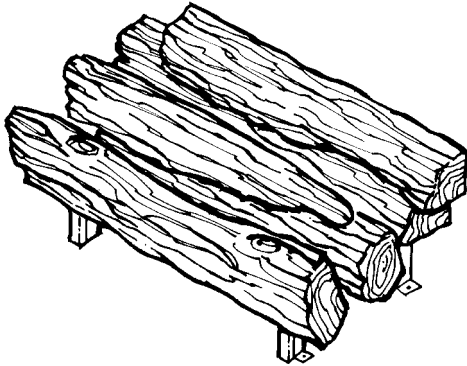




INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

The *White Mountain* Log Collection



"SO" Log Assembly Shown

This appliance may be installed in an after-market, 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.

WARNINGS

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 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.

UNVENTED GAS LOG HEATER OR VENTED DECORATIVE APPLIANCE

MODELS

VFYM-16SO-2	VFYR-16SO-1
VFYM-18SO-2	VFYR-18SO-1
VFYM-24SO-2	VFYR-24SO-1
VFYM-30SO-2	VFYR-30SO-1
VFYM-16RWO-2	VFYR-16RWO-1
VFYM-18RWO-2	VFYR-18RWO-1
VFYM-24RWO-2	VFYR-24RWO-1
VFYM-30RWO-2	VFYR-30RWO-1



EFFECTIVE DATE
APRIL, 2003

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. Refer to page 7.

WARNING: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 7.

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Installer: Please leave these instructions with the consumer.

Consumer: Please retain these instructions for future use.

IMPORTANT SAFETY INFORMATION

- An unvented room heater having an input rating of more than 6,000 Btu per hour shall not be installed in a bathroom.
- An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom or bathroom.
- Never burn solid fuels in a fireplace where a gas log set is installed.
- 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.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- This unit complies with ANSI Z21.11.2b-2002 Unvented Heaters and it also complies with ANSI Z21.60b-2001 Decorative Vented Appliances for Solid Fuel Burning Fireplaces. State or local codes may only allow operation of this appliance in a vented configuration. Check your state or local codes.
- Correct installation of logs, proper location of the heater and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace.
- Avoid any drafts that could alter burner flame patterns. Do not allow fans to blow directly into the fireplace. Do not place a blower inside burn box area of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur as a result of drafts.
- The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition) and to the National Electrical Code, ANSI/NFPA 70 (latest edition).
- NOTE: Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.
- Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance. Provide adequate combustion and ventilation air.
- The flow of combustion and ventilation air MUST NOT be obstructed.
- Provide adequate clearances around air openings into the combustion chamber and adequate accessibility clearance for servicing and proper operation. NEVER obstruct the front opening of the appliance.
- WARNING: This appliance is for installation in a solid-fuel burning masonry or *UL 127* factory-built fireplace or in a ventless firebox enclosure. It has been design certified for these installations. Exception: DO NOT install this appliance in a factory-built fireplace that includes instructions stating it has not been tested or should not be used with unvented gas logs.
- An unvented room heater intended for installation in a solid-fuel burning fireplace shall comply with the following instructions.
- 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.
- Solid-fuels shall not be burned in a masonry or *UL 127* factory-built fireplace in which an unvented room heater is installed.
- Any glass doors shall be opened when the appliance is in operation.
- Any outside air ducts and/or ash dumps in the fireplace shall be permanently closed at time of appliance installation.

WARNING

When used without adequate combustion and ventilation air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

Do not install heater until all necessary provisions are made for combustion and ventilation air. Consult the written instructions provided with the heater for information concerning combustion and ventilation air. In the absence of instructions, refer to the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the heater if not enough fresh air is available.

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If heater shuts off, do not relight until you provide fresh air.

If heater keeps shutting off, have it serviced. Keep burner and control compartment clean.

CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, heater may not be working properly. Get fresh air at once! Have heater serviced.

Some people – pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes – are more affected by carbon monoxide than others.

The pilot light safety system senses the depletion of oxygen at its location. If this heater is installed in a structure having a high vertical dimension, the possibility exists that the oxygen supply at the higher levels will be less than that at the heater. In this type of application, a fan to circulate the structure air will minimize this effect. The use of this fan will also improve the comfort level in the structure. When a fan is used to circulate air, it should be located so that the air flow is not directed at the burner.

SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point

by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas. That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- **Finally**, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in LP-Gas also are subject to oxidation. This fading can

occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- **Learn to recognize the odor of LP-gas.** Your local LP-Gas Dealer can give you a "Scratch and Sniff" pamphlet. Use it to find out what the propane odor smells like. If you suspect that your LP-Gas has a weak or abnormal odor, call your LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. **If you have any question about the gas odor, call your LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.**
- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

INTRODUCTION

Always consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of an unvented room heater/vented decorative appliance.

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

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

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.

Solid-fuels shall not be burned in a masonry or *UL 127* factory-built fireplace in which an unvented room heater is installed.

A vented decorative appliance must be installed only in a solid-fuel burning fireplace with a working flue and constructed of non-combustible material.

WARNING: Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

Instructions to Installer

1. Installer must leave instruction manual with owner after installation.
2. Installer must have owner fill out and mail warranty card supplied with unvented room heater/vented decorative appliance.
3. Installer should show owner how to start and operate unvented room heater/vented decorative appliance.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Important

All correspondence should refer to complete Model No., Serial No. and type of gas.

Attention: During initial use of logs you will detect an odor as the logs are cured.

Notice: During initial firing of this unit, its paint will bake out, and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

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

Save this manual for future reference.

Please read this manual before installing and using the appliance.

WARNING: Any modification to this unvented gas heater or its controls can be dangerous. Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

ACCESSORIES

Description		Color
For use with VFYM and VFYR models		
EK-1	Embers Kit	
ELH-1	Fireplace Hood for Log Sets	Black
ELH-2	Brass Hood for Vent-Free Logs	Brass
For use with VFYR models only		
FRBC-1	Battery Operated Remote Control	
FRBTC-1	Battery Operated Remote Control w/Thermostat	
FREC-1	Electric Remote Control	
FWS-1	Wall Switch	
GWSG-T	Wall Thermostat, Millivolt	

PRODUCT SPECIFICATION

Natural Gas	Manual	Millivolt	Propane Gas	Manual	Millivolt
Regulator pressure setting	6.0" W.C.	3.5" W.C.	Regulator pressure setting	10.0" W.C.	10.0" W.C.
Gas inlet pressure	Max. 10.5" W.C. Min. 7.0" W.C.	Max. 10.5" W.C. Min. 5.0" W.C.	Gas inlet pressure	Max. 13.0" W.C. Min. 11.0" W.C.	Max. 13.0" W.C. Min. 11.0" W.C.

Model	Gas	Valve Type	BTUH	BTUH	BTUH
			Max. Rate	Med. Rate	Min. Rate
VFYM-16	Natural	Manual	25,000	20,000	15,000
VFYM-16	Propane	Manual	25,000	20,000	15,000
VFYR-16	Natural	Millivolt	25,000	—	17,500
VFYR-16	Propane	Millivolt	25,000	—	17,500
VFYM-18	Natural	Manual	32,000	27,000	22,000
VFYM-18	Propane	Manual	32,000	27,000	22,000
VFYR-18	Natural	Millivolt	32,000	—	22,000
VFYR-18	Propane	Millivolt	32,000	—	22,000
VFYM-24	Natural	Manual	36,000	27,000	22,000
VFYM-24	Propane	Manual	36,000	27,000	22,000
VFYR-24	Natural	Millivolt	36,000	—	25,000
VFYR-24	Propane	Millivolt	36,000	—	25,000
VFYM-30	Natural	Manual	38,000	27,000	22,000
VFYM-30	Propane	Manual	38,000	27,000	22,000
VFYR-30	Natural	Millivolt	38,000	—	26,000
VFYR-30	Propane	Millivolt	38,000	—	26,000

GENERAL INFORMATION

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.

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

Unvented gas heaters are a supplemental zone heater. They are not intended to be a primary heating appliance. Water vapor produced by an unvented heater can create moisture problems in a home when operated for extended periods of time.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace.

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

Before you get started

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. Do not attempt to install any part of the appliance unless you have all parts in good condition.

Metal shipping plate covering burner marked REMOVE must be removed from top of burner and discarded. Burner will not operate if plate is left in place.

Make sure you have received all parts:

Check your packing list to verify that all listed parts have been received. You should have the following:

- Gas log grate/burner assembly.
- VFY(M,R)-16SO; 16" logs, three (3) ceramic fiber logs.
- VFY(M,R)-(18, 24, 30)SO; 18", 24" and 30" logs, four (4) ceramic fiber logs.
- VFY(M,R)-16RWO; 16" logs, four (4) refractory logs.
- VFY(M,R)-(18, 24, 30)RWO; 18", 24" and 30" logs, five (5) refractory logs.
- Two (2) masonry anchoring screws and two (2) 10 x 1/2" black sheet metal anchoring screws.
- Plastic bag containing glowing embers (rock wool) for burner coverage.
- Plastic bag containing lava rock.

Millivolt controlled heater designed to be operated with optional devices for ON/OFF functions.

- Wall switch or thermostat with wire.
- Hand held remote control with ON/OFF switch or thermostat.

Handle the gas log burner assembly by the grate and legs only. Do not pick the unit up by the burner.

Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile - Handle with care.

