



The new name in flame

VENTED DECORATIVE GAS LOG HEATER OWNER'S OPERATION AND INSTALLATION MANUAL



HARDWOOD ORIGINAL

HCA-18-RFN
HCA-24-RFN
HCA-18-RFP
HCA-24-RFP

CALIFORNIA MAPLE

HCM-18-RFN
HCM-24-RFN
HCM-18-RFP
HCM-24-RFP

KENTUCKY ELM

HKE-18-RFN
HKE-24-RFN
HKE-18-RFP
HKE-24-RFP

⚠ 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 appliance.
- **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.

INSTALLER: Leave this manual with the appliance.

CONSUMER: Retain this manual for future reference.

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SAFETY

⚠ WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

⚠ WARNING: This appliance is for installation only in a solid-fuel burning masonry or UL127 factory-built fireplace, constructed of noncombustible material and connected to a working flue. (See page 6 for minimum flue opening.)

⚠ WARNING: This is a gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to the *National Fuel Gas Codes, ANSI Z233.1/NFPA 54, Air for Combustion and Ventilation*.

This appliance may be installed in an aftermarket,* permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

* Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

⚠ WARNING: This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

⚠ WARNING: Keep flue open when operating unit.

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate or service this log set. Improper use of this log set can cause serious injury or death from burns, fire, explosion, electrical shock and carbon monoxide poisoning.

SAFETY

Continued

⚠ DANGER: Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness or nausea. If you have these signs, the log set may not be working properly. **Get fresh air at once!** Have log set serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol and those at high altitudes.

Natural & LP Gas: Natural & LP gas are odorless. An odor-making agent is added to the gas. The odor helps you detect a gas leak. However, the odor added to the gas can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this log set.

⚠ WARNING: Any change to this log set or its controls can be dangerous.

⚠ WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this appliance.

⚠ WARNING: This appliance is equipped for either natural gas or propane/LP gas but not both. Gas type is indicated on the rating plate. Field conversion is not permitted.

⚠ WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

⚠ WARNING: Installed decorative glass door enclosures must be fully opened when operating this gas appliance.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

Do not place clothing or other flammable material on or near the appliance. Never place any objects on the heater.

Heater assembly becomes very hot when running heater. Keep children and adults away from hot surface to avoid burns or clothing ignition. Heater will remain hot for a time after shutdown. Allow surface to cool before touching.

Carefully supervise young children when they are in the room with appliance.

You must operate this heater with a fireplace screen in place. Make sure fireplace screen is closed before running heater.

Keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Children and adults should be alerted to the hazard of high temperature and should stay away to avoid burns or clothing ignition.

1. This appliance, as supplied, is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

SAFETY

Continued

2. Do not place propane/LP supply tank(s) inside the structure. Locate propane/LP supply tank(s) outdoors (propane/LP units only).
3. If you smell gas
 - shut off gas supply
 - 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
4. Never install the log set
 - in a recreational vehicle
 - where curtains, furniture, clothing or other flammable objects are less than 42" from the front, top or sides of the log set.
 - in high traffic areas
 - in windy or drafty areas
5. Before installing in a solid fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner. Creosote will ignite if highly heated. Inspect chimney flue for damage. If damaged, repair flue before operating appliance.
6. If fireplace has glass doors, never operate with glass doors closed. If you operate heater with doors closed, heat buildup inside fireplace will cause glass to burst. Also if fireplace opening has vents at the bottom, you must open the vents before operating heater.
7. To reduce the creation of soot, follow the instructions in Cleaning and Maintenance, page 12.
8. Do not run heater
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
9. Do not burn solid fuel in the fireplace after installing the log set. Do not use this log set to cook food or burn paper or other objects.
10. Log set becomes very hot when in use. Keep children and adults away from hot surface to avoid burns or clothing ignition. Log set will remain hot for a time after shutdown. Allow surface to cool before touching.
11. Carefully supervise young children when they are in the room with the log set.
12. Do not use heater if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
13. Turn log set off and let cool before servicing, installing or repairing. Only a qualified service person should install, service or repair log set.
14. Provide adequate clearances around air openings.

