



## 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.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to page 7.

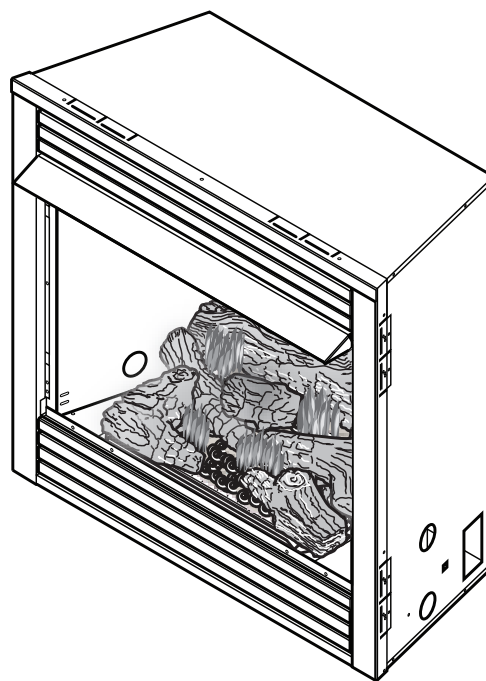
**INSTALLER:** Leave this manual with the appliance.  
**CONSUMER:** Retain this manual for future reference.

## DFS Series Vent-Free Fireplace System

Installation Instructions

**Models:**

**DFS32C, DFS36C, DFS42C**



**Thank you and congratulations on your purchase of a  
Majestic Fireplace.**

**PLEASE READ THE INSTALLATION AND OPERATION INSTRUCTIONS BEFORE USING THE APPLIANCE!**

**IMPORTANT: Read all instructions and warnings carefully before starting installation.**

**Failure to follow these instructions may result in a possible fire hazard and will void the warranty.**

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**INSTALLER**

Please leave these instructions with the appliance.

**OWNER**

Please retain these instructions for future reference.

**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 Unvented Heaters, latest edition.
11. Do not install the unvented heater in a bathroom.
12. Do not install the unvented heater in a bedroom unless the maximum input rating is equal to or less than 10,000 Btu/hr.
13. 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. Refer to log placement instructions for proper installation.
14. 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.
15. **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.
16. This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to *Page 7*.
17. 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.
18. Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
19. Unvented gas heaters are a supplemental zone heater. They are not intended to be the primary heating appliance.
20. 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.

21. 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.
22. 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.
23. 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).
24. 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).
25. 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.
26. Never burn solid fuels in a fireplace where a unvented room heater is installed.
27. 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.**

### **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:

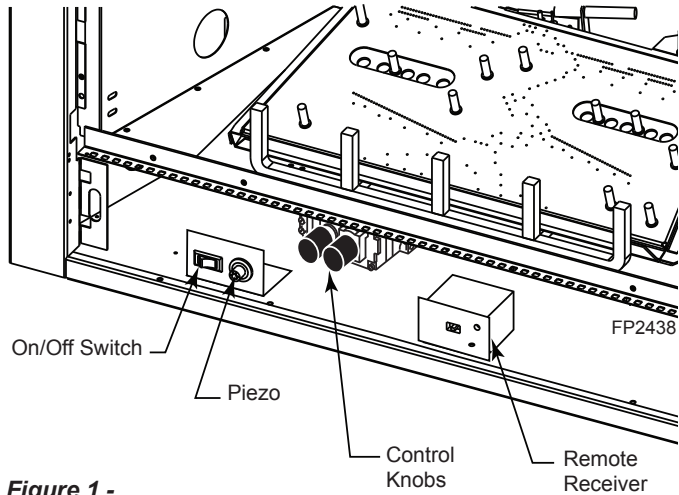
**American National Standards Institute, Inc.**

1430 Broadway  
New York, NY 10018

or

**National Fire Protection Association, Inc.**

Batterymarch Park  
Quincy, MA 02269



**Figure 1 -  
DFS Controls**

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.

**GAS PRESSURES**

	Natural	Propane (LP)
Inlet Minimum	5.0" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Regulator Pressure	3.5" w.c.	10.0" w.c.
Pilot Regulator	3.5" w.c.	--

**Gas Specifications**

Model	Fuel	Control	Input BTU/hr	
			Max.	Min.
DFS32NVC	Nat.	Millivolt	38,000	26,000
DFS32PVC	LP	Millivolt	34,000	26,000
DFS36NVC	Nat.	Millivolt	38,000	26,000
DFS36PVC	LP	Millivolt	34,000	26,000
DFS42NVC	Nat.	Millivolt	38,000	26,000
DFS42PVC	LP	Millivolt	34,000	26,000

**IGNITION CONTROLS**

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

**Milli-Volt control has four (4) positions:**

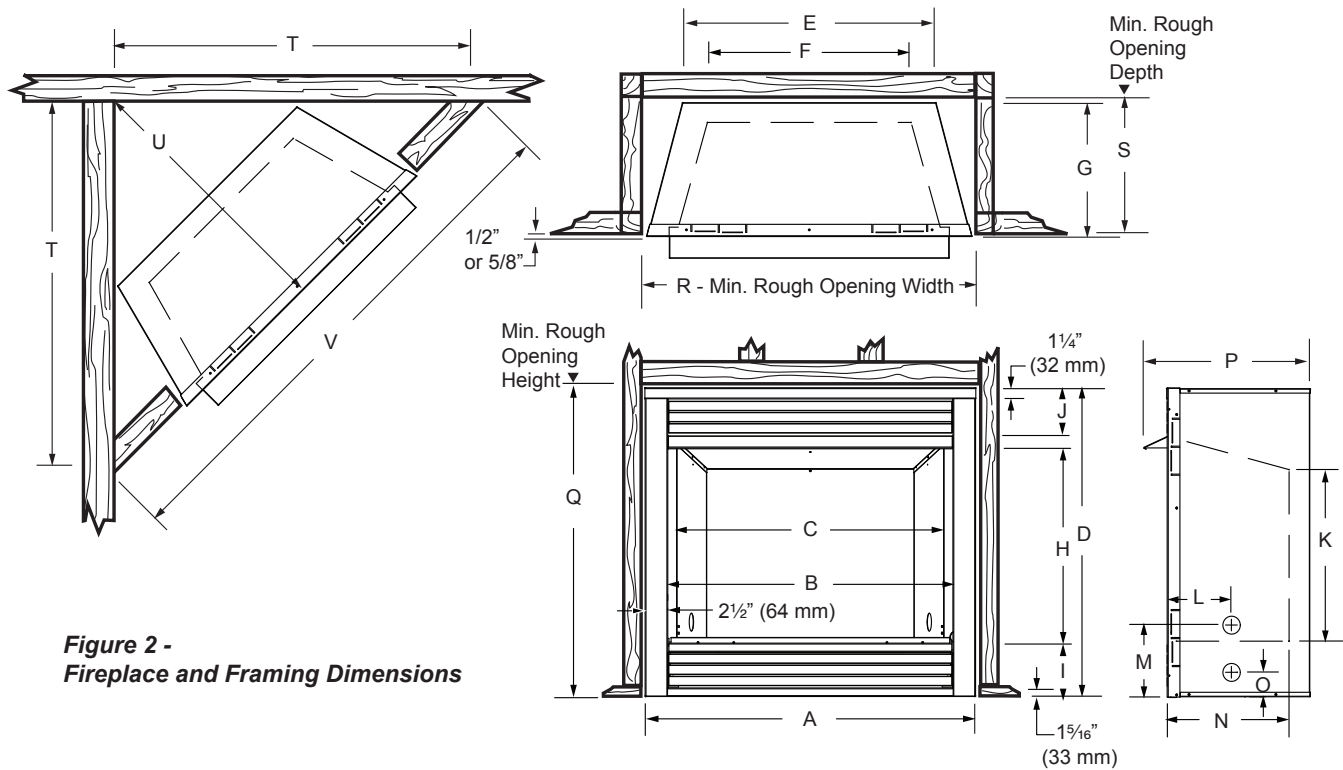
- OFF** - All gas to the gas logs is shut off at the valve.
- IGN** - Valve position to light/maintain a standing pilot.
- ON** - Valve position to turn ON/OFF log set with remote switch/thermostat.
- LOW/HI** - Variable position to control flame height (heat output). Both front and rear burners are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



