

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

MISSOURI PROPANE GAS ASSOCIATION,)	
)	
Complainant,)	
)	
vs.)	File No. GC-2016-0083
)	
SUMMIT NATURAL GAS OF MISSOURI, INC.,)	
)	
Respondent.)	

AFFIDAVIT OF BRIAN T. BROOKS

STATE OF MISSOURI)
) ss
COUNTY OF Webster)

Brian T. Brooks, being first duly sworn on his oath, states:

1. My name is Brian T. Brooks. I am the Hearth Products Manager and Assistant Office Manager for Brooks Gas Company. My business address is 209 S. Clay, Marshfield, MO 65706. I am also a Board Member of the Missouri Propane Gas Association (MPGA).
2. I have reviewed the public versions of Summit Natural Gas of Missouri's (SNGMO) responses to MPGA's Data Requests relating to SNGMO's conversions of unvented heating products.
3. Based on the documents provided by SNGMO, between September 29, 2014, and September 4, 2015, SNGMO converted four unvented heating products from propane to natural gas. Based on the documents provided by SNGMO, I obtained the owners' manuals for each of those four unvented heating products that Summit converted from propane to natural gas.

4. On September 29, 2014, SNGMO converted an unvented heating product from propane to natural gas that was manufactured by DESA, model no. VMH26PRB/EFS26PRA. A copy of SNGMO's General Service Order and DESA's Owner's Manual pertaining to this product is attached as **Exhibit 1** hereto. Page 1 of the Owner's Manual indicates that it is for model nos. VMH26PRB and EFS26PRA.

a. On page 2 of the Owner's Manual, it states: "This appliance is only for use with the type of gas on the rating plate. This appliance is not convertible for use with other gases."

b. On page 4 of the Owner's Manual, it states: "1. This appliance is only for use with the type of gas on the rating plate. This appliance is not convertible for use with other gases."

c. On page 32 of the Owner's Manual, under the "Specifications" section for model no. VMH26PRB/EFS26PRB it states:

"Type of Gas Propane /LP gas only."

5. On January 23, 2015, SNGMO converted an unvented heating product from propane to natural gas that was manufactured by DESA, model no. VGF28PT. A copy SNGMO's General Service Order and DESA's Owner's Manual pertaining to this product is attached as **Exhibit 2** hereto. I found the correct owner's manual for this product on the internet at <http://desatech.com> under the heading on the right side of the page, "Manuals With Parts List" and Subheading ""Indoor Heating" by clicking on "Fireplace" and when the dropbox appeared, clicking on model no. VGF28PT, and the manual automatically downloads. A copy of the above-described steps is attached as **Exhibit 3** hereto.

- a. On page 3 of the Owner's Manual, it states: "1. Use only propane gas. Do not convert fireplace to use different fuel type."
- b. On page 32 of the Owner's Manual, under the "Specifications" section, it states:
"Type of Gas Propane Gas Only."

6. On March 19, 2015, I was in attendance at a meeting in SNGMO's office in Sunrise Beach, MO, where I witnessed SNGMO convert an unvented heating product from propane to natural gas that was manufactured by SHM International Corp. The rating plate applies to multiple models: (S, B) VFMV (21,24,27,30) LP. A copy of the rating plate attached to the product that was supplied by SNGMO in response to a MPGA data request and a copy of the SHM Owner's Manual pertaining to the product is attached as **Exhibit 4** hereto. Page 1 of the manual indicates that it is for model no. (S, B) VFMV 24 LP.

- a. The rating plate attached by the manufacturer to the product says the following:
 - i. "Gas Type Propane/LP"
 - ii. "This appliance is only for use with propane gas. This appliance shall not be field converted."
 - iii. "This appliance is only for use with the type of gas indicated on the rating plate."
 - iv. "This appliance is not convertible for use with other gases."
- b. The Owner's Manual is consistent with the language on the rating plate and contains the following language:
 - i. Page 1: "This appliance is only for use with the type of gas on the rating plate. This appliance is not convertible for use with other gases."

ii. Page 3: "1. This appliance is only for use with the type of gas on the rating plate. This appliance is not convertible for use with other gases."


iii. Page 25: Under the "Specifications" section for model VFM 21,24 LP and VFM 27,30 LP, it states: "Gas Type Propane/LP"

7. On September 4, 2015, SNGMO converted an unvented gas heating product from propane to natural gas that was manufactured by Sure Heat, model no. BIVFMV. A copy of SNGMO's General Service Order and Sure Heat's Owner's Manual is attached as **Exhibit 5** hereto. I found the correct manual on the internet at <http://sureheat.com/manuals/heaters/bivfmv.pdf>.

a. On page 1 of the Owner's manual, it states: "NOTE: THIS UNIT CANNOT BE CONVERTED TO DIFFERENT GAS TYPE."

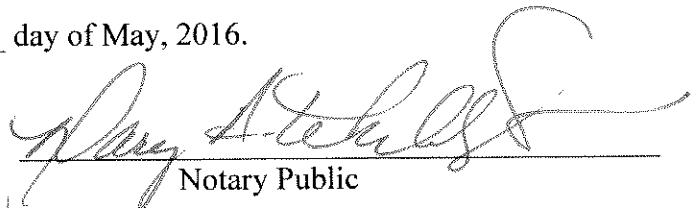
b. On page 1 of the Owner's Manual, it states: "THIS APPLIANCE IS ONLY FOR USE WITH THE TYPE OF GAS INDICATED ON THE RATING PLATE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES."

8. I hereby swear and affirm that to the best of my knowledge and belief, the information herein is true and correct.



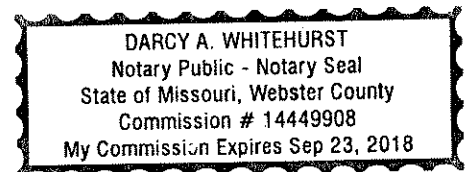
Brian T. Brooks

Subscribed and sworn to before me this 11 day of May, 2016.



Notary Public

My commission expires: 9/23/2018



PUBLIC Attachment
MFGA OR 4 GA 2010 0083

SLG
9-29-14
9/29/14

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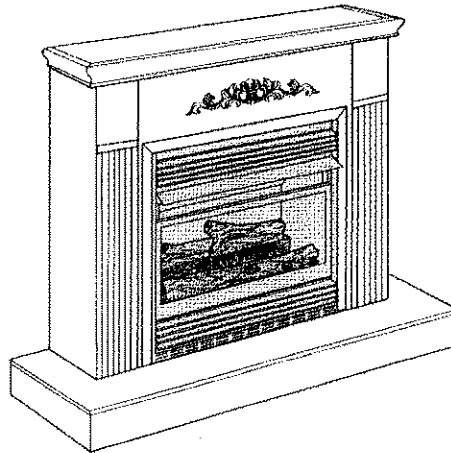
800-927-0787

GENERAL SERVICE ORDER						
S.O.#	Category SNG	Location: LOO		Date & Time Rec'd		
Account #	Service	Address:		Date & Time Wanted 9-29-14 1pm		
Customer Name	Town Or Subdivision	LIUN CREEK		Customer Ph.#		
Action Required	METER SET	FUR	Leak Classification: 1 2 3 4		Inside Leak <input type="checkbox"/> Outside Leak <input type="checkbox"/>	
ERT#	48333930	CSEF				
Meter #	13X145635	Last Read	Last Read Date		Meter Notes 100 G ERT	
COMPLETION INFORMATION						
Date	9/29/14	Time Arrived	1:15 pm	Time Departed	4:15	Cancel <input type="checkbox"/> Not Completed <input type="checkbox"/> Wrong Address <input type="checkbox"/> Not ready <input type="checkbox"/> Not Home <input type="checkbox"/> No Access <input type="checkbox"/>
Action Taken:	Turned On <input checked="" type="checkbox"/>	Turned Off <input type="checkbox"/>	TF/TN <input type="checkbox"/>	Removed <input type="checkbox"/>	Changed <input type="checkbox"/>	Use Last Reading <input type="checkbox"/>
	Meter Number	Dials	Manufacturer		Size	Index Type Test Year
Old Meter						
New Meter	13X145635	4	American		250	DR 2014
Old ERT#		New ERT#	48333930		Painted Meter Set	YES <input checked="" type="checkbox"/>
Off Reading	Removed Meter Status			Odorant Level		
	Usable <input type="checkbox"/> Non-Usable <input type="checkbox"/> Lost/Stolen <input type="checkbox"/>			High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low <input type="checkbox"/>		
On Reading	Regulator Installed	Reg Pressure Setting		Regulator Removed	Removed Regulator Status	
0	YES <input type="checkbox"/> NO <input type="checkbox"/>	2#		YES <input type="checkbox"/> NO <input type="checkbox"/>	Usable <input type="checkbox"/> Non-Usable <input type="checkbox"/>	
SHUT IN TEST AND/OR PRESSURE TEST FOR NEW PIPING						
Start Time	Start Pressure	End Time	End Pressure	Time Held	System	CUSTOMER PIPING
2:15	2#	2:30	2#	15min	OK <input checked="" type="checkbox"/>	Pass/Fail
Comments:				Yellow Tag Done		
Pre fine ok - lower unit pressure switch was sticking, notified customer converted appliances, set meter, performed shut in, and snap test (11:15).				BAR HOLE Tested @ Riser		
				YES (NO) <input checked="" type="checkbox"/> % of GAS		
Meter Location: West side of Business/Home.						
Appliance Check Item	Central Heating	Lower		CH (napco)	FD	Range, Dryer, Other
Manufacturer	American Standard	American Standard		Desa	Danfoss	
Model No.	ALH1B080A9421AA	AH42C100A9V4VAD		VMB26DRA/FFS2GPA	TGP433SEJ1SS	
Serial No.	11045PHK1G	10492XR17G		N/A	8G7095510	
BTU Input	80,000	100,000		26,000	46,000	
BTU Flow Rate (BTU Output)						
Red Tagged (Remove from Service)						
<input type="checkbox"/> Please check box if an additional appliance sheet is used						
This inspection or work performed covers natural gas items and equipment visible and accessible to the service technician, and represents the conditions at the time and date of the inspection or work performed. It does not cover latent or manufacturing defects and the internal working of sealed equipment or structural components, and cannot be construed to cover future defects or unforeseen events.						
CUSTOMER:				TECHNICIAN:		
I know how to turn off the gas in case of an emergency.				I certify that I have completed the work as described.		
I have smelled natural gas and detect its odor.				<input type="checkbox"/> Performed Odor Test <input type="checkbox"/> Performed Pressure Test		
I have had gas system deficiencies and/or corrections if any explained.				<input checked="" type="checkbox"/> Performed Leak Test w/ CO <input checked="" type="checkbox"/> Performed Shut In Test		
Received by Safety Technician <input checked="" type="checkbox"/> Minimum 11 Appliance Safety				<input type="checkbox"/> Showed Customer where to safely turn off gas		
PRINT NAME:				PRINT NAME:		
SIGNATURE:				SIGNATURE:		

DESATM

HEATING PRODUCTS

UNVENTED (VENT-FREE) GAS COMPACT CLASSIC HEARTH® FIREPLACE OWNER'S OPERATION AND INSTALLATION MANUAL



Shown with optional cabinet mantel/hearth base accessory.

**REMOTE-READY MODELS:
VMH26PRB, VMH26NRB, EFS26NRA, EFS26PRA**

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

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

Save this manual for future reference.
For more information, visit www.desatech.com

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

WARNING: This 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 Air for Combustion and Ventilation section on page 6 of this manual.

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

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

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

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SAFETY INFORMATION

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

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

⚠ DANGER: Carbon monoxide poisoning may lead to death!

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

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

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

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

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

⚠ WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

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

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

Fireplace front and screen become very hot when running heater. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.

Carefully supervise young children when they are in the room with fireplace. When using the hand-held remote accessory keep selector switch in the OFF position to prevent children from turning on burners with remote.

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

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

SAFETY INFORMATION

Continued

1. 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.
2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors.
3. If you smell gas
 - shut off gas supply
 - do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
4. This fireplace shall not be installed in a bathroom or bedroom.
5. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
6. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
7. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person. *Note:* During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
8. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance*, page 26.
9. Before using furniture polish, wax, carpet cleaner, or similar products, turn fireplace off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
10. This fireplace needs fresh air ventilation to run properly. This fireplace has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 6 through 8. If fireplace keeps shutting off, see *Troubleshooting*, pages 28 through 31.
11. Do not run fireplace
 - where flammable liquids or vapors are used or stored.
 - under dusty conditions.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Never place any objects in the fireplace or on logs.
14. Do not use fireplace if any part has been under water. Immediately call a qualified service technician to inspect the room fireplace and to replace any part of the control system and any gas control which has been under water.
15. Turn off and unplug fireplace and let cool before servicing. Only a qualified service person should service and repair fireplace.
16. Operating fireplace above elevations of 4,500 feet could cause pilot outage.
17. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
18. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
19. Provide adequate clearances around air openings.

PRODUCT IDENTIFICATION

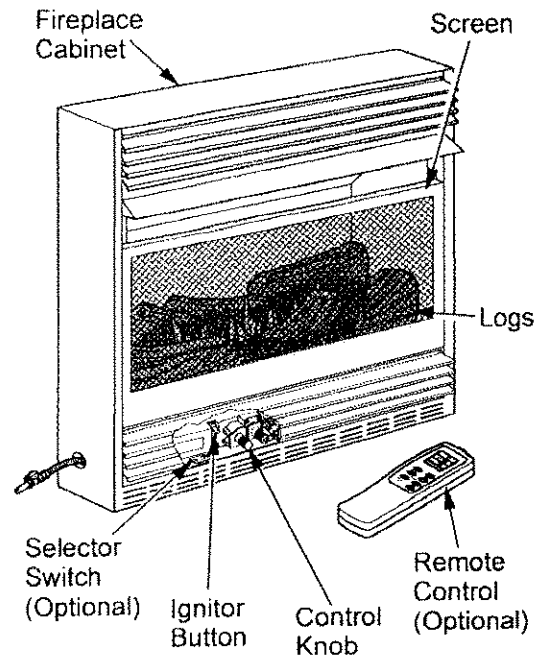


Figure 1 - Vent-Free Compact Classic Hearth® Fireplace

OPTIONAL REMOTE CONTROL ACCESSORIES

There are four optional remote controls that can be purchased separately:

- wall switch
- hand-held ON/OFF remote
- wall thermostat
- hand-held thermostat remote

See *Accessories*, pages 36 and 37.

LOCAL CODES

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

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

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

PRODUCT FEATURES

SAFETY PILOT

This fireplace has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/pilot is a required feature for vent-free room fireplaces. The ODS/pilot shuts off the fireplace if there is not enough fresh air.

PIEZO IGNITION SYSTEM

This fireplace has a piezo ignitor. This system requires no matches, batteries, or other sources to light fireplace.

UNPACKING

1. Remove fireplace and hood from carton. Log is wrapped and inside fireplace. Do not remove at this time.
2. Remove all protective packaging applied to fireplace for shipment.
3. Make sure your fireplace includes one hardware packet.
4. Check fireplace for any shipping damage. If fireplace is damaged, promptly inform dealer where you bought fireplace.

ASSEMBLY

WARNING: Always have branch support and screen in place before operating fireplace. This prevents excessive temperatures on fireplace surfaces.

WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this fireplace may result in property damage or personal injury.

ASSEMBLING FIREPLACE

Tools Required:

- Phillips screwdriver
 - 5/16" hex wrench
 - slotted screwdriver
 - scissors
1. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Lift fireplace screen up and pull out to remove. Set screen aside until installation has been completed.
 2. Cut two plastic straps to remove the log from the firebox cavity.
 3. An optional blower is available. See *Accessories*, pages 36 and 37. Install optional blower now. Follow installation instructions provided with blower or (see page 14).

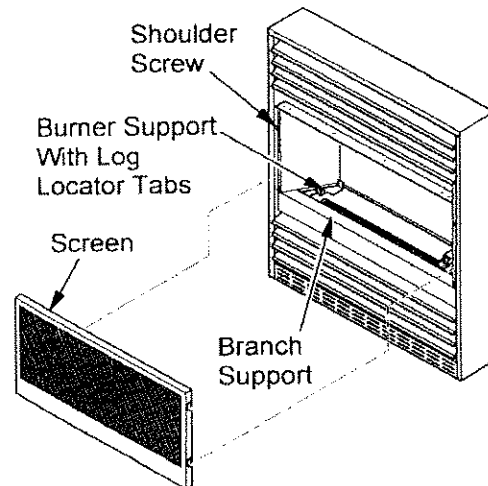


Figure 2 - Removing Screen

ASSEMBLY

Continued

4. Locate four black phillips sheet metal screws from the hardware packet.
5. Rotate hood as shown in Figure 3. Make sure hood tabs point toward fireplace.
6. Insert hood tabs between baffle and louvers (see Figure 3).
7. Gently rotate hood to upright position. Make sure hood tabs are behind louvers and hood is resting on firebox top (see Figure 3).
8. Align screw holes on hood with screw holes on firebox top.
9. Insert screws as shown in Figure 3. Tighten screws firmly.

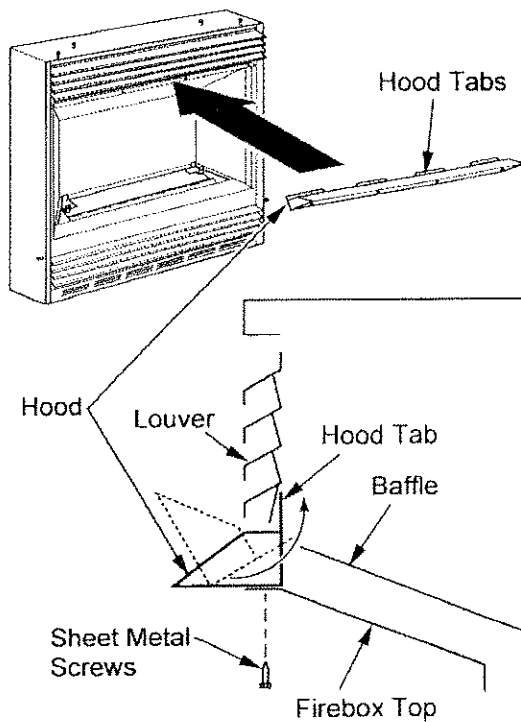


Figure 3 - Assembling Hood

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This fireplace shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

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.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation*.

All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space
3. Confined Space

The information on pages 6 through 8 will help you classify your space and provide adequate ventilation.

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.

AIR FOR COMBUSTION AND VENTILATION

Continued

Unusually tight construction is defined as construction where:

- walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6×10^{-11} kg per pa-sec-m²) or less with openings gasketed or sealed **and**
- weather stripping has been added on openable windows and doors **and**
- 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 these three criteria, you must provide additional fresh air. See *Ventilation Air From Outdoors*, page 8.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow For Fireplace Location*, below.

Confined and Unconfined Space

The *National Fuel Gas Code, ANSI Z223.1/NFPA 54* defines a confined space as a space whose volume is 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 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.

* Adjoining rooms are communicating only if there are doorless passageways or ventilation grills between them.

DETERMINING FRESH-AIR FLOW FOR FIREPLACE LOCATION

Determining if You Have a Confined or Unconfined Space

Use this work sheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install fireplace plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

- Determine the volume of the space (length x width x height).

Length x Width x Height = _____ cu. ft.
(volume of space)

Example: Space size 16 ft. (length) x 14 ft. (width) x 8 ft. (ceiling height) = 1792 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

- Multiply the space volume by 20 to determine the maximum Btu/Hr the space can support.

_____ (volume of space) x 20 = (Maximum Btu/Hr the space can support)

Example: 1792 cu. ft. (volume of space) x 20 = 35,840 (maximum Btu/Hr the space can support)

- Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free fireplace	_____	Btu/Hr
Gas water heater*	_____	Btu/Hr
Gas furnace	_____	Btu/Hr
Vented gas heater	_____	Btu/Hr
Gas fireplace logs	_____	Btu/Hr
Other gas appliances*	+ _____	Btu/Hr
Total	= _____	Btu/Hr

* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

Example:

Gas water heater	30,000	Btu/Hr
Vent-free fireplace	10,000	Btu/Hr
Total	40,000	Btu/Hr

- Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

_____ Btu/Hr (maximum the space can support)
_____ Btu/Hr (actual amount of Btu/Hr used)

Example: 35,840 Btu/Hr (maximum the space can support)

40,000 Btu/Hr (actual amount of Btu/Hr used)

AIR FOR COMBUSTION AND VENTILATION

Continued

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air From Inside Building*.
- Vent room directly to the outdoors. See *Ventilation Air From Outdoors*.
- Install a lower Btu/Hr fireplace, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

⚠ WARNING: If the area in which the fireplace 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/NFPA 54 Section 5.3* or applicable local codes.

VENTILATION AIR

Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 4). You can also remove door into adjoining room (see option 3, Figure 4). Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

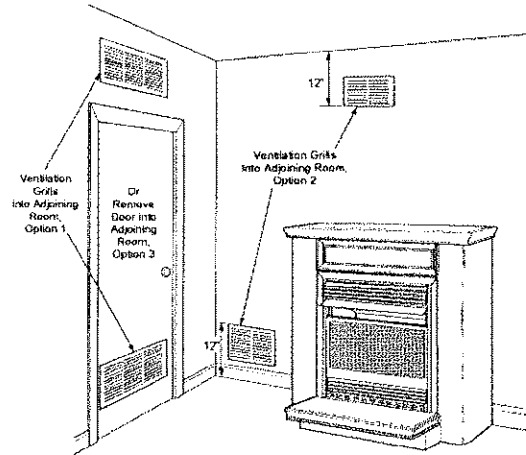


Figure 4 - Ventilation Air from Inside Building

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

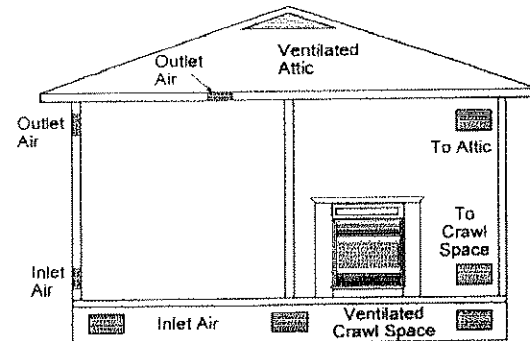


Figure 5 - Ventilation Air from Outdoors

INSTALLATION

NOTICE: This heater is intended for use as supplemental heat. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

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

⚠ WARNING: Never install the fireplace

- in a bathroom or bedroom
- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the fireplace
- as a fireplace insert
- in high traffic areas
- in windy or drafty areas

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

IMPORTANT: Vent-free fireplaces add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, pages 6 through 8.

Note: Your fireplace is designed to be used in zero clearance installations. Wall or framing material can be placed directly against any exterior surface on the rear, sides, or top of your fireplace, except where standoff spacers are integrally attached. If standoff spacers are attached to your fireplace, these spacers can be placed directly against wall or framing materials.

Note: When installing fireplace directly on carpeting, tile or other combustible material, other than wood flooring, the fireplace shall be installed on a metal or wood panel extending the full width and depth of the fireplace.

Use the dimensions shown for rough openings to create the easiest installation (see *Built-In Fireplace Installation*, page 10).

—CHECK GAS TYPE

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

⚠ WARNING: This appliance is equipped for (natural or propane/LP) gas. Field conversion is not permitted.

INSTALLATION ITEMS

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

- external regulator (supplied by installer, for propane/LP units only)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection*
- ground joint union
- sediment trap
- tee joint
- pipe wrench

* A CSA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, pages 36 and 37.

Note: If desired, purchase a four-sided trim kit for built-in installations. See *Accessories*, pages 36 and 37.

INSTALLATION

Continued

FIREPLACE CLEARANCES

WARNING: Maintain the minimum clearances shown in Figure 6. If you can, provide greater clearances from floor, ceiling, and joining wall.

If your fireplace is to be used with an optional mantel, the installation instructions included with your mantel shows an CSA approved method of attaching the fireplace/mantel system to a wall. **IMPORTANT:** Only use optional cabinet or corner mantels specified in this manual. Purchase the optional mantel from your dealer (see *Accessories*, pages 36 and 37).

If your fireplace is to be recessed into the wall, see *Built-In Fireplace Installation* to secure your fireplace into the wall.

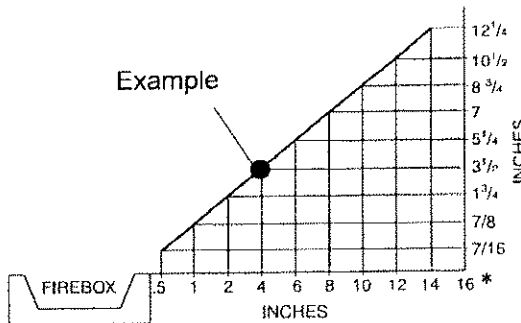
CAUTION: If you install the fireplace in a home garage

- fireplace pilot and burner must be at least 18 inches above floor.
- locate fireplace where moving vehicle will not hit it.

For convenience and efficiency, install fireplace

- where there is easy access for operation, inspection, and service
- in coldest part of room

An optional blower kit is available from your dealer. See *Accessories*, pages 36 and 37. If planning to use blower, follow instructions provided with blower for power source.



*Minimum 16 inches from Side Wall

Figure 6 - Minimum Clearance for Combustible to Wall

Minimum Clearances For Side Combustible Material, Side Wall, and Ceiling

A. Clearances from the side of the fireplace cabinet to any combustible material and wall should follow diagram in Figure 6.

Example: The face of a mantel, bookshelf, etc. is made of combustible material and protrudes 3 1/2" from the wall. This combustible material must be 4" from the side of the fireplace opening (see Figure 6).

B. Clearances from the top of the fireplace opening to the ceiling should not be less than 36 inches.

C. For mantel clearances, see Figure 10 on page 12.

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS		
Top	Left and Right Sides	Bottom and Rear
36"	6"	0"

BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. An optional trim kit accessory is available (see *Accessories*, pages 36 and 37). Trim will extend past sides of fireplace approximately 1/2 inch. This will cover the rough edges of the wall opening. If installing a built-in mantel above the fireplace, you must follow the clearances shown in Figure 10, page 12. Follow the instructions below to install the fireplace in this manner.

	Actual	Framing
Height	26"	26 7/8"
Front Width	26 3/4"	26 7/8"
Depth	9 1/2"	10 1/2"
Bottom	3/4"	3/4"

1. Frame in rough opening. Use dimensions shown in Figure 7, page 11 for the rough opening. If installing in a corner, use dimensions shown in Figure 8 for the rough opening. The height is 26 7/8" which is the same as the wall opening above.

INSTALLATION

Continued

2. If installing GA3450T blower accessory, do so at this time. Follow instructions included with blower accessory.

Note: If not installing blower accessory, you may wish to run electrical wiring to your fireplace for future blower installation (see *Accessories*, pages 36 and 37). Use only approved three-wire electrical wiring.

Note: A qualified installer should make all electrical connections.

⚠ WARNING: If pre-wiring, do not connect wiring to any electrical source at this time.

Install fireplace electrical outlet and connect wiring to outlet before connecting to electrical source. The fireplace electrical outlet is included with the GA3450T blower accessory.

Only use the fireplace electrical outlet supplied with the GA3450T blower accessory.

3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the equipment shutoff valve. The flexible gas line must be the last item installed on the gas piping.

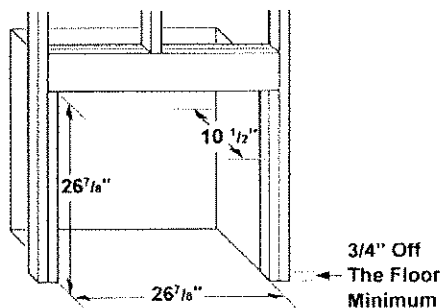


Figure 7 - Rough Opening for Installing in Wall

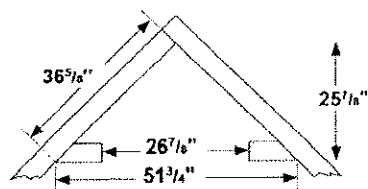


Figure 8 - Rough Opening for Installing in Corner

4. If you have not assembled firebox, follow instructions beginning on page 5.
5. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
6. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, pages 17 and 18.
7. Bend four nailing flanges on outer casing with pliers (see Figure 9).
8. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange.
9. Check all gas connections for leaks. See *Checking Gas Connections*, page 18.
10. If using optional trim kit, install the trim after final finishing and/or painting of wall. See instructions included with trim accessory for attaching trim.

IMPORTANT: When finishing your firebox, combustible materials such as wall board, gypsum board, sheet rock, drywall, plywood, etc. may be butted up next to the sides and top edge of the firebox. Combustible materials should never overlap the firebox front facing.

⚠ WARNING: Do not allow any combustible materials to overlap the firebox front facing.

IMPORTANT: Noncombustible materials such as brick, tile, etc. may overlap the front facing, but should never cover any necessary openings like louvered slots.

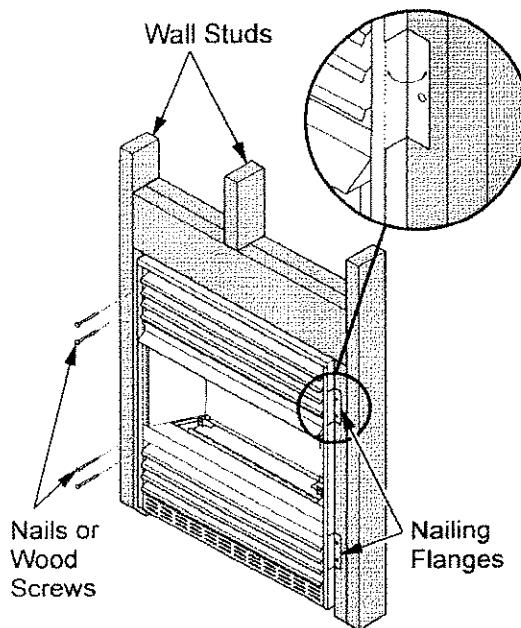


Figure 9 - Attaching Fireplace to Wall Studs

INSTALLATION

Continued

⚠ WARNING: Do not allow non-combustible materials to cover any necessary openings like louvered slots.

⚠ WARNING: Never modify or cover the louvered slots on the front of the firebox.

⚠ WARNING: Use only noncombustible mortar or adhesives when overlapping the front facing with noncombustible facing material.

Mantel Clearances for Built-In Installation

If placing mantel above built-in fireplace, you must meet minimum clearance between mantel shelf and top of fireplace opening.

NOTICE: Surface temperatures of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become hot to the touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual.

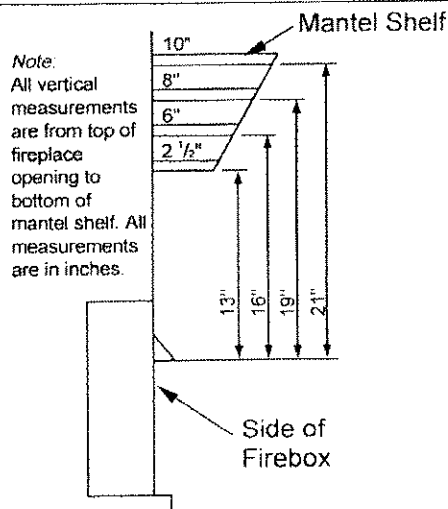


Figure 10 - Minimum Mantel Clearances for Built-In Installation

NOTICE: If your installation does not meet the minimum clearances shown, you must do one of the following:

- raise the mantel to an acceptable height
- remove the mantel

OPTIONAL MANTEL INSTALLATION

Note: Refer to instructions provided with the mantel for assembly instructions. Refer to the following instructions for system installation. Refer to instructions on page 5 for fireplace assembly. Blower accessory should be installed if it is being used (see *Installing Optional Blower Accessory GA3450T*, pages 13 through 15).

1. Unscrew four screws that attach top louver to fireplace. Remove louver from fireplace and set aside (see Figure 11).
2. Place base assembly next to wall at installation location.
3. Place fireplace on wood base (see Figure 12, page 13).
4. Place mantel around fireplace on base (see Figure 12, page 13).
5. Assemble perimeter trim kit. See *Assembling Perimeter Trim*, page 13.
6. Firmly snap perimeter trim kit on shoulder screws. Shoulder screws are located on fireplace cabinet (see Figure 12, page 13).
7. Align perimeter trim kit for flush fit around opening.
8. Center mantel left to right on base making sure mantel is flush against wall.
9. Use two 3" wood screws provided and attach base of fireplace to wooden mantel base (see Figure 12, page 13).
10. Remove perimeter trim kit and mantel. Be careful not to damage wall or mantel.

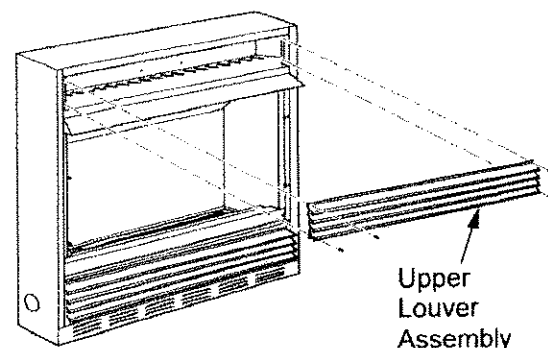


Figure 11 - Removing Top Louver

INSTALLATION

Continued

- Cut an access hole in base to run flexible gas line to fireplace (see Figure 12). Make sure to locate access hole so mantel will cover it when installed. **Note:** You can secure base to floor using wood screws. Countersink screw heads and putty over.
- Install gas line. See *Connecting To Gas Supply*, pages 16 and 17.
- Check for leaks. See *Checking Gas Connections*, pages 17 and 18.
- Place mantel around fireplace. Be careful not to damage wall or mantel.
- Place perimeter trim kit on the shoulder screws located on the side and top of the fireplace. Firmly snap trim over shoulder screws on fireplace (see Figure 12).
- Adjust assembly to remove any gaps. Attach remaining two 3" wood screws from hardware pack through openings inside of fireplace sides into the mantel. The openings are located at top behind the area for top louver (see Figure 12).
- Reinstall top louver.

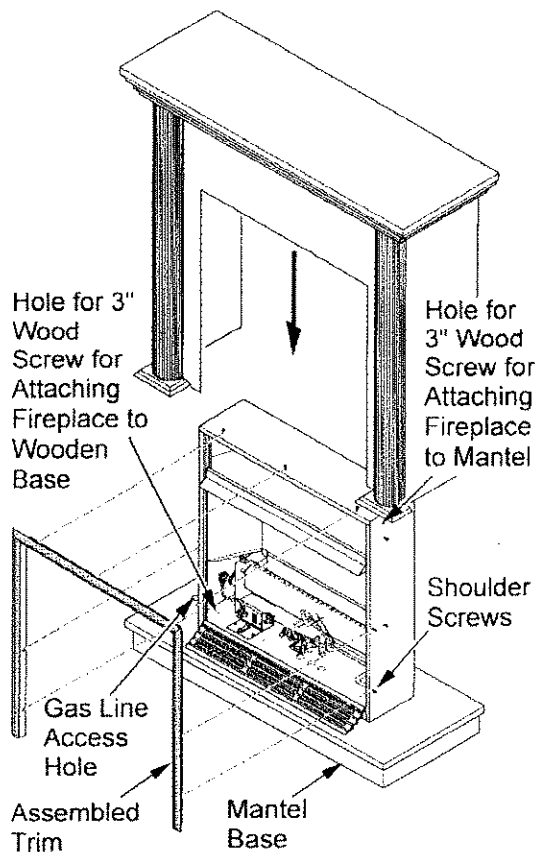


Figure 12 - Attaching Perimeter Trim, Mantel and Base

Assembling Trim (Trim shipped with mantel)

- Remove packaging from three remaining pieces of trim.
- Locate two adjusting plates with set screws, and two shims in the hardware packet.
- Align shim under adjusting plate as shown in Figure 13.
- Slide one end of adjusting plate/shim in slot on mitered edge of top trim (see Figure 13).
- Slide other end of adjusting plate/shim in slot on mitered edge of side trim (see Figure 13).
- While firmly holding edges of trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
- Repeat steps 1 through 6 for other corner.
- Set assembly aside for later installation.

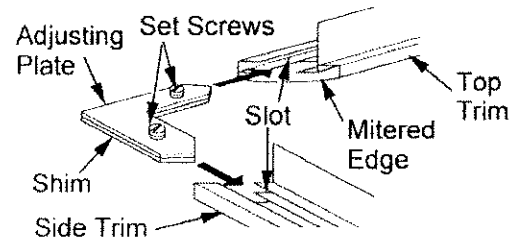


Figure 13 - Assembling Trim

INSTALLING OPTIONAL BLOWER ACCESSORY GA3450T

Removing Upper Louver Assembly and Branch Support

To install the blower accessory, you must first remove the upper louver assembly.

- Lift screen off fireplace and remove log set if installed.
- Remove 2 screws from each side of branch support and pull branch support out (see Figure 14).
- Remove 4 screws from upper louver assembly (see Figure 14). Save these screws.
- Pull upper louver assembly straight out from the cabinet. Be careful not to scratch the paint. Set louver assembly and screws aside.
- Open lower louver door by swinging door down (see Figure 12).

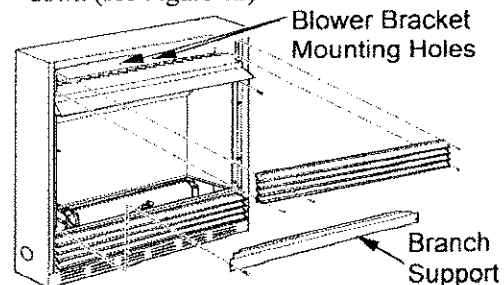


Figure 14 - Removing Top Louver and Branch Support

INSTALLATION

Continued

Installing Blower Accessory

⚠ CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

⚠ CAUTION: Verify proper operation after servicing.

Note: If you are using a mantel with your fireplace, use the following instructions. If your fireplace is built-in, see *For Built-In Installation*, page 15.

1. Install snap bushings found in hardware kit into both holes in rear of valve cover shield.
2. Make sure the wire harness is firmly connected to the terminals on the blower bracket assembly.
3. Note the wire locations on back of AUTO/OFF/ON switch. The terminals on back of switch are numbered 1, 2, and 3. Carefully remove red wire from terminal 3 and blue wire from terminal 1. Black wire can remain on middle terminal 2 (see Figure 15).

4. Carefully disconnect green and white wires at their insulated connectors (see Figure 16).
5. In top of the fireplace cabinet, locate the four mounting holes on the outer casing. Align these four holes with those on the blower bracket assembly. Attach blower bracket assembly to the outer casing with 4 #10 screws provided (see Figure 15).
6. Route the wire harness through the hole in left side of baffle. Pull wire harness through lower opening on the side of the valve cover shield. (see Figure 15).
7. Insert the 4 wire harnesses into one of the round holes in the rear of the valve cover shield and through the rectangular hole in the front of shield (see Figure 15).

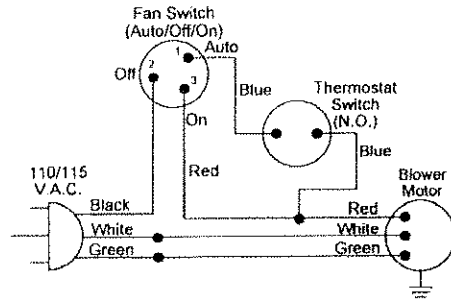


Figure 16 - Wiring Diagram For Blower Accessory Standard Installation

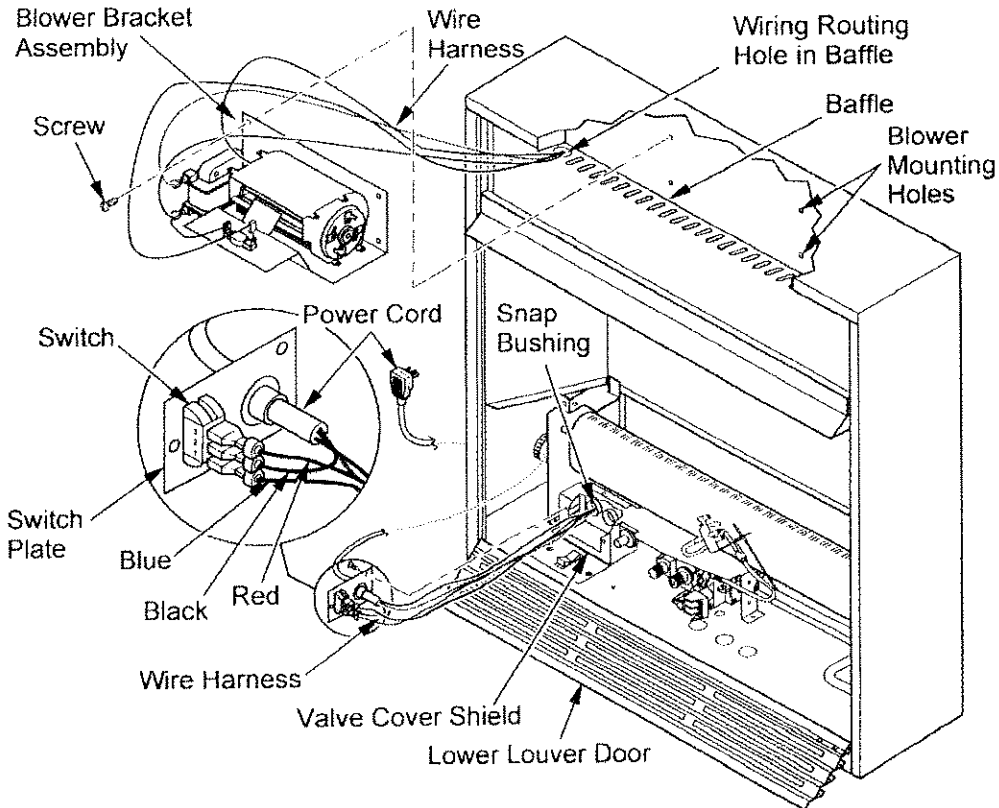


Figure 15 - Installing Blower Bracket Assembly

INSTALLATION

Continued

8. Reconnect red wire to switch position 3. Reconnect blue wire to switch position 1. Reconnect green and white wires.
9. Install the switch plate on the valve cover shield with 2 #10 screws provided (see Figure 17). Route power cord out of the cabinet by inserting it through the bushing on the outer casing (see Figure 15, page 14). Plug fan kit into 120-Volt grounded power supply and test operation. *Note:* When switch is in the AUTO position, the fan will start after the fireplace has run for a few moments. The fan will continue to run for several moments after the fireplace has been turned off. When switch is in the ON position, the fan will run until turned to OFF. Reinstall upper louver assembly (see Figure 14, page 13) and branch support. Close lower louver door.

