

Flat Pan with Burner Instruction Manual

This instruction manual applies to all Starfire Designs® Flat Pan with Burner models, sizes, and shapes.



Attention: Please carefully read these instructions prior to installing your Flat Pan with Burner. Failure to adhere to these instructions may result in a possible fire hazard, explosion, property damage, serious injury, or loss of life. Do not discard this instruction manual, it must remain with the appliance.

What to do if you smell gas:

- Do not attempt to ignite your appliance
- Do not touch any electrical switch
- Contact your gas supplier immediately from an off-site location
- Contact your local fire department

Attention: This Fire Pit Burner is for **OUTDOOR USE ONLY!**

For use with Natural Gas or Propane Gas only. Propane installations require additional fittings and parts. See "Propane Gas Installation on page 3 of this manual for details.

Installer: Leave this manual with the appliance.

Consumer: Do not discard this manual. Save for future reference.



WARNING: DO NOT TOUCH! HOT! BURN RISK! FIRE HAZARD! SEVERE BURNS OR CLOTHING IGNITION MAY RESULT IN THE IMPROPER USE OR INSTALLATION OF THIS APPLIANCE!

Attention: Installation and service must be performed by a qualified gas installer, service agency, or gas supplier. Your installer must follow these instructions carefully. Starfire Designs®, Starfire Direct, Inc. and their affiliates are not responsible for the actions of the installer.

The installation of this burner must conform to all local codes. In the absence of local codes, the National Fuel Gas Code ANSI Z223.1 or CAC/CGA-8149.1, National Gas Installation Code or CAN/CGA-B149.2, Propane Installation Code must be adhered to.

We recommend our products be installed and serviced by a member of the National Fireplace Institute who is certified as a Gas Specialist. For More information, go to www.NFICertified.org



KEEP CHILDREN AWAY. SUPERVISE CHILDREN AT ALL TIMES WHEN IN THE AREA OF THIS APPLIANCE. INFORM ADULTS AND CHILDREN OF THE RISKS AND DANGERS OF HIGH TEMPERATURES. FLAMMABLE MATERIAL SUCH AS, BUT NOT LIMITED TO CLOTHING, SHOULD NOT BE HUNG OR STORED IN, ON, AROUND, OR ANYWHERE NEAR THE APPLIANCE.

WARNING:

- Do not store flammable liquids or vapors anywhere near this appliance.
- Solid-fuels must not be burned in a fire pit where this decorative appliance is installed.
- Do not use this appliance if it or any part of it has been submerged beneath water.
- Never leave this appliance unattended while in use.
- Supervise children at all times.
- Flammable materials must not be placed on or near the fire.
- A qualified technician should inspect this appliance annually.
- Inspect all gas or propane supply lines prior to each use of your fire pit.
- If your fire ring is connected to a LP gas cylinder, the LP gas cylinder must be shut off after every use.

Gas Supply Requirements

This Flat Pan with Burner is designed for use with Natural Gas and Propane Gas only. When installed for use with Propane Gas, additional parts and fittings are required. See Propane Gas Installation on page 3 for details. All gas line connections must be installed by a qualified gas plumber and in accordance with all local building codes. If local codes are not available, please follow ANSI Z223.1. The maximum BTU output of your fire feature is ultimately determined by your gas supply line and regulator. The size and length of your gas supply pipe as well as the pressure supplied by the regulator will determine the overall BTUs your Flat Pan with Burner will produce. Consult a qualified gas plumber to verify that your gas supply line is adequate for the size of the Flat Pan with Burner you choose to install. The table below displays BTU ratings for the corresponding burner sizes and shapes. 'RND' = Round Burner, 'H' = H-Burner, 'L' = Linear Burner, 'SQ' = Square Burner.