LOCAL CODES

Install and use log set with care. Follow all local codes. In the absence of local codes, use the latest edition of the *National Fuel Gas Code ANSI Z223.1/NFPA 54**

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018
National Fire Protection Association, Inc.
Battery march park
Quincy, MA 02269

Hardwood Series gas log sets are certified by PFS Corporation to Z21.60/CGA 2.26 as a vented decorative gas log set.

PRODUCT IDENTIFICATION

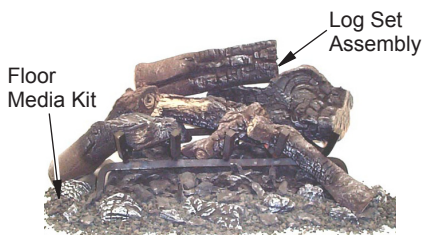


Figure 1 - Product Identification

UNPACKING

⚠ CAUTION: Do not remove data plates from grate assembly. Data plates contain important warranty and safety information.

1. Remove log set by lifting tray handles. Set tray on floor.
2. Remove contents from side compartments (see Figure 2).
3. Remove log set from tray by cutting zip ties.
4. Check heater for any shipping damage. If heater is damaged call FMI PRODUCTS, LLC at 1-866-328-4537 for replacement parts before returning to dealer.

Carton Tray
with Handles

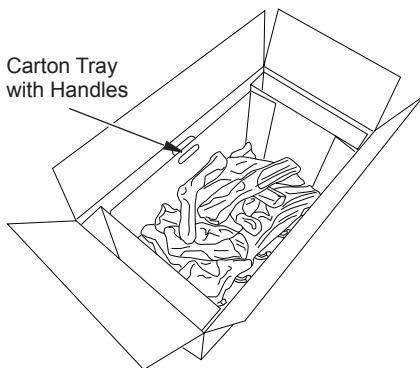


Figure 1 - Log Set in Packing Box

GENERAL INFORMATION

These vented decorative gas log sets incorporate uni-body constructed ceramic fiber logs and ember bed burner which glow realistically when the appliance is in operation.

These units are remote controlled-decorative rated and are equipped with millivolt gas valves. The remote control allows for flame height adjustment, timer and on/off control.

A spark ignition system (piezo) allows the gas pilot to be lit without the use of matches or batteries and permits operation of the heater during a power outage.

These log sets come with a Floor Media Kit included. This kit is used to blend the floor and the log set together for a more natural look.

INSTALLATION

⚠ WARNING: A qualified service person must install heater. Follow all local codes.

⚠ WARNING: Before installing in a solid fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner. Creosote will ignite if highly heated. A dirty chimney flue may create and distribute soot within the house. Inspect chimney flue for damage. If damaged, repair flue damper before operating appliance.

⚠ CAUTION: This heater creates warm air currents. These currents move heat to wall surfaces next to heater. Installing heater next to vinyl or cloth wall coverings or operating heater where impurities (such as, but not limited to, tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls or cause odors.

⚠ WARNING: Special care is required if you are installing the unit into a sunken fireplace. You must raise the fireplace floor to allow access to gas log controls. This will insure adequate air flow and guard against sooting. Raise the fireplace floor using noncombustible material.

INSTALLATION

Continued

CHECK GAS TYPE

Use the correct gas type (natural or propane/LP) for your unit. If your gas supply is not correct, do not instal in fireplace. Call dealer where you bought the appliance for proper type of appliance.

⚠ WARNING: This appliance is equipped for either natural gas or propane/LP gas but not both. Gas type is indicated on the rating plate. Field conversion is not permitted.

FLUE OPENING SPECIFICATIONS

Note: This vented appliance must be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible material. The fireplace chimney must have a permanent vent opening to outside of not less than 29 square inches or as determined from manufacturer's installation instructions.

LOG SIZING REQUIREMENTS				
LOG SIZE	MINIMUM FIREBOX SIZE			
	HEIGHT	DEPTH	FRONT WIDTH	REAR WIDTH
18"	14"	16"	30"	20"
24"	18"	18"	34"	24"

VENTING SPECIFICATIONS FOR INSTALLATION

The fireplace chimney flue and vent must be drafting properly. To check the vent for proper drafting: Light a tightly rolled newspaper on one end and place it at the inside front edge of the fireplace. Observe the smoke and be sure the vent is properly drawing it up the chimney. If the smoke spills out into the room, extinguish the flame and remove any obstruction until proper venting is achieved.