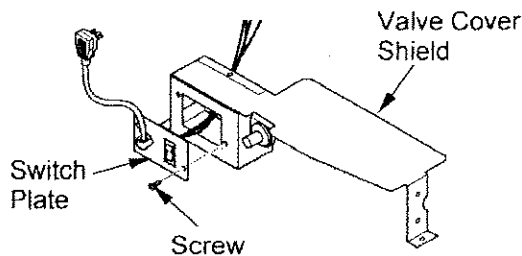


Figure 17 - Installing Switch Plate to Valve Cover Shield

For Built-In Installation

⚠ WARNING: A licensed electrician must connect the wiring harness to electrical supply following all local codes. Electrician must provide a clamp on the box cover to secure the wiring. Wiring should be routed through the bushing in the hole on the outer casing of fireplace.

1. Install a snap bushing found in hardware kit into one of the holes on rear of valve cover shield. The other hole is for a strain relief clamp (not supplied) to secure incoming electrical supply.
2. Follow steps 2 through 6 in *Installing Blower Accessory*, page 14.
3. A licensed electrician must follow the wiring diagram to connect incoming electrical supply to fan kit wiring harness (see Figure 18).

4. Plug power cord to the outlet receptacle (not provided) as shown in Figure 19. Wind the extra power cord and tie with plastic wire strap (see Figure 19). Set the power cord bundle between the burner bracket and outer casing, away from the burner.
5. Test to make sure the blower is working properly.
6. Reinstall upper louver assembly (see Figure 14, page 13) and close lower louver.

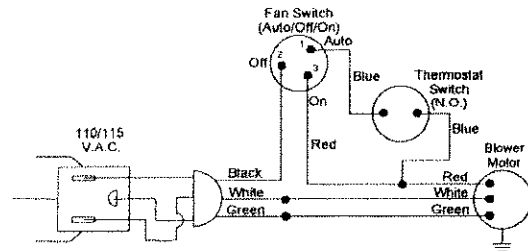


Figure 18 - Wiring Diagram For Blower Accessory Built-In Installation

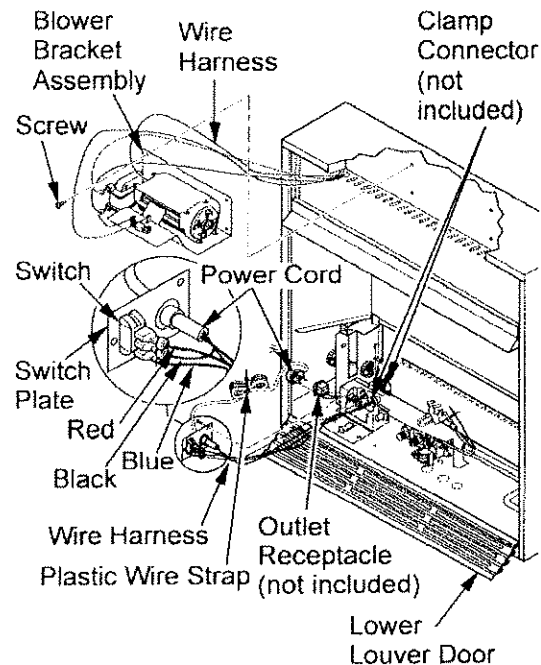


Figure 19 - Installing Blower Bracket Assembly

Extension Cord

Use extension cord if needed. The cord must have a three-prong, grounding plug and a three-hole receptacle. Make sure cord is in good shape. It must be heavy enough to carry the current needed. An undersized cord will cause a drop in line voltage. This will result in loss of power and overheating. Use a No. 16 AWG cord for lengths less than 50 feet.

INSTALLATION

Continued

CONNECTING TO GAS SUPPLY

⚠ WARNING: This appliance requires a 45° male flare fitting 5/8"-18 UNF (Unified National Fine Thread) inlet connection and the flexible gas line provided.

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

⚠ WARNING: Never connect natural gas fireplace to private (non-utility) gas wells. This gas is commonly known as well-head gas.

IMPORTANT: For natural gas, check gas line pressure before connecting fireplace to gas line. Gas line pressure must be no greater than 14 inches of water. If gas line pressure is higher, heater regulator damage could occur.

⚠ CAUTION: Never connect propane/LP fireplace directly to the propane/LP supply. This fireplace requires an external regulator (not supplied). Install the external regulator between the fireplace and propane/LP supply.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, fireplace regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 20. Pointing the vent down protects it from freezing rain or sleet.

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

Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from heater (see Figure 21, page 17).

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

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

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

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

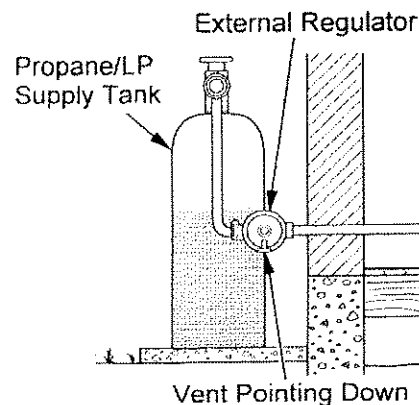


Figure 20 - External Regulator With Vent Pointing Down

INSTALLATION

Continued

We recommend that you install a sediment trap in supply line as shown in Figure 21. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and heater. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

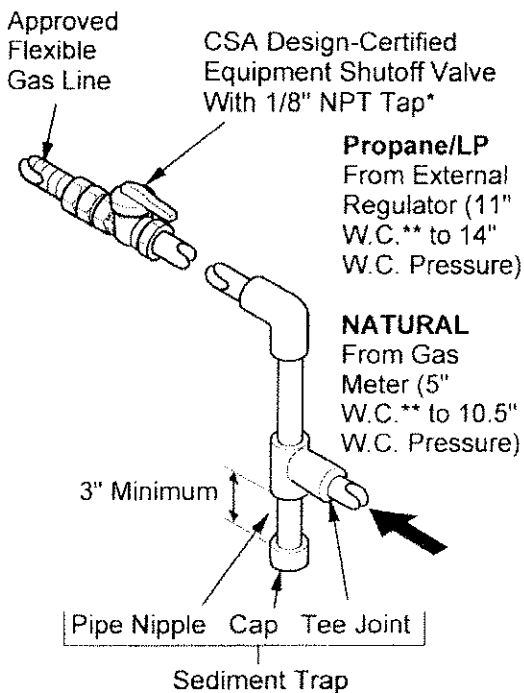


Figure 21 - Gas Connection

* Purchase the optional CSA design-certified equipment shutoff valve from your dealer. See *Accessories*, pages 36 and 37.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- Phillips screwdriver
 - sealant (resistant to propane/LP gas, not provided)
1. Remove screws that attach branch support to fireplace (see Figure 22). Carefully lift up branch support and remove from fireplace (see Figure 22).

NOTICE: Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace (see Figure 22). The flexible gas supply line connection to the equipment shutoff valve should be accessible.

2. Route flexible gas line, included, from fireplace control to equipment shutoff valve through side or rear access holes in outer casing.
3. Apply pipe joint sealant lightly to male threads of gas connector attached to flexible gas line/equipment shutoff valve (see Figure 23, page 18).

CAUTION: Avoid damage to gas control. Hold gas control with wrench when connecting it to gas piping and/or fittings.

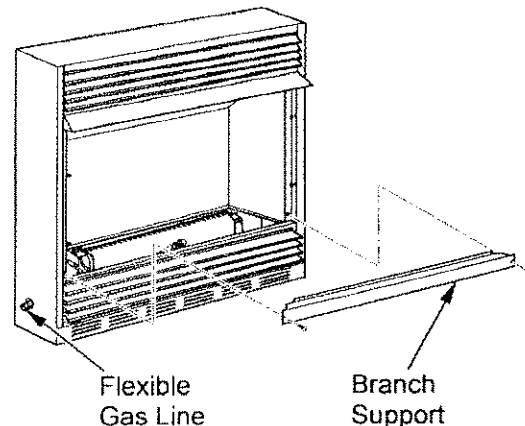


Figure 22 - Removing Branch Support From Fireplace

INSTALLATION

Continued

4. Check all gas connections for leaks. See *Checking Gas Connections*.
5. Replace branch support back into fireplace. Feed flexible gas line into fireplace base area while replacing branch support. Make sure the entire flexible gas line is in fireplace base area. Reattach branch support to fireplace with screws removed in step 1, page 17.

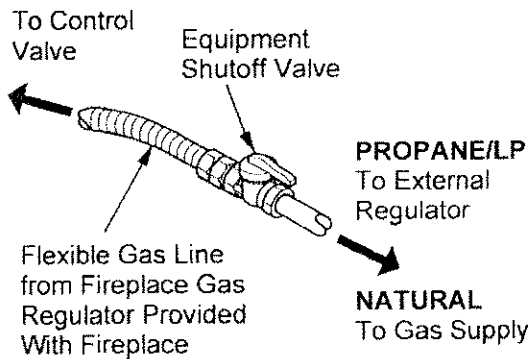


Figure 23 - Attaching Flexible Gas Line to Equipment Shutoff Valve

CHECKING GAS CONNECTIONS

⚠ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

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

⚠ CAUTION: Make sure external regulator has been installed between propane/LP supply and fireplace. See guidelines under *Connecting to Gas Supply*, pages 16 and 17.

Pressure Testing gas Supply Piping System

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

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

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

1. Close equipment shutoff valve (see Figure 24).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter for natural gas, or using compressed air.
3. Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP (see Figures 25 or 26, page 19). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

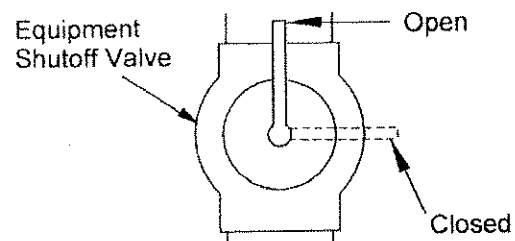
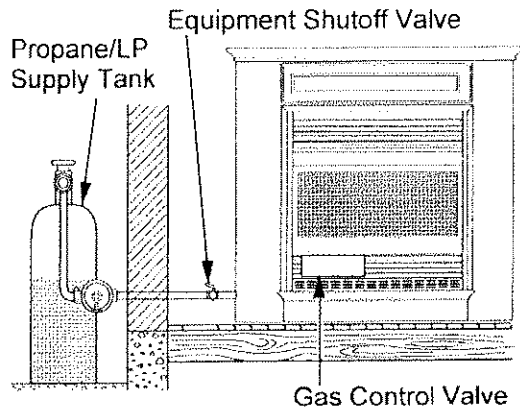


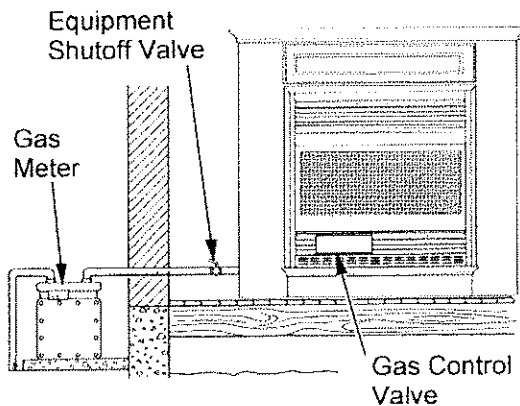
Figure 24 - Equipment Shutoff Valve

INSTALLATION

Continued



**Figure 25 - Checking Gas Joints
(Propane/LP Only)**



**Figure 26 - Checking Gas Joints
(Natural Gas Only)**

Pressure Testing Fireplace Gas Connections

1. Open equipment shutoff valve (see Figure 24, page 18).
2. Open main gas valve located on or near gas meter for natural gas or open propane/LP supply tank valve.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from equipment shutoff valve to gas control valve (see Figures 25 or 26). Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, pages 22 through 25). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 23).

OPTIONAL WIRELESS HAND-HELD REMOTE CONTROL ACCESSORIES (GHRCB Series & GHRCTB Series)

Installing Receiver

1. Remove screws.
2. Disconnect switch wires from the control valve.
3. Remove switch plate (see Figure 27). Discard switch plate after removing. Save the screws.
4. Locate the battery clip mounted on the back of the receiver (see Figure 28).
5. Slide 9-volt battery (not included) through the clip.
6. Attach the terminal wires to the battery (see Figure 28).
7. Connect wires as shown in Figure 30, page 20.
8. Install remote receiver unit onto fireplace base using the two screws removed in step one (see Figure 29, page 20).

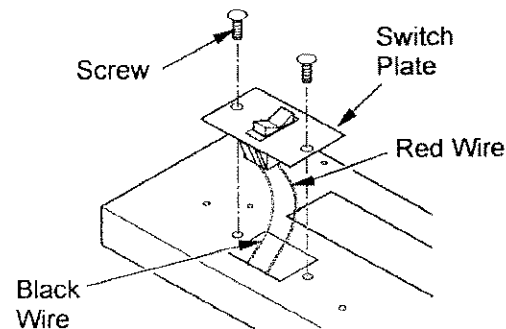


Figure 27 - Switch Plate and Wiring Harness

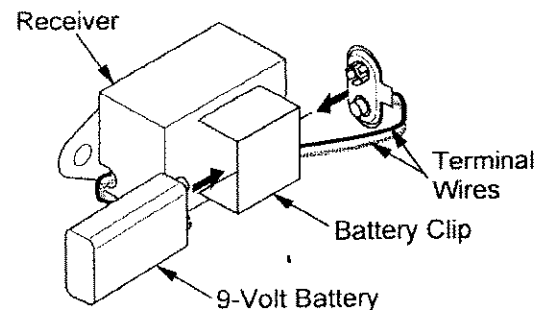


Figure 28 - Attaching Battery to Receiver

INSTALLATION

Continued

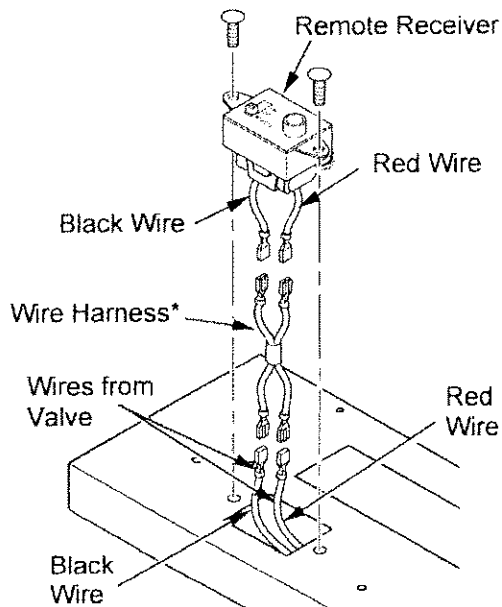


Figure 29 - Installing Remote Receiver

* Wire harness provided in the fireplace hardware pack.

Installing 9-Volt Battery in Hand-Held Remote Control Unit

1. Remove battery cover on back of remote control unit.
2. Attach terminal wires to the battery (not included). Place battery into the battery housing.
3. Replace battery cover onto remote control unit.

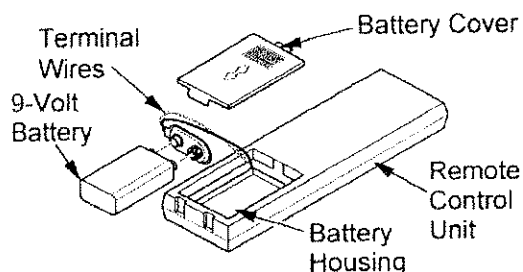


Figure 30 - Installing Battery in Hand-Held Remote Control Unit (GHRCB Series)

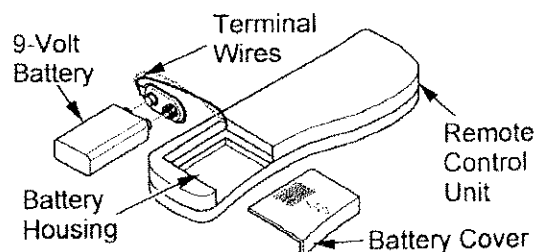


Figure 321- Installing Battery in Hand-Held Remote Control Unit (GHRCTB Series)

OPTIONAL WALL MOUNTED THERMOSTAT - GWMT1

⚠ WARNING: Read and follow installation instructions. Installation should be done by a qualified installer familiar with low-voltage wiring procedures.

⚠ WARNING: Do not connect this thermostat to any electrical source! Electrical shock and/or fire hazard will occur.

1. Connect one terminal of 25 ft. wire to bottom contact of switch (see Figure 32).
2. Connect remaining wire terminal to the "TH" terminal on the control valve. Make sure that wire terminals are in the positions on your unit as pictured in Figure 32. If wires are not "crossed" the thermostat will not work.

3. Route the 25 ft. wire to a convenient location to mount your thermostat (no outside wall). **IMPORTANT:** The wire may be shortened but must not be lengthened.

The thermostat should be mounted 54" above the floor in a location where there is good air circulation. Avoid heat sources such as lamps, direct sunlight, fireplace, or heat and air conditioning ducts.

4. Gently remove the cover of the thermostat from the base. Grasp the sides of the cover firmly and pull to separate from the base.
5. Feed the electrical wires through the rectangular slots on each side of the base (see Figure 33, page 22).

⚠ WARNING: Do not connect the thermostat to a power source. Electrical shock and/or a fire hazard will occur.

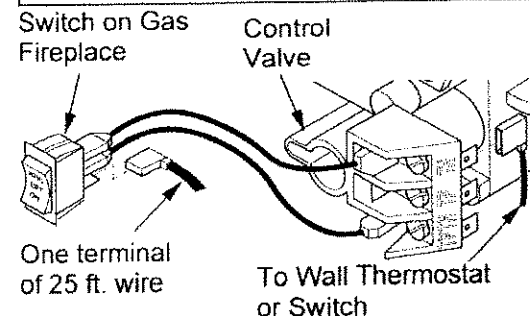


Figure 32 - Connecting Wire Terminals

INSTALLATION

Continued

6. Connect one bare wire end to each terminal ("W" and "R") of the thermostat base (see Figure 34).
7. Install the base onto the wall with the provided screws.
8. Move the temperature adjustment back and forth to insure the bimetal is free from restrictions.
9. Replace the cover onto the base. (Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation).
10. Set switch on fireplace to Auto position.
11. Set the temperature adjustment to the desired setting. This thermostat has been electronically calibrated at the factory. No adjustment or leveling is necessary.

Feed wires through rectangular slots

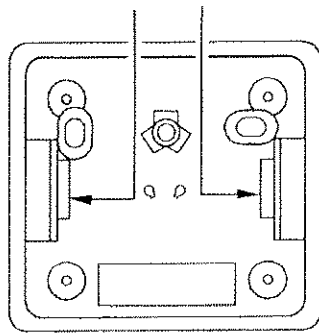


Figure 33 - Back View of Thermostat Base

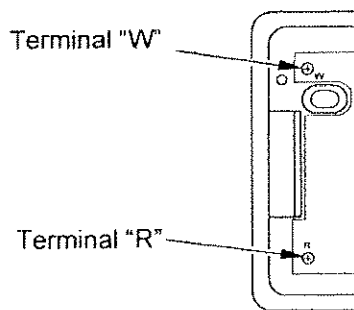


Figure 34 - Thermostat Base Terminals "W" and "R"

OPTIONAL WALL SWITCH - GWMS2

WARNING: Read and follow installation instructions. Installation should be done by a qualified installer familiar with low-voltage wiring procedures.

WARNING: Do not connect this switch to any electrical source! Electrical shock and/or fire hazard will occur.

1. Connect one terminal of 25 ft. wire to bottom contact of switch (see Figure 32, page 20).
2. Connect remaining wire terminal to the "TH" terminal on the control valve. Make sure that wire terminals are in the positions on your unit as pictured in Figure 32, page 20. If wires are not "crossed" the thermostat will not work.
3. Route the 25 ft. wire to a convenient location to mount your wall switch (no outside walls).

WARNING: Do not connect the switch to a power source. Electrical shock and/or fire hazard will occur.

IMPORTANT: The wire may be shortened but must not be lengthened.

4. Connect one bare wire end to each of the terminals of the provided wall switch.
5. Install the wall switch and cover in the wall.

INSTALLING LOG SET AND SCREEN

1. Remove log packaging material and discard packaging. Gently place log on burner support (see Figure 35). The log should fit flat against top of burner support and log locator tabs fit into the slots under the log. Do not allow log to contact flame. If flame contacts log, soot will be created.
2. Reattach screen by placing the notches in the screen frame over the shoulder screws and pushing down.

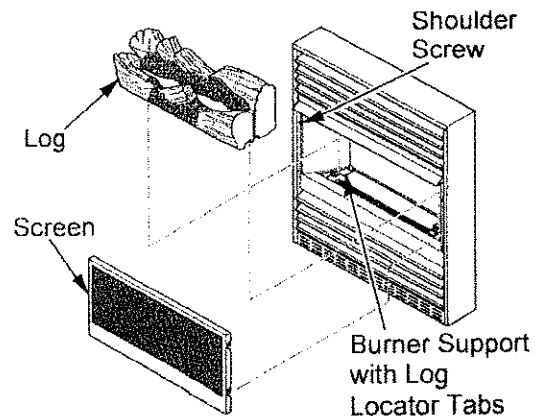


Figure 35 - Installing Log and Screen

OPERATING FIREPLACE

**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.

- This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- 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 or gas supplier. Force or attempted repair may result in a fire or explosion.
 - 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

⚠ WARNING: You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE: During initial operation of new fireplace, burning logs will give off a paper-burning smell. Open window to vent smell. This will only last a few hours.

- STOP!** Read the safety information in column 1.
- Make sure equipment shutoff valve is fully open.
- Set switch in the OFF position.

⚠ WARNING: Burner will come on automatically within one minute when the selector switch is in the ON position after the pilot is lit.

- Press in and turn control knob clockwise  to the OFF position (see Figure 37).
- 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, column 1. If you don't smell gas, go to the next step.
- Press in and turn control knob counter-clockwise  to the PILOT position. Press in control knob for five (5) seconds (see Figure 36).

Note: You may be running this fireplace for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds or less. This will allow air to bleed from the gas system.

- With control knob pressed in, press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights.

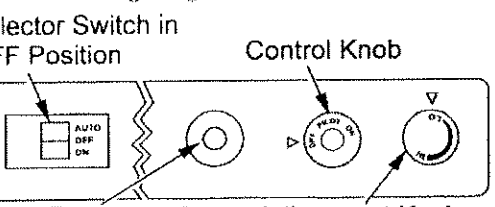



Figure 36 - Control Knob and Ignitor Button Location (Shown as Supplied - No Control Options)

OPERATING FIREPLACE

Continued

8. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
 - If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

Note: If pilot goes out, repeat steps 4 through 8.
9. Slightly push in and turn control knob counterclockwise  to the ON position.
10. Wait one minute and switch selector switch to the ON position to light burner.
11. Set flame adjustment knob to any level between HI and LO.

CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

WARNING: Make sure the selector switch is in the OFF position when you are away from home for long periods of time. Fireplace will come on automatically with selector switch in the ON position.

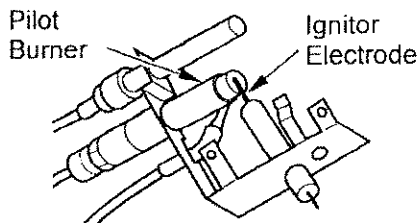


Figure 37 - Propane/LP Gas Pilot

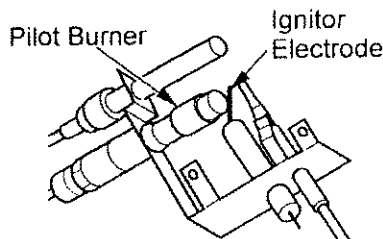



Figure 38 - Natural Gas Pilot


TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

1. Turn control knob clockwise  to the OFF position.
- 2a. Set selector switch in the OFF position.
- 2b. If Using Optional Hand-Held Remote: Set selector switch in the OFF position to prevent draining battery.

Shutting Off Burners Only (pilot stays lit)

You may shut off the burners and keep the pilot lit by doing one of the following:

1. Turn control knob clockwise  to the PILOT position.
2. Use remote control manual OFF button.
3. Set selector switch in the OFF position.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 6 under *Lighting Instructions*, page 22.
2. Depress control knob and light pilot with match.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow steps 9 through 11, *Lighting Instructions*, column 1.

OPTIONAL HAND-HELD REMOTE OPERATION

Note: All remote control accessories must be purchased separately (see *Accessories*, pages 36 and 37). Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions* on page 22.

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide the selector switch to the REMOTE position (see Figure 39, page 24). **Note:** The burner may light if hand-held remote was on when selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.

IMPORTANT: Do not leave the selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.

OPERATING FIREPLACE

Continued

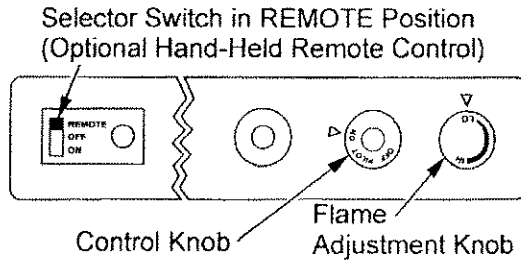


Figure 39 - Setting the Selector Switch, Control Knob, and Flame Adjustment Knob for Hand-Held Remote Operation

ON/OFF SERIES (MODEL GHRCB)

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off (see Figure 40).

TO LOCK press both buttons on hand-held remote control until light stops flashing. Hand-held remote control is now locked. If the fire is on it will be turned off automatically. In the locked state, the light will not light up when any button is pressed.

TO UNLOCK press both buttons together on hand-held remote control until the light stops flashing. The hand-held remote is now unlocked.

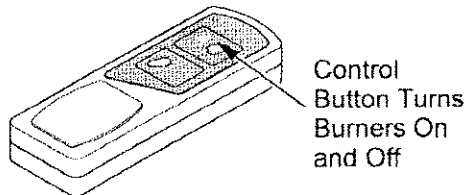


Figure 40 - On/Off Hand-Held Remote Control Unit (GHRCB)

THERMOSTAT SERIES (MODEL GHRCTB)

The hand-held remote can be operated using either the manual mode (MANU) or thermostatic mode (AUTO) (see Figure 41). To select Fahrenheit/Centigrade mode display, carefully press the °C/°F mode button with the end of a paper clip or similar blunt object.

Manual Mode

1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
2. Press the MANU button to turn on the fireplace.
3. Press the POWER and LOCK buttons together to turn off the fireplace.

Auto (Thermostatic) Mode

1. Press the POWER and LOCK buttons together to turn on the hand-held remote control.
2. Press AUTO button to select this mode.
3. Set the desired room temperature by pressing the TEMP + or - buttons.
4. Press the POWER and LOCK buttons together to turn off the fireplace

Note: Do not leave the hand-held remote in the AUTO mode close to the fireplace. The radiant heat from the fireplace will turn off the fireplace. Ideally, place the hand-held remote in the center of the room facing towards the fireplace.

Note: Do not hold the hand-held remote for a long time. Body temperature will affect its operation in the AUTO mode.

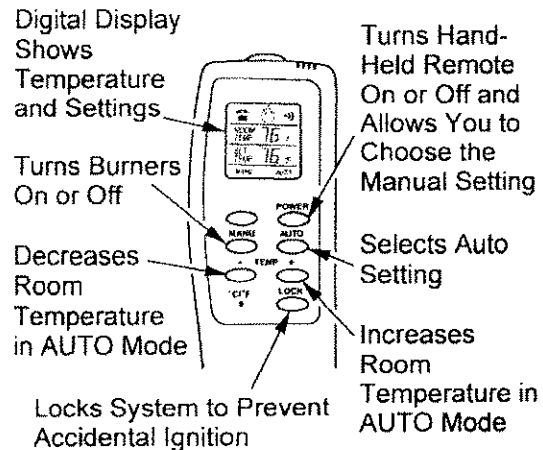


Figure 41 - Thermostat Hand-Held Remote Control Unit (GHRCTB)

Safety Features

When away from home for an extended period of time or as a child safety feature to prevent accidental ignition of the fireplace, the receiver ON/OFF/REMOTE switch should be in the OFF position.

Auto Shutoff Feature

1. If the average room temperature exceeds 82 degrees Fahrenheit (28 degrees Centigrade), the hand-held remote control will perform a safety override and shut the fireplace off. This feature is not available in the MANU mode.
2. The receiver continuously receives signals from the hand-held remote to control the room temperature. If the hand-held remote is misplaced, obstructed, or for any reason cannot transmit to the receiver, the receiver will shut off the fireplace after 8 minutes.

OPERATING FIREPLACE

Continued

Key Pad Lock Feature

This feature allows the user to lock/unlock the keypad on the hand-held remote in the MANU or AUTO mode to prevent inadvertent operation (i.e. children operating the hand-held remote control, etc.). The keypad is locked in either on or off. Press the POWER and LOCK buttons together to turn the unit on or off.

GWMT1 WALL MOUNTED THERMOSTAT (OPTIONAL)

Make sure the heater switch is on AUTO and set the temperature adjustment on wall thermostat to the desired setting. The thermostat has been electronically calibrated at the factory and requires no adjustment or leveling.

Upon installation, the thermostat must be allowed to stabilize at room temperature for a minimum of 30 minutes for proper operation. See installation instructions on pages 20 and 21 of this manual.

GWMS2 WALL MOUNTED SWITCH (OPTIONAL)

Make sure the heater switch is on AUTO. This wall switch works just like the conventional light switch. Flip the switch up for on and down for off.

Note: Make sure that this switch is not in a position to be mistaken for a light switch. This may result in the fireplace being inadvertently turned on without the proper precautions being taken. See installation instructions on page 21 of this manual.

OPERATING BLOWER (OPTIONAL)

This blower has three settings: ON, OFF, and AUTO. In the ON position, the blower will operate constantly. In the OFF position, the blower will not operate. In the AUTO position, the blower will start when the thermostat senses a sufficient increase in firebox temperature.

Note: Your fireplace and thermostat blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.

Note: It is safe to operate fireplace with blower turned off. However, the blower helps distribute heated air from the fireplace.

AUTO/OFF/ON Switch

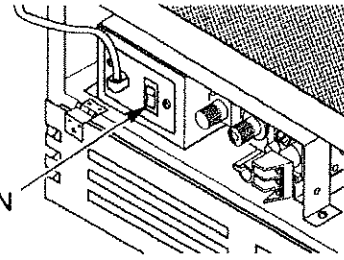


Figure 42 - AUTO/OFF/ON Blower Switch

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 43 shows a correct pilot flame pattern. Figure 44 shows 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 fireplace will shut down.

If pilot flame pattern is incorrect, as shown in Figure 44

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 23)
- see *Troubleshooting*, pages 28 through 31

Note: The pilot flame on natural gas units will have a slight curve, but flame should be blue and have no yellow or orange color.

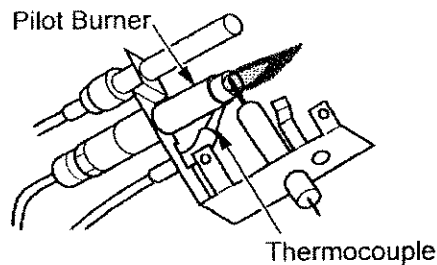


Figure 43 - Correct Pilot Flame Pattern (Propane/LP Shown)

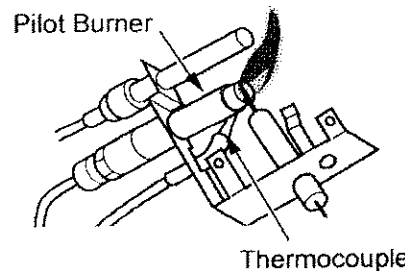


Figure 44 - Incorrect Pilot Flame Pattern (Propane/LP Shown)

INSPECTING BURNERS

Continued

BURNER FLAME PATTERN

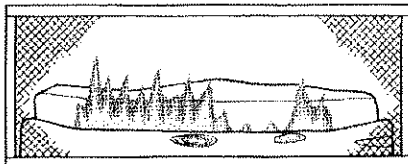
Figure 45 shows a correct burner flame pattern. Figure 46 shows an incorrect burner flame pattern. The incorrect burner flame pattern shows sporadic, irregular flame tipping. The flame should not be dark or have an orange/reddish tinge.

Note: When using the fireplace the first time, the flame will be orange for approximately one hour until the log cures.

If burner flame pattern is incorrect, as shown in Figure 46

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 23)
- see *Troubleshooting*, pages 28 through 31

26,000 Btu/Hr Units



10,000 Btu/Hr Units

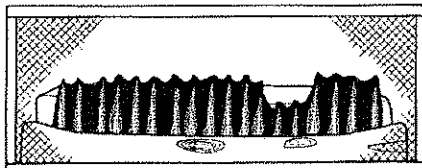
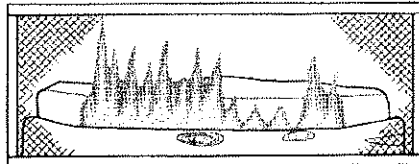


Figure 45 - Correct Burner Flame Pattern

26,000 Btu/Hr Units



10,000 Btu/Hr Units



Figure 46 - Incorrect Burner Flame Pattern

CLEANING AND MAINTENANCE

⚠ WARNING: Turn off fireplace and let cool before cleaning.

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

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

BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint, and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have fireplace inspected yearly by a qualified service person.

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
2. Inspect burner, pilot, and primary air inlet holes on injector holder for dust and dirt (see Figure 47, page 27).

CLEANING AND MAINTENANCE

Continued

3. Blow air through the ports/slots and holes in the burner.
4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hair with a soft cloth or vacuum cleaner nozzle.
5. Blow air into the primary air holes on the injector holder.
6. In case any large clumps of dust have now been pushed into the burner repeat steps 3 and 4.

Clean the pilot assembly also. A yellow tip on the pilot flame indicates dust and dirt in the pilot assembly. There is a small pilot air inlet hole about two inches from where the pilot flame comes out of the pilot assembly (see Figures 48 or 49 depending on model). With the unit off, lightly blow air through the air inlet hole. You may blow through a drinking straw if compressed air is not available.

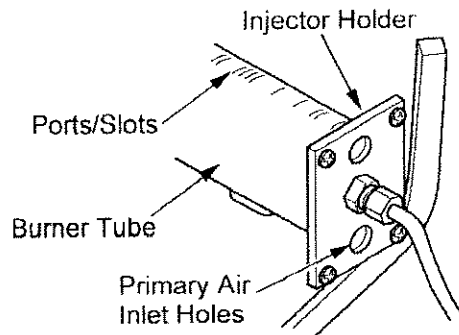


Figure 47 - Injector Holder On Outlet Burner Tube

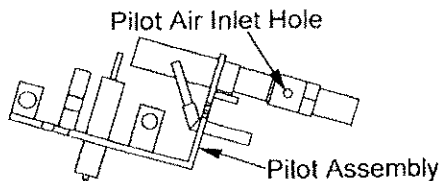


Figure 48 - Pilot Inlet Air Hole (Propane/LP Gas)

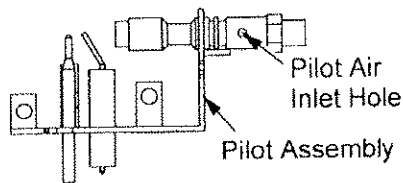


Figure 49 - Pilot Inlet Air Hole (Natural Gas)

LOG SET

- If you remove one-piece log set for cleaning, refer to *Installing Log Set and Screen*, page 21, for placement instructions.
- Replace log set if broken or chipped (dime-sized or larger).

CABINET

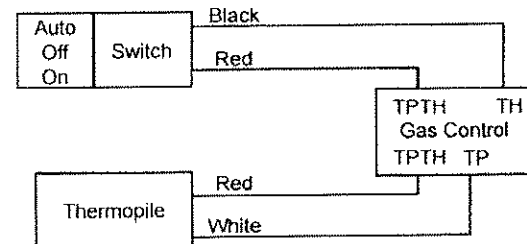
Air Passageways

- Use a vacuum cleaner or pressurized air to clean.

Exterior

- Use a soft cloth dampened with a mild soap and water mixture. Wipe the cabinet to remove dust.

WIRING DIAGRAM



TROUBLESHOOTING

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

⚠ CAUTION: Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	<ol style="list-style-type: none"> 1. Ignitor electrode not connected to ignitor cable 2. Ignitor cable pinched or wet 3. Broken ignitor cable 4. Bad piezo ignitor 5. Ignitor electrode positioned wrong 6. Ignitor electrode broken 	<ol style="list-style-type: none"> 1. Reconnect ignitor cable 2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry 3. Replace ignitor cable 4. Replace piezo ignitor 5. Replace pilot assembly 6. Replace pilot assembly
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	<ol style="list-style-type: none"> 1. Gas supply turned off or equipment shutoff valve closed 2. Control knob not in PILOT position 3. Control knob not pressed in while in PILOT position 4. Air in gas lines when installed 5. Depleted gas supply (propane/LP only) 6. ODS/pilot is clogged 7. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open equipment shutoff valve 2. Turn control knob to PILOT position 3. Press in control knob while in PILOT position 4. Continue holding down control knob. Repeat igniting operation until air is removed 5. Contact local propane/LP gas company 6. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, pages 26 and 27) or replace ODS/pilot assembly 7. Replace gas regulator

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"> 1. Control knob not fully pressed in 2. Control knob not pressed in long enough 3. Safety interlock system has been triggered 4. Equipment shutoff valve not fully open 5. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: A) Low gas pressure B) Dirty or partially clogged ODS/pilot 6. Thermocouple connection loose at control valve 7. Thermocouple damaged 8. Control valve damaged 	<ol style="list-style-type: none"> 1. Press in control knob fully 2. After ODS/pilot lights, keep control knob pressed in 30 seconds 3. Wait one minute for safety interlock system to reset. Repeat ignition operation 4. Fully open equipment shutoff valve 5. A) Contact local natural or propane/LP gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, pages 26 and 27) or replace ODS/pilot assembly 6. Hand tighten until snug, then tighten 1/4 turn more 7. Replace pilot assembly 8. Replace control valve
Burner does not light after ODS/pilot is lit	<ol style="list-style-type: none"> 1. Inlet gas pressure is too low 2. Burner orifice is clogged 3. Thermopile leads disconnected or improperly connected 4. Burners will not come on in remote position 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company 2. Clean burner (see <i>Cleaning and Maintenance</i>, pages 26 and 27) or replace burner orifice 3. Reconnect leads (see <i>Wiring Diagram</i>, page 27) 4. Replace battery in hand-held remote and receiver
Delayed ignition of burner	<ol style="list-style-type: none"> 1. Manifold pressure is too low 2. Burner orifice is clogged 	<ol style="list-style-type: none"> 1. Contact local natural or propane/LP gas company 2. Clean burner (see <i>Cleaning and Maintenance</i>, pages 26 and 27) or replace burner orifice
Burner backfiring during combustion	<ol style="list-style-type: none"> 1. Burner orifice is clogged or damaged 2. Damaged burner 3. Gas regulator defective 4. Inlet gas pressure is too low 	<ol style="list-style-type: none"> 1. Clean burner (see <i>Cleaning and Maintenance</i>, pages 26 and 27) or replace burner orifice 2. Replace damaged burner 3. Replace gas regulator 4. Contact local natural or propane/LP gas company

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Slight smoke or odor during initial operation	<ol style="list-style-type: none">1. Residues from manufacturing processes and log curing2. Not enough air3. Gas regulator defective	<ol style="list-style-type: none">1. Problem will stop after a few hours of operation2. Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Maintenance</i>, pages 26 and 27)3. Replace gas regulator
Fireplace produces a whistling noise when burner is lit	<ol style="list-style-type: none">1. Turning control knob to HI position when burner is cold2. Air in gas line3. Air passageways on fireplace blocked4. Dirty or partially clogged burner orifice	<ol style="list-style-type: none">1. Turn control knob to LO position and let warm up for a minute2. Operate burner until air is removed from line. Have gas line checked by local natural gas company3. Observe minimum installation clearances (see pages 10 through 12)4. Clean burner (see <i>Cleaning and Maintenance</i>, pages 26 and 27) or replace burner orifice
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none">1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. may turn into white powder residue	<ol style="list-style-type: none">1. Turn fireplace off when using furniture polish, wax, carpet cleaners, or similar products
Moisture/condensation noticed on windows	<ol style="list-style-type: none">1. Not enough combustion/ventilation air	<ol style="list-style-type: none">1. Refer to Air for Combustion and Ventilation requirements (page 6)

TROUBLESHOOTING

Continued

- ⚠ WARNING:** If you smell gas
- Shut off gas supply.
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.

