ANSI

INSTALLATION AND OPERATION GUIDE FOR
HARGROVE VENTED GAS LOGS

Double Stack Burner with COOL MOUNT MHE Variable Flame Valve (1F*CMT)

NATIONAL FIREPLACE INSTITUTE NFI CERTIFIED www.nficertified.org

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.

DESIGN CERTIFIED to ANSI Z21.60/CGA 2.26 Vented Decorative Appliance for Installation in Solid-Fuel Burning Fireplaces.

PFS® C US

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

NOTE: **ADEQUATE FIREPLACE VENTILATION IS REQUIRED FOR SAFETY.**
READ INSTRUCTIONS FULLY BEFORE INSTALLING OR OPERATING.
INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.
CONSUMER: RETAIN THIS MANUAL 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.

WHAT TO DO IF YOU SMELL GAS

1. **Open a window.**
2. **Do not try to light any appliance.**
3. **Do not touch any electrical switch; do not use the phone in your building.**
4. **Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.**
5. **If you cannot reach your gas supplier, call the fire department.**

FOR YOUR SAFETY

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

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

NOTE: **This appliance is only for use with the type of gas indicated on the rating plate.**

Solid fuels shall not be burned in a fireplace where a decorative appliance is installed.

This Hargrove vented gas log set is to be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible material. The installation, including provisions for combustion and ventilation air must conform to the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the CSA B149.1, Natural Gas and Propane Installation Code*, and applicable local building code. A damper clamp is included to maintain the minimum permanent vent opening and to prevent full closure of the damper blade. The gas log set must be burned with the **damper completely open** **(In the Commonwealth of Massachusetts the damper must either be welded in the fully open position or completely removed)** and the chimney free of any obstructions or restrictions.

The realistic yellow flame produces carbon monoxide and soot. Under normal conditions, these products are exhausted up the chimney. If fumes or soot, from the gas burning, are evident in the room when the damper is fully open it indicates that the fireplace draft is defective. Do not operate your gas log set until the fireplace draft is corrected. **It is the homeowners responsibility to assure their fireplace has adequate draft.**

IMPORTANT PRE-INSTALLATION AND FIREPLACE SAFETY INFORMATION

WARNING: This appliance assembly contains burner orifices specifically for the input gas and Btu rating. Modifying or failure to use the factory orifice may cause property damage, personal injury or loss of life.

1. It is recommended that adults be present when this gas appliance is operating. It is recommended that this unit is not left burning when unattended or while anyone is sleeping.

2. Do not use a natural gas set for propane or a propane set for natural gas. If the gas type is not correct. DO NOT INSTALL. Contact your dealer for immediate assistance.

3. There are many different local codes for gas fire logs. The installation and the provision for combustion and ventilation air must conform to local codes and, or in the absence of local codes, with the National Fuel Gas Code ANSI Z223.1 – (most current revision).

4. Gas log sets must be installed by personnel qualified for installing gas appliances.

5. This appliance must be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible materials. Solid fuels are not to be burned in a fireplace where a decorative appliance has been installed.

6. A permanent free opening must be provided by either the fireplace chimney or chimney damper to vent flue gasses. Any chimney damper must be fixed in a manner, which will maintain the permanent free opening at all times. Use Table II to determine the minimum permanent free opening based on chimney height and the appliance Btu input rating. Refer to the Damper Stop section for additional directions.

7. The minimum free opening is based only on two factors; chimney height and Btu input rating. Many other factors affect the fireplace drafting. It is the homeowner's responsibility to assure their fireplace has adequate draft. If fumes or soot from the gas burning are evident in the room when the damper is fully open, it indicates that the fireplace draft is defective. Do not operate your gas log set until the fireplace draft is corrected. Consult your fireplace specialist.

8. A fireplace screen must be in place when the appliance is operating and, unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.

9. When glass fireplace doors are used, always operate gas log set with the doors fully open to allow for proper combustion air and to keep control valves from overheating.

10. The minimum inlet supply pressure for input adjustment is 5.0 inches (natural gas) 11 inches (propane gas) in water column. The maximum inlet supply pressure is 10.5 inches (natural gas) 13 inches (propane gas) in water column.

11. The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures more than 1/2 psig (3.5kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual valve during pressure testing equal to or less than 1/2 psig (3.5kPa).