**Figure 2 -  
Fireplace and Framing Dimensions**

Ref.	DFS32	DFS36	DFS42
A	37" (940 mm)	41" (1041 mm)	47" (1194 mm)
B	32" (813 mm)	36" (914 mm)	42" (1067 mm)
C	29 <sup>7</sup> / <sub>8</sub> " (759 mm)	34" (864 mm)	40" (1016 mm)
D	34 <sup>1</sup> / <sub>2</sub> " (876 mm)	34 <sup>1</sup> / <sub>2</sub> " (876 mm)	34 <sup>1</sup> / <sub>2</sub> " (876 mm)
E	29" (737 mm)	32" (813 mm)	38" (965 mm)
F	23 <sup>3</sup> / <sub>8</sub> " (594 mm)	27 <sup>3</sup> / <sub>8</sub> " (695 mm)	33 <sup>3</sup> / <sub>8</sub> " (848 mm)
G	16" (406 mm)	18" (457 mm)	18" (457 mm)
H	21 <sup>3</sup> / <sub>4</sub> " (553 mm)	21 <sup>3</sup> / <sub>4</sub> " (553 mm)	21 <sup>3</sup> / <sub>4</sub> " (553 mm)
I	6" (152 mm)	6" (152 mm)	6" (152 mm)
J	5 <sup>7</sup> / <sub>16</sub> " (138 mm)	5 <sup>7</sup> / <sub>16</sub> " (138 mm)	5 <sup>7</sup> / <sub>16</sub> " (138 mm)
K	18" (457 mm)	17 <sup>5</sup> / <sub>8</sub> " (448 mm)	17 <sup>5</sup> / <sub>8</sub> " (448 mm)
L	7 <sup>1</sup> / <sub>8</sub> " (181 mm)	9 <sup>3</sup> / <sub>4</sub> " (248 mm)	9 <sup>3</sup> / <sub>4</sub> " (248 mm)
M	8" (203 mm)	8 <sup>1</sup> / <sub>4</sub> " (210 mm)	8 <sup>1</sup> / <sub>4</sub> " (210 mm)
N	13 <sup>1</sup> / <sub>4</sub> " (337 mm)	15 <sup>3</sup> / <sub>4</sub> " (400 mm)	15 <sup>3</sup> / <sub>4</sub> " (400 mm)
O	2 <sup>3</sup> / <sub>4</sub> " (70 mm)	2 <sup>1</sup> / <sub>4</sub> " (57 mm)	2 <sup>1</sup> / <sub>4</sub> " (57 mm)
P	18 <sup>5</sup> / <sub>8</sub> " (473 mm)	20 <sup>5</sup> / <sub>8</sub> " (524 mm)	20 <sup>5</sup> / <sub>8</sub> " (524 mm)
Q	35" (889 mm)	35" (889 mm)	35" (889 mm)
R	37 <sup>1</sup> / <sub>4</sub> " (946 mm)	41 <sup>1</sup> / <sub>4</sub> " (1048 mm)	47 <sup>1</sup> / <sub>4</sub> " (1200 mm)
S	15 <sup>1</sup> / <sub>2</sub> " (394 mm)	17 <sup>1</sup> / <sub>2</sub> " (445 mm)	17 <sup>1</sup> / <sub>2</sub> " (445 mm)
T	43 <sup>3</sup> / <sub>4</sub> " (1111 mm)	48 <sup>3</sup> / <sub>4</sub> " (1238 mm)	53" (1346 mm)
U	30 <sup>7</sup> / <sub>8</sub> " (784 mm)	34 <sup>1</sup> / <sub>2</sub> " (876 mm)	37 <sup>1</sup> / <sub>2</sub> " (953 mm)
V	61 <sup>3</sup> / <sub>4</sub> " (1568 mm)	68 <sup>7</sup> / <sub>8</sub> " (1749 mm)	74 <sup>7</sup> / <sub>8</sub> " (1901 mm)

**WARNING** Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile — handle with care.

**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
- Rock wool
- Plastic bag containing crushed volcanic rock
- Trim kit
- 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

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. 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
- Manual shutoff valve
- Tee joint.
- Phillips head screwdriver

**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.

**FIREPLACE INSTALLATION**

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.

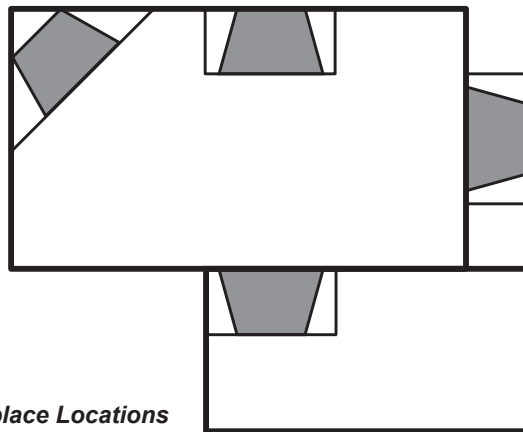
**WARNING** Optional bottom radiant panel kits cannot be covered. Optional top radiant panels can be covered as shown in Figure 7

**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.

## FIREPLACE LOCATION

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” section on Page 9. 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. *Refer to Figure 3* below 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 3 -  
Possible Fireplace Locations**

FP2440



**WARNING**

The dimensions shown in Figures 4, 5 and 6 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.*

**CLEARANCES**

**Sidewall and ceiling clearances:** The clearance from the inside of the appliance to any combustible adjacent wall should no be less than 9". *Figure 4*

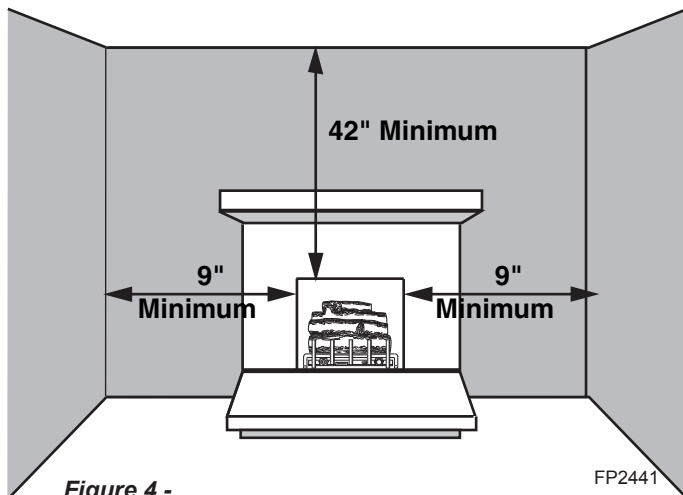
**Ceiling clearance:** The ceiling must be at least 42" from the top of the firebox opening. *Figure 4*

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

**Floor clearance:** This fireplace may be installed directly onto a combustible floor or raised on a platform of appropriate height. Do not install the fireplace directly onto any soft flooring material such as carpeting, vinyl tile or other combustible material other than wood flooring, unless there is a sheet metal panel (.030" minimum thickness) or flat wood, plywood or particle board panel (1/2" minimum thickness) extending the full width and depth of the enclosure. Be sure firebox rests on a solid continuous floor or platform with appropriate framing for support.

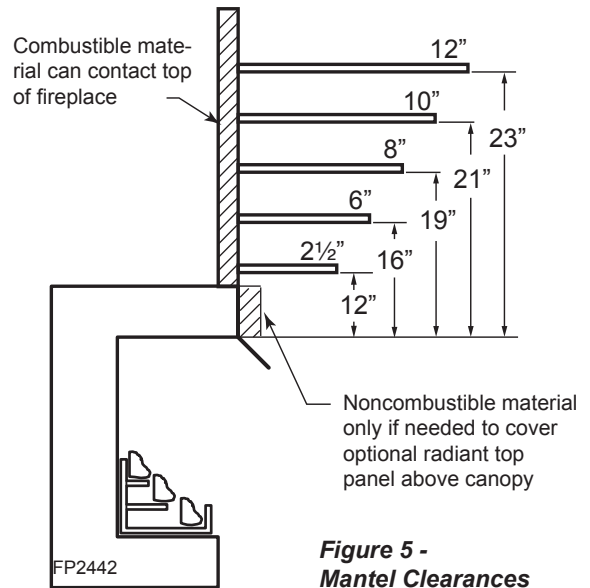
**Mantel clearances:** The canopy supplied with the unit must be installed. If a combustible mantel is installed. It must meet the clearance requirements shown in *Figures 5 & 6*.