Manual Control has five (5) positions

- Off – All gas to set is completely off at the valve.
- Pilot – Valve position to light/maintain the standing pilot.
- Low – Min. gas rate - pleasing yellow flames - glowing embers.
- Medium – Middle gas rate - pleasing yellow flames - glowing embers.
- High – Max. gas rate - pleasing yellow flames - glowing embers.

Millivolt Control has four (4) positions

- Off – All gas to set is completely off at the valve.
- Pilot – Valve position to light/maintain the standing pilot.
- Low – Min. gas rate - pleasing yellow flames - glowing embers.
- High – Max. gas rate - pleasing yellow flames - glowing embers.
- Ignition – Piezo Ignitor allows lighting of the pilot without matches.
- Pilot – All gas log heaters are designed with safety pilot systems that will shut down when the level of oxygen available in the room is low. The pilot will only relight when adequate fresh air is available.
- Thermal Generator – All millivolt logs are fitted with a thermo generator to provide millivolt power to activate switches, remote controls or thermostats.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation, or company that either in person or through a representative is engaged in and is responsible for (a) the installation, testing, or replacement of gas piping or (b) the connection, installation, testing, repair, or servicing of equipment; that is experienced in such work; that is familiar with all precautions required, and that has complied with all the requirements of the authority having jurisdiction.

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

The installation must conform with local codes or, in the absence of local codes, with the *National Fuel Gas Code, ANSI Z223.1*.
**Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10018.*

High Altitudes: For altitudes/elevation above 2,000 feet ratings should be reduced at the rate of 4 percent for each 1,000 feet above sea level. Contact the manufacturer.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Unvented room heaters are recommended as supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat applications, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

1. Be sure the heater is sized properly for the application, including ample combustion air and circulation air.
2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
3. Do not use an unvented room heater as the primary heat source

Exhaust fans, fireplaces, clothes dryers and fuel burning appliances draw air from the house to operate. You must provide adequate fresh air for these appliances. This will insure proper venting of vented fuel-burning appliances.

PROVISIONS FOR ADEQUATE COMBUSTION & VENTILATION AIR

This heater shall not be installed in a confined space unless provisions are provided 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 1,000 Btu per hour (4.8m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8 m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

Unusually Tight Construction

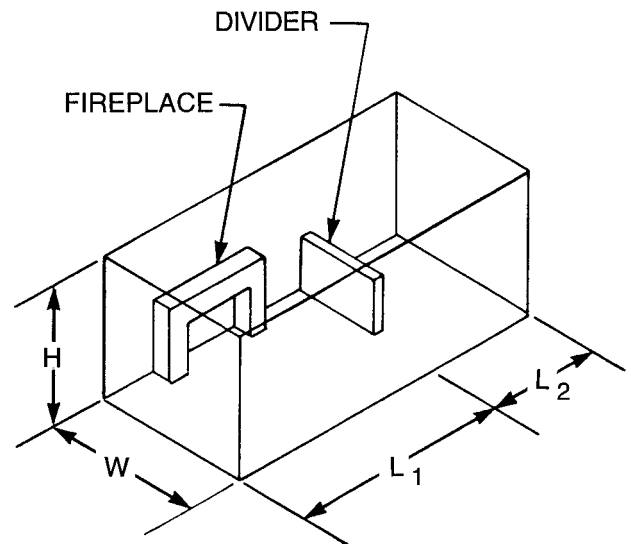
The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm or less with openings gasketed or sealed, and
- b. Weatherstripping has been added on openable windows and doors, and
- c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air.

Warning: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1*, Section 5.3. or applicable local codes.



Example of Large Room with 1/2 Wall divider.

Figure 1

The following formula can be used to determine the maximum heater rating per the definition of unconfined space:

$$Btu/Hr = \frac{(L_1 + L_2)FT \times (W)FT \times (H)FT}{50} \times 1000$$

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 Gas Code, ANSI Z223.1, Section 5.3.

Adhere to all codes, or in their absence, the latest edition of THE NATIONAL FUEL GAS CODE ANSI Z223.1 or NFPA54 which can be obtained from:

American National Standards Institute
11 West 42nd St.
New York, NY 10018

National Fire Protection Association, Inc.
Batterymarch Park
Quincy, MA 02269

CLEARANCES

Minimum Dimensions For Solid Fuel Burning Fireplaces UL127 Factory Built Fireplaces (Figure 2)

Model	A	B	C	D
VFYM-16	18"	13"	24"	18"
VFYR-16	18"	13"	24"	18"
VFYM-18	17"	14"	28"	17"
VFYR-18	17"	14"	28"	17"
VFYM-24	23"	14"	30"	18"
VFYR-24	23"	14"	30"	18"
VFYM-30	26"	14"	34"	20"
VFYR-30	26"	14"	34"	20"

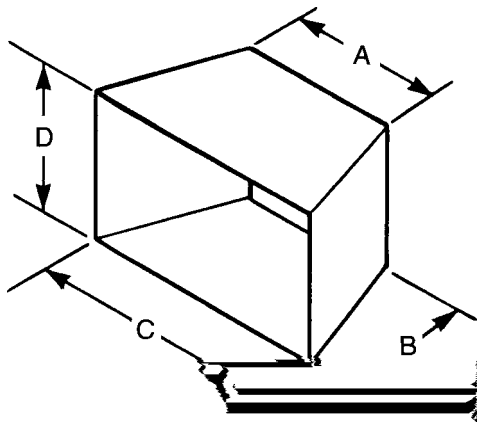


Figure 2

The dimensions shown and defined in the fireplace manufacturer's instructions are minimum clearances to maintain in installing this heater. Left and right clearances are determined when facing the front of the heater.

Follow these instructions to ensure safe installation.

Failure to follow instructions exactly can create a fire hazard.

Sidewall & Ceiling Clearances (Figure 3)

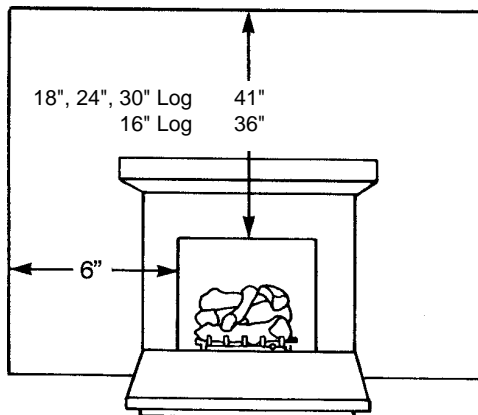


Figure 3

The sides of the fireplace opening must be 6" from any combustible wall. The ceiling must be at least 36" (for the 16" log) and 41" (for 18", 24" and 30" logs) from the fireplace opening.

MANTEL CLEARANCES (Figure 4)

Minimum non-combustible material clearance. If not using hood.

You must have non-combustible materials above the fireplace opening. Non-combustible material must extend at least 12" above fireplace opening. With sheet metal, you must have non-combustible material behind it.

Heat resistant materials such as slate and marble must be **at least 1/2" thick. Sheet metal should not be installed onto combustible material.**

Important: If you can not meet these minimum clearances, you must operate this heater with chimney flue damper open, if possible. See instructions for vented operations.

If above minimum clearances can not be obtained, you must use a hood.

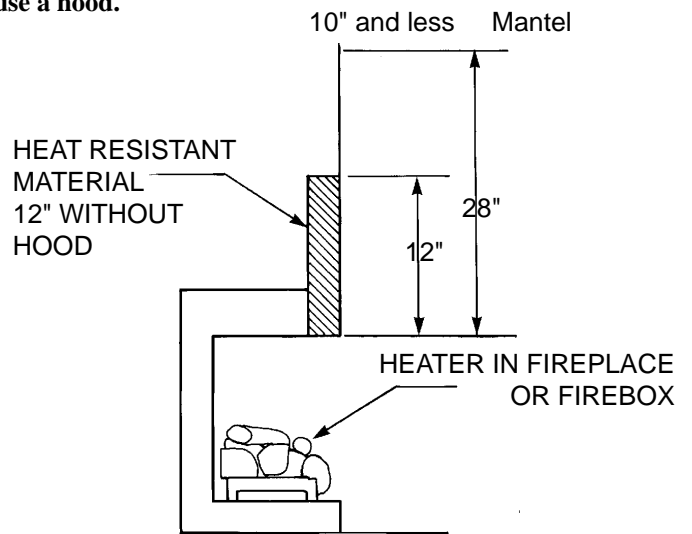


Figure 4

Non-Combustible Material Distance	Requirements for Safe Installation
12" or more	Non-combustible material.
Less than 12"	Non-combustible material must be extended to at least 8" with the installation of the optional fireplace hood. If you cannot extend non-combustible material at least 8", you must operate heater with flue damper open.

MINIMUM CLEARANCE WITH HOOD (Figure 5)

Example: A mantel may project from the wall a maximum of 2" at a minimum of 13-1/2" above the opening, and a maximum of 6" at a minimum of 15" above the opening.