The chimney flue damper must be fixed open to provide a minimum of 29 square inch flue opening at all times during operation of the log set. A damper clamp can be used to secure the damper (see Accessories, page 18). See the *National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 6.6* for details about minimum flue size.

INSTALLING DAMPER CLAMP

Secure the damper stop clam to the edge of the damper as shown in Figure 2. If for any reason this clamp doesn't work on your fireplace, another suitable clamp or permanent stop must be installed, or the damper blade must be cut or removed.

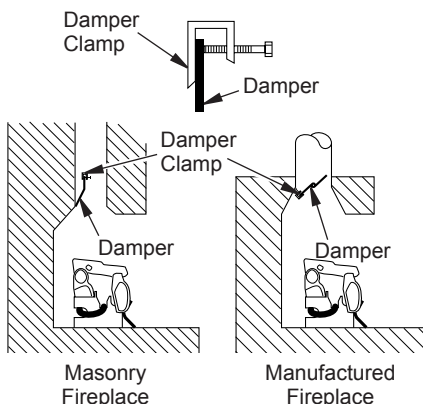


Figure 2 - Attaching Damper Clamp

PLACEMENT OF APPLIANCE

Center the appliance in the fireplace. Make certain the grate front feet sit inside the front edge of the fireplace and that there is adequate clearance around the appliance for access and operation.

CONNECTING TO GAS SUPPLY

⚠ WARNING: A qualified service person must connect heater to gas supply. Follow all local codes.

Installation Items Needed

Before installing heater, make sure you have the items listed below.

- external regulator (propane/LP models only)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve
- test gauge connection
- sediment trap
- tee joint
- pipe wrench

INSTALLATION

Continued

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 3. Pointing the vent down protects it from freezing rain or sleet.

⚠ WARNING: Connecting directly to an unregulated propane/LP tank may cause an explosion.

The appliance gas inlet connection is 3/8" NPT at the regulator, located at the rear of the appliance.

IMPORTANT: Hold appliance regulator with a wrench to prevent movement when connecting to inlet piping.

⚠ CAUTION: Use only new, black iron or steel pipe. Internally-tinned copper tubing may be used in certain areas. Check your local codes. Use pipe of 1/2" diameter or greater to allow proper gas volume to heater. If pipe is too small, undue loss of volume will occur.

Installation must include an equipment shutoff valve, union and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from log set (see Figure 4).

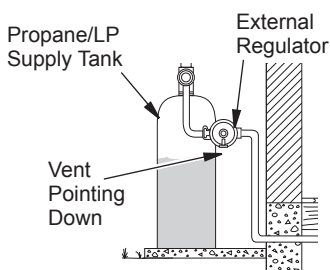


Figure 3 - External Regulator with Vent Pointing Down

IMPORTANT: Install equipment shutoff valve in an accessible location. The equipment shutoff valve is for turning on or shutting off the gas to the appliance.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged heater valves.

⚠ WARNING: Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

Install a sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into heater controls. If sediment trap is not installed or is installed wrong, heater may not run properly.

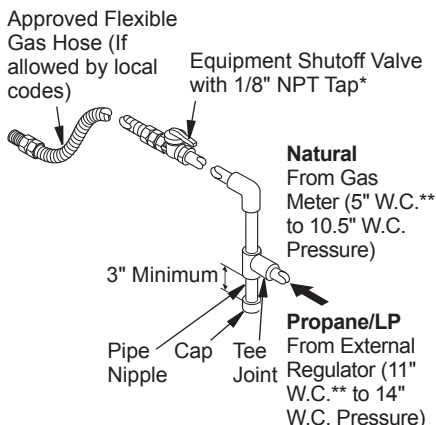


Figure 4 - Gas Connection

* Purchase the optional shutoff valve from your dealer.

** Minimum inlet pressure for purpose of input adjustment.

INSTALLATION

Continued

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections for leaks after installing or servicing. Correct all leaks at once.

⚠ WARNING: Never use an open flame to check for a leak. Apply a noncorrosive leak detection fluid to all joints. Bubbles forming show a leak. Correct all leaks at once.

