PYROMASTER.

PLEASE READ THIS MANUAL BEFORE INSTALLING AND USING APPLIANCE.

IMPORTANT: Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

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.

FOR YOUR SAFETY

Installation and service must be performed by a qualified installer, service agency, or the gas supplier. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

FOR YOUR SAFETY

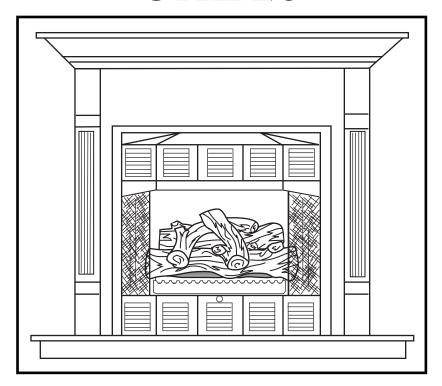
If you smell gas:

- 1. Open windows
- 2. Do not touch electrical switches.
- 3. Do not try to light any appliance.
- 4. Extinguish any open flame.
- 5. Do not use the phone in your building.
- 6. Immediately call your gas supplier from a neighbor's phone.
- 7. Follow your gas supplier's instructions.
- 8. If you cannot reach your gas supplier, call the fire department.

This is an unvented 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.

Vent-Free Gas Room Heaters

UVHB20



Homeowner's Installation and Operating Manual



INSTALLER: DO NOT DISCARD THIS MANUAL - Leave in fireplace for homeowner.

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General Information

This gas room heater should be installed by a qualified installer in accordance with local building codes and with current National Fuel Gas Code. ANSI Z223.1/ NFPA 54.

This heater should not be installed in a confined space unless provisions are made for adequate combustion and ventilation air.

The National Fuel Gas Code defines a confined space as "a space whose volume is less than 50 cubic feet per 1000 BTU per hour (4.83 per kw) of the aggregate input rating of all appliances installed in that space" and unconfined space as "space."

WARNING: If the area in which the heater may be operated is smaller than that defined as an "unconfined space," provide adequate combustion and ventilation air by one of the methods described in the National Fuel Code, ANSI Z223.1/NFPA 54, 1992, Section 5.3.

FOR SAFE INSTALLATION AND OPERATION OF YOUR PYROMASTER VENT-FREE ROOM HEATER PLEASE NOTE THE FOLLOWING:

- 1. This heater gives off high temperatures and should be located out of high traffic areas and away from furniture and draperies.
- This appliance is for supplemental heating only. It should not be used as the primary heat source for a dwelling.
- Children and adults should be alerted to the hazards of the high surface temperatures of this heater and should stay away to avoid burns or ignition of clothing.
- 4. Children should be carefully supervised when they are in the same room as your heater.
- Under no circumstances should this heater be modified. Parts removed for service should be replaced prior to operating this heater again.
- 6. Installation and any repairs to this heater should be carried out by a qualified service person. A professional service person should be contacted to inspect this heater annually. Make it a practice to have all of your gas heaters checked annually. More frequent cleaning may be required due to excess lint and dust from carpeting, bedding material, etc.
- 7. Control compartments, burners and air passages in this heater should be kept clean and free of dust and lint. Make sure that the gas valve and pilot light are

- turned off before you attempt to clean this unit.
- 8. Under no circumstances should any solid fuels (wood, coal, paper or cardboard, etc.) be used in this heater.
- Keep the area around your heater clear of combustible materials, gasoline and other flammable vapor and liquids. This heater should not be used as a drying rack for clothing, nor should Christmas stockings or decorations be hung in the area of it.
- Under no circumstance should this Heater be installed in a chase or used with any other mantel than the approved FPS1212 or FPS1214 mantels.
- 11. Do not install heater in bedroom or bathroom.
- 12. Avoid propane tank dropping below 25% full. This will help prevent soot from occurring.

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.

Proposition 65 Warning: Fuels used in gas, woodburning 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 other reproductive harm. California Health & Safety Code Sec. 25249.6

Safety Devices

Adequate combustion and ventilation air must be provided. The flow of combustion and ventilation air MUST NOT be obstructed.

Provide adequate clearances around the air opening into the combustion chamber; and adequate accessibility clearance for servicing and proper operation. NEVER obstruct the front opening of the heater or cover the top and bottom louvres.