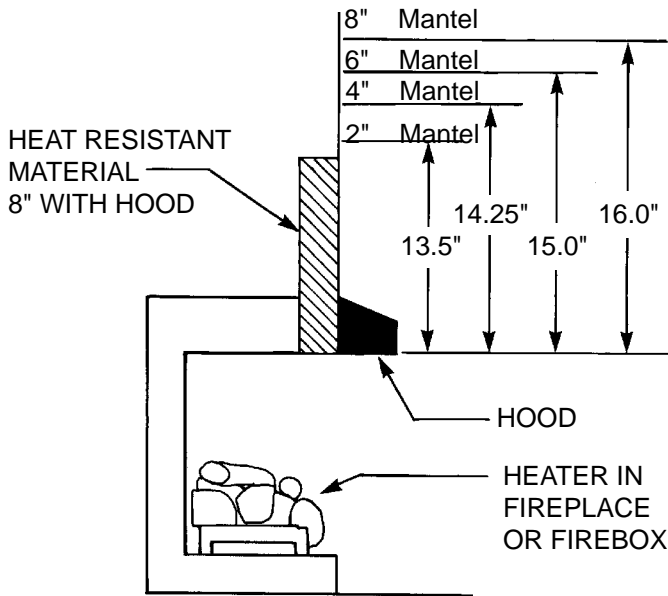


Figure 5

If your installation does not meet the above minimum clearances, you must:

- Operate the heater with the flue damper open, if possible or
- Raise the mantel to the proper height, or
- Remove the mantel.

FLOOR CLEARANCE (Figure 6)

If installing heater at floor level, the minimum distance to combustibles is "0" inches.

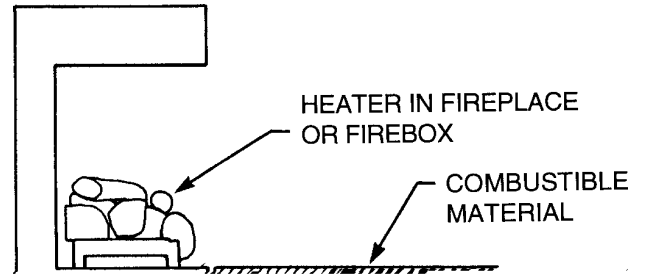


Figure 6

COMBUSTIBLE MATERIAL

Do not attach combustibles to the mantel of your fireplace. This is a fire hazard.

No greeting card, stockings or ornamentation of any type should be placed on or attached to the fireplace. This is a heating appliance. The flow of heat can ignite combustibles.

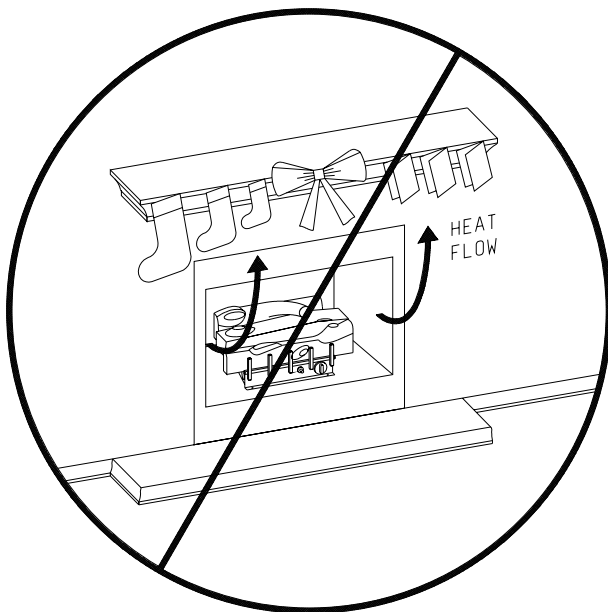


Figure 7

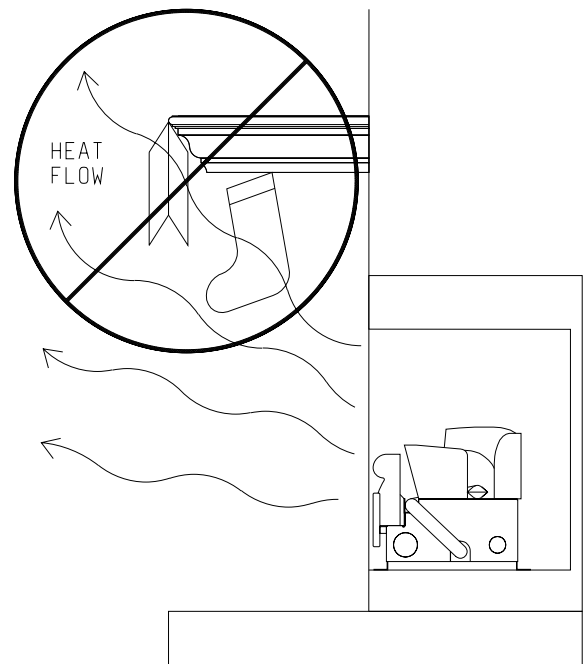


Figure 8

FIREPLACE PREPARATION

BEFORE INSTALLING THE APPLIANCE

- Turn off gas supply to fireplace or firebox.
- Have the fireplace floor and chimney professionally cleaned to remove ashes, soot, creosote or other obstructions. Have this cleaning performed annually after installation.
- Seal any fresh air vents or ash clean-out doors located on floor or wall of fireplace. If not, drafting may cause pilot outage or sooting. Use a heat-resistant sealant. Do not seal chimney flue damper.

Install and operate the appliance as directed in this manual.

FOR FACTORY BUILT FIREPLACES

FREE OPENING AREA OF CHIMNEY DAMPER FOR VENTING COMBUSTION PRODUCTS FROM DECORATIVE APPLIANCES FOR INSTALLATION IN SOLID FUEL BURNING FIREPLACES

	Appliance Input Rate (BTU/hr)		
	20	30	40
Chimney Height* (ft)	Minimum Opening** (sq. in.)		
10	11.3	16.6	22.1
15	8.6	12.6	17.3
20	7.5	10.8	14.5
25	6.6	9.6	12.6
30	6.2	9.1	11.3
35	5.7	8.0	10.8
40	5.3	7.5	10.2

* Height is from hearth to top of chimney and the minimum height is 10 feet.

** Chart shows minimum opening (sq. in.) for given height and input rate.

FOR MASONRY BUILT FIREPLACES

FREE OPENING AREA OF CHIMNEY DAMPER FOR VENTING COMBUSTION PRODUCTS FROM DECORATIVE APPLIANCES FOR INSTALLATION IN SOLID FUEL BURNING FIREPLACES

	Appliance Input Rate (BTU/hr)		
	20	30	40
Chimney Height* (ft)	Minimum Opening** (sq. in.)		
6	17.6	25.7	33.8
8	16.5	23.7	31.2
10	15.1	21.7	28.7
15	14.1	19.9	26.1
20	12.9	18.5	23.7
30	12.2	16.9	21.6

* Height is from hearth to top of chimney and the minimum height is 6 feet.

** Chart shows minimum opening (sq. in.) for given height and input rate.

INSTALLING AS A VENTED APPLIANCE

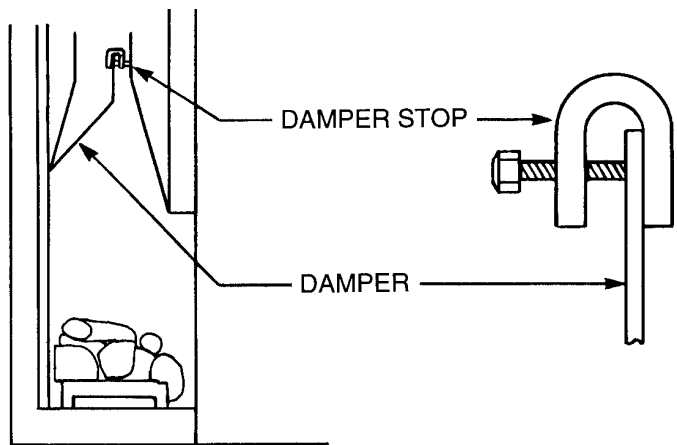
Manual and millivolt controlled gas logs may be installed as a vented decorative log set in compliance with ANSI Z21.60 and National Fuel Gas Code, Section 6.6 since, the gas logs are operated with the damper open, non-combustible material and minimum mantel requirements do not apply.

This appliance is for installation only in a solid fuel burning fireplace (masonry fireplace or manufactured fireplace) with a working flue and constructed of noncombustible material.

Damper stop installation:

A damper stop must be provided with the unit. Contact your dealer to obtain one. The damper stop must be installed as shown in (Figure 9) to prevent full closure of the fireplace damper blade and provide a minimum 29 square inch flue opening.

State of Massachusetts requirement for installation of vented decorative appliance in a vented fireplace is the following:
A vented decorative gas appliance must be installed in a vented fireplace only in the state of Massachusetts. The vent damper must be removed or welded permanently open.



Damper Stop Installation

Figure 9

BEFORE FULLY INSTALLING THE APPLIANCE

- Turn off the gas supply to the fireplace or firebox.
- Seal any fresh air vents and/or ash clean-out doors located on the floor or wall of the fireplace. If left unsealed, drafting may cause pilot outage or sooting. Use a heat resistant sealant. Do not seal the chimney flue damper.

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.

You must secure the gas log heater to the fireplace floor. If not, the entire unit may move when you adjust the controls. Movement of unit may cause shifting of the gas logs which leads to sooting and improper burning. Grate movement could cause a gas leak.

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 materials.

Metal shipping plate covering burner marked **REMOVE** must be removed from top of burner and discarded. Burner will not operate if plate is left in place.

Save for future use – when servicing fireplace.