IMPORTANT: Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Remote does not function	1. Battery is not install. Battery power is low	1. Replace 9-volt batteries in receiver and remote control
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person
Fireplace produces unwanted odors	1. Fireplace burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See <i>IMPORTANT</i> statement above) 2. Low fuel supply (propane/LP only) 3. Gas leak. See Warning statement at top of page	1. Open window to ventilate room. Stop using odor causing products while fireplace is running 2. Refill supply tank (propane/LP only) 3. Locate and correct all leaks (see <i>Checking Gas Connections</i> , pages 18 and 19)
Fireplace shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local natural or propane/LP gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , pages 26 and 27)
Gas odor even when control knob is in OFF position	1. Gas leak. See Warning statement at top of page 2. Control valve defective	1. Locate and correct all leaks (see <i>Checking Gas Connections</i> , pages 18 and 19) 2. Replace control valve
Gas odor during combustion	1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement at top of page	1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , pages 18 and 19)

SPECIFICATIONS

	Remote-Ready Models VMH26PRB, EFS26PRA	Remote-Ready Models VMH26NRB, EFS26NRA
Btu/Hr	14,000/26,000	14,000/26,000
— Type Gas	Propane/LP Gas Only	Natural Gas Only
Ignition	Piezo	Piezo
Manifold Pressure	8" W.C.	3.5" W.C.
Inlet Gas Pressure (in. of water)		
Maximum	14"	10.5"
Minimum*	11"	5"
Dimensions, inches (HxWxD)		
Fireplace (including hood and screws)	25 ⁷ / ₈ x 26 ¹³ / ₁₆ x 9 ³ / ₈	25 ⁷ / ₈ x 26 ¹³ / ₁₆ x 9 ³ / ₈
Carton	32 ⁵ / ₈ x 27 ¹³ / ₁₆ x 11 ⁵ / ₈	32 ⁵ / ₈ x 27 ¹³ / ₁₆ x 11 ⁵ / ₈
Weight, pounds		
Fireplace	44 ¹ / ₂ lbs.	44 ¹ / ₂ lbs.
Shipping	48 lbs.	48 lbs.
* For purpose of input adjustment		

REPLACEMENT PARTS

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

PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating Products' Technical Service Department at 1-866-672-6040.

When calling DESA Heating Products, have ready

- your name
- your address
- model and serial numbers of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

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

PARTS NOT UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA Heating Products at 1-866-672-6040 for referral information.

When calling DESA Heating Products, have ready

- model number of your fireplace
- the replacement part number

SERVICE HINTS

When Gas Pressure Is Too Low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- for propane/LP units, propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local natural or propane/LP gas supplier.

TECHNICAL SERVICE

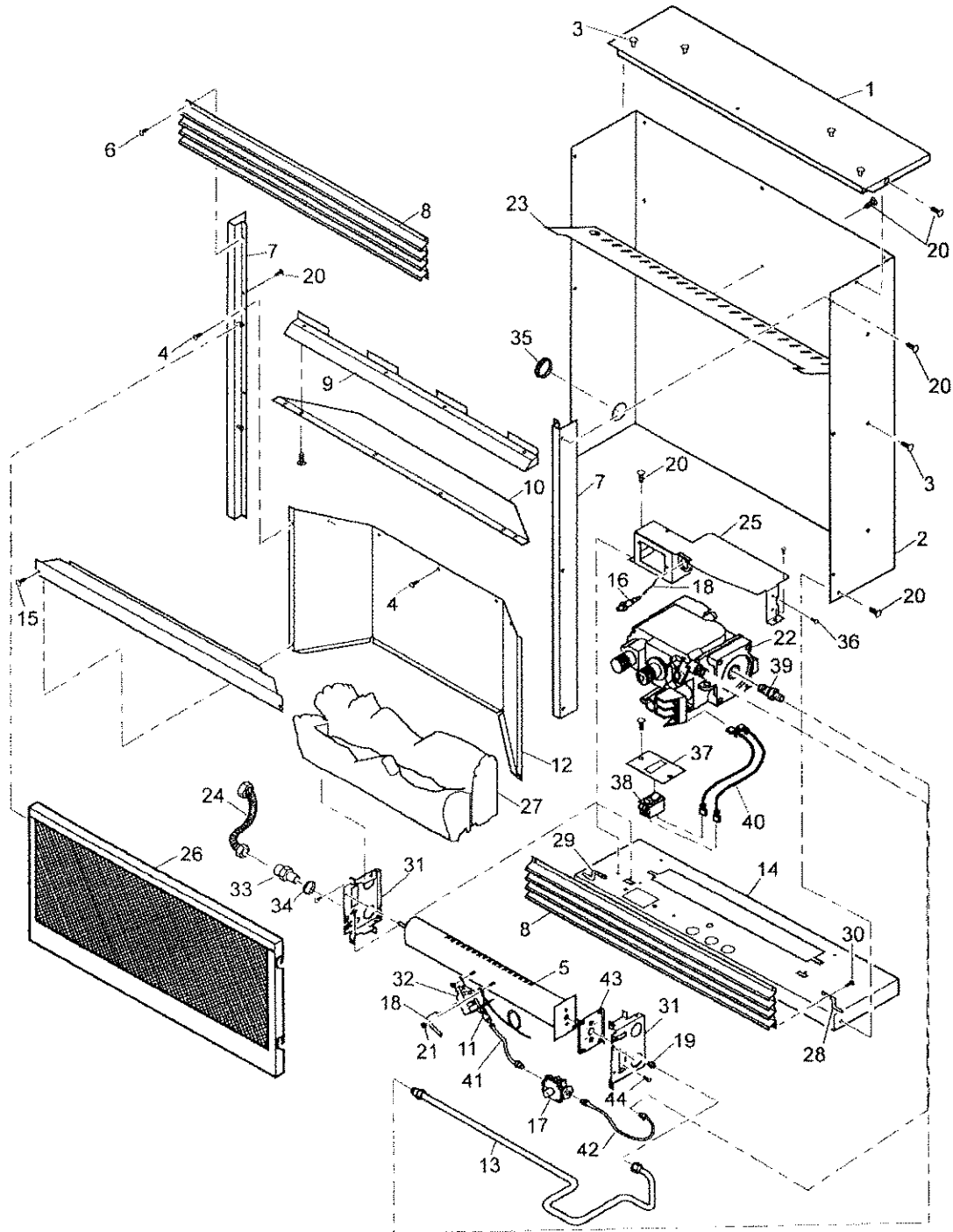
You may have further questions about installation, operation, or troubleshooting. If so, contact DESA Heating Products' Technical Service Department at 1-866-672-6040. When calling, please have your model and serial numbers of your heater ready.

You can also visit DESA Heating Products' technical services web site at www.desatech.com.

ILLUSTRATED PARTS BREAKDOWN

REMOTE-READY MODELS

VMH26PRB, VMH26NRB (Shown), EFS26PRA, EFS26NRA



PARTS LIST

REMOTE-READY MODELS

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 33 of this manual.

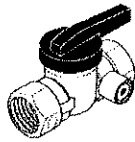
KEY NO.	PART NUMBERS		DESCRIPTION	QTY.
	VMH26PRB EFS26PRA	VMH26NRB EFS26NRA		
1	102633-02	102633-02	Outer Casing Top	1
2	102624-02	102624-02	Outer Casing	1
3	099230-02	099230-02	Shoulder Screw	14
4	098304-01	098304-01	Screw, #10 x 3/8"	13
5	109824-05	109824-05	Burner	1
6	098304-02	098304-06	Screw, PPH AB 6-20 x .38	4
7	102635-02	102635-02	Left and Right Side Front	2
8	103209-05	103209-05	Louver	2
9	104281-02CK	104281-02CK	Firebox Hood	1
10	102638-01	102638-01	Firebox Top	1
11	103778-01	103779-01	ODS/Pilot Assembly	1
12	**	**	Firebox Wrapper	1
13	104322-01	104322-01	Burner Tube	1
14	104335-01CK	104335-01CK	Outer Shell Base	1
15	102649-02	102649-02	Branch Support	1
16	102445-01	102445-01	Piezo Ignitor	1
17	—	099918-02	Regulator, Pilot	1
18	098271-10	098271-10	Ignitor Cable	1
19	107186-01	107186-02	Injector	1
20	M11084-26	M11084-26	Screw, Hex Head, #10 x 3/8"	25
21	098249-01	098249-01	Nut, M5	6
22	103781-02	103781-01	Gas Valve	1
23	102639-01	102639-01	Baffle	1
24	101628-01	101628-01	Flexible Connector	1
25	104305-01	104305-01	Control Shield	1
26	103295-03CK	103295-03CK	Screen Assembly	1
27	107153-01	107153-01	Log Set Assembly Kit	1
28	104313-01	104313-01	Right Hinge	1
29	104313-02	104313-02	Left Hinge	1
30	M10908-2	M10908-2	Hinge Screws	4
31	103734-01	103734-01	Burner Support	2
32	101006-02	101006-02	Pilot Bracket	1
33	097809-02	097809-02	Connector, Male	1
34	101629-01	101629-01	Bushing	1
35	101629-02	101629-02	Bushing	1
36	M12461-26	M12461-26	Gas Valve Screws	4
37	103587-02	103587-02	Plate, Switch	1
38	099998-01	099998-01	Switch, Fan	1
39	098264-02	098264-02	Connector, Male	1
40	103284-03	103284-03	Wire Harness	1
41	—	099387-14	Pilot Tube to Regulator	1
42	099387-13	099387-15	Pilot Tube to Control Valve	1
43	—	107634-02	NG Conversion Plate	1
44	M10908-75	M10908-75	Hex Wsr Head Tapping Screw	1
PARTS AVAILABLE — NOT SHOWN				
	103877-01	103877-01	Lighting Instructions Plate	1
	100563-01	100563-01	Warning Plate	1
	103470-02	103470-02	Hardware Package	1

** Part not available for field replacement.

ACCESSORIES

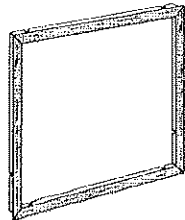
NOTICE: All accessories may not be available for all fireplace models.

Purchase these fireplace accessories from your local dealer. If they can not supply these accessories, call DESA Heating Products at 1-866-672-6040 for referral information. You can also write to the address listed on the back page of this manual.



EQUIPMENT SHUTOFF VALVE GA5010

For all models. Equipment shutoff valve with 1/8" NPT tap. Fits 1/2" NPT pipe.



PERIMETER TRIM KIT - GA6095

For all models. Optional four-sided perimeter trim kit for recessed built-in installations (when unit is raised off of the floor). Provides a finished appearance by covering rough edges of wall opening.

PERIMETER TRIM KIT (Not Shown)

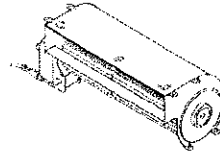
GA6094 - Polished Brass
GAB6094 - Black
GAP6094 - Platinum

For all models. Optional three-sided perimeter trim kit for custom and recessed installations (when unit is on the floor). Provides a finished appearance by covering rough edges of wall opening. Black trim included with all mantels.

EXTRUDED LOUVER KIT (Not Shown)

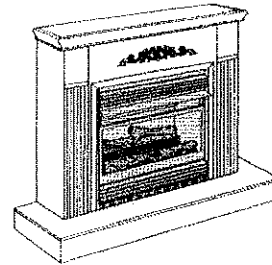
GA9092 - Polished Brass
GAP9092 - Platinum

For all models. Optional extruded louver. Kit contains 2 louvers.



THERMOSTAT-CONTROLLED BLOWER KIT - GA3450T

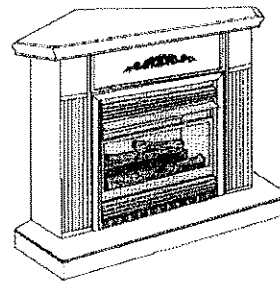
For all models. Provides better heat distribution. Makes fireplace more efficient. Automatically turns off and on as needed.



CABINET MANTEL WITH BUILT-IN HEARTH BASE AND ROUNDED LEG STYLING

GMC61U Series - Unfinished
GMC60F Series - Oak Finished
GMC65W Series - White Lacquer Finished
(Appearance May Differ by Model)

For all models. A mantel and hearth base offers compact styling and completes the fireplace look. Available in an oak stained or an unfinished birch, ready to stain or paint. Complete assembly instructions included. Three-sided perimeter trim kit included.



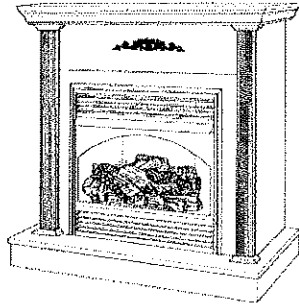
CORNER MANTEL WITH FULL HEARTH BASE

GMC63U Series - Unfinished
GMC64F Series - Finished
GMC83F Series - Finished (Column Style)

For all models. Space-saving mantel and hearth base corner design features clean, classic lines. Available in a stained oak, white lacquer or an unfinished hardwood, ready to stain or paint. Complete assembly instructions included. Three-sided perimeter trim kit included.

ACCESSORIES

Continued



CABINET MANTEL AND FULL HEARTH BASE

GMC80F Series - Oak Finished
GMC81U Series - Unfinished Birch
GMC82F Series - Cherry Finished Birch

For all models. Mantel features columns, moldings, fluting and medallion. Three-sided perimeter trim kit included.

Dimensions (WxHxD): 56" x 50" x 24"

CLEANING KIT - GCK (Not Shown)

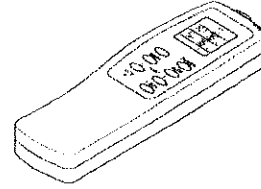
For all models. Your vent-free gas appliance requires regular cleaning and maintenance to prevent performance problems. This kit gives you the tools and instructions to make it easy to clean all critical areas of your appliance.

WALL-MOUNT THERMOSTAT SWITCH - GWMT1 (Not Shown)

For all models. The desired comfort setting can be selected on the wall thermostat and the fireplace will automatically cycle from pilot to the heat setting selected.

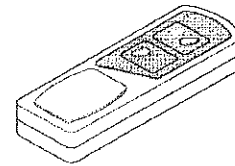
WALL-MOUNT ON/OFF SWITCH GWMS2 (Not Shown)

For all models. Allows the fireplace to be turned on and off with a wall switch.



RECEIVER AND HAND-HELD THERMOSTAT REMOTE CONTROL KIT - GHRCTB

For all models. Allows the fireplace to be operated in a manually or thermostatically controlled mode. You can turn the fireplace on and off without ever leaving the comfort of your easy chair.



RECEIVER AND HAND-HELD REMOTE CONTROL KIT - GHRCB

For all models. Allows the fireplace to be turned on and off by using a hand-held remote control.

INFORMATION VIDEO - 108917-01

For all models. A care and maintenance video is available by calling 1-866-672-6040. You may also email your request to productsupport@desaint.com.

FIRE CRACKLE - CF6A (Not Shown)

For all models. Creates the sound of a real burning fire.

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model _____
Serial No. _____
Date Purchased _____

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

LIMITED WARRANTY VENT-FREE COMPACT CLASSIC HEARTH® FIREPLACE

DESA Heating Products warrants this product to be free from defects in materials and components for four (4) years and five (5) years on stainless steel burners from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this fireplace to proper operating condition and an allowance for labor when provided by a DESA Heating Products Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA Heating Products who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The fireplace MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective fireplace will be the responsibility of the owner.

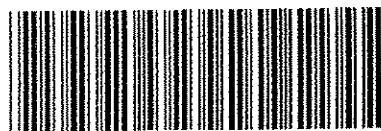
TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO FOUR (4) YEARS ON ALL COMPONENTS AND FIVE (5) YEARS ON STAINLESS STEEL BURNERS FROM THE DATE OF FIRST PURCHASE; AND DESA HEATING PRODUCTS' LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA HEATING PRODUCTS SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

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

For information about this warranty write:

DESA
HEATING PRODUCTS
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004
www.desatech.com



113110 01

NOT A UPC

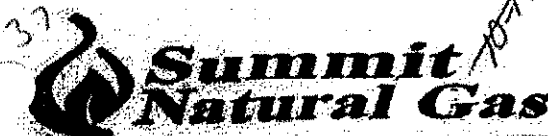
113110-01
Rev. A
03/04

PGC Attachment
MPGA DRY GC-2016-0663

SUG

1/23/15

F



800-927-0787

GENERAL SERVICE ORDER							
Category: SNG		Location: LOO		Date & Time Rec'd			
Account #		Town Or Subdivision: CAMDENTON		Date & Time Wanted: 1-23-15 1pm			
Leak Classification: 1 2 3 4		Leak Read		Last Read Date		Meter Notes	
Leak Classification: 1 2 3 4		Leak Classification: 1 2 3 4		Inside Leak <input type="checkbox"/>		Outside Leak <input type="checkbox"/>	
COMPLETION INFORMATION							
Action Taken: Turned On <input checked="" type="checkbox"/>		Turned Off <input type="checkbox"/>		TF/TN <input type="checkbox"/>		Removed <input type="checkbox"/>	
Meter Number		Dials		Manufacturer		Size	
Old Meter		Dials		Manufacturer		Size	
New Meter: BX145573		Dials: 84		Manufacturer: American		Size: AC250	
Old ERT#		New ERT#		Removed Meter Status		Odorant Level	
Usable <input type="checkbox"/>		Non-Usable <input type="checkbox"/>		Lost/Stolen <input type="checkbox"/>		High <input type="checkbox"/>	
Regulator Installed: YES <input checked="" type="checkbox"/>		Regulator Removed: YES <input type="checkbox"/>		Removed Regulator Status: Usable <input type="checkbox"/>		Non-Usable <input type="checkbox"/>	
Start Pressure: 10"		End Pressure: 10"		Time Held: 15 MIN		CUSTOMER PIPING: Pass/Fail	
Start Pressure: 10"		End Pressure: 10"		Time Held: 15 MIN		Yellow Tag Done: YES <input type="checkbox"/>	
Comments: Set main piped to existing. Final phase completed. Check seal test OK.							
Meter Location: Right Side (Rear)							
Manufacturer: DQSA		Model No: N6F28PT/6LS28PT		Serial No: 4247164		BTU Input: 29000	
BTU Flow Rate (BTU Output)		Red Tagged (Remove from Service)		Please check box if additional analysis was required			
This inspection or work performed covers natural gas items and equipment visible and accessible to the service technician, and represents the conditions at the time and date of the inspection or work performed. It does not cover latent or manufacturing defects and the internal working of sealed equipment or structural components, and cannot be construed to cover future defects or unforeseen events.							
CUSTOMER: I have been instructed on the use of the gas in case of an emergency. I have smelled natural gas and heard its odor. I have had gas system deficiencies and/or corrections (if any) explained.				TECHNICIAN: I certify that I have completed the work as described.			
Received: <input checked="" type="checkbox"/> Safety Instructions <input checked="" type="checkbox"/> Appliance Sticker				<input checked="" type="checkbox"/> Performed Gas Test <input type="checkbox"/> Performed Pressure Test			
PRINT NAME: [Redacted]				<input checked="" type="checkbox"/> Performed Leak Test <input checked="" type="checkbox"/> Performed Shut Off Test			
SIGNATURE: [Redacted]				<input type="checkbox"/> Shown Customer how to properly use gas			

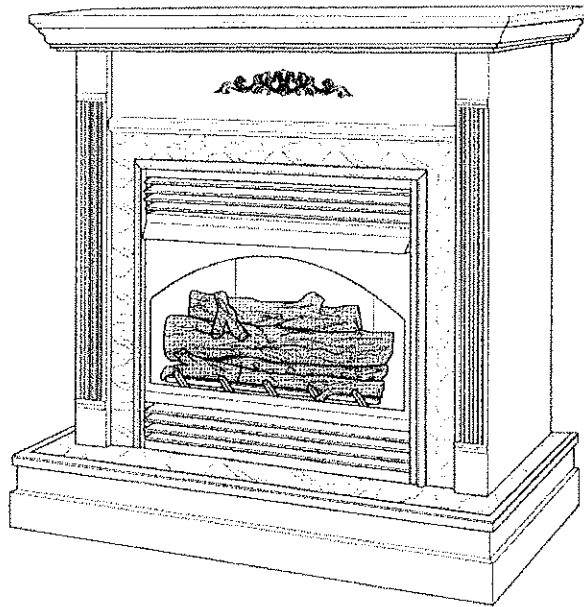
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13X145572

DESA INTERNATIONAL UNVENTED (VENT-FREE) PROPANE GAS FIREPLACE

OWNER'S OPERATION AND INSTALLATION MANUAL

Thermostatically Controlled



Shown with optional cabinet mantel, hearth base, and trim accessories.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

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



Save this manual for future reference.

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SAFETY INFORMATION

WARNINGS

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

DANGER

Carbon monoxide poisoning may lead to death!

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

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

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

Safety information continues on next page

SAFETY INFORMATION

Continued

WARNINGS *Continued*

WARNING: Any change to this fireplace or its controls can be dangerous.

1. Use only propane gas. Do not convert fireplace to use different fuel type.
2. Do not place propane supply tank(s) inside any structure. Locate propane supply tank(s) outdoors.
3. If you smell gas
 - shut off gas supply
 - do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
4. This fireplace shall not be installed in a bedroom or bathroom.
5. Never install the fireplace
 - in a recreational vehicle
 - where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the fireplace
 - in high traffic areas
 - in windy or drafty areas
6. Do not use this fireplace as a wood-burning fireplace. Use only the logs provided with the fireplace.
7. Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting. Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.
8. You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.
9. This fireplace is designed to be smokeless. If logs ever appear to smoke, turn off fireplace and call a qualified service person. *Note:* During initial operation, slight smoking may occur due to log curing and fireplace burning manufacturing residues.
10. Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside burn area of firebox. Use only the blowers provided with this fireplace. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur. Sooting can settle on household surfaces outside the fireplace.
11. This fireplace needs fresh air ventilation to run properly. This fireplace has an oxygen depletion sensor (ODS) pilot light safety system. The ODS shuts down the fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 6 through 8. If fireplace keeps shutting off, see *Troubleshooting*, pages 26 through 30.
12. Do not run fireplace
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
13. Do not use this fireplace to cook food or burn paper or other objects.
14. Never place any objects in the fireplace or on logs.
15. Fireplace front and screen becomes very hot when running fireplace. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shut-down. Allow surfaces to cool before touching.
16. Carefully supervise young children when they are in the room with fireplace.
17. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
18. Do not operate fireplace if any log is broken. Do not operate fireplace if a log is chipped (dime-sized or larger).
19. Turn fireplace off, unplug, and let cool before servicing. Only a qualified service person should service and repair fireplace.
20. Operating fireplace above elevations of 4,500 feet may cause pilot outage.

PRODUCT IDENTIFICATION

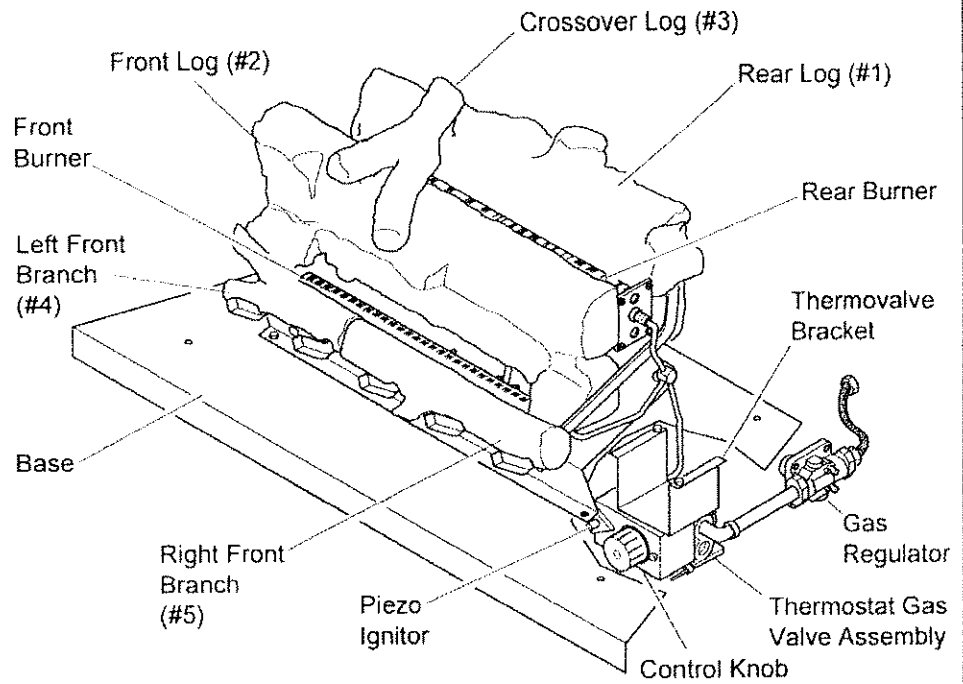


Figure 1 - Log Base Assembly

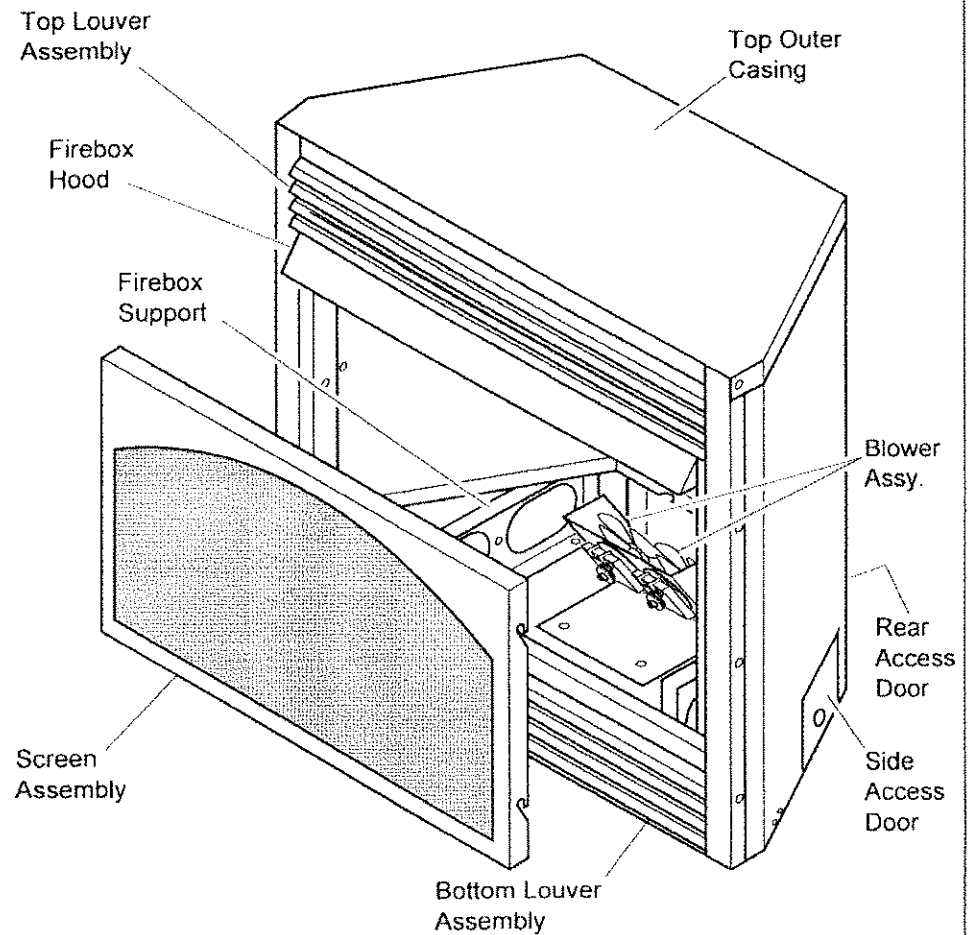


Figure 2 - Fireplace

LOCAL CODES

Install and use fireplace with care. Follow all local codes. In the absence of local codes, use the latest edition of The National Fuel Gas Code ANSI Z223, also known as NFPA 54*.

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

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

UNPACKING

1. Remove trim kit and cartons containing logs from carton. Place the carton containing the fireplace unit on its back. Hold fireplace and pull the carton and pallet away.
2. Remove protective packaging applied to logs, log base assembly, and fireplace. You may not want to remove protective plastic on front of fireplace until after installing. This will protect fireplace from dust, debris, and damage during installation.
3. Check all items for any shipping damage. If damaged, promptly inform dealer where you bought fireplace.

PRODUCT FEATURES

Operation

This vent-free fireplace is clean burning. It requires no outside venting. There is no heat loss out a vent or up a chimney. Heat is generated by both realistic flames and glowing embers.

Safety Device

This fireplace has a pilot with an Oxygen Depletion Sensor Shutoff System (ODS). The ODS/pilot is a required feature for vent-free room heaters. The ODS system shuts off the fireplace if there is not enough fresh air.

Piezo Ignition System

This fireplace has a piezo ignitor. This system requires no matches, batteries, or other sources to light fireplace.

Blower Assembly

This fireplace has a blower assembly. The blower operates thermostatically or manually. The blower circulates heated air from the fireplace into the room. Use of blower is optional.

Thermostat Control

This fireplace has a thermostat sensing bulb and a control valve. The thermostat controls the heat output and flame height. This maintains a consistent room temperature. Even the lowest setting provides realistic flames and glowing embers from two burners. Selecting higher comfort settings allows fireplace to run longer, producing greater heat output. At lower comfort settings, the fireplace will run less. This results in increased heating comfort. This can also result in lower gas bills.

AIR FOR COMBUSTION AND VENTILATION

WARNING

This fireplace must have fresh air for proper operation. If not, poor fuel combustion could result. Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. Fresh air enters the home through and around doors and windows. This may provide enough fresh air for combustion and ventilation. All fuel-burning appliances need fresh air for proper combustion and ventilation.

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.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation*.

All spaces in homes fall into one of the three following ventilation classifications:

1. Unusually Tight Construction; 2. Unconfined Space; 3. Confined Space.

The information on pages 6 through 8 will help you classify your space and provide adequate ventilation.

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. weather stripping 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. See *Ventilation Air From Outdoors*, page 8.

If your home does not meet all of the three criteria above, proceed to page 7.

Unconfined Space

An unconfined space has a minimum air volume of 50 cubic feet for each 1000 BTU/Hr input rating of all appliances in the space (cubic feet equals length x width x height of space). Include adjoining rooms only if there are doorless passageways or ventilation grills between the rooms.

If the BTU per 50 cubic feet is less than 1000 BTU/Hr, then the fresh air will be provided by the natural air flow into the house.

Confined Space

A confined space has an air volume of less than 50 cubic feet for each 1000 BTU/Hr input rating of all appliances in the space (cubic feet equals length x width x height of space). Include adjoining rooms only if there are doorless passageways or ventilation grills between the rooms.

AIR FOR COMBUSTION AND VENTILATION

Continued

DETERMINING AIR FLOW FOR FIREPLACE LOCATION

Determining if You Have a Confined or Unconfined Space

Use this work sheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install fireplace plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

1. Determine the volume of the space (length x width x height).

Length x Width x Height = _____ cu. ft. (volume of space)

Example: Space size 22 ft. (length) x 18 ft. (width) x 8 ft. (ceiling height) =
3168 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Divide the space volume by 50 cubic feet to determine the maximum BTU/Hr the space can support.

_____ (volume of space) ÷ 50 cu. ft. = (Maximum BTU/Hr the space can support)

Example: 3168 cu. ft. (volume of space) ÷ 50 cu. ft. = 63.3 or 63,300 (maximum BTU/Hr the space can support)

3. Add the BTU/Hr of all fuel burning appliances in the space.

Vent-free fireplace	_____	BTU/Hr
Gas water heater*	_____	BTU/Hr
Gas furnace	_____	BTU/Hr
Vented gas heater	_____	BTU/Hr
Gas fireplace logs	_____	BTU/Hr
Other gas appliances*	+ _____	BTU/Hr
Total	= _____	BTU/Hr

Example:

Gas water heater		40,000	BTU/Hr
Vent-free fireplace	+	28,000	BTU/Hr
Total	=	68,000	BTU/Hr

* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum BTU/Hr the space can support with the actual amount of BTU/Hr used.

_____ BTU/Hr (maximum the space can support)
_____ BTU/Hr (actual amount of BTU/Hr used)

Example: 63,300 BTU/Hr (maximum the space can support)
68,000 BTU/Hr (actual amount of BTU/Hr used)

The space in the above example is a confined space because the actual BTU/Hr used is more than the maximum BTU/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- A. Rework work sheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See *Ventilation Air from Inside Building*, page 8.
- B. Vent room directly to the outdoors. See *Ventilation Air from Outdoors*, page 8.
- C. Install a lower BTU/Hr fireplace, if lower BTU/Hr size makes room unconfined.

If the actual BTU/Hr used is less than the maximum BTU/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

WARNING

You must provide additional ventilation air in a confined space.

Continued

7

AIR FOR COMBUSTION AND VENTILATION

Continued

VENTILATION AIR

Ventilation Air from Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 3). Follow the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts. You can also remove door into adjoining room (see option 3, Figure 3).

⚠ WARNING

Re-calculate work sheet, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

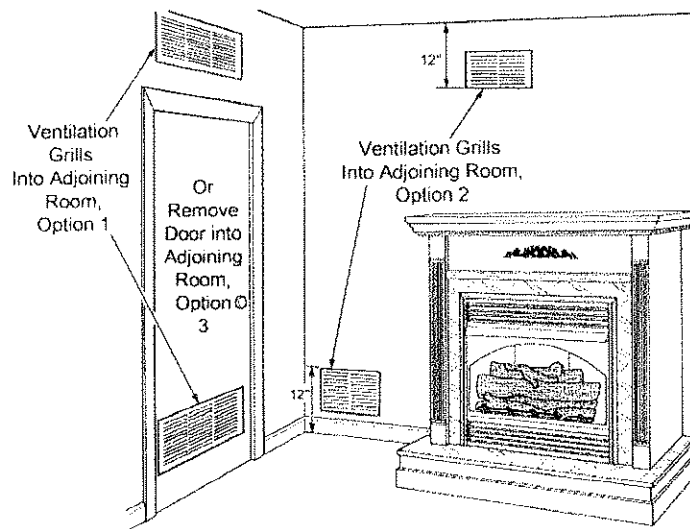


Figure 3 - Ventilation Air from Inside Building

Ventilation Air from Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the *National Fuel Gas Code NFPA 54/ANSI Z223.1, Section 5.3, Air for Combustion and Ventilation* for required size of ventilation grills or ducts. **IMPORTANT:** Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

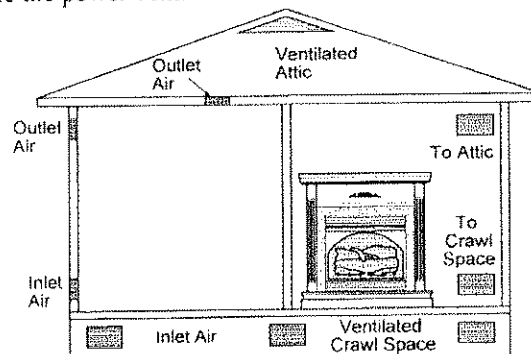


Figure 4 - Ventilation Air from Outdoors

INSTALLING

NOTICE

A qualified service person must install fireplace. Follow all local codes.

WARNING

Never install the fireplace

- in a bedroom or bathroom
- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 36 inches from the front, top, or sides of the fireplace
- in high traffic areas
- in windy or drafty areas

WARNING

This fireplace has a three-prong, grounded electrical plug. This plug helps protect you against electrical shock. Only connect plug to a properly grounded, three-prong receptacle. Do not cut or remove the grounding prong from this plug.

CAUTION

This fireplace creates warm air currents. These currents move heat to wall surfaces next to fireplace. Installing fireplace next to vinyl or cloth wall coverings or operating fireplace where impurities in the air (such as tobacco smoke) exist, may discolor walls.

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing fireplace in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, pages 6 through 8.

IMPORTANT: Make sure the fireplace is level. If fireplace is not level, log set will not work properly. Avoid damage to thermostat bulb. Avoid nicks or sharp bends in thermostat bulb wire. Keep thermostat bulb in mounting bracket.

CHECK GAS TYPE

Use only propane gas. If your gas supply is not propane gas, do not install fireplace. Call dealer where you bought fireplace for proper type fireplace.

ELECTRICAL HOOKUP

This fireplace has a blower assembly with an electrical cord. The electrical cord is five feet in length. You must locate fireplace within reach of a 120 volt grounded electrical outlet. If not, you must install an electrical outlet within reach of fireplace power cord.

Continued

9

INSTALLING

Continued

ASSEMBLING AND ATTACHING BRASS TRIM

Note: The instructions below show assembling and attaching brass trim to fireplace. You cannot attach the brass trim as described below for built-in installation (see page 13).

1. Remove packaging from three pieces of brass trim.
2. Locate four brass screws, two adjusting plates with set screws, and two shims in the hardware packet.
3. Align shim under adjusting plate as shown in Figure 5.
4. Slide one end of adjusting plate/shim in slot on mitered edge of top brass trim (see Figure 5).
5. Slide other end of adjusting plate/shim in slot on mitered edge of side brass trim (see Figure 5).
6. While firmly holding edges of brass trim together, tighten both set screws on the adjusting plate with slotted screwdriver.
7. Repeat steps 1 through 6 for other side.

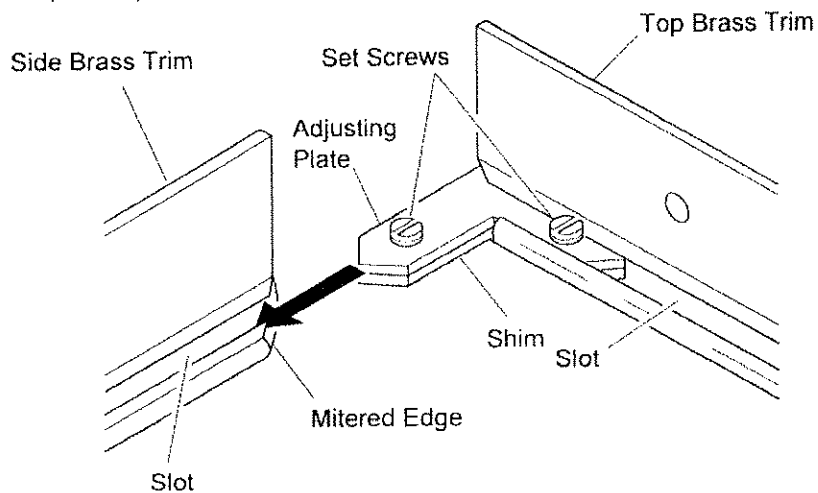


Figure 5 - Assembling Brass Trim

8. Place the assembled trim onto fireplace cabinet. Attach to fireplace with brass screws included in hardware package (see Figure 6).

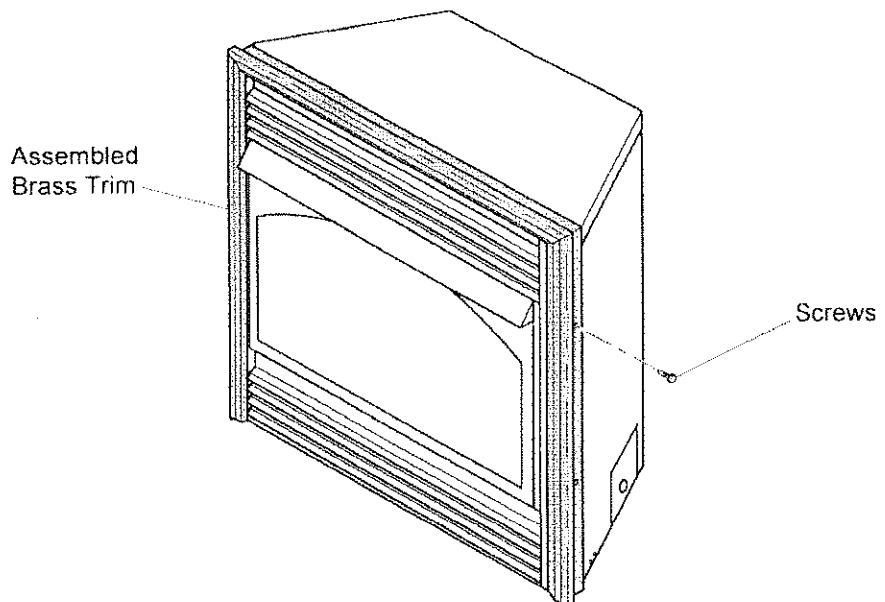


Figure 6 - Attaching Brass Trim to Fireplace

INSTALLING

Continued

INSTALLATION CLEARANCES

⚠ WARNING

Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling, and adjoining wall.

Carefully follow the instructions below. This will ensure safe installation.

Minimum Wall and Ceiling Clearances (see Figure 7)

- A. Clearances from the side of the fireplace opening to any combustible wall should not be less than 16 inches for a standard mantel or 12 inches for a corner installation.
- B. Clearances from the top of the fireplace opening to the ceiling should not be less than 42 inches.

Note: Clearances are the same if using optional cabinet mantel or built-in installation.

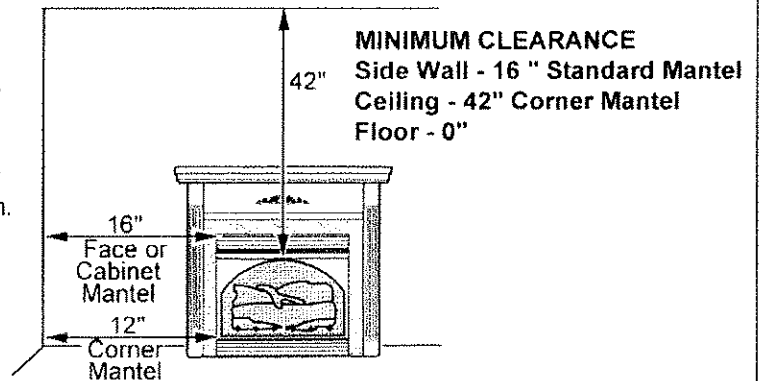


Figure 7 - Minimum Clearance to Wall and Ceiling

CONVENTIONAL FIREPLACE INSTALLATION

Conventional installation of this fireplace involves installing fireplace along with the corner mantel accessory or cabinet mantel with hearth base accessories against a wall in your home. Follow the instructions below to install the fireplace in this manner.

⚠ WARNING

For conventional installation, it is recommended you use the cabinet mantel, corner mantel, or hearth base specified in this manual. Surface clearances may not be sufficient with other cabinet mantels and hearth bases. This may create a fire hazard. See *Accessories*, pages 32 and 33 for correct cabinet mantel and hearth base.

Note: The instructions below show installation using the cabinet mantel and the G3000F/G3001U hearth base accessories. The hearth base accessory shown is optional for this installation. You can install fireplace and cabinet mantel directly on the floor. The corner mantel and face mantel accessories cannot be installed with the G3000F/G3001U hearth base. You must install corner mantel directly on the floor. If mounting fireplace to floor or using corner mantel, an optional G3005 Slim Base kit may be installed.

