Step 2: Install the fire ring through the pan and connect inlet gas line as shown in Fig. 12 on page 10.



Fig. 9 Minimum 1¹/₄ -inch center clearance hole in pan.



Fig. 10 Natural gas models 30/36/48-inch fire ring parts.

INSTALLING KEY VALVE

Note: It is recommended to use the key valve assembly provided in the Fire Ring kit. Otherwise, you will need to provide a key valve for the installation.

The key valve contents: 1- key valve, 1- key and 1- flange. (See Fig 11). The valve requires a 1¹/₄" round clearance hole in the non-combustible enclosure wall. See the instructions supplied with the key valve for more specific details. **Note**: Be sure to leak test all fittings before operation. Fig. 12 shows an example of a typical installation.



Fig. 11 Key valve components.



TYPICAL INSTALLATION DRAWINGS



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 gualified 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.

LIGHTING INSTRUCTIONS

READ ALL WARNING AND SAFETY INFORMATION ABOVE BEFORE ATTEMPTING TO LIGHT FIRE PIT

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

TURNING ON FIRE PIT

- 1. Insert key into shut-off valve and secure into square end (See Figs. 13 & 14).
- 2. Light a long match or butane lighter and hold it near the burner (see Fig. 15).
- 3. Turn the key slowly counter-clockwise in key valve (ON position) to allow gas to flow and simultaneously apply the long burning match or Butane lighter as close to the end burner as possible to light the fire pit.
- 4. Gas should ignite within 10 seconds or less. If fire pit does not light within 10 seconds turn key clockwise to turn OFF the gas supply. Ensure there is not too much media on top of the burner that might inhibit gas flow and try again in 5 minutes.

TURNING OFF FIRE PIT

- 1. Insert key into shut-off valve and secure into square end.
- 2. Turn key clockwise until it stops.
- 3. After cooling off install cover.

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Fig. 14 Inserting Key into Valve



Fig. 15 Lighting fire pit with lighter



Fig. 13 Key Valve Face

Butane Lighter

Fire Ring Burners

FIRE RING REPLACEMENT PARTS











5







FIRE RING REPLACEMENT PARTS

ltem	Description	Qty.	Part Number
1	6-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-6SSK)	1	FG-FR-6SS
1	12-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-12SSK)	1	FG-FR-12SS
1	18-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-18SSK)	1	FG-FR-18SS
1	24-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-24SSK)	1	FG-FR-24SS
1	30-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-30SSK)	1	FG-FR-30SS
1	36-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-36SSK)	1	FG-FR-36SS
1	48-inch Round Stainless Steel Fire Ring Burner (Used with FG-FR-48SSK)	1	FG-FR-48SS
2	Orifice Air Shutter - NG 50,000 Btu's (Used with FG-FR-6SSK, FG-FR-12SSK)	1	OAS-NG34
2	Orifice Air Shutter - NG 75,000 Btu's (Used with FG-FR-18SSK)	1	OAS-NG29
2	Orifice Air Shutter - NG 125,000 Btu's (Used with FG-FR-24SSK)	1	OAS-NG22
2	Orifice Air Shutter - NG 250,000 Btu's (Used with FG-FR-30SSK)	1	OAS-NG25/64"
2	Orifice Air Shutter - NG 250,000 Btu's (Used with FG-FR-36SSK)	1	OAS-NG25/64"
2	Orifice Air Shutter - NG 250,000 Btu's (Used with FG-FR-48SSK)	1	OAS-NG25/64"
3	1/2" OD x 28" Long Flex Gas Line (Used with 6", 12", 18", 24")	1	T200-9898-28
3	1/2" OD x 34" Long Flex Gas Line (Used with 30", 36" 48")	1	T200-9898-34
4a	Key Valve(Used with 6", 12", 18", and 24")	1	BVL2S
4a	Key Valve (used with 30", 36", and 48")	1	BVL3S
4b	Chrome Plated Flange Cover For Key Valve	1	CVR-BVL2CP
4c	12-inch Chrome Key	1	KEY-PC-12
5	1/2" OD x 1 1/2" Long Black Nipple (6", 12", 18", 24")	1	113BS-D15
6	1/2" OD Flare to 1/2" MIP (6", 12" 18", 24")	1	U1-8D-S
7	³ ⁄ ₄ " to ¹ ⁄ ₂ " reducer (provided with 30", 36", and 48" Fire Ring kits)	1	S4100-128
8	1/2" Flare to 1/2" FIP (6", 12" 18", 24") (Not shown)	1	U3-8D-S
9	1/2" OD Flare to 3/4" FIP Fitting (provided with 30", 36", and 48" Fire Ring kits) (Not shown)	2	U1-8E-S
10	1/2" Female to 1/2" Female Coupling (All LPK kits) (Not shown)	1	99-8

See the Firegear Outdoors catalogue for a variety of fittings and flex connectors also available.



