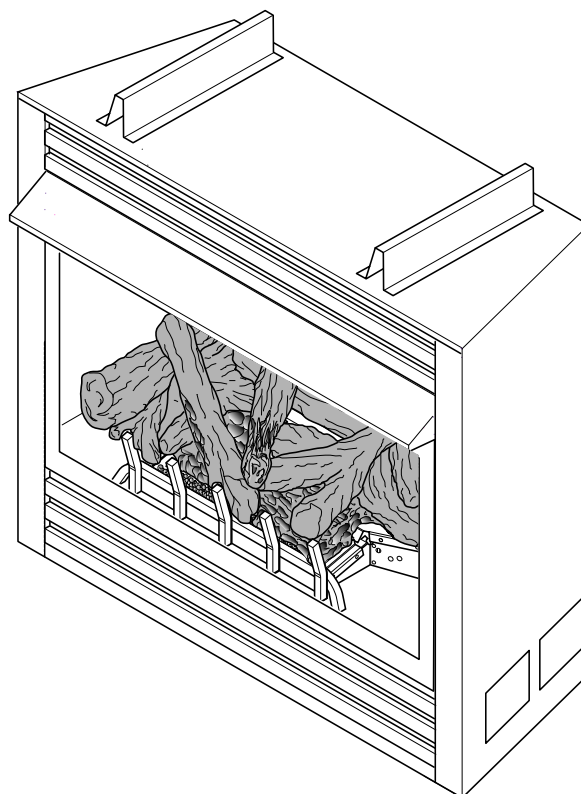


VENT-FREE FIREPLACE SYSTEMS

INSTALLATION AND OPERATING INSTRUCTIONS

MODEL:
MCFS36
Milli-Volt



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 10.

WARNINGS

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from 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.

READ AND SAVE THESE INSTRUCTIONS

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IMPORTANT SAFETY INFORMATION

INSTALLER

Please leave these instructions with the owner.

OWNER

Please retain these instructions for future reference.

IMPORTANT

Read these instructions carefully before installing or trying to operate this vent-free gas heater.

WARNING

- **Any change to this heater or its controls can be dangerous.**
- **Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.**
- **Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.**
- **Do not use a blower insert, heat exchanger insert or other accessory, not approved for use with this heater where applicable.**

1. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
2. Children and adults should be alerted to the hazard of high surface temperature and should stay away to avoid burns or clothing ignition.
3. Young children should be carefully supervised when they are in the same room with the appliance.
4. Do not place clothing or other flammable material on or near the appliance.
5. Any safety screen or guard removed for servicing an appliance, must be replaced prior to operating the heater.
6. Installation and repair should be done by a qualified service person.
7. To prevent malfunction and/or sooting, an unvented gas heater should be cleaned before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways be kept clean.
8. **CARBON MONOXIDE POISONING:** Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Have the heater serviced as it may not be operating properly.
9. The installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code, ANSI Z223.1/NFPA54.**
10. This unit complies with ANSI Z21.11.2-2001 Unvented Heaters.
11. Do not install this heater in a bathroom or bedroom.
12. Correct installation of the ceramic fiber logs, proper location of the heater, and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace. See log placement instructions for proper installation.
13. 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. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur.
14. **Caution:** Candles, incense, oil lamps, etc. produce combustion byproducts including soot. Vent-free appliances will not filter or clean soot produced by these types of products. In addition, the smoke and/or aromatics (scents) may be reburnt in the vent-free appliance which can produce odors. It is recommended to minimize the use of candles, incense, etc. while the vent-free appliance is in operation.
15. 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. See page 10.
16. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Continued on page 4

IMPORTANT SAFETY INFORMATION

Continued from page 3

17. Unvented gas heaters are a supplemental zone heater. They are not intended to be the primary heating appliance.
18. Unvented gas heaters emit moisture into the living area. In most homes of average construction, this does not pose a problem. In houses of extremely tight construction, additional mechanical ventilation is recommended.
19. During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last two to three hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.
20. Input ratings are shown in BTU per hour and are for elevations up to 2,000 feet. For elevations above 2,000 feet, input ratings should be reduced 4 percent for each 1,000 feet above sea level. Refer to the National Fuel Gas Code.
21. The appliance and its appliance main gas 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 (3.5 kPa).
22. The appliance must be isolated from gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).
23. Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
24. Never burn solid fuels in a fireplace where a unvented room heater is installed.
25. Always have a fireplace screen in place when the appliance is in operation and, unless other provisions for combustion air are provided, the screen must have an opening(s) for induction of combustion air.

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.

WARNING

Never connect unit to private (non-utility) gas wells. This gas is commonly known as wellhead gas.



www.nficertified.org

We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as Gas Specialists.

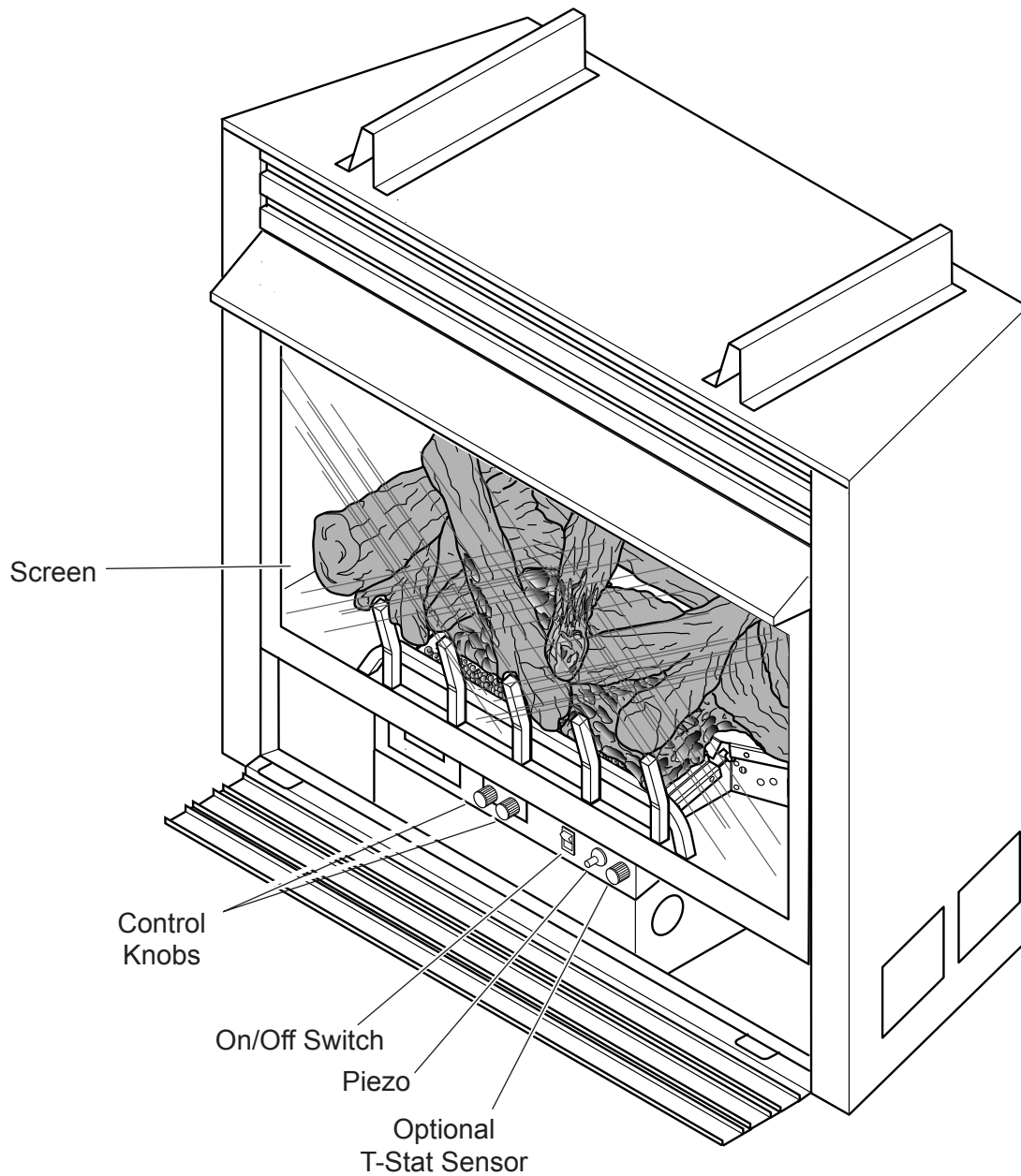


Figure 1 - Unvented Gas Heater with Control Access Door Open

This vent-free fireplace must be mounted on the floor or on the optional fireplace hearth.

OPERATION

This unvented gas heater requires no outside venting and burns cleanly with high heating efficiency.

This zero-clearance unvented gas heater can be installed against (or recessed into) any wall that is accessible to a gas line.

PRODUCT FEATURES

NATURAL GAS

Milli-Volt Pressure

Regulator Pressure Setting: 3.5" w.c.
Pilot Regulator: 3.5" w.c.
Gas Inlet Pressure: Max. 10 1/2" w. c.
Min. 5" w.c.

Model Number	Gas Rate	
	Max BTU/Hr	Min BTU/Hr
MCFS36NVA	36,000	24,000

PROPANE/LPG

Note: An external regulator is required to reduce supply pressure to a maximum of 13" w.c.

Milli-Volt

Regulator Pressure Setting: 10" w.c.
Gas Inlet Pressure: Max. 13" w.c.
Min. 11" w.c.

Model Number	Gas Rate	
	Max BTU/Hr	Min BTU/Hr
MCFS36PVA	36,000	24,000

IGNITION CONTROLS

Piezo ignitor allows ignition of the pilot without the use of matches or batteries.

Milli-Volt control has four (4) positions:

- OFF** - All gas to the gas logs is shut off at the valve.
- IGN** - Valve position to light/maintain a standing pilot.
- ON** - Valve position to turn ON/OFF log set with remote switch/thermostat.
- LOW/HI** - Variable position to control flame height (heat output). Both front and rear burners are in operation to provide realistic glow and yellow flame.

PILOT

The gas log heater is fitted with a specially designed safety pilot light (ODS assembly) which senses the amount of oxygen available in the room and shuts the gas log heater off if the oxygen level begins to drop below a satisfactory level. The pilot can only be relit when adequate fresh air is available.

THERMAL GENERATOR

The milli-volt gas log pilot is fitted with a milli-volt generator to provide power for remote activation.

MAKE SURE YOU HAVE RECEIVED ALL PARTS:

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

- Unvented gas log grate/burner assembly
- Installation/operating instructions
- Ceramic fiber logs
- Two (2) radiant face plates
- Plastic bag containing crushed volcanic rock
- Two (2) anchoring screws
- Canopy and five (5) mounting screws

The milli-volt controlled version of this heater is the only style designed to be operated with optional devices for ON/OFF functions. The following options may be used with the milli-volt controlled heater. These options are not packaged with the log set.