**NOTE:** The MHSC Barrington Cabinet Mantel Model series BWC300, BWC400 and BWC500 are specially designed to comply with all mantel temperature requirements. Any custom-built mantel must comply with all clearance requirements shown in this instruction manual.

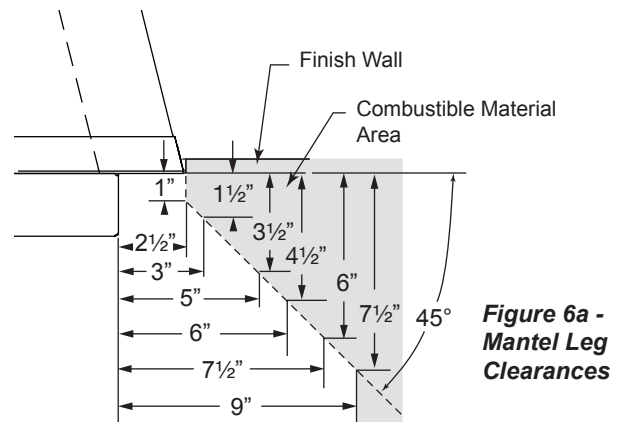


**Figure 4 - Sidewall and Ceiling Clearances**

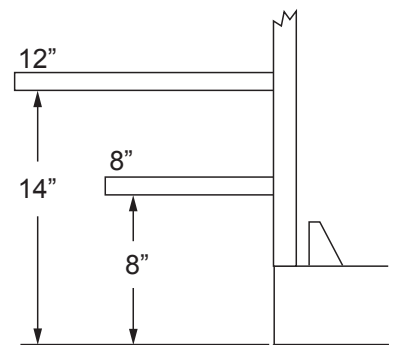
FP2441



**Figure 5 - Mantel Clearances**



**Figure 6a - Mantel Leg Clearances**



**Figure 6 - Mantel Heights for Wide Brass Canopy (Refer to Page 35)**

FP2444

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.** Refer to Figure 2 on Page 6 for fireplace and framing dimensions. The framing headers may rest directly on top of the firebox.

This fireplace may be installed directly onto a combustible floor or raised on a platform of appropriate height. Do not install the fireplace directly onto any soft flooring material such as carpeting, vinyl tile or other combustible material other than wood flooring, unless there is a sheet metal panel (.030” minimum thickness) or flat wood, plywood or particle board panel (1/2” minimum thickness) extending the full width and depth of the enclosure. Be sure firebox rests on a solid continuous floor or platform with appropriate framing for support.

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

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

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

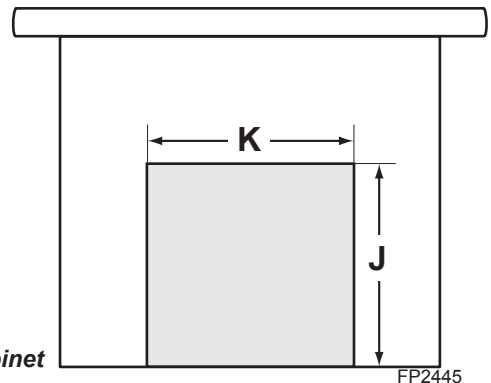


Figure 7 - Custom Cabinet

Ref.	DFS32	DFS36	DFS42
J	35 <sup>7</sup> / <sub>8</sub> " (911 mm)	35 <sup>7</sup> / <sub>8</sub> " (911 mm)	35 <sup>7</sup> / <sub>8</sub> " (911 mm)
K	37 <sup>7</sup> / <sub>8</sub> " (962 mm)	41 <sup>7</sup> / <sub>8</sub> " (1064 mm)	47 <sup>7</sup> / <sub>8</sub> " (1216 mm)

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. Figure 8
5. The canopy must be installed for safe operation of the heater. Refer to Page 16 for canopy installation details.

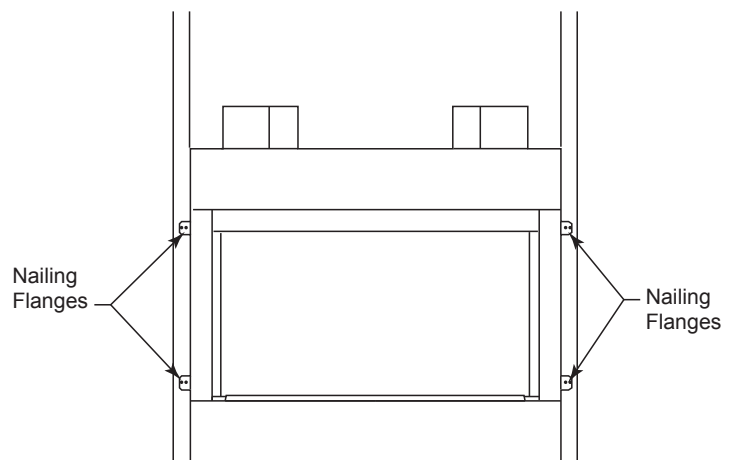
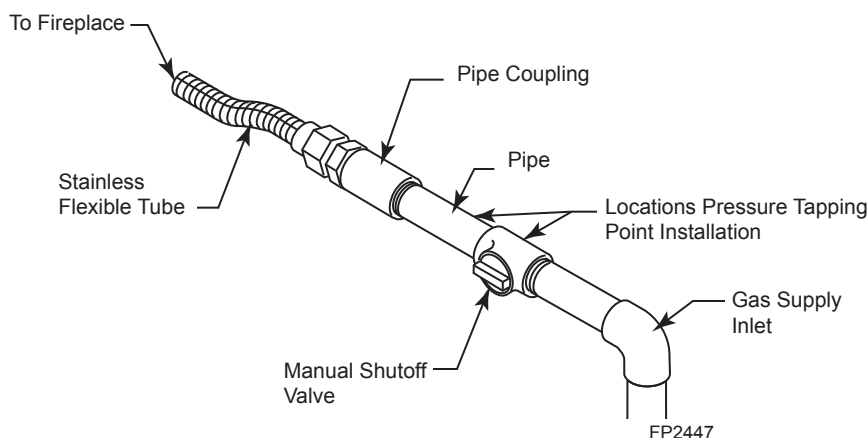


Figure 8 - Side Nailing Flanges

**CONNECT THE GAS**

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

**WARNING** 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 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 9*



**Figure 9 - Gas Connection**

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

**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** **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.

When tightening 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

Figure 10

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.