Assembly Procedure: (Figure 10)

1. Center the gas log unit in the fireplace or firebox. Make certain the front feet of the grate sit inside the front edge of the fireplace or firebox.
2. An anchor hole is provided in the two bottom side members of the grate frame. After centering the grate correctly, mark the hole positions on the fireplace/firebox floor. Drill two (2) 5/32" diameter holes approximately 1-1/2" deep for masonry screws or 1/8" hole for sheet metal screws.
3. Anchor the grate to the fireplace/firebox floor using the screws provided. Refer to Figure 10.

Proper installation of the grate is essential to prevent any movement of the gas logs and controls during operation.

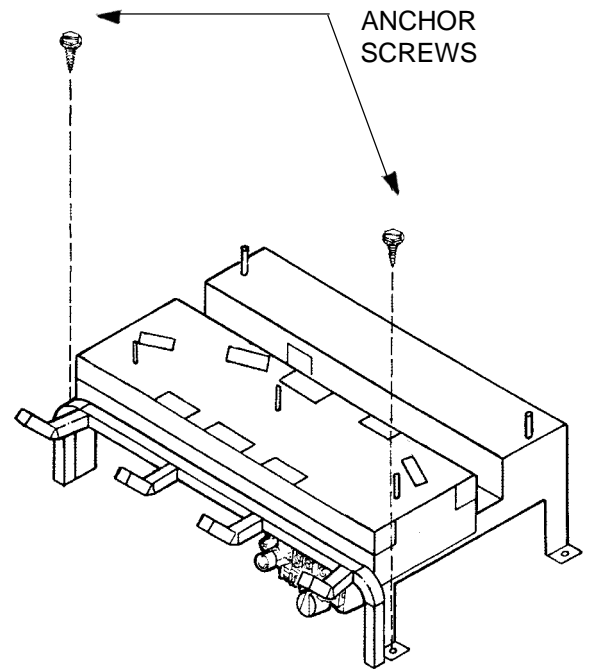
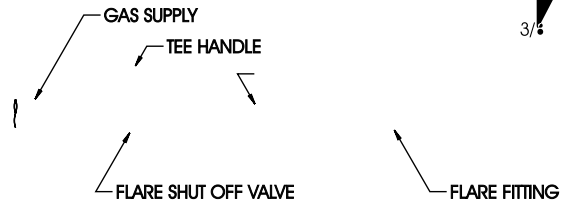


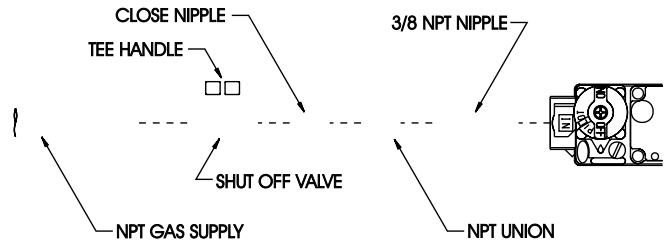
Figure 10

GAS SUPPLY

FLEXIBLE GAS LINE CONNECTION



RIGID GAS LINE CONNECTION



1. Always use proper safety practices when working with gas lines.
2. Always use the correct tools and equipment for the job.
3. Always wear your safety glasses and other protective gear.
4. Always make sure the gas supply is turned off before working on the lines.
5. Always make sure the gas lines are properly supported and secured.
6. Always make sure the gas lines are properly labeled and identified.
7. Always make sure the gas lines are properly tested and checked for leaks.
8. Always make sure the gas lines are properly maintained and inspected.
9. Always make sure the gas lines are properly replaced and repaired.
10. Always make sure the gas lines are properly disposed of and recycled.

LOG PLACEMENT

LOG PLACEMENT(Figures 12, 13, 14 and 15)

SO Logs

Before you begin: This unit is supplied with a set of ceramic fiber logs. Do not handle these logs with your bare hands! Always wear gloves to prevent skin irritation from ceramic fibers. After handling logs, wash your hands gently with soap and water to remove any traces of fibers.

All Logs

The log system has a rear log support that rests under the rear log. This support has two holes per side that fits on the single pin covering the air shutter. A label on the rear log support indicates the location of the holes to be used. (See label).

Every burner is shipped with a protective cover. This cover must be removed before log placement.

The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance.

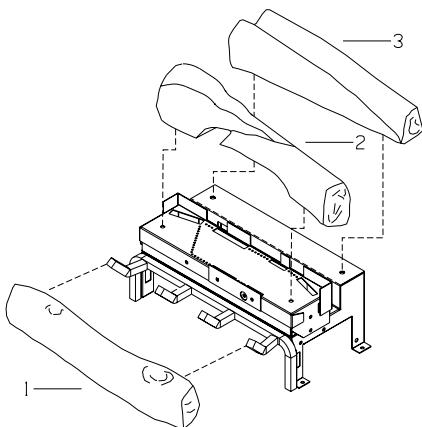
Refer to Figures 12, 13, 14 and 15 for the following warning.

Warning: Failure to position the parts in accordance with this diagram or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

PROPER INSTALLATION SEQUENCE:

VFYR and VFYM-16SO (Figure 12)

1. Install rear log (#3) behind the pilot assembly directly on the pins on each side of the rear log shield.
2. The middle log (#2) will go directly on the two pins on the flat portion of the main burner.
3. Install front log (#1) onto of the grate. The log is located into a notch area in the front grate area.



Log Placement

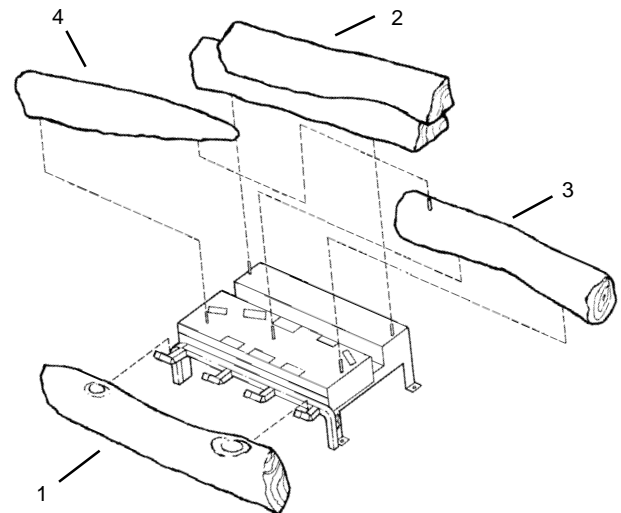
VFYR and VFYM-16SO Logs Shown

Figure 12

PROPER INSTALLATION SEQUENCE:

VFYR and VFYM-(18, 24, 30)SO (Figure 13)

1. Install front log (#1) onto of the grate. The log is located into a notch area in the front grate area.
2. Install rear log (#2) behind the pilot assembly directly on the pins on each side of the rear log shield.
3. The right, middle log (#3) will go directly on the two pins on the right side of the flat portion of the main burner.
4. The left, middle log (#4) should be placed flat on the pin on the left side of the flat portion of the main burner. The left, middle log will rest on a pin located on the right, middle log.



Log Placement

VFYR and VFYM -(18, 24, 30)SO Logs Shown

Figure 13

RWO Curing Process

The logs shipped with this product are formed from a cast refractory material. The curing process for this material won't be completed until after your new burner assembly has fired for a period of time. During this curing period you may notice popping noises and small pieces of material coming from the logset. This is caused by moisture near the surface of the logs and is normal.

Anytime your vent-free burner is operating, the screen curtains on the fireplace or firebox should be closed. This is especially true during the first few hours of operation.

To help the curing process and achieve maximum strength in the logs, the following procedure is suggested to place a new logset into operation.

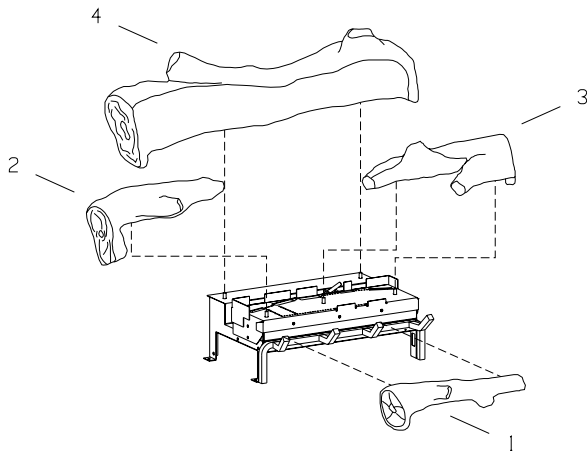
- After installation and leak testing is complete, burn the logset on low fire for 1/2 hour with the screen curtains closed.
- Shut the logset off and allow a 1/2 to 1 hour cooling period.
- Burn the logset at a medium fire setting for 1/2 hour.
- Allow another 1/2 to 1 hour cooling period.
- Burn the logset on the highest fire setting for 1/2 hour.
- Allow a final 1/2 to 1 hour cooling period.

LOG PLACEMENT (continued)

PROPER INSTALLATION SEQUENCE:

VFYR and VFYM-16RWO Logs (Figure 14)

1. Install front, left log (#1) onto the grate. The left end of front, left log must be placed to the outside of left grate.
2. Install front, right log (#3) onto right pin and middle pin on flat portion of main burner.
3. Install middle, left log (#2) onto the left pin on flat portion of main burner. Pivot tip of middle, left log to lay on front, right log.
4. Install rear log (#4) onto two pins on rear log support.

