



# Dagan Industries, Inc.

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## OUTDOOR FIRE RINGS INSTALLATION AND OPERATING INSTRUCTIONS



**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 or use gasoline or other flammable vapors and liquids in the vicinity of this or any other fireplace.
- ✓ What to do if you smell gas
  - Do not try to light any appliance
  - Do not touch any electrical switch; do not use any phone in your building
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- ✓ Installation and service must be performed by a qualified installer, service agency or the gas supplier.

**Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Read this manual thoroughly before installing or servicing this equipment.**

**Important!** Read all instructions carefully, before beginning installation. Failure to follow instructions may result in a possible fire hazard and will void our warranty.

**WARNING!**  
For outdoor use only. Do not use indoors.



**This manual must be used for installation of Dagan Fire Rings. A copy of this manual must be retained by homeowner for operation and maintenance. Save manual for future reference.**

**For technical assistance please contact: Dagan Industries, Inc.  
15540 Roxford St. Svlmar. CA 91342**

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### **A. Introduction**

Dagan Industries, Inc. Fire Rings are distributed as Decorative natural gas or propane Fire Rings for the outdoor use only. Fire Rings are not to be used under any circumstances, for indoor use or for cooking.

Care must be taken to insure Fire Rings are not exposed excessively to water or submerged under water.

**WARNING!**  
Fire Rings must be used ONLY outdoors in a well ventilated space. Fire Rings must NOT be used inside a building, garage, or any other enclosed area.



## B. SAFETY INFORMATION

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1 or CAN/CGA-B149.1, National Gas installation Code or CAN/CGA-B149.2, Propane Installation Code.

**IMPORTANT:** Installation of natural 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 ½ psig (3.6kPa).

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 psig (3.5kPa).

**Note:** All new LP cylinders (and in many cases used cylinders) may contain water, air or other contaminants. It is essential that these substances be released before filling the cylinder and placing into service. Water vapor present in the gas vapor may cause the regulator to “Freeze up” and cause an interruption to the gas flow. This interruption will cause the appliance to shut down. To prevent this from occurring, it is essential that a qualified individual always purges a new tank thoroughly before placing it into service. It is recommended that cylinders that have not been used for extended periods of time also be purged before use.

- Children and adults should be alerted to the hazards of 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.
- Never leave the appliance unattended during operation.
- Clothing or other flammable materials should not be placed on or near the appliance.
- Any guard or other protective device removed for servicing the appliance must be replaced prior to operating the appliance.
- 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, burner and circulating air passageways of the appliance be kept clean.
- Inspect the fuel supply connection (including the hose for LP models) before each use of the appliance.
- If it is evident there is excessive abrasion or wear, or the hose is cut, it must be replaced prior to the appliance being put into operation.
- The pressure regulator and hose assembly supplied with LP models must be used. Replacement pressure regulators and hose assemblies must be those specified in this manual.
- The LP gas supply cylinder used with LP models must be constructed and marked in accordance with the specifications for LP gas cylinders of the U.S Department of Transportation (DOT).
- Cylinders must be stored outdoors in a well ventilated area out the reach of children. Disconnected cylinders must have threaded valve plugs tightly installed and must not be stored in a building, garage or any other enclosed area.
- Storage of this appliance indoors is permissible only if it has been disconnected from its fuel supply (natural gas line or LP gas cylinder).
- The LP gas cylinder supply system must be arranged for vapor withdrawal.
- When an LP model is not in use, the LP gas must be turned off at the supply cylinder.



### **C. OUTDOOR FIRE RING INSTALLATION INSTRUCTIONS**

Natural or LP gas installation

- ✓ Inspect fire Ring for damage or signs of corrosion.
- ✓ Install yellow Teflon tape (for gas service) to threads of plug fitting and mating gas pipe. Screw gas plug/cap into center of Fire Ring gas inlet ¼" only. Cap may be installed on either end to allow gas outlet holes to be installed upward or in the downward position.
- ✓ Screw in gas service pipe to opposite end as shown in "Figure A" above.
- ✓ Install yellow Teflon tape to pipe threads and connect flexible gas line to pipe as shown in figure A.
- ✓ Connect flexible gas line to separate gas shut-off valve (See Figure A)

#### Natural Gas Connection

- ✓ Connect the ON/OFF gas valve to the incoming gas supply line. Make certain all gas connections are tight.
- ✓ Turn the ON/OFF valve at the appliance slowly to the "ON" position. Use soap and water solution to test fittings for leaks.
- ✓ **DO NOT USE AN OPEN FLAME!**