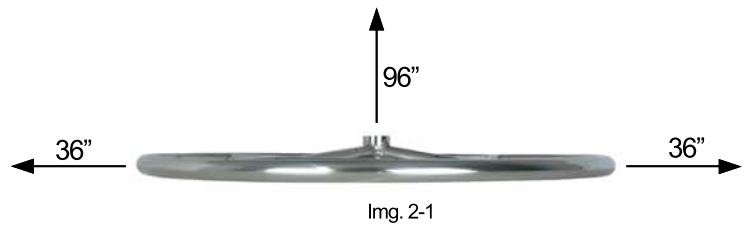
BTU Rating	Burner Size & Shape
50,000	24" L
75,000	18" H, 36" L
90,000	12" RND, 12" SQ
100,000	24" H, 48" L
125,000	18" RND, 30" H, 60" L
150,000	24" RND, 36" H, 72" L, 18" SQ

BTU Rating	Burner Size & Shape
175,000	30" RND, 42" H
200,000	48" H, 96" L, 24" SQ
250,000	36" RND, 120" L
300,000	42" RND
400,000	48" RND

Clearances To Combustibles

Maintain a minimum horizontal clearance of 36" to combustible materials and a minimum vertical clearance of 96" from your burner (see Img. 2-1).

Burners with a rating of 200,000 BTUs or higher and burners connected to a gas source with the rating 200,000 BTUs or higher must not be installed under any sort of overhang or cover.



Img. 2-1

Installation

IMPORTANT: For all Natural Gas and Propane Gas installations, use gas appropriate pipe tape or pipe joint compound on all NPT fittings. Do NOT use pipe tape or pipe joint compound on FLR or compression fittings. If using this Flat Pan with Burner with an electronic ignition flame control system or battery spark ignition, please follow the installation instructions included with the electronic ignition flame control system or battery spark ignition. Vents (see Img. 2-2 Part # 9) are recommended for all fire pit installations and are required when connected to Propane Gas or if you are installing an electronic ignition flame control system.

 **Video Tutorials Available***

 Scan this code to view our installation video or go to www.StarfireDirect.com/Video-Gallery

*Videos are for reference only and do not supersede these written instructions.

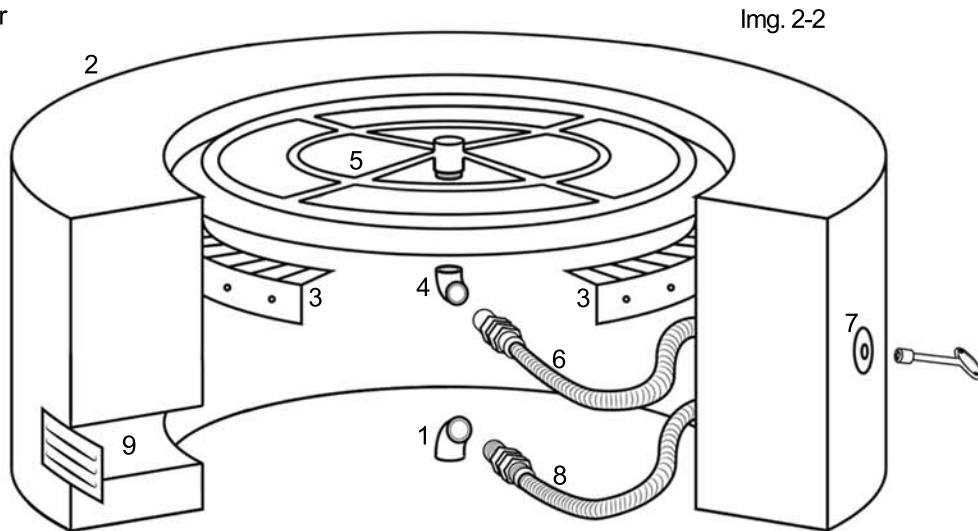
All the additional fittings and parts needed to install your Flat Pan with Burner, including Battery Spark Kits and Electronic Ignitions, can be purchased online at www.StarfireDirect.com.

Scan this code to get started:



Natural Gas Installation - Match Lit (Img. 2-2):

- Run a Natural Gas Supply Line (1) to the location of the Fire Pit Enclosure (2). Your Fire Pit Enclosure must be constructed of non-combustible materials (brick, stone, metal, concrete, etc.).
- Install the Form Fitting Fire Pit Ledge (3) around the inside perimeter of your Fire Pit Enclosure. The ledge should be between 2.5" and 4" down from the very top cap of your fire pit.
- Thread a 90° Elbow Fitting (4) to the bottom of the Flat Pan with Burner (5).
- Connect one end of a Whistle-Free Flex Connector (6) to the 90° Elbow Fitting, then connect the other end to your Key Valve (7).
- The Key Valve must be installed no more than 3 feet away from your Flat Pan with Burner, ideally in the wall of your Fire Pit Enclosure.
- Your Key Valve may then be connected to the Natural Gas Supply Line using another Whistle-Free Flex Connector (8) or hard gas pipe.
- Rest the Flat Pan with Burner on the Form Fitting Fire Pit Ledge with the Fire Ring facing up.
- Test your burner (see operation instructions pg. 3).
- Cover your Flat Pan with Burner with your choice of Starfire Glass® brand fire glass, lava rock, or other approved fire pit media.