**WARNING**

**Do not use open flame to check for gas leaks.**

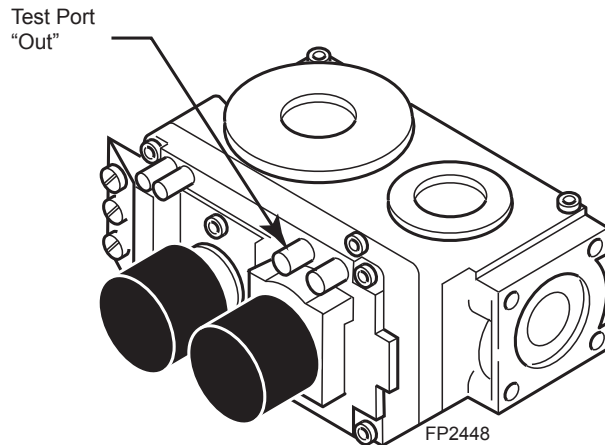


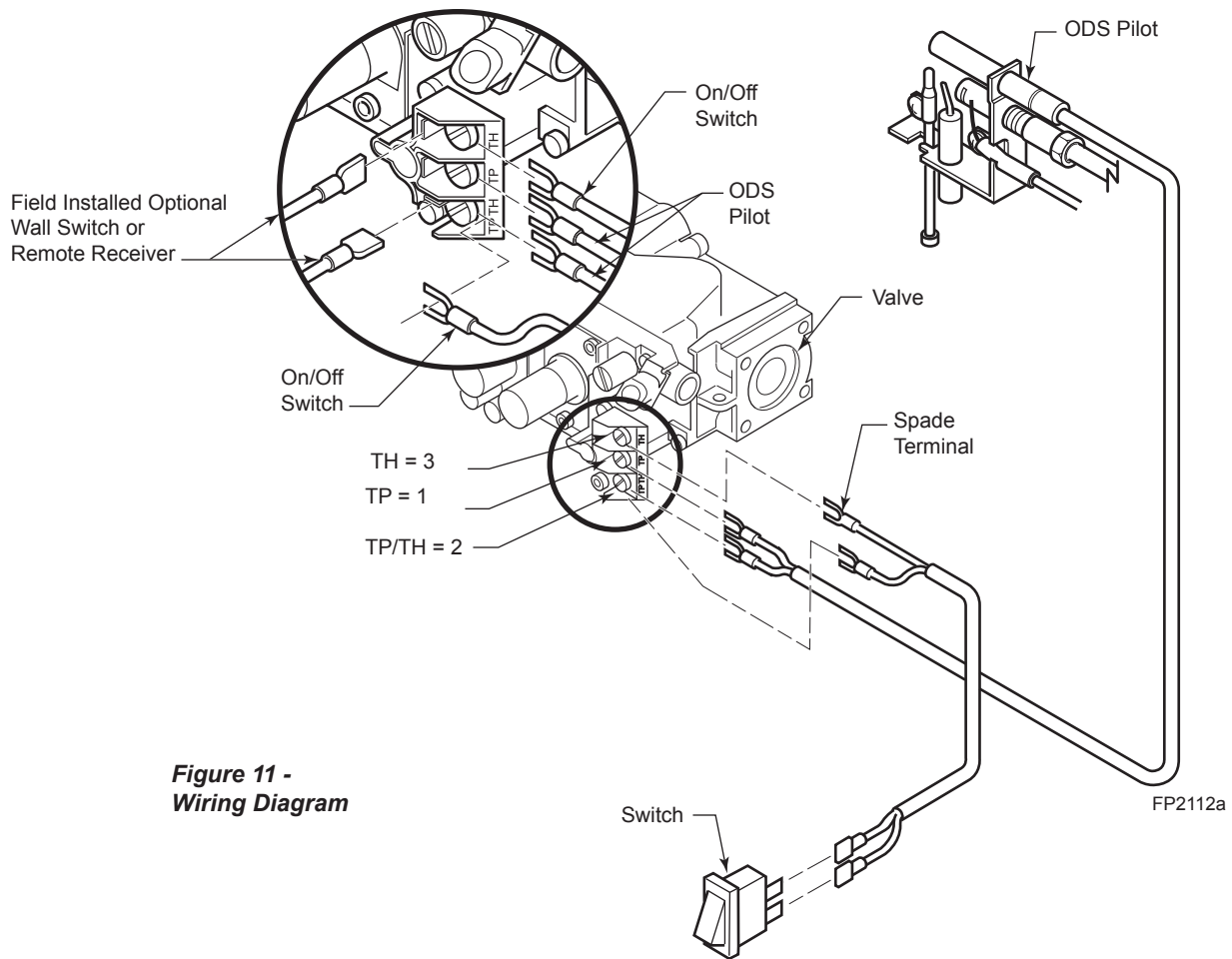
Figure 10 -  
Pressure Test Point Location Milli-volt Control

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

## ELECTRICAL WIRING

### CONNECTING OPTIONAL WALL SWITCH

1. Use 18 awg, two-wire cable, 15 feet 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.



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

**CONNECT REMOTE RECEIVER**

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

Figure 12

1. Remove bottom louvre door.
2. Connect the remote connectors located in the unit.
3. Stick Velcro® pads with self-adhesive backing to bottom of remote receiver and to floor of compartment behind access panel.
4. Attach remote receiver to firebox with Velcro® pads. Control switch must face forward.

**NOTE:** Do not place remote in combustion chamber.

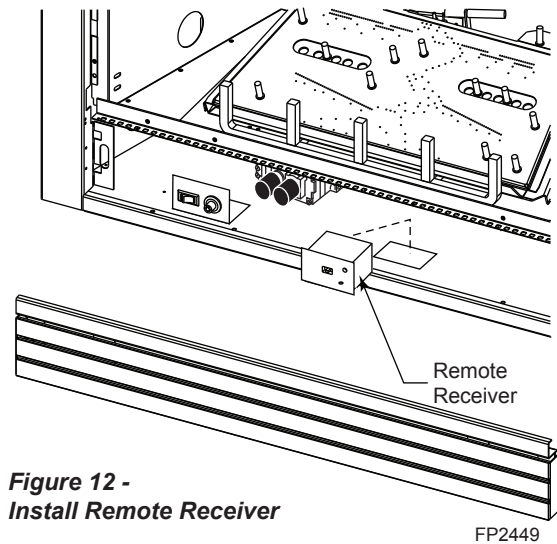


Figure 12 - Install Remote Receiver

FP2449

**CHECK 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.

**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.

Check Test	To Test	Connect Meter Leads to Terminals	Switch or Thermostat Contacts	Meter Reading Should Be
A	Complete System	2 & 3	Closed	Closed
B	Thermopile	1 & 2	Open	Open

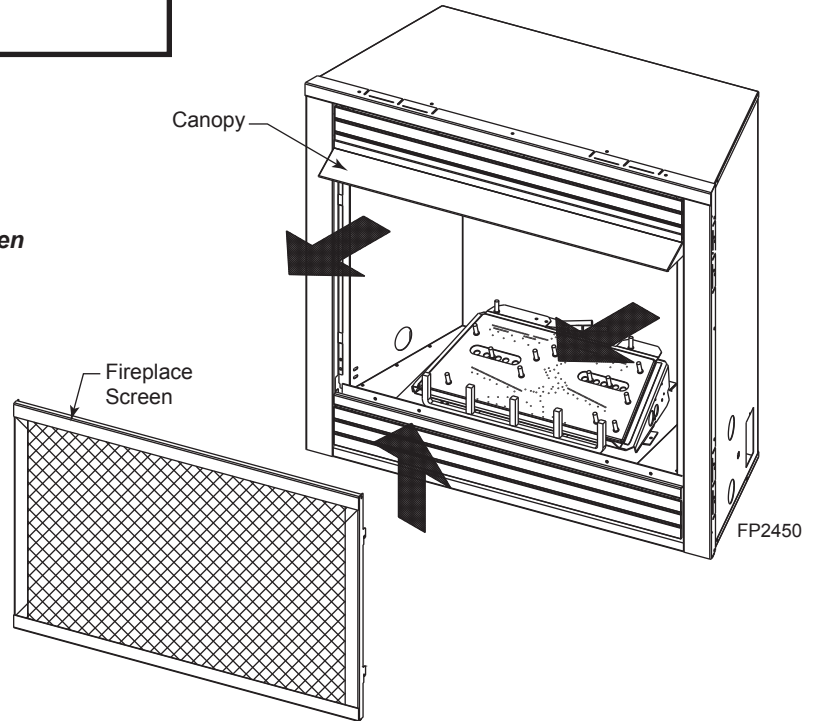
**SCREEN REMOVAL**

Remove fireplace screen frame panel by pushing screen frame panel up and out.

*Figure 13*

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

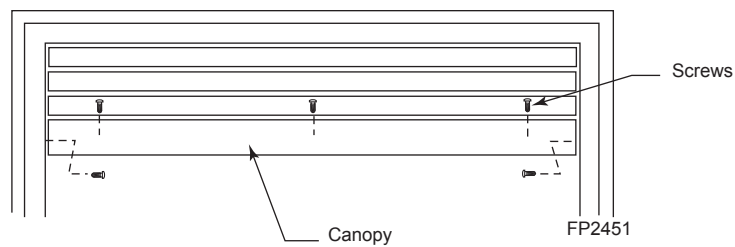
*Figure 13 -  
 Remove Fireplace Screen  
 Frame Panel*