1. Assemble cabinet mantel, hearth base, and trim accessories. Assembly instructions are included with each accessory.
2. Install a properly grounded, 120 volt three-prong electrical outlet at fireplace location if an outlet is not there. If possible, locate outlet so cabinet mantel will cover it when installed (see Figure 8, page 12).

Continued

INSTALLING

Continued

3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 15.
4. Place hearth base accessory against wall at installation location. Cut an access hole in hearth top to run flexible gas line to fireplace (see Figure 8). Make sure to locate access hole so cabinet mantel will cover it when installed. **Note:** You can secure base to floor using wood screws. Countersink screw heads and putty over.

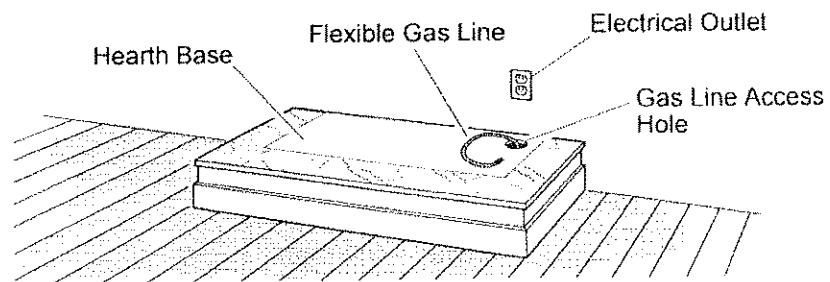


Figure 8 - Placing Hearth Base Accessory Against Wall

5. Route flexible gas line through access hole in hearth base.
6. Center cabinet mantel on hearth base (see Figure 9). Make sure mantel is flush against wall.

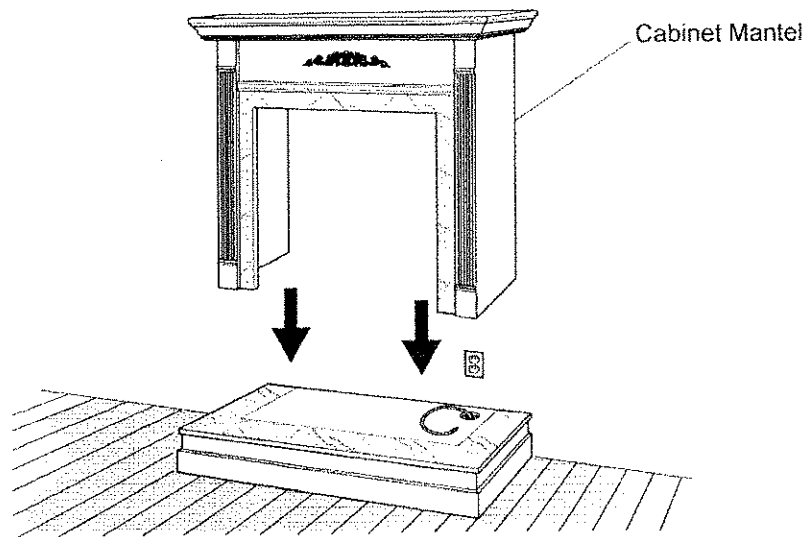


Figure 9 - Installing Cabinet Mantel

7. Place cardboard or other protective material on top of hearth base. Carefully set fireplace on protective material, with back of fireplace inside mantel opening.
8. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 17.
9. Route blower electrical cord through side or rear access door of fireplace. Plug electrical cord into electrical outlet.
10. Carefully insert fireplace into cabinet mantel. Be careful not to scratch or damage hearth base, cabinet mantel, or any laminate trim on hearth base. Remove protective material from top of hearth base and from front of fireplace (if any). **Note:** You can secure fireplace to hearth or floor. Open lower louver. Locate screw holes in bottom of base. Tighten wood screws through these holes and into hearth or floor.

INSTALLING

Continued

11. Check all gas connections for leaks. See *Checking Gas Connections*, page 18.

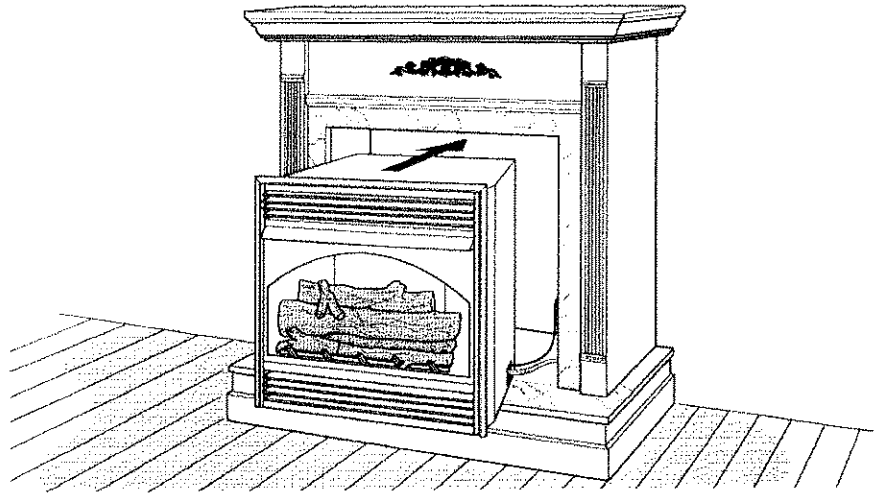


Figure 10 - Inserting Fireplace Into Cabinet Mantel

BUILT-IN FIREPLACE INSTALLATION

Built-in installation of this fireplace involves installing fireplace into a framed-in enclosure. This makes the front of fireplace flush with wall. If installing a mantel above the fireplace, but you must follow the clearances shown in Figure 15, page 15. Follow the instructions below to install the fireplace in this manner.

Height		Front Width		Depth	
Actual	Framing	Actual	Framing	Actual	Framing
32 ³ / ₈ "	33"	34 ⁵ / ₁₆ "	35 ¹ / ₂ "	16 ¹¹ / ₁₆ "	17 ³ / ₄ "

1. Frame in rough opening. Use dimensions shown in Figure 11 for the rough opening.

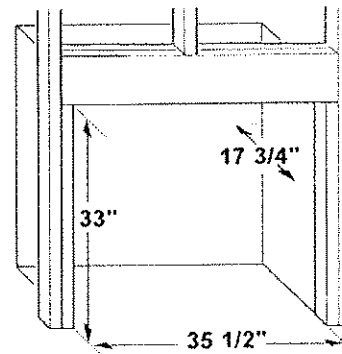


Figure 11 - Rough Opening for Installing in Wall

If installing in a corner, use dimensions shown in Figure 12 for the rough opening. The height is 33" which is the same as the wall opening, above.

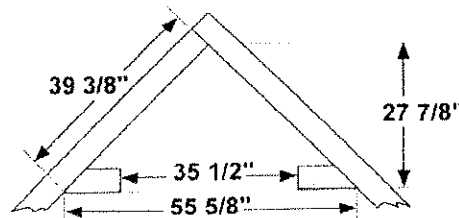


Figure 12 - Rough Opening for Installing in Corner

Continued

INSTALLING

Continued

2. Install a properly grounded, three-prong 120 volt electrical outlet at fireplace location. Locate outlet inside the framed enclosure.
3. Install gas piping to fireplace location. This installation includes an approved flexible gas line (if allowed by local codes) after the manual shutoff valve. The flexible gas line must be the last item installed on the gas piping. See *Installing Gas Piping to Fireplace Location*, page 15.
4. Carefully set fireplace in front of rough opening with back of fireplace inside wall opening.
5. Attach flexible gas line to fireplace gas regulator. See *Connecting Fireplace to Gas Supply*, page 17.
6. Route blower electrical cord through side or rear access door of fireplace. Plug electrical cord into electrical outlet.
7. Carefully insert fireplace into rough opening.
8. Attach fireplace to floor using wood screws through holes in bottom of base. Open lower louver to locate screw holes (see Figure 13).
9. Check all gas connections for leaks. See *Checking Gas Connections*, page 18.

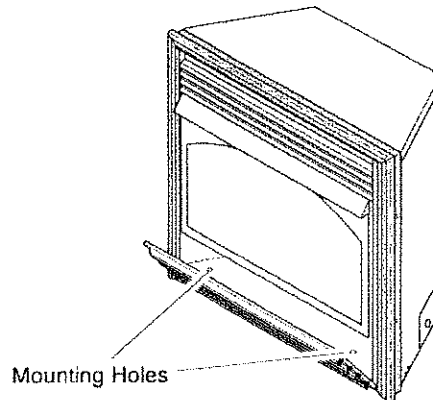


Figure 13 - Floor/Hearth Mounting Holes

Alternate Built-In Attachment Method: Nailing Flange Accessory

If desiring to attach heater to wall studs, use nailing flange accessory. *Note:* You cannot use brass trim if using the nailing flange.

1. Attach nailing flange accessory to each side of fireplace (see Figure 14). See *Accessories*, page 33, for nailing flange.
2. Carefully insert fireplace into rough opening.
3. Attach fireplace to wall studs using nails or wood screws through holes in nailing flange (see Figure 14).
4. Check all gas connections for leaks. See *Checking Gas Connections*, page 18.

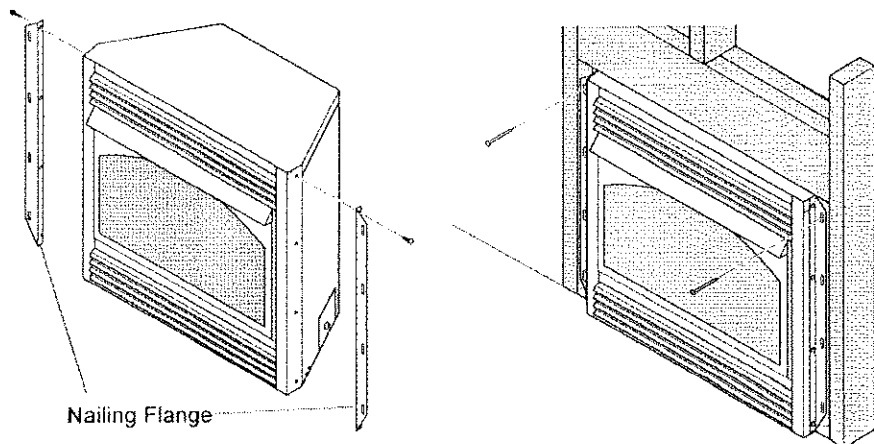


Figure 14 - Installing and Attaching Nailing Flange Accessory

INSTALLING

Continued

Mantel Clearances for Built-In Installation

If placing mantel above built-in fireplace, you must meet minimum clearance between mantel shelf and top of fireplace opening.

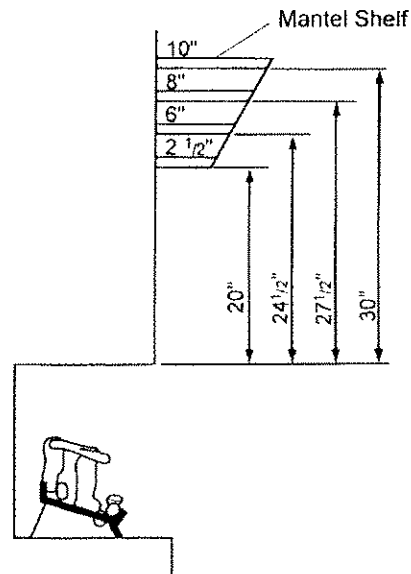


Figure 15 - Minimum Mantel Clearances for Built-In Installation

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

- raise the mantel to an acceptable height, OR
- remove the mantel.

INSTALLING GAS PIPING TO FIREPLACE LOCATION

NOTICE

A qualified service person must connect fireplace to gas supply. Follow all local codes.

CAUTION

Never connect heater directly to the propane supply. This heater requires an external regulator (not supplied). Install the external regulator between the heater and propane supply.

Installation Items Needed

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

- external regulator (supplied by installer, see Figure 16, page 16)
- piping (check local codes)
- sealant (resistant to propane gas)
- manual shutoff valve *
- test gauge connection *
- sediment trap
- tee joint
- pipe wrench
- approved flexible gas line with gas connector (if allowed by local codes) (not provided)

* An A.G.A. design-certified manual shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 32.

Continued

15

INSTALLING

Continued

The installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install external regulator with the vent pointing down as shown in Figure 16. Pointing the vent down protects it from freezing rain or sleet.

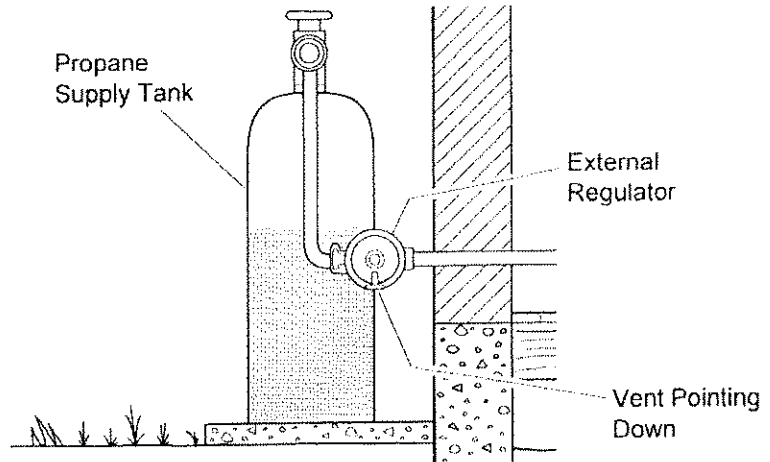


Figure 16 - External Regulator With Vent Pointing Down

CAUTION

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

Installation must include a manual shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from fireplace (see Figure 17, page 17).

Check your building codes for any special requirements for locating manual shutoff valve to fireplaces.

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

CAUTION

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

Install sediment trap in supply line as shown in Figure 17, page 17. Locate sediment trap where it is within reach for cleaning. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into fireplace gas controls. If sediment trap is not installed or is installed wrong, fireplace may not run properly.

INSTALLING

Continued

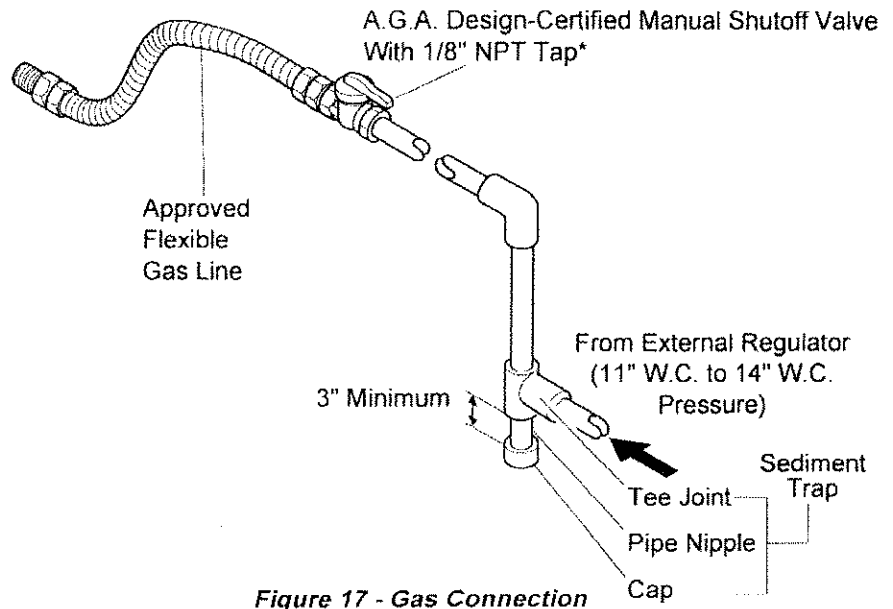


Figure 17 - Gas Connection

* Purchase the optional A.G.A. design-certified manual shutoff valve from your dealer. See *Accessories*, page 32.

CONNECTING FIREPLACE TO GAS SUPPLY

Installation Items Needed

- 5/16" hex socket wrench or nut-driver
- Phillips screwdriver
- sealant (resistant to propane gas, not provided)

1. Remove fireplace screen. Remove two screws that hold fireplace screen in place for shipping. These screws are located near top of screen. Discard screws. Lift fireplace screen up and pull out to remove.
2. Remove access door from rear or side of fireplace. See *Product Identification*, page 4, for access door locations.
3. Remove screws that attach log base assembly to fireplace (see Figure 18). Carefully lift up log base assembly and remove from fireplace (see Figure 18).

Note: If adding the G8000 brick liner accessory, install it now. Follow instructions in G8000 accessory kit.

CAUTION

Do not pick up log base assembly by burners. This could damage burners. Only handle base by grates.

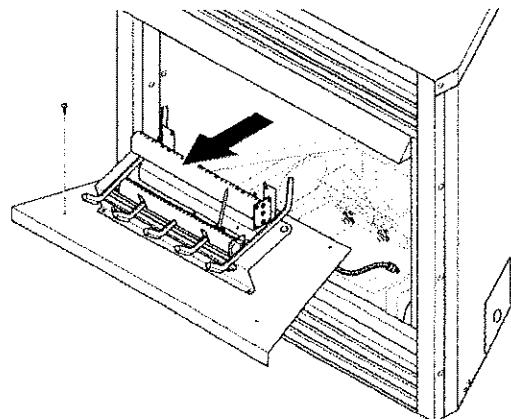


Figure 18 - Removing Log Base Assembly From Fireplace

Continued

INSTALLING

Continued

4. Route flexible gas line from manual shutoff valve into fireplace through side or rear access panel. Route flexible gas supply line through fireplace access door.

NOTICE

Most building codes do not permit concealed gas connections. A flexible gas line is provided to allow accessibility from the fireplace. The flexible gas supply line connection to the manual shutoff valve should be accessible.

5. Apply pipe joint sealant lightly to male threads of gas connector attached to flexible gas line (see Figure 18). Connect flexible gas line to flexible gas line attached to gas regulator of fireplace (see Figure 18).
6. Check all gas connections for leaks. See *Checking Gas Connections*, below.
7. Replace log base assembly back into fireplace. Feed flexible gas line into fireplace base area while replacing log base assembly. Make sure the entire flexible gas line is in fireplace base area. Reattach log base assembly to fireplace with screws removed in step 3.

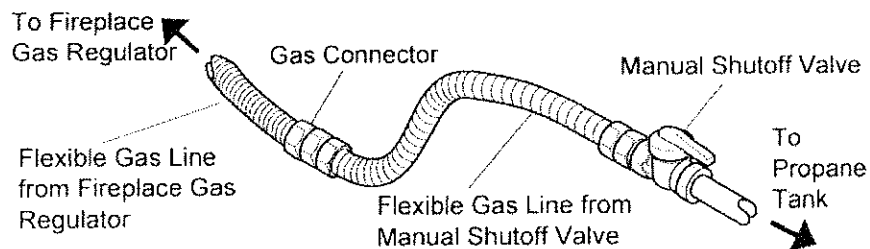


Figure 18 - Attaching Flexible Gas Lines Together

CHECKING GAS CONNECTIONS

⚠ WARNING

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

⚠ WARNING

Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

Pressure Testing Gas Supply Piping System

Test Pressures In Excess Of 1/2 PSIG

1. Disconnect fireplace and its individual manual shutoff valve from gas supply piping system. Pressures in excess of 1/2 psig will damage fireplace gas regulator.
2. Cap off open end of gas pipe where manual shutoff valve was connected.
3. Pressurize supply piping system by either using compressed air or opening main gas valve located on or near gas meter.
4. Check all joints of gas supply piping system. Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Re-connect fireplace and manual shutoff valve to gas supply. Check re-connected fittings for leaks.

INSTALLING

Continued

Test Pressures Equal To or Less Than 1/2 PSIG

1. Close manual shutoff valve (see Figure 20).
2. Pressurize supply piping system by either using compressed air or opening propane supply tank valve.
3. Check all joints from propane supply tank to manual shutoff valve (see Figure 21). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
4. Correct all leaks at once.

Pressure Testing Fireplace Gas Connections

1. Open manual shutoff valve (see Figure 20).
2. Open propane supply tank valve.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from manual shutoff valve to thermostat gas valve (see Figure 21). Apply mixture of liquid soap and water to gas joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Fireplace*, pages 22 through 24). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas to Appliance*, page 24).

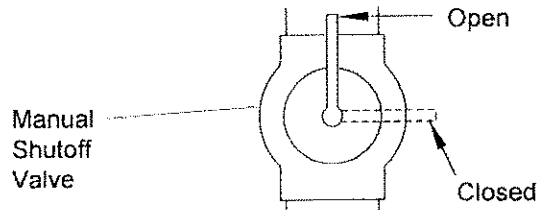


Figure 20 - Manual Shutoff Valve

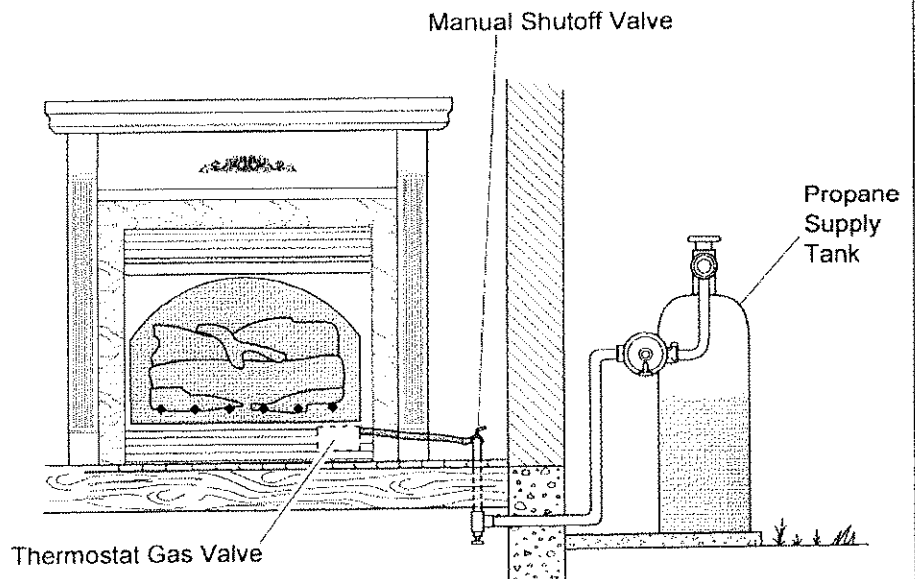


Figure 21 - Checking Gas Joints

Continued

INSTALLING

Continued

INSTALLING LOGS

⚠ WARNING

Do not add extra logs or ornaments such as pine cones, vermiculite, or rock wool. Using these added items can cause sooting.

Do not add lava rock around base. Rock and debris could fall into the control area of fireplace.

Each log is marked with a number. These numbers will help you identify the log when installing. It is very important to install these logs exactly as instructed. Do not modify logs. Only use logs supplied with fireplace.

1. Slide rear log (#1) into place behind rear burner (see Figure 22).

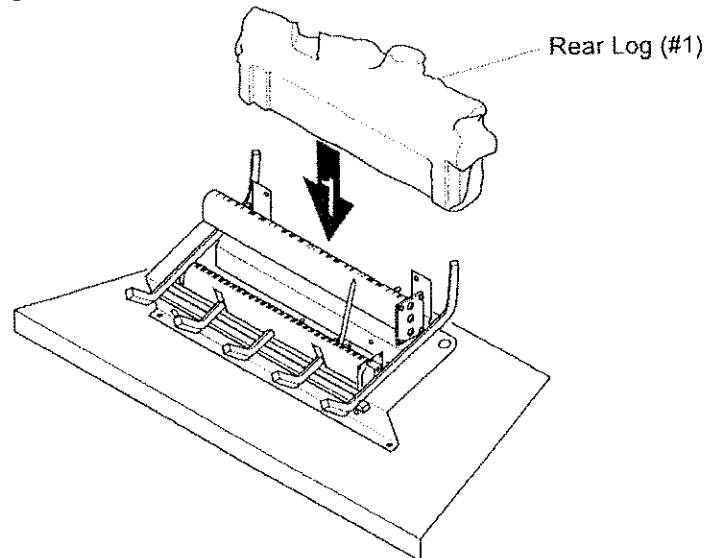


Figure 22 - Installing Rear Log

2. Slide front log (#2) into place behind front burner. Make sure tabs at bottom of log are behind front burner (see Figure 23).

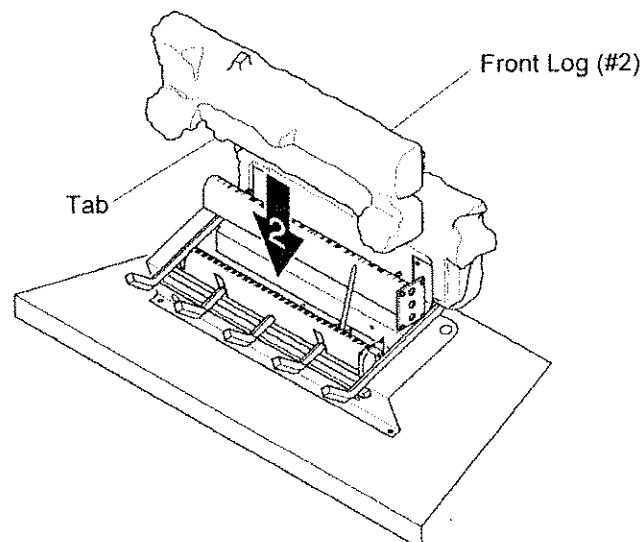


Figure 23 - Installing Front Log

INSTALLING

Continued

3. Place crossover log (#3) into place (see Figure 24). Be sure to place back of crossover log into notch on left side of rear log. The indentation under front left fork of crossover log must rest on rectangular knob of front log.

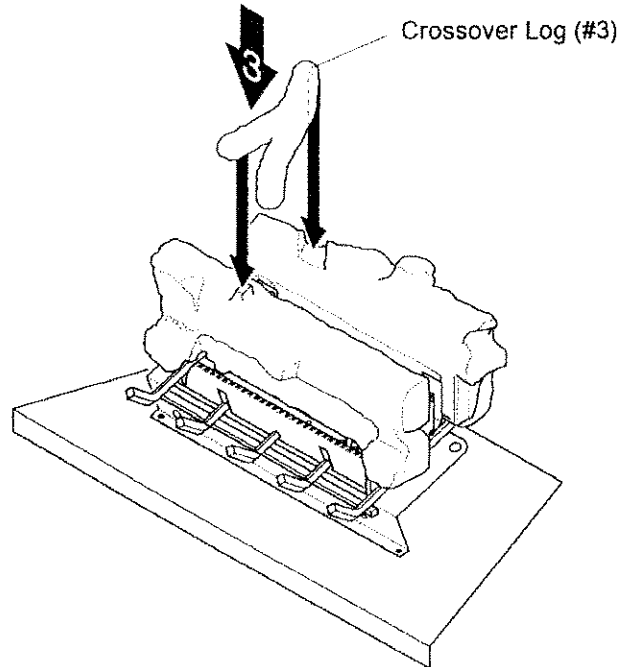


Figure 24 - Installing Crossover Log

4. Place left front branch (#4) and right front branch (#5) into place (see Figure 25). Make sure notches on bottom rest on grates.

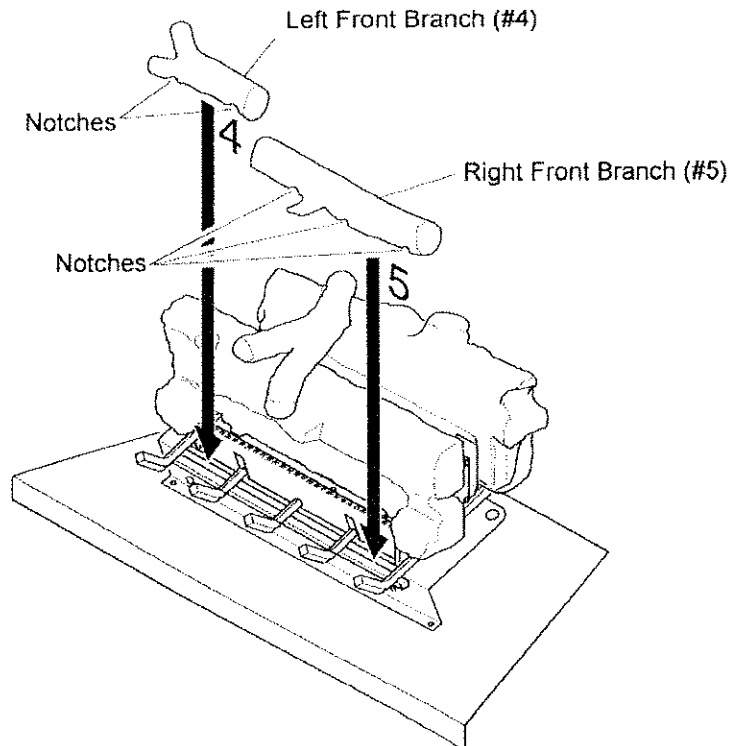


Figure 25 - Installing Left Front Branch and Right Front Branch

Continued

INSTALLING

Continued

⚠ WARNING

You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is in place before running fireplace.

5. Install fireplace screen by slipping notches of fireplace screen over screws on front of fireplace (see Figure 26).

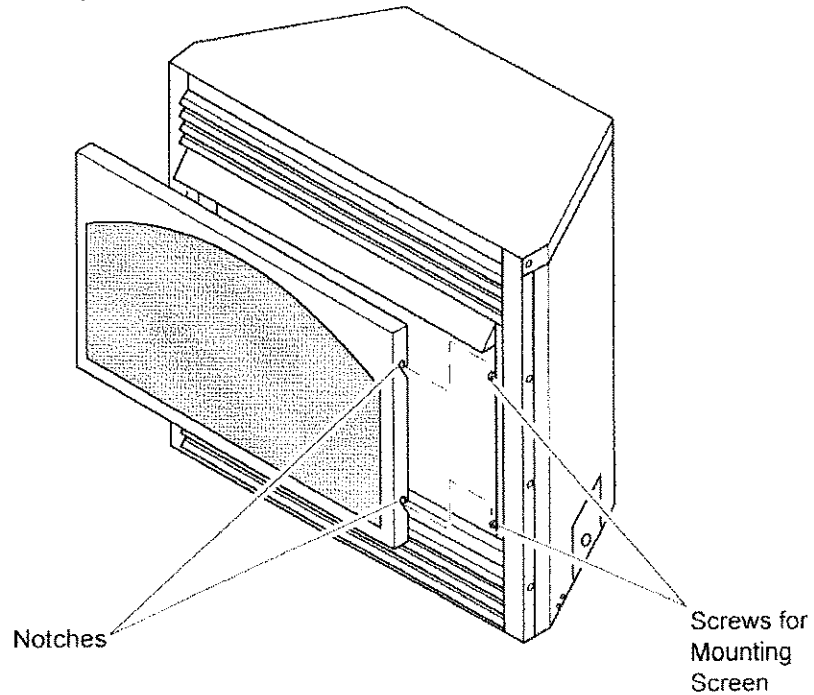


Figure 26 - Installing Fireplace Screen

OPERATING FIREPLACE

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 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, don't try to repair it, call a qualified service technician or gas supplier. 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.

OPERATING FIREPLACE

Continued


LIGHTING INSTRUCTIONS

WARNING

You must operate this fireplace with the fireplace screen in place. Make sure fireplace screen is installed before running fireplace.

NOTICE

During initial operation of new fireplace, burning logs will give off a paper-burning smell. Orange flame will also be present. Open window to vent smell. Operate fireplace on HI position to burn off odor. This will only last a few hours.

1. STOP! Read the safety information on page 22.
2. Make sure manual shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position.

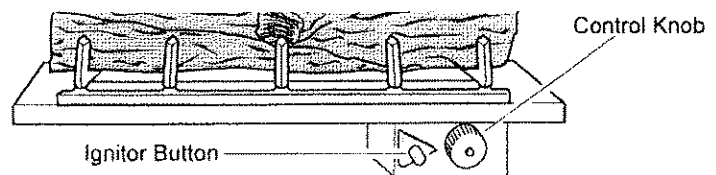



Figure 27 - Control Knob and Ignitor Button Location

4. 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 don't smell gas, go to the next step.
5. Turn control knob counterclockwise  to the PILOT position. Press in control knob for five (5) seconds (see Figure 27, above).
Note: If running fireplace for first time, there will be air in gas line. You may need to press in control knob for 30 seconds or longer. This will allow air to bleed from the gas system.
6. Continue pressing control knob in. Press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights.
Note: If pilot does not stay lit, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*, page 24.
7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.
Note: If pilot goes out, repeat steps 3 through 7. This fireplace has a safety interlock system. Wait one (1) minute for system to reset before lighting pilot again.
 - If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

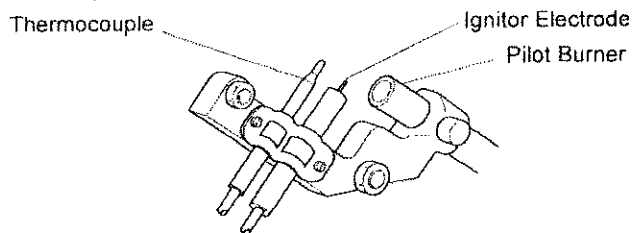


Figure 28 - Pilot

Continued

OPERATING FIREPLACE

Continued

8. Turn control knob counterclockwise  to desired heating level. The burners should light. Set control knob to any heat level between HI and LO.

CAUTION

Do not try to adjust heating levels by using the manual shutoff valve.

BLOWER OPERATION

WARNING

This fireplace has a three-prong, grounded electrical plug. This plug helps protect you against electrical shock. Only connect plug to a properly grounded, three-prong receptacle. Do not cut or remove the grounding prong from this plug.


Locate the blower switch by opening lower louver on fireplace. Blower switch is located at lower left inside louver door. The thermostat-controlled blower has three settings: ON, OFF, and AUTO. In the ON position, the blower will operate constantly. In the OFF position, the blower will not operate. In the AUTO position, the blower will start when the thermostat senses a sufficient increase in firebox temperature.

Note: It is safe to operate fireplace with blower turned off. However, the blower helps distribute heated air from the fireplace.

Note: Your gas logs and blower will not turn on and off at the same time. The fireplace may run for several minutes before the blower turns on. After the heater modulates to the pilot position, the blower will continue to run. The blower will shut off after the firebox temperature decreases.

TO TURN OFF GAS TO APPLIANCE

Shutting Off Fireplace

Turn control knob clockwise  to the OFF position.

Shutting Off Burners Only (pilot stays lit)

Turn control knob clockwise  to the PILOT position.

THERMOSTAT CONTROL OPERATION

You can set the thermostat control knob to any comfort level between HI and LO. The thermostat will gradually modulate the heat output and flame height from higher to lower settings, or pilot, in order to maintain the comfort level you select. The ideal comfort setting will vary by household depending upon the amount of space to be heated, the output of the central heating system, etc.

Note: Selecting the HI setting will cause the burner to remain on without modulating down in most cases.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 5 under *Lighting Instructions*, page 23.
2. Depress control knob and light pilot with match.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8, above.

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 29 shows a correct pilot flame pattern. Figure 30 shows 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 fireplace will shut down.

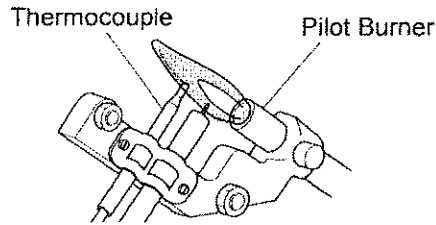


Figure 29 - Correct Pilot Flame Pattern

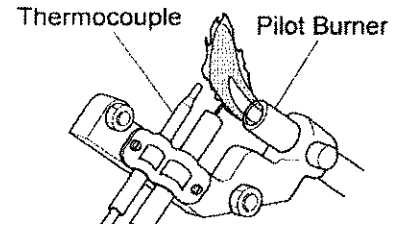


Figure 30 - Incorrect Pilot Flame Pattern

If pilot flame pattern is incorrect, as shown in Figure 30

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 24)
- see *Troubleshooting*, pages 26 through 30

FRONT BURNER FLAME PATTERN

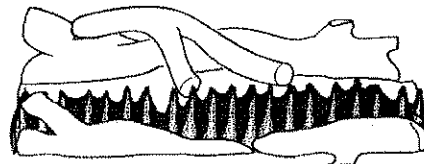
Figure 31 shows correct front burner flame pattern. Figure 32 shows incorrect front burner flame pattern. The incorrect burner flame pattern shows yellow tipping at top of blue flame.

WARNING

If front burner flame pattern shows yellow tipping, your fireplace could produce increased levels of carbon monoxide. Follow instructions at bottom of this page. Yellow flame on rear burner is normal.

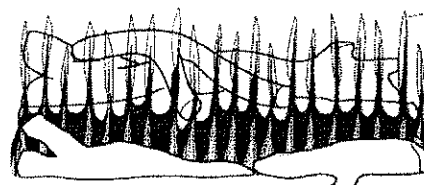
NOTICE

Do not mistake orange flames with yellow tipping. Dirt or other fine particles are burned by fireplace, causing brief patches of orange flame.



CORRECT FLAME PATTERN AT HIGH POSITION

Figure 31 - Correct Front Burner Flame Pattern



Yellow Tipping At Top of Blue Flame

INCORRECT FLAME PATTERN AT HIGH POSITION

Figure 32 - Incorrect Front Burner Flame Pattern

If front burner flame pattern is incorrect, as shown in Figure 32

- turn fireplace off (see *To Turn Off Gas to Appliance*, page 24)
- see *Troubleshooting*, pages 26 through 30

CLEANING AND MAINTENANCE

TROUBLE-SHOOTING

Note: All troubleshooting items are listed in order of operation.

⚠ WARNING

Turn off fireplace and blower and let cool before cleaning.

⚠ CAUTION

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

ODS/PILOT AND BURNERS

- Use a vacuum cleaner or small, soft bristled brush to clean.

LOGS

- If you remove logs for cleaning, refer to *Installing Logs*, pages 20 and 21, to properly replace logs.
- Replace log(s) if broken or chipped (dime-sized or larger).

⚠ WARNING

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

⚠ CAUTION

Never use a wire, needle, or similar object to clean ODS/pilot. This can damage ODS/pilot unit.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	1. Ignitor electrode positioned wrong	1. Replace ignitor
	2. Ignitor electrode broken	2. Replace ignitor
	3. Ignitor electrode not connected to ignitor cable	3. Reconnect ignitor cable
	4. Ignitor cable pinched or wet	4. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry
	5. Piezo ignitor nut is loose	5. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel.
	6. Broken ignitor cable	6. Replace ignitor cable
	7. Bad piezo ignitor	7. Replace piezo ignitor

TROUBLE-SHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	<ol style="list-style-type: none"> 1. Gas supply turned off or manual shutoff valve closed 2. Control knob not in PILOT position 3. Control knob not pressed in while in PILOT position 4. Air in gas lines when installed 5. ODS/pilot is clogged 6. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open manual shutoff valve 2. Turn control knob to PILOT position 3. Press in control knob while in PILOT position 4. Continue holding down control knob. Repeat igniting operation until air is removed 5. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 26) or replace ODS/pilot assembly 6. Replace gas regulator
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"> 1. Control knob not fully pressed in 2. Control knob not pressed in long enough 3. Safety interlock system has been triggered 4. Manual shutoff valve not fully open 5. Thermocouple connection loose at control valve 6. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: <ol style="list-style-type: none"> A) Low gas pressure B) Dirty or partially clogged ODS/pilot 7. Thermocouple damaged 8. Control valve damaged 	<ol style="list-style-type: none"> 1. Press in control knob fully 2. After ODS/pilot lights, keep control knob pressed in 30 seconds 3. Wait one minute for safety interlock system to reset. Repeat ignition operation 4. Fully open manual shutoff valve 5. Hand tighten until snug, then tighten 1/4 turn more 6. A) Contact local propane gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 26) or replace ODS/pilot assembly 7. Replace thermocouple 8. Replace control valve

Continued

TROUBLE-SHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
One or both burners do not light after ODS/pilot is lit	1. Burner orifice(s) clogged	1. Clean burner(s) (see <i>Cleaning and Maintenance</i> , page 26) or replace burner orifice(s)
	2. Burner orifice(s) diameter is too small	2. Replace burner orifice(s)
	3. Inlet gas pressure is too low	3. Contact local propane gas company
	4. Mislocated crossover tube	4. Contact qualified service person
Delayed ignition of one or both burners	1. Manifold pressure is too low	1. Contact local propane gas company
	2. Burner orifice(s) clogged	2. Clean burner(s) (see <i>Cleaning and Maintenance</i> , page 26) or replace burner orifice(s)
	3. Mislocated crossover tube	3. Contact qualified service person
Burner backfiring during combustion	1. Burner orifice is clogged or damaged	1. Clean burner (see <i>Cleaning and Maintenance</i> , page 26) or replace burner orifice
	2. Damaged burner	2. Replace damaged burner
	3. Gas regulator defective	3. Replace gas regulator
Yellow flame in front burner during burner combustion	1. Not enough air	1. Check burner(s) for dirt and debris. If found, clean burner(s) (see <i>Cleaning and Maintenance</i> , page 26)
	2. Gas regulator defective	2. Replace gas regulator
Slight smoke or odor during initial operation	1. Residues from manufacturing processes and logs curing	1. Problem will stop after a few hours of operation
Fireplace produces a whistling noise when burners are lit	1. Turning control knob to HI position when burners are cold	1. Turn control knob to LO position and let warm up for a minute
	2. Air in gas line	2. Operate burners until air is removed from line. Have gas line checked by local propane gas company
	3. Air passageways on fireplace blocked	3. Observe minimum installation clearances (see page 11)
	4. Dirty or partially clogged burner orifice(s)	4. Clean burners (see <i>Cleaning and Maintenance</i> , page 26) or replace burner orifice(s)

TROUBLE-SHOOTING

Continued

WARNING

If you smell gas

- Shut off gas supply.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT: Operating fireplace where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces a clicking/ticking noise just after burners are lit or shut off	1. Metal expanding while heating or contracting while cooling	1. This is common with most fireplaces. If noise is excessive, contact qualified service person
Fireplace produces unwanted odors	1. Fireplace burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (See IMPORTANT statement above) 2. Gas leak. See Warning statement at top of page	1. Open window and ventilate room. Stop using odor causing products while fireplace is running 2. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 18)
Fireplace shuts off in use (ODS operates)	1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged	1. Open window and/or door for ventilation 2. Contact local propane gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i> , page 26)
Gas odor even when control knob is in OFF position	1. Gas leak. See Warning statement at top of page 2. Control valve defective	1. Locate and correct all leaks (see <i>Checking Gas Connections</i> , page 18) 2. Replace control valve

Continued

TROUBLE-SHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Gas odor during combustion	<ol style="list-style-type: none"> 1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement at top of page 29 	<ol style="list-style-type: none"> 1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 18)
Blower does not work	<ol style="list-style-type: none"> 1. Blower power cord not plugged into electrical outlet 2. Loose wire nuts on motor leads 3. Defective blower switch 	<ol style="list-style-type: none"> 1. Plug power cord into 120V grounded outlet 2. Check wire connections of motor leads. Tighten if loose 3. Replace blower switch
Blower fans turning slowly	<ol style="list-style-type: none"> 1. Motor leads not wired properly 	<ol style="list-style-type: none"> 1. Wire motor leads properly. See <i>Wiring Diagram</i>, page 31
Moisture/condensation noticed on windows	<ol style="list-style-type: none"> 1. Not enough combustion/ventilation air 	<ol style="list-style-type: none"> 1. Refer to <i>Air for Combustion and Ventilation</i> requirements (page 6)

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

SERVICE HINTS

When gas pressure is too low

- pilot will not stay lit
- burners will have delayed ignition
- fireplace will not produce specified heat
- propane gas supply may be low

When gas quality is bad

- pilot will not stay lit
- burners will produce flames and soot
- fireplace will backfire when lit

You may feel your gas pressure is too low or gas quality is bad. If so, contact your local propane gas supplier.