PRESSURE TESTING GAS SUPPLY PIPING SYSTEM

Test Pressures In Excess Of 1/2 PSIG (3.5 kPa)

1. Disconnect appliance with its appliance main gas valve (control valve) and equipment shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage heater regulator.
2. Cap off open end of gas pipe where equipment shutoff valve was connected.
3. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas or using compressed air.
4. Check all joints of gas supply piping system. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Reconnect heater and equipment shutoff valve to gas supply. Check reconnected fittings for leaks.

Test Pressures Equal To or Less Than 1/2 PSIG (3.5 kPa)

1. Close equipment shutoff valve (see Figure 5).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas or using compressed air.

3. Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP (see Figure 6 or 7). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

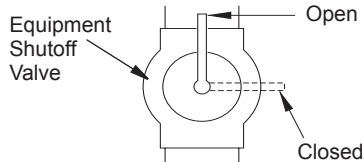


Figure 5 - Equipment Shutoff Valve

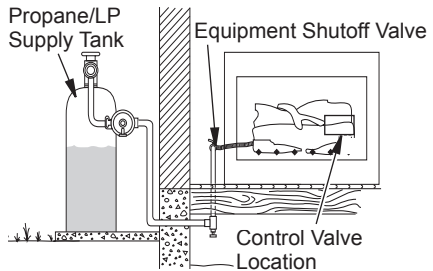


Figure 6 - Checking Gas Joints (Propane/LP Gas Only)

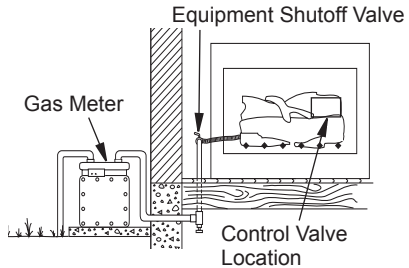


Figure 7 - Checking Gas Joints (Natural Gas Only)

Gas Pressure Check

The appliance regulator controls the burner pressure which should be checked at the pressure test point (1/8" NPT plugged tap) located near the on the control valve identified OUT for the manifold side and IN for inlet pressure. Make sure operating pressures are within the limits shown in Specifications, page 15.

INSTALLATION

Continued

The pressure should be checked with the unit burning and set to High. Replace test point plug or tighten test screw after pressure measurement ensuring no gas leaks.

PLACEMENT OF FLOOR MEDIA

⚠ WARNING: Do not add extra logs or ornaments such as pine cones or vermiculite. Using these added items can cause sooting. Use only the material included in the kits.

⚠ WARNING: Do not place lava rock, embers or fiber log pieces on logs or burners. This may cause sooting. Place floor media material only on the fireplace floor.

1. Place lava rock around base of unit making sure the burner ports and valve access are not blocked (see Figure 8). Retain a small amount of lava rock to be used in step 4.
2. Place ember flake material around front and sides of unit close to (but NOT on) the burner (see Figure 9).



Figure 8 - Placing Lava Rock



Figure 9 - Placing Ember Flake Material

3. Place fiber log pieces randomly on lava rock and ember material around unit (see Figure 10).
4. Use remaining lava rock to blend the floor media together. Your finished effect should resemble Figure 11.

⚠ WARNING: Failure to position the floor media as shown in Figures 8 through 11 or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.



Figure 10 - Placing Fiber Log Pieces



Figure 11 - Floor Media Kits Installed

OPERATION

The RF Millivolt valve control used on these appliances allows you to turn the gas log set on or off; use a timer to automatically operate the log set; increase or decrease flame height, fan speed or timing. An easy-to-read display gives you information about room temperature, set temperature, flame height level, fan speed level and a countdown timer, as well as a low battery indication. Figure 12 shows the location of the controls and indicators for the transmitter (remote) and the receiver (valve).

Note: Fan operations are not applicable to these Hardwood Series.

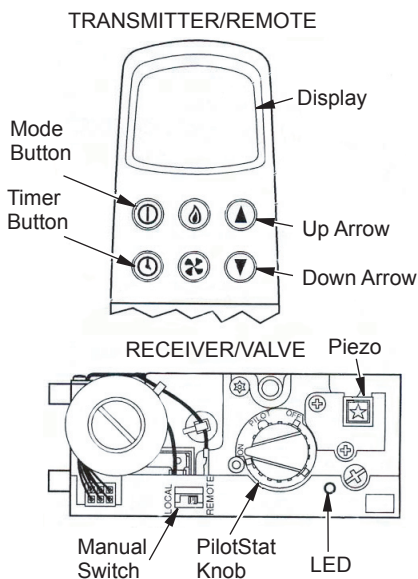


Figure 12 - RF Millivolt Valve Controls with Transmitter/Remote

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: Keep flue open when operating unit.