- Hand held Remote with receiver
- Wall switch with 15' wire
- Wall thermostat with 15' wire
- Hand held Thermostat Remote with receiver
- Thermostat Sensor

WARNING

- **Handle the gas log burner assembly by the grate only. Do not pick the unit up by the burners.**
- **Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile — handle with care.**

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

WHAT YOU WILL NEED FOR INSTALLATION:

You must have the following items available before proceeding with installation:

- External regulator (for propane/LPG and 1/2 lb. and greater natural gas systems only)
- Piping which complies with local codes
- Pipe wrench or appropriate size crescent wrench set
- Pipe sealant approved for use with propane/LPG (Resistant to sulfur compounds)
- Sediment trap (optional but recommended)
- Manual shutoff valve
- Tee joint.
- Drill with 5/32 bit (.15625)
- Phillips head screwdriver

GENERAL INSTALLATION INFORMATION

In planning the installation for the fireplace it is necessary to determine where the unit is to be installed and whether optional accessories are desired. Gas supply piping should also be planned. The following steps represent the normal sequence of installation. Each installation is unique, however, and might require a different sequence.

1. Position fireplace in desired location. Refer to the "Location of Fireplace" and "Clearances and Height Requirements", and "Firebox Framing" sections found in this manual. **Note: Be sure all packing material has been removed from underside of the unit.**
2. Install canopy and logs per instructions found in this manual. The canopy **MUST** be installed for safe operation of the unit.
3. Field wire main power supply to units with fan kit. Refer to the "Electrical Section" found in this manual. (Electrical connections should only be performed by an experienced, licensed certified tradesman).
4. Install optional ON/OFF kit on units with milli-volt control. Refer to installation instructions included with the kit and also refer to the "Electrical Wiring" section found in this manual.
5. Plumb gas line. Refer to the "Connecting the Gas" section found in this manual. (Gas connections should only be performed by an experienced, licensed / certified tradesman).
6. Complete finish wall material and/or surround.

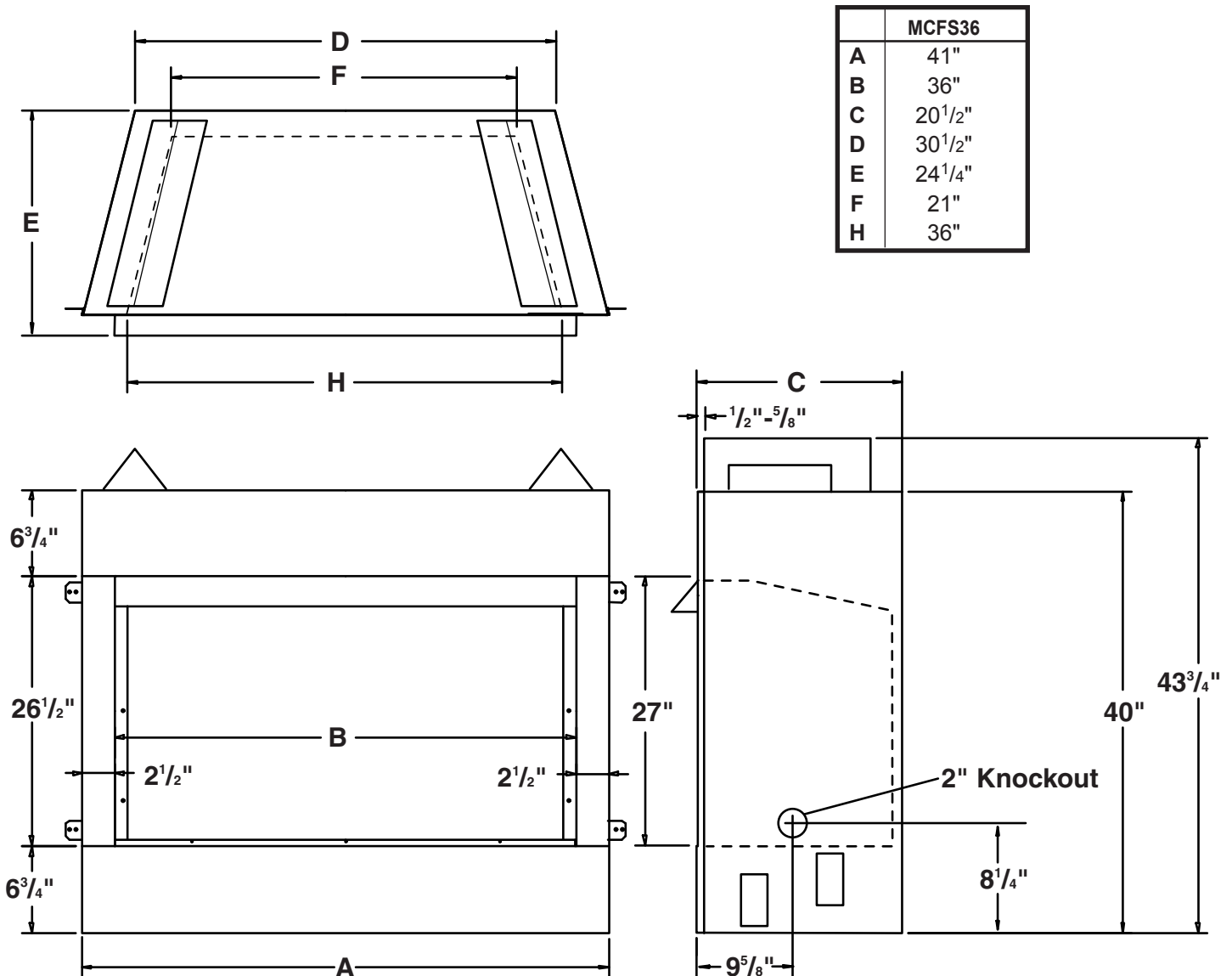


Figure 2 - Firebox Dimensions with Screen and Log Sets Removed

CODES

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

American National Standards Institute, Inc.

1430 Broadway
New York, NY 10018

or

National Fire Protection Association, Inc.

Batterymarch Park
Quincy, MA 02269

WARNING

Do not install the heater ...

- **Where curtains, furniture, clothing, or other flammable objects are less than 42" from the front of the heater.**
- **In high traffic areas.**
- **In windy or drafty areas.**

ADEQUATE COMBUSTION AND VENTILATION AIR

This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, (ANSI Z223.1/NFPA54), 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.

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 1 perm (6 x 10¹¹ kg per pa/sec-m²) or less with openings gasketed or sealed;
- b) weather striping 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.

GENERAL INSTALLATION INFORMATION

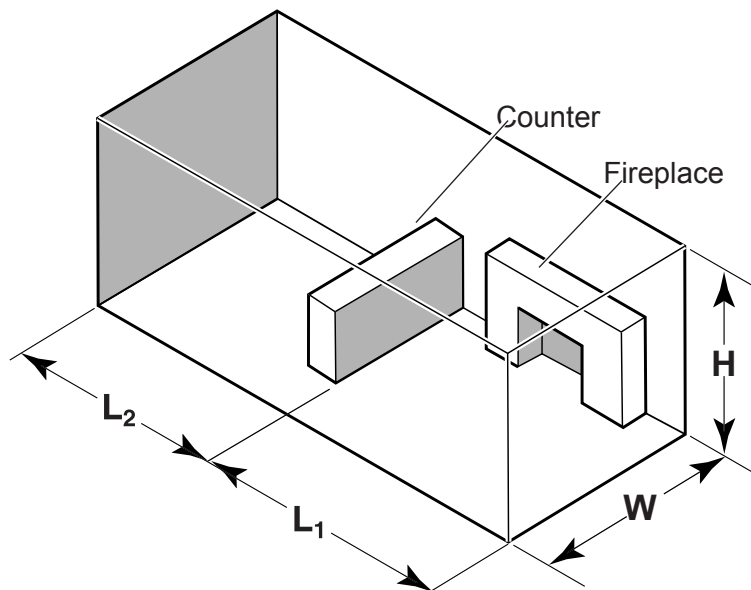


Figure 3 - Example of a Large Room with 1/2 Wall Divider

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

$$\text{BTU/Hr} = \frac{(L_1 + L_2) \text{ Ft} \times (W) \text{ Ft} \times (H) \text{ Ft}}{50} \times 1000$$

Consider two connecting rooms with an open area between, with the following dimensions:

$$L_1 = 15\frac{1}{2} \text{ Ft.}, L_2 = 12 \text{ Ft.}, W = 12 \text{ Ft.}, H = 8 \text{ Ft.}$$

$$\text{BTU/Hr} = \frac{(15\frac{1}{2} + 12) \times (12) \times (8)}{50} \times 1000 = 52800 \text{ BTU/Hr}$$

If there were a door between the two rooms the calculation would be based only on the room with the heater.

$$\text{BTU/Hr} = \frac{(15\frac{1}{2}) \times (12) \times (8)}{50} \times 1000 = 29760 \text{ BTU/Hr}$$

WARNING

If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1/NFPA54, Section 5.3 or applicable local codes.

REMOVING SCREEN

Remove fireplace screen frame panel by pushing screen frame panel up and out. *See Figure 4.*

WARNING
Do not operate the unit without the screen frame panel and canopy installed.

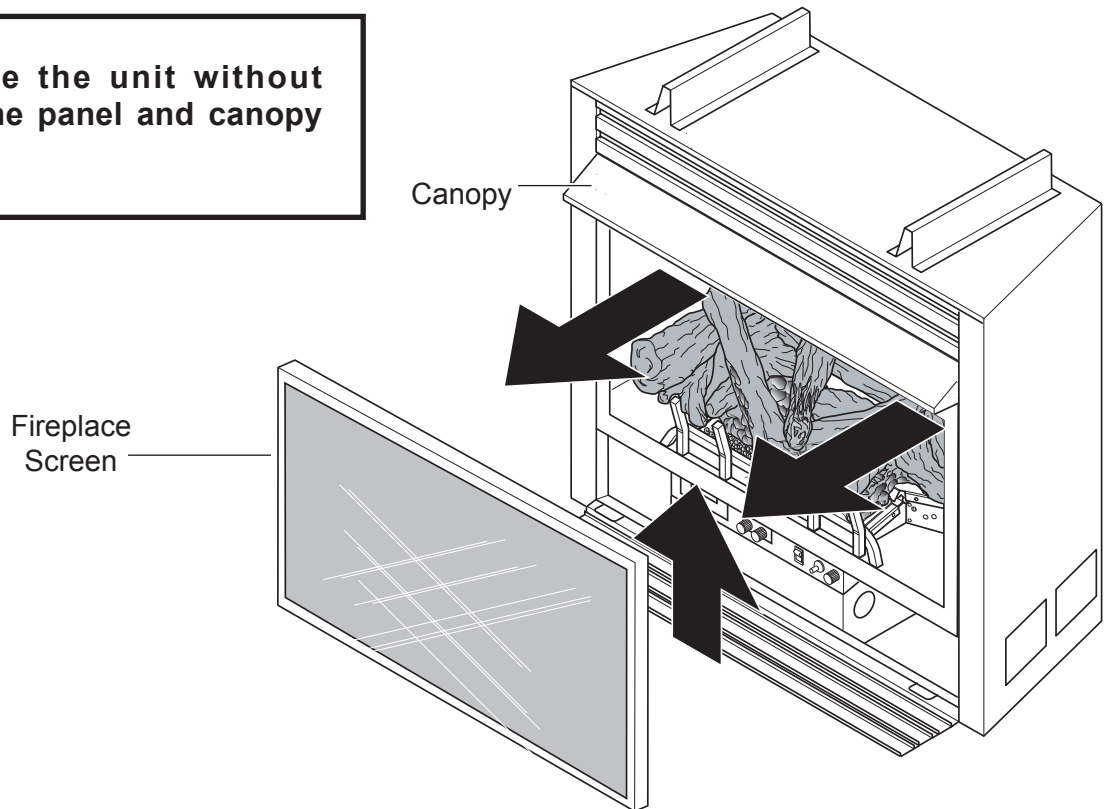


Figure 4 - Removing Fireplace Screen Frame Panel

NOTE: Fireplace screen must be removed to access log box and to install canopy.