REPLACEMENT PARTS

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

Parts Under Warranty

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Technical Service Department at 1-800-DESA LOG (1-800-337-2564).

When calling DESA International, have ready

- your name
- your address
- model number of your fireplace
- how fireplace was malfunctioning
- type of gas used (propane or natural gas)
- purchase date

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

Parts Not Under Warranty

Contact authorized dealers of this product. If they can't supply original replacement part(s), call DESA International's Parts Department at 1-800-972-7879 for information.

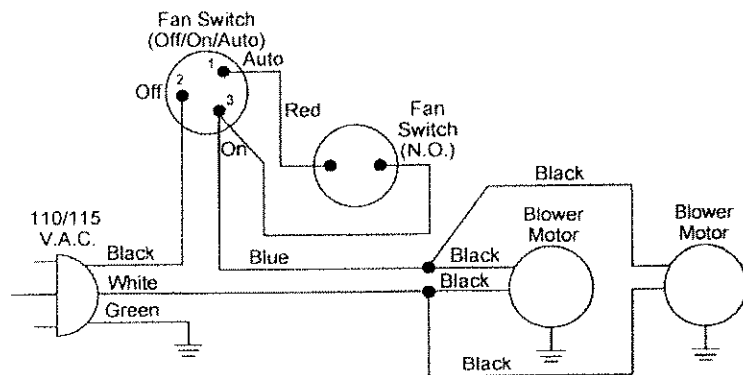
When calling DESA International, have ready

- model number of your fireplace
- the replacement part number

SPECIFICATIONS

BTU (Variable)	20,000/28,000
Type Gas	Propane Gas Only
Ignition	Piezo
Pressure Regulator Setting	8" W.C.
Inlet Gas Pressure (in. of water)	
Maximum	14"
Minimum	11"
Shipping Weight	92 lbs.

WIRING DIAGRAM



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

ACCESSORIES

Purchase these fireplace accessories from your local dealer. If they can not supply these accessories, call DESA International's Sales Department at 1-800-432-2382 for information. You can also write to the address listed on the back page of this manual.

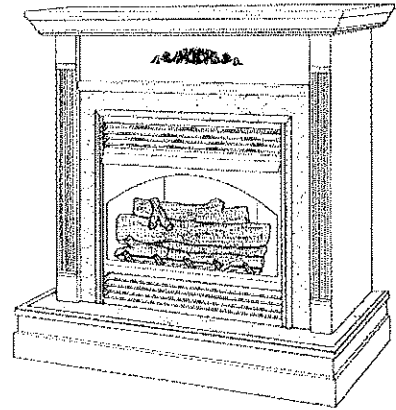
CABINET MANTEL

GM100F - Walnut Finished

GM101U - Unfinished

Shown with optional base and laminate hearth and mantel trim accessories.

Dimensions (WxHxD): 56-7/8" x 48-3/4" x 20-7/8"



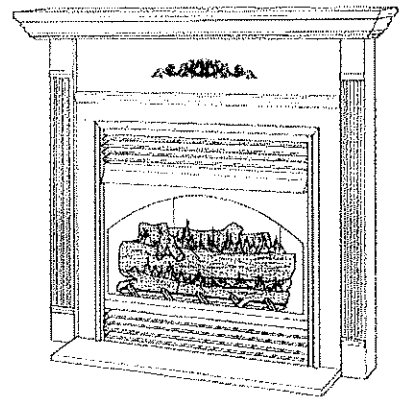
FACE MANTEL

GM400F - Walnut Finished

GM401U - Unfinished

Shown with optional slim base.

Dimensions (WxHxD): 56-3/4" x 48-3/4" x 7"



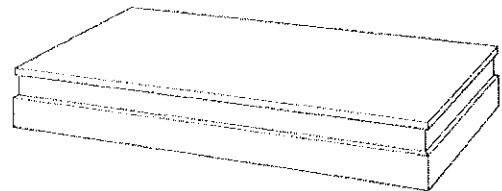
HARDWOOD HEARTH BASE

G3000F - Walnut Finished

G3001U - Unfinished

The hearth base creates a handsome riser for the fireplace (cannot be used with corner mantel or face mantel).

Dimensions (WxHxD): 58-1/8" x 6-1/8" x 28-1/2"



SLIM HEARTH BASE

G3005J - Jade Marble Laminate

G3005S - Sandstone Marble Laminate

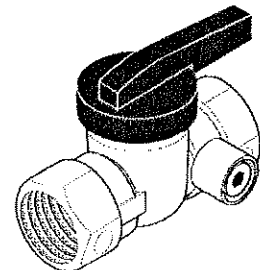
G3005B - Black Onyx Marble Laminate

The slim hearth base allows you to further customize your fireplace. Dimensions (WxHxD): 41-7/8" x 5/8" x 10"

MANUAL SHUTOFF

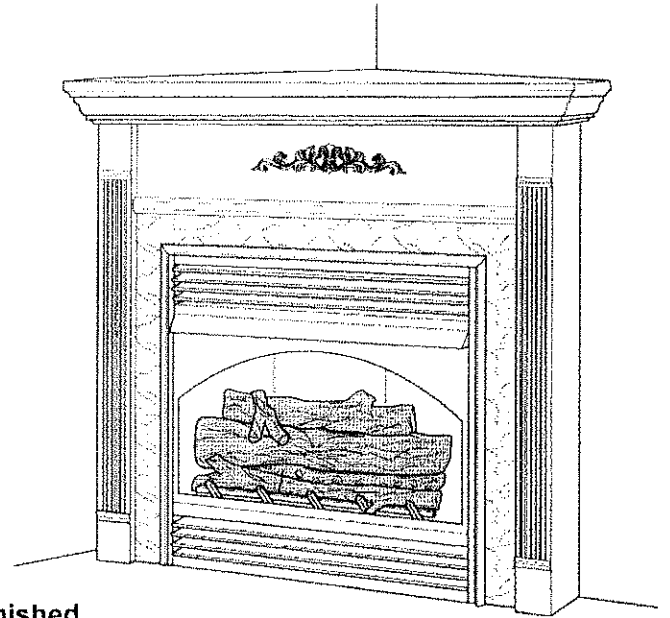
VALVE - GA5010

For all models. Manual shutoff valve with 1/8" NPT tap. Fits 1/2" NPT pipe.



ACCESSORIES

Continued



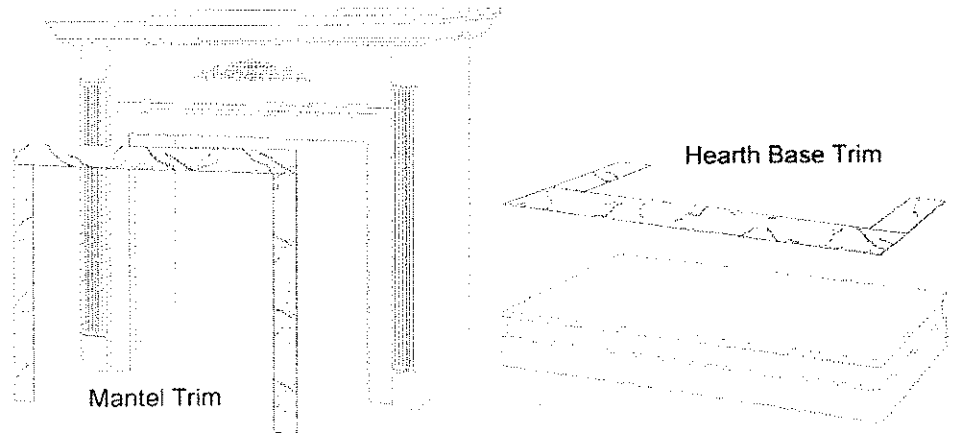
CORNER MANTEL

GM200F - Walnut Finished

GM201U - Unfinished

Shown with optional laminate mantel trim accessory.

Dimensions (WxHxD): 61-1/8" x 48-3/4" x 34-1/2"



LAMINATE TRIM FOR HEARTH OR MANTEL

G3002J - Jade Marble Laminate Mantel Trim

G3003J - Jade Marble Laminate Hearth Base Trim

G3002S - Sandstone Marble Laminate Mantel Trim

G3003S - Sandstone Marble Laminate Hearth Base Trim

G3002B - Black Onyx Marble Laminate Trim

G3003B - Black Onyx Marble Laminate Hearth Base Trim

Mantel trim for cabinet or corner mantel. Hearth base trim for hearth base.

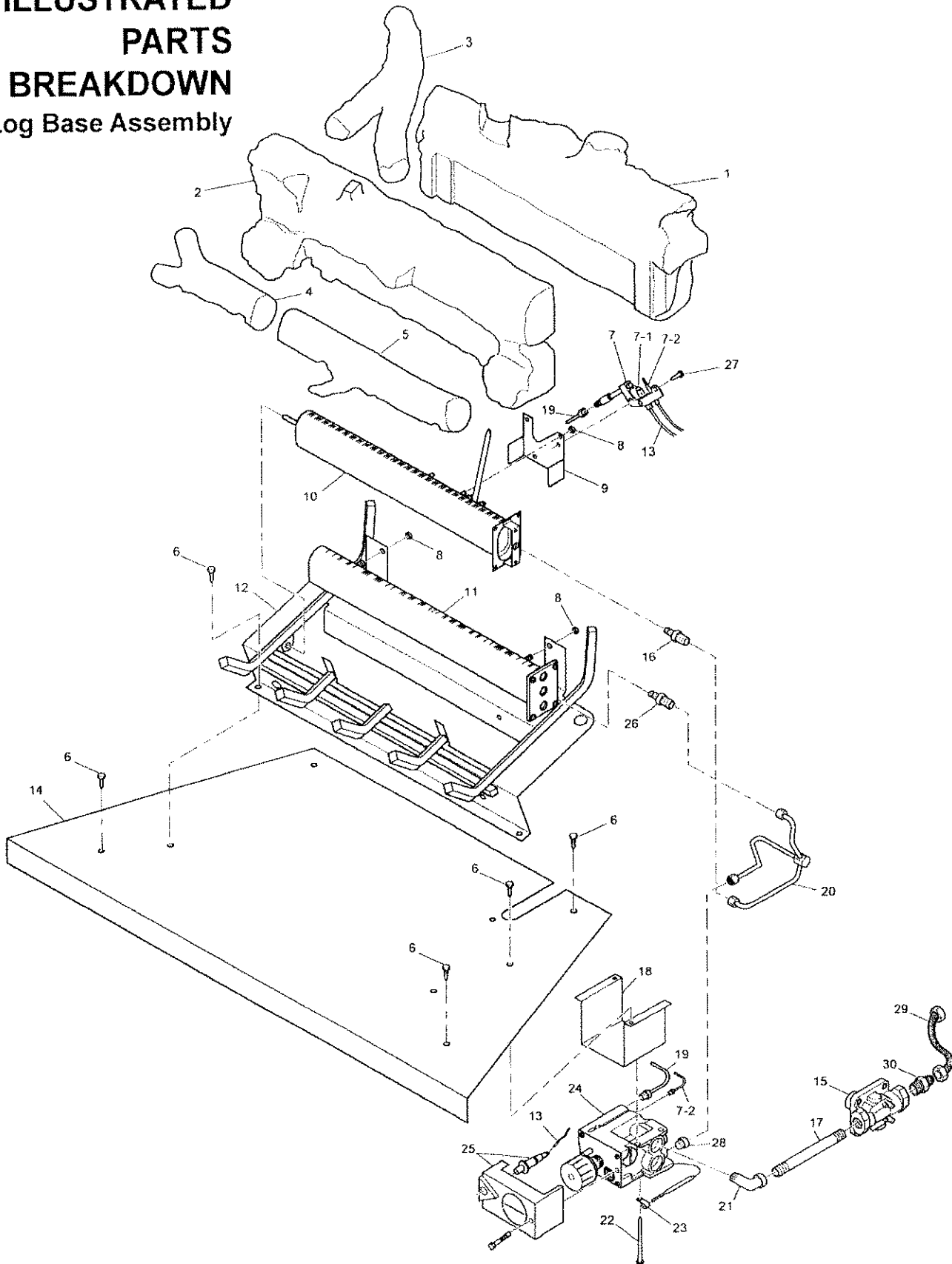
FIREBOX BRICK LINER - G8000

Ceramic fiber firebox liner adds the look of real brick.

NAILING FLANGE - G3004

For securing fireplace to wall studs for built-in installation.

ILLUSTRATED PARTS BREAKDOWN Log Base Assembly



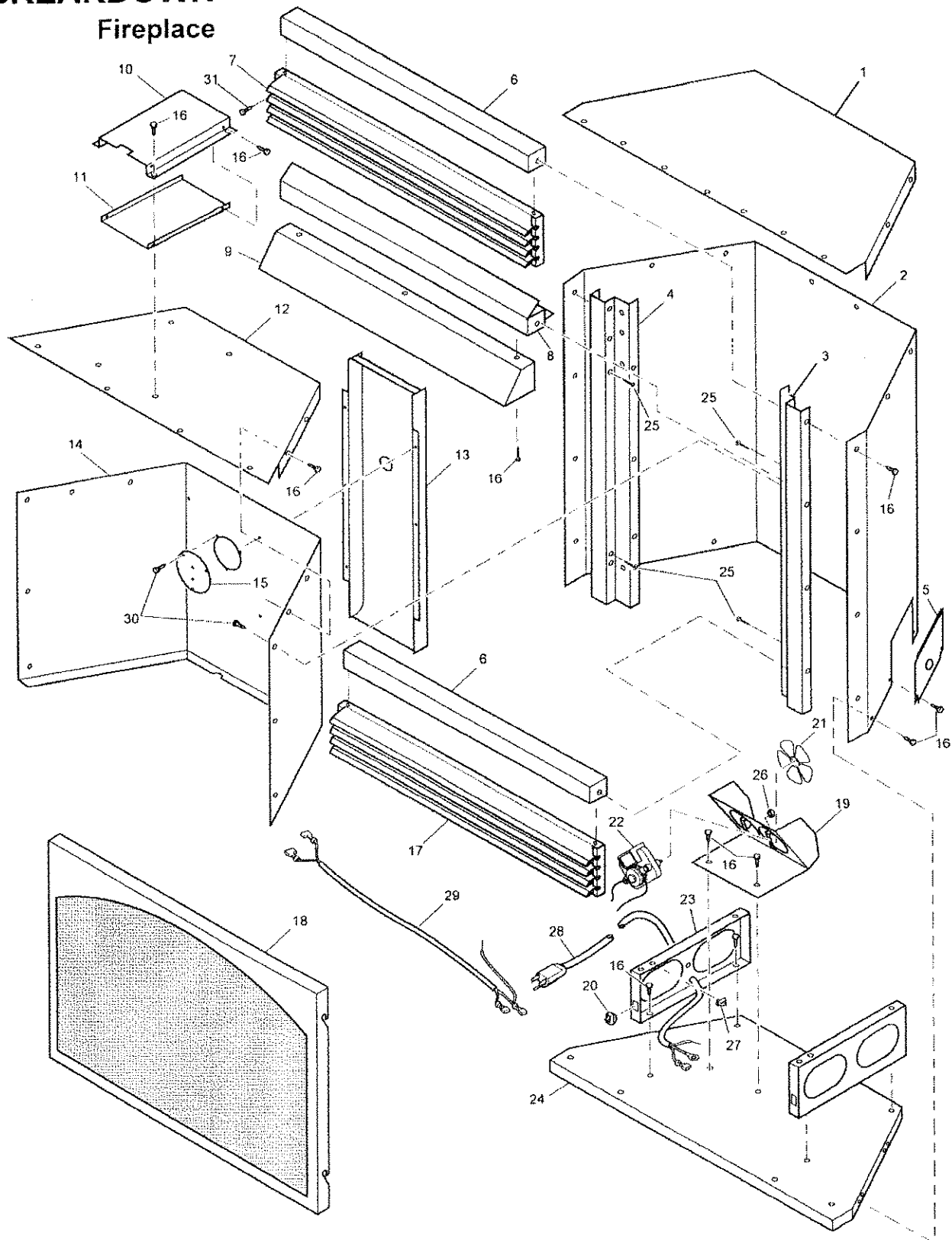
PARTS LIST

Log Base Assembly

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 31 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101337-02	Rear Log (#1)	1
2	101336-02	Front Log (#2)	1
3	101335-01	Crossover Log (#3)	1
4	101332-01	Left Front Branch (#4)	1
5	101333-01	Right Front Branch (#5)	1
6	098304-01	Screw, #10 Phillips, Black	8
7	099059-02	O.D.S. Pilot	1
7-1	098594-01	Ignitor	1
7-2	098593-01	Thermocouple	1
8	098249-01	Nut	4
9	101006-01	Pilot Bracket	1
10	101330-02	Front Burner Assembly	1
11	100999-02	Rear Burner Assembly	1
12	101392-02BR	Base Assembly	1
13	098271-06	Ignitor Cable	1
14	101924-01CB	Firebox Bottom	1
15	098867-08	Gas Regulator	1
16	101004-10	Front Burner Injector	1
17	100996-01	Pipe Nipple	1
18	101382-01	Therموالve Bracket	1
19	099387-03	Pilot Tube	1
20	101384-01	Burner Tube	1
21	101380-01	Elbow	1
22	099211-01	Screw	2
23	098544-01	Thermostat Clamp	1
24	101329-07	Thermostat Gas Valve Assembly	1
25	101381-01	Cover and Piezo	1
26	101004-01	Rear Burner Injector	1
27	M11084-26	Hex Screw, #10	2
28	098264-02	Male Connector	1
29	101628-01	Flex Hose	1
30	097809-02	Adapter	1
PARTS AVAILABLE — NOT SHOWN			
	099564-205	AGA Info Decal	1
	100563-01	Warning Plate	1
	101054-01	Lighting Instructions Plate	1
	100565-01	Bead Chain	1
	101416-09	Information Video	1

ILLUSTRATED PARTS BREAKDOWN Fireplace



PARTS LIST

Fireplace

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under *Replacement Parts* on page 31 of this manual.

KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	101357-01	Top Outer Casing	1
2	101373-01	Outer Casing	1
3	101923-01CB	Right Front Side	1
4	101922-01CB	Left Front Side	1
5	101368-01	Access Door	2
6	101352-01CB	Top Front	2
7	101700-01	Top Louver Assembly	1
8	101354-01CB	Middle Front	1
9	101712-01	Firebox Hood	1
10	101403-01	Top Duct	1
11	101404-01	Baffle	1
12	101872-01	Firebox Top	1
13	101573-01	Back Duct with Bushing	1
14	101375-03BR	Firebox Wrapper	1
15	101614-01	Limit Switch (thermal disk) Assy.	1
16	M11084-26	Hex Screw, #10	76
17	101701-01	Lower Louver Assembly	1
18	101727-01	Screen Assembly	1
19	101575-01	Motor Housing Assembly	1
20	099998-01	Fan Switch	1
21	101379-01	Fan	2
22	101408-01	Motor	2
23	101348-01	Firebox Support	2
24	101347-01CB	Outer Base	1
25	099230-01	Shoulder Screw	4
26	097384-02	Hex Nut with Washer 8-32	2
27	099123-01	Wire Clip	4
28	098219-28	Power Cord Assembly	1
29	101398-01	Wire Harness	1
30	098304-01	Phillips Pan Head Screw, #10	9
31	098304-03	Phillips Pan Head Screw, #8	4
PARTS AVAILABLE — NOT SHOWN			
	101407-01	Brass Trim Kit	1
	101785-01	Brass Trim Hardware	1
	099038-01	Strain Relief Bushing	1
	100639-01	Caution Decal	1

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model _____
Serial No. _____
Date Purchased _____

Always specify model and serial numbers when communicating with the factory.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

LIMITED WARRANTY VENT-FREE PROPANE GAS FIREPLACE

DESA International warrants this product to be free from defects in materials and components for two (2) years from the date of first purchase, provided that the product has been properly installed, operated and maintained in accordance with all applicable instructions. To make a claim under this warranty the Bill of Sale or cancelled check must be presented.

This warranty is extended only to the original retail purchaser. This warranty covers the cost of part(s) required to restore this heater to proper operating condition and an allowance for labor when provided by a DESA Authorized Service Center. Warranty part(s) MUST be obtained through authorized dealers of this product and/or DESA International who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty. The heater MUST be installed by a qualified installer in accordance with all local codes and instructions furnished with the unit.

This warranty does not apply to parts that are not in original condition because of normal wear and tear, or parts that fail or become damaged as a result of misuse, accidents, lack of proper maintenance or defects caused by improper installation. Travel, diagnostic cost, labor, transportation and any and all such other costs related to repairing a defective heater will be the responsibility of the owner.

TO THE FULL EXTENT ALLOWED BY THE LAW OF THE JURISDICTION THAT GOVERNS THE SALE OF THE PRODUCT; THIS EXPRESS WARRANTY EXCLUDES ANY AND ALL OTHER EXPRESSED WARRANTIES AND LIMITS THE DURATION OF ANY AND ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE TO TWO (2) YEARS FROM THE DATE OF FIRST PURCHASE; AND DESA INTERNATIONAL'S LIABILITY IS HEREBY LIMITED TO THE PURCHASE PRICE OF THE PRODUCT AND DESA INTERNATIONAL SHALL NOT BE LIABLE FOR ANY OTHER DAMAGES WHATSOEVER INCLUDING INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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

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

For information about this warranty write:

DESA
INTERNATIONAL
2701 Industrial Drive
P.O. Box 90004
Bowling Green, KY 42102-9004

101918-01
Rev. C
4/95

The screenshot shows the Desatech website with the following content:

- Header:** DESA TECH logo and website URL www.desatech.com.
- Section:** INFORMATION CENTER.
- Navigation:**
 - MANUALS WITH PARTS LIST:**
 - OUTDOOR HEATING:** Construction Heaters, Patio Heaters.
 - INDOOR HEATING:** Fireplaces, Gas Logs, Stoves, Wall Heaters, Woodburning Units.
 - SPECIALTY PRODUCTS:** Chainsaws, Door Bells & Lighting.
 - Click on any category above and use the pull down arrow to find your model number.**
- PARTS DISTRIBUTOR LIST:** A map of the United States with the text "Click the map for Desatech parts distributors".
- HOW-TO TIPS AND TECH DOCS:**
 - Kerosene Heaters Service Information
 - Propane (LP) Forced Air Troubleshooting
 - Gas Heater Thermal Switch Replacement
 - Thermoelectric Gas Valve Troubleshooting
 - Pro Flame 584 Series Remote Operation
 - Pilot and Burner Cleaning Demonstrations
 - ODS Pilot Troubleshooting
 - Thermocouple Troubleshooting
 - Piezo Ignitor Troubleshooting
 - Gas Valve Troubleshooting
 - Vent Free Conversion Kits
- PURCHASE PARTS:**
 - Chainsaw Parts List
 - Pole Saw Parts List

- Footer:**
- ODS Pilots, Gas Valves, Pilots
- Disclaimers regarding Desatech's bankruptcy in 2009.
- Desa Family of Brands Prior to 2009: ALL-PRO, Comfort Glow, GLO-WARM, MASTER, ReddyHeater, REMINGTON.



INFORMATION CENTER

[Back to Home](#)

MANUALS WITH PARTS LIST

OUTDOOR HEATING

Construction Heaters
Patio Heaters

INDOOR HEATING

Fireplaces

Gas Logs
Stoves
Wall Heaters
Woodburning Units

SPECIALTY PRODUCTS

Chainsaws
Door Bells & Lighting

Click on any category above
and use the pull down arrow to
find your model number.

PARTS DISTRIBUTOR LIST



Click the map for Desa parts distributors.

HOW-TO TIPS AND TECH DOCS

Kerosene Heaters Service Information
Propane (LP) Forced Air Troubleshooting
Gas Heater Thermal Switch Replacement
Thermoelectric Gas Valve Troubleshooting
Pro Flame 584 Series Remote Operation
Pilot and Burner Cleaning Demonstrations
ODS Pilot Troubleshooting
Thermocouple Troubleshooting
Piezo Ignitor Troubleshooting
Gas Valve Troubleshooting

PURCHASE PARTS

[Chainsaw Parts List](#)

[Pole Saw Parts List](#)

[Vent Free Conversion Kits](#)

Our owner's manuals require Adobe Reader to view



Please note that Desa International filed bankruptcy in December 2000 and is no longer in business. DesaTech.com is an information site for products manufactured by Desa prior to 2000. This site has owner's manuals and tech tips that were written by Desa prior to their bankruptcy. You can also find links to purchase parts for Desa products, as well as links to other manufacturers of heating products similar to those previously offered by Desa. Products that were manufactured by Desa should only be serviced by qualified technicians.





INFORMATION CENTER

[Back to Home](#)

MANUALS WITH PARTS LIST

OUTDOOR HEATING

Construction Heaters
 Patio Heaters

INDOOR HEATING

- Fireplaces
- VGF28NTA
- VGF28NV
- VGF28NV
- VGF28P
- VGF28P
- VGF28PM
- VGF28PM
- VGF28P
- VGF28PT
- VGF28PTA
- VGF28PTA
- VGF28PTA
- VGF28PV
- VGF28PV
- VGL36CL
- VGL36CLE
- VGL36CLP
- VGL36CLPE
- VGL36CR
- VGL36CRE

PARTS DISTRIBUTOR LIST



Click the map for Desatech parts distributors

HOW-TO TIPS AND TECH DOCS

- Kerosene Heaters Service Information
- Propane (LP) Forced Air Troubleshooting
- Gas Heater Thermal Switch Replacement
- Thermoelectric Gas Valve Troubleshooting
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- ODS Pilot Troubleshooting
- Thermocouple Troubleshooting
- Piezo Ignitor Troubleshooting
- Gas Valve Troubleshooting

PURCHASE PARTS

[Chainsaw Parts List](#)

[Pole Saw Parts List](#)

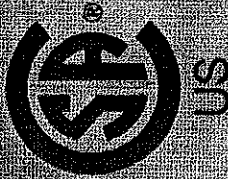
[Vent Free Conversion Kits](#)

order to view

Pro Flame 584 Series Remote Operation Pilot and Burner Cleaning Demonstrations ODS Pilot Troubleshooting Thermocouple Troubleshooting Piezo Ignitor Troubleshooting Gas Valve Troubleshooting



SHM International Corp
1861 West Oak Parkway
Marietta, GA 30067



Model	SLB1VMV21 Z4 Z7 30LP
Gas Type	Propane/LP
Input MBH	39,000(B)HP
Input Mils	22,000(B)HP
Manifold Pressure	10" WC
Max. Inlet Pressure	14" WC
Min. Inlet Pressure	11" WC
Min. Fireplace Size 18"	18" H x 22" W x 15" D
Max. Fireplace Size 21"	18" H x 28" W x 15" D
Min. Fireplace Size 27"	18" H x 36" W x 15" D

See page 10 for specifications

This appliance is equipped with a SHM 820 NOVA valve.

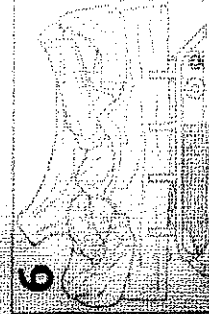
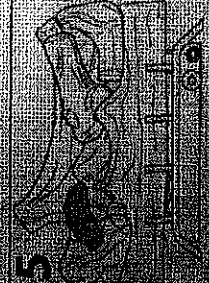
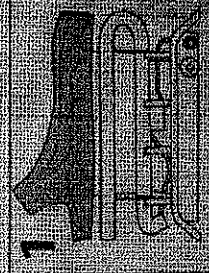
WARNING: This appliance is for installation only in a solid-fuel burning masonry or 1/2" (127 factory built fireplace or in a rated ventless flex duct. It has been design certified for these installations. EXCEPT FOR DO NOT install this appliance in a factory built fireplace that includes masonry or masonry in the wall. This model or should not be used with ventless gas logs.

Minimum Clearance
Clearance to combustibles: 600 mm (24")
Clearance to combustibles: 102 mm (4")
For other restrictions, please refer to the installation manual.

This appliance is only to use with propane gas.
This appliance shall not be used with any other gas.

21FVC20169463

Serial No.



WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Therefore, the owners' instruction manual provided with this appliance, installation and service must be performed by a qualified installer, service agency, or the gas supplier.
WARNING: Do not use a "bypass" heat exchanger, heat or the necessary and approved for use with this heater.

This appliance may be installed in an attic, provided it is permanently located, manufacturer's (visible) 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.

WARNING: Fan flames or sparks must be allowed while the appliance is operating.

If this appliance is installed in a fireplace that has glass doors, the doors must be kept closed while the appliance is in use.

Do not use this burner for any other purpose. Do not use this burner for any other purpose. Do not use this burner for any other purpose. Do not use this burner for any other purpose.

WARNING:
When used without adequate combustion and ventilation air, heater may give off excessive 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 Z223.7/NFPA 54, FOR COMBUSTION AND VENTILATION 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 headaches, dizziness, and/or nausea. If you have these signs, the burner may not be working properly. Get fresh air at once! Call for service.

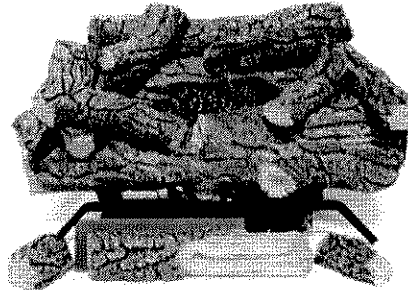
Some people, pregnant women, persons with heart or lung disease, and those under the influence of alcohol, those at high altitudes, are more affected by carbon monoxide than others. Removal of this marking will void the compliance of the heater with ANSI Z21.11.2 - 2011 Underwriters Laboratories.

PLS SHM 21FVC20169463 21FVC20169463

VENT FREE GAS LOG SET

Owner's Operation and Installation Manual

(S,B)VFM18NG
(S,B)VFM18LP
(S,B)VFM24NG
(S,B)VFM24LP



(S,B)IVFMV18NG
(S,B)IVFMV18LP
(S,B)IVFMV24NG
(S,B)IVFMV24LP

Also Design-Certified As Vented Decorative Appliances



ANSI Z21.11.2 - 2011
Unvented Heaters
ANSI Z21.60 - 2004
Vented Decorative

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

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

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 4, Air for Combustion and Ventilation.

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

This appliance has been tested and approved under ANSI Z21.11.2–2011 Unvented Gas-Fired Room Heaters.

WARNING: This appliance is for installation only in a solid fuel burning masonry or UL127 factory-built fireplace or listed ventless fire-box enclosure. It has been design certified for these installations. **EXCEPTION: DO NOT** install this appliance in a factory-built fireplace that includes instruction stating it has not been tested or should not be used with unvented gas logs.

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

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

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

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SAFETY INFORMATION

You must operate this heater with the fireplace screen in place. Make sure the fireplace screen is in place before funning this appliance.

Unless other provisions are made for combustion air, the screens shall have an opening or openings for introduction of combustion air into the fireplace

If this appliance is installed in a fireplace that has glass doors, the doors must be left open when the appliance is in use.

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

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

▲ DANGER: Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, 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.

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

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

▲ WARNING: Any change to this heater or its controls can be dangerous.

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

▲ WARNING: Do not allow fans to blow directly into the appliance. Avoid any drafts that alter burner flame patterns. Ceiling fans can create drafts that alter burner flame patterns. Altered burner patterns can cause sooting.

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

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

Fireplace front and screen become very hot when running appliance. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Logs will remain hot for a time after shutdown. Allow surfaces to cool before touching.

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

SAFETY INFORMATION

CONTINUED

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

1. 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.
2. Do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors (propane/LP units only).
3. If you smell gas
 - shut off gas supply
 - do not try to light any appliance
 - do not touch any electrical switch; do not use any phone in your building
 - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
 - if you cannot reach your gas supplier, call the fire department
4. This appliance shall not be installed in a bedroom or bathroom.
5. Do not use this appliance as a wood-burning fireplace. Use only the logs provided with the appliance.
6. Do not add extra logs or ornaments such as pine cones, vermiculite or rock wool. Using these added items can cause sooting and poor combustion. Do not add lava rock around base. Rock and debris could fall into the control area of heater.
7. This appliance is designed to be smokeless. If logs ever appear to smoke, turn off appliance and call a qualified service person. Note: During initial operation, slight smoking could occur due to log curing and fireplace burning manufacturing residues.
8. To prevent the creation of soot, follow the instructions in *Cleaning and Maintenance* section.

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

9. Before using furniture polish, wax, carpet cleaner, or similar products, turn heater off. If heated, the vapors from these products may create a white powder residue within burner box or on adjacent walls or furniture.
10. This appliance needs fresh air ventilation to run properly. This appliance has an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS shuts down the

fireplace if not enough fresh air is available. See *Air for Combustion and Ventilation*, pages 4 through 6. If appliance keeps shutting off, see *Troubleshooting*, pages 17 through 20.

11. Do not run appliance
 - where flammable liquids or vapors are used or stored
 - under dusty conditions
12. Do not use this appliance to cook food or burn paper or other objects.
13. Never place any objects in the heater or on logs.
14. Do not use appliance if any part has been exposed to or 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.
15. Turn appliance off and let cool before servicing. Only a qualified service person should service and repair appliance.
16. Operating appliance above elevations of 4,500 feet could cause pilot outage.
17. To prevent performance problems, do not use propane/LP fuel tanks of less than 100 lbs. capacity.
18. Provide adequate clearances around air openings.

LOCAL CODES

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

*Available from:

American National Standards Institute, Inc.
1430 Broadway
New York, NY 10018

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

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

Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

Vent-free gas products are prohibited for bedroom and bathroom installation in the Commonwealth of Massachusetts.

UNPACKING

1. Remove the carton and log wrap.
2. Remove all protective packaging applied to heater for shipment.
3. Make sure your logset includes one hardware packet.
4. Check heater for any shipping damage. If heater is damaged, call SHM International at (800) 229-5647 for replacement parts before returning to dealer.

PRODUCT FEATURES

SAFETY PILOT

This heater has a pilot with an Oxygen Depletion Sensing (ODS) safety shutoff system. The ODS/pilot is a required feature for vent-free room heaters. The ODS/pilot shuts off the heater if there is not enough fresh air.

PIEZO IGNITION SYSTEM

This heater has a piezo ignitor. This system requires no matches, batteries or other sources to light heater.

THERMOSTATIC HEAT CONTROL

Thermostat-controlled models have a thermostat sensing bulb and a control valve. The thermostat will automatically modulate the heat output to maintain a consistent room temperature. This results in greater heater comfort. This can also result in lower gas bills.

QUALIFIED INSTALLATION 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. Installation, testing or replacements of gas piping or
- B. 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 requirements of the authority having jurisdiction.

AIR FOR COMBUSTION AND VENTILATION

⚠ WARNING: This heater shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the National Fuel Gas Code, ANSI Z223.1/ NFPA 54, the International Fuel Gas Code, or applicable local codes.

Read the following instructions to insure proper fresh air for this and other fuel-burning appliances in your home.

Today's homes are built more energy efficient than ever. New materials, increased insulation, and new construction methods help reduce heat loss in homes. Home owners weather strip and caulk around windows and doors to keep the cold air out and the warm air in. During heating months, home owners want their homes as airtight as possible.

While it is good to make your home energy efficient, your home needs to breathe. Fresh air must enter your home. All fuel-burning appliances need fresh air for proper combustion and ventilation.

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.

PROVIDING ADEQUATE VENTILATION

The following are excerpts from National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation.

All spaces in homes fall into one of the following ventilation classifications:

1. Unusually Tight Construction
2. Unconfined Space

The information on pages 4 through 6 will help you classify your space and provide adequate ventilation.

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:

- walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm (6×10^{-11} kg per pa-sec- m^2) or less with openings gasketed or sealed and
- weather stripping has been added on openable windows and doors and
- 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. See *Ventilation Air From Outdoors*, page 5.

If your home does not meet all of the three criteria above, proceed to *Determining Fresh-Air Flow for Appliance Location*, page 6.

VENTILATION AIR

Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor on the wall connecting the two spaces (see Figure 1). You can also remove door into adjoining room (see Figure 1). Follow the National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation for required size of ventilation grills or ducts.

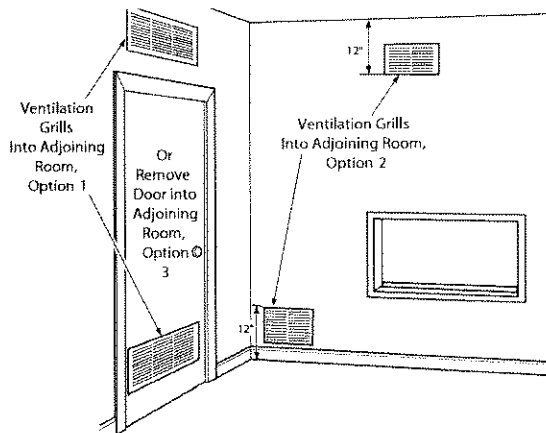


Figure 1 - Ventilation Air from Inside Building

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12" of the ceiling and one within 12" of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. Follow the National Fuel Gas Code ANSI Z223.1/NFPA 54, Section 5.3, Air for Combustion and Ventilation for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

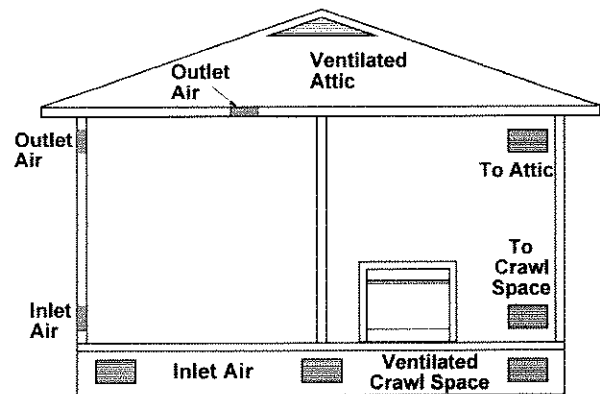


Figure 2 - Ventilation Air from Outdoors
DETERMINING FRESH-AIR FLOW FOR APPLIANCE LOCATION

Determining if You Have a Confined or Unconfined Space

Use this work sheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install appliance plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

- Determine the volume of the space (length x width x height).

Length x Width x Height = cu. ft. (volume of space)

Example: Space size 22 ft. (length) x 18 ft. (width) x 8 ft. (ceiling height) = 3168 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

- Multiply the space volume by 20 to determine the maximum Btu/Hr the space can support.

_____ (volume of space) x 20 = (Maximum Btu/Hr the space can support)

Example: 3168 cu. ft. (volume of space) x 20 = 63,360 (maximum Btu/Hr the space can support)

AIR FOR COMBUSTION AND VENTILATION

CONTINUED

3. Add the Btu/Hr of all fuel burning appliances in the space.

Vent-free log set _____	Btu/Hr
Gas water heater* _____	Btu/Hr
Gas furnace _____	Btu/Hr
Vented gas heater _____	Btu/Hr
Gas fireplace logs _____	Btu/Hr
Other gas appliances* + _____	Btu/Hr
Total = _____	Btu/Hr

* Do not include direct-vent gas appliances. Direct-vent draws combustion air from the outdoors and vents to the outdoors.

Example:

Vent-free log set _____	39,000	Btu/Hr
Gas water heater* _____	40,000	Btu/Hr
Total = _____	79,000	Btu/Hr

4. Compare the maximum Btu/Hr the space can support with the actual amount of Btu/Hr used.

_____ Btu/Hr (max. the space can support)

_____ Btu/Hr (actual amt. of Btu/Hr used)

Example: 63,300 Btu/Hr (maximum the space can support)

73,000 Btu/Hr (actual amount of Btu/Hr used)

The space in the above example is a confined space because the actual Btu/Hr used is more than the maximum Btu/Hr the space can support. You must provide additional fresh air. Your options are as follows:

- A. Rework work sheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See Ventilation Air from Inside Building, page 5.
- B. Vent room directly to the outdoors. See Ventilation Air from Outdoors, page 5.
- C. Install a lower Btu/Hr appliance, if lower Btu/Hr size makes room unconfined.

If the actual Btu/Hr used is less than the maximum Btu/Hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

⚠ WARNING: If the area in which the heater may be operated does not meet the required volume for indoor combustion air, combustion and ventilation air shall be provided by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/ NFPA 54, the International Fuel Gas Code, or applicable local codes.