12. The fireplace chimney or venting system should be examined annually and cleaned as required by a qualified agency.

13. After burning for several hours, the logs become fragile and should not be handled. Knocking or rubbing logs can cause concrete to crumble and is not covered under the warranty.

14. To clean the logs, use a soft dry paintbrush for periodic dusting of the gas fire logs.

15. To clean the burner, shut off the gas supply, remove the burner pan media, and vacuum the burner ports. After cleaning, replace burner pan media and light the pilot according to the lighting instructions.

SPECIFICATIONS AND DIMENSIONS

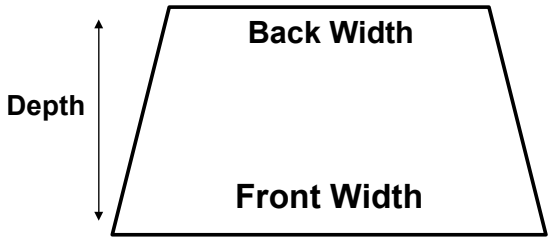


TABLE I
Minimum Fireplace Dimensions

SET SIZE	FRONT WIDTH	REAR WIDTH*	DEPTH	HEIGHT	BTU (NG)	BTU (LP)
18”	28”	16”	15”	18”	75,000	70,000
24”	32”	20”	15”	18”	80,000	75,000
30”	38”	24”	15”	18”	85,000	80,000
36”	44”	28”	15”	18”	90,000	85,000

***At depth listed**

TABLE II
Free opening area of chimney damper for venting combustion products from decorative appliances for installation in vented fireplaces. Minimum size of chimney flue is 8” diameter.

Minimum Permanent Free Opening, Square Inches

Chimney Height, Feet	29	39	51	64
	Appliance Input Rating, Btu Per Hour (w)			
6	34,000	46,400	62,400	80,000
8	37,000	50,400	68,000	86,000
10	40,400	55,800	74,400	96,400
15	44,600	62,400	84,000	108,800
25	50,400	68,400	94,000	122,200
30	55,200	76,800	105,800	138,600

PRE-INSTALLATION CHECKLIST

FIREPLACE AND CHIMNEY

- Fireplace is approved for solid-fuel burning and made of non-combustible materials.
- Operational damper with a chimney free of any obstruction or restriction.
- Fireplace has proper draft to accommodate decorative appliance.
- Fireplace is free from debris or ash.
- Fireplace is free of obstruction such as log grate, log lighter, etc.; that would prohibit the installation of the log set.
- If the floor is recessed or glass doors are installed on the fireplace, the appliance may need to be elevated to ensure proper air flow.
- Consult table to determine if the set is properly sized for the installation in the fireplace.

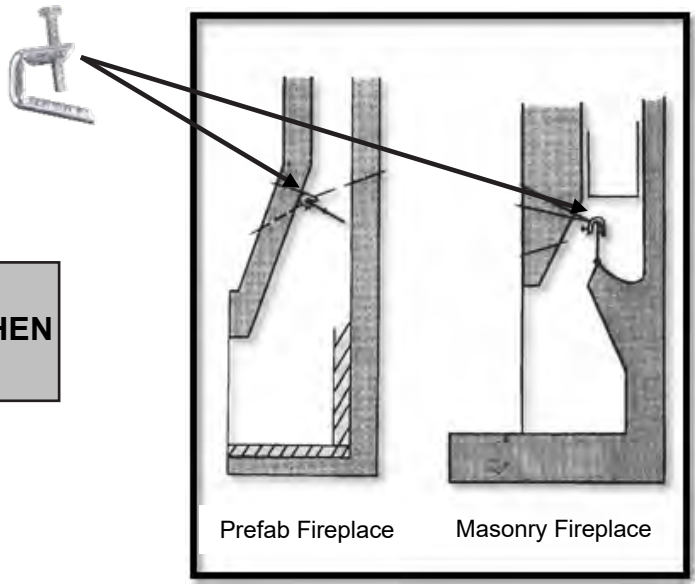
GAS LINE

- Ensure gas line is in safe condition and that it is adequate for the installation.
- Check gas line sizing to ensure it is properly sized for the appliance.
- For ease of installation gas line should be located on the right side of the fireplace when possible.
- Turn the gas supply line off and you are ready to begin burner installation.

DAMPER STOP INSTALLATION

Attach the damper stop clamp to the fireplace damper blade. Position the clamp to prevent full closure of the fireplace damper blade.