INSTALLING CANOPY

1. Remove the fireplace screen as described in the previous section.
2. Align the black canopy with the holes in the top frame assembly. *See Figure 5.*
3. Install the three (3) screws (in owner's manual packaging) which attach the canopy to the top frame assembly. *See Figure 5.*
4. Tighten all screws. Make sure the canopy is level and secure. Install the fireplace screen.

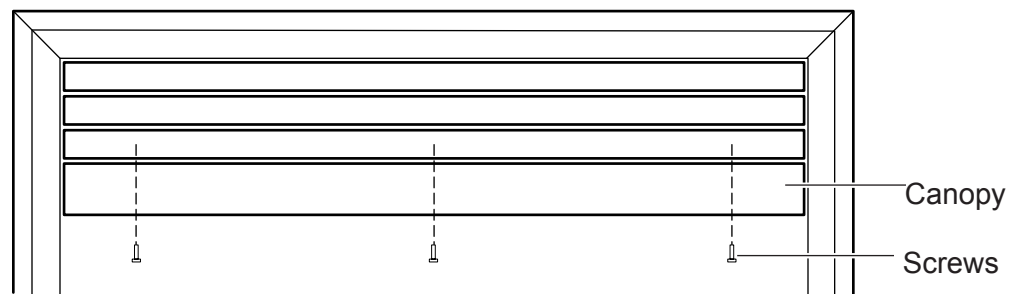


Figure 5 - Canopy Installation

GENERAL INSTALLATION INFORMATION

INSTALLING RADIANT FACE PLATES

1. Remove the two radiant face plates from the uprights on the top of the firebox. Remove packing foam.
2. Snap off the three upper louvers and the three lower louvers as shown in *Figure 6*.
3. Snap on the upper radiant face plate and the lower radiant face plate as shown in *Figure 6*.

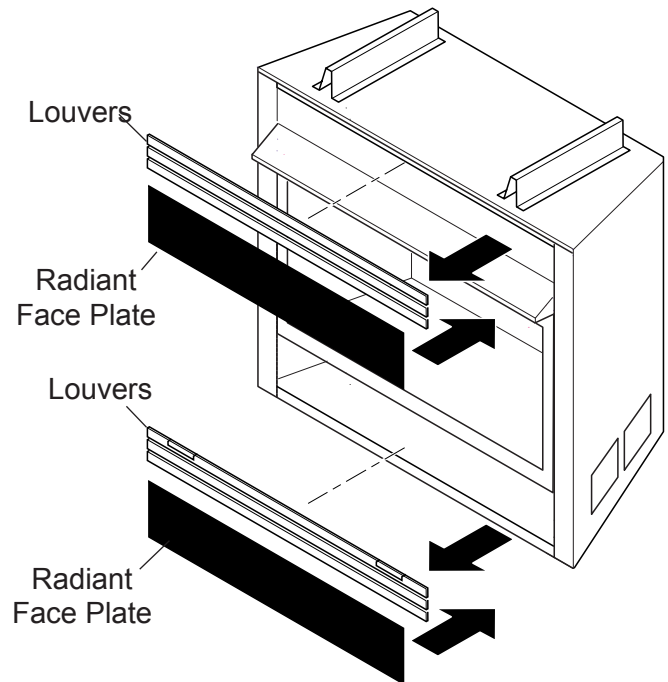


Figure 6 - Installing Radiant Face Plates

LOCATION OF FIREPLACE

Carefully select the best location for installation of your unvented fireplace. The following factors should be taken into consideration.

- Clearance to side wall, ceiling, woodwork and window or other combustibles. Refer to *Clearances and Height Requirements* section on page 13. Minimum clearances to combustibles **must be maintained**.
- Location must not be affected by drafts caused by kitchen exhaust fans, ceiling fans, return air registers for forced air furnaces / air conditioners, windows or doors.
- Installation must provide adequate ventilation and combustion air.
- **DO NOT INSTALL THIS MODEL IN A BEDROOM OR BATHROOM.**
- Location should be out of high traffic areas and away from furniture and draperies due to heat from firebox.
- Never obstruct the front opening of the unvented fireplace or restrict the flow of combustion and ventilation air.
- Minimize modifications to existing construction. See *Figure 7* for location suggestions.
- Do not install in the vicinity where gasoline or other flammable liquids may be stored. The unvented firebox must be kept clear and free from the combustible materials.

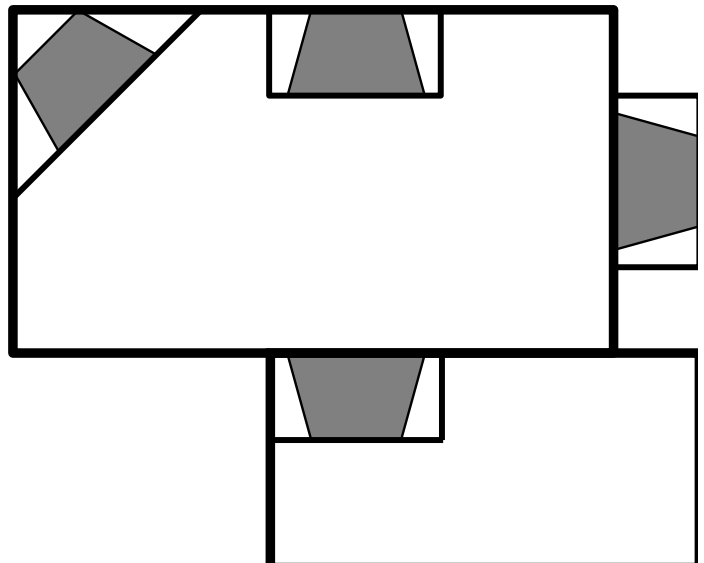


Figure 7 - Suggested Locations

Note: If the unit is mounted on carpeting, tile or combustible material without the hearth, a metal or wooden base covering the entire width and depth of the base must be installed.

CLEARANCES AND HEIGHT REQUIREMENTS

WARNING

The dimensions shown in Figures 8 and 9 and defined in the fireplace manufacturer's instructions are *minimum clearances* to maintain when installing this heater. Left and right clearances are determined when facing the front of the heater.

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

Sidewall and ceiling clearances: The clearance from the inside of the appliance to any combustible adjacent wall should not be less than 9". See Figure 8.

Ceiling clearance: The ceiling must be at least 42" from the top of the firebox opening. See Figure 8.

Back wall clearance: The appliance may be placed against a combustible back wall.

Floor clearance: The fireplace may not be installed onto any combustible flooring material, such as carpeting, vinyl or tile without the hearth or a minimum 22 GA (0.030") metal or a minimum 1/2" wooden base covering the entire width and depth of the base.

Mantel clearances: The canopy supplied with the unit must be installed. If a combustible mantel is installed. It must meet the clearance requirements shown in Figure 9.

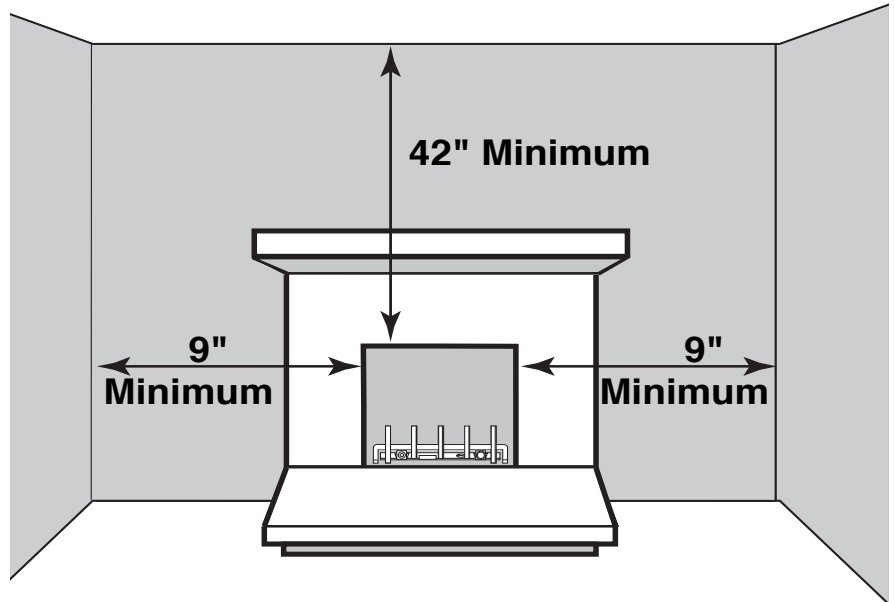


Figure 8 - Sidewall and Ceiling Clearances

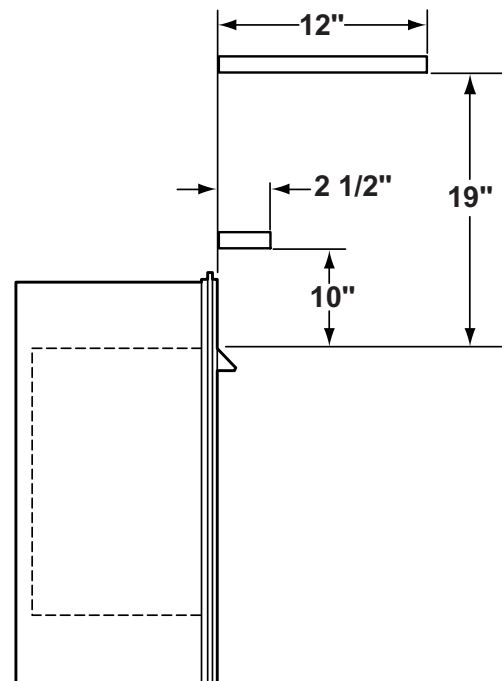


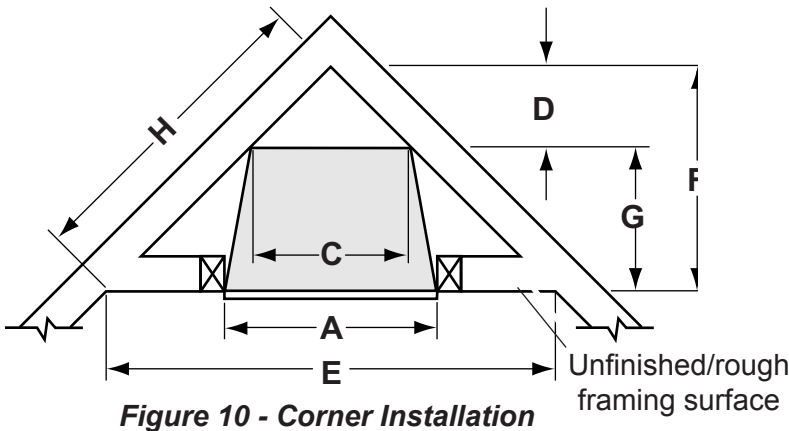
Figure 9 - Minimum Mantel Clearances

FIREPLACE FRAMING

If unit is to be “built in”, fireplace framing can be built before or after the appliance is set in place. **BE SURE THAT ALL PACKING MATERIAL HAS BEEN REMOVED FROM THE UNDERSIDE OF THE UNIT PRIOR TO SETTING THE FIREBOX IN PLACE.** Construct fireplace framing following *Figures 10 through 13.* See *Figure 2 on page 8* for fireplace dimensions. The framing headers may rest directly on top of the firebox.