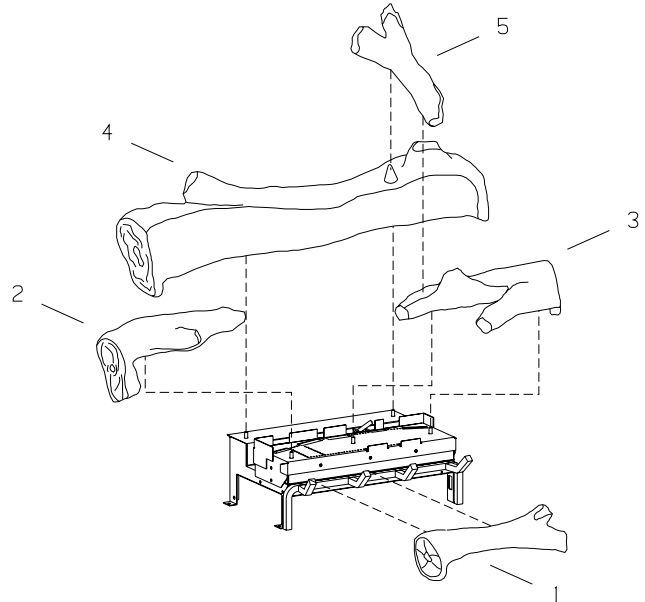


Log Placement
VFYR and VFYM-16RWO Logs Shown
Figure 14

PROPER INSTALLATION SEQUENCE:

VFYR and VFYM-(18, 24, 30)RWO Logs (Figure 15)

1. Install front, left log (#1) onto the grate. The left end of front, left log must be placed to the outside of left grate.
2. Install front, right log (#3) onto right pin and middle pin on flat portion of main burner.
3. Install middle, left log (#2) onto the left pin on flat portion of main burner. Pivot tip of middle, left log to lay on front, right log.
4. Install rear log (#4) onto two pins on rear log support.
5. Install top log (#5) onto pin on rear log. Tip of top log will lay on front, right log.



Log Placement
VFYR and VFYM -(18, 24, 30)RWO Logs Shown
Figure 15

PLACEMENT OF GLOWING EMBERS AND LAVA ROCK

Provided with the log set is a small bag of glowing embers (rock wool) to be placed between logs on the flat metal surface of the burner.

Placement of the glowing embers (rock wool) is very individual and light coverage of the areas indicated will provide your best effects. We recommend separation of the rock wool by hand and make your coverage as light and fluffy as possible.

Place just enough embers on the burner to obtain the glow and a gold yellow flame.

Do not place embers (rock wool) over large ports in rear portion of burner.

A thin layer of glowing embers (rock wool) should be placed under open space between the right and left middle logs.

Rock wool should **not** be placed in the area of the pilot assembly.

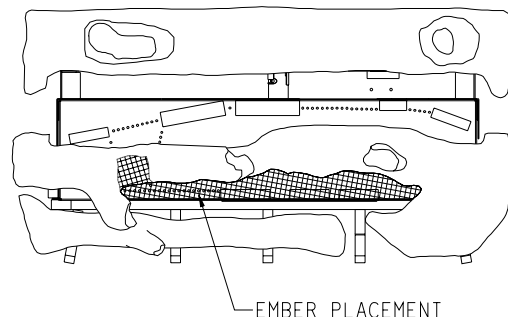
Placing Lava Rock in Front of Grate and Burner Pan on Fireplace Floor

Spread lava rocks on fireplace floor in front of grate and burner pan. The lava rocks are for decorative effect and are not required for fireplace operation.

ATTENTION: DO NOT PLACE LAVA ROCKS ON LOGS OR ROCK WOOL. THE LAVA ROCKS SHOULD ONLY BE PLACED ON THE FIREPLACE FLOOR.

TOP VIEW OF LOG SET

REAR LOG



Placement of Glowing Embers (rock wool)
For All Logs

Figure 16

OPERATION INSTRUCTIONS / FLAME APPEARANCE

Flames from the pilot (rear right back side of the pan burner) as well as the main flame should be visually checked as the log set is installed.

In normal operation at full rate after 10 to 15 minutes, the flame appearance should be sets of yellow flames.

NOTE: all flames will be random by design, flame height will go up and down.

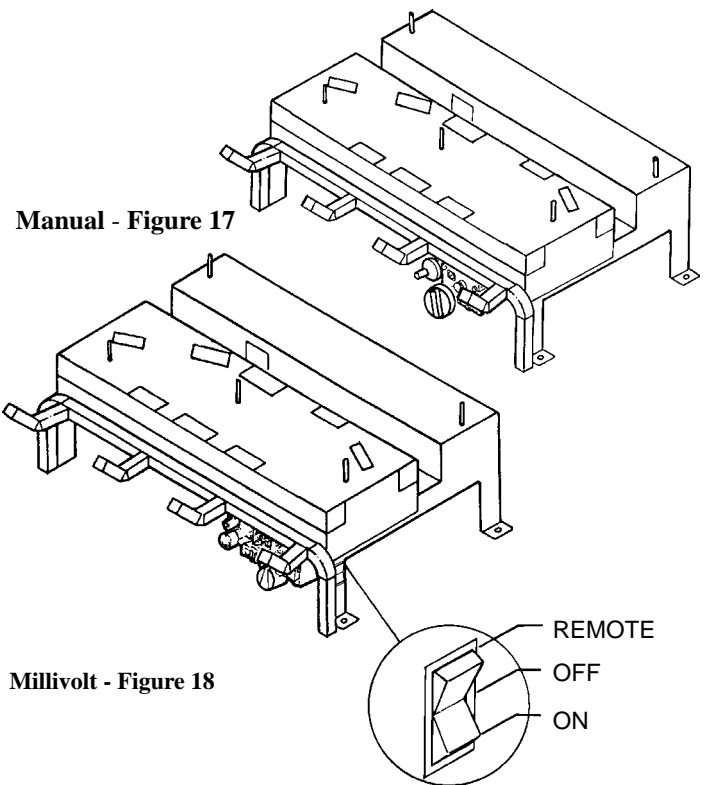
Glowing embers (rock wool) can cover the pan burner in between the front and middle logs, but very little is necessary to cover this area. Excess ember material causes the yellow flame to become orange and stringy. Apply just enough to obtain slow glow and a gold yellow flame.

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside the burner area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

This appliance must not be used with glass doors in the closed position. This can lead to pilot outages and severe sooting outside the fireplace.



CLEANING AND SERVICING

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

TURN OFF HEATER AND ALLOW TO COOL BEFORE CLEANING.

Remove logs, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Refer to manual for correct log placement.

PERIODIC CLEANING – Refer to parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Logs - brush with soft bristle brush or vacuum with brush attachment.
- Remove loose particles and dust from the burner areas, controls, piezo covers and grate . Don't remove media from inside burner box.
- Inspect and clean burner air intake hole. Remove lint or particles with brush. Failure to keep air intake hole clean will result in sooting and poor combustion.

ANNUAL CLEANING/INSPECTION – Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake hole. Remove lint or particles with vacuum or brush. Failure to keep air intake hole clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner.
- Check level of glass media in burner. Burner should be full, up to the level of openings in burner top.

Attention: Glass media that is dislodged from burner box during shipment can be replaced through openings in burner top. If settling of glass media occurs during shipment an additional one (1) pound bag of glass media, part number, 10267 can be ordered from Empire Comfort Systems, Inc.

VFYM LIGHTING INSTRUCTIONS

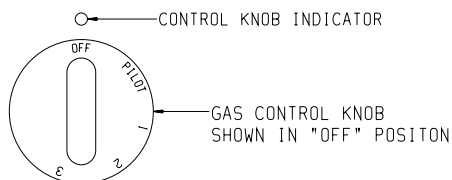
FOR YOUR SAFETY READ BEFORE LIGHTING

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

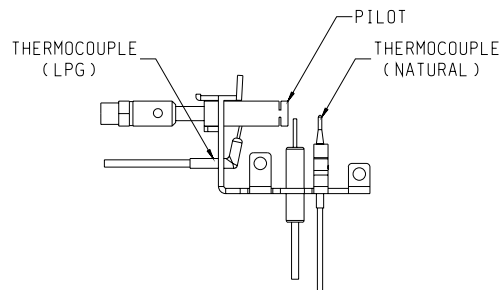
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- 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.
- 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, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- 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

1. STOP! Read the safety information.
2. Make sure the manual shutoff valve is fully open.
3. This heater is equipped with an ignition device (piezo) which automatically lights the pilot.
4. Refer to Figure 22 for the location of the piezo ignitor and control knob. Push in gas control knob slightly and turn control knob clockwise to the OFF position.
NOTE: Knob cannot be turned to OFF unless knob is pushed in slightly. Do not force.



7. With the control knob pushed in, push and release the piezo ignitor button to light the ODS pilot. The pilot is located on the right rear side of the heater, behind the middle log and in front of the rear log. If piezo ignitor does not light the pilot, refer to "Match Lighting Instructions".



5. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas STOP! Follow the instructions under 'What To Do If You Smell Gas'. If you do not smell gas, go to the next step.
6. From OFF position, push in gas control knob slightly and turn counterclockwise to the PILOT position. Push in and hold control knob for 5 seconds.
NOTE: If you are running the heater for the first time, it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.
8. Hold the control knob in for an additional 10 seconds to prevent the ODS pilot from shutting off the gas while the thermocouple is warming up.
9. Release the control knob.
 - * If the knob does not pop out when released, stop and immediately call your service technician or gas supplier.
 - * If the ODS pilot will not stay lit after several tries, push and turn the gas control knob clockwise to OFF and wait 15 seconds. Repeat steps 6 through 9.
10. Push in control knob and turn to desired setting (1, 2, 3). The control knob must be set at either the low or high position, and the control knob will pop out when positioned correctly. Do not set the control knob at a position between pilot (1, 2, 3).

TO TURN OFF GAS TO APPLIANCE

1. Turn control knob clockwise to OFF position to completely shut off the heater.

VFYR LIGHTING INSTRUCTIONS

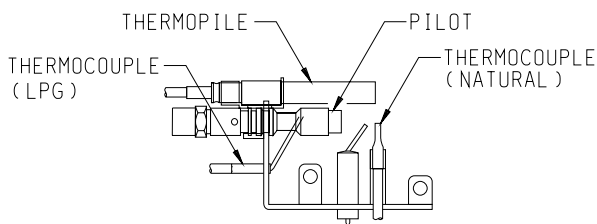
FOR YOUR SAFETY READ BEFORE LIGHTING

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

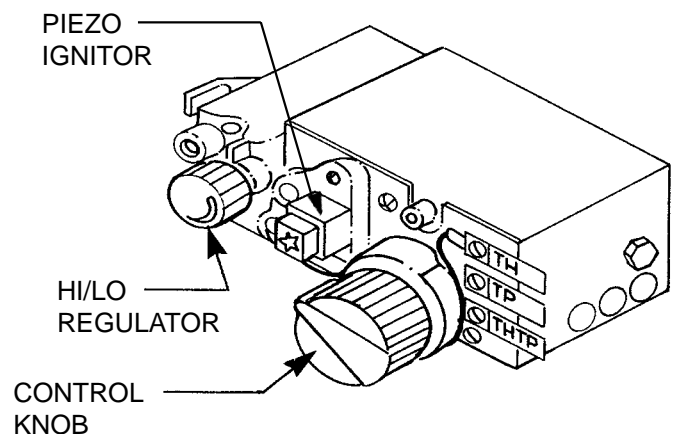
- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS**
- 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.
- 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, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- 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

1. STOP! Read the safety information label.
 2. Make sure the manual shutoff valve is fully open.
 3. This gas log set is equipped with an ignition device (piezo) which lights the pilot. If piezo ignitor does not light the pilot, refer to instructions for "Match Lighting".
 4. Turn gas control knob clockwise to the "OFF" position, set the thermostat to the lowest setting and turn ON/OFF switch to OFF position.
 5. Wait ten (10) 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 label. If you do not smell gas, go to the next step.
 6. From OFF position, turn the gas control knob counterclockwise to "Pilot" position. Push in and hold control knob for 5 seconds.
 9. Turn gas control knob counterclockwise to the "ON" position.
 10. After the pilot has been lit for one minute, the burner can be turned on. Turn the ON/OFF switch to "ON" position or adjust thermostat to desired setting.
 11. If the gas logs will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.
- Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.



7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.



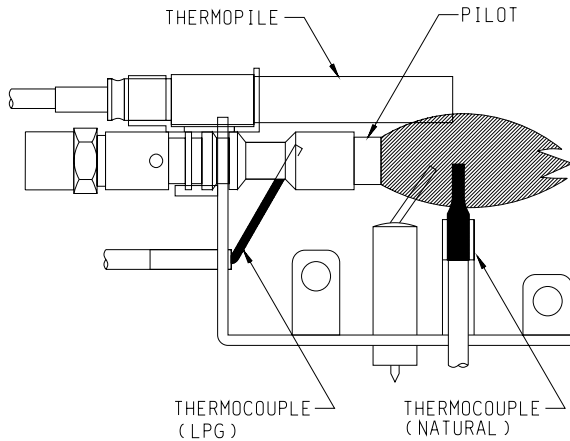
TO TURN OFF GAS TO APPLIANCE

1. Turn control knob clockwise to OFF position to completely shut off the heater.
2. If applicable: Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting. If applicable: Turn off all electric power to the heater.

PILOT FLAME CHARACTERISTICS

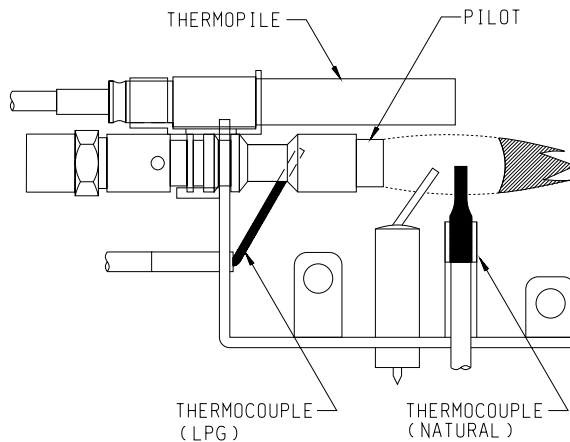
Figures 19 and 22 show a correct pilot flame pattern. The correct flame will be blue and will extend beyond the thermocouple. The flame will surround the thermocouple just below the tip. A slight yellow flame may occur where the pilot flame and main burner flame meet. Figures 20 and 23 show an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the heater will shut down.

VFYR PILOT



Correct appearance of pilot flame.

Figure 19



Incorrect appearance of pilot flame.

Figure 20

If pilot flame pattern is incorrect, as shown in Figure 20

- See Troubleshooting, page 20.

Cleaning and Maintenance/Pilot Oxygen Depletion Sensor Pilot (Figure 21)

When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open end wrench.

2. Blow air pressure through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Tighten nut B also by grasping nut A.

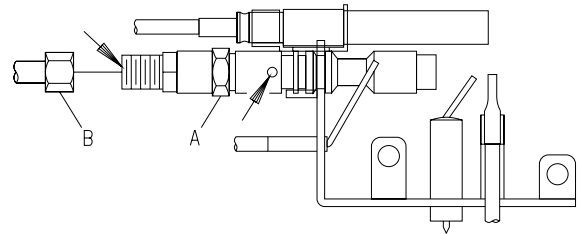
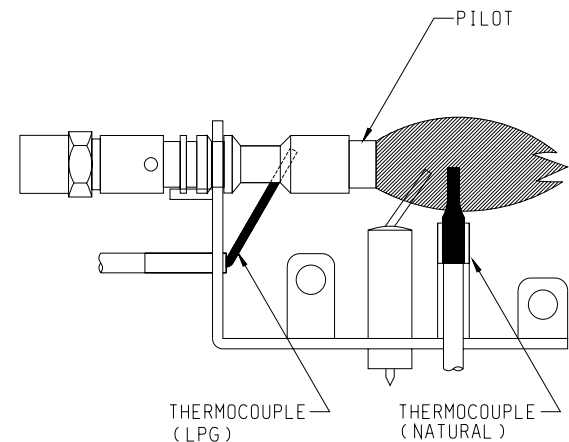


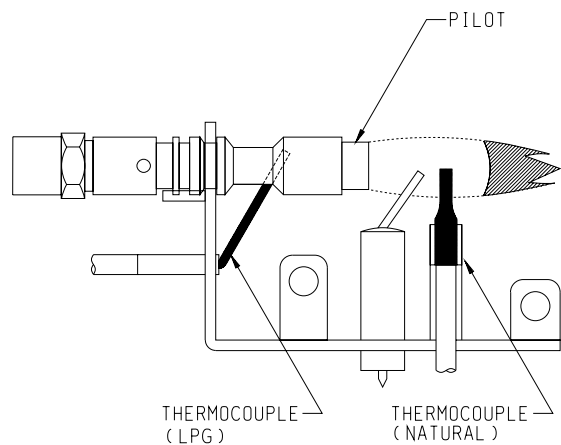
Figure 21

VFYM PILOT



Correct Pilot Flame Pattern

Figure 22



Incorrect Pilot Flame Pattern

Figure 23

If pilot flame pattern is incorrect, as shown in Figure 23

- See Troubleshooting, page 20.

PILOT FLAME CHARACTERISTICS (continued)

Cleaning and Maintenance/Pilot

Oxygen Depletion Sensor Pilot (Figure 24)

When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open end wrench.
2. Blow air pressure through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Tighten nut B also by grasping nut A.

Warning:

Never use needles, wires, or similar cylindrical objects to clean the pilot to avoid damaging the calibrated ruby that controls the gas flow.

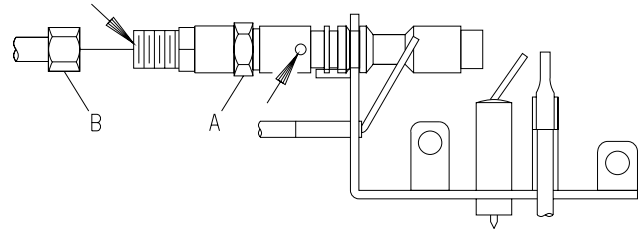


Figure 24

WIRING

Millivolt Control

The valve regulator controls the burner pressure which should be checked at the pressure test point. Turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point (Use test point "A" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.