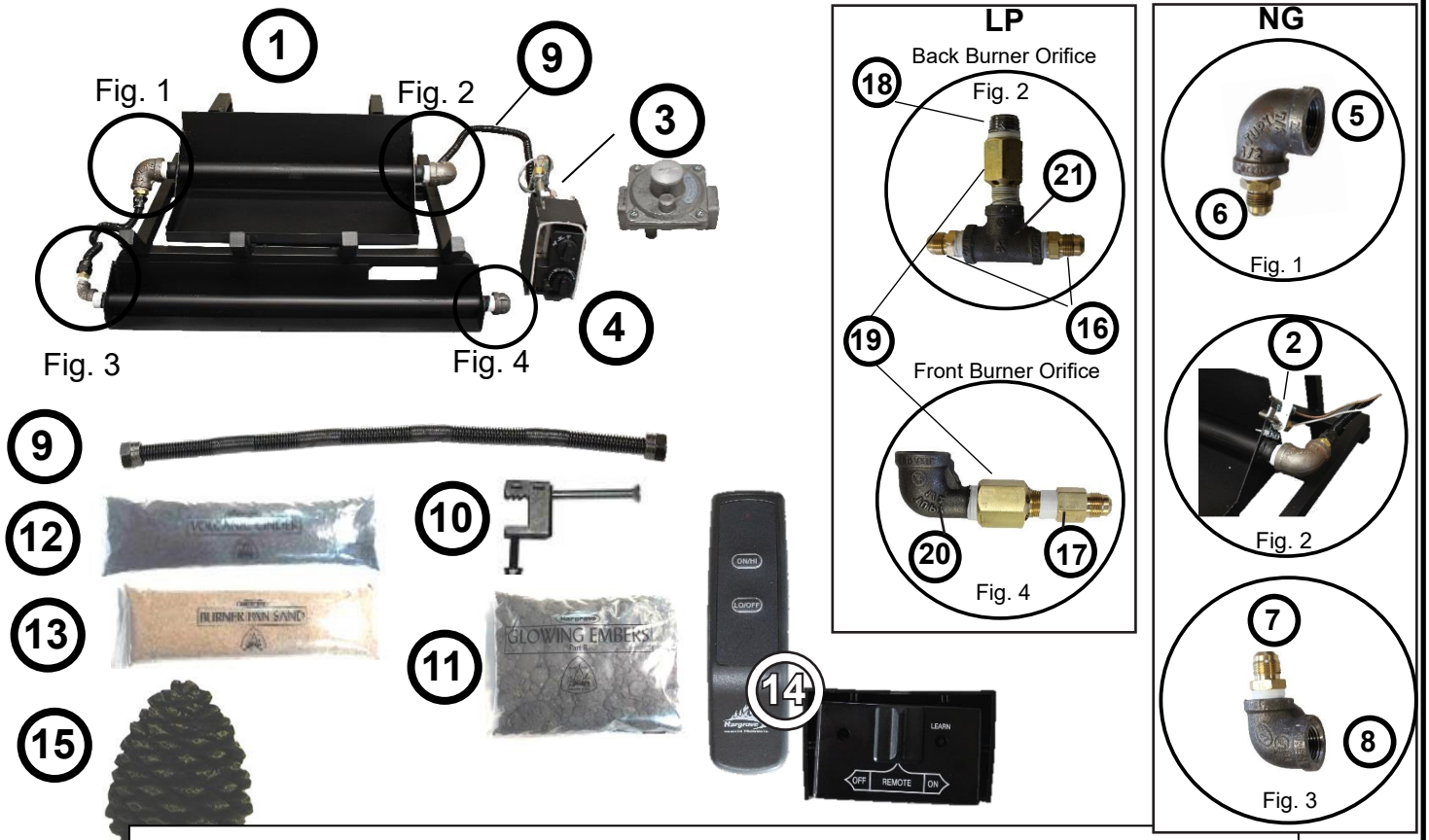
If the damper stop provided does not fit, the installer shall install a permanent damper stop that will keep the damper open to a minimum opening as determined on page 3 Table II of the instructions.



CAUTION
THE DAMPER MUST BE FULLY OPEN WHEN OPERATING THE GAS LOGS!

IMPORTANT: In the Commonwealth of Massachusetts the damper must be either permanently welded in the fully open position or completely removed.