Note: When used as a vented heater, appliance must be installed only in a solid-fuel burning fireplace with a working flue and constructed of noncombustible material.

VENTED OPERATION

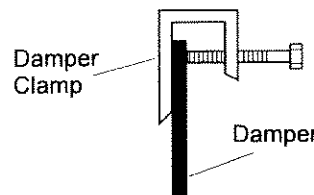
You may also use this heater as a vented product. There are three reasons for operating your heater in the vented mode.

1. The fireplace does not meet the clearance to combustibles requirements for vent-free operation.
2. State or local codes do not permit vent-free operation.
3. You prefer vented operation.

If reasons number 1 or 2 above apply to you, you must permanently open chimney flue damper. You must install the damper clamp. This will insure vented operation (see Figure 10). The damper clamp will keep damper open. See chart below for minimum permanent flue opening you must provide. Attach damper clamp so the minimum permanent flue opening will be maintained at all times.

Area of Various Standard Round Flues	
Diameter (ins.)	Area (sq. ins.)
5"	20 sq. inches
6"	29 sq. inches
7"	39 sq. inches
8"	51 sq. inches

Chimney Height (ft.)	Minimum Permanent Flue Opening (sq. ins.)
6' to 15'	39 sq. inches
15' to 30'	29 sq. inches



Follow instructions *Installing Damper Clamp* on page 8 for location of damper in the fireplace.

INSTALLATION

⚠ WARNING: Before installing in a solid-fuel-burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes, and loose paint by a qualified chimney cleaner.

NOTICE: This appliance is intended for supplemental heating. Use this heater along with your primary heating system. Do not install this heater as your primary heat source. If you have a central heating system, you may run system's circulating blower while using heater. This will help circulate the heat throughout the house. In the event of a power outage, you can use this heater as your primary heat source.

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

⚠ WARNING: Never install the appliance

- in a recreational vehicle
- where curtains, furniture, clothing, or other flammable objects are less than 36 inches (91.5 cm) from the front, top, or sides of the appliance
- in a wood-burning stove
- in high traffic areas
- in windy or drafty areas

⚠ WARNING: Never install in a bedroom or bathroom. Any heating product with a Btu/Hr rating over 10,000 cannot be used in a bedroom. Any heating product with a Btu/Hr rating over 6,000 cannot be used in a bathroom.

⚠ CAUTION: This appliance creates warm air currents. These currents move heat to wall surfaces next to appliance. Installing appliance next to vinyl or cloth wall coverings or operating appliance where impurities (such as tobacco smoke, aromatic candles, cleaning fluids, oil or kerosene lamps, etc.) in the air exist, may discolor walls.

IMPORTANT: Vent-free heaters add moisture to the air. Although this is beneficial, installing appliance in rooms without enough ventilation air may cause mildew to form from too much moisture. See *Air for Combustion and Ventilation*, page 4.

CHECK GAS TYPE

Use the correct gas type (natural or propane/LP) for your appliance. If your gas supply is not correct or if you do not know your gas type, do not install appliance.

INSTALLATION ITEMS NEEDED

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

- external regulator for propane/LP unit only (supplied by installer)
- piping (check local codes)
- sealant (resistant to propane/LP gas)
- equipment shutoff valve *
- test gauge connection *
- ground joint union
- sediment trap (optional)
- tee joint
- pipe wrench
- approved flexible gas line (not provided), or provided gas connector (if allowed by local codes)

* A CSA/AGA design-certified equipment shutoff valve with 1/8" NPT tap is an acceptable alternative to test gauge connection. Purchase the optional CSA/AGA design-certified equipment shutoff valve from your dealer.

For propane/LP units, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 14 inches of water. If you do not reduce incoming gas pressure, heater regulator damage could occur.

LOG SET PLACEMENT

Place the log set in the center of your fireplace or firebox.

CLEARANCES (Vent-Free Operation Only)

⚠ WARNING: Maintain the minimum clearances. If you can, provide greater clearances from floor, ceiling, and adjoining wall.

Minimum Fireplace Clearance To Combustible Materials

Log Size	Side Wall	Ceiling
18", 21", 24"	15.5"	42"

Log Size	LOG SIZING REQUIREMENTS			
	Minimum Firebox Size			
	Height	Depth	Width	Rear*
18"	18"	12"	22"	18"
21", 24"	18"	15"	28"	22"

*Measured at 14" Depth

INSTALLATION

CONTINUED

INSTALLATION CLEARANCES

⚠ WARNING: Maintain the minimum clearances.

Mantel Clearances for Installation

If placing mantel above heater, you must meet the minimum clearance between the mantel shelf and the top of the firebox opening.

NOTICE: Surface temperatures of adjacent walls and mantels become hot during operation. Walls and mantels above the firebox may become hot to the touch. If installed properly, these temperatures meet the requirement of the national product standard. Follow all minimum clearances shown in this manual.

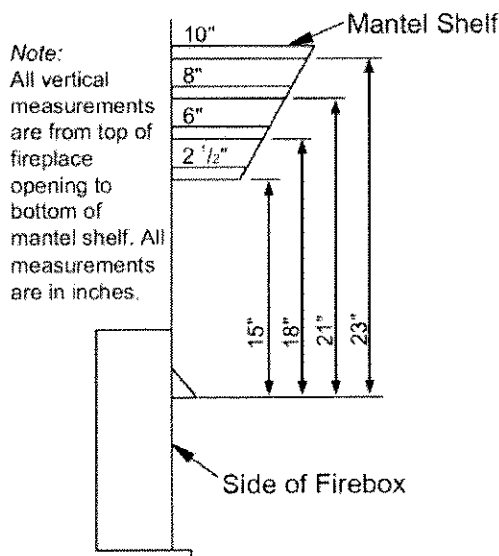
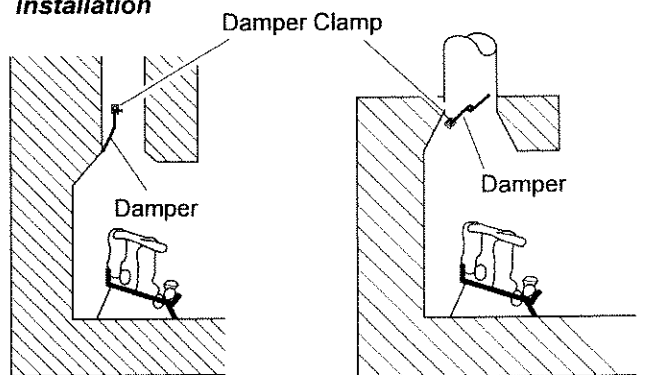


Figure 3 - Minimum Mantel Clearances for Installation



Masonry Fireplace

Manufactured Fireplace

INSTALLING DAMPER CLAMP ACCESSORY FOR VENTED OPERATION

CONNECTING TO GAS SUPPLY

⚠ WARNING: This appliance requires a 5/8" UNF (Unified National Fine Thread) and 1/2" NPT (National Pipe Thread) inlet connection and the gas connection tube provided.

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

⚠ WARNING: Never connect natural gas log set to private (non-utility) gas wells. This gas is commonly known as wellhead gas.

IMPORTANT: For natural gas, check gas line pressure before connecting heater to gas line. Gas line pressure must be no greater than 10.5" of water. If gas line pressure is higher, heater regulator damage could occur.

⚠ CAUTION: Never connect propane/LP log set directly to the propane/LP supply. This appliance requires an external regulator (not supplied). Install the external regulator between the appliance and propane/LP supply.

For propane/LP gas, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11" and 14" of water. If you do not reduce incoming gas pressure, heater regulator damage could occur. Install the external regulator with the vent pointing down as shown in Figure 4. Pointing the vent down protects it from freezing rain or sleet.

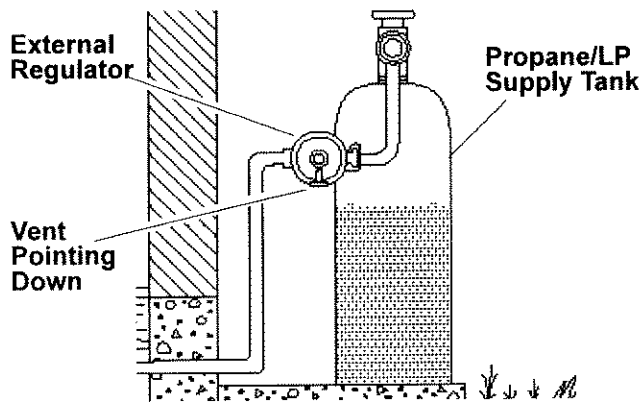


Figure 4 - External Regulator with Vent Pointing Down

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

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

Shutoff Valve

Installation must include an equipment shutoff valve, union, and plugged 1/8" NPT tap. Locate NPT tap within reach for test gauge hook up. NPT tap must be upstream from appliance.

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

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

Apply pipe joint sealant lightly to male NPT threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged fireplace valves. Never use sealant on flare threads.

We recommend that you install a sediment trap in supply line as shown in Figure 5. Locate sediment trap where it is within reach for cleaning. Install in piping system between fuel supply and appliance. Locate sediment trap where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into appliance gas controls. If sediment trap is not installed or is installed wrong, appliance may not run properly.

CHECKING GAS CONNECTIONS

▲ WARNING: Test all gas piping and connections, internal and external to unit, for leaks after installing or servicing. Correct all leaks at once.

▲ WARNING: Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

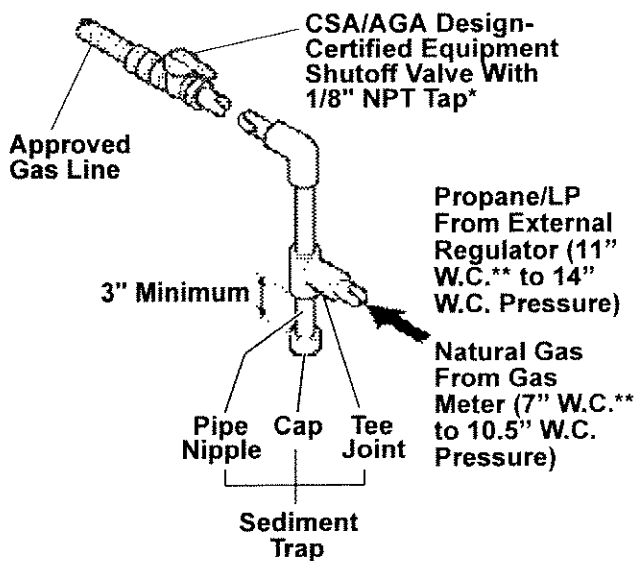


Figure 5 - Gas Connection

* Purchase the optional CSA/AGA design-certified equipment shutoff valve from your dealer.

** Minimum inlet pressure for purpose of input adjustment.

Pressure Testing Gas Supply Piping System

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

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

INSTALLATION

CONTINUED

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

1. Close equipment shutoff valve (see *Figure 6*).
2. Pressurize supply piping system by either opening propane/LP supply tank valve for propane/LP gas or opening main gas valve located on or near gas meter of natural gas or using compressed air.
3. Check all joints from gas meter to equipment shutoff valve for natural gas or propane/LP supply to equipment shutoff valve for propane/LP. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
4. Correct all leaks at once.

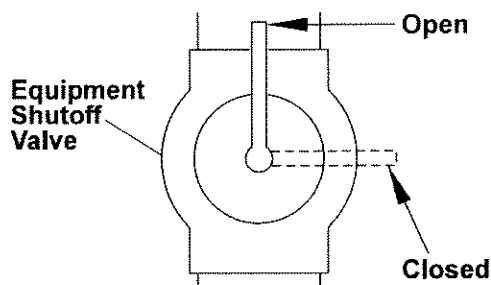


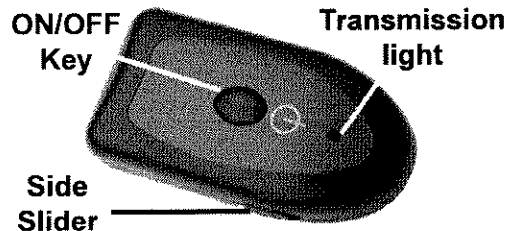
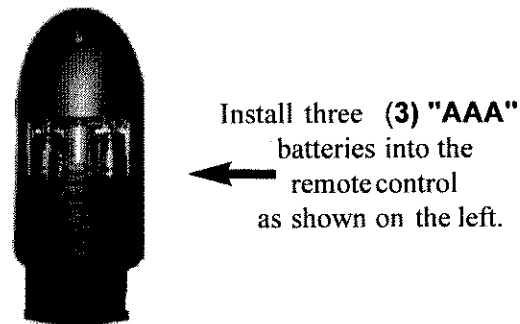
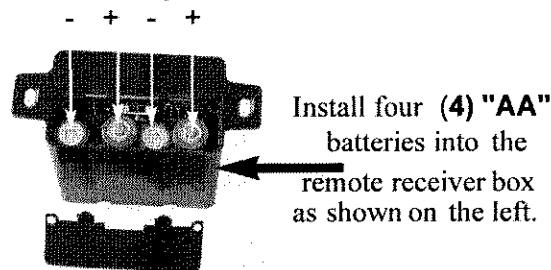
Figure 6 - Equipment Shutoff Valve

PRESSURE TESTING APPLIANCE GAS CONNECTIONS

1. Open equipment shutoff valve (see *Figure 14*).
2. For natural gas, open main gas valve located on or near gas meter. For propane/LP gas, open propane/LP supply tank valve.
3. Make sure control knob of fireplace is in the OFF position.
4. Check all joints from equipment shutoff valve to gas control valve. Apply noncorrosive leak detection fluid to all joints. Bubbles forming show a leak.
5. Correct all leaks at once.
6. Light fireplace (see *Operating Log Set*, page 13). Check all other internal joints for leaks.
7. Turn off fireplace (see *To Turn Off Gas To Log Set*, page 14).

OPTIONAL REMOTE CONTROL SET INSTALLATION AND SET-UP

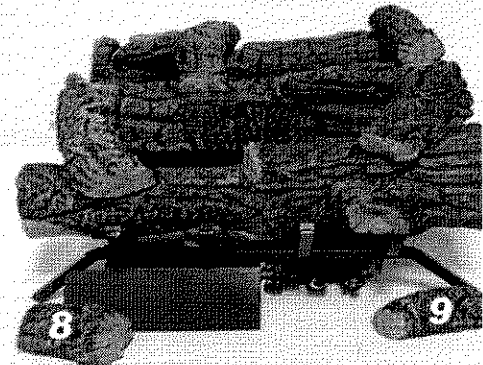
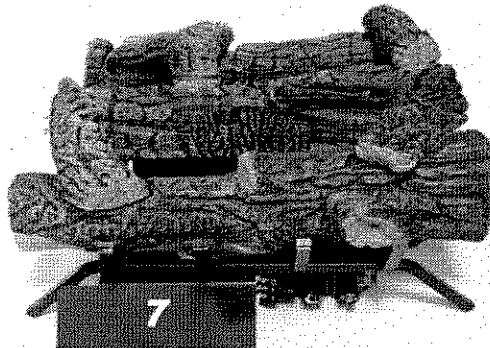
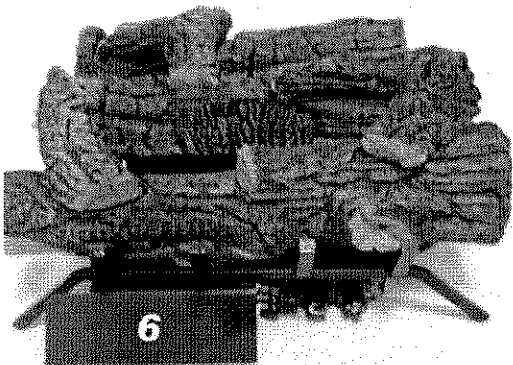
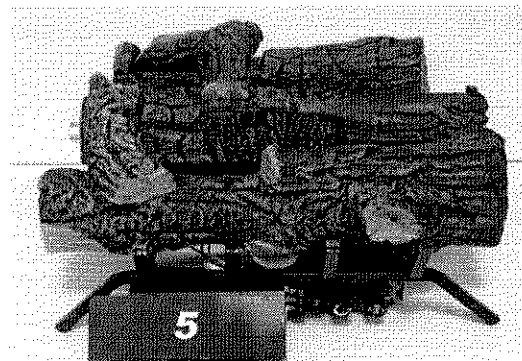
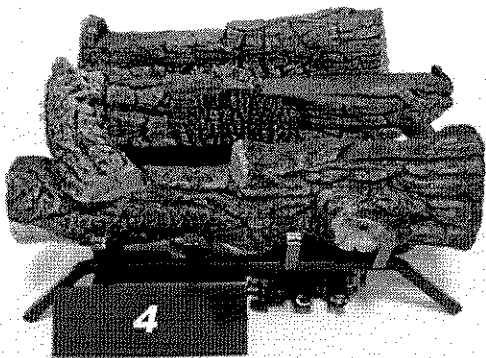
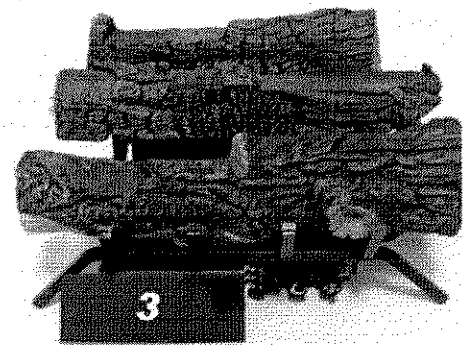
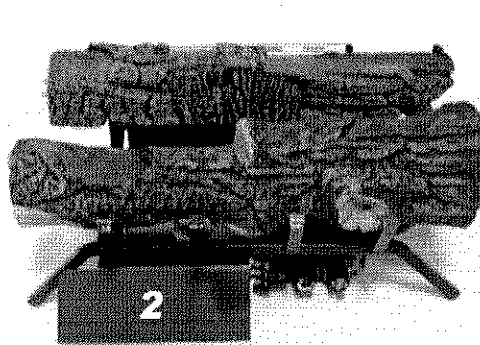
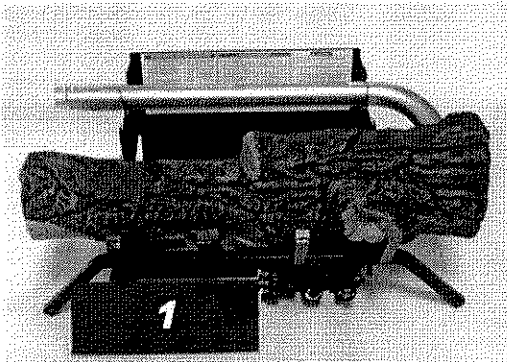
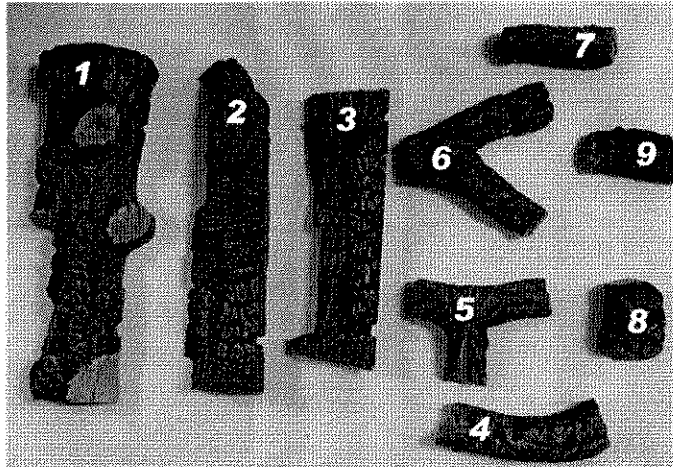
Remote control purchased separately.



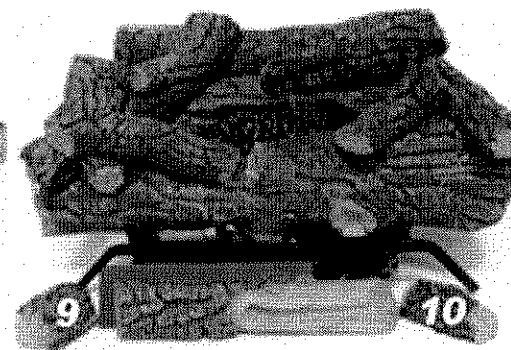
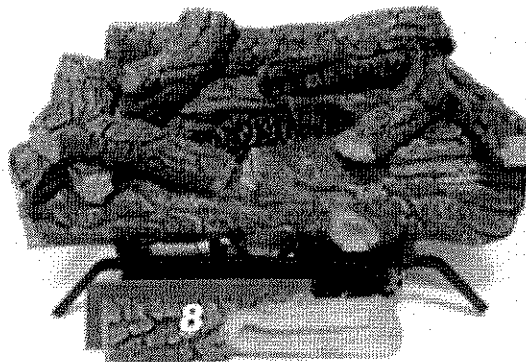
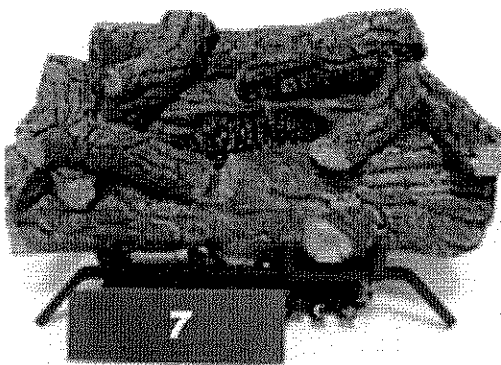
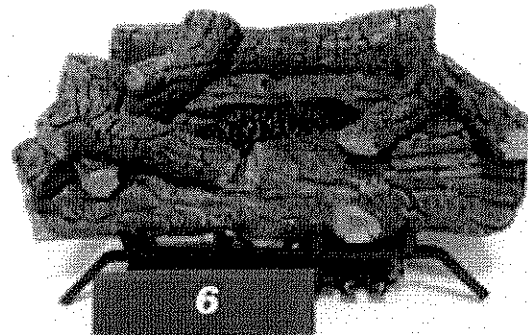
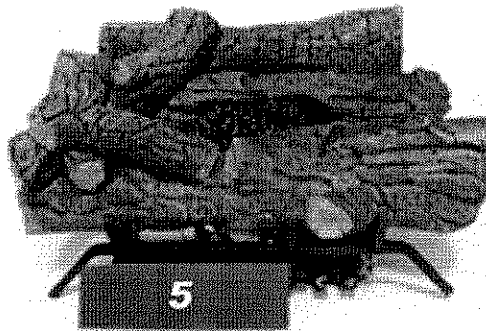
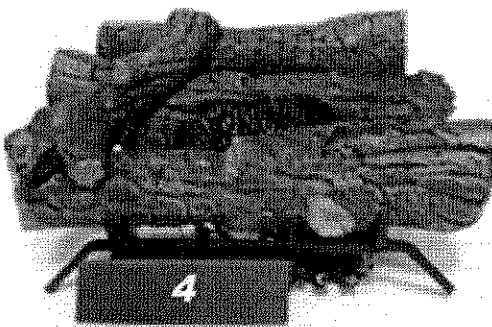
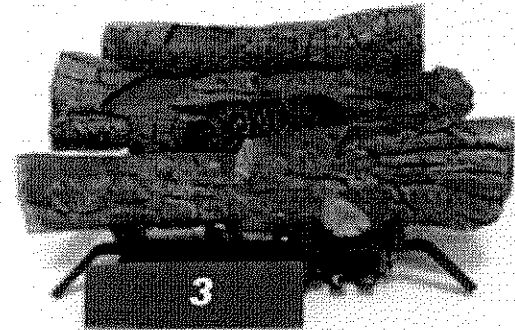
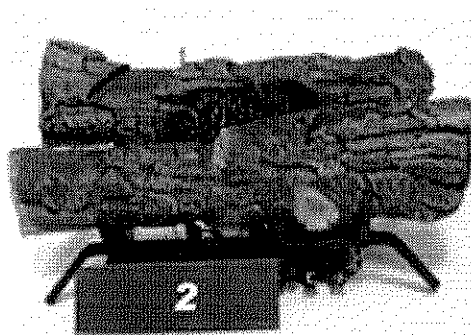
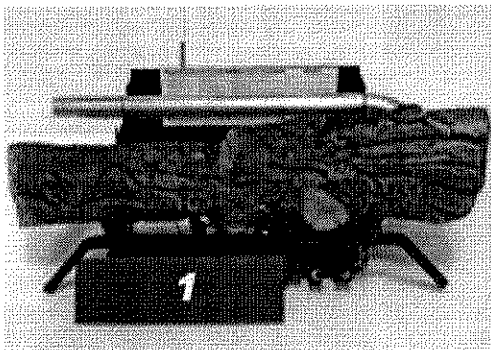
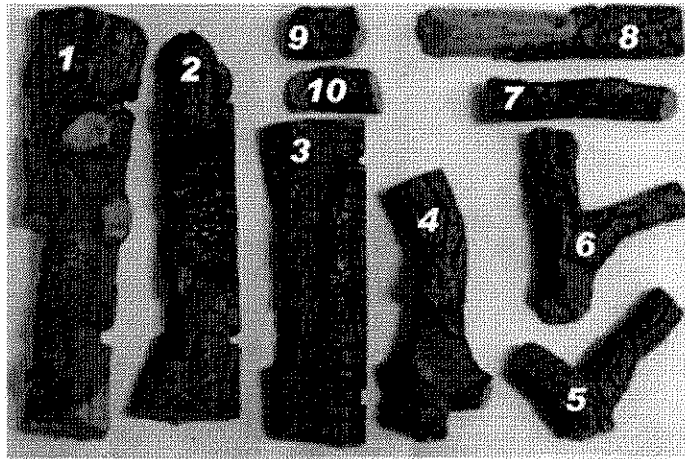
COMMUNICATION BETWEEN THE REMOTE CONTROL TRANSMITTER AND THE RECEIVER

To program the transmitter to the receiver move the three position slider of the receiver in the **REMOTE** position and depress the **ON/OFF** key of the transmitter. The System has an automatic learning mode that allows the receiver to mate with a new transmitter in the event the transmitter must be replaced. As soon as the receiver module receives the first correct command from any remote control it captures the new address and then "beeps" 3 times to confirm the synchronization and command execution.

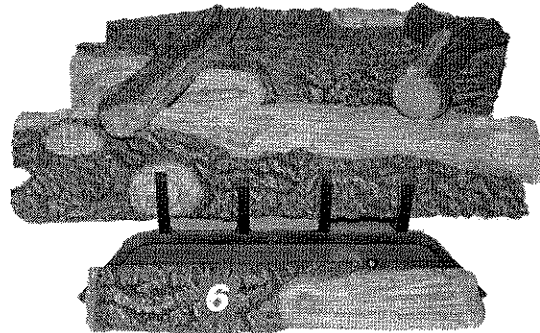
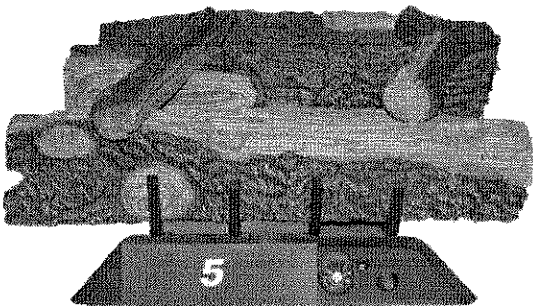
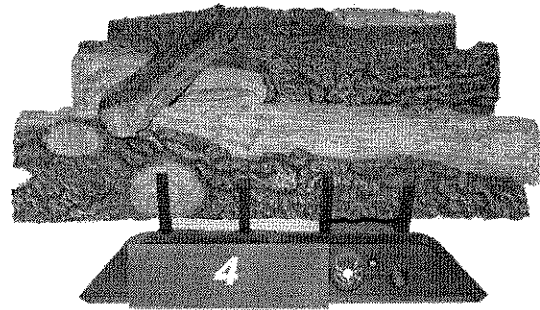
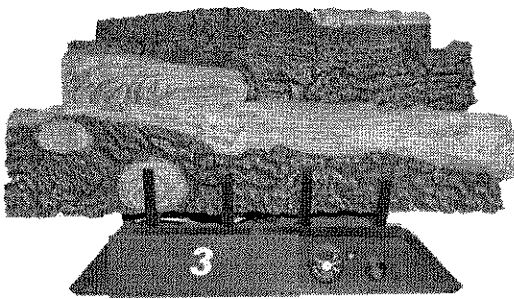
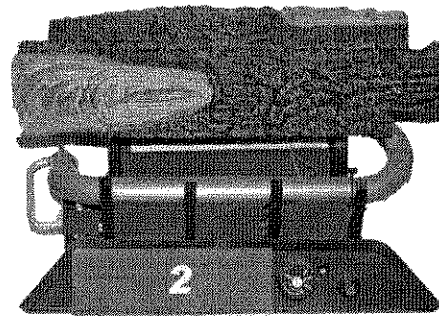
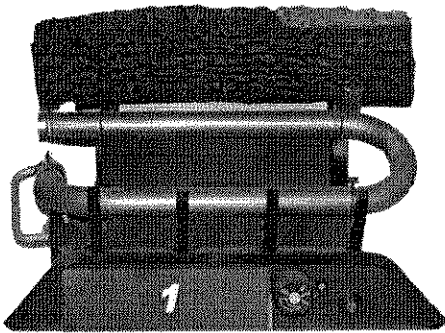
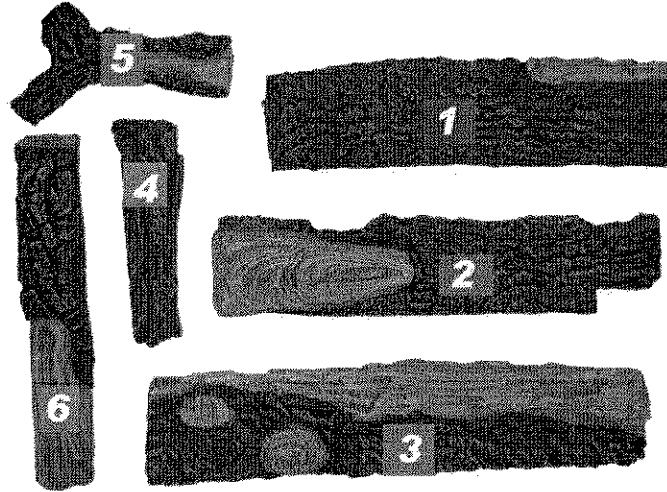
Log Placement Savannah Oak 18



Log Placement Savannah Oak 24/30



Log Placement, CVO(18,24,30) MV(18,24)VFM And OVM22



OPERATING HEATER

MANUALLY-CONTROLLED MODELS

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 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.
2. 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 or gas supplier. Force or attempted repair may result in a fire or explosion.
3. 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


⚠ WARNING:

- If fireplace has glass doors, never operate this heater with glass doors closed. If you operate heater with doors closed, heat buildup inside fireplace may cause glass to burst. Make sure there are no obstructions across openings of fireplace.
- You must operate this heater with a fireplace screen in place. Make sure fireplace screen is closed before running heater.

NOTICE: During initial operation of new heater, burning logs will give off a smell. Orange flame will also be present. Open damper or window to vent smell. This will only last a few hours.


Note: Home owners generally prefer to operate their heater with the chimney damper closed. This will put all the heat into the room. However, there may be times you will desire the full flames of the HI heat setting but will find the heat output excessive. You can open the chimney damper (if you have one) fully or partially to release some of the heat.

⚠ WARNING: Damper handle will be hot if heater has been running.

1. **STOP!** Read the safety information column 1.
2. Make sure equipment shutoff valve is fully open.
3. Turn control knob clockwise  to the OFF position.
4. 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, column 1. If you don't smell gas, go to the next step.

OPERATING HEATER

Continued

5. Slightly depress and turn control knob counterclockwise  to the PILOT position. Keep control knob pressed in for five (5) seconds (see Figure 15).

Note: You may be running this heater for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds or more. This will allow air to bleed from the gas system.

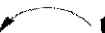
6. With control knob pressed in, press and release ignitor button. This will light pilot. The pilot is attached to the burner. If needed, keep pressing ignitor button until pilot lights.

Note: If pilot does not light, contact a qualified service person or gas supplier for repairs. Until repairs are made, light pilot with match. To light pilot with match, see *Manual Lighting Procedure*, column 2.

7. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.

• If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

Note: If pilot goes out, repeat steps 3 through 7.

8. Slightly depress and turn control knob counterclockwise  to the HI position. The burner should light. Set control knob to any heat level between HI and LO.

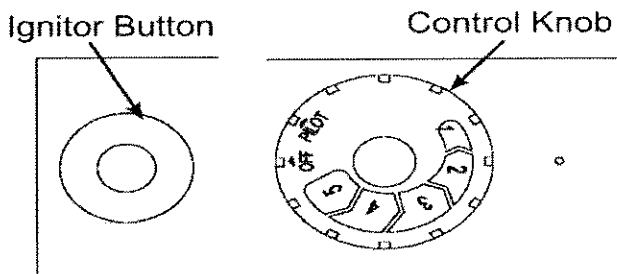
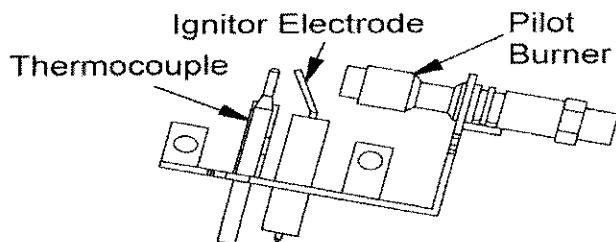


Figure 15



(Note: Appearance of pilot assembly may vary by model.)

Figure 16 - Pilot

CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

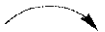
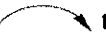
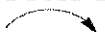
VARIABLE CONTROL OPERATION

The variable control valve can be set to any heat setting and flame height desired, by simply turning the control knob until that setting is attained. Even the lowest setting provides realistic, dancing yellow flames. Selecting higher settings produces greater heat output. This results in increased heating comfort.



CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

TO TURN GAS OFF TO APPLIANCE

Shutting Off Heater

1. Press in and turn control knob clockwise  to the HI position.
2. Turn the control knob clockwise  to the PILOT position.
3. Press in control knob and turn clockwise  to the OFF position.

Shutting Off Burners Only (pilot stays lit)

1. Turn the control knob clockwise  to the HI position.
2. Press in and turn control knob clockwise  to the pilot position.

MANUAL LIGHTING PROCEDURE

1. Follow steps 1 through 5 under *Lighting Instructions*, page 13.
2. Press control knob and light pilot with match.
3. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob. Now follow step 8 under *Lighting Instructions*.

OPERATING HEATER

Continued

REMOTE-READY MODELS

**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 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, don't try to repair it, call a qualified service technician or gas supplier. 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

⚠ WARNING:

- If fireplace has glass doors, never operate this heater with glass doors closed. If you operate heater with doors closed, heat buildup inside fireplace may cause glass to burst. Make sure there are no obstructions across openings of fireplace.
- You must operate this heater with a fireplace screen in place. Make sure fireplace screen is closed before running heater.

NOTICE: During initial operation of new heater, burning logs will give off a smell.

Orange flame will also be present. Open damper or window to vent smell. This will only last a few hours.

Note: Home owners generally prefer to operate their heater with the chimney damper closed. This will put all the heat into the room. However, there may be times you will desire the full flames of the HI heat setting but will find the heat output excessive. You can open the chimney damper (if you have one) fully or partially to release some of the heat.



⚠ WARNING: Damper handle will be hot if heater has been running.

1. **STOP!** Read the safety information column 1.
2. Make sure equipment shutoff valve is fully open.
3. Set selector switch in the OFF position.

⚠ WARNING: Burners will come on automatically within one minute when the selector switch is in the ON position after the pilot is lit.

OPERATING HEATER 2

Continued

4. Press in and turn control knob clockwise  to the OFF position (see Figure 17).
5. 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, column 1, page 13. If you don't smell gas, go to the next step.
6. Press in and turn control knob counter-clockwise  to the PILOT position. Press in control knob for five (5) seconds (see Figure 17).

Note: You may be running this heater for the first time after hooking up to gas supply. If so, the control knob may need to be pressed in for 30 seconds or more. This will allow air to bleed from the gas system.


7. With control knob pressed in, press and release ignitor button. This will light pilot. The pilot is attached to the front burner. If needed, keep pressing ignitor button until pilot lights.

Note: If pilot does not stay lit, contact a qualified service person or gas supplier for repairs.

8. Keep control knob pressed in for 30 seconds after lighting pilot. After 30 seconds, release control knob.

• If control knob does not pop out when released, contact a qualified service person or gas supplier for repairs.

Note: If pilot goes out, repeat steps 4 through 8.

9. Slightly push in and turn control knob counter-clockwise  to the ON position.
10. Wait one minute and switch selector switch to the ON position to light burners.
11. Set flame adjustment knob to any level between HI and LO.

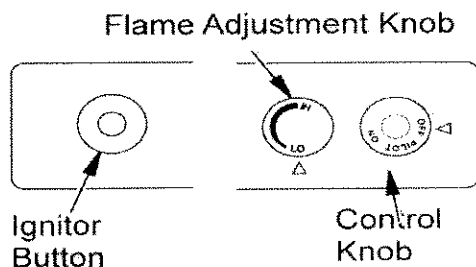


Figure 17 - Control Knob and Ignitor Button Location

CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

WARNING: Make sure the selector switch is in the OFF position when you are away from home for long periods of time. Heater will come on automatically with selector switch in the ON position.

Note: The pilot flame on natural gas units will have a slight curve, but flame should be blue and have no yellow or orange color.

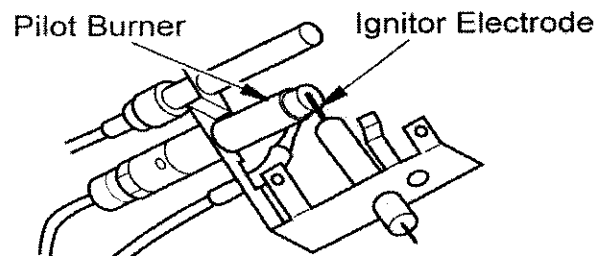


Figure 18 - Pilot (Propane/LP)

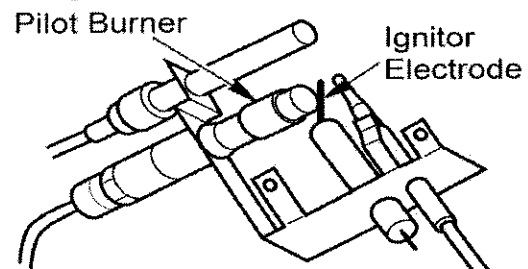




Figure 19 - Pilot (Natural)

TO TURN GAS OFF TO APPLIANCE

Shutting Off Heater

1. Turn control knob clockwise  to the OFF position.
- 2a. Set selector switch in the OFF position.
- 2b. If Using Optional Hand-Held Remote: Set selector switch in the OFF position to prevent draining battery.

Shutting Off Burners Only (pilot stays lit)
You may shut off the burners and keep the pilot lit by doing one of the following:

1. Turn control knob clockwise  to the PILOT position.
2. Use remote control manual OFF button.
3. Set selector switch in the OFF position.

OPTIONAL HAND-HELD REMOTE OPERATION

Note: All remote control accessories must be purchased separately.

Follow instructions included with the remote control.

NOTICE: You must light the pilot before using the hand-held remote control unit. See *Lighting Instructions* on page 15.

After lighting, let pilot flame burn for about one minute. Turn control knob to ON position. Adjust flame adjustment knob anywhere between HI and LO. Slide the selector switch to the REMOTE position (see Figure 20).

Note: The burner may light if hand-held remote was on when selector switch was last turned off. You can now turn the burner on and off with the hand-held remote control unit.

IMPORTANT: Do not leave the selector switch in the REMOTE or ON position when the pilot is not lit. This will drain the battery.

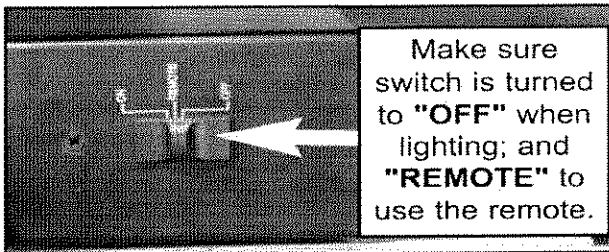
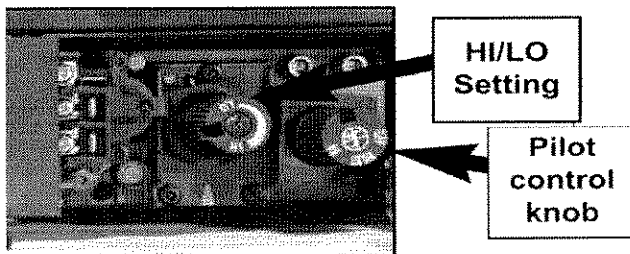


Figure 20 - Setting the Selector Switch, Control Knob and Flame Adjustment

BACKUP FUNCTION

If the batteries of the Receiver are low, the appliance can be switched on manually by moving the 3 position slider switch on the Receiver to the ON position.

Continued

Hand-Held Remote Operation

Hold the control button on the hand-held remote until burner turns on. Hold the control button again until burner turns off.

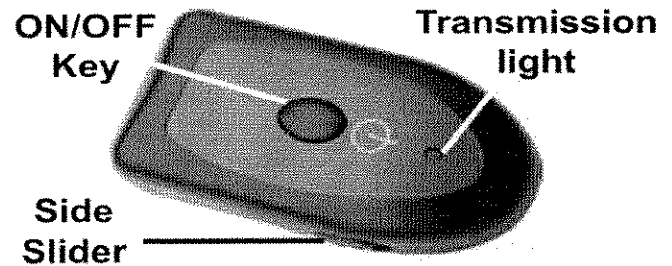


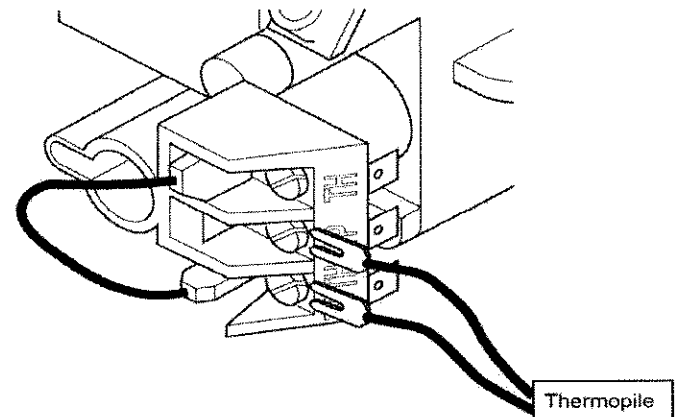
Figure 21 - On/Off Hand-Held Remote Control Unit

Manual Mode

1. Press the **Side Slider** to turn on the hand-held remote control.
2. Press the **POWER** button to turn on the fireplace.
3. Press the **POWER** button to turn off the fireplace.