Img. 2-2

Don't Forget the Fire Glass!

Our Drop-In Burner Pans are specifically designed for use with Starfire Glass® brand fire glass.

Scan the code or go to www.StarfireDirect.com/StarfireGlass.



How Much Fire Glass Do You Need?

To determine the amount of fire glass needed for your particular fire pit, use our handy online Fire Glass Calculator.

Scan the code or Go to www.StarfireDirect.com/Fireglass-Calculator.

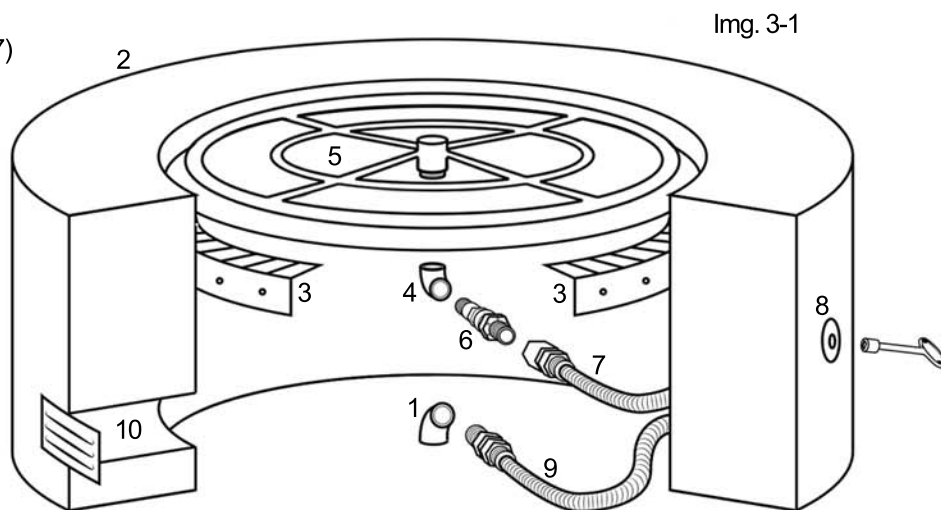


Installation (Continued)

Propane Gas Installation - Match Lit (Img. 3-1):

Propane gas is much different than Natural Gas and requires a Propane Air Mixer Orifice for proper combustion. Propane is heavier than air and it is possible that un-combusted Propane may sink to the bottom of your fire pit enclosure. For this reason, you must ensure that your fire pit enclosure has plenty of air ventilation (see Img. 3-1 Part # 10). Your propane fire pit will require a minimum of two 18 square inch vents which should be located toward the very bottom of your fire pit. These vents prevent un-combusted propane from storing up in your fire pit enclosure and they provide a steady flow of oxygen to the Propane Air Mixer Orifice. If using Fire Glass, make sure the burner element is not buried in more than 1" of Fire Glass.

- Run your Propane Gas Supply Line (1) to the location of the Fire Pit Enclosure (2). Your Fire Pit Enclosure must be constructed of non-combustible materials (brick, stone, metal, concrete, etc...).
- Install the Form Fitting Fire Pit Ledge (3) around the inside perimeter of your Fire Pit Enclosure. The ledge should be between 2.5" and 4" down from the very top cap of your Fire Pit Enclosure.
- Thread a 90° Elbow Fitting (4) to the bottom of your Flat Pan with Burner (5).
- Thread a Propane Air Mixer (6) into the 90° Elbow Fitting. Make sure the arrow on the Propane Air-Mixer is pointing in the direction of the flow of gas.
- Connect one end of a Whistle-Free Flex Connector (7) to the Propane Air Mixer, then connect the other end to your Key Valve (8).
- The Key Valve must be installed no more than 3 feet away from your burner, ideally being installed in the wall of your Fire Pit Enclosure.
- Your Key Valve may then be connected to the Propane Gas Supply Line using another Whistle-Free Flex Connector (9) or hard gas pipe.
- Rest the Flat Pan with Burner on the Form Fitting Fire Pit Ledge with the burner facing up.
- Test your burner (See operation instructions).
- Fill your Drop-In Burner Pan with your choice of Starfire Glass® brand fire glass, lava rock, or another approved fire pit media.