BURNER PARTS LIST



*Photos not to scale

ITEM	PART NUMBER	DESCRIPTION
1	DG	Double Stack Burner
2	RSTPB-18	Pilot Assembly (NG)
	RSTPB-18LP	Pilot Assembly (LP)
3	REG 4	4” Regulator (NG)
	REG 10	10” Regulator (LP)
4	MHC-C	Gas Control Valve
5	EL-12-8	3/4” to 1/2” Reducing Elbow
6	48-8-6	12” Male to 3/8 Flare End
7	48-66-31	3/8” Male to Flare End Orifice
8	EL-8-6	1/2” to 3/8” Reducing Elbow
9	FCNW-18	Non-Whistling Flex Connector
10	DS	Damper Stop
11	RW	Glowing Embers
12	VC	Volcanic Cinder
13	SD-10	Sand
14	RC-S6V-MX	Variable Flame Remote Kit
15	1215CL	Half-Pinecone
16	48-6-6	3/8” Male to Flare End
17	46-6-6	3/8” Female to Flare End
18	N-8x1	1/2” Pipe Nipple 1 Inch Long
19	AM-55	Air Mixer (LP)
20	SE-8	1/2” Street Elbow
21	T-6	3/8” Pipe T

BURNER AND GRATE POSITIONING

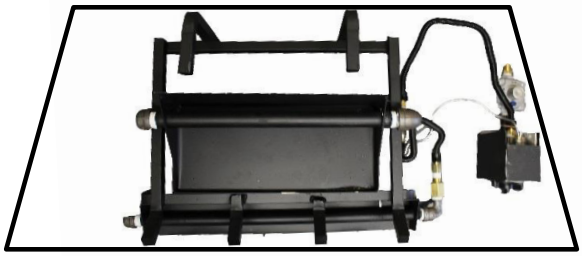
Check that the gas is turned off.
Center the burner on the fireplace floor. The burner should be located under the flue opening.

The grate should be placed over the burner so the front legs of the grate are just in front of the burner pipe. Once the final positioning is established, mark the burner and grate position on the floor of the fireplace for reference points.

Remove the grate and proceed with the gas connection.

NOTE: If the floor is recessed or glass doors are installed, burner must be elevated with firebrick or equivalent to ensure proper air flow over valve systems.

BURNER POSITION
(for burner-mounted valves)



GAS CONNECTION

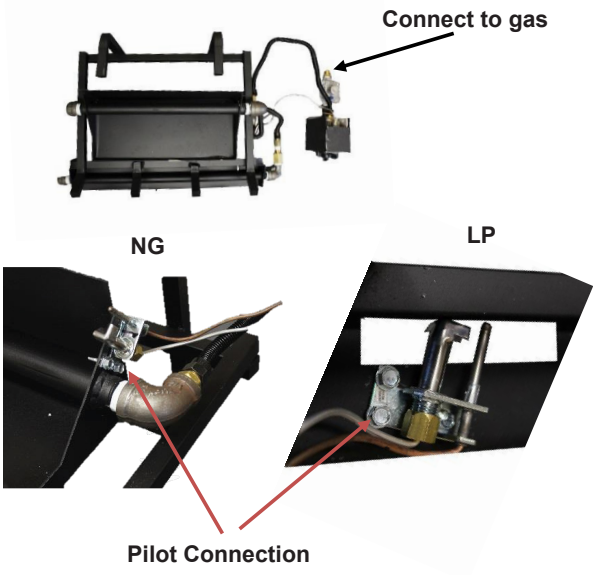
Check that the gas is turned off.
Any remote kits should be installed on the burner at this point, refer to instructions with kit for that installation.

The gas supply line should be ½" inside diameter (ID) up to 30 feet and ¾" for longer distance.

Use one of the non-whistling flex connectors provided in the accessory kit to connect the gas valve to the burner pan and install the pilot on the back burner pan for NG and the back of the front burner pan for LP using the supplied screws.
Use the other non-whistling flex connector to connect the gas valve to the gas supply

Turn the gas supply on and check connection for leaks using a soapy solution.

NOTE: At this point install and program any remote kits, refer to the instructions provided with those kits for installation.