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

**CANOPY INSTALLATION**

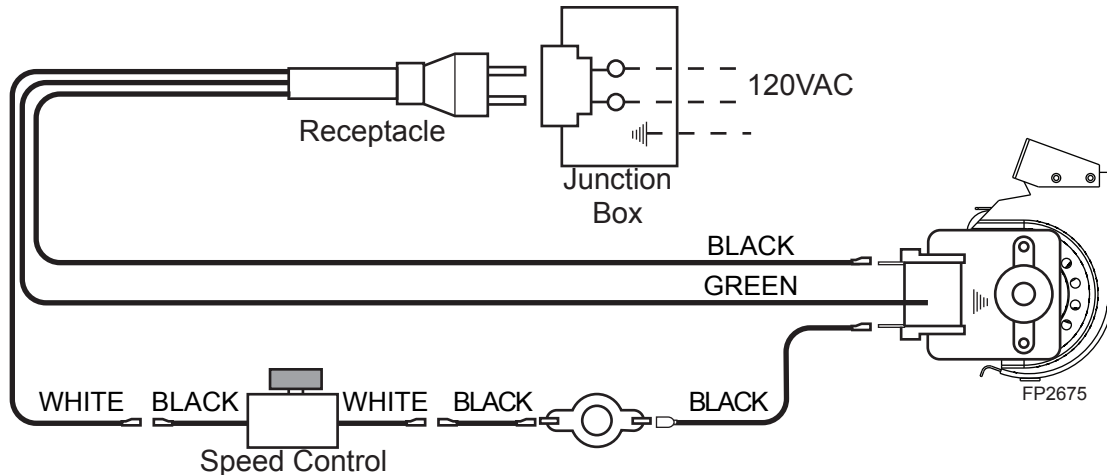
1. Remove the fireplace screen as described in the previous section.
2. Align the canopy with the holes in the top frame. *Figure 14*
3. Install and tighten side screws.
4. Make sure the canopy is level and secure. Install the fireplace screen.



*Figure 14 -  
 Install Canopy*

**FORCED AIR KIT (BLOTMC)**

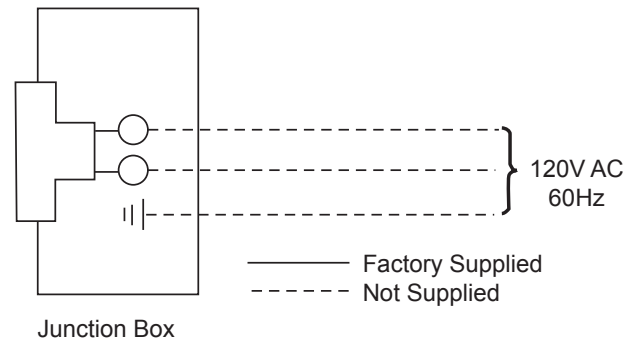
If you are installing the forced air blower kit, refer to the installation instructions provided with the kit. The firebox must be connected to main power supply at time of firebox installation. The electrical connections must be made before the firebox is framed and enclosed in the finished walls.



**Figure 15 -**  
**BLOTMC Blower Wiring Diagram**

**JUNCTION BOX WIRING**

1. This should be done before framing the fireplace. Wire the receptacle into an electrical circuit. Wire with minimum 60° C wire in accordance with prevailing codes.
2. Remove the external junction box cover by removing the screw from the side of the outside firebox wall. Junction box was installed at the factory.
3. The junction box cover has a factory installed “romex” style strain relief connector. After connecting the wires, route the wire leads through this connector. Refer to the wiring diagram in *Figure 16*.



**Figure 16 -**  
**Junction Box Wiring Diagram**

**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.**

**The blower when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70.**



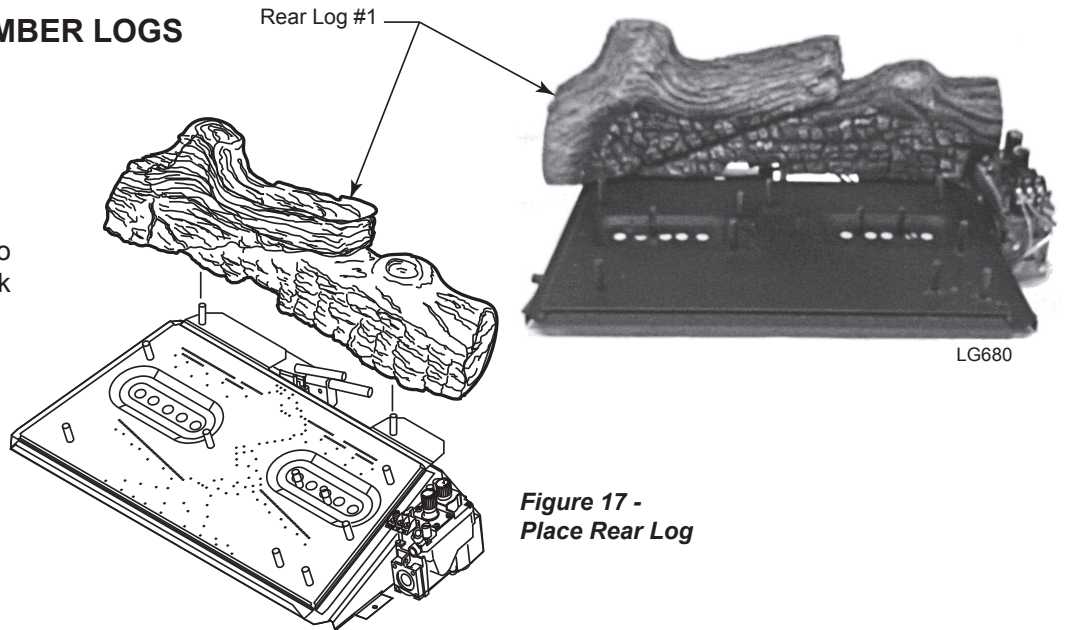
**Before you begin** — This unit is supplied with six (6) ceramic fiber logs. Do not handle these logs with your bare hands. **Always wear gloves to prevent skin irritation from ceramic fibers.** After handling the logs, wash your hands gently with soap and water to remove any traces of fibers.

**CAUTION**  
**DO NOT** sprinkle volcanic rock on the logs or around the pilot or the main burner. This may cause sooting. Only place volcanic rock 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.

**WARNING**  
 The positioning of the logs is critical to the safe and clean operation of this heater. Sooting and other problems may result if the logs are not properly and firmly positioned in the appliance. Never add additional logs or embellishments such as pine cones, vermiculite or rock wool to the heater. Only use the logs and TPB-RW (rock wool) 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.