Operation

Be sure your fire pit is free from flammable liquids or combustible materials. If you smell gas do not attempt to ignite your fire pit.

How to Ignite your Fire Pit System Manually:

1. Use a long-necked butane lighter and hold the flame over the burner.
2. Slowly turn the Key Valve to the ON position. Your burner should light.
3. If the burner does not light, immediately turn the valve to the OFF position.
4. Wait 5 minutes to clear out any gas then repeat the above steps.
5. If your burner fails to light for a third time, turn the gas valve off and contact your dealer or a local gas technician.
6. To turn your fire off, turn the valve to the OFF position. Be sure the valve is fully off to avoid any gas leakage.

If your Flat Pan with Burner is installed with an electronic ignition system or other type of flame control system, follow the lighting instructions that came with the flame control system carefully.

Tri-Purpose Ignition Ports

Depending on the model you purchased, your Flat Pan with Burner may be equipped with one or two Tri-Purpose Ignition Ports. This allows you to set up your fire pit as a match lit system, with the Starfire Designs® Battery Spark Ignition, or with the All Weather Electronic Ignition System (AWEIS) available at www.StarfireDirect.com.

Match Lit System:

Ensure that the Igniter Port Cover Plates are secured to the Flat Pan with the 7/16" hole closest to the center of the pan (see *Img. 4-1*).



AWEIS Ignition System:

Remove one of your Igniter Port Cover Plates completely (see *Img. 4-4*). The AWEIS Pilot Assembly will drop into the exposed Igniter Port and is secured using the set of 1/4" Screws and 1/4" Flange Nuts (see *Img. 4-5*). The other Igniter Port Cover Plate (if present) should remain as it would be during a match lit installation (see *Img. 4-1*). The Igniter Port you install the AWEIS Pilot Assembly into will depend on the size burner you have.



Battery Spark Ignition:

To use your Flat Pan with Burner with the Starfire Designs® Battery Spark Ignition Kit, install one of the Igniter Port Cover Plates with the 7/16" hole closest to the outside edge of the Flat Pan (see *Img. 4-2*). The Battery Spark Igniter is installed in the 7/16" hole (see *Img. 4-3*). The other Igniter Port Cover Plate (if present) should remain as it would be during a match lit installation (see *Img. 4-1*). The Igniter Port you install the Battery Spark Kit into will depend on the size burner you have.



Warranty Information

Limited Warranty:

Starfire Designs® warrants this Flat Pan with Burner against defects in materials and workmanship for a period of 10 years from the date of purchase. This warranty is for the benefit of the original purchaser. Starfire Designs® agrees to repair or provide a replacement for the defective product, but will not remove the defective product or reinstall the replacement product. Starfire Designs® must be contacted within 15 days of discovering the defect. Do not return your defective product without written authorization from Starfire Designs®. Defective product returned without proof of purchase date will not be covered under warranty and will be serviced or replaced at an additional expense to the original purchaser. This warranty does not cover damage caused by freight or parcel carriers, such as but not limited to, UPS, FED-EX, USPS, DHL. If your product is damaged in transit, please file a claim with the carrier immediately.

After receiving authorization from Starfire Designs®, please return defective product to:

Starfire Direct, Inc.
42168 Remington Ave.
Temecula, CA 92590

Please Note: Address subject to change. Shipping charges are the responsibility of the buyer.

Exclusions:

Starfire Designs® will not warrant any product found to be misused, abused, or installed contrary to the instructions provided in the owner's manual. Starfire Designs® is not liable for the loss, theft, damage, neglect, or misuse of this product. This warranty does not cover any Starfire Designs® product that has been modified, altered, or repaired by someone other than the Starfire Designs® factory or any person/entity that has been expressly approved by Starfire Designs®. Starfire Designs® is not liable for product color changes. Starfire Designs® will not warranty parts or fittings from third party manufacturers that are used to install our products. Starfire Designs® and Starfire Direct, Inc. are not liable for any and all claims by the purchaser of our products as a result of damage or personal injury resulting from the sale, assembly, installation, operation, shipment, storage, or manufacture of this product.