Wiring Diagram (Figure 25)

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

16", 18", 24" and 30" Gas Logs (Millivolt) thermopile is self powered gas valve and does not require 110 volts. Refer to (Figure 25) to provide optional wall switch, thermostat, or remote control. Maximum length of 20 feet of 18 AWG to conductor wires is to be used with all optional switches.

Use the two leads (Red and Green wires) to attach optional components.

Check System Operation

Millivolt system and all individual components may be checked with a millivolt meter 0-1000 MV range.

Remote Receiver -VFYR-(16, 18, 24, 30)

Use the following steps to place the **remote receiver** adjacent to the gas valve.

Attention:

1. The remote receiver **can not** be placed behind the gas valve and burner assembly.
2. When facing the appliance, the remote receiver must be placed to the **right** of the gas valve and burner assembly.

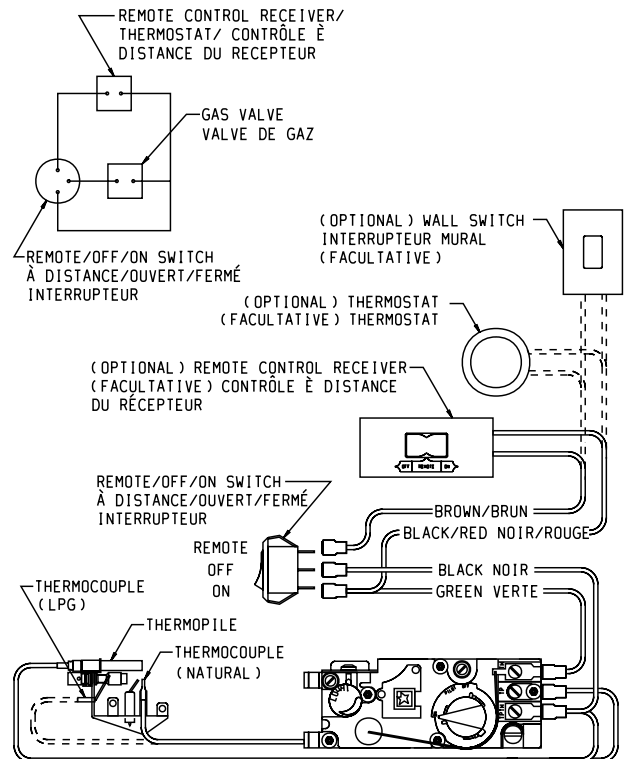
Note: Do not let remote control receiver come in contact with burner assembly.

On circulating vent-free firebox, install remote control receiver behind bottom louver.

Refer to remote control installation and operating instructions for more details on remote control.

750 Millivolt System

When you ignite the pilot, the thermocouple produces millivolts (electrical current) which energizes the magnet in the gas valve. After 30 seconds to 1 minute time period you can release the gas control knob and the pilot will stay ON. Allow your pilot flame to operate an additional one (1) to two (2) minutes before you turn the gas control knob from the PILOT position to the ON position. This time period allows the millivolts (electrical current) to build-up to a sufficient level allowing the gas control to operate properly.



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THIS UNIT MUST BE REPLACED, IT MUST BE REPLACED WITH NO. 18, 150°C WIRE OR ITS EQUIVALENT.

Figure 25

TROUBLESHOOTING

SYMPTOMS - POSSIBLE CAUSES AND CORRECTION

Turn appliance OFF and allow to cool before servicing. Only a qualified service person should service and repair the heater.

- 1. When ignitor button is pressed, there is no spark at ODS/pilot.**
 - a. Ignitor electrode positioned wrong - Replace pilot.
 - b. Ignitor electrode is broken - Replace pilot.
 - c. Ignitor electrode not connected to ignitor cable - Reconnect ignitor cable.
 - d. Ignitor cable pinched or wet. Keep ignitor cable dry - Free ignitor cable if pinched by any metal or tubing.
 - e. Broken ignitor cable - Replace ignitor cable.
 - f. Bad piezo ignitor - Replace piezo ignitor.
- 2. Appliance produces unwanted odors.**
 - a. Appliance burning vapors from paint, hair spray, glues, etc. - Ventilate room. Stop using odor causing products while heater is running.
 - b. Gas leak - Locate and correct all leaks.
- 3. Appliance shuts off during use. (Pilot and main burner are off.)**
 - a. Not enough fresh air is available for ODS/pilot to operate - Open window and/or door for ventilation.
 - b. Low line pressure - Contact local gas company.
 - c. ODS/pilot is partially clogged - Clean ODS/pilot.
 - d. Defective thermocouple - Replace pilot.
- 4. Appliance shuts off during use. (Pilot stays on.)**
 - a. Low line pressure - Check line pressure to the valve.
 - b. Defective thermopile - Check pilot flame, check wire connections, output should be a minimum of 325 millivolts across. TH/TP and TP terminals with ON/OFF switch off.
- 5. Gas odor even when control knob is in OFF position.**
 - a. Gas leak - Locate and correct all leaks.
 - b. Control valve defective - Replace control valve.
- 6. When ignitor button is pressed, there is spark at ODS/pilot, but no ignition.**
 - a. Gas supply turned off or manual shutoff valve closed - Turn on gas supply or open manual shutoff valve.
 - b. Control knob not in PILOT position - Turn control knob to PILOT position.
 - c. Control knob not pressed in while in PILOT position - Press in control knob while in PILOT position.
 - d. Air in gas lines when installed - Continue holding down control knob. Repeat igniting operation until air is removed.
 - e. ODS/pilot is clogged - Replace ODS/pilot assembly or get it serviced.
 - g. Gas regulator setting is not correct - Replace gas regulator.
- 7. ODS/pilot lights but flame goes out when control knob is released.**
 - a. Control knob not fully pressed in - Press in control knob fully.
 - b. Control knob not pressed in long enough - After ODS/pilot lights, keep control knob pressed in 30 seconds.
 - c. Manual Shutoff valve not fully open - Fully open manual shutoff valve.
 - d. Thermocouple connection loose at control valve - Hand tighten until snug, then tighten 1/4 turn more.
 - e. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure or dirty or partially clogged ODS/pilot - Contact local gas company.
 - f. Thermocouple damaged - Replace thermocouple.
 - h. Control valve damaged - Replace control valve.
- 8. Burner does not light after ODS/pilot is lit.**
 - a. Burner orifice clogged - Clean burner or replace main burner orifice.
 - b. Burner orifice diameter is too small - Replace burner orifice.
 - c. Inlet gas pressure is too low - Contact qualified service person.
- 9. Burner backfires during combustion.**
 - a. Manifold pressure is too low - Contact local gas company.
 - b. Burner orifice clogged - Clean burner or replace burner orifice.
- 10. Logs appear to smoke after initial operation.**
 - a. Vapors from paint or curing process of logs - Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours.
Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
- 11. Heater produces a whistling noise when main burner is lit.**
 - a. Turning control knob to HIGH position when main burner is cold - Turn control knob to LOW position and let warm up for a minute.
 - b. Air in gas line - Operate burner until air is removed from line. Have gas line checked by local gas company.
 - c. Dirty or partially clogged burner orifice - Clean burner or replace burner orifice.
- 12. No gas to pilot.**
 - a. LP-regulator shut down due to inlet pressure too high - Verify LP tank regulator is installed and set at 11" to 13" w.c. Replace regulator on heater.

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

HOW TO ORDER REPAIR PARTS

Parts can be ordered **only** through your **service person or dealer**. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number from the name plate on your equipment. Then determine the Part Number (**not** the Index Number) and the Description of each part from the following appropriate illustration and list. Be sure to give all this information . . .

Appliance Model Number _____	Part Description _____
Appliance Serial Number _____	Part Number _____
Type of Gas (Propane or Natural) _____	

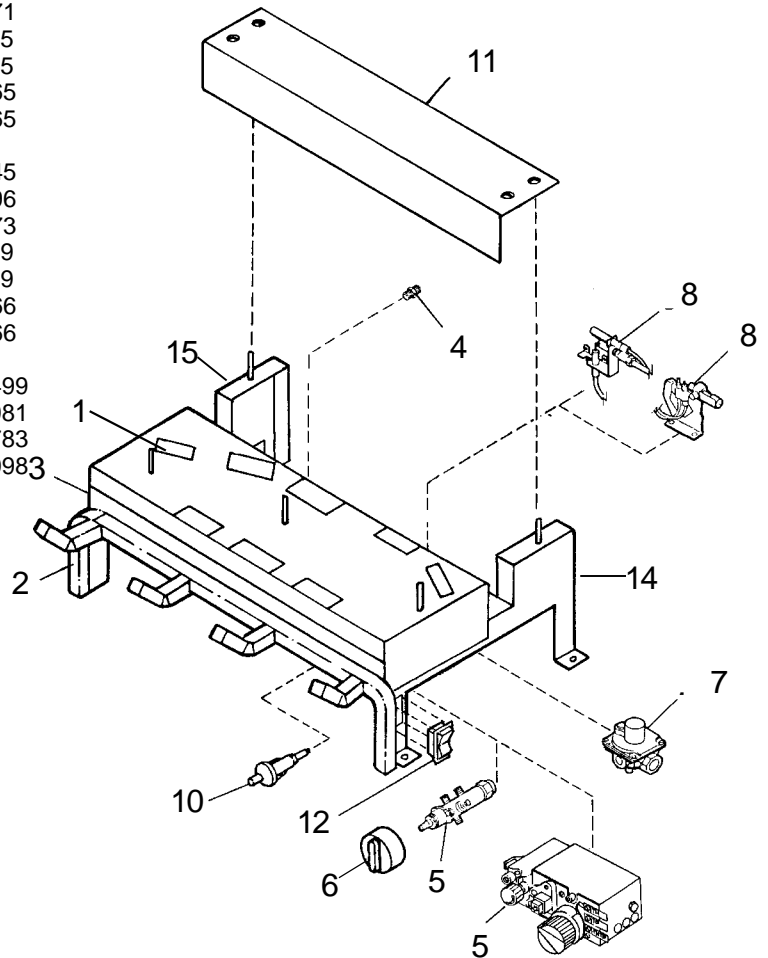
Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.