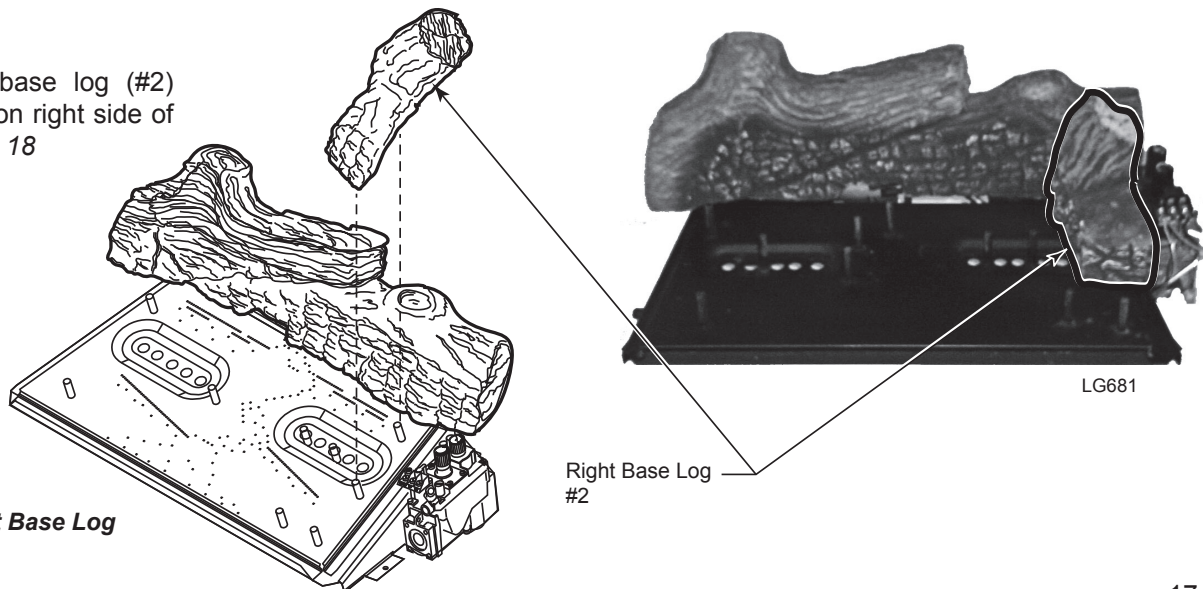
**PLACE CHARRED TIMBER LOGS**

1. Place rear log (#1) on two located pins on the back of the grate. *Figure 17*



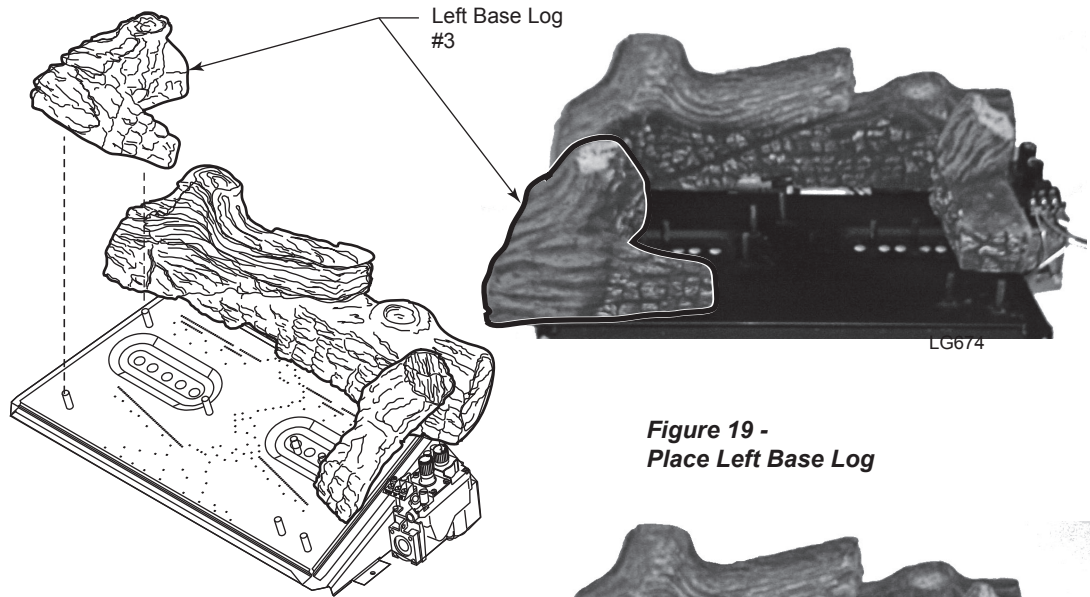
*Figure 17 - Place Rear Log*

2. Place right base log (#2) on two pins on right side of grate. *Figure 18*



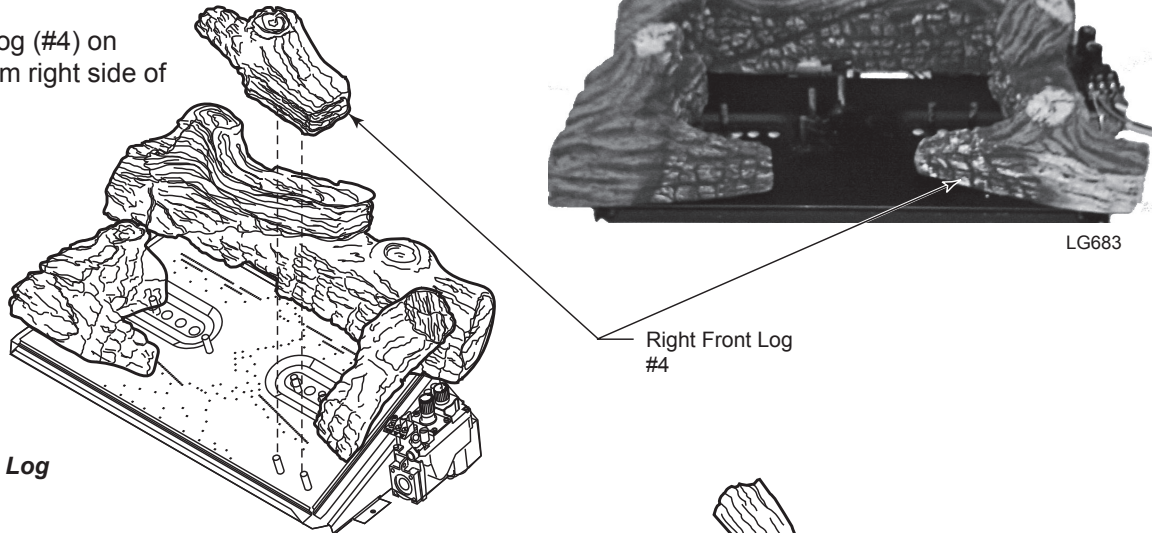
*Figure 18 - Place Right Base Log*

- 3. Place left base log (#3) on two pins on left side of grate. *Figure 19*



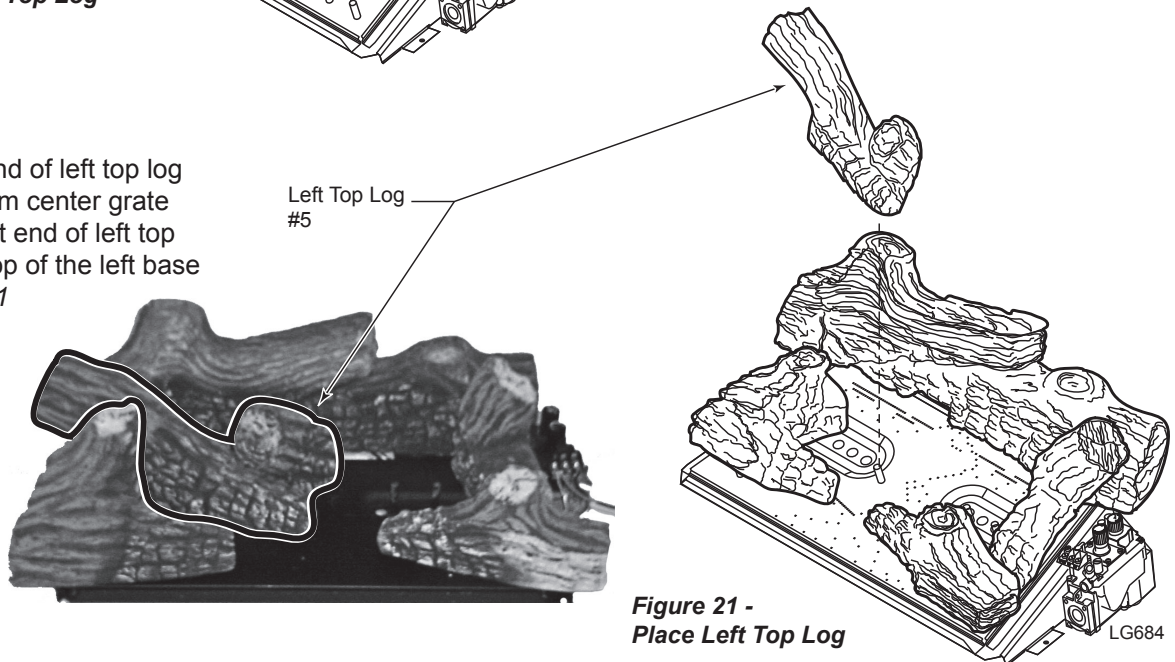
**Figure 19 - Place Left Base Log**

- 4. Place right front log (#4) on two pins on bottom right side of grate. *Figure 20*



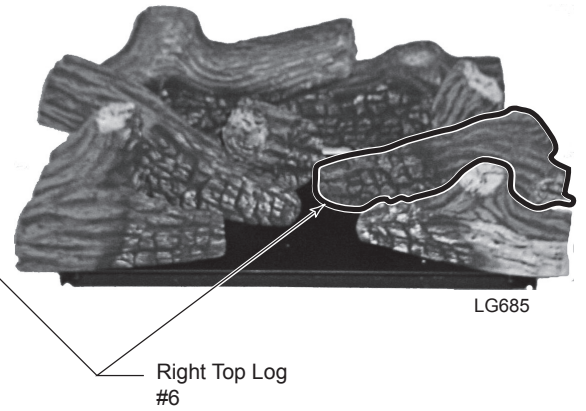
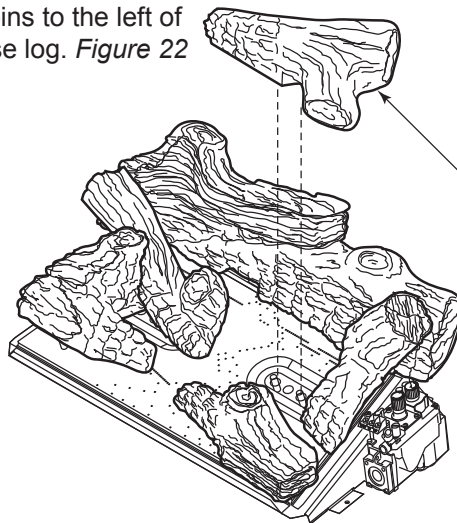
**Figure 20 - Place Right Top Log**