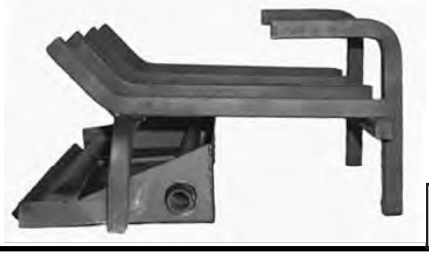
IMPORTANT: The minimum inlet supply pressure for the purpose of input adjustment is 5.0 inches (natural gas) 11 inches (propane gas) in water column.
The maximum inlet supply pressure is 10.5 inches (natural gas) 13 inches (propane gas) in water column.

GRATE PLACEMENT

Place the Pedestal Grate over the burner using the reference marks made on the fireplace floor.

The grate should be placed over the burner so the front legs of the grate are just in front of the burner pipe.

GRATE POSITION



LIGHTING THE PILOT

Read the lighting instruction plate attached to the gas valve or located at the end of these instructions.

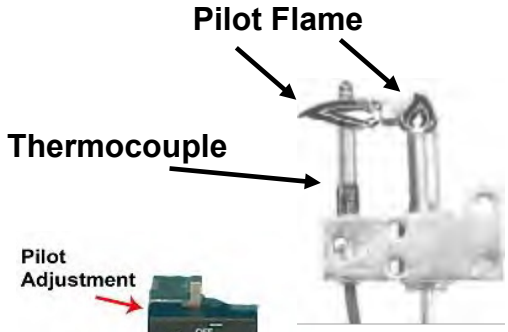
Push in gas control knob slightly and turn clockwise until the knob will not turn any longer. This is the "OFF" position. The word off should be at the 12 o'clock position on the control knob.

Slightly push in on pilot knob and turn valve to the "PILOT" position. Push the knob in all the way and hold in. Immediately light the pilot. *(The pilot is located on the back right corner of the burner pan*) Continue to hold the knob for at least 30 seconds after the pilot is lit. Release the knob and the pilot should remain lit.

Turn the burner to the "ON", the pilot flame should ignite the main burner within 4 seconds.

Carefully check the connections for leaks using a soapy solution.

NOTE: If the pilot will not stay lit after several tries turn the control off and call a technician.



RSTPB-18

MHC-C

IMPORTANT: These controls are factory preset and will not normally require additional adjustment of the pilot flame. If field adjustment of the pilot flame is required, adjust using the pilot adjustment screw. The 90 degree pilot should produce 2 flames about 1-1 ½" in 2 directions. One flame should come towards the front of the firebox to ignite the burner and the other, wrapping around the thermocouple to ensure proper valve operation.

BURNER MEDIA

Fill the burner pan with sand (NG) or vermiculite (LP). The media level should be sloped evenly with the sides of the burner pan. Under filling will cause uneven flame.

Glowing Embers (Rockwool) are placed over the media. For best results pinch off pieces of the rockwool the size of a dime and feather it out

Test fire the burner once again for flame distribution, media can be altered to achieve desired flame appearance.

REMOTE ATTACHMENT

WIRING INSTRUCTION

1. **Connect the Black 18 gage stranded wire with the 1/4" female terminal from the receiver to the 1/4" male terminal on the valve servomotor.**
2. **Connect the Black 18 gage stranded wire with the 7/32" female terminal from the receiver to the 7/32" male terminal on the valve servomotor.**
3. **After receiver wires are connected to the valve servo motor terminals make sure the receiver shield is located over the receiver and then locate the receiver in an area that will not exceed the 120° F.**
4. **Always mount the receiver to side of the valve kit away from the fire.**

REMOTE ATTACHMENT

WARNING: DO NOT CONNECT REMOTE RECEIVER DIRECTLY TO 110120VAC POWER. THIS WILL BURN OUT THE RECEIVER. FOLLOW INSTRUCTIONS FROM MANUFACTURER OF GAS VALVE FOR CORRECT WIRING PROCEDURES. IMPROPER INSTALLATION OF ELECTRIC COMPONENTS CAN CAUSE DAMAGE TO GAS VALVE AND REMOTE RECEIVER.

TRANSMITTER

The transmitter has ON/HI and LO/OFF functions that are activated by pressing either button on the face of the transmitter. When a button on the transmitter is pressed, a signal light on the transmitter illuminates to verify that a signal is being sent. Upon initial use, there may be a delay of three seconds before the remote receiver will respond to the transmitter. This is part of the system's design. If the signal light does not illuminate, check the position of the transmitter's battery.