Fire Ring Contents





CONVERTING TO LP GAS

Converstion Kit	Common Parts	Btu Ratings	LP Orifice	Models
OAS-LPK47	#99-8, #113-SS4-D5, U3-8D-S	50,000 (14.65kW)	OAS-LP47	FG-FR-6SSK FG-FR-12SSK
OAS-LPK41	#99-8, #113-SS4-D5, U3-8D-S	75,000 (21.98kW)	OAS-LP41	FG-FR-18SSK
OAS-LPK35	#99-8, #113-SS4-D5, U3-8D-S	125,000 (36.63kW)	OAS-LP35	FG-FR-24SSK
OAS-LPK12	#99-8, #113-SS4-D5, U3-8D-S	250,000 (73.26kW)	OAS-LP12	FG-FR-30SSK FG-FR-36SSK FG-FR-48SSK

Table 6 LP conversion chart

When converting Burners to LP gas the <u>main burner orifice must be kept a minimum of 6-inches away from the burner</u> <u>connection</u> (nipple) to prevent any back pressure at the LP orifice. See Fig. 16 below for details. **Note**: It is acceptable to install a 90° elbow, if necessary, to run the gas line the opposite direction (see Fig 17 or 17). <u>A 90° elbow or close nipple</u> <u>are not provided with the kit</u>.



All NPT pipe threads <u>must be</u> sealed with approved gas Teflon tape or pipe compound. <u>Check for any gas leaks before presuming normal operation after conversion is complete.</u>

CAUTION: Ensure there is ventilation under the burner to provide fresh air for air shutter/orifice.







Fig. 16 LP conversion illustration.



Fig. 18 Optional LP conversion illustration shows a 90° elbow and close nipple (not supplied).



ACCESSORIES

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

<i>Vent Kits</i> Provide 18 sq. in of ventilation per side of enclosure)	<i>Media</i> <i>Lava Stones</i> : 1" to 2" size (50 lbs) Model : FG-LS-50	Fireglass/Liquid Glass/ Reflective Glass Sold in 10lb jugs in various colors.
Model: VENT-KIT-6X12SS Model: PAVER-VENT-4-LNTS Model: PAVER-VENT-6-LNTS	<i>Lava Rock:</i> 1" to 1½" size (1 Cubic Foot) Model : FG-LAVA-40	See your Firegear dealer for various options.
	Paver Control Panels	
	PAVER-CP-MT MT systems	
Log Sets	E-STOP	FLEXFRAME
Model: L-SF (Spit Fire) - 17pc (52lbs) L-Sedona (Sedona) 19pc (200lbs)	Mechanical gas timer valve with emergency shut-off.	Universal brackets to support fire pit disc when using paver blocks or other non-combustible enclosures.
	Model: ESTOP1-0H 1hr. timer Model: ESTOP2-5H 2.5hr. timer	Model: FLEXFRAME-SS (2-piece) Model: FLEXFRAME-SS3 (3-piece)

NOTE: See the Firegear Outdoors catalogue for a variety of fittings and flex connectors and other accessories.



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. Over time stainless steel 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

<u>Symptom</u>	Remedy
Fire pit won't light	 Bleed gas line. Ensure all gas supply lines are turned ON. Ensure there is not too much media overtop of burner; it can inhibit gas from flowing. Check gas pressure.
Low flame	 Ensure the base media is at least 1-inch in diameter and top media is no more than 1-inch over top of burner. Ensure all shut-off valves and key valve is fully open. See page 11; Figure 14 Check gas pressure. Check for spider webs blocking the air shutter orifice.
Water in my fire pit	 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. Ensure free nit enclosure has proper drainage for water and proper ventilation to dry out

2. Ensure fire pit enclosure has proper drainage for water and proper ventilation to dry out.

FOR TECHNICAL SERVICE, CALL: (800) 966-8126

Firegear Outdoors 17322 Gothard St Huntington Beach, CA 92647 Web Site: www.firegearoutdoors.com

Manual changes often occur, ensure to check the Firegear Outdoor website for any recent updates and warranty information.