These heaters are equipped with a pilot system featuring an Oxygen Depletion Sensor (O.D.S.) shut-off device. All unvented heaters are required to have this system. The O.D.S. pilot will shut down the heater when there is not enough fresh air available.

Report any parts damaged in shipment to your dealer.

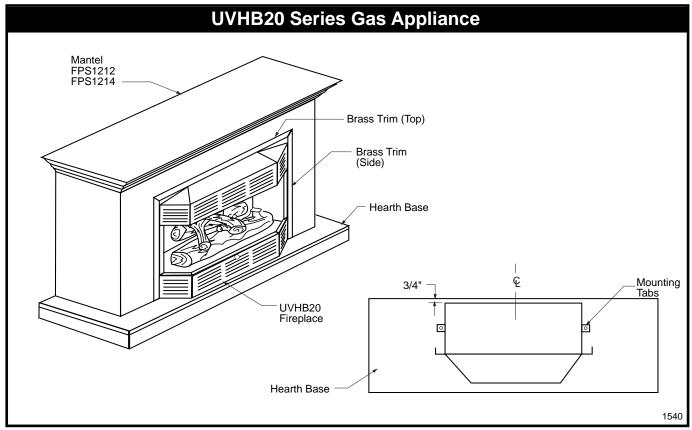
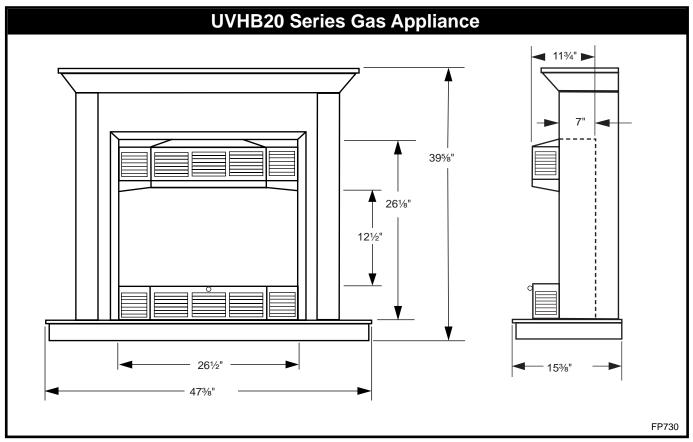


Fig. 1 UVHB20 Series specifications.



UVHB20 Series specifications and dimensions.

Description

The UVHB20 vent-free heater is designed to be installed into an FPS1212 or FPS1214 mantel cabinet only. It may not be installed in any other manner.

The UVHB20 is available in Natural or Propane gas, equipped with an oxygen depletion sensor with a standing pilot.

Minimum Clearances

Minimum clearance to combustibles are maintained when the UVHB20 is installed into the FPS1212 or FPS1214 mantel cabinets. Top of unit to ceiling minimum 42 inches.

Gas Supply Pressures

This heater must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure equal to or less than 1/2 psig (3.45 kPa).

The heater 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 in excess of 1/2 psig (3.45 kPa).

	Natural	LP
Minimum Inlet Pressure	5.5" w.c.	11.0" w.c.
Maximum Inlet Pressure	14.0" w.c.	14.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.

Table 1 Gas supply pressures.

High Elevations

Input ratings are shown in BTU per hour and are certified without deration from elevations up to 4,500 feet (1,370m) above sea level.

Nuisance outages may occur at altitudes above 4,500 feet (1,370m) if dirt, dust, lint and/or cobwebs are allowed to accumulate on burner and/or ODS pilot. Monthly inspection and cleaning is recommended for altitudes above 4,500 feet (1,370m)

For elevations above 4,500 feet (1,370m), installations must be in accordance with the current ANSI Z223.1 and/or local codes having jurisdiction.

Gas Specifications				
Model	Fuel	Gas Control	Max. Input B.T.U.H.	Min. Input B.T.U.H.
UVHB20RN	Natural	Millivolts Hi/Lo	25,000	17,500
UVHB20RP	Propane	Millivolts Hi/Lo	25,000	18,750

Fig. 2 Gas specifications.

Planning

Planning the installation is an important first step: it will save time and money later in the actual installation. In planning the installation, consider:

- 1. Where the heater will be located.
- 2. All components needed to complete the project.