#### LP Gas Connection

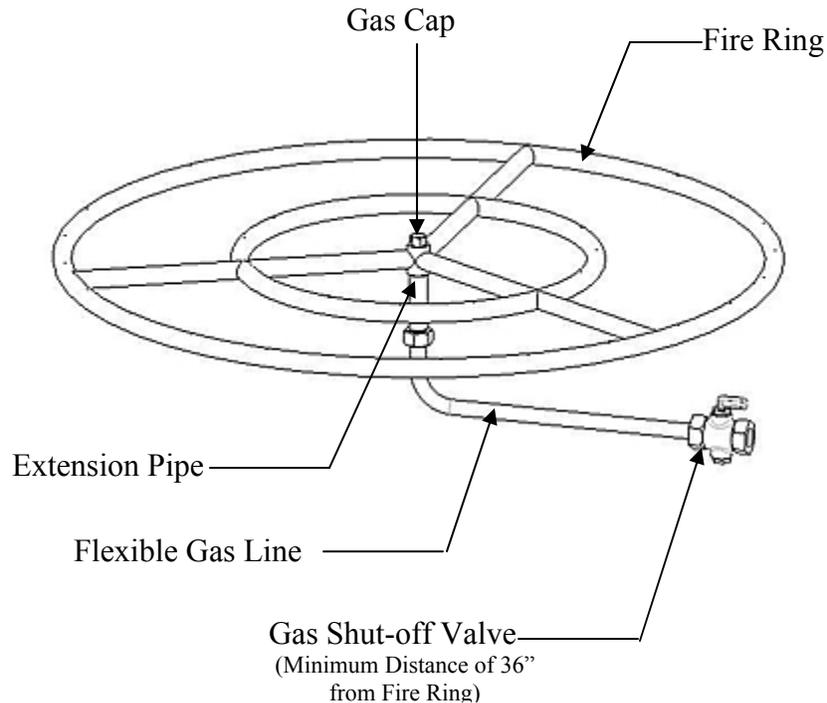
- ✓ Make sure the tank valve is turned completely OFF (clockwise).
- ✓ Ensure the tank valve has the proper external mating threads (tank valve marked: USE WITH TYPE 1).
- ✓ Inspect the hose shipped with the appliance for any damage. Do not use if there is evidence of damage.
- ✓ Connect the end of the hose onto the ON/OFF gas valve of the appliance. Make sure it is secured tightly.
- ✓ Connect the regulator assembly to the tank valve. Hand tighten only (clockwise). Do not use a wrench to tighten! Use of a wrench may damage the quick closing nut and result in a hazardous condition.
- ✓ Position the hose out of pathways where people may trip over it or in areas where hose may be subject to accidental damage.
- ✓ Open the tank valve fully (counterclockwise). Turn the ON/OFF valve slowly to the "ON" position and use a soap and water solution to check all connections for leaks. If a leak is found, turn the tank valve OFF and do not use the appliance until repairs can be made.

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



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**C. OUTDOOR FIRE RING INSTALLATION INSTRUCTIONS (Cont.)**



**Figure A**

**Tell children what to do if they smell gas**

Instruct older children to leave the house and call your local gas utility from a nearby phone if they smell a gas leak while you are out. **(1-800-261-5325)** Remind them not to use matches, turn lights on and off, use a flashlight, or use the phone or other electrical appliances, as a spark from any of these things could ignite the gas and cause it to explode.



## Dagan Industries, Inc.

### D. Required hardware:

ITEM	DESCRIPTION
	1/2" thread X 2 1/2" Steel Pipe Extension
	<b>McMaster-Carr #4513K324</b> Blk Forged Stl Threaded Pipe Fitting-3000 Psi 1/2" Pipe Size, Hex Head Plug
	<b>McMaster-Carr #5891K66</b> Stainless Steel Hose Assembly for Natural Gas Appliance 48" Lg, 1/2" ID, W/1/2" Male/Female Couplings
	<b>McMaster-Carr #4786K373</b> Bronze Gas Service Plug Valve 1/2" NPT Female, Lever Handle, 25 Max Psi
	Yellow Teflon Tape for gas service

All parts can be purchased from McMaster Car Supply P.O. Box 54960  
Los Angeles, CA 90054-0960 [la.sales@mcmaster.com](mailto:la.sales@mcmaster.com)



## **E. MAINTENANCE INSTRUCTIONS**

- ❖ Inspect Fire Rings before initial use. Periodically inspect and clean at least annually by a qualified service person.
- ❖ Tampering with Fire Rings is Dangerous and voids all warranties. Any component that is found to be faulty must be replaced with an approved component.
- ❖ To obtain proper operation, it is imperative that the burner flame characteristics are steady, **not lifting or floating**.
- ❖ Periodically remove the fire pit media (lava rocks, vermiculite) and examine the fire rings.
- ❖ Check for wear, corrosion, and damage. If visible damage to fire ring, than replace fire ring (burner).
- ❖ Periodically check the hose connections to Natural or LP gas supply for leaks or damage.