The fireplace may be installed directly on a combustible floor or a raised platform of an appropriate height. Do not place fireplace on carpeting, vinyl, tile or other soft floor coverings. It may, however, be placed on flat wood, plywood, particle board or other hard surfaces. Be sure fireplace rests on a solid continuous floor or platform with appropriate framing for support and so that no cold air can enter from under the firebox.

Anchor fireplace to the side framing members using optional nailing flange kit. See installation instructions included with the kit.



MCFS36	
A	41 ¹ / ₄ "
B	43 ¹ / ₂ "
C	30 ¹ / ₂ "
D	15 ¹ / ₄ "
E	71 ¹ / ₂ "
F	35 ³ / ₄ "
G	21"
H	50 ¹ / ₂ "

Figure 10 - Corner Installation

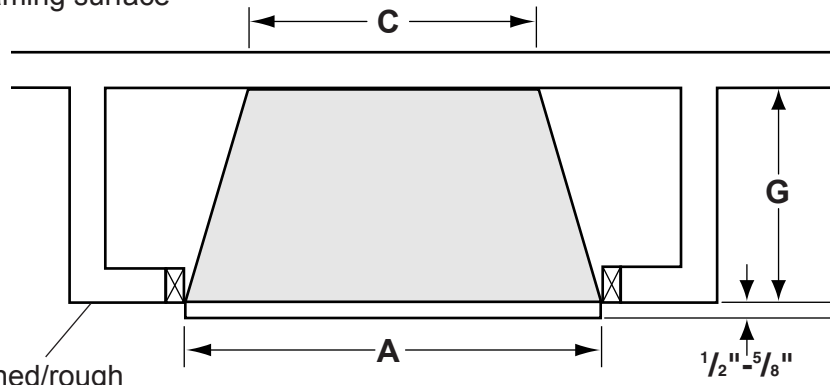


Figure 11- Inside Chase Installation

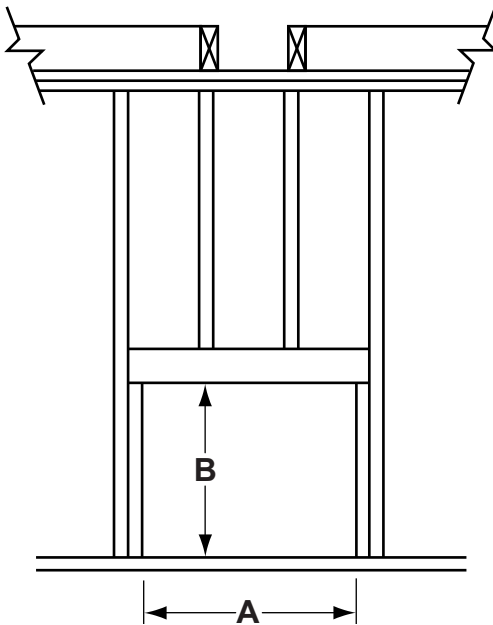


Figure 12 - Stud Location

Unfinished/rough framing surface

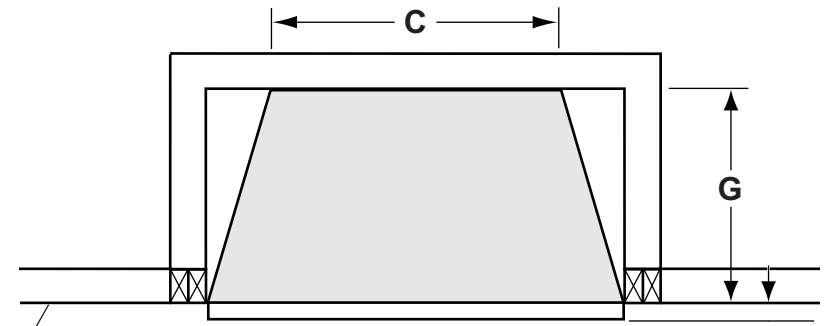


Figure 13 - Recessed Installation

Unfinished/rough framing surface

When finishing a custom cabinet, mantel, or other built-in enclosure, the opening size to accommodate the fireplace with trim installed is as follows:

	MCFS36 with Trim
K	41 ⁷ / ₈ "
J	41"

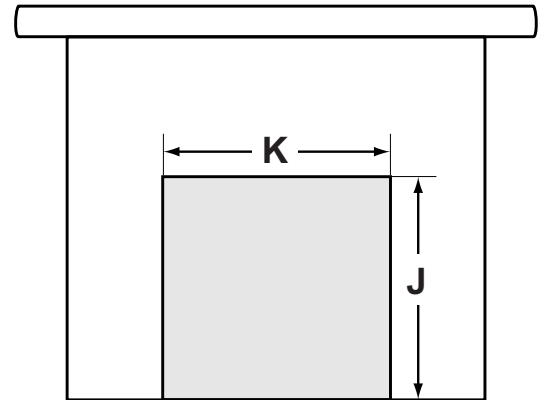


Figure 14 - Custom Cabinet

WARNING

The fireplace must be installed giving full consideration to the clearance and height requirements identified in this manual.

1. Bend out the nailing flanges located on each side of the firebox.
2. Slide the firebox into prepared framing or position firebox in its final position and frame later.
3. Level the firebox by checking the top edge of the firebox. Shim if necessary.
4. Anchor firebox to the side framing members using 8d nails or other suitable fasteners. *See Figure 15.*
5. A factory installed canopy is required for safe operation of the heater. *See Installing Canopy, page 11.*

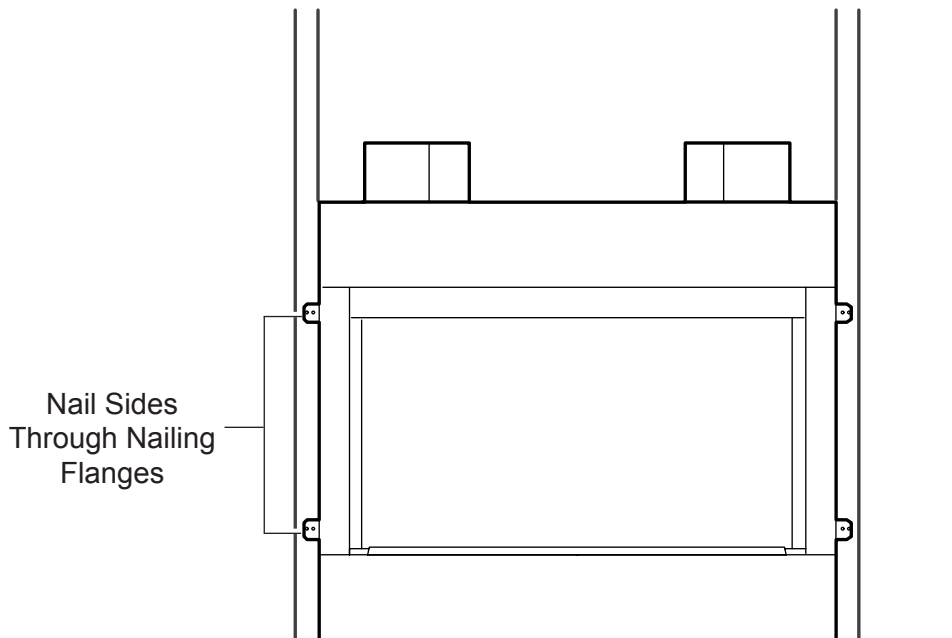


Figure 15 - Location of Nailing Flanges

CONNECTING THE GAS

NOTICE: A qualified gas appliance installer must connect the heater to the gas supply. Consult all local codes.

CAUTION

Use new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (Listed on Data Plate) at the maximum flow rate (BTU/Hr). Undue pressure loss will occur if the pipe is too small.

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged $\frac{1}{8}$ " NPT pressure tapping point should be installed upstream of the appliance. See Figure 16.

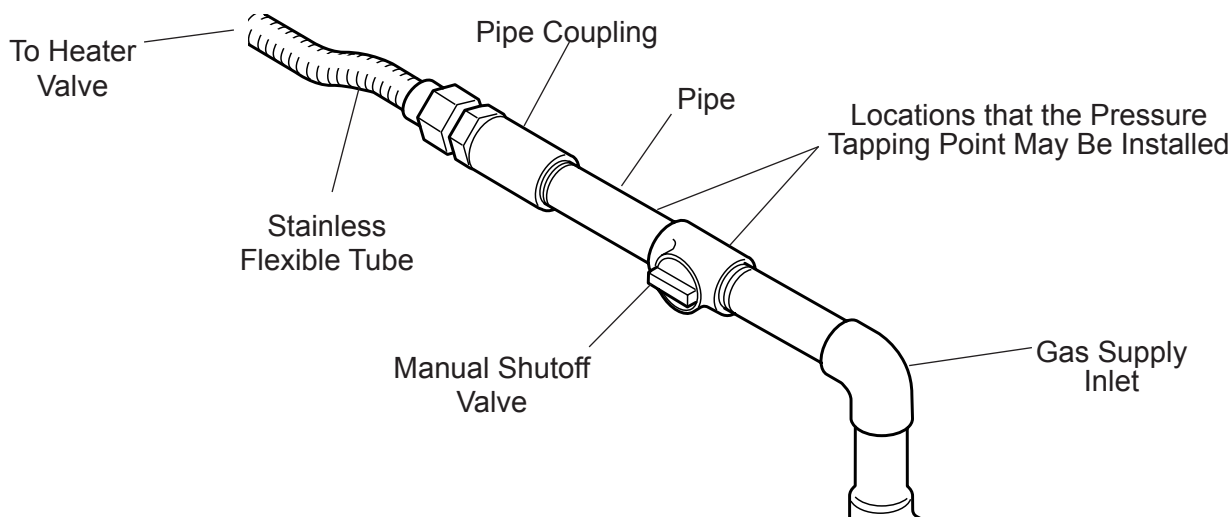


Figure 16 - Gas Connection

IMPORTANT: Hold heater valve firmly with a wrench to prevent movement when connecting to inlet pipe.

WARNING

CHECK GAS TYPE: The gas supply must be the same as stated on the heater's rating plate. If the gas supply is different, **DO NOT INSTALL THE HEATER**. Contact your dealer for the correct model.

Always use an external regulator for all propane/LPG heaters and high pressure one to two-pound systems only, to reduce the supply tank pressure to a maximum of 13" w.c. This is in addition to the internal regulator in the heater valve.

WARNING

Connecting directly to an unregulated propane/LPG tank can cause an explosion.

When tightening up the joint to the valve, hold the valve securely to prevent movement.