Installation

Preparing the UVHB20

The UVHB20 may only be used with the approved mantel and hearth assembly.

- After determining a location, open the mantel hearth base carton and place into position on a solid surface. NOTE: Be sure to level the base before setting the UVHB20 heater in place.
- Place the heater on the hearth base centering side to side and 3/4" from the back edge of the hearth base (Fig. 1)
- Bend the lower mounting tabs down against the hearth base and secure with two (2) wood screws (Fig. 1)

Installing Brass Trim

- 1. Remove brass trim (3 pieces) from carton. Remove the protective coating from each piece.
- 2. Using the (2) screws provided, attach the side pieces to the heater. (Fig.3)
- Mount the top trim to the heater. Loosen top three
 screws and slide trim under the screws, tighten the screws. Be sure to overlap top trim to the front side of the side trim pieces.

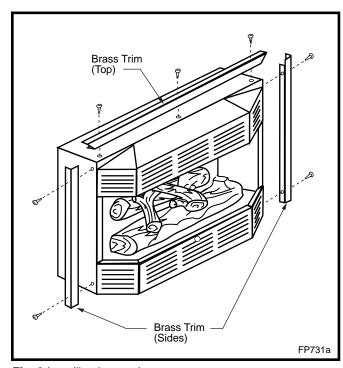


Fig. 3 Installing brass trim.

Run Gas Line from Its Source to the Heater

If gas piping from the source to the heater location has not been accomplished, install the required pipe. Consult local plumbing code to assure proper pipe size.

The gas pipeline can be brought in through the right side of the heater.

NOTE: The gas line connection can be made with properly tinned 3/8" copper tubing, 1/2" rigid pipe or an approved flex connector, then reduced to 3/8" to the heater. Because some municipalities have some additional local codes, it is always best to consult your local authority. Consult the current National Fuel Gas Code, ANSI Z223.1



Always check for gas leaks using a 50/50 soap and water solution. Apply water/soap solution with a brush - *do not over apply.* **NEVER!** test with an open flame.

The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8" test point up stream of the control.

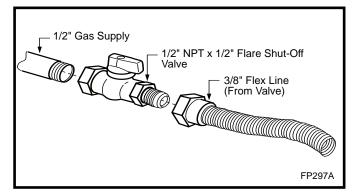


Fig. 4 Typical gas supply installation.

Optional FK24 Fan Hook-Up

NOTE: The FK24 fan should be installed before the mantel cabinet is complete. Later installation will be more difficult.

- 1. Remove the two (2) screws holding the screen rods inside the bay top. Remove the screen and rods then set aside.
- 2. Remove the bay top by removing three (3) screws securing it to the combustion dome and three (3) screws on top of unit.
- 3. Remove three (3) nuts securing the fan bracket to the back of the heater.

- 4. Remove the (2) screws holding the bracket to the fan. Discard this bracket.
- 5. Remove the two (2) wires attached to the fan and assemble the fan to the bracket as shown in Figure 6.
- 6. Attach the fan assembly to the back of the heater with the three (3) nuts.
- 7. Attach the electrical flag connectors to the fan motor using the wire extension (Fig. 5)
- Feed the wire down the 1-inch diameter hole in the left side of the radiant shield. Push plastic bushing in hole.
- Hook the wire extension to the wire leads from the fan control box. NOTE: These leads were hooked to the motor earlier.
- 10. Mount the thermo-disc to the shield under the burner pan and secure with two (2) nuts.
- 11. Mount the fan on-off control to the base with the studs provided and secure with two (2) nuts.
- 12. Feed the plug through the 4" x 5" hole on the left side of the heater and plug into a wall receptacle.
- 13. Repeat steps 1 through 3 to reassemble the heater.

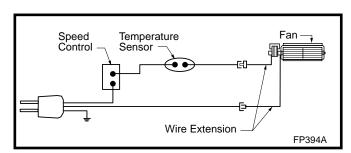


Fig. 5 Wiring diagram.

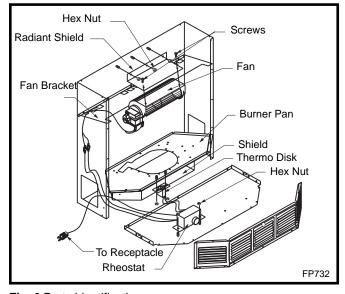


Fig. 6 Parts identification.