Firegear Outdoors hereby warrants to the end user that products will be free from material and workmanship defects that prevent safe and correct operation of the product. The warranty commences from date of sale to the end user for the following period:

CONSUMER RESIDENTIAL APPLICATIONS – MANUFACTURED AFTER 12/02/2019

BURNER SYSTEMS, BURNERS, COMPONENTS AND ACCESSORIES

- LIFETIME WARRANTY ON CONSTRUCTION AND MANUFACTURER DEFECTS
- LIFETIME WARRANTY STAINLESS STEEL BURNERS AND PANS
- LIFETIME WARRANTY BRASS BURNERS
- FIVE (5) YEAR WARRANTY GAS VALVE, SPARK IGNITER, PILOT ASSEMBLIES
- FIVE (5) YEAR WARRANTY AWS ELECONITC IGNITION SYSTEMS (24VAC, 30 VDC)
- FIVE (5) YEAR WARRANTY TFS/TMSI ELECTRONIC COMPONENTS
- FIVE (5) YEAR WARRANTY MT COMPONENTS (KEY VALVE)
- FIVE (5) YEAR WARRANTY REFRACTORY GAS LOG SETS
- FIVE (5) YEAR WARRANTY READY TO FINISH/ANF FIRE PIT ENCLOSURES
- FIVE (5) YEAR WARRANTY SKYTECH MANUACFTURED OPTIONAL CONTROLS

OUTDOOR FIREPLACE – KALEA BAY

- LIFETIME WARRANTY CONSTRUCTION AND MANUFACTURER DEFECTS
- LIFETIME WARRANTY STAINLESS STEEL COMPONENTS
- FIVE (5) YEAR WARRANTY GAS VALVE, PILOT ASSEMBLY, POWER SUPPLY, CONTROLS
- FIVE (5) YEAR WARRANTY SKYTECH MANUACFTURED OPTIONAL CONTROLS

SANCTUARY SERIES – GFRC FIRE FEATURES

- THREE (3) YEAR WARRANTY GFRC STRUCTURE
- REFER TO THE APPROPRIATE BURNER SYSTEM FOR WARRANTY WARRANTY COVERS MANUFACTURING DEFECTS OR STRUCTURAL FAILURE. SMALL STRESS CRACKS AND SURFACE CRAZING ARE A NATURAL OCCURRENCE IN GFRC PRODUCTS AND NOT COVERED BY WARRANTY.

READY TO FINISH/ANF ENCLOSURES

• FRAME – LIFETIME WARRANTY ON CONSTRUCTION AND MANUFACTURER DEFECTS

ACCESSORIES

- LIFETIME WARRANTY CONSTRUCTION AND MANUFACTURER DEFECTS
- LIFETIME WARRANTY STAINLESS STEEL COMPONENTS (LIDS, STAINLESS STEEL COVERS)
- ONE (1) YEAR WARRANTY ESTOP1-OH, ESTOP2-5H WINDSHIELDS, HOSES AND REGULATORS



COMMERCIAL APPLICATIONS - MANUFACTURED AFTER 12/02/2019

BURNER SYSTEMS, BURNERS, COMPONENTS AND ACCESSORIES

- TWO (2) YEAR WARRANTY ON CONSTRUCTION AND MANUFACTURER DEFECTS
- TWO (2) YEAR WARRANTY STAINLESS STEEL BURNERS AND PANS
- TWO (2) YEAR WARRANTY BRASS BURNERS
- TWO (2) YEAR WARRANTY GAS VALVE, SPARK IGNITER, PILOT ASSEMBLIES
- TWO (2) YEAR WARRANTY AWS ELECONITC IGNITION SYSTEMS (24VAC, 30 VDC)
- TWO (2) YEAR WARRANTY MT COMPONENTS (KEY VALVE)
- TWO (2) YEAR WARRANTY REFRACTORY GAS LOG SETS
- FIVE (5) YEAR WARRANTY READY TO FINISH/ANF FIRE PIT ENCLOSURES
- TWO (2) YEAR WARRANTY SKYTECH MANUACFTURED OPTIONAL CONTROLS