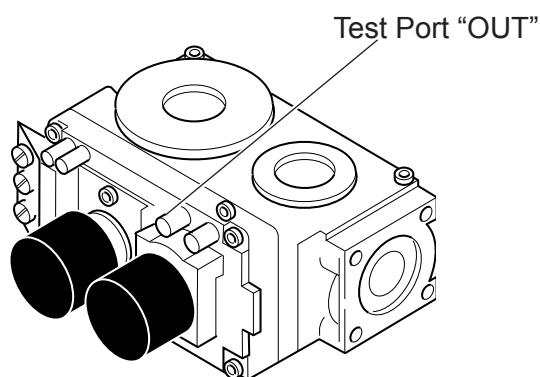
Test all gas joints from the gas meter to the heater valve for leaks using a gas analyzer or soap and water solution after completing connection. **DO NOT USE AN OPEN FLAME.**

Check the gas pressure with the appliance burning and the control set to **HIGH**.

MILLI-VOLT CONTROL AND THERMOSTAT CONTROL (*Figure 17*)

The valve regulator controls the burner pressure which should be checked at the pressure test point.

Turn captured screw counter clockwise two or three turns and then place tubing to pressure gauge over test point (Use test point "OUT" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.



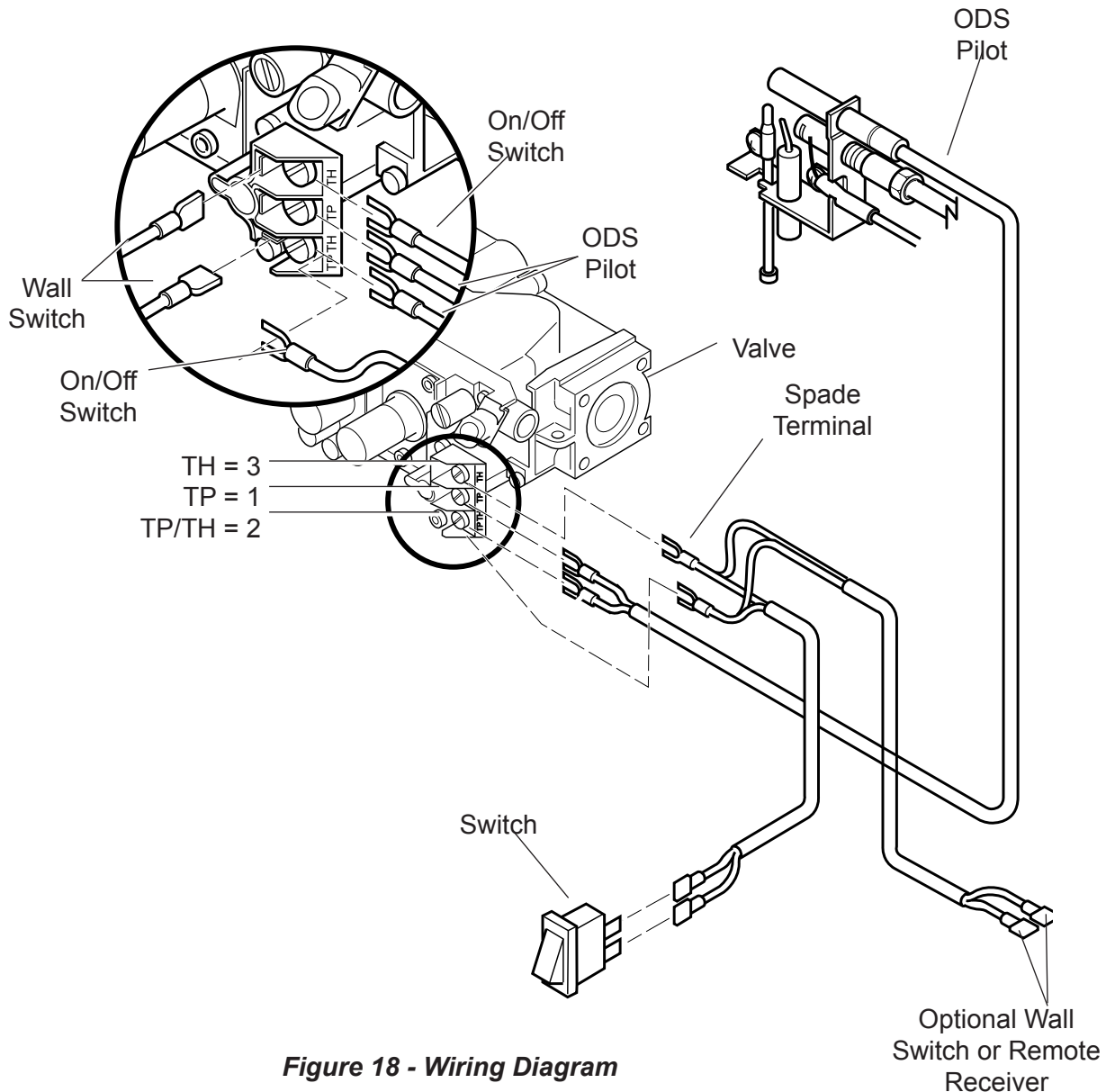
**Figure 17 - Pressure Test Point Location
Milli-Volt Control**

ELECTRICAL WIRING (MILLI-VOLT)

The milli-volt valve is a self-powered combination gas control **THAT DOES NOT REQUIRE 110 VAC TO OPERATE.**

WARNING

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



CONNECTING OPTIONAL WALL SWITCH OR THERMOSTAT

1. Use 18 awg, two-wire cable, 15' maximum length.
2. At one end of the cable, connect both wires to the wall switch or thermostat. At the other end, connect one wire to TP/TH and one wire to TH, or connect the wall switch/thermostat to the two male (0.25") terminals on the left side of the unit. The color of the wires does not matter.

CONNECTING REMOTE RECEIVER

THESE INSTRUCTIONS SUPERCEDE THE SECTION ENTITLED "HEARTH MOUNT" IN THE MILLI-VOLT HAND-HELD REMOTE INSTRUCTIONS SUPPLIED WITH THE REMOTE.

1. Remove cover on control panel to show opening for remote receiver. *See Figure 19.*
2. Cut cable to length (approximately 12") for placement in the fireplace.
3. Strip back 1/4" of the insulation from both ends of each wire.
4. Connect two .25 female connectors to the wires at one end of the cable.
5. Insert the opposite ends of the wires into the receiver wire terminals and tighten the screws.
6. Connect the connectors to the two .25" male connectors located on the left side when facing the unit (*Figure 19*). Do not let the wire touch the grate or burners.
7. Slide remote receiver in the opening of control panel. Use two screws provided to attach remote receiver to the control panel. *See Figure 19.*
8. Replace Cover. *See Figure 19.*

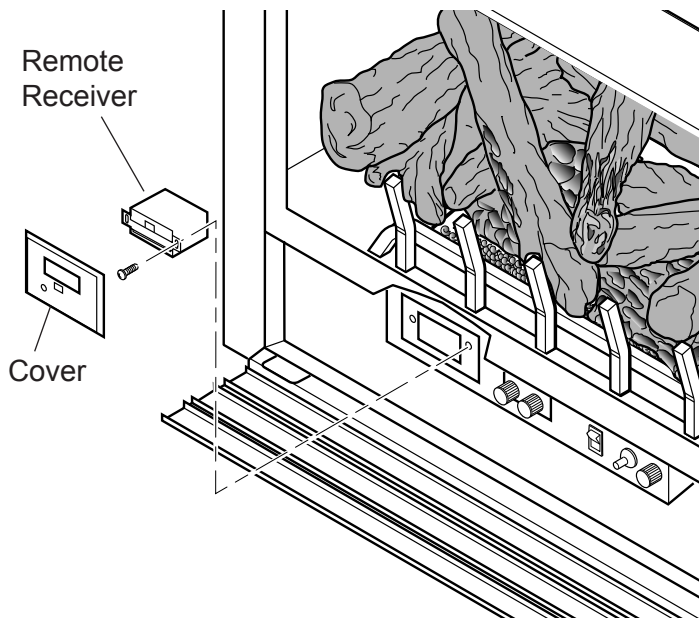


Figure 19 - Installing Remote Receiver

NOTE: Do not place remote in combustion chamber.

CHECKING SYSTEM OPERATION

The milli-volt system and individual components may be checked with a milli-volt meter having a 0-1000 mV range. Conduct each check shown in chart below by connection meter test leads to terminals as indicated.

CHECK TEST	TO TEST	CONNECT METER LEADS TO TERMINALS	THERMOSTAT CONTACTS	METER READING SHOULD BE
A	COMPLETE SYSTEM	2 & 3	CLOSED	CLOSED
B	THERMOPILE OUTPUT	1 & 2	OPEN	OPEN

A. COMPLETE MILLI-VOLT SYSTEM CHECK

("A" Reading - Thermostat contacts CLOSED - Control Knob "ON" - Main burner should turn ON)

- a. If the reading is more than 100 milli-volts and the automatic valve still does not come on, replace the control.
- b. If the closed circuit reading ("A" reading) is less than 100 millivolts, determine cause for low reading, proceed to Section B below.

B. Thermopile Output Reading Check

("B" Reading - Thermostat contacts OPEN - Main burner OFF)

1. Check gas pressure to the unit. If gas pressure is within minimum and maximum on data plate, then check pilot voltage, 325 millivolts minimum. If the minimum milli-volt reading is not obtainable, replace pilot.

INSTALLING ROCK WOOL

PLACING ROCK WOOL

Starting on the second row of burner ports, place EB-RW (Rock Wool) in dime-size pieces on the second row of ports and going toward back of front burner. See Figure 20.

NOTE: Do not put EB-RW (Rock Wool) on first row of burner ports.

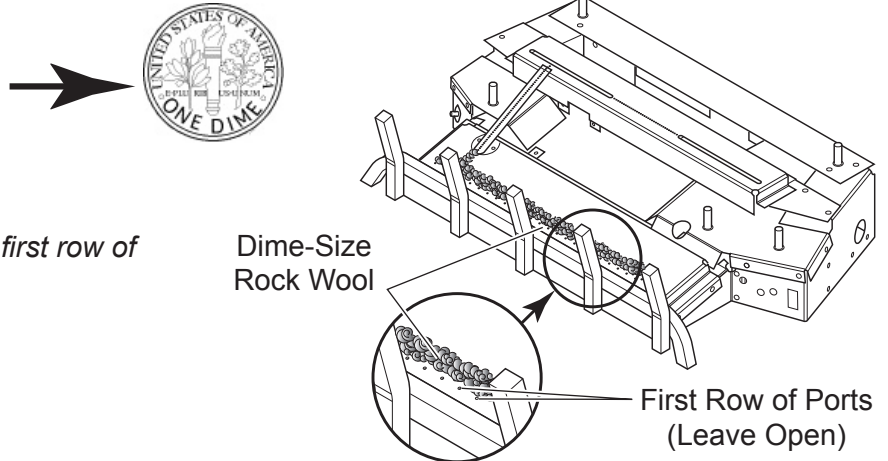


Figure 20 - Placing Rock Wool

WARNING

- Use only EB-RW provided with log set.
- Do not add additional rock wool.
- Place EB-RW (rock wool) on front burner ports only. **DO NOT PLACE EB-RW ON BACK BURNER!**

WARNING

DO NOT sprinkle volcanic rock on the logs or around the pilot or the main burner. This may cause sooting. Place volcanic rock only on the floor of the fireplace.