**NOTE: Carbon (soot) may build up on the surfaces of the fire pit media (lave rock, vermiculite, etc.) with prolong use. This is more likely to occur when using LP gas. Soot should be cleaned off the media with a dry clean bristle brush or cloth.**

## **F. HIGH ELEVATION INSTALLATION**

For US installation, above 2000 feet elevation, National Fuel Gas Codes require a decrease of the input rating by changing the existing burner orifice to a smaller size. Input should be reduced 4% for each 1000 feet above sea level. Check with the local gas utility for proper orifice size identification.

For Canada, the input rating does not need to be reduced. When installing fire rings at an elevation above 4500 feet in Canada, check with the local authorities.

<b>FUEL</b>	<b>ORIFICE #</b>	<b>ORIFICE SIZE</b>	<b>MAXIMUM OUTPUT</b>
Propane Gas	#44	.086	60,000 BTU's
Natural Gas	#27	.144	75,000 BTU's



## **G. ENCLOSURES FOR LP GAS SUPPLY SYSTEMS**

For building an enclosure for LP gas cylinder, follow these recommended specifications and you must follow local codes.

A. Enclosures for LP gas supply cylinders must be ventilated by openings at the level of the cylinder valve and at floor level. The effectiveness of the opening(s) for purposes of ventilation must be determined with the LP gas supply cylinder(s) in place. This must be accomplished by one of the following:

- 1) One side of the enclosure must be completely open
- 2) For an enclosure having four sides. A top and bottom:
  - a. At least two ventilation openings at cylinder valve level shall be provided in the side wall, equally sized, spaced at 180° (3.2 sq. cm/kg) of stored fuel capacity and not less than a total free area of 10 square inches (64.5 sq. cm).
  - b. Ventilation opening(s) must be provided at floor level and shall have a total free area of not less than ½ square inches (3.2 sq. cm/kg) of stored fuel capacity and not less than a total of 10 square inches (64.5 sq. cm). If ventilation openings at floor level are in a side wall, there must be at least two openings. The bottom of the openings must be at floor level and the upper edge can't be more than 5" (127 mm) above the floor. The openings must be equally sized, spaced at 180° (3.14 rad) and unobstructed.
  - c. Every opening must have minimum dimensions to permit the entrance of a 1/8" (3.2 mm) diameter rod.
- 3) Cylinder valves must be readily accessible for hand operation. A door on the enclosure to gain access to the cylinder valves is acceptable, provided it is not-locking and can be opened without the use of tools.
- 4) There must be a minimum clearance of 2" (50.8 mm) between the lower surface of the floor of the LP gas supply cylinder enclosure and the ground.
- 5) The design of the enclosure must be such that:
  - d. The LP gas supply cylinder(s) can be connected disconnected and the connections inspected and tested outside the cylinder enclosure.
  - e. Those connections which could be disturbed when installing the cylinder(s) in the enclosure can be leak tested inside the enclosure.
  - f. Be certain to mount or set the LP gas cylinder on a flat stable surface and retain it to prevent it from tipping.

B. Purge the gas supply line of any trapped air prior to the first firing of the Fire Ring.



**H. OPERATING INSTRUCTIONS**

Inspect the Fire Ring before use. If there is any evidence of damage, it must be replaced before operating.

After completing the gas line installation, there will be ambient air in the Fire Ring and new installed gas line. When first lighting the Fire Ring, it will take a few minutes to purge out all the trapped air. Subsequent lighting of the Fire Ring will not require such purging.

**Note: Never allow the ON/OFF valve to remain in the open position without placing a burning match on top of the Fire Ring gas outlet holes First!**