- 5. Place right end of left top log (#5) on bottom center grate pin. Place left end of left top log (#5) on top of the left base log. *Figure 21*



**Figure 21 - Place Left Top Log**

- 6. Place right top log (#6) on two pins to the left of right base log. *Figure 22*



**Figure 22 -  
Place Right Top Log**

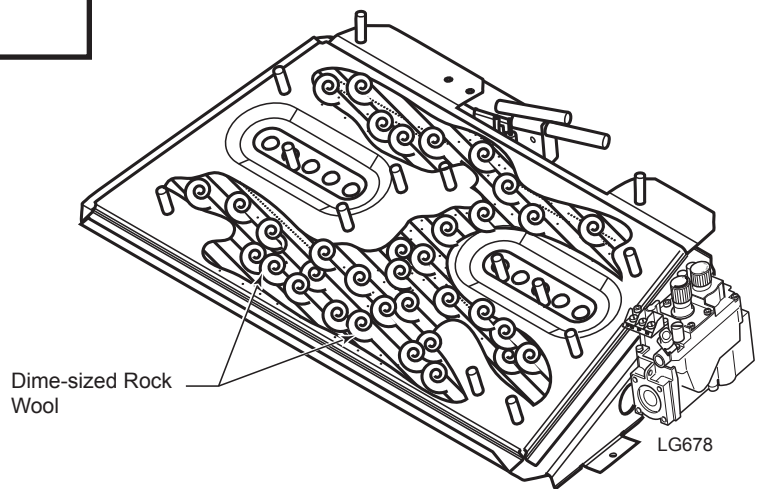
**PLACING ROCK WOOL**

After placing logs, place TPB18-RW (Rock Wool) in dime-size pieces evenly across the burner surface in between the logs. Do not add additional Rock Wool. *Figure 23*

Wash hands after placing Rock Wool. Itching may occur.

**WARNING**

- Use only TPB18-RW rock wool provided with log set.
- Do not add additional rock wool.



**Figure 23 -  
Place Rock Wool**

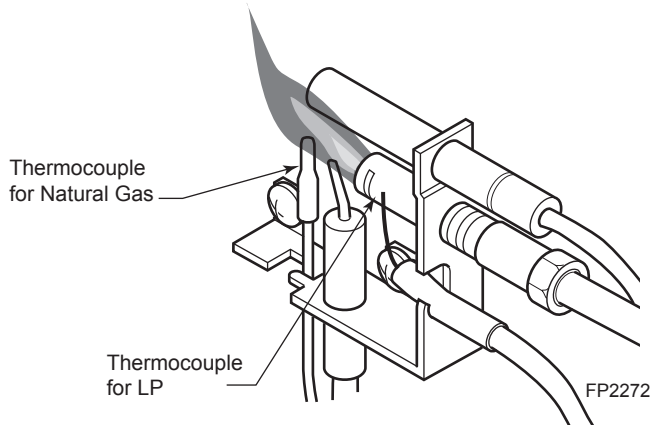
Flames from the pilot, front and rear burner should be visually checked as soon as the heater is installed. In addition, periodically check the flames visually during operation.

### CHECK THE PILOT FLAME

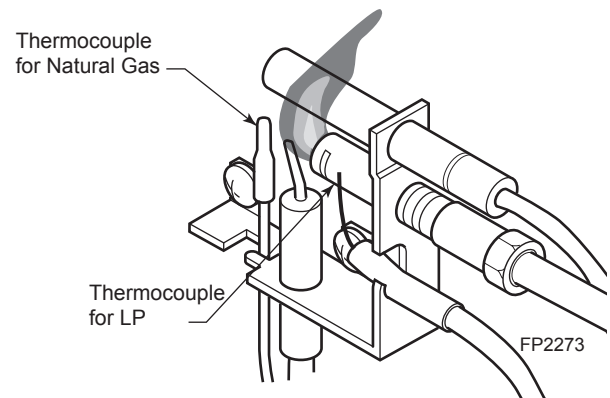
The pilot flame must always be present when the heater is in operation. It should just touch the top of the thermocouple tip for natural. Refer to Figure 26 for correct pilot flame.

If the pilot flame does not touch the thermocouple, then the main burner cannot function reliably. Refer to Figure 25 for incorrect shape of pilot flame.

### MILLI-VOLT CONTROL



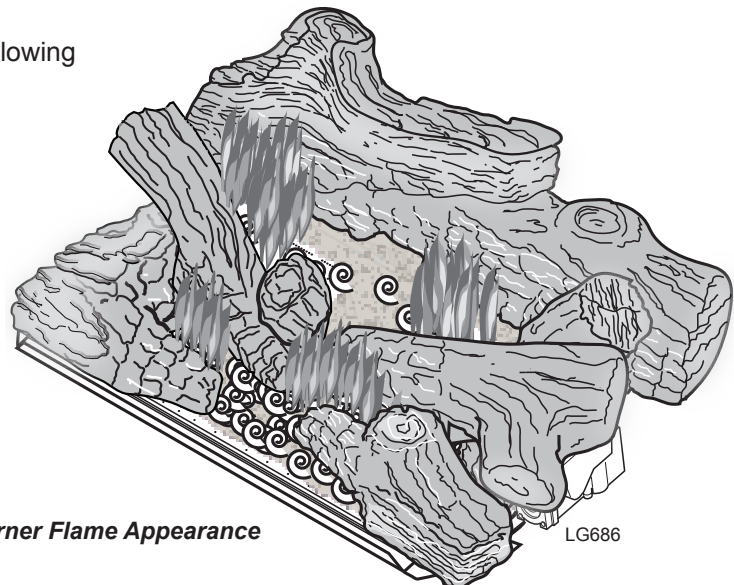
**Figure 24 -**  
**Correct Pilot Flame Appearance**



**Figure 25 -**  
**Incorrect Pilot Flame Appearance**

### BURNER FLAME APPEARANCE

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



**Figure 26 -**  
**Correct Burner Flame Appearance**

Burner will have a random pattern of yellow flames as shown in Figure 26. There should be glowing embers on the front burner. **NOTE: The front flames and embers will be an opaque orange color during the burn off time.**

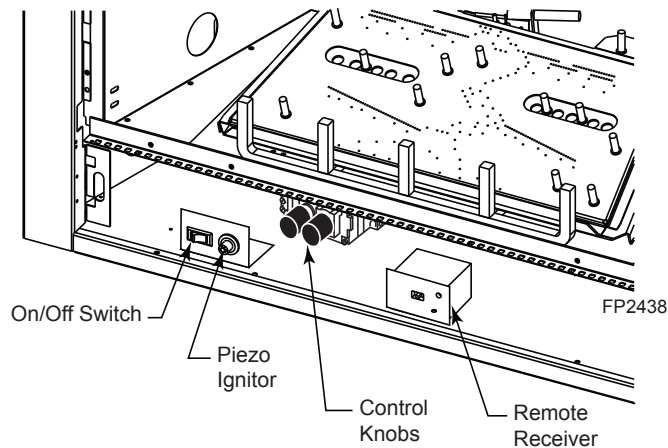
**FOR YOUR SAFETY READ BEFORE LIGHTING****WARNING**

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 a pilot which must be lit with built-in piezo ignitor while following these instructions exactly.
- 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:**

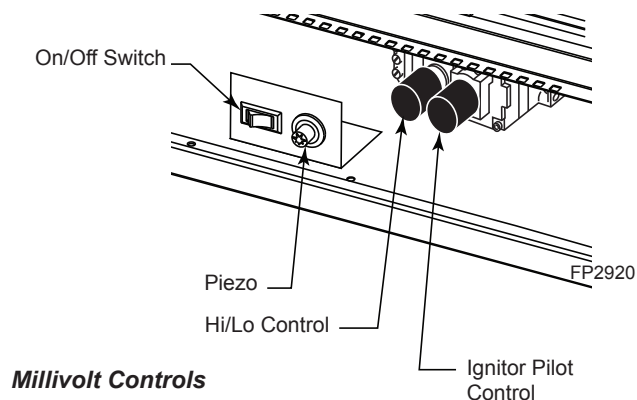
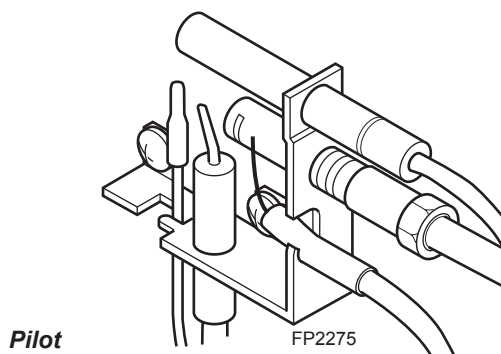
- Turn off all gas to the appliance.
  - Open windows.
  - Do not attempt to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach 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.