Fan Operation

The FK24 fan has a heat sensor that will not allow the fan to come on until heater reaches a preset temperature, approximately 100-120° F. Once the heater reaches temperature use the speed control knob to turn fan on and off to adjust fan speed.

Final Assembly

Final assembly is accomplished by lifting the mantel cabinet overtop of the heater behind the brass trim pieces.

NOTE: The mantel is designed to fit flush to the wall as a freestanding unit. If desired, it may be secured to the wall with nails or screws (not provided).



When installed, the heater must be electrically connected and grounded in accordance with local codes or, in the absence of local codes:

U.S. INSTALLATIONS: FOLLOW LOCAL CODES AND THE NATIONAL ELECTRICAL CODE, ANSI/ NFPA NO. 70.

Remote Control (RM2)

The UVHB20 is shipped with a remote control that allows the unit to be turned on or off from anywhere in the room. The remote control receiver is wired at the factory as shown in Figure 7.

Move the switch on the receiver (mounted behind the door) to the desired position for operation.

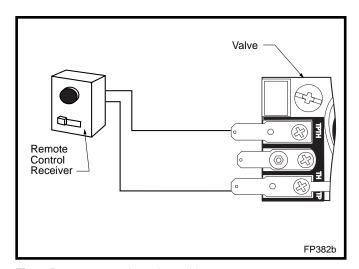


Fig. 7 Remote control receiver wiring.

Log Installation

Remove logs from packaging.



As with all plastic - these are not toys and should be kept away from children and infants.

- Place rear log on rear bracket (ensure log is seated properly, leveled and centered to the unit), so it will not move from side to side and is firmly positioned on the bracket.
- Place front log behind the front burner on top of the front log support. Make sure the log is centered to the burner.
- 4. Place top left log onto locator notches. Ensure log is secure.
- 5. Place top right log onto locator notches. Ensure log is secure.
- Once the unit is lit, check that the flame does not impinge or touch the logs. If impingement does occur, adjust logs slightly until flames do not touch the logs.

Rock Placement

Spread the volcanic rock (gravel size) on the burner pan of the fireplace. This will give the fireplace a realistic look.



Under no circumstances should this lava rock be placed on any part of the burner tube.

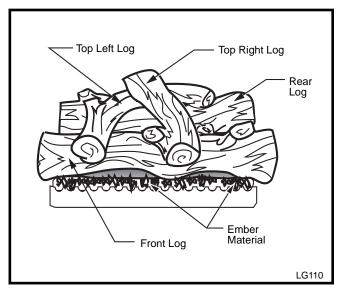


Fig. 8 Log placement.

Ember Placement

Separate the ember material into small pieces and place onto the grill in front of the front burner. Do NOT pack down, leave in fluffy, loose condition for most realistic ember effects. **Do not install more embers on the burner than come with the unit.**

Operating Instructions

First Firing

Upon completing the gas line connection, a small amount of air will be trapped in the line. When first lighting the unit with pilot light, it will take a few minutes to purge the trapped air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lightings of the appliance will not require purging.

When lit for the first time, the appliance will emit a slight odor for an hour or two. This is due to paint and lubricants used in the manufacturing process. After each lighting, vapor may condense and fog the glass; this moisture disappears within a few minutes of burning.

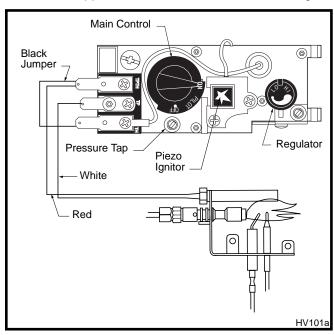


Fig. 9 Honeywell valve and pilot assembly.

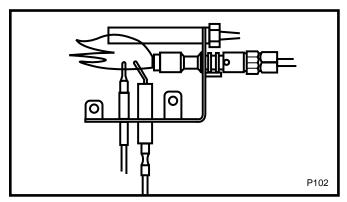


Fig. 11 Proper pilot flame height.