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 lighted with a piezo ignitor. 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

- Do not try to light any appliance.
- Do not touch any electric 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.

C. Use only your hand to push in or turn 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 technician. Force or attempted repair may result in a fire.

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 under water.






LIGHTING INSTRUCTIONS

NOTICE: During initial operation the appliance will emit a slight odor for an hour or two. This is due to the "burn-in" of the internal paints and lubricants used in manufacturing. For the first few hours, operate the appliance with doors and windows open to encourage dissipation of odor.

1. STOP! Read the safety information, beginning in column 1.
2. Make sure equipment shutoff valve is fully open.
3. Set switch in the Local position.


OPERATION

Continued

- Wait five (5) minutes to clear out any gas. If you then smell gas STOP! Follow the safety information, page 10. If you don't smell gas, go on to the next step.
- Turn PilotStat knob to PILOT. Push in on PilotStat knob and press Piezo button  until the pilot is lit.
- Continue to hold PilotStat knob in until LED blinks (one brief blink every two seconds) then release knob.
Note: You will need to hold the knob in for about one minute.
- Turn PilotStat knob to ON See Figure 12, page 10.
- Press MODE  button until mode shows in display window of transmitter/remote. Press up or down key to change set temperature.
- To set delay timer, press TIMER  button followed by either the up or down key.
- To change the flame height, press the MODE  button until mode is ON. Press the FLAME  button and press the up or down arrow key.
- To change between Fahrenheit and Celsius, press the up and down arrow keys at the same time and hold for at least three seconds.

⚠ WARNING: Moving the Local/Remote switch can cause the main burner to come on immediately. Stand away from the main burner when moving the local/remote switch to avoid possible injury.

USING TRANSMITTER/ REMOTE

- Move switch to REMOTE position (see Figure 12, page 10). Remote comes on in Manual mode.
- Press FLAME  key within 30 seconds.
- Make sure LED turns on for one second.

TO TURN OFF GAS TO APPLIANCE

Shut Off Main Burner Using Remote

Press MODE  button until mode is OFF. Pilot stays lit.

Shut Off Main Burner Without Remote

Turn PilotStat knob to PILOT. Pilot stays lit.

Shut Off Main Burner and Pilot

Turn PilotStat knob to OFF.

⚠ CAUTION: During normal shutdown of this unit, a flash may be observed due to the nature of the burner components. Remain clear of the unit during the shutdown process.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

Flames from the pilot should always be present when the appliance is in operation (see Figure 13).

The flame should look similar to those in Figure 14, page 12. The flames should look random in appearance with the ember bed glowing red-orange in color.

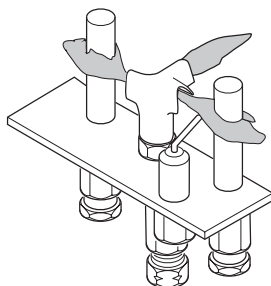


Figure 13 - Correct Pilot Flame Pattern

INSPECTING BURNERS

Continued



Hardwood Original Log Set



California Maple Log Set



Kentucky Elm Log Set

Figure 14 - Log Sets with Flame Patterns

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off the appliance and allow to cool before cleaning.

⚠ CAUTION: You must keep control areas, burners and circulating air passageways of fireplace clean. Inspect these areas of fireplace before each use. Have fireplace and chimney (if applicable) inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, etc.

Only limited cleaning will be required under normal use of this appliance. Dust the front grate and top of receiver/valve. Do not use cleaning fluids to clean logs or any other part of the appliance.

If, after a period of use, the flames start to exhibit unusual shapes and behavior or the burner fails to ignite smoothly, then the burner holes may require some cleaning. If this happens, we recommend that you contact your nearest authorized service technician to get the appliance serviced.

TRANSMITTER

If the battery light is on or the display is blank, you will need to replace the three AAA batteries in transmitter/remoter. To change batteries in the transmitter/remote, slide the battery compartment door off to expose old batteries. Place new batteries into housing and reattach door. See Figure 15.

