

# INSTALLATION AND OPERATION INSTRUCTIONS

## !!! IMPORTANT !!!

Read these instructions carefully before installing or operating this decorative gas fire pit. These instructions should be left with the homeowner for future reference.

## !!! WARNING !!!

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

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

A liquid propane tank, not connected for use with this decorative gas fire pit, shall not be stored in the vicinity of this or any other appliance.

Installation and service must be performed by a qualified installer, service agency, or the gas supplier.



## !!! WARNING !!!

Liquid propane units are designed and certified for use, only with household liquid propane supply. Do not use "portable" propane tanks of less than 20-lbs. capacity. LP units can not be operated with 20-lb. propane tanks

## !!! WARNING !!!

Gas supply system must be installed in accordance with the U.S. National Fuel Gas Code.

This appliance and its individual shut off valve must be disconnected from the gas supply piping system during any system pressure test in excess of ½ PSI ( 3.5 KPA ).

Use a system manual shut off valve to shut off the gas supply to the fire pit before continuing with installation procedures.

## !!!IMPORTANT!!!

### WHAT TO DO IF YOU SMELL GAS:

- < Shut off gas supply to the appliance.
- < Extinguish any open flames.
- < Immediately call your gas supplier.

Follow the gas supplier's instructions.

- < If you can not reach your gas supplier, call the fire department.



## SAFETY INFORMATION

- < THIS GAS APPLIANCE IS DESIGNED FOR OUTDOOR USE ONLY. IT IS NOT INTENDED FOR INSTALLATION IN ANY BUILDING, GARAGE, OR ENCLOSED STRUCTURE. IT IS NOT INTENDED FOR INSTALLATION IN OR ON RECREATIONAL VEHICLES OR BOATS.
- < WARNING: Follow all gas leak check procedures in this manual, prior to operation.
- < WARNING: Fuels used in gas or oil – fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm. This warning is issued pursuant to California Health & Safety Code Sec. 25249.6.
- < While this appliance is not in use, the gas must be turned off at the gas supply.
- < While this appliance is not in use, it should be covered to protect it from weather and other adverse elements.
- < DO NOT ATTEMPT TO DISCONNECT THE GAS OR ANY GAS FITTING WHILE THIS APPLIANCE IS IN OPERATION.
- < Inspect the gas connections of this appliance prior to each use. Do not operate the unit if there is a gas leak present.
- < DO NOT put anything flammable on or in the area beneath the fire pit.
- < NEVER leave the fire pit unattended while in operation.
- < NEVER allow children to operate this fire pit.
- < NEVER lean over the fire pit, or place hands or fingers on the front edge while in operation.

## SET-UP

Your gas fire pit comes assembled, ready for a Natural Gas connection. Liquid Propane units may be special ordered or Liquid Propane change kits, for use with household Liquid Propane supplies, are available from your dealer.

- 1- Remove fire pit from container box.
- 2- Place unit on any level, outdoor, noncombustible surface. NOTE: Do not place this appliance on grass or dirt area. This may prevent proper safety venting.
- 3- The burner assembly is shipped ready for gas connection with any one (1) of several methods: ( Your method may vary )

**PROPER CLEARANCES FROM COMBUSTIBLE CONSTRUCTION AND MATERIALS MUST BE MAINTAINED FROM ALL SIDES, TOP, AND BOTTOM OF THIS APPLIANCE.**

**THIS APPLIANCE SHOULD NEVER BE PLACED ON ANY COMBUSTIBLE SURFACE.**

**THIS APPLIANCE SHOULD NEVER BE PLACED UNDER ANY COMBUSTIBLE CONSTRUCTION OR MATERIALS.**

**THIS APPLIANCE SHOULD NEVER BE PLACED CLOSER THAN FORTY-EIGHT ( 48 ) INCHES FROM ANY SIDE TO ANY COMBUSTIBLE CONSTRUCTION OR MATERIALS. ( SEE FIGURE 1 )**

- < NEVER use liquid propane gas in a natural gas unit, or natural gas in a liquid propane unit. GAS CONVERSIONS SHOULD ONLY BE DONE BY A QUALIFIED SERVICE TECHNICIAN.
- < DO NOT use charcoal briquettes or lighter fluid in any gas fire pit.
- < Storage of this appliance indoors is permissible only if the gas is disconnected and removed from the appliance.

## DECORATIVE GAS FIRE PIT SPECIFICATIONS

### NATURAL GAS - RATED PRESSURE - 7.0" W.C.

MINIMUM GAS PRESSURE	MAXIMUM GAS PRESSURE	ORIFICE SIZE	BTU/HR INLET
7.0" W.C.	10.5" W.C.	#14	9000

### LIQUID PROPANE - RATED PRESSURE – 11.0" W.C.

MINIMUM GAS PRESSURE	MAXIMUM GAS PRESSURE	ORIFICE SIZE	BTU/HR INLET
11.0" W.C.	13.0" W.C.	#35	9000

## HARD PIPING TO UNIT WITHOUT GAS PROXIMITY

- 1- TURN OFF THE 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 Teflon tape or pipe dope to the steel fittings before making any connection.