Flame Adjustment

For units equipped with Hi/Lo valves, flame adjustment is accomplished by rotating the Hi/Lo adjustment knob located near the center of the gas control. (Fig. 12)



It is important to periodically perform a visual check of the pilot and the burner flames. (Figures 11 and 13)

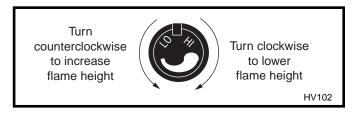


Fig. 12 Flame adjustment on gas valve.

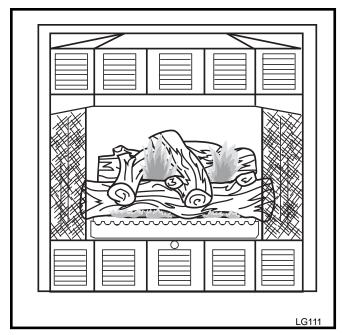


Fig. 13 Approximate flame heights.

Lighting And Operating Instructions

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 heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the heater 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 fireplace
- 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 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. Applying force or any attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

Lighting Instructions

- 1. **STOP!** Read the safety information above.
- 2. Turn off all electrical power to the fireplace.
- 3. For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the On/Off switch to "OFF" position or set thermostat to lowest level.
- 4. Open control access panel.
- 5. Push in gas control knob slightly and turn clockwise ____ to "OFF".







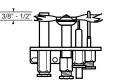
Euro SIT

SIT NOVA

Honeywell

- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above. If you do not smell gas, go to the next step.
- 7. Remove glass door before lighting pilot. (See Glass Frame Removal section).
- 8. Visibly locate pilot by the main burner.
- 9. Turn knob on gas control counterclockwise to "PILOT".

10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 8.





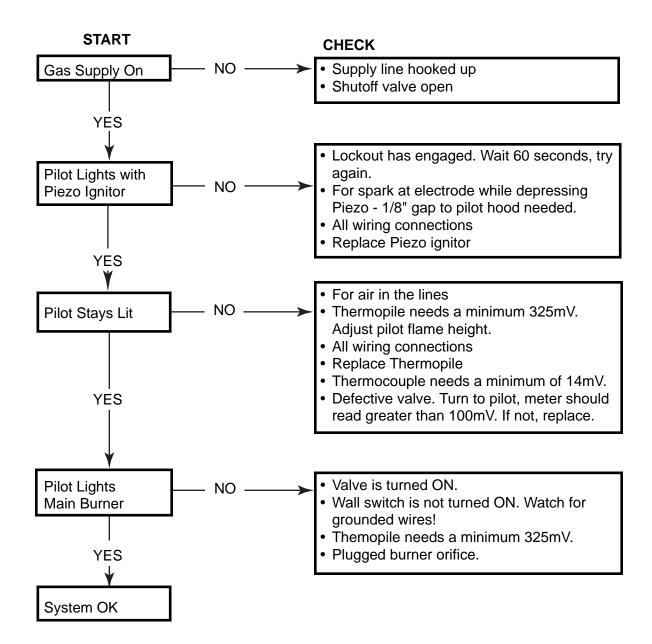


- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 11. Replace glass door.
- 12. Turn gas control knob to "ON" position.
- 13. For RN/RP appliances turn the On/Off switch to "ON" position or set thermostat to desired setting.
- 14. Turn on all electrical power to the fireplace.

To Turn Off Gas To Heater

- 1. Turn the On/Off switch to Off position or set the thermostat to lowest setting.
- 2. Turn off all electric power to the fireplace if service is to be performed.
- 3. Open control access panel.
- 4. Push in gas control knob slightly and turn clockwise to "OFF". Do not force.
- 5. Close control access panel.

Troubleshooting - Honeywell VS8421



Maintenance

Keep the control compartment, logs and burner area surrounding the logs clean by vacuuming or brushing at least twice a year. THE LOGS CAN GET VERY HOT—HANDLE ONLY WHEN COOL.

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located on the front cover plate.

Never obstruct the flow of combustion and ventilation air. Keep the front of the heater clear of all obstacles and materials.

Leave at least 36" clearance from front of heater to combustibles.