<b>For Your Safety, Read Before Lighting</b>	
<b>Warning!</b>	
If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury and /or loss of life.	
A. Light fire rings only by hand. When lighting Fire Rings, these instructions must be followed exactly.	C. Use only your hand to turn the gas control knob or valve. Never use tools. If the valve will not turn by hand, don't try to repair it, call a qualified service technician. Forced or attempted repair may result in a fire or explosion.
B. <b>Before lighting</b> – smell all around the fire ring for gas leakage. Be sure to smell the base of the fire ring pit, because some gas is heavier than air and will settle to the bottom.	D. Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance, and to replace any part which has been under water.
<b>What to do if you smell gas:</b>	
<ul style="list-style-type: none"><li>✓ Do not try to light any appliance</li><li>✓ Do not touch any electrical switch; do not use any phone in your building</li><li>✓ Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.</li><li>✓ If you cannot reach your gas supplier, call the fire department.</li></ul>	
<b><u>LIGHTING INSTRUCTIONS</u></b>	
1. Stop! Read safety information above.	3. If the Fire Ring does not light before the match goes out, immediately turn the gas valve to "OFF".
2. Place a burning match on top of the Fire Ring (gas exit holes). <b>DO NOT HOLD MATCH WITH YOUR HAND!</b> For natural gas, turn on the ON/OFF gas valve approximately ¼ on position, for LP gas; turn on the LP tank counterclockwise  all the way, and then turn on the ON/OFF valve slowly at the Fire Ring.	4. Wait at least five minutes to clear out any gas. Then smell for gas, including base of the Fire Ring. If you smell gas, <b>STOP!</b> Follow the safety information above. If no gas is present, then repeat step 2.
<b><u>TO TURN OFF GAS TO FIRE RING</u></b>	
Turn the ON/OFF valve to the "OFF" position at the Fire Ring for natural gas. For LP gas hook-ups turn the ON/OFF valve to the "OFF" position at the Fire Ring and then turn the valve on the LP tank  to the "OFF" position.	



**I. Recommended Materials**

- a. Outdoor barbeque lava rocks
- b. UL tested Ceramic fiber fireplace logs
- c. Fire retardant Vermiculite

River rock is prohibited, and not to be use with Dagan Fire Rings. River rocks when exposed to high temperatures may build up internal gases and explode, causing personal injury.

Beach sand not recommended outdoor Fire Rings. Beach sand (silicon) will retain moisture and promote rust/contamination of carbon steel fire rings.

**DAGAN INDUSTRIES, INC.**  
**OUTDOOR FIRE RINGS LIMITED ONE YEAR WARRANTY**

Dagan Industries, Inc. Fire Ring(s) product is thoroughly inspected before leaving the factory. It is warranted to be free of defects in workmanship and materials under normal use for one (1) year from date of original purchase. Should any trouble develop during the one year period, you must call the factory, which will at that time determine if you should send back the items for inspection (do not return any merchandise without a R.G.A. Number). If inspection reveals a factory defect, then at our option we will repair or replace at no charge and Dagan Industries will pay for freight charges. This warranty is subject to the conditions, exclusions and limitations described below.

This warranty applies only to the original owner of the Product and is non-transferable. Dagan Industries, Inc., obligation under this warranty does not extend to damages resulting from (1) assembly, operation or maintenance of the Product not in accordance with the Installation/Assembly instructions, Operating instructions; (2) Installation or use which does not comply with local building codes and ordinances; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unauthorized repairs; (4) use of fuels other than those specified in the Operating Instructions; (5) installation or use of components not supplied with the Product or any other components not expressly authorized and approved in writing by Dagan Industries, Inc. Any of the circumstances described in the previous sentence voids this warranty. This warranty is void if the Product or any component has been removed, repaired or replaced before Dagan Industries, Inc. has been afforded a reasonable opportunity to inspect the Product.

This warranty is limited to the replacement or repair of defective components or workmanship and Dagan Industries, Inc., may fully discharge its obligation under this warranty by repairing or replacing, at its discretion, the defective components. Dagan Industries, Inc., will provide replacement parts at no charge and will pay reasonable and necessary labor and freight cost related to replacing or repairing defective components under this warranty. The maximum amount recoverable under this warranty is limited to the purchase price of the Product and, if Dagan Industries, Inc. is unable to provide replacement or repair in an expedient and cost-effective manner, Dagan Industries, Inc. may discharge all obligations under this warranty by refunding the purchase price of the Product.

EXCEPT TO THE EXTENT PROVIDED BY LAW, DAGAN INDUSTRIES, INC. MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY EXPRESSED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO THE DURATION OF THE WARRANTY SPECIFIED ABOVE. IN NO EVENT SHALL DAGAN INDUSTRIES, INC. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY DEFECTS IN THE PRODUCT.

To obtain service under this warranty, you must:

1. Send written notice of the claimed condition to: Dagan Industries, Inc. 15540 Roxford St. Sylmar, CA 91342
2. Affirm, you are the original purchaser of the Product.
3. Provide Dagan Industries, Inc. the opportunity to investigate the claim.
4. Obtain, Dagan Industries, Inc. consent to any warranty work before the work is done.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty may last. So the above limitations may not apply to you.