During initial operation of the new heater, burning logs will give off a paper burning smell and orange flames will be present. Simply open the windows for a few hours to vent the odor.

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

WARNING

The positioning of the logs are critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs supplied with the unit.

Failure to position the parts in accordance with diagrams below or to use only parts specifically approved for this heater may result in property damage or personal injury.

INSTALLING KENTUCKY STACK LOGS ON GRATE

1. Install back log (#1) on two pins located near the back of base. Check log position and stability. *See Figure 21.*
2. Install left log cluster (#2) on pin located near left edge of base. *See Figure 21.*
3. Install right log cluster (#3) on two pins located on right side of base. *See Figure 21.*
4. Rest end of top center log (#4) on rear log. Place front end of top center log where right and left cluster logs meet. *See Figure 21.*

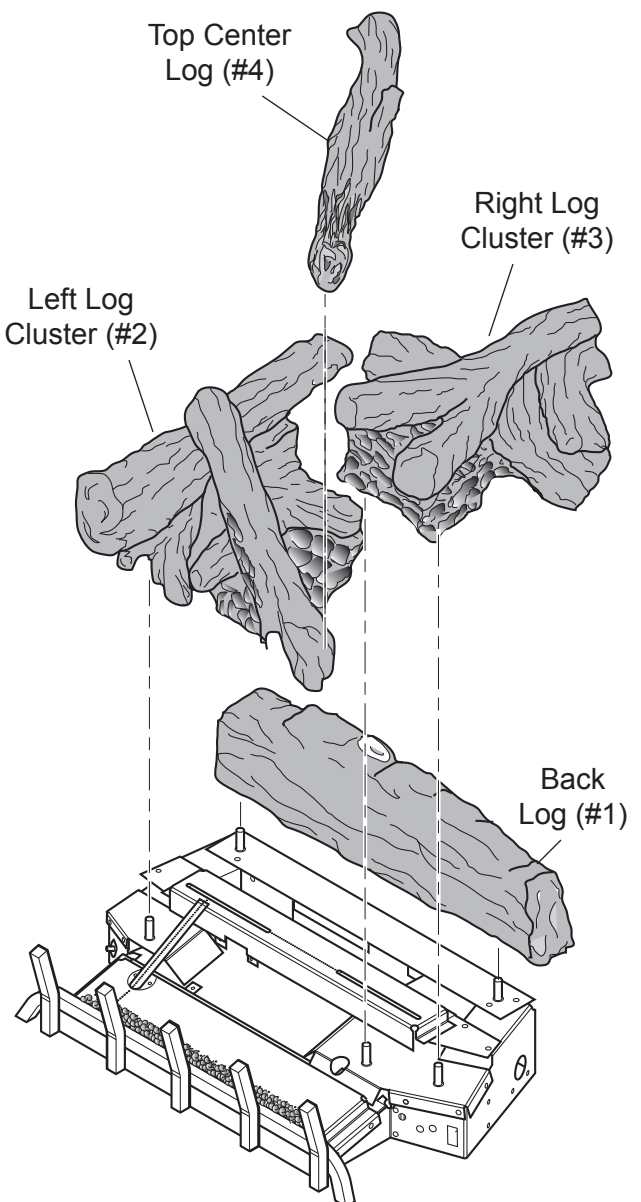


Figure 21 - Installing Logs on Grate

FLAME APPEARANCE

Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

CHECKING THE PILOT FLAME

The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural. See *Figure 22* for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. See *Figures 23* for incorrect shape of pilot flame.

THERMOSTAT AND MILLI-VOLT CONTROL

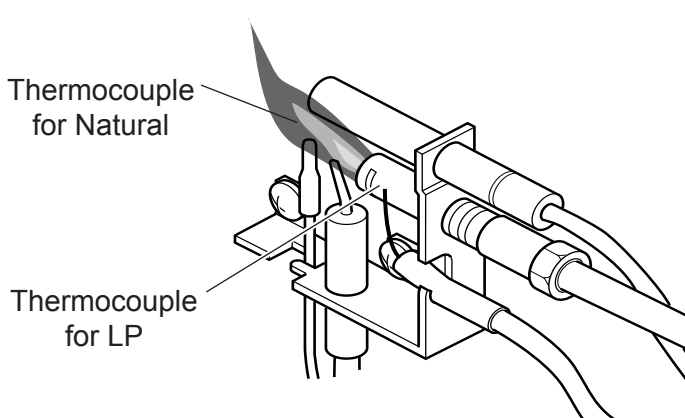


Figure 22 - Correct Appearance of Pilot Flame

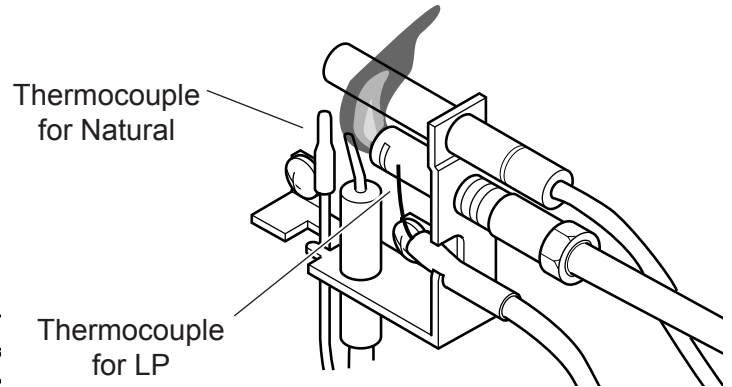


Figure 23 - Incorrect Appearance of Pilot Flame

CHECKING THE BURNER FLAME

In normal operation at full rate after 15 minutes, the following flame appearances should be observed:

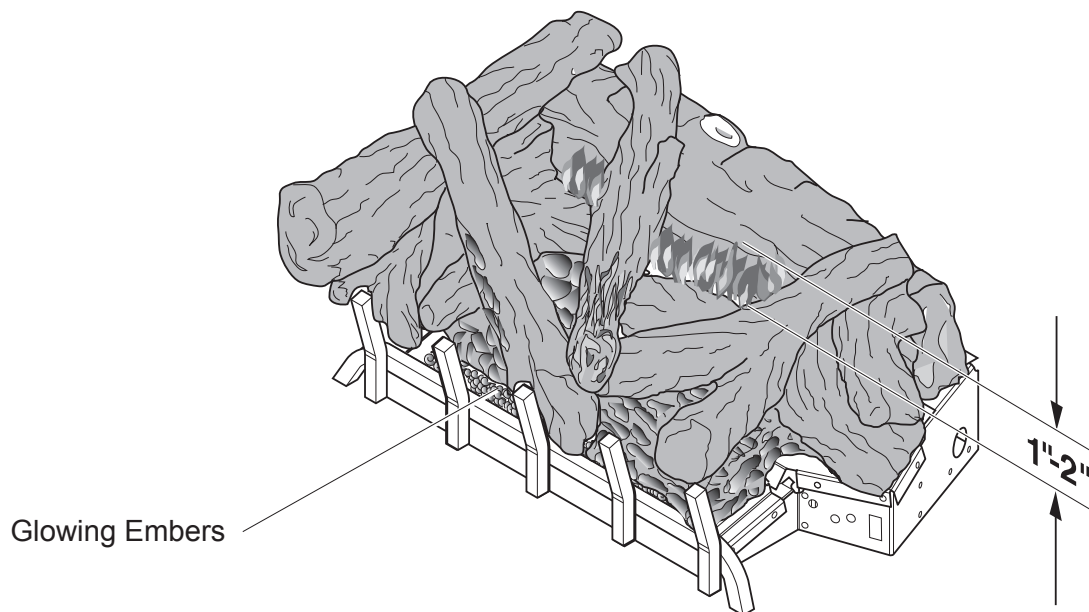


Figure 24 - Correct Appearance of Rear Flames

The left and right rear flames should be yellow and extend 1"-2" above the log top surfaces. The yellow flames should **not** contact the logs. There should be glowing embers on the front surface of middle log. **Note: The flames and embers will be an opaque orange color during the burn off time.**

OPERATING INSTRUCTIONS

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

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

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

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

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 which automatically lights the pilot. Do not try to light the unit by hand.
- B. BEFORE OPERATING 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 attempt 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. Force or attempted repair may result in a fire or explosion.
 - D. Do not use this appliance if any part of it 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 that has been under water.

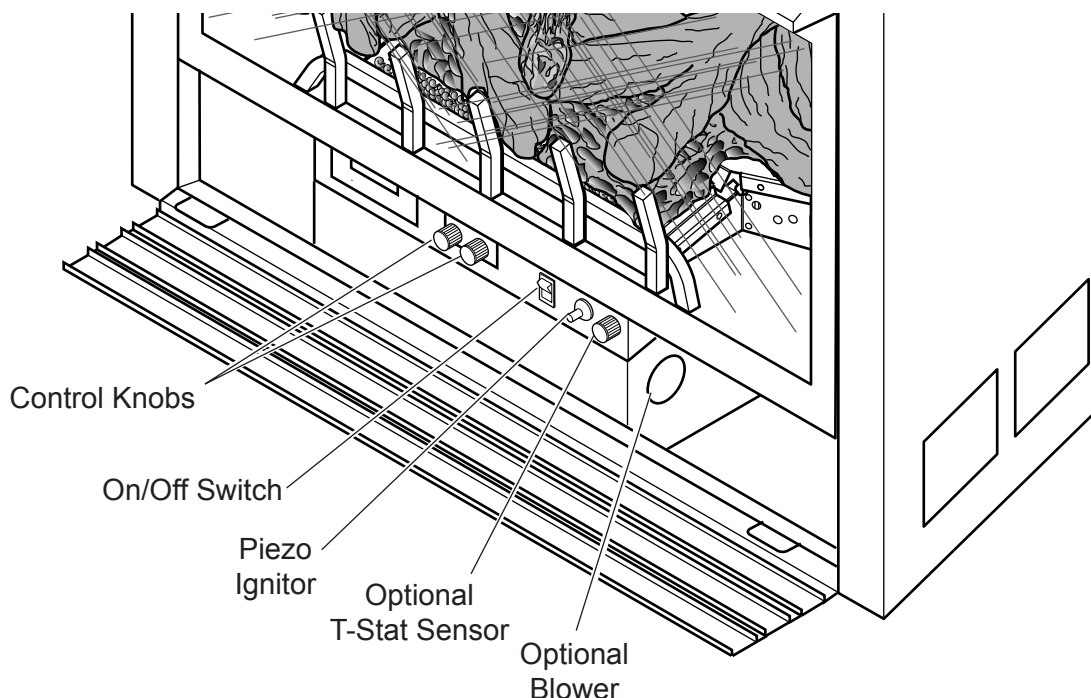





Figure 25 - Location of Piezo Ignitor, Control Knobs and Switch on Milli-Volt Unit

MILLI-VOLT/THERMOSTAT CONTROL LIGHTING INSTRUCTIONS

1. STOP! Read the safety information label.
2. Make sure the manual shutoff valve is fully open.
3. This gas log set is equipped with an ignition device (piezo) which automatically lights the pilot. If piezo ignitor does not light the pilot, refer to instructions for *Match Lighting Instructions*, page 26.
4. Turn gas control knob clockwise  to the OFF position, set the thermostat to the lowest setting and turn ON/OFF switch to OFF position.
5. Wait (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow *What to Do if You Smell Gas*, page 24. If you don't smell gas, go to next step.
6. From OFF position, turn the gas control knob counterclockwise  to IGN position. Push in control knob for 5 seconds. **NOTE: If you are running the heater for the first time, it will be necessary to press in the control knob for 30 seconds to allow air to bleed out of the gas piping.**
7. With the control knob pushed in, push in and release the piezo ignitor button to light the pilot.
8. Continue pushing the control knob in for a further 10 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
9. Turn gas control knob counterclockwise  to the ON position.
10. After the pilot has been lit for one minute, the burners can be turned on. Turn the ON/OFF switch to ON position or adjust thermostat to desired setting.
11. If the gas logs will not operate, follow the instructions *To Turn Off Gas To Heater* below and call your service technician or gas supplier.