Cleaning the Standing Pilot Control System

The burner and control system consists of:

- main burner
- pilot burner
- gas orifice
- thermopile
- · combination millivolt gas valve

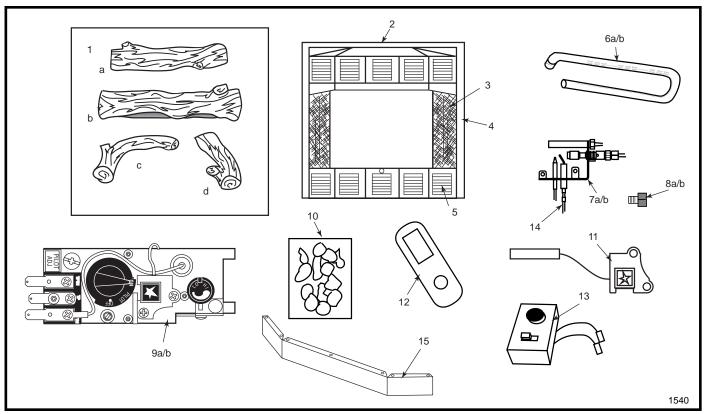
Most of these components may require only an occasional checkup and cleaning and some may require adjustment. If repair is necessary, it should be performed by a qualified technician.

In order to properly clean the burner and pilot assembly, turn off the gas to the unit, remove the logs exposing the burner and pilot assembly. Clean all foreign materials from the top of the burner. Check to make sure that burner parts are clean. Visually inspect pilot. Brush or blow away any dust or lint accumulation If pilot orifice is plugged, disassembly may be required to remove any foreign material from the orifice or tubing.

To obtain proper operation, it is imperative that the pilot and burner's flame characteristics are steady, not lifting or floating.

Typically, the top 1/8" of the thermopile should be engulfed in the pilot flame. (Fig. 11)

The air shutter is set at the factory, no adjustment should be necessary.



CFM Harris Systems reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

UVHB20 Vent Free Heater

Ref.	Description	UVHB20
1.	Complete Log Set	20001575
1a.	Log - Back	20001545
1b.	Log - Front	20001544
1c.	Log - Left Cross	20001546
<u>1d.</u>	Log - Top Right	H4
2.	Top Trim	3187132
3.	Screen Assembly	3187170
4.	Side Trim	3187130
5.	Louvre	3187146
6a.	Burner Tube Assembly - Natural	20001628
6b.	Burner Tube Assembly - LP	20001629
7a.	Pilot Assembly - Natural	55464
7b.	Pilot Assembly - LP	20001578
8a.	Orifice - Natural	7535180
8b.	Orifice - LP	7535131
9a.	Valve Honeywell - Natural	3000029
9b.	Valve Honeywell - LP	30000030
10.	Volcanic Rock	2000376
11.	Piezo Ignitor	20000062
12.	Transmitter	20001609
13.	Receiver	20001610
14.	Piezo Ignitor Cable 24"	20000101
15.	Screen Rail	3187124

Accessories

The following accessories for these heaters are available from your local Pyromaster distributor. **Each accessory comes with a separate installation instruction for mounting to the particular heater.** Be sure to read each instruction thoroughly before installing.

Accessory	Description	Part No.
Fan	Provides air flow	FK24
Electrical Cord (6 ft.)	Used to connect fan	51865
Fan Temperature Sensor		51740
Speed Control	Allows speed adjustment for fan	51738
Speed Control Knob		51882

CAUTION: This heater is a highly engineered system, and, as such, must be operated only with PYROMASTER approved components. If you use an unapproved component to make any modifications, you may create a possible fire hazard and will void the PYROMASTER warranty. In addition, such action may void the coverage provided by the owner's insurance.

Contact CFM Harris Systems for questions concerning prices and policies covering replacement parts. Parts may be ordered through your CFM Harris Systems distributor or dealer.

You will need the following information when ordering replacement parts:

- 1. The heater model number.
- 2. The serial number.
- 3. A description of the part.

Should you need additional information beyond what your dealer can furnish, contact:

CFM Harris Systems 3501 West Howard Skokie, II 60076-4012 1-800-944-8982

Model and serial numbers are listed on the
rating plate (located on the instruction plate
behind the removable grille).