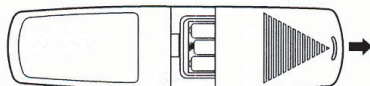


Figure 15 - Bottom of Transmitter, Showing Battery Compartment and Door

TROUBLESHOOTING

Note: In normal operation, LED blinks once every two seconds; also, LED will be on for one second after every valid command received by the receiver/valve; these are not error codes.

Failure codes can occur anytime after the pilot burner is lit. Failure code timing is 1/4 second on, 1/2 second off.

Sequence is failure code followed by LED not blinking for four seconds.

In the event of multiple failure codes, the next failure code follows the previous failure code by approximately 3 seconds.

LED Failure Code (No. of Blinks)	Service Action
8	Replace valve.
7	Confirm stepper motor connection exists.
5	Confirm fan connection exists and works.
3	Replace thermopiles.
2	Device too hot. Turn on fan or if applicable, open glass doors.
1 short blink	Normal operation

LED Failure Codes and Service Action



WARNING: Turn off and unplug heater and let cool before servicing. Only a qualified service person should service and repair heater.

IMPORTANT: Valve system troubleshooting should only be accomplished by a qualified service technician.

Note: Before troubleshooting the gas control system, be sure external gas shut off valve (located at gas supply inlet) is in the "ON" position.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Spark ignitor will not light pilot after repeated triggering of ignitor button	1. Defective ignitor (no spark at electrode)	1. Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace ignitor
	2. Defective or misaligned electrode at pilot (spark at electrode)	2. Using a match, light pilot. If pilot lights, turn off pilot and trigger the ignitor button again. If pilot lights, an improper gas mixture caused the bad lighting and a longer purge period is recommended. If pilot will not light, check gap at electrode and pilot - gap should be 1/8" to have a strong spark. If gap measures 1/8", replace pilot
	3. Gas supply pressure errant	3. Check inlet gas pressure. It should be within the limits as marked on the rating plate
	4. Pilot orifice plugged	4. Clean or replace pilot orifice

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot will not stay lit after carefully following the lighting instructions	1. Defective pilot generator (thermocouple)	1. Check pilot flame, it must impinge on thermocouple (see Figure 13, page 11). Clean and/or adjust pilot for maximum flame impingement on thermocouple. Ensure that the connection between the valve and thermocouple are tight and secure.
Pilot burning, no gas to burner, valve knob "ON"	1. Thermopile may not be generating sufficient millivoltage. 2. Plugged burner orifice	1. Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. It should read 325 millivolts minimum. Replace faulty thermopile if reading is below specified minimum. 2. Check burner orifice for stoppage and remove
Frequent pilot/burner outage problem	1. Pilot flame may be too low or blowing (high) causing the pilot/valve safety to drop out	1. Clean and/or adjust pilot flame for maximum flame impingement on thermocouple (see Figure 13, page 11)