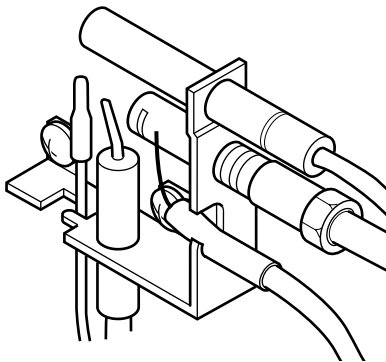


Figure 26 - Pilot

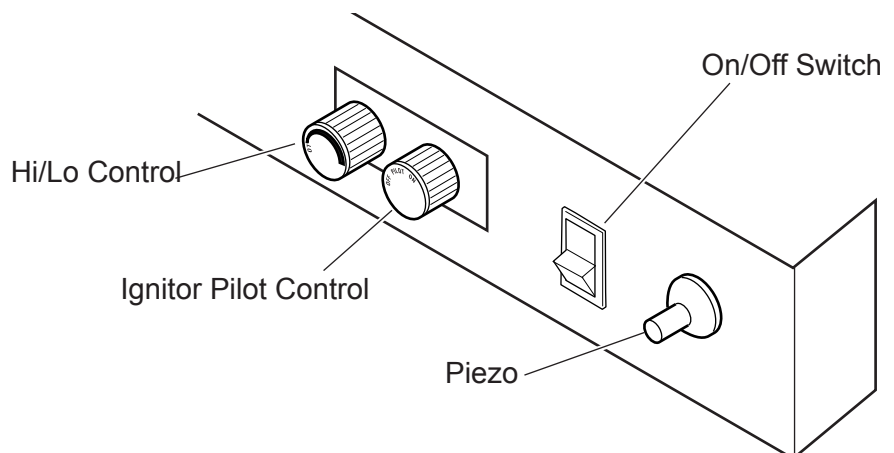



Figure 27 - Control Cover Plate for Milli-Volt

TO TURN OFF GAS TO HEATER

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

OPERATING INSTRUCTIONS AND CLEANING AND SERVICING

MATCH LIGHTING INSTRUCTIONS

1. Remove any items necessary for easy access to the pilot (for example: logs, screens, etc.).
2. Follow appropriate lighting instructions found previously. Instead of pushing and releasing the piezo button, light a match and hold the flame to the end of the pilot and ignite the pilot.
3. After control knob has been released and pilot stays lit, reinstall any items that were removed for pilot access.
4. Call a qualified service technician for repair or replacement of the piezo ignitor.

CLEANING AND SERVICING

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

WARNING

Turn off heater and allow to cool before cleaning. Disconnect electrical power before cleaning or servicing.

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

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

- Do not use cleaning fluid to clean logs or any part of heater.
- Brush logs with soft bristle brush or vacuum with brush attachment.
- Vacuum loose particles and dust from the front and rear burner, control and piezo covers and grate weldment.
- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush, or pipe cleaners. Failure to keep air intake holes clean will result in sooting and poor combustion.
- External case should be dusted and wiped with a wet soapy cloth.

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

- Inspect and clean burner air intake holes. Remove lint or particles with vacuum, brush or pipe cleaners. Failure to keep air intake holes clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner and rear burner.

OPTIONAL EQUIPMENT

FORCED AIR KIT

If you are installing the forced air kit, Model BLOT, see the installation instructions provided with the kit for electrical wiring requirements, or the blower installation section. The firebox must be connected to main power supply at time of firebox installation. The blower must be installed prior to the installation of the unvented heater. The electrical connections must be made before the firebox is framed and enclosed in the finished walls.

BRASS/PEWTER LOUVERS

Optional brass/pewter louvers may be installed in place of the factory installed black louvers. Refer to installation instructions provided with the brass or chrome louvers.

BRASS/PEWTER TRIM

Optional brass/pewter trim kits can be used with unit when installed as a free standing fireplace with a wood surround.

FIREBRICKS

Optional firebrick kits can be installed. Refer to installation instructions provided with kit.

WARNING

Electrical connections should only be performed by a qualified, licensed electrician, main power must be off when connecting to main electrical power supply or performing service.

TROUBLESHOOTING

WARNING

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

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 positioned wrong.2. Ignitor electrode is broken.3. Ignitor electrode not connected to ignitor cable.4. Ignitor cable pinched or wet. Keep ignitor cable dry.5. Broken ignitor cable.6. Bad piezo ignitor.	<ol style="list-style-type: none">1. Replace ignitor.2. Replace ignitor.3. Reconnect ignitor cable.4. Free ignitor cable if pinched by any metal or tubing.5. Replace ignitor cable.6. Replace piezo ignitor.
Appliance produces unwanted odors.	<ol style="list-style-type: none">1. Appliance burning vapors from paint, hair spray, glues, etc.2. Gas leak.3. Initial burn off.	<ol style="list-style-type: none">1. Ventilate room. Stop using odor causing products while heater is running.2. Locate and correct all leaks.3. Ventilate room and turn unit on high until odor is gone. Odor should be gone after 2 to 3 hours of continuous use.
Appliance shuts off during use.	<ol style="list-style-type: none">1. Not enough fresh air is available for ODS/pilot to operate.2. Low line pressure.3. ODS/pilot is partially clogged.4. Defective Thermopile.5. Restrictions in incoming air flow.	<ol style="list-style-type: none">1. Open window and/or door for ventilation.2. Contact local gas company.3. Clean ODS/pilot.4. Check pilot flame, check wire connections, check output, should be 325 milli-volts across TH/TP and TP Terminals with ON/OFF switches off.5. Check for bottom riser on glass door, sunken fireplace, excessive lava rock/cinders densely packed against grate.
Gas odor even when control knob is in OFF position.	<ol style="list-style-type: none">1. Gas leak.2. Control valve defective.	<ol style="list-style-type: none">1. Locate and correct all leaks.2. Replace control valve.
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. Replace ODS/pilot assembly or get it serviced.6. Replace gas regulator.

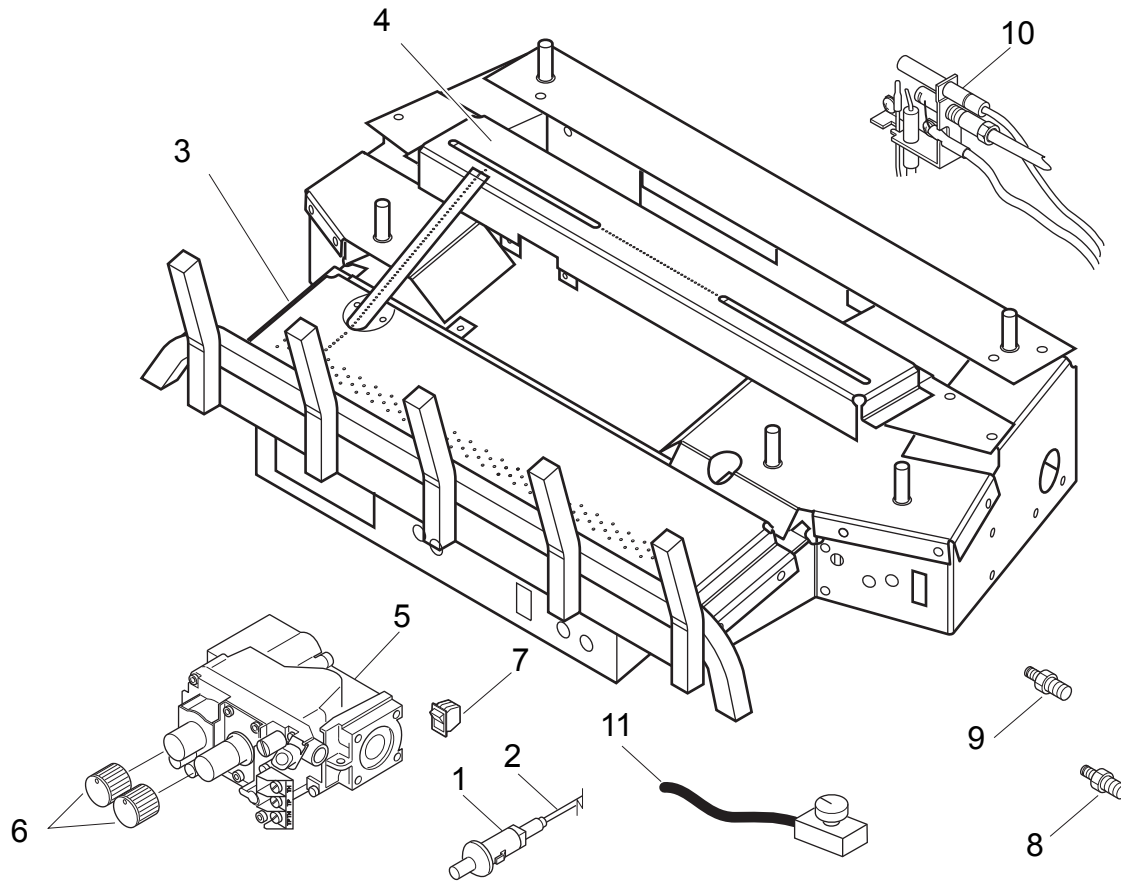
WARNING

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

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. Manual shutoff valve not fully open. Thermocouple connection loose at control valve. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure, or a dirty or partially clogged ODS/pilot. 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 for 30 seconds. Fully open manual shutoff valve. Hand tighten thermocouple connection until snug, then tighten 1/4 turn more. 5a. Contact local gas company. 5b. Clean pilot with vacuum cleaner. Replace thermocouple. Replace control valve.
Burner does not light after ODS/pilot is lit.	<ol style="list-style-type: none"> Burner orifice is clogged. Burner orifice diameter is too small. Inlet gas pressure is too low. 	<ol style="list-style-type: none"> Clean orifice. Replace burner orifice. Contact qualified service person.
Burner backfires during combustion.	<ol style="list-style-type: none"> Manifold pressure is too low. Burner orifice is clogged. 	<ol style="list-style-type: none"> Contact local gas company. Clean burner or replace burner orifice
Slight smoke or odor during initial operation.	<ol style="list-style-type: none"> Burner orifice is clogged or damaged. Burner is damaged. Gas regulator defective. 	<ol style="list-style-type: none"> Clean burner or replace burner orifice. Replace burner. Replace gas regulator.
Logs appear to smoke after initial operation.	<ol style="list-style-type: none"> Vapors from paint or curing process of logs. Vapors or smoke continue after heater has run with damper or window open for several hours. 	<ol style="list-style-type: none"> Problem will stop after a few hours of operation. Run the heater with the damper open if you have one, or open a window for the first few hours. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.
Heater produces a whistling noise when burner is lit.	<ol style="list-style-type: none"> Turning control knob to HIGH position when burner is cold. Air in gas line. Dirty or partially clogged burner orifices. 	<ol style="list-style-type: none"> Turn control knob to LOW position and let warm up for a minute. Operate burner until air is removed from line. Have gas line checked by local gas company. Clean burner or replace burner orifice.
No gas to pilot.	<ol style="list-style-type: none"> LP-regulator shut down due to inlet pressure too high. 	<ol style="list-style-type: none"> Verify LP tank regulator is installed and set at 11" to 13" w.c. Replace regulator on heater.