WIRING DIAGRAM

Note: For proper operation of optional accessories, the wires from the thermopile to the control must be connected exactly as shown.



IMPORTANT !

Check and make sure the logs are clear of the burner flame. Flames touching the logs can produce sooting!

INSPECTING BURNERS

Check pilot flame pattern and burner flame patterns often.

PILOT FLAME PATTERN

Figure 22 shows a correct pilot flame pattern. Figure 23 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the flame sensor. This will cause the flame sensor to cool. When the flame sensor cools, the fireplace will shut down.

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

- turn fireplace off (see *Turning OFF The Appliance*, page 14)
- see *Cleaning and Maintenance*

Note: The pilot flame on natural gas units will have a slight curve, but flame should be blue and have no yellow or orange color.

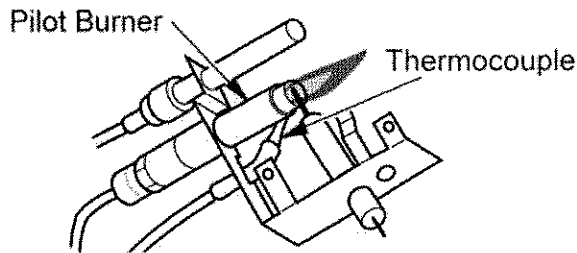


Figure 22 - Correct Pilot Flame Pattern (Your pilot may vary from pilots shown)

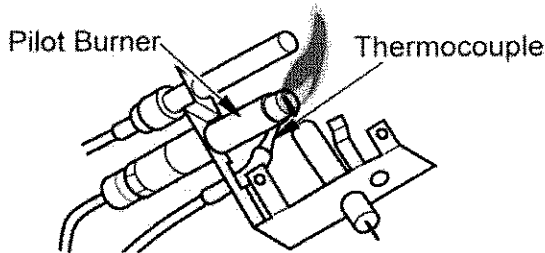


Figure 23- Incorrect Pilot Flame Pattern (Your pilot may vary from pilots shown)

MAIN BURNER

Periodically inspect all burner flame holes with the fireplace running. Some burner flame holes may become blocked by debris or rust, with no flame present. If so, turn off fireplace and let cool. Remove blockage. Blocked burner flame holes may create soot.

BURNER FLAME PATTERN

Figure 24 shows correct burner flame pattern. Figure 25 shows incorrect burner flame pattern. The correct burner flame pattern shows yellow tipping at top of blue flame. If burner flame pattern is incorrect, as shown in Figure

- turn fireplace off (see *Turning OFF The Appliance*, page 16)
- see *Troubleshooting*, page 1

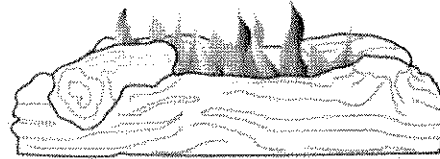


Figure 24 - Correct Burner Flame Pattern Showing Blue Flame with Yellow/White Tips

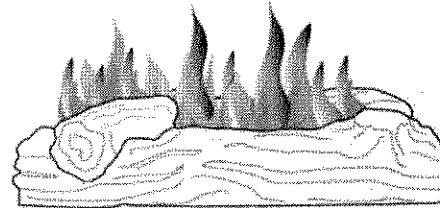


Figure 25 - Incorrect Burner Flame Pattern Showing Solid Yellow/Orange Flame

CLEANING AND MAINTENANCE

WARNING: Turn off fireplace and let cool before cleaning.

CAUTION: Keep burner and control compartment clean. See installation and operating instructions accompanying heater. Inspect these areas of fireplace before each use. Have fireplace inspected yearly by a qualified service person. Fireplace may need more frequent cleaning due to excessive lint from carpeting, bedding material, pet hair, etc.

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

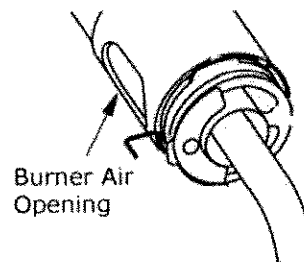


Figure 26 - Injector Holder On Outlet Burner Tube

BURNER INJECTOR HOLDER AND PILOT AIR INLET HOLE

The primary air inlet holes allow the proper amount of air to mix with the gas. This provides a clean burning flame. Keep these holes clear of dust, dirt, lint, and pet hair. Clean these air inlet holes prior to each heating season. Blocked air holes will create soot. We recommend that you clean the unit every three months during operation and have heater inspected yearly by a qualified service person (see Fig. 26).

We also recommend that you keep the burner tube and pilot assembly clean and free of dust and dirt. To clean these parts we recommend using compressed air no greater than 30 PSI. Your local computer store, hardware store, or home center may carry compressed air in a can. You can use a vacuum cleaner in the blow position. If using compressed air in a can, please follow the directions on the can. If you don't follow directions on the can, you could damage the pilot assembly.

1. Shut off the unit, including the pilot. Allow the unit to cool for at least thirty minutes.
2. Inspect burner, burner primary air holes on injector holder and pilot primary air inlets for dust and dirt (see Fig. 27).
3. Blow air through the ports and holes in the burner.
4. Check the injector holder located at the end of the burner tube again. Remove any large particles of dust, dirt, lint, or pet hair with a soft cloth or vacuum cleaner nozzle.
5. Blow air into the primary air holes on the injector holder.

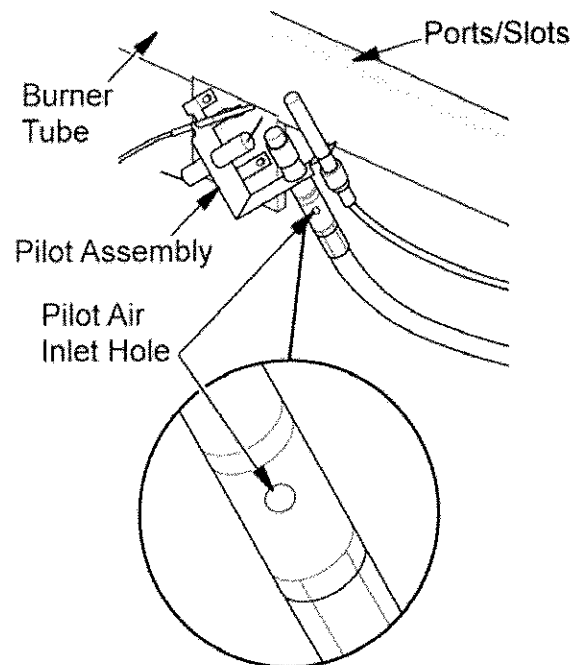


Figure 27 - Pilot Inlet Air Hole

Replace any screen or guard (heat shield or cover), before operating appliance.

TROUBLESHOOTING

Note: All troubleshooting items are listed in order of operation.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot	<ol style="list-style-type: none"> 1. Ignitor electrode not connected to ignitor cable 2. Ignitor cable pinched or wet 3. Piezo ignitor nut is loose 4. Broken ignitor cable 5. Bad piezo ignitor 6. Ignitor electrode positioned wrong 7. Ignitor electrode broken 	<ol style="list-style-type: none"> 1. Reconnect ignitor cable 2. Free ignitor cable if pinched by any metal or tubing. Keep ignitor cable dry 3. Tighten nut holding piezo ignitor to base panel of log set. Nut is located behind base panel. 4. Replace ignitor cable 5. Replace piezo ignitor 6. Replace ignitor 7. Replace ignitor
When ignitor button is pressed, there is spark at ODS/pilot but no ignition	<ol style="list-style-type: none"> 1. Gas supply turned off or manual shutoff valve closed 2. Control knob not in PILOT position 3. Control knob not pressed in while in PILOT position 4. Air in gas lines when installed 5. ODS/pilot is clogged 6. Gas regulator setting is not correct 	<ol style="list-style-type: none"> 1. Turn on gas supply or open manual shutoff valve 2. Turn control knob to PILOT position 3. Press in control knob while in PILOT position 4. Continue holding down control knob. Repeat igniting operation until air is removed 5. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 18) or replace ODS/pilot assembly 6. Replace gas regulator

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
ODS/pilot lights but flame goes out when control knob is released	<ol style="list-style-type: none"> Control knob not fully pressed in Control knob not pressed in long enough Safety interlock system has been triggered Manual shutoff valve not fully open Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by one or both of the following: <ol style="list-style-type: none"> Low gas pressure Dirty or partially clogged ODS/pilot Thermocouple connection loose at control valve Thermocouple damaged Control valve damaged 	<ol style="list-style-type: none"> Press in control knob fully After ODS/pilot lights, keep control knob pressed in 30 seconds Wait one minute for safety interlock system to reset. Repeat ignition operation Fully open manual shutoff valve A) Contact local natural gas company B) Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 18) or replace ODS/pilot assembly Hand tighten until snug, then tighten 1/4 turn more Replace thermocouple Replace control valve
Burner does not light after ODS/pilot is lit	<ol style="list-style-type: none"> Inlet gas pressure is too low Burner orifice clogged Thermopile leads disconnected or improperly connected (Remote-Ready Models Only) Burners will not come on in remote position (Remote-Ready Models Only) 	<ol style="list-style-type: none"> Contact local natural gas company Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice Reconnect leads (see <i>Wiring Diagram</i>, page 17) Replace battery in transmitter and receiver
Delayed ignition burner	<ol style="list-style-type: none"> Manifold pressure is too low Burner orifice clogged 	<ol style="list-style-type: none"> Contact local natural gas company Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice
Burner backfiring during combustion	<ol style="list-style-type: none"> Burner orifice is clogged or damaged Damaged burner Gas regulator defective 	<ol style="list-style-type: none"> Clean burner (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice Replace damaged burner Replace gas regulator
Slight smoke or odor during initial operation	<ol style="list-style-type: none"> Not enough air Gas regulator defective Residues from manufacturing processes and logs curing 	<ol style="list-style-type: none"> Check burner for dirt and debris. If found, clean burner (see <i>Cleaning and Maintenance</i>, page 18) Replace gas regulator Problem will stop after a few hours of operation
Heater produces a whistling noise when burner is lit	<ol style="list-style-type: none"> Turning control knob to HI position when burner is cold Air in gas line Air passageways on heater blocked Dirty or partially clogged burner orifice 	<ol style="list-style-type: none"> Turn control knob to LO position and let warm up for a minute Operate burner until air is removed from line. Have gas line checked by local natural gas company Observe minimum installation clearances (see pages 7 through 9) Clean burners (see <i>Cleaning and Maintenance</i>, page 18) or replace burner orifice
Moisture/condensation noticed on windows	<ol style="list-style-type: none"> Not enough combustion/ventilation air 	<ol style="list-style-type: none"> Refer to <i>Air for Combustion and Ventilation</i> requirements (pages 4 through 6)

TROUBLESHOOTING

Continued



WARNING: If you smell gas

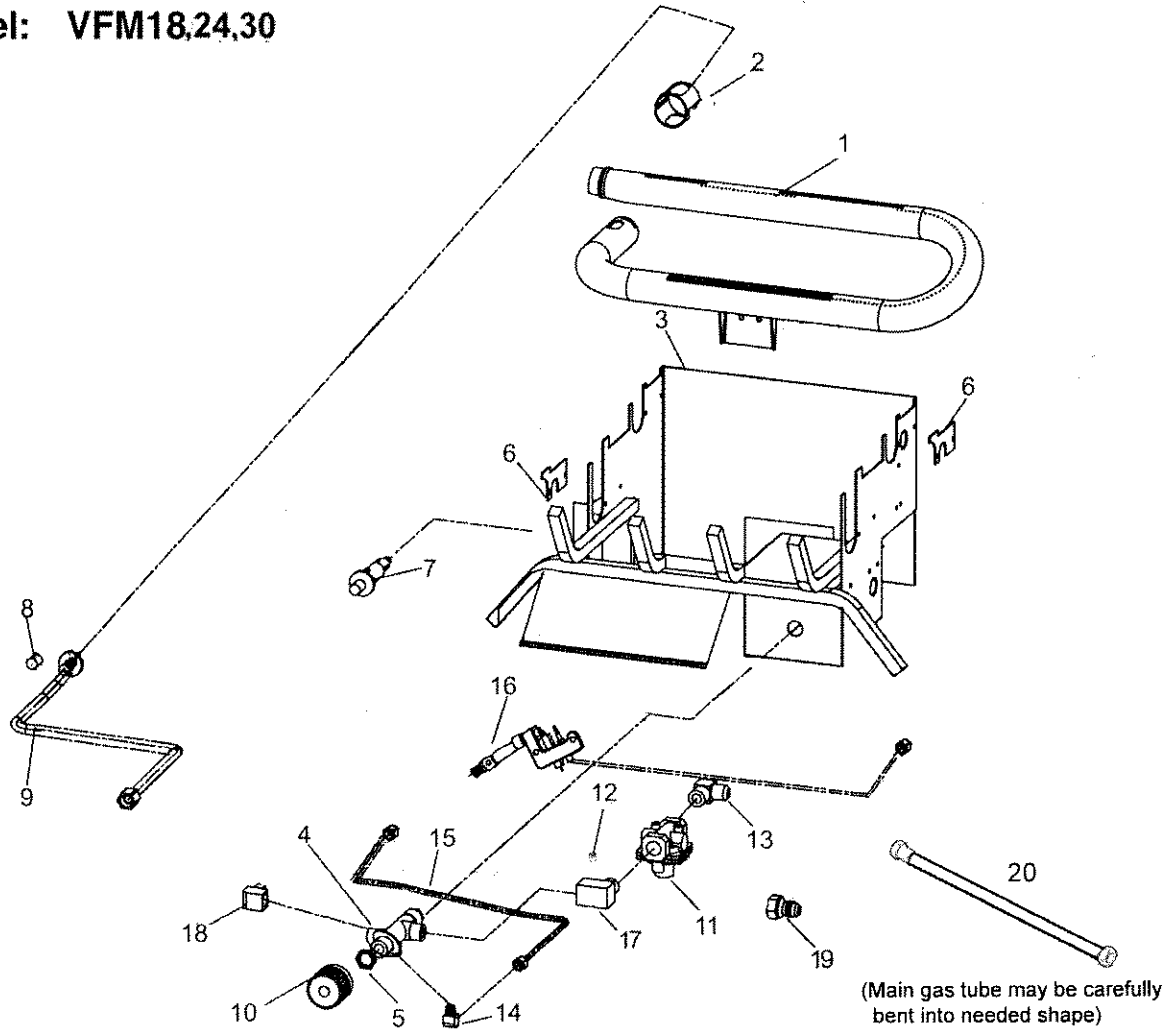
- Shut off gas supply.
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

IMPORTANT: Operating heater where impurities in air exist may create odors. Cleaning supplies, paint, paint remover, cigarette smoke, cements and glues, new carpet or textiles, etc., create fumes. These fumes may mix with combustion air and create odors. These odors will disappear over time.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Dark residue on logs or inside of fireplace	<ol style="list-style-type: none"> 1. Improper log placement 2. Drafts or other air currents affecting flame pattern 3. Air holes at burner inlet blocked 4. Burner flame holes blocked 	<ol style="list-style-type: none"> 1. Properly locate logs (see <i>Installing Logs</i>, page 11-12) 2. Eliminate source of drafts around heater 3. Clean out air holes at burner inlet. Periodically repeat as needed 4. Remove blockage or replace burner
White powder residue forming within burner box or on adjacent walls or furniture	<ol style="list-style-type: none"> 1. When heated, vapors from furniture polish, wax, carpet cleaners, etc. turn into white powder residue 	<ol style="list-style-type: none"> 1. Turn heater off when using furniture polish, wax, carpet cleaners, or similar products
Heater produces a clicking/ticking noise just after burner is lit or shut off	<ol style="list-style-type: none"> 1. Metal expanding while heating or contracting while cooling 	<ol style="list-style-type: none"> 1. This is common with most heaters. If noise is excessive, contact qualified service person
Heater produces unwanted odors	<ol style="list-style-type: none"> 1. Heater burning vapors from paint, hair spray, glues, cleaners, chemicals, new carpet, etc. (see <i>IMPORTANT</i> statement above) 2. Gas leak. See Warning statement at top of page 	<ol style="list-style-type: none"> 1. Open window and ventilate room. Stop using odor causing products while heater is running 2. Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 9)
Heater shuts off in use (ODS operates)	<ol style="list-style-type: none"> 1. Not enough fresh air is available 2. Low line pressure 3. ODS/pilot is partially clogged 	<ol style="list-style-type: none"> 1. Open window and/or door for ventilation 2. Contact local natural gas company 3. Clean ODS/pilot (see <i>Cleaning and Maintenance</i>, page 18)
Gas odor even when control knob is in OFF position	<ol style="list-style-type: none"> 1. Gas leak. See Warning statement at top of page 2. Control valve defective 	<ol style="list-style-type: none"> 1. Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 9) 2. Replace control valve
Gas odor during combustion	<ol style="list-style-type: none"> 1. Foreign matter between control valve and burner 2. Gas leak. See Warning statement at top of page 	<ol style="list-style-type: none"> 1. Take apart gas tubing and remove foreign matter 2. Locate and correct all leaks (see <i>Checking Gas Connections</i>, page 9)
Remote does not function (Remote-Ready Models Only)	<ol style="list-style-type: none"> 1. Battery is not installed. Battery power is low 	<ol style="list-style-type: none"> 1. Replace batteries in receiver and hand-held remote control

PARTS LIST & ILLUSTRATED PARTS BREAKDOWN

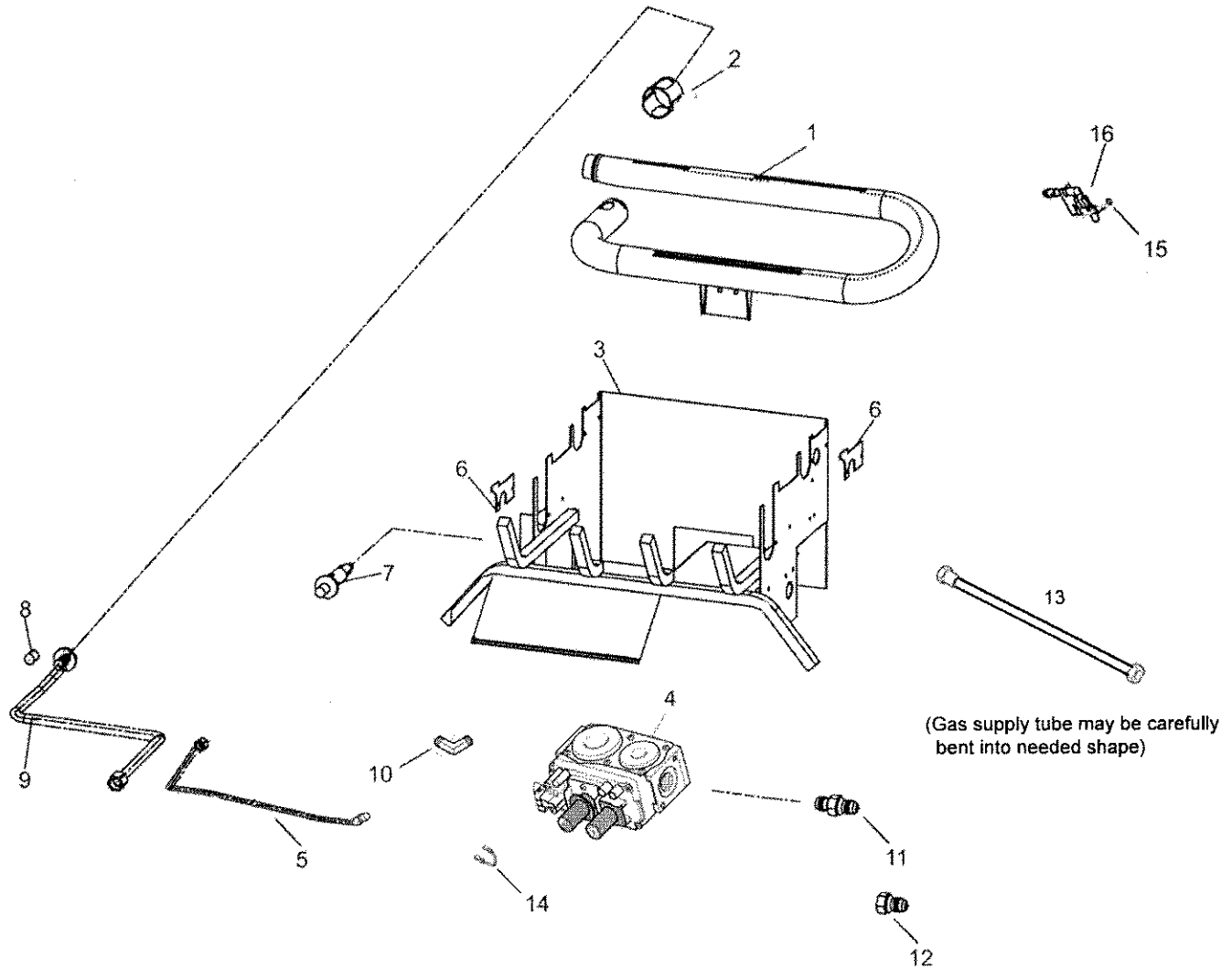
Model: VFM18,24,30



ITEM	DESCRIPTION	VFM18	VFM24	VFM30
1	Dual Burner	RMH-120-01120	RMH-120-01430	RMH-120-01430
2	Air Shutter NG	RMH-120-00260	RMH-120-00260	RMH-120-00260
2	Air Shutter LP	RMH-120-00252	RMH-120-00252	RMH-120-00252
3	FRAME GRATE BURNER ASSM.™	WIP-120-90530	WIP-120-90534	WIP-120-90534
4	Gas Valve, Manual	FCHD1809017	FCHD1809017	FCHD1809017
5	Nut, Gas Valve	RHWDZ00005A	RHWDZ00005A	RHWDZ00005A
6	Burner Support Clip	FCHD1809008	FCHD1809008	FCHD1809008
7	Piezo Igniter, Snap-In	RMH-120-90945	RMH-120-90945	RMH-120-90945
8	Orifice NG	RMH-120-SP033	RMH-120-SP018	RMH-120-SP018
8	Orifice LP	RMH-120-SP051	RMH-120-SP049	RMH-120-SP049
9	Orifice Tube, Main Burner	RMH-120-TCLOT18	RMH-120-TCLOT24	RMH-120-TCLOT24
10	Knob, Control Valve	FCHD1809018	FCHD1809018	FCHD1809018
11	Gas Regulator NG	RMH-120-00214	RMH-120-00214	RMH-120-00214
11	Gas Regulator LP	RMH-120-00213	RMH-120-00213	RMH-120-00213
12	Plug, Press Tap (1/8" Pipe)	FCHD2309031	FCHD2309031	FCHD2309031
13	Elbow, .25 FNPT X .5625 Flare	RMH-120-00032	RMH-120-00032	RMH-120-00032
14	Elbow, .125 FNPT X .125 Comp	FCHD1809015	FCHD1809015	FCHD1809015
15	Tube, Control Valve to ODS	FCHD1809016	FCHD1809016	FCHD1809016
16	ODS Pilot NG	RMH-120-08221	RMH-120-08221	RMH-120-08221
16	ODS Pilot LP	RMH-120-08418	RMH-120-08418	RMH-120-08418
17	Elbow, .375 FNPT X .375 FNPT	FCHD1809020	FCHD1809020	FCHD1809020
18	Elbow, .375 FNPT X .625 MUNEF	FCHD2409014	FCHD2409014	FCHD2409014
19	Adapter, .375 FNPT X .5625 Flare	FCHD1809021	FCHD1809021	FCHD1809021
20	Tube, Main Gas Supply	WIP-120-90414	WIP-120-90414	WIP-120-90414

PARTS LIST & ILLUSTRATED PARTS BREAKDOWN

Model: BIVFMV 18,24,30



(Gas supply tube may be carefully bent into needed shape)

ITEM	DESCRIPTION	QUANTITY	BIVFMV18	BIVFMV24	BIVFMV30
1	Dual Burner	1	RMH-120-01120	RMH-120-01430	RMH-120-01430
2	Air Shutter NG	1	RMH-120-00260	RMH-120-00260	RMH-120-00260
2	Air Shutter LP	1	RMH-120-00252	RMH-120-00252	RMH-120-00252
3	FRAME GRATE BURNER ASSM. ""	1	WIP-120-90530	WIP-120-90534	WIP-120-90534
4	Gas Valve, mV NG	1	RMH-120-00547	RMH-120-00547	RMH-120-00547
4	Gas Valve, mV LP	1	RMH-120-00544	RMH-120-00544	RMH-120-00544
5	Tube, Control Valve to ODS	1	WIP-120-90432	WIP-120-90432	WIP-120-90432
6	Burner Support Clip	2	FCHD1809008	FCHD1809008	FCHD1809008
7	Piezo Igniter with nut	1	RMH-120-90945	RMH-120-90945	RMH-120-90945
8	Orifice NG	1	RMH-120-SP033	RMH-120-SP018	RMH-120-SP018
8	Orifice LP	1	RMH-120-SP051	RMH-120-SP049	RMH-120-SP049
9	Orifice Tube, Main Burner	1	RMH-120-09003	RMH-120-09003	RMH-120-09003
9	Orifice Tube, Main Burner	1	RMH-120-09004	RMH-120-09004	RMH-120-09004
10	Elbow, .375 MNPT X .375 Flare	1	RMH-120-00062	RMH-120-00062	RMH-120-00062
11	Adapter, .375 MNPT X .5625 Flare	1	RMH-120-00050	RMH-120-00050	RMH-120-00050
12	Adapter, .375 FNPT X .5625 Flare	1	FCHD1809021	FCHD1809021	FCHD1809021
13	Tube, Main Gas Supply	1	WIP-120-90414	WIP-120-90414	WIP-120-90414
14	Jumper Wire	1	WIP-722-00003	WIP-722-00003	WIP-722-00003
15	Nut, ODS Mounting	2	RMP-122-0062	RMP-122-0062	RMP-122-0062
16	ODS Pilot NG	1	RMH-120-008419	RMH-120-008419	RMH-120-008419
16	ODS Pilot LP	1	RMH-120-008421	RMH-120-008421	RMH-120-008421

SERVICE INFORMATION

REPLACEMENT PARTS

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

Parts Under Warranty

Contact authorized dealers of this product. If they can't supply original replacement part(s), call SHM International's Technical Service Department at (800) 229-5647.

When calling SHM International, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- type of gas used (propane/LP or natural gas)
- purchase date

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

Parts Not Under Warranty

Contact authorized dealers of this product. If they can't supply original replacement part(s), call SHM International at (800) 229-5647 for referral information. When calling SHM International, have ready:

- model number of your heater
- the replacement part number (see *Page 23-24*)

SERVICE HINTS

When gas pressure is too low:

- pilot will not stay lit
- heater will not produce the specified heat
- propane/LP gas supply may be low

You may feel your gas pressure is too low. If so, contact your local natural or propane/LP gas supplier.

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

TECHNICAL SERVICE

You may have further questions about installation, operation or troubleshooting. If so, contact SHM International's Technical Service Department at (800) 229-5647.

When calling please have your model and serial numbers of your heater ready. You can also visit SHM International's Technical Service web site at www.sureheat.com.

SPECIFICATIONS

Model (S,B)	VFM18NG	VFM18LP	VFM21,24NG	VFM21,24LP	VFM27,30NG	VFM27,30LP
Gas Type	Natural Gas	Propane/LP	Natural Gas	Propane/LP	Natural Gas	Propane/LP
Input Max.	34,000 BTU/Hr	34,000 BTU/Hr	39,000 BTU/Hr	39,000 BTU/Hr	39,000 BTU/Hr	39,000 BTU/Hr
Input Min.	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr
Manifold Pressure	3.5" W.C.	8.0" W.C.	3.5" W.C.	8.0" W.C.	3.5" W.C.	8.0" W.C.
Inlet Pressure Max.	10.5" W.C.	14.0" W.C.	10.5" W.C.	14.0" W.C.	10.5" W.C.	14.0" W.C.
Inlet Pressure Min.*	7.0" W.C.	11.0" W.C.	7.0" W.C.	11.0" W.C.	7.0" W.C.	11.0" W.C.
Min. Firebox Size	18" H X 22" W X 12" D		18" H X 28" W X 15" D		18" H X 34" W X 15" D	
Model (S,B)	IVFMV18NG	IVFMV18LP	IVFMV21,24NG	IVFMV21,24LP	IVFMV27,30NG	IVFMV27,30LP
Gas Type	Natural Gas	Propane/LP	Natural Gas	Propane/LP	Natural Gas	Propane/LP
Input Max.	34,000 BTU/Hr	34,000 BTU/Hr	39,000 BTU/Hr	39,000 BTU/Hr	39,000 BTU/Hr	39,000 BTU/Hr
Input Min.	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr	22,000 BTU/Hr
Manifold Pressure	3.5" W.C.	8.0" W.C.	3.5" W.C.	8.0" W.C.	3.5" W.C.	8.0" W.C.
Inlet Pressure Max.	10.5" W.C.	14.0" W.C.	10.5" W.C.	14.0" W.C.	10.5" W.C.	14.0" W.C.
Inlet Pressure Min.*	7.0" W.C.	11.0" W.C.	7.0" W.C.	11.0" W.C.	7.0" W.C.	11.0" W.C.
Min. Firebox Size	18" H X 22" W X 12" D		18" H X 28" W X 15" D		18" H X 34" W X 15" D	

*For purpose of input adjustment

WARRANTY INFORMATION

KEEP THIS WARRANTY

Model _____
Serial No. _____
Date Purchased _____

Always specify model and serial numbers when communicating with the factory.

LIMITED WARRANTY

SHM International Corp. warrants the components of this appliance to be free from defects in material and workmanship for one (1) year from the date of purchase. SHM International Corp. at its option, will repair or replace this product or any component of the product found to be defective during the warranty period. Replacement will be made with a new manufactured product or component. If the product is no longer available, replacement may be made with a similar product of equal value. This warranty does not include transportation or shipping costs of any kind. This your exclusive warranty.

This warranty is valid for the original retail purchaser from the date of initial retail purchase and is not transferable. Keep the original sales receipt. Proof of purchase is required to obtain warranty parts.

This warranty does not cover normal wear of parts such as scratches and dents of the components or damage resulting from any of the following:

- negligent use or misuse of the product, including exposing the product to chemicals or cleaning products not approved by SHM International Corp.
- corrosion, rust or discoloring of any kind
- use or installation contrary to specified instructions and applicable building codes, including heating the product to temperatures above its rated specifications which can cause considerable warping
- disassembly, including removal of the product from a built-in installation
- damage resulting from accident, alteration, misuse, abuse, hostile environments, or improper installation
- repair or alteration
- acts of God, such as fire, flood, hurricanes, and tornadoes
- gas cylinders, propane tanks or other fuel delivery systems, including connections to a household fuel supply
- usage other than single-family household use such as commercial or industrial use
- minor warping or discoloration of parts, which is normal and not a defect under this warranty

DO NOT RETURN THIS PRODUCT TO THE PLACE OF PURCHASE

If the appliance does not operate properly, first thoroughly carry out the instructions provided with the unit to ensure that the appliance is installed correctly and check the troubleshooting section in the use and care manual.

We recommend you return the warranty registration card so that you can be contacted when any questions of safety arise that could affect you. The return of the warranty registration card is not a condition for warranty coverage.

Because of continuing product improvement, these specifications are subject to change without notice.

If you have other questions or need replacement parts, contact our
Customer Service Hotline at (800) 229-5647 or
visit our website at www.sureheat.com.

SHM International Corp., 1861 West Oak Parkway, Marietta, GA 30062

OML2011A
Rev. 1.2
02/2013

PUBLIC Attachment
MPC DR #12 GC-2016-0083

SNG

9/18/11

800-927-0787



GENERAL SERVICE ORDER

Category SNG	Location: LOO	Date & Time Rec'd
Account #	Service Address:	Date & Time Wanted: 9-4-15 1pm
Customer Name	Subdivision: GRANDS MILLS	Cus Ph.
Action Required: METER SET	Leak Classification: 1 2 3 4	Inside Leak <input type="checkbox"/> Outside Leak <input type="checkbox"/>
ERT# 48335252	Last Read Date	Meter Notes: 100
Meter # 13X145707		

COMPLETION INFORMATION

Date: 9-4-15	Time Arrived: 1:30 PM	Time Departed: 4:00 PM	Cancel <input type="checkbox"/> Not Completed <input type="checkbox"/> Wrong Address <input type="checkbox"/> Not ready <input type="checkbox"/>
Action Taken: Turned On <input checked="" type="checkbox"/> Turned Off <input type="checkbox"/> TF/TN <input type="checkbox"/> Removed <input type="checkbox"/> Changed <input type="checkbox"/> Use Last Reading <input type="checkbox"/>			Not Home <input type="checkbox"/> No Access <input type="checkbox"/>
Meter Number: 13X145707	Dials: 4	Manufacturer: American	Size: 250
Old Meter			Index Type: DR
New Meter			Test Year: 2013
Old ERT# 48335252	New ERT#	Painted Meter Set YES <input checked="" type="checkbox"/>	
Off Reading	Removed Meter Status: Usable <input type="checkbox"/> Non-Usable <input type="checkbox"/> Lost/Stolen <input type="checkbox"/>		Odorant Level: High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low <input type="checkbox"/>
On Reading: 0000	Regulator Installed: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Reg Pressure Setting: 7" <input checked="" type="checkbox"/> P.S.I. <input type="checkbox"/> L.W.C. <input type="checkbox"/>	Regulator Removed: YES <input type="checkbox"/> NO <input type="checkbox"/>
SHUT IN TEST AND/OR PRESSURE TEST FOR NEW PIPING		CUSTOMER PIPING: Pass/Fail	Removed Regulator Status: Usable <input type="checkbox"/> Non-Usable <input type="checkbox"/>
Time: .5	Start Pressure: 7"	End Time: 3:30	End Pressure: 7"
Time Held: 15min	System: OK <input type="checkbox"/>	Yellow Tag Done: YES/NO	BAR HOLE Tested @ Riser: <input checked="" type="checkbox"/>

Comments: Set meter + pressure piped to house converted fine place NO LP. could not pre-fire. Performed shut in test

Meter Location: Rear Center	Central Heating	Water Heater	Range	Dryer	Other
Appliance Check Item	Fire Place				
Manufacturer	Shureheat				
Model No.	BIVFMV				
Serial No.	F0BDE32264				
BTU Input					
BTU Flow Rate (BTU Output)	40,000				
Red Tagged (Remove from Service)					

Please check box if an additional appliance sheet is used

This inspection or work performed covers natural gas items and equipment visible and accessible to the service technician, and represents the conditions at the time and date of the inspection or work performed. It does not cover latent or manufacturing defects and the internal working of sealed equipment or structural components, and cannot be construed to cover future defects or unforeseen events.

CUSTOMER: I know how to turn off the gas in case of an emergency. I have smelled natural gas and detect its odor. I have had gas system deficiencies and/or corrections if any explained.	TECHNICIAN: I certify that I have completed the work as described.
Received: <input type="checkbox"/> Safety Signature <input type="checkbox"/> Meter <input type="checkbox"/>	<input type="checkbox"/> Performed Odor Test <input type="checkbox"/> Performed Pressure Test
NAME:	<input type="checkbox"/> Performed Leak Test w/ CGI <input type="checkbox"/> Performed Shut In Test
SIGNATURE:	<input type="checkbox"/> Showed Customer where to safely turn off gas
	PRINT NAME:
	SIGNATURE:

SURE HEAT

Installation and Operating Instructions for **NATURAL & L.P. GAS** **VENT FREE MANUALLY CONTROLLED** **SYSTEM**

Model: VFM-18, VFM-24/21, VFM-30
FVfy-18, FVfy-24, FVfy-30

DANGER

FAILURE TO FOLLOW THESE INSTRUCTIONS CAREFULLY AND WITHOUT ERROR, OR FAILURE TO HEED ANY AND ALL WARNINGS IN THESE INSTRUCTIONS CAN RESULT IN AN EXPLOSION, FIRE OR THE PRODUCTION OF CARBON MONOXIDE GAS WHICH CAN CAUSE PROPERTY DAMAGE, BODILY INJURY OR DEATH.



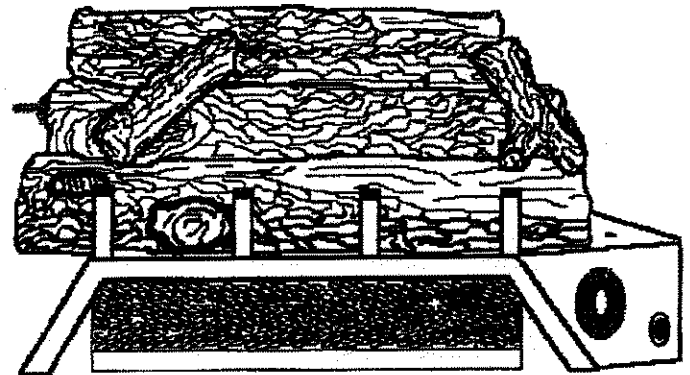
Sure Heat Manufacturing

3130 Moon Station Road

Kennesaw, GA 30144

Tel: (770) 422-8008

Fax: (770) 424-3842



NOTE: THIS UNIT CANNOT BE CONVERTED TO DIFFERENT GAS TYPES.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors or 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 telephone in your building.
 - Immediately call your gas supplier from a neighbor's telephone.
 - Follow the gas suppliers 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.

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.

THIS APPLIANCE MAY BE INSTALLED IN AN AFTERMARKET MANUFACTURED (MOBILE) HOME, WHERE NOT PROHIBITED BY STATE OR LOCAL CODES. INSTALL ONLY IN A SOLID-FUEL BURNING FIREPLACE OR APPROVED VENTLESS FIREBOX ENCLOSURE (MANUFACTURED UNVENTED FIREPLACE) AS SPECIFIED BY THESE INSTRUCTIONS.

*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 LABEL ATTACHED TO THE APPLIANCE. THIS APPLIANCE IS NOT CONVERTIBLE FOR USE WITH OTHER GASES.

This appliance is designed as an unvented room heater when installed in a noncombustible fireplace with the flue damper closed.

This appliance may be used as a heating appliance only if unvented heating appliances are permitted by local state and city codes. If unvented heaters are not permitted, then the fireplace vent damper must be locked at the minimum vent area required by local codes, or in the absence of local codes, by the latest edition of the National Fuel Gas Code (ANSI Z223.1 or latest edition).

This installation manual contains valuable safety instructions and installation procedures that should be understood before installation of the unit. The owner of this appliance should keep this instruction manual to refer to in the future. It is the installer's responsibility to instruct the owner of this unit in the proper use and maintenance of this appliance.

DANGER: THIS APPLIANCE, AS ANY GAS-FIRED APPLIANCE, CAN PRODUCE POISONOUS CARBON MONOXIDE ALONG WITH OTHER COMBUSTION PRODUCTS. CARBON MONOXIDE, IN STRONG CONCENTRATIONS, CAN CAUSE SICKNESS, SERIOUS PERSONAL INJURY AND DEATH.

GASEOUS FUELS ARE HIGHLY EXPLOSIVE IN CERTAIN CONCENTRATIONS AND ARE VERY FLAMMABLE. ANY GAS LEAKS IN THE PLUMBING SUPPLYING GAS TO THIS APPLIANCE CAN LEAD TO FIRE OR EXPLOSION.

WHEN PROPERLY INSTALLED, USED AND MAINTAINED, THIS APPLIANCE SHOULD NOT PRODUCE CARBON MONOXIDE IN DANGEROUS QUANTITIES. HOWEVER, SINCE CARBON MONOXIDE CAN BE DEADLY POISONOUS, THE INSTALLER AND ALL USERS OF THIS APPLIANCE SHOULD READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY.

IMPORTANT INFORMATION

Fireplace sizing guide and BTU information:					BTU Information			
<u>Set Size</u>	<u>Opening Height</u>	<u>Front Width</u>	<u>Rear Width</u>	<u>Fireplace Depth</u>	<u>Natural Gas</u>		<u>L.P. Gas</u>	
					<u>Max.</u>	<u>Min.</u>	<u>Max.</u>	<u>Min.</u>
18"	18"	22"	18"	12"	34,000	22,000	34,000	22,000
24"/21"	18"	28"	20"	15"	39,000	22,000	39,000	22,000
30"	18"	34"	25"	15"	39,000	22,000	39,000	22,000

Sufficient space must be provided around this appliance to provide air for combustion and ventilation. Any alterations to this unit or its controls may be hazardous.

Do not install this heater in bedrooms or bathrooms.

These instructions should be studied carefully before the installation and operation of this unit.

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.

The installation and repair of this unit should be conducted by a licensed or qualified service person.

WARNING: This appliance is only for installation in a solid fuel burning fireplace made of noncombustible materials or approved ventless firebox enclosure.

This appliance must be kept clear from combustible materials, gasoline or other flammable vapors and liquids.

Solid fuels should not be burned in a fireplace where an unvented room heater is installed.

Keep burner and control compartment clean. See Installation and Operating Instructions accompanying heater.

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

Children should be supervised when they are in the same room with the appliance.

All people should be notified of the high surface temperatures of the system to avoid burns or clothing ignition.

This system should be inspected upon installation and annually by a professional service person. It is necessary to keep controls, burner and air passageways clear of any debris.