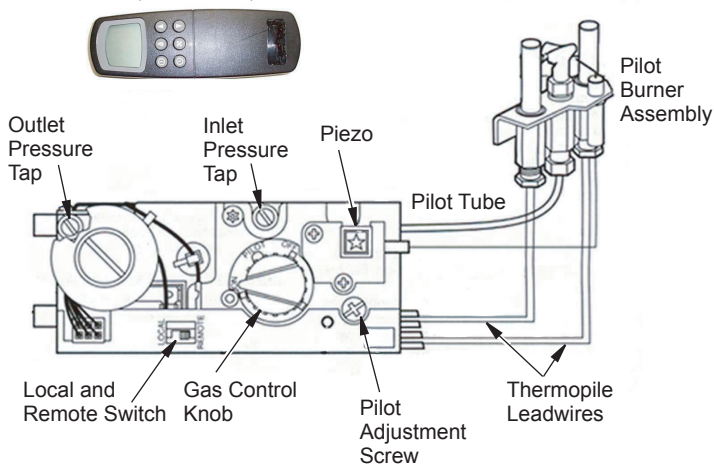
SPECIFICATIONS

	HCA-24-RFN HCM-24-RFN HKE-24-RFN	HCA-24-RFP HCM-24-RFP HKE-24-RFP	HCA-18-RFN HCM-18-RFN HKE-18-RFN	HCA-18-RFP HCM-18-RFP HKE-18-RFP
Btu (Variable)	45,000/67,000	43,000/65,000	41,000/56,000	42,000/51,000
Type Gas	Natural Gas Only Propane/LP Only			Natural Gas Only
Propane/LP Only				
Ignition	Piezo	Piezo	Piezo	Piezo
Manifold Pressure	3.5" - 1.6"W.C.	10" - 6.3"W.C.	3.5" - 1.6"W.C.	10" - 6.3"W.C.
Inlet Gas Pressure (in. of water)				
Maximum	10.5" W.C.	13" W.C.	10.5" W.C.	13" W.C.
Minimum*	5.0" W.C.	11" W.C.	5.0" W.C.	11" W.C.
Valve Operation	RF Millivolt	RF Millivolt	RF Millivolt	RF Millivolt
Orifice Size	#21	#42	#28	#45

* For purpose of input adjustment

WIRING DIAGRAM

REMOTE CONTROL
(MILLIVOLT)



▲ POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

Figure 16 - Millivolt System Wiring Diagram

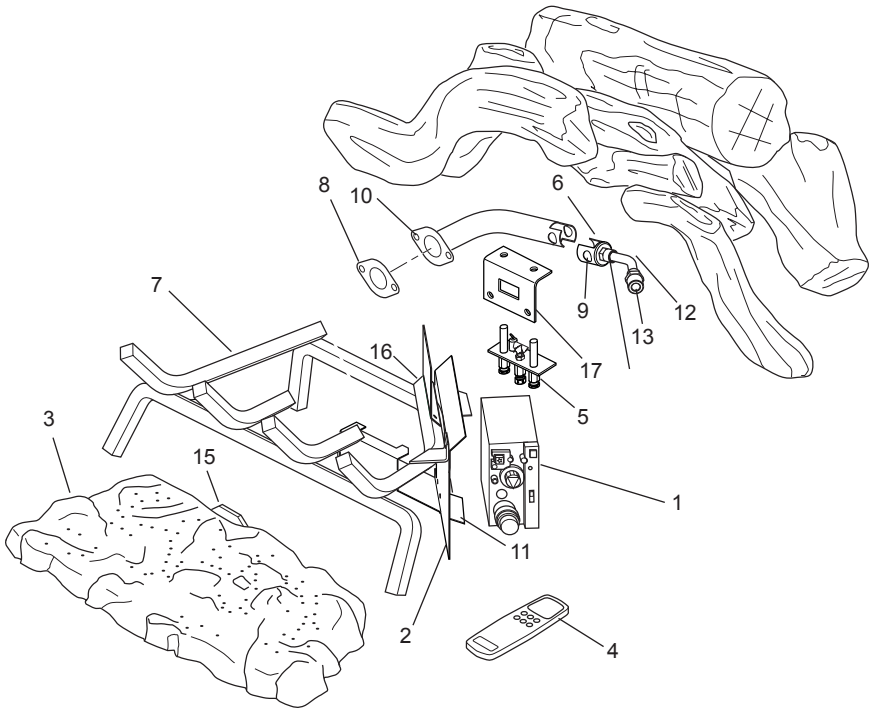
TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact FMI PRODUCTS, LLC at 1-866-328-4537. When calling please have your model and serial numbers of your heater ready.

You can also visit FMI PRODUCTS, LLC's web site at www.fmiproducts.com.

PARTS

HCA-24-RFN, HCA-24-RFP, HCA-18-RFN, HCA-18-RFP, HCM-24-RFN,
HCM-24-RFP, HCM-18-RFN, HCM-18-RFP, HKE-24-RFN, HKE-24-RFP,
HKE-18-RFN, HKE-18-RFP



PARTS

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under Replacement Parts on page 12 of this manual.