ILLUSTRATED PARTS BREAKDOWN

BURNER ASSEMBLY



WARNING

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

REPLACEMENT PARTS LIST

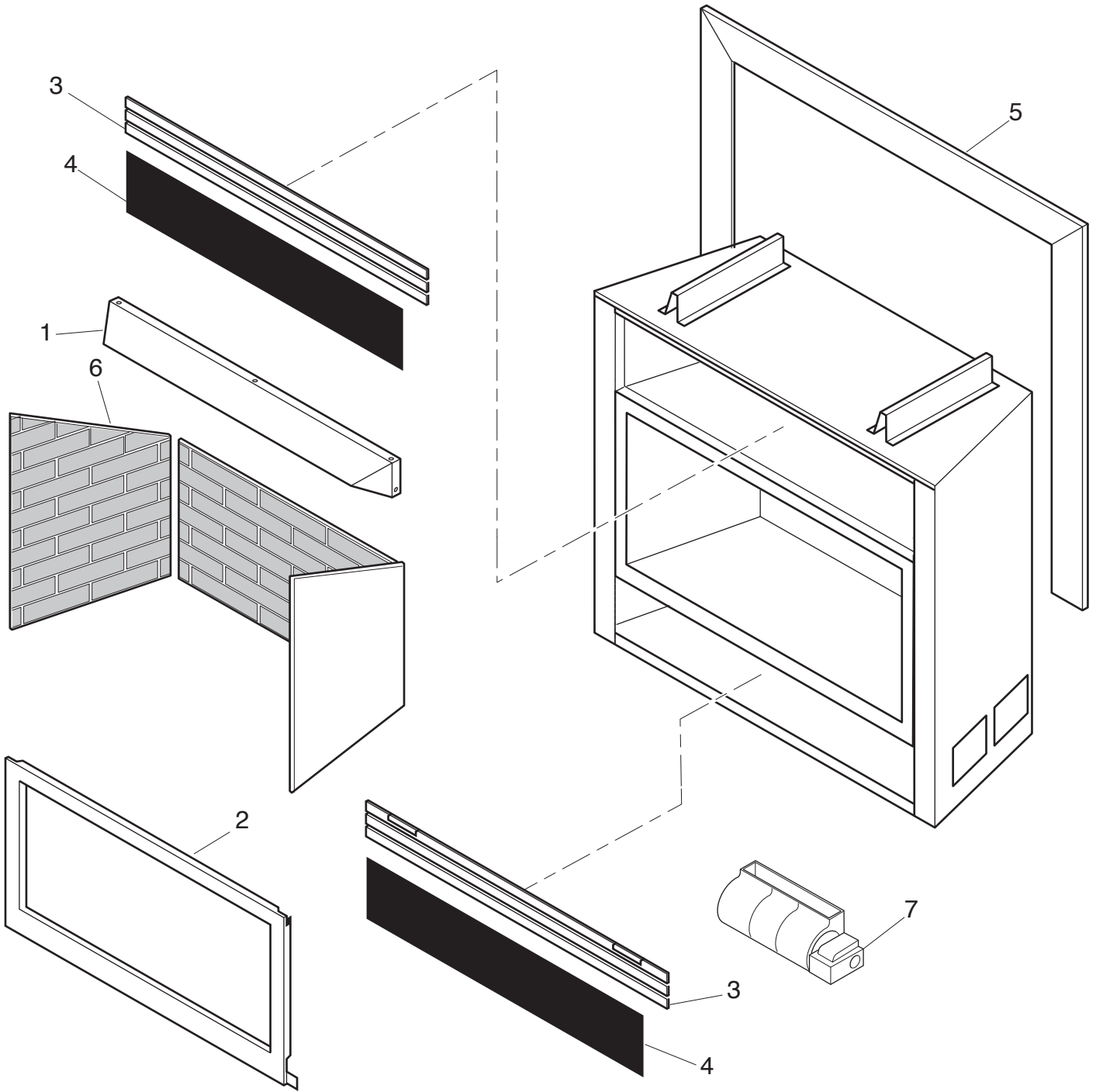
REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

BURNER ASSEMBLY

Item	Description	Qty.	MCFSA36	
			Natural	Propane
1	Piezo Ignitor	1	14D0503	14D0503
2	Piezo Wire	1	00K0632	00K0632
3	Front Burner	1	59D0051	59D0051
4	Rear Burner	1	59D0059	59D0059
5	Control Valve	1	14D0467	14D0468
6	Control Knobs	1	18D0603	18D0603
7	On/Off Switch	1	32D0232	32D0232
8	Front Burner Injector	1	20H3144	20H3142
9	Rear Burner Injector	1	20H3145	20H3143
10	ODS Pilot Assembly	1	14D0473	14D0477
11	Rheostat	1	26D3314	26D3314

Accessories Sold Separately		
	Thermostat Sensor Kit	TS
	Flex Connector	Flexcon 30
	Wall Switch Kit	MVWS
	Wall Thermostat Kit	MVWTS
	Hand Held Remote	RCM
	Hand Held Thermostat Remote	RCT
	Remote Receiver Cover Ember	RRCE
	Remote Receiver Cover Metal	RRCM

ILLUSTRATED PARTS BREAKDOWN



WARNING

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

REPLACEMENT PARTS LIST

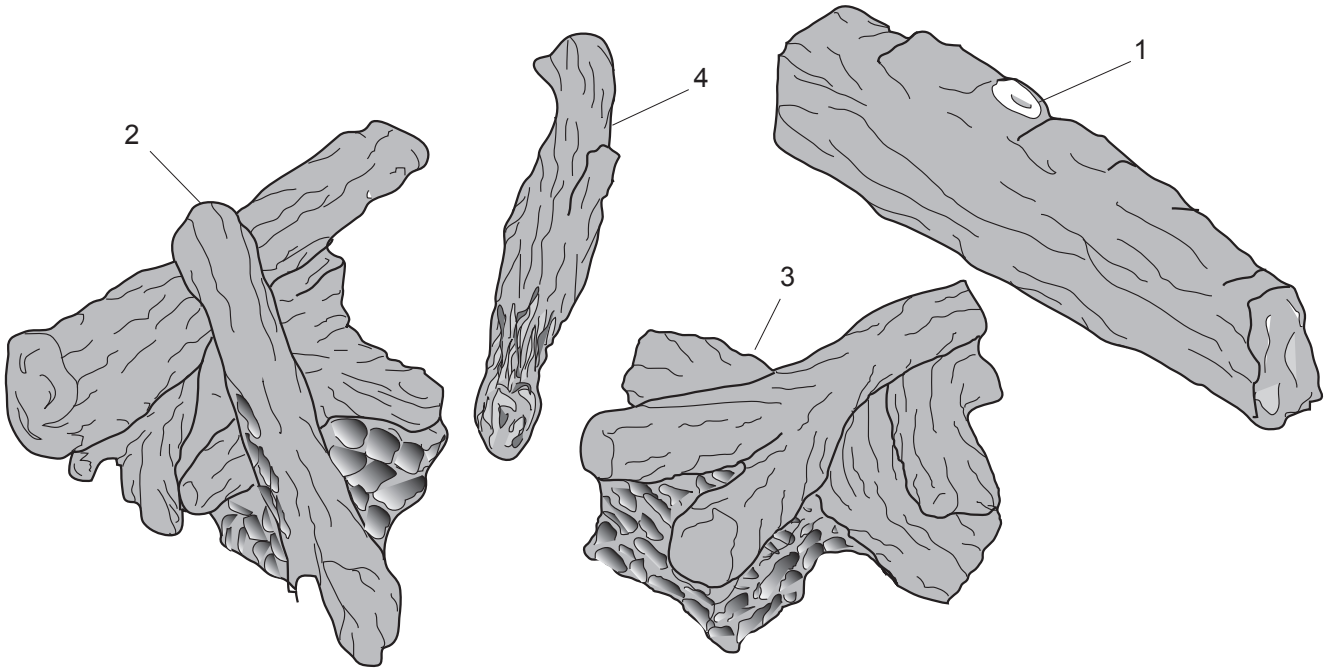
REPLACEMENT PARTS ARE AVAILABLE THROUGH YOUR RETAILER.

Item	Description	Qty.	MCFS36
Standard Features			
1	Canopy	1	26D0715K
2	Screen Assembly	1	26D2452K
3	Black Louver	6	26D0697K
4	Radiant Front	2	26D0576K
Accessories			
3	Brass Louver	1 Set	L36BR
3	Chrome Louver	1 Set	L36CH
5	Curved Design Brass Trim	1	BRTK36C
5	Curved Design Pewter Trim	1	PWTK36C
5	Curved Design Black Trim	1	BLTK36C
5	4" Wide Brass Wall Trim	1	BRWT36
6	Weathered Firebrick	1	FB36W1B
7	Blower with Rheostat	1	BLOT

REPLACEMENT PARTS LIST

LOGS

Item	Description	Qty	MCFS36
1	Back Log	1	59D1248K
2	Left Log Cluster	1	59D1244K
3	Right Log Cluster	1	59D1240K
4	Top Center Log	1	59D1249K



MONESSEN HEARTH SYSTEMS

LIMITED LIFETIME WARRANTY POLICY

The following components are warranted for life to the original owner, subject of proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate, and Stainless Steel Burners.

FIVE YEAR WARRANTY

The following components are warranted for 5 years to the original owner, subject of proof of purchase: Vent Free Ceramic Fiber Logs, Catalytic Filter and Aluminized Burners.

BASIC WARRANTY

Monessen Hearth Systems (MHS) warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by MHS in the appliance are found to be defective in materials or workmanship, MHS will, at its option, replace or repair the defective components at no charge to the original owner. MHS will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from the date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alteration, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. Monessen Hearth Systems, Inc. does not assume for it any other obligations or liability in connection with the sale or use of the appliance. In states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in this Limited Lifetime Warranty.

MHS reserves the right to investigate any and all claims against the Limited Lifetime Warranty and decide upon method of settlement.

For information about this warranty, contact:

**Technical Services
Monessen Hearth Systems
149 Cleveland Drive
Paris, Kentucky 40361**