BURNER PARTS LIST & PARTS VIEW

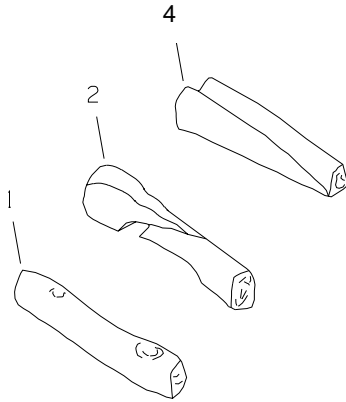
Attention: When ordering parts, it is very important that **part number** and **description** of part coincide.

Index Number	Description	Part Number		Index Number	Description	Part Number	
		Natural	Propane			Natural	Propane
Common Parts				8	Pilot ODS Assembly	R-5171	R-5170
1	Glass Media (1 Lb.)	10267	10267	10	Piezo Ignitor	R-2313	R-2313
14	Burner Support - Right	10212	10212		Pilot Tubing (18", 24", 30")	10251	10251
15	Burner Support - Left	10213	10213		Pilot Tubing (16")	10978	10978
	Ignitor Wire	R-5668	R-5668		5/16" Tubing (Regulator to Valve)	10249	10249
	Orifice Holder (18", 24", 30")	P-200	P-200		(18", 24", 30")		
	Orifice Holder (16")	P-253	P-253		5/16" Tubing (Regulator to Valve)	10503	10503
Not Shown	Rock Wool (2 Required)	11548	11548		(16")		
Not Shown	Lava Rock (2 Required)	11788	11788		5/16" Tubing (Valve to Venturi)	10250	10250
					(18", 24", 30")		
					5/16" Tubing (Valve to Venturi)	10504	10504
					(16")		
					Regulator Bracket	10754	10754
VFY16				Millivolt System			
2	Grate Assembly Millivolt	10528	10528	5	Valve Control	R-4323-A	R-4324-A
2	Grate Assembly Manual	10526	10526	8	Pilot ODS Assembly	R-3624	R-3623
3	Burner Assembly	10518	10519	12	Rocker Switch (On/Off Remote)	R-3436	R-3436
4	Orifice (Manual)	P-254	P-255		Pilot Tubing (18", 24", 30")	10412	10412
4	Orifice (Millivolt)	P-256	P-255		Pilot Tubing (16")	10509	10509
11	Rear Log Support (Millivolt)	10977	10977		5/16" Tubing Valve to Venturi	10254	10254
	Rear Log Support (Manual)	10977	10977		(18", 24", 30")		
					5/16" Tubing Valve to Venturi	10508	10508
					(16")		
					Wire Harness	R-4579-D	R-4579-D
					Valve Cover	R-4610	R-4610
					Piezo Ignitor	R-4641	R-4641
					Brass Male Connector	R-2423	R-2423
VFY18							
2	Grate Assembly Millivolt	10243	10243				
2	Grate Assembly Manual	10188	10188				
3	Burner Assembly	10268	10269				
4	Orifice (Manual)	P-203	P-250				
4	Orifice (Millivolt)	P-243	P-250				
11	Rear Log Support (Millivolt)	10264	10264				
	Rear Log Support (Manual)	10264	10264				
VFY24							
2	Grate Assembly Millivolt	10244	10244				
2	Grate Assembly Manual	10194	10194				
3	Burner Assembly	10270	10271				
4	Orifice (Manual)	P-244	P-245				
4	Orifice (Millivolt)	P-244	P-245				
11	Rear Log Support (Millivolt)	10265	10265				
	Rear Log Support (Manual)	10265	10265				
VFY30							
2	Grate Assembly Millivolt	10245	10245				
2	Grate Assembly Manual	10196	10196				
3	Burner Assembly	10272	10273				
4	Orifice (Manual)	P-209	P-249				
4	Orifice (Millivolt)	P-211	P-249				
11	Rear Log Support (Millivolt)	10266	10266				
	Rear Log Support (Manual)	10266	10266				
Manual System							
5	Valve Control (18", 24", 30")	R-4495	R-4499				
	Valve Control (16")	R-4982	R-4981				
6	Control Knob	R-2783	R-2783				
7	Regulator	R-5097	R-50983				

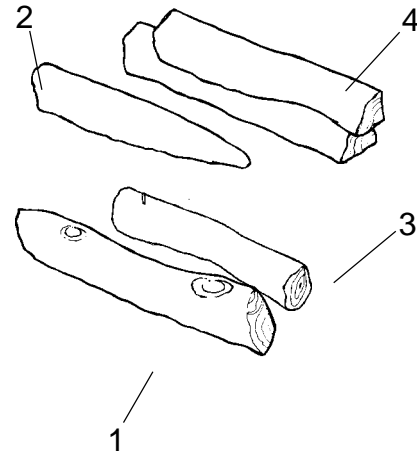


LOGS PARTS LIST & PARTS VIEW

Attention: When ordering parts, it is very important that **part number** and **description** of part coincide.



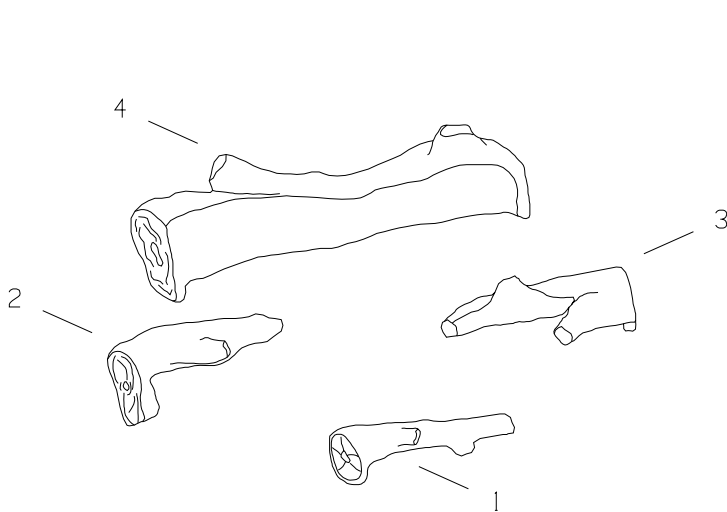
16" LOGS



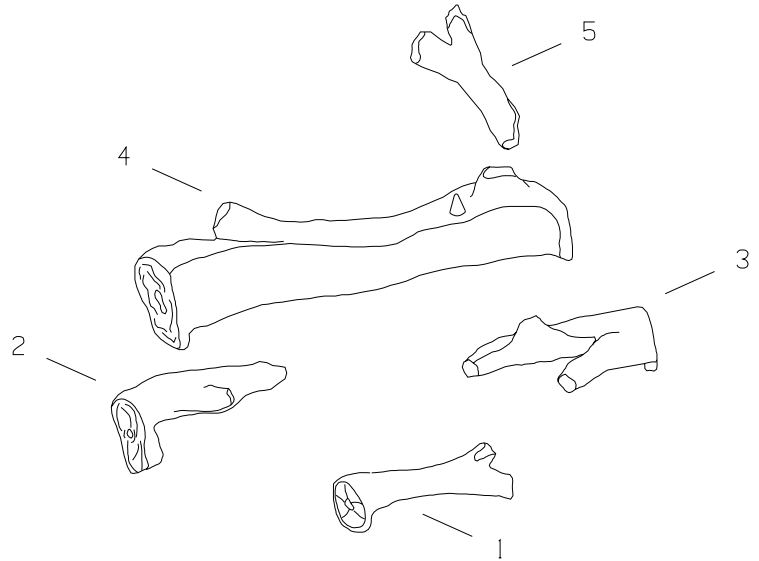
18", 24", 30" LOGS

SO LOG REPLACEMENT

Index No.	Description	Part Number			
		16	18	24	30
1	Front Log	R-4936	R-4584	R-4589	R-4594
2	Left Middle Log	_____	R-5856	R-4590	R-4595
2	Middle Log	R-4937	_____	_____	_____
3	Right Middle Log	_____	R-5857	R-4591	R-4596
4	Rear Log	R-4946	R-4587	R-4592	R-4597



16" LOGS



18", 24", 30" LOGS

RWO LOG REPLACEMENT

Index No.	Description	Part Number			
		16	18	24	30
1	Front Left Log	R-5317	R-5224	R-5118	R-5228
2	Middle Left Log	R-5319	R-5225	R-5119	R-5119
3	Front Right Log	R-5318	R-5226	R-5120	R-5229
4	Rear Log	R-5316	R-5227	R-5121	R-5230
5	Top Log	_____	R-5122	R-5122	R-5122



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