Do not place any combustible material on or around the appliance.

Do not use this appliance if any part has been submerged 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.

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 (4.8m³ 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.

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 Gas Code, ANSI Z223.1, 1992, Section 5.3.

This appliance is equipped with an ODS (oxygen depletion sensor) pilot light safety system that turns off the appliance if enough fresh air is not available. Additional ventilation is obtained by opening a door to another room or opening a window.

Always ensure that there is proper ventilation from the area the system is operating in.

Any outside air ducts and/or ash dumps in the fireplace shall be permanently closed at time of appliance installation.

This appliance must be used with glass doors in the OPEN position.

A fireplace screen with an opening for combustion air must be in place when the appliance is operating, unless other provisions for combustion air are provided.

IMPORTANT: During the manufacturing process this appliance is treated with certain coloring agents. These agents are not harmful, but may produce annoying smoke and smell as they are burned off. This is a temporary occurrence that ceases after 4 to 6 hours of use. During the "burning off" period, provide ventilation by opening windows, doors and the chimney flue to allow odors to dissipate. Any remaining odors will burn off with continued use.

WARNING: This appliance cannot be converted to a gas other than the type for which it was made at the factory. Operation of this appliance on gases for which it is not equipped may be hazardous. See identification plate for gas type designation.

Unpacking

Unpack the appliance carefully and inspect for missing parts or damages that may have occurred during shipping. If any part of the appliance is missing or damaged, please notify Sure Heat Manufacturing at (770) 422-8008. An incomplete or damaged appliance may be hazardous. **DO NOT INSTALL A DAMAGED OR INCOMPLETE APPLIANCE.**

Fireplace Preparation

The fireplace needs to be properly prepared before installing this fireplace unit.

1. Turn off gas supply to the fireplace.
2. Clean chimney and fireplace floor of any combustible material to limit the smell from the system.

WARNING: Before installing in a solid fuel burning fireplace, the chimney flue and firebox must be cleaned of soot, creosote, ashes and loose paint by a qualified chimney cleaner.

Unit Placement

Place the entire unit system in the center of the fireplace to allow proper air flow on all sides of the unit.

Gas Piping and Gas Pressure Requirements

Check the type of gas that is supplied to your fireplace. Use only the gas type indicated on the heater's rating plate. **— If the gas listed on the plate is not your type of gas supply, DO NOT INSTALL THE SYSTEM.** Contact your dealer for the proper model.

All gas piping must be installed to comply with local and national fuel gas codes. Do not use flexible hose unless it is allowed by local codes. Compounds used on threaded joints of gas piping must be resistant to the action of LP gas.

The gas supply line to the fireplace should not be less than 1/2" inside dimension.

The gas supply must be of sufficient size to provide a minimum natural gas pressure of 7 inches water column for natural gas or 11 inches for L.P. gas. The maximum inlet gas pressure to the appliance must not exceed 10 inches for natural gas and 13 inches for L.P. gas. If this appliance is to be supplied with L.P. gas the tank or bottle supplying the gas must have a regulator that reduces gas pressure between 11 and 13 inches water column.

Include a manual shutoff valve and union in the line so the appliance may be disconnected for servicing. Provide a 1/8" NPT plugged tapping for pressure gauge connection between shutoff valve and the appliance.

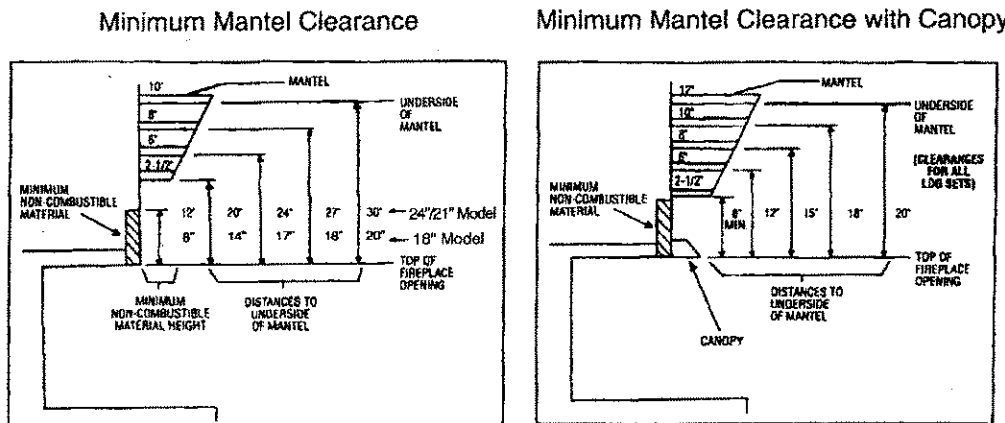
Test for leaks using soap and water solution after completing the connection. **DO NOT USE OPEN FLAME!**

WARNING: The appliance and its individual shutoff 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 (3.5kPa). The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig. Pressures in excess of 1/2 psig will cause damage to the unit.

Fireplace Clearances

To guarantee safe installation into a noncombustible fireplace, certain space requirements must be fulfilled.

1. The clearance from the side of the unit to any combustible wall should not be less than 15 1/2 inches.
2. The clearance from the ceiling to the top of the fireplace opening should not be less than 42 inches.
3. The minimum clearance to combustible items in front of the heater is 36 inches.
4. For any fireplace in which this unit is installed, there are certain mantel clearance requirements that must be met.



You must have non combustible material(s) above the fireplace opening. Non combustible materials (such as slate, marble, tile, etc.) must be at least 1/2 inch thick. Some decorative fireplace surrounds (cultured marble) may get discolored from the heat produced by the system. With sheet metal, you must have noncombustible material behind it. If noncombustible material is less than 8" you must install fireplace canopy (Model AMG-100).

Burner Assembly Installation

1. Place your grate/burner assembly in the center of your fireplace.
2. Remove the black iron pipe cap from your gas supply pipe.
NOTE: Hold the gas supply pipe securely with a wrench to prevent it from rotating loose and unthreading from the inner wall connection.
3. Tighten the 1/2" NPT by 3/8" flare fitting on the 1/2" gas supply line using pipe joint compound.
4. Fasten the aluminum tube from the gas supply to the gas inlet at the rear of the heater assembly.
NOTE: The use of a flexible hose to attach the gas supply to the burner assembly may cause the burner to make excess noise.

Log Placement

1. The largest log is placed in the front part of the grate with the notches facing upwards (see Figure 1 and Figure 2).
NOTE: The Front log should be as far to the front of the grate as possible.
2. The second largest log (Log with Burner Notch) is to be placed on the second tier of the grate. (See Figure 1 and Figure 2).
3. The back log is to be placed on the back tier. (See Figure 1 and Figure 2).
4. Place the top logs as shown in Figure 2 and Figure 3. Incorrect log placement can lead to the production of harmful carbon monoxide while the unit is in operation. Be sure that the logs are correctly placed in the notches provided for them. There should be no direct impingement of flames on any of the logs.

WARNING: Failure to position the parts specifically approved with this heater may result in property damage or personal injury.

Models: VFM-18, VFM-24/21, and VFM-30

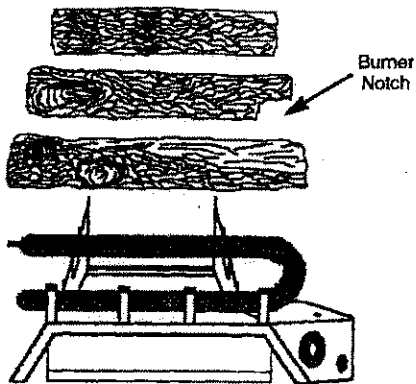


Figure 1

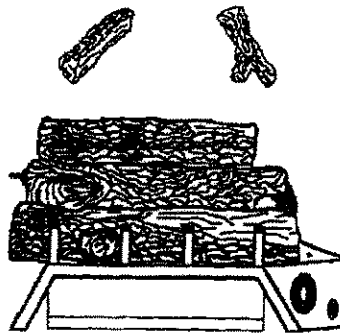


Figure 2

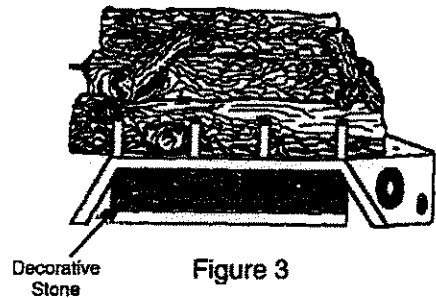


Figure 3

Models: FVfy-18, FVfy-24, and FVfy-30

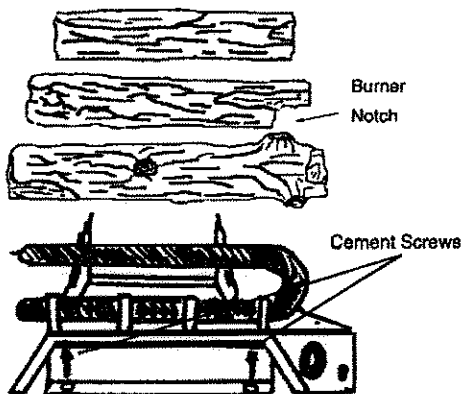


Figure 1

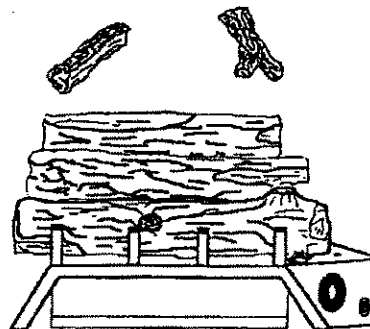


Figure 2

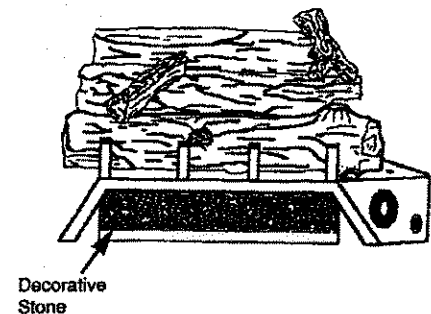


Figure 3

Decorative Stone

The decorative stone from the bag provided should be spread on the bottom tray of the grate. (See Figure 3) The stone should not be placed on or near the burner. Contact with the burner can cause the production of carbon monoxide.

Cement Screws

The cement screws are only used with the lightweight ceramic fiber log sets (Models: FVfy-18, FVfy-24 & FVfy-30) to anchor the system to the fireplace floor. Center the fireplace burner system in the fireplace. With a 5/32" drill bit, drill a hole into the fireplace floor through the two holes provided in the faceplate on the front of the unit. Screw the two cement screws through the faceplate and into the fireplace floor as shown in Figure 1.

Final Checkpoints Before Operation

1. Before setting the logs in place, turn the gas on and check each joint in the gas line with a soap and water solution for leaks. Bubbles indicate leaks. Repair any leaks and recheck before proceeding.

DANGER: DO NOT USE OPEN FLAME TO TEST FOR LEAKS!

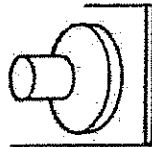
2. It is most convenient to light the pilot and check the operation of the burner without the logs in place. After the final check of the gas supply is complete and the corrections are made, go to the "Lighting Operation" section of this manual.
3. After the pilot flame is established, turn the control knob to the "ON" position. The burner should ignite within four (4) seconds. If the burner does not ignite within four (4) seconds, turn valve to OFF position.
4. With the pilot and burner in operation, check each connection with soap and water solution again for leaks. If any leaks are found, turn gas supply off and correct them immediately.
5. After the gas connections are secure, turn control knob to OFF position. Allow system to cool down.
6. Set the front log, the longest log, in position centered side to side on the front part of the grate with the thin flat surface of the log on the grate.
7. Set the middle log, the second longest log, in position centered side to side on the middle supporting brackets with the thin flat surface of the log on the grate.
8. Set the back log, the third longest log, in position centered side to side on the back supporting brackets with the thin flat surface of the log on the grate. The top log should be positioned according to the notches left available by the bottom logs. See Figure 2 and 3 on page 5 for top log placement.

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 is equipped with an ignition device (piezo) which lights the pilot automatically. If the Piezo fails to light the pilot, turn to "Match Lighting" Instructions on page 7.

PIEZO



- B. BEFORE LIGHTING the unit, smell 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 telephone in your building.
- Immediately call your gas supplier from a neighbor's telephone.
- 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.

- 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. Call a qualified service technician.

WARNING: THE USE OF FORCE OR ATTEMPTED REPAIR MAY RESULT IN A FIRE OR EXPLOSION.

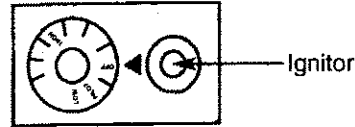
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS FOR MANUALLY CONTROLLED SYSTEM

Model VFM

1. STOP! Read the safety information on the previous page before proceeding.
2. Push and turn the control knob clockwise (↻) to OFF. It is necessary to push the knob in before turning to any position.

CONTROL KNOB



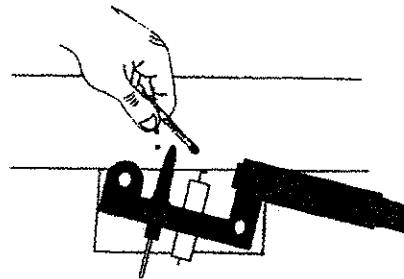
3. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information on page 8. If you do not smell gas, go to the next step.
4. Remove the back and top logs to gain access to the pilot. It is located toward the back of the unit on the right hand side.
5. Push and turn the knob counterclockwise (↺) to PILOT **against** the stop. The word pilot should line up with the ignitor to ensure that you are in the correct position.
6. Position yourself so the pilot can be seen. Push the knob inward fully and hold it in. Immediately push the piezo ignitor button several times. This will cause a spark at the pilot which will ignite the pilot gas. If the pilot does not light immediately, push the ignitor button again, at five (5) second intervals, until the pilot is lit. After the pilot is lit, continue to hold the control knob in for about one (1) minute while the probe warms up. Release the knob and it will pop back out. The pilot should remain lit. If it goes out repeat steps 2 through 6.

MATCH LIGHTING

If the pilot cannot be ignited with the piezo, it can be manually lit with a match. Follow steps 2 through 5. Push the knob in fully and hold it in. Immediately light the pilot with a match. Continue to hold the knob in for about one (1) minute. After one (1) minute, release the knob and it will pop back out. The pilot should remain lit. If it goes out, repeat steps 2 through 6.

- If the control knob does not pop out when released, STOP and immediately call your service technician or gas supplier.
- If the pilot will not stay lit after several tries, turn the gas control knob clockwise (↻) to OFF and call your service technician or gas supplier.

7. Replace the back and top logs in their proper position.
8. Push and turn the knob counterclockwise (↺) to low then all the way to high. After one (1) minute adjust the knob between HI or LO as desired.



TO TURN GAS OFF TO APPLIANCE

1. Push and turn knob clockwise (↻) to OFF.

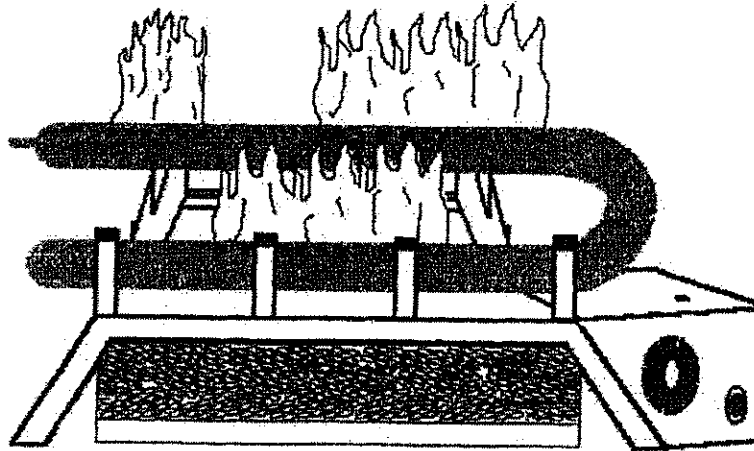
Flame Check

A periodic visual check of the flames should be made. The pilot flame should always be present when the appliance is in operation.

the flames should be yellow in color and should not be impinging on any of the logs.

For your safety, the appliance is equipped with an ODS (oxygen depletion sensor) system. The system senses the oxygen in the atmosphere and switches off the gas supply in case the level of oxygen falls below a safe level.

VFM FLAME CHARACTERISTICS



FINAL CHECKS

Things To Do

1. Use only the type of gas for which your system is designed. The type of gas the system is equipped for is stamped on the rating plate.
2. Install appliance and all gas piping according to local codes.
3. Disconnect or isolate the system during line pressure testing.
4. Make sure 1/2" gas line is run to the fireplace to ensure sufficient gas volume to the appliance.
5. Install the system only in a fireplace suitable for burning solid fuel.
6. Use pipe dope on threaded joints of gas piping that is resistant to the action of LP gas.
7. Install a manual shutoff valve, union and 1/8" NPT plugged pressure tap ahead of controls.
8. Use soap and water solution when checking for leaks.
9. Keep the area around the appliance clear and free of combustible materials, gasoline and any flammable or explosive material.
10. Follow the lighting and operation procedures given in this manual.
11. Periodically inspect the pilot and burner flame.
12. Clean the appliance as described in this manual.
13. Keep the logs properly positioned.

Things NOT To Do

- 1. Do not modify or alter this appliance in any way.
- 2. Do not use this appliance with any gas other than that for which it is equipped.
- 3. Do not install this appliance in any area where gasoline or any flammable material is used or stored.
- 4. Do not use open flame to check for leaks.
- 5. Do not operate this system with glass doors in the closed position.
- 6. Do not block or restrict any grilles of a factory built fireplace in which this appliance is installed.
- 7. Do not burn solid fuels in a fireplace where this appliance is installed.

Maintenance of the System

Under normal use this appliance will require only limited cleaning. Constant air flow through this appliance will cause dust to collect on the burners, base and logs. An excessive build-up of dust can cause the pilot and burners to operate incorrectly and produce high levels of carbon monoxide, a poisonous gas. This unit should be cleaned about once a month.

To clean the burner and base, turn the control to OFF and allow the system to cool down. Remove top logs and bottom logs very carefully. Vacuum or brush away all dust and lint from the system. Do not use any cleaning fluids to clean the logs or any other part of the appliance.

Replace the logs in their proper position and relight the pilot. At least once a year, the log set and all gas piping should be inspected by a qualified service person.

WARNING

When used without fresh air, appliance may give off **carbon monoxide**, an odorless, poisonous gas.

OPEN WINDOW AN INCH OR TWO FOR FRESH AIR WHEN USING APPLIANCE.

This appliance has a Pilot Light Safety System that turns the appliance off if enough fresh air is not available.

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If appliance shuts off, do not relight until you provide fresh air. If appliance continues to shut off, have it serviced by a qualified technician. 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 experience any of these symptoms, appliance may not be working properly. **Get fresh air at once!** Have appliance serviced by a qualified service technician.

Some individuals, pregnant women, persons with heart or lung disorders, anemia, those under the influence of alcohol or those at high altitudes are more likely to be affected by carbon monoxide than others.

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

Adults and especially children should be alerted to the hazard of high surface temperatures and should be kept away to avoid burns or clothing ignition.

Young children should be carefully supervised when in the same room as the appliance.

Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

Do not place clothing or other flammable material on or near appliance.

Installation and repair should only be performed by a qualified service technician.

The appliance should be inspected before use and at least once a year by a qualified service technician.

More frequent cleaning may be required due to excessive lint from some carpeting, bedding or other materials. It is imperative that control compartments, burners and circulating air passageways of this appliance be kept clean.

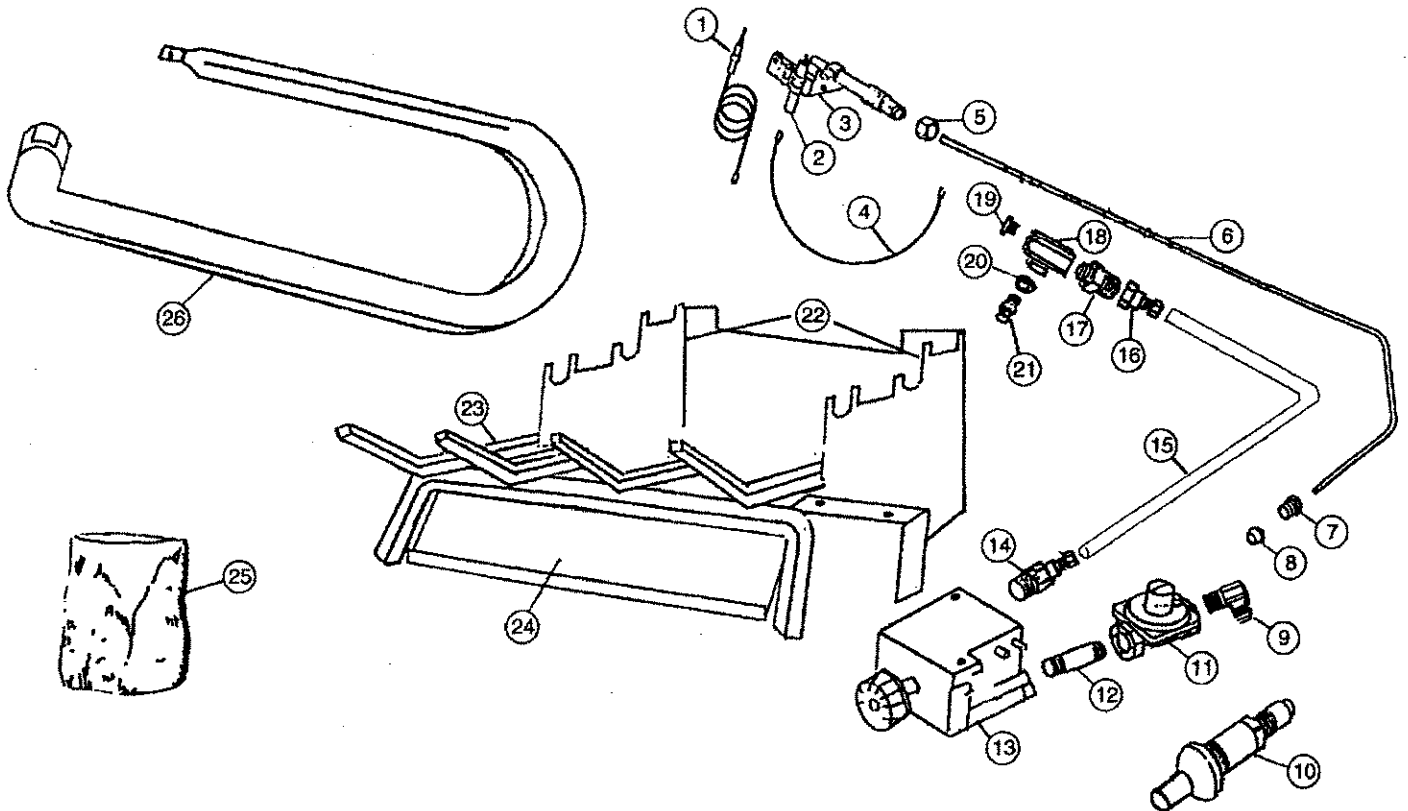
WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.

WARNING: Do not use a blower insert, heat exchanger insert or other accessories not approved for use with this heater.

WARNING: Any change to this appliance or its controls can be dangerous.

Parts List

Ref. #	Part Name-VFM (18", 24"/21" & 30")	Qty.	Ref. #	Part Name-VFM (18", 24"/21" & 30")	Qty.
1	Thermocouple	1	14	Fitting-3/8" Compression Elbow	1
2	Electrode	1	15	Tubing-3/8" O.D.	1
3	ODS Pilot System	1	16	Fitting-3/8" Compression Female Straight	1
4	16" Wire	1	17	Fitting-3/8" x 3/16" Reducer	1
5	3/16" Compression Fitting	1	18	Fitting-3/16" Tee	1
6	Tubing 3/16" O.D.	1	19	Fitting-Plug (Pressure Tap)	1
7	Compression Nut	1	20	Washer	1
8	Compression Sleeve	1	21	Orifice	1
9	Fitting-3/8" Male Union	1	22	Back Log Standoffs	2
10	Piezo Starter	1	23	Grate Assembly	1
11	Main Regulator	1	24	Decorative Stone Shelf	1
12	Pipe Nipple	1	25	Decorative Stone - (1 Bag)	1
13	Control valve	1	26	Burner	1



NOTES

LIMITED LIFETIME WARRANTY

Limited Lifetime Warranty shall apply to the original purchaser at the original installation point only

All logs are guaranteed for the lifetime of the original purchaser against destruction by fire or heat.

The burner assembly system is guaranteed for a period of three (3) years from the date of purchase and will be replaced for freight cost only.

General Warranty: This warranty does not apply in the case of improper installation, neglect, accident, misuse or as a result of modifications of the original product.

All costs for removal and reinstallation are the expressed responsibility of the purchaser.

Repair, replacement, or service to defective part or parts to be secured at outlet of original purchase within first 30 days of purchase. Thereafter, with valid warranty registration and proof of purchase, ship defective part prepaid and insured in original carton to Sure Heat Manufacturing, 3130 Moon Station Road, Kennesaw, GA 30144
Goods returned improperly packaged are the sole responsibility of purchaser.

Size: ○ 18" ○ 24"/21" ○ 30"

Model:

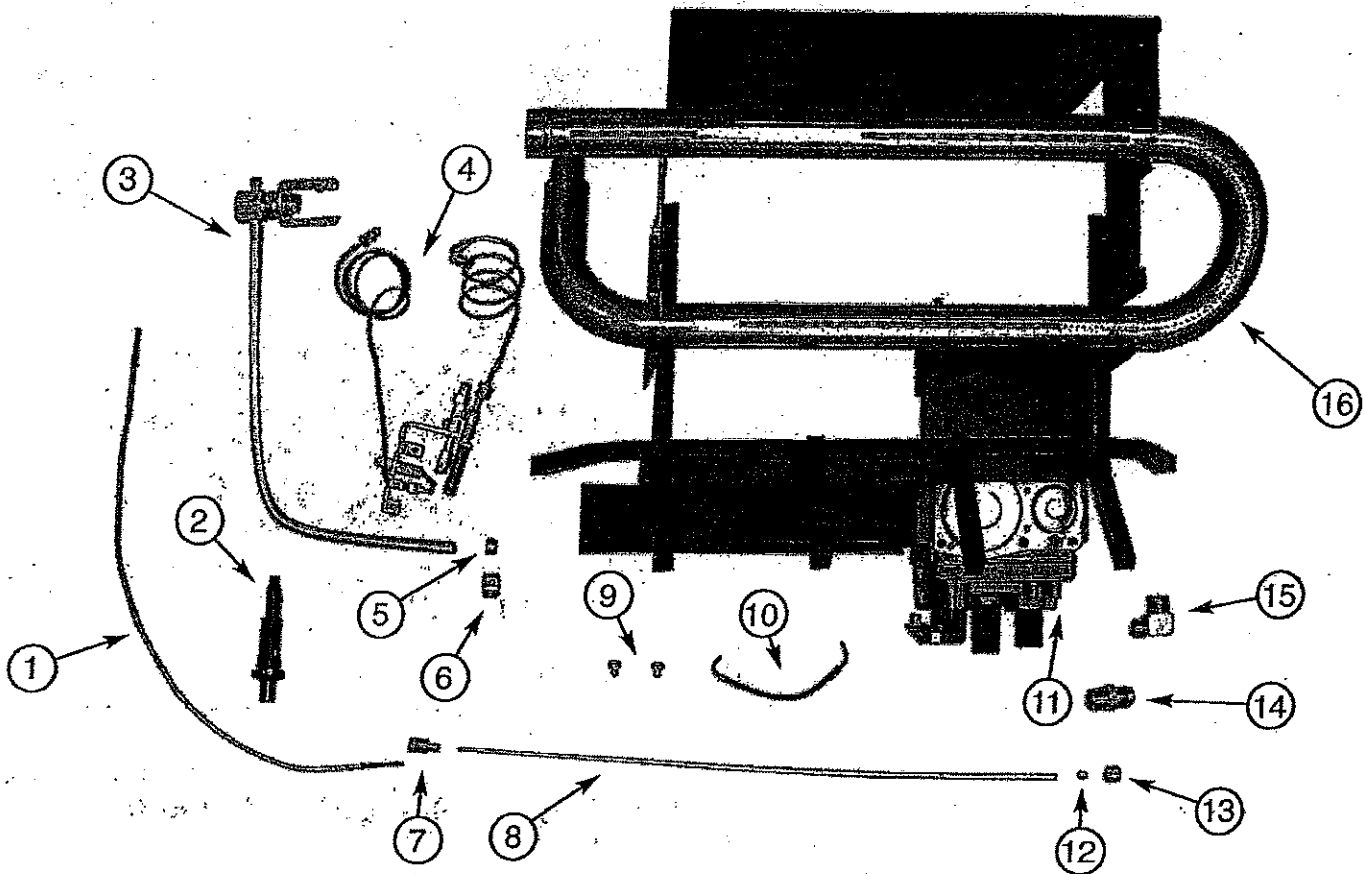
Name _____ Phone (____) _____

A d d r e s s

Please photocopy and return to Sure Heat within 14 days of purchase

If you have other questions, please contact Customer Service Hotline
(770) 422-8008

IVFMV Burner Parts List - Front Mount Valve



- | | | |
|-----|---------------|-------------------------------------|
| 1. | RMH-120-00021 | 18" Piezo Wire |
| 2. | RMH-120-90945 | Piezo Starter |
| 3. | RMH-120-09004 | Burner Supply Tube LP |
| | RMH-120-09003 | Burner Supply Tube NG |
| 4. | RMH-120-08421 | ODS Pilot LP |
| | RMH-120-08419 | ODS Pilot NG |
| 5. | RMH-120-00026 | 3/8" Compression Sleeve |
| 6. | RMH-120-00040 | 3/8" Compression Nut |
| | | Supplied With Valve (#11) |
| | WIP-120-90432 | 3/16" Pilot Supply Tube |
| | RMH-120-00618 | Valve Mount Screws |
| 9. | WIP-722-00003 | Jumper Wire |
| 10. | RMH-120-00544 | Valve Nova LP |
| | RMH-120-00547 | Valve Nova NG |
| 11. | RMH-120-00028 | 3/16" Compression Sleeve |
| 12. | RMH-120-00029 | 3/16" Compression Nut |
| 13. | RMH-120-00050 | Connector 3/8" Flare
x 3/8" Male |
| | RMH-120-00002 | 3/8" Comp x 3/8" Elbow |
| | WIP-120-90536 | 18" Frame and Burner (Front) |
| | WIP-120-90524 | 24" Frame and Burner (Front) |

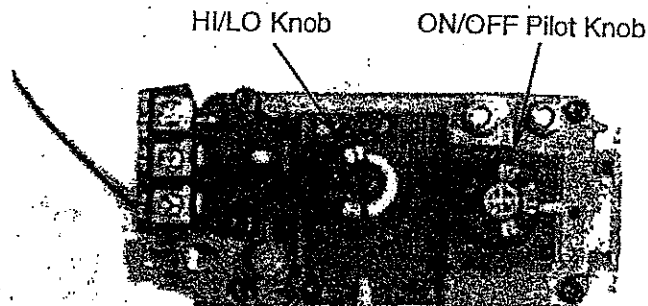
Not Shown:

- | | |
|---------------|-----------------------------|
| WIP-120-90414 | 18" 3/8" Burner Supply Tube |
| RMP-122-00062 | ODS Mount Nuts |

LIGHTING INSTRUCTIONS FOR MILLIVOLT CONTROLLED SYSTEM

MODEL: IVFMV18, 24, 30

1. **STOP!** Read the safety information label.
2. If the unit is installed with a switch, turn off the switch.
3. Turn off all electrical power to the unit.
4. Push in gas control knob slightly and turn clockwise to "OFF".
5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow B on the safety information page. If you don't smell gas, go on to the next step.
6. The pilot is located by the main burner.
7. Push in the gas control knob slightly and turn counter-clockwise to "Pilot".
8. Push in control knob all the way and hold in. Immediately light the pilot with a match until the pilot flame appears. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release the knob and it will pop back out. 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.
 - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician.
9. Push in the gas control knob slightly and turn counter-clockwise to "ON".
10. Wait 30 seconds for thermocouple to heat up and then turn on the switch.
11. This valve is equipped with a HI/LO feature. Set unit input as desired. The valve is also equipped with a safety lockout feature that will prevent the relighting of the pilot after it is extinguished. You must wait one (1) minute for valve to reset itself before relighting the pilot.



TO TURN OFF GAS TO APPLIANCE

1. Turn off the switch.
2. Push in gas control knob slightly and turn clockwise to "OFF". DO NOT FORCE.

WIRING INSTRUCTIONS FOR MILLIVOLT CONTROLLED SYSTEMS

MODEL: IVFMV18, 24, 30

FOR MANUAL OPERATION

The millivolt valve comes with a jumper wire pre-installed for manual operation. (Figure 1) This allows use of the unit by manually turning the control knob to "ON" and then adjusting the flame height with the HI/LO knob.

FOR USE WITH A WALL SWITCH OR REMOTE HANDSET

1. Remove jumper wire from the top and bottom terminals. (Figure 2)
2. Install the wall switch or remote sensor wires to the top and bottom terminals. (Figure 3)

NOTE: Either the push tabs or screw terminals may be used to attach wires.

Figure 1. Jumper Wire

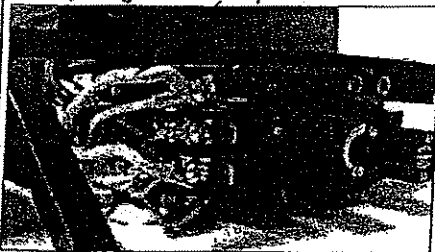
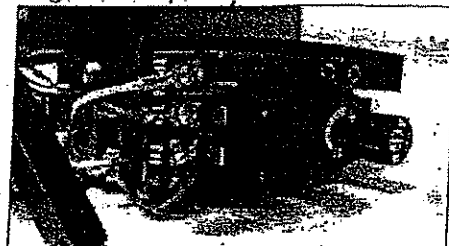


Figure 2. Remove Jumper Wire



Figure 3. Top and Bottom Terminals



TO TURN OFF GAS TO APPLIANCE

1. Turn off the switch.
2. Push in gas control knob slightly and turn clockwise to "OFF". DO NOT FORCE.

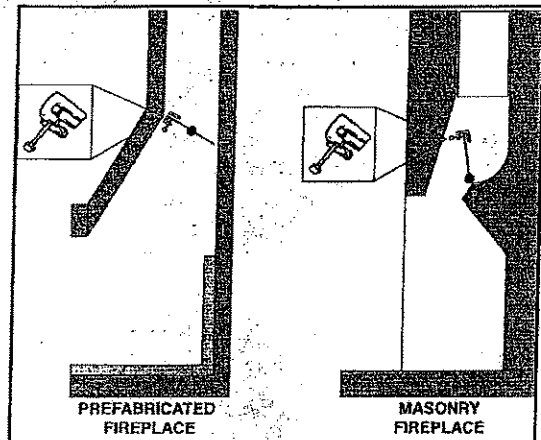
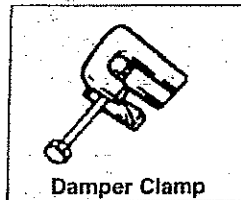
NOTICE

Do not return to retailer if a log is broken or parts are missing.
Please call our Customer Service Department at

DAMPER CLAMP INSTRUCTIONS

Reasons for installing a Damper Clamp:

- Vents water vapor to prevent condensation build up.
- Vents initial burn odor (Set may need up to 10 hours to cure.)
- Allows for more complete air flow around the heater.
- There is no significant heat loss due to a 1" opening.



It is optional to keep the fireplace flue system open about one (1) inch.

STANDARD MAINTENANCE

Vent Free Gas Logs

There is a small hole (about the size of a pen tip) through the shaft of the pilot light. This is located about 1 inch back from the mouth. It runs horizontally through the shaft. Take a small brush (old toothbrush, etc.) and brush that hole and the surrounding area really well. Use a vacuum hose to clean any soot around the pilot area.

This cleans out the oxygen depletion sensor. If there is any debris (soot, dust, spider webs, etc.) in this area, it will not sense enough oxygen to run the unit. This should be done at least once a year as standard maintenance.

Clean the pilot opening with a dry q-tip.

If your unit shuts down and the above does not work, please do the following:

Locate your thermocouple. Follow the copper line to the back of the control box. It is connected with a 3/16" nut. Disconnect and clean with a dry paper towel. Reconnect and tighten finger tight - then 1/4 turn with a wrench.

For further assistance, please contact our customer service department at 1-800-229-5647

IMPORTANT: It is very important that the top logs are placed as shown so **NO FLAMES TOUCH THE LOGS**. Black soot on a log indicates that flames are touching that log. If flames are touching the logs, simply move the logs out of the flames.

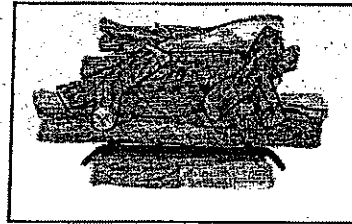
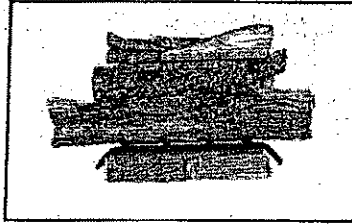
WARNING: Carbon Monoxide will be produced if the flames hit the logs. Proper log placement is shown on opposite page. Refer to pictures. If you have any questions, please call (800) 229-5647 for customer service.

RM11 150 001610

Proper Log Placement For Sure Heat Vent-Free Gas Logs

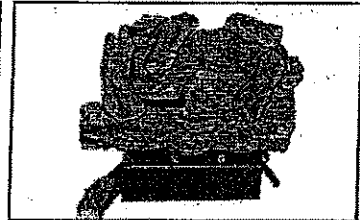
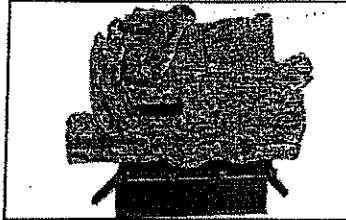
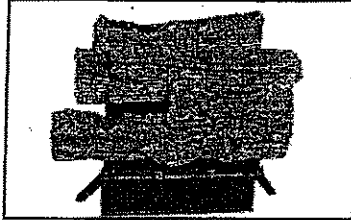
SPO - SAVANNAH PREMIUM VENT FREE LOGS

Universal
Size

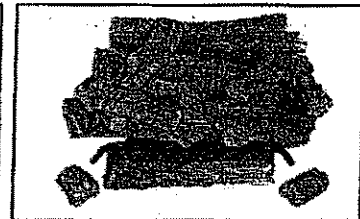
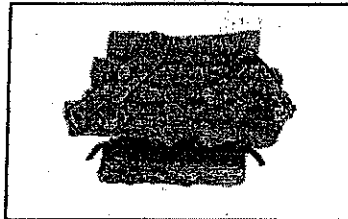
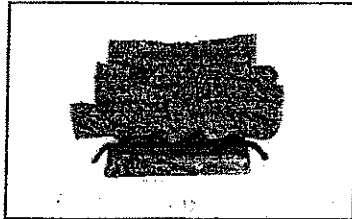


SVO - SAVANNAH OAK VENT FREE LOGS

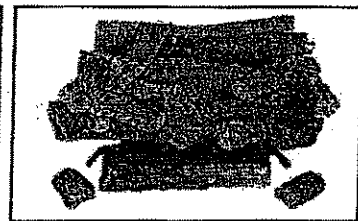
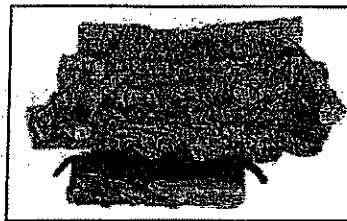
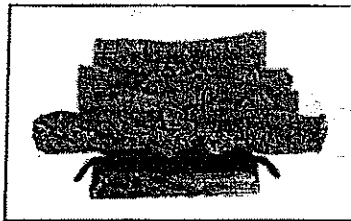
18"



24"

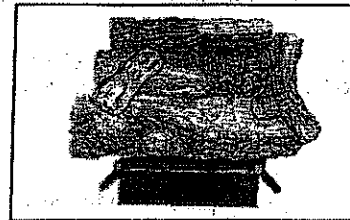
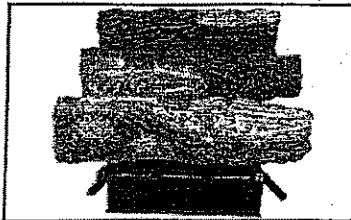


30"

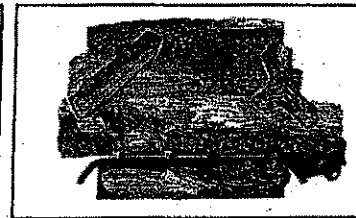
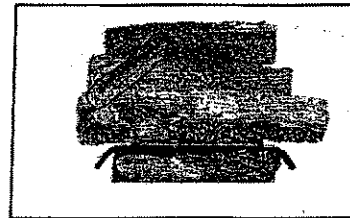
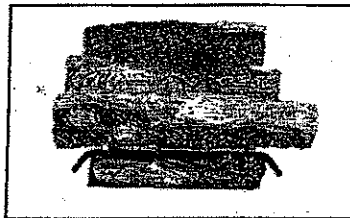


CVO - CHARLESTON OAK VENT FREE LOGS

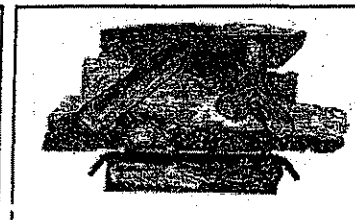
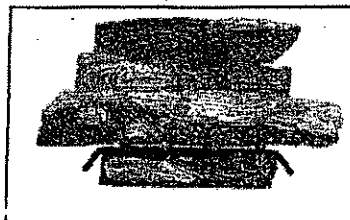
18"



24"



30"



RHH-130-0CD1013