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

- 2- Extend the gas supply system ( using 1/2" black iron pipe) from current house supply. This may be accomplished by "teeing off " or tapping into a convenient gas line connection; installing the necessary pipe for the distance required; and then installing a manual valve at 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- From manual valve, extend piping to the fire pit.  
NOTE: If pipe is to be placed in an underground trench, check with local codes for required depth and material construction.
- 4- Connect the 1/2" female x 3/8" male flare brass fitting ( furnished with the fire pit ) to the 1/2" steel pipe making sure to clean the pipe threads and use Teflon tape or pipe dope.
- 5- Connect the 1/2" female x 3/8" male flare brass fitting to the 3/8" female brass flare fitting, assembled on the end of the gas line, protruding through the hole on the base of the fire pit.  
NOTE: Brass to brass connections do not require Teflon tape or pipe dope.
- 6- Make sure the valve on the fire pit is turned off. The key should be turned fully, in the clockwise direction. ( SEE FIGURE 2,CONTROL PANEL )  
  
Make sure the valve at the wall of the house is turned off.
- 7- Turn on the main gas supply system.
- 8- CHECK FOR LEAKS! Apply soapy water to each connection and watch for bubbles. If bubbles are seen, turn off the main gas supply system, retighten the connections and CHECK AGAIN! DO NOT use a lighted match or other source of ignition to check for leaks. Repeat this procedure until you are sure that there are no leaks in the gas connections. When you are assured that no gas leaks are present:
- 9- Turn on the gas supply valve at the wall of the house.
- 10- CHECK FOR LEAKS! Apply soapy water to each connection and watch for bubbles. If bubbles are seen, turn off the gas supply valve at the wall of the house, retighten the connections and CHECK AGAIN! DO NOT use a lighted match or other source of ignition to check for leaks. Repeat this procedure until you are sure that there are no leaks in the gas connections. When you are assured that no gas leaks are present:

## FLEX PIPING TO UNIT WITH GAS PROXIMITY

- 1- TURN OFF THE 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 Teflon tape or pipe dope to the steel fittings before making any connection.

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

- 2- Remove the existing cap or gas jet assembly from the gas stub.
- 3- Install a manual valve. Some brass adaptor fittings (not included) may be required depending on your gas supply system.
- 4- From the manual valve, extend your required length of 1/2" flex piping with female flared ends (not included) to the fire pit. Connect the 1/2" female x 3/8" male flare brass fitting ( furnished with the fire pit ) to the flex line using a 1/2" male x 1/2" male flare brass fitting (not included).
- 5- Connect the 1/2" female x 3/8" male flare brass fitting to the 3/8" female brass flare fitting, assembled on the end of the gas line, protruding through the hole on the base of the fire pit.  
NOTE: Brass to brass connections do not require Teflon tape or pipe dope.

OR

- 6- Remove the 1/2" female x 3/8" male flare brass fitting from the gas line, protruding through the base of the fire pit. Set it aside.
- 7- Connect a 1/2" male flare x 3/8" male flare brass fitting (not included) from the flex line to the 3/8" female flare brass fitting assembled on the end of the gas line, protruding through the hole on the base of the fire pit.  
NOTE: Brass to brass connections do not require Teflon tape or pipe dope.
- 8- Make sure the valve on the fire pit is turned off. The key should be turned fully in the clockwise direction.  
  
Make sure the valve at the gas stub is turned off.
- 9- Turn on the main gas supply system.
- 10- CHECK FOR LEAKS! Apply soapy water to each connection and watch for bubbles. If bubbles are seen, turn off the main gas supply system, retighten the connections and CHECK AGAIN! DO NOT use a lighted match or other source of ignition to check for leaks. Repeat this procedure until you are sure that there are no leaks in the gas connections. When you are assured that no gas leaks are present:
- 11- Turn on the gas supply valve at the gas stub.

## **FLEX PIPING TO UNIT WITH GAS PROXIMITY CONTINUED**

- 12- CHECK FOR LEAKS! Apply soapy water to each connection and watch for bubbles. If bubbles are seen, turn off the gas supply valve at the wall of the house, retighten the connections and CHECK AGAIN! DO NOT use a lighted match or other source of ignition to check for leaks. Repeat this procedure until you are sure that there are no leaks in the gas connections. When you are assured that no gas leaks are present:



CONTROL PANEL

## **QUICK DISCONNECT GAS SUPPLY HOSES**

Quick disconnect gas supply hose kits, for use with either natural gas or liquid propane are available through hardware retail stores. Once gas proximity has been established, these kits can be used in place of hard piping or flex lines. Quick disconnect kits can promote safety and climate flexibility in that, whenever the unit is not in use, it can be "quickly disconnected" from the gas supply and the fire pit, once the gas has been turned off. If you choose to use a quick disconnect gas supply hose kit, after you have established gas supply proximity, follow the instructions that come with the kit, then follow the safety instructions in the "installation proximity" sections of this manual.