Record your model and serial numbers here for future reference:

Model # _____

Serial # _____

PYROMASTER®

LIMITED 2/20 YEAR WARRANTY

For CFM Harris Systems Decorative Gas Appliances

The CFM Harris Systems extends the warranties specified in paragraphs A and B below with respect to its Decorative Gas Appliances (the "Gas Appliance"), including the CFM Harris Systems supplied accessories and components referred to in those paragraphs, subject to the following conditions and limitations:

- (1) These warranties are extended only to the Gas Appliance installed in the continental United States, including Alaska, and Canada; only if and so long as the accordance with the installation and operating instructions furnished therewith; and only if and so long as Gas Appliance is not removed from its original installation.
- (2). These warranties are limited to only the component parts manufactured and supplied by CFM Harris Systems. The use of components manufactured by others with the Gas Appliance (except for a listed Type B venting system as defined in the installation instructions) could create serious safety hazard, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes.
- (3). The Gas Appliance must be operated at all times in accordance with the operating instruction furnished therewith. The Gas Appliance is designed to burn either natural or propane gas only. Burning conventional fireplace fuels such as wood, coal, or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.
- (4). These warranties are limited to repair, replacement or furnishing a replacement for sale, as specified in Paragraphs A and B, for a part found to CFM Harris Systems' satisfaction, after examination, to be defective in materials or workmanship under normal conditions, use and service.
- (5). All obligations with respect to these warranties may be fully discharged by CFM Harris Systems refunding the wholesale price of a defective part.
- (6). Except as otherwise expressly specified in Paragraphs A and B. NONE OF THESE WARRANTIES COVER, AND CFM HARRIS SYSTEMS SHALL NOT BE RESPONSIBLE FOR, ANY CONSTRUCTION, INSTALLATION, LABOR, TRANSPORTATION OR OTHER COSTS OR EXPENSES ARISING FROM A DEFECTIVE PART, ITS REPAIR OR REPLACEMENT OR OTHERWISE, NOR SHALL CFM HARRIS SYSTEMS, INC. IN ANY EVENT BE RESPONSIBLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. EXCEPT TO THE EXTENT PROVIDED BY LAW, THERE ARE NO IMPLIED WARRANTIES WITH RESPECT TO THE GAS APPLIANCE, ITS COMPONENTS AND ACCESSORIES (IN-

CLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), ALL OF WHICH ARE HEREBY EXPRESSLY INCLUDED. IN NO EVENT SHALL ANY IMPLIED WARRANTY PRESCRIBED BY LAW (NOTWITHSTANDING THE FOREGOING EXPRESS EXCLUSION) REMAIN IN EFFECT AFTER EXPIRATIONS OF THE WARRANTIES SET FORTH IN PARAGRAPHS A AND B.

A. Gas Appliances, electrical and manual components, glass panels, all sealants or adhesives and optional accessories (exclusive of CFM Harris Systems supplies decorative logs which are covered by a separate warranty under paragraph B below):

Within two years from the date of manufacture of the gas appliance, CFM Harris Systems will repair, or replace (at our option) a defective part without charge.

B. Cement or ceramic fiber log components: Within two years from the date of manufacture of the gas appliance, CFM Harris Systems will replace a defective part without charge. Within years three through twenty from the date of manufacture of the gas appliance, CFM Harris Systems will provide a replacement for a defective part to the homeowner, but assumes no liability for incurred labor cost.

The foregoing warranties gives you specific legal rights and you may also have other rights which vary from state to state. Some states do not allow limitations on how long an implied warranty may last, so the limitation specified above on the duration of any implied warranty prescribed by law may not apply to you. Similarly, some states do not permit the exclusion or limitation of incidental or consequential damages, so the above exclusion of such damages may not apply to you.

In order to obtain performance of any of the above warranty obligations, write to CFM Harris Systems, Inc. at this address:

CFM Harris Systems

3501 West Howard Street Skokie, Illinois 60076-4012

Attention: Manager of Customer Service

Since local building requirements may vary greatly throughout the country, users of CFM Harris Systems products should determine in advance whether there are any building code restrictions on the use of a specified product.

CFM HARRIS SYSTEMS MAKES NO REPRESENTATION OR WARRANTY REGARDING, AND SHALL NOT BE RESPONSIBLE FOR, ANY BUILDING CODE COMPLIANCE.

CFM Harris SystemsA Division of The Vermont Castings Majestic Products Company