OUTDOOR FIREPLACE – KALEA BAY

- LIFETIME WARRANTY CONSTRUCTION AND MANUFACTURER DEFECTS
- LIFETIME WARRANTY STAINLESS STEEL COMPONENTS
- TWO (2) YEAR WARRANTY GAS VALVE, PILOT ASSEMBLY, POWER SUPPLY, CONTROLS
- TWO (2) YEAR WARRANTY SKYTECH MANUACFTURED OPTIONAL CONTROLS

SANCTUARY SERIES – GFRC FIRE FEATURES

- THREE (3) YEAR WARRANTY GFRC STRUCTURE
- REFER TO THE APPROPRIATE BURNER SYSTEM FOR WARRANTY WARRANTY COVERS MANUFACTURING DEFECTS OR STRUCTURAL FAILURE. SMALL STRESS CRACKS AND SURFACE CRAZING ARE A NATURAL OCCURRENCE IN GFRC PRODUCTS AND NOT COVERED BY WARRANTY.

READY TO FINISH/ANF ENCLOSURES

• FRAME – LIFETIME WARRANTY ON CONSTRUCTION AND MANUFACTURER DEFECTS

ACCESSORIES

- LIFETIME WARRANTY CONSTRUCTION AND MANUFACTURER DEFECTS
- LIFETIME WARRANTY STAINLESS STEEL COMPONENTS (LIDS, STAINLESS STEEL COVERS)
- ONE (1) YEAR WARRANTY ESTOP1-OH, ESTOP2-5H WINDSHIELDS, HOSES AND REGULATORS



The end-user must provide a bill of sale, canceled check, or payment record to verify the purchase date and to establish the warranty period. This Limited Warranty shall be valid and limited to the original purchaser only.

WARNING Any modification to the product will void the warranty.

This Limited Warranty shall be limited to the repair and/or replacement of parts that have been proven to be defective under normal use and service. All warranty claims must be made by the OEM/Distributor/Dealer account on behalf of the end-user. You may contact Technical Support at 800-966-8126.

Our Technical Service Department must confirm all approved defects. If a defect is confirmed and we approve the claim, we will replace such parts without charge. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

The manufacturer may request defective products returned with an RMA (Return Merchandise Authorization) issued by Firegear Outdoors for specific products, which is considered to be the nature of the defect and or warranty claim. Product to be returned should; be packed so as not to incur damages during transportation. Firegear is not responsible for damages on returned items. RMA is valid for thirty (30) days from the date issued. The RMA must be clearly marked on the outside of the package.

Please check with your local building code department or governing agency for proper approvals before purchasing. Firegear Outdoors is not responsible for any violation of local codes.

Travel, diagnostic cost, service labor to repair the defect on warranty parts to and from the factory will be the responsibility of the owner. We will not be responsible for labor charges and/or damage incurred in installation, repair, and replacement. Firegear is not responsible for Issues related to gas or electrical installation.

The Limited Warranty is voided if not assembled, installed, and operated as intended. This Limited Warranty does not cover any defects due to accident, abuse, misuse, alteration, misapplication, vandalism, improper installation or improper maintenance or service, removal from the original location, or re-installation into another location, or failure to perform normal and routine maintenance.

Damage due to severe weather conditions such as hail, hurricanes, earthquakes, tornadoes, discoloration due to overheating, exposure to chemicals (including chlorine and salt), either directly or in the atmosphere, or very high humidity, is not covered by this Limited Warranty. Costal, humid and/or salt environments are subject to manufacturer review. All out-of-box claims must be made within 30 days of purchase and must be made prior to installation. Any product installed damaged will be considered damaged during installation and not covered under warranty.

There are no other express warranties except as set forth herein. For consumer applications, any applicable implied warranties of merchantability and fitness are limited induration to the period of coverage of this Limited Warranty. Some states do not allow limitation on how long an implied warranty lasts, so this limitation may not apply to you.

For Commercial Applications, the liability of Firegear Outdoors is limited to the express terms of this warranty. We expressly disclaim any and all implied warranties, including any warranties of fitness for a particular purpose or merchantability.



We are not liable for any special, indirect or consequential damages. Our maximum liability is limited to the purchase price of the purchased units. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.

We do not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return, or replacement of its equipment, and or such representation are binding.

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