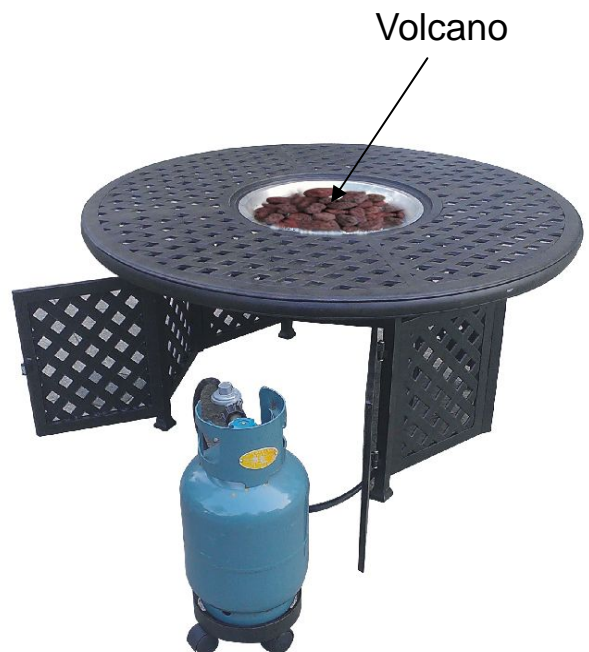
## **FINAL SET-UP**

Your was designed to operate with two (2) types of lava rock (not included with some models). (SEE FIGURE 3)

- 1- A small 1" to 2" size - you will need approximately 35 lbs. – to fill the burner basin from its base to above the burner.
- 2- A large 7" to 10" size - you will need approximately 4 to 6 pieces - placed on top of the smaller size lava rock to disperse the flame.

Being careful not to damage the burner pipe, place the smaller size lava rock into the burner basin, covering it and the burner tube completely.

Carefully place the larger sizes of lava rock on top of the lava bed you have just constructed. This arrangement is left to personal preference entirely. You may want to try different placements to achieve your desired flame pattern. WARNING: Allow lava rock to cool before handling or rearranging.



## OPERATION

FOR YOUR SAFETY – READ BEFORE LIGHTING

### !!! WARNING !!!

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

This appliance, is lit by match, or hand fire starter. Follow these instructions exactly when lighting the fire pit. BEFORE LIGHTING, smell around the appliance area for gas. Be sure to smell next to the ground as liquid propane gas is heavier than air and will settle to the ground.

Use only your hand to turn the gas control key (SEE FIGURE 4 & 5) on the valve. Never use tools. If the valve key will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair by an unqualified person may result in a fire or explosion.

### !!! WARNING !!!

All gas burning appliances produce smoke and carbon monoxide gas during operation. These fumes can be harmful if the appliance is used in any other than an open air, fully vented area.

- 1- **STOP!** Read the safety information at the beginning of this manual.
- 2- Insert the gas control key ( SEE FIGURE 4 & 5 ) into the valve on the control panel ( SEE FIGURE 2 & 5 ). Make sure the gas is off. The gas control key should be turned in a fully clockwise direction to the off position.
- 3- Turn on the main system gas supply.
- 4- Turn on the valve at the gas stub or house wall.
- 5- If you smell gas, STOP! Turn off the gas and recheck gas connections for leaks. Do not continue until gas leaks are corrected. If you do not smell gas, continue with the next step.
- 6- Place a match or hand fire starter near the bed of small lava rock nearest to the fire pit side with the control panel. Slowly turn on the gas by rotating the gas control key in a counterclockwise direction. Gas should ignite within approximately 5 seconds.

**NOTE: ON NEW ORRETRO-FIT CONSTRUCTION OF GAS SYSTEM, AIR IN THE PIPING WILL HAVE TO BE BLED BEFORE IGNITION CAN TAKE PLACE.**

## GAS FIRE PIT TROUBLE SHOOTING

PROBLEM OBSERVED	POSSIBLE CAUSE	CORRECTIVE MEASURE
Gas odor during set up	Gas leak	See " What to do if you smell gas " page 1 Check all gas connections
Gas odor before first ignition	Gas leak	See " What to do if you smell gas " page 1 Check all gas connections
Delayed ignition	Low gas pressure Clogged or dirty burner ports Blocked orifice Faulty valve	Check gas supply pressure Clean burner ports - see manual section Check orifice opening Replace valve
Burner lights but does not stay lit	Low gas pressure Faulty valve Clogged or dirty burner ports Faulty Regulator Windy conditions	Check gas supply pressure Replace valve Clean burner ports - see manual section Replace regulator Shield from wind
Incorrect burner flame	Incorrect gas supply or pressure Incorrect primary air mix - LP only Blocked orifice Clogged or dirty burner ports Faulty valve Faulty Regulator High altitude	Check gas supply pressure Adjust air mixer - see manual section Check orifice opening Clean burner ports - see manual section Replace valve Replace regulator Adjust orifice size for altitude
Backfire of burner	Blocked orifice Clogged or dirty burner ports Incorrect primary air mix - LP only	Check orifice opening Clean burner ports - see manual section Adjust air mixer - see manual section