KEY NO.	PART NO.	DESCRIPTION	HCA-24-RFN	HCM-24-RFN	HKE-24-RFN	HCA-24-RFP	HCM-24-RFP	HKE-24-RFP	HCA-18-RFN	HCM-18-RFN	HKE-18-RFN	HCA-18-RFP	HCM-18-RFP	HKE-18-RFP	QTY.
1	111814-01	Gas Valve	•						•						1
	111814-02	Gas Valve				•						•			1
2	115453-01	Valve/Pilot Bracket	•			•			•			•			1
3	115457-01	Log Burner	•			•									1
	115458-01	Log Burner							•			•			1
4	111815-01	Transmitter/Remote	•			•			•			•			1
5	111809-01	Pilot	•						•						1
	111809-02	Pilot				•						•			1
6	115490-01	Orifice	•												1
	115490-02	Orifice				•									1
	115490-03	Orifice							•						1
	115490-04	Orifice										•			1
7	115449-01	Grate	•			•									1
	115448-01	Grate							•			•			1
8	104489-01	Gasket	•			•			•			•			1
9	115491-01	Air Shutter	•												1
	115492-01	Air Shutter				•			•						1
	115493-01	Air Shutter										•			1
10	115454-01	Venturi	•			•			•						1
	115454-02	Venturi										•			1
11	115452-01	Valve Bracket	•			•			•			•			1
12	115488-01	Tube	•			•			•			•			1
13	14396	Adapter Valve	•			•			•			•			1
14	115489-01	Adapter Orifice	•			•			•			•			1
15	115450-01	Burner Plate	•			•									1
	115451-01	Burner Flakes							•			•			1
16	115456-01	Log Support Plate	•			•			•			•			1
17	114394-01	Pilot Shield	•			•			•			•			1

PARTS AVAILABLE NOT SHOWN

111288-02	Flex Gas Line	•	•	•	•	•	1
112363-01	Ember Chunk Kit #1, (3 Pieces)	•	•	•	•	•	1
112364-01	Ember Chunk Kit #2, (2 Pieces)	•	•	•	•	•	1
112799-01	Ember Flakes Kit	•	•	•	•	•	1
GA6060	Lava Rock	•	•	•	•	•	1
26839	Rock Wool	•	•	•	•	•	1

LOG SET ASSEMBLIES	
MODELS	PART NO.
HCA-24-RFN/P	115474-01
HCM-24-RFN/P	115471-01
HKE-24-RFN/P	115473-01
HCA-18-RFN/P	115469-01
HCM-18-RFN/P	115470-01
HKE-18-RFN/P	115472-01

REPLACEMENT PARTS

Note: Use only original replacement parts. This will protect your warranty coverage for parts replaced under warranty.

Contact authorized dealers of this product. If they can't supply original replacement part(s), call FMI PRODUCTS, LLC at 1-866-328-4537.

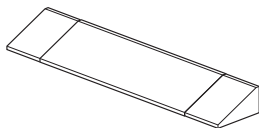
When calling, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- purchase date

Usually, we will ask you to return the part to the factory.

ACCESSORIES

Purchase these accessories from your local dealer. If they can not supply these accessories call FMI PRODUCTS, LLC at 1-866-328-4537 for information. You can also write to the address listed on the back page of this manual.



FIREPLACE HOOD

Black - GA6050

Antique Brss - GA6053

Helps deflect heat away from mantel or wall above fireplace. Fits opening 28" to 4" wide.

DAMPER CLAMP - GA6080

Permanently opens chimney flue damper for vented operation.

LAVA ROCK - GA6060

Order when additional rock is desired (1.8 lb. bag)

NOTES

WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag) _____

Serial No. (located on product or identification tag) _____

Date Purchased _____

Keep receipt for warranty verification.

FMI PRODUCTS, LLC LIMITED WARRANTIES

New Products

Standard Warranty: FMI PRODUCTS, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of four (4) years from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

For products purchased for commercial, industrial or rental usage, this warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: FMI PRODUCTS, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with FMI PRODUCTS, LLC's warnings and instructions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contacting the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a FMI PRODUCTS, LLC Authorized Service Center or a provider approved by FMI PRODUCTS, LLC. Warranty parts must be obtained through authorized dealers of this product and/or FMI PRODUCTS, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or alteration(s).

This is FMI PRODUCTS, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits the duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to four (4) years on new products and 30 days on factory reconditioned products from the date of first purchase. FMI PRODUCTS, LLC makes no other warranties regarding this product.

FMI PRODUCTS, LLC's liability is limited to the purchase price of the product, and FMI PRODUCTS, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

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

For information about this warranty contact:


FMI PRODUCTS, LLC
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Santa Ana, CA 92704
1-866-328-4537
www.fmiproductions.com

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