RECEIVER

- With the slide switch in the REMOTE position, the system will only operate if the remote receiver receives commands from the transmitter. Upon initial use or after an extended period of no use, the ON/HI button may have to be pressed for up to three seconds before activating servomotor. If the system does not respond to the transmitter on initial use, see LEARNING TRANSMITTER TO RECEIVER section.
- With the slide in the OFF position, the system is off.
- Move slide switch to ON position for manual operation. Manual ON will move the servo motor to ON/HI position and stop motor after five seconds. Manual OFF will move the servo motor to LO/OFF position and stop after five seconds.
- It is suggested that the slide switch be placed in the OFF position if you will be away from your home for an extended period of time. Placing the slide switch in the OFF position also functions as a safety "lock out" by both turning the system OFF and rendering the transmitter inoperative.

IMPORTANT: Keep receiver in a cool location. Battery life is also significantly shortened if batteries are exposed to high temperatures. Make sure the remote receiver switch is in the OFF position. For best results it is recommended that 18 gauge stranded wires should be used to make connections and no longer than 20 feet.

NOTE: The remote receiver will only respond to the transmitter when the 3position slide button on the remote receiver is in the REMOTE position. The remote receiver houses the microprocessor that responds to commands from the transmitter to control system operation.

Each transmitter uses a unique security code. It will be necessary to press the LEARN button on the receiver to accept the transmitter security code upon initial use, if batteries are replaced, or if a replacement transmitter is purchased from your dealer or the factory. In order for the receiver to accept the transmitter security code, be sure the slide button on the receiver is in the REMOTE position; the receiver will not LEARN if the slide switch is in the ON or OFF position. The LEARN button in located on the front face of the receiver; inside the small hole labeled LEARN. Using a small screwdriver or end of a paperclip gently press the black LEARN button inside the hole and release the button. When you release the LEARN button the receiver will emit a “beep”. After the receiver emits the beep press any button on the transmitter and release. The receiver will emit several beeps indicating that the transmitter’s code has been accepted into the receiver. The microprocessor that controls the security code matching procedure is controlled by a timing function. If you are unsuccessful in matching the security code on the first attempt, wait 1 - 2 minutes before trying again--this delay allows the microprocessor to reset its timer circuitry--and try up to two or three more times.

GAS VALVE LOCATION - Cool-Mount Valves

The cool mount setup provides flexibility in the location of the gas valve. It can be oriented vertically or horizontally and is made to be located as far away from the burner as possible.

NOTE: To conceal the valve place up against the refractory brick panels, and for even better effect, paint all the fireplace panels black.

VERTICAL

HORIZONTAL

LOG INSTALLATION

Install the logs based on the installation diagram provided with the logs set, as stated in step 7, for Radiant Heat logs it will be necessary to remove the grate and install the radiant heat bracket (packaged with Radiant Heat logs) onto the back of the burner pan.

Once the logs have all been place you can readjust the grate positioning to get desired flame pattern. When adjusting grate position be careful as the **GRATE WILL BE HOT**, it might be necessary to let it cool between adjustments.

RECOMMENDED BURN-IN PERIOD: Hargrove gas logs are made of special refractory materials, which withstand high temperatures. One characteristic of this material is retention of moisture. For this reason, we recommend burning the logs for only fifteen minutes during the first burning. After allowing the logs to cool for at least one hour, the set can be burned for any length of time.

LIMITED LIFETIME WARRANTY: Hargrove gas logs carry a limited lifetime warranty against breakage in the original fireplace. Warranty does not include labor. This warranty is void if excessive handling after burning causes breakage. All accessories and metal parts carry a two year limited warranty in the original fireplace. Items will be replaced during this period for the cost of shipping.

VOLCANIC CINDER PLACEMENT

The black volcanic cinders are used to cover the fireplace floor, fittings and tubing around the burner system. Although not functional, the back cinders act as a picture frame to show off the glowing embers and yellow flame.

FOR YOUR SAFETY: 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 of the system or gas control, which has been underwater

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot, which must be lit by hand. When lighting the pilot, follow these instructions exactly.

B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

1. Do not try to light any appliance.
2. Do not touch any electric switch; do not use any phone in your building.
3. Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
4. If you cannot reach your gas supplier, call the fire department

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it. Call a qualified service technician.

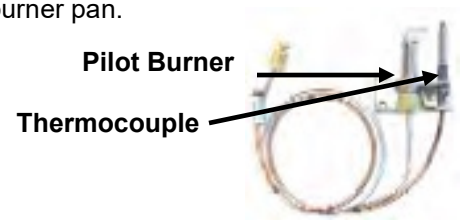
D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control, which has been underwater

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Push in gas control knob slightly and turn clockwise to **"OFF".**

NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

3. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas, go to next step.
4. Find pilot – follow metal tube from the gas control behind the burner pan.



5. Turn knob on gas control counterclockwise to **"PILOT"**.
6. Push in control knob all the way and hold in. Immediately light the pilot with a match. Continue to hold the control knob in for about one minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 3 – 7.

- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob to **"OFF"** and call your service technician or gas supplier.

7. Turn gas control knob counterclockwise to **"ON"**.

TO TURN OFF GAS APPLIANCE

1. Turn knob clockwise from **"ON"** position to the **"PILOT"** position. Push in the gas control knob slightly and turn clockwise to **"OFF"**. Do not force knob.

LIMITED WARRANTY

Refractory and Ceramic Fiber Logs

Hargrove gas logs carry a limited lifetime warranty against any manufactured defect or breakage. This warranty does not cover breakage caused by excessive handling once installed and fired. Contact Customer Service for warranty claim details.

Burner & Grate

If the burner or grate fails due to deterioration within five (5) years of the verified purchase date, contact Customer Service for warranty claim details.

Valves, Remote Controls, & Switching Devices

All valves, remote controls and switching devices are warranted against manufacturing defects which appear within two (2) years of the verified purchase date. Warranty does not cover products that have been damaged by misuse from overheating. Before any product is returned a Return Goods Authorization number (RGA) must be issued by the Customer Service Department. All returns must be accompanied by an explanation of the problem and all necessary parts.

All Other Parts

If any assembled part should fail to operate or be found defective which appear within two years of the verified purchase date, contact Customer Service for warranty claim details

Buyer shall notify Customer Service of any defect covered by this warranty no later than thirty (30) days after defect is discovered. Failure to provide notice within thirty (30) days shall void the limited warranty.

WHAT IS NOT COVERED

1. Removal and reinstallation costs.
2. Labor costs for replacement or repairs.
3. Transportation or shipping cost.
4. The cost of a service call to diagnose trouble.
5. Painted Surfaces.
6. Damage or defect caused by improper installation, accident, misuse, abuse, alteration, or authorized service technician.
7. Replacement of burner or combustion chamber resulting from improper storage of the appliance.

LIMITATIONS AND EXCLUSIONS

1. No one has authority to add to or vary this limited warranty, or to create for Hargrove Manufacturing Corporation any other obligation or liability in connection with this appliance.
2. Any implied warranty applicable to this appliance is limited in duration to the same period of time as this written warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
3. HARGROVE MANUFACTURING CORPORATION WILL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL OR CONTINGENT DAMAGES YOU MIGHT SUFFER AS A RESULT OF A CLAIM UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you.
4. This warranty applies only to the original purchaser and may not be transferred or assigned.
5. If you cannot verity the purchase date of the appliance, the warranty period will begin on the date of which the appliance was manufactured.
6. Replacement or repair parts are warranted for the remaining period of the original part warranty. Warranty parts must be obtained through authorized dealers of this product who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.
7. The maximum liability of Hargrove Mfg. Corp. in connection with this limited warranty shall not in any case exceed the contract price paid for the product claimed to be defective or unsuitable.
8. Purchaser or user agrees to hold Hargrove Mfg. Corp. harmless from all claims by the buyer because of injury or damage to an ultimate user or other person caused by the product sold herein by the seller to the buyer, whether the injury or damage results from the assembly, installation, operation, shipment, storage, or manufacture of this product. Hargrove Mfg. Corp. makes no warranties, expressed or implied, other than those expressly stated herein.

YOUR DUTIES

This appliance must be installed by a qualified installer, operated and maintained in accordance with all applicable codes and the instructions furnished with the appliance. You must provide a receipt verifying the purchase date of the appliance when making a warranty claim with the dealer from which the appliance was purchased.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

CONTACT INFO: Hargrove Gas Logs
Wellston Park Rd. – Sand Springs, OK 74063
Toll Free – (800)725-4166
www.hargrovegaslogs.com

Customer Service hours: 8:00am to 4:00pm CST