**DFS Controls**

## MILLI-VOLT 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 23.
4. Turn gas control knob clockwise ↷ to the OFF position, 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 21. 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 60 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.



## 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.

## 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.

**WARNING**

Turn off heater and allow to cool before cleaning.

Disconnect electrical power before cleaning or servicing.

### CLEANING AND SERVICING

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

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.

**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.

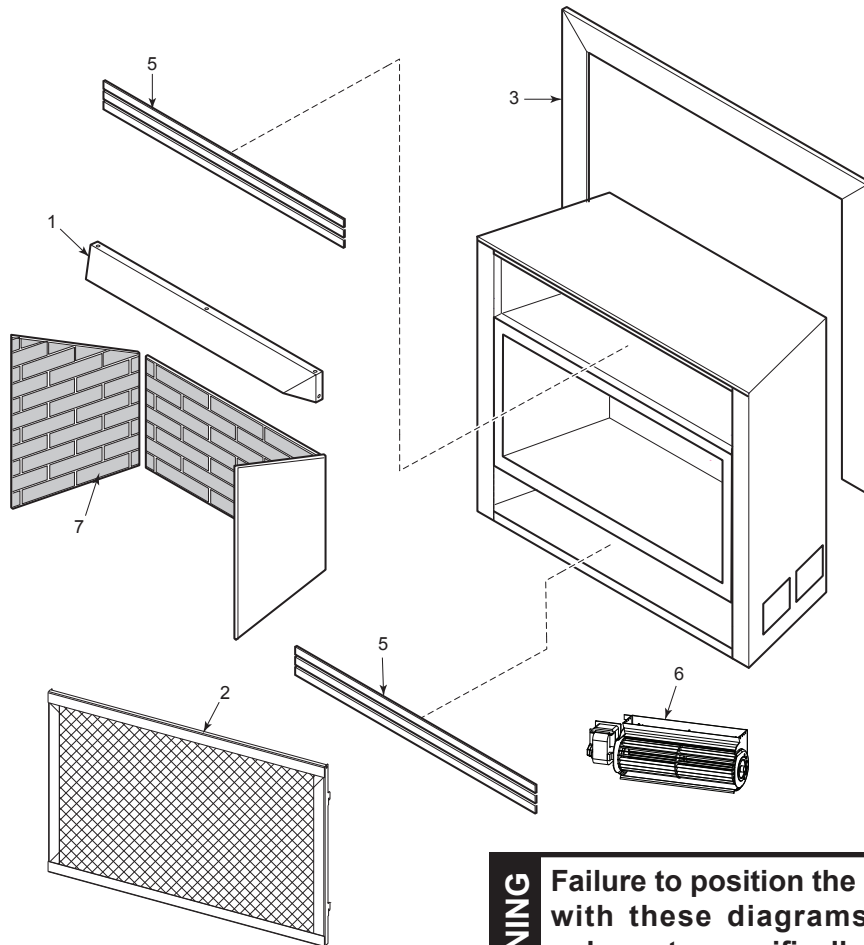
OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
When ignitor button is pressed, there is no spark at ODS/pilot.	<ol style="list-style-type: none"> <li>1. Ignitor electrode positioned wrong.</li> <li>2. Ignitor electrode is broken.</li> <li>3. Ignitor electrode not connected to ignitor cable.</li> <li>4. Ignitor cable pinched or wet. Keep ignitor cable dry.</li> <li>5. Broken ignitor cable.</li> <li>6. Bad piezo ignitor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace ignitor.</li> <li>2. Replace ignitor.</li> <li>3. Reconnect ignitor cable.</li> <li>4. Free ignitor cable if pinched by any metal or tubing.</li> <li>5. Replace ignitor cable.</li> <li>6. Replace piezo ignitor.</li> </ol>
Appliance produces unwanted odors.	<ol style="list-style-type: none"> <li>1. Appliance burning vapors from paint, hair spray, glues, etc.</li> <li>2. Gas leak.</li> <li>3. Initial burn off.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ventilate room. Stop using odor causing products while heater is running.</li> <li>2. Locate and correct all leaks.</li> <li>3. Ventilate room and turn unit on high until odor is gone. Odor should be gone after 6 hours of continuous use.</li> </ol>
Appliance shuts off during use.	<ol style="list-style-type: none"> <li>1. Not enough fresh air is available for ODS/ pilot to operate.</li> <li>2. Low line pressure.</li> <li>3. ODS/pilot is partially clogged.</li> <li>4. Defective Thermopile.</li> <li>5. Restrictions in incoming air flow.</li> </ol>	<ol style="list-style-type: none"> <li>1. Open window and/or door for ventilation.</li> <li>2. Contact local gas company.</li> <li>3. Clean ODS/pilot.</li> <li>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.</li> <li>5. Check for bottom riser on glass door, sunken fireplace, excessive lava rock/cinders densely packed against grate.</li> </ol>
Gas odor even when control knob is in OFF position.	<ol style="list-style-type: none"> <li>1. Gas leak.</li> <li>2. Control valve defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Locate and correct all leaks.</li> <li>2. Replace control valve.</li> </ol>
When ignitor button is pressed, there is spark at ODS pilot, but no ignition.	<ol style="list-style-type: none"> <li>1. Gas supply turned off or manual shutoff valve closed.</li> <li>2. Control knob not in PILOT position.</li> <li>3. Control knob not pressed in while in PILOT position.</li> <li>4. Air in gas lines when installed.</li> <li>5. ODS/pilot is clogged.</li> <li>6. Gas regulator setting is not correct.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn on gas supply or open manual shutoff valve.</li> <li>2. Turn control knob to PILOT position.</li> <li>3. Press in control knob while in PILOT position.</li> <li>4. Continue holding down control knob. Repeat igniting operation until air is removed.</li> <li>5. Replace ODS/pilot assembly or get it serviced.</li> <li>6. Replace gas regulator.</li> </ol>



**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.**

<b>OBSERVED PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>REMEDY</b>
ODS/pilot lights, but flame goes out when control knob is released.	<ol style="list-style-type: none"> <li>1. Control knob not fully pressed in.</li> <li>2. Control knob not pressed in long enough.</li> <li>3. Manual shutoff valve not fully open.</li> <li>4. Thermocouple connection loose at control valve.</li> <li>5. 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.</li> <li>6. Thermocouple damaged.</li> <li>7. Control valve damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Press in control knob fully.</li> <li>2. After ODS/pilot lights, keep control knob pressed in for 30 seconds.</li> <li>3. Fully open manual shutoff valve.</li> <li>4. Hand tighten thermocouple connection until snug, then tighten 1/4 turn more.</li> <li>5a. Contact local gas company.</li> <li>5b. Clean pilot with vacuum cleaner.</li> <li>6. Replace thermocouple.</li> <li>7. Replace control valve.</li> </ol>
Burner does not light after ODS/pilot is lit.	<ol style="list-style-type: none"> <li>1. Burner orifice is clogged.</li> <li>2. Burner orifice diameter is too small.</li> <li>3. Inlet gas pressure is too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean orifice.</li> <li>2. Replace burner orifice.</li> <li>3. Contact qualified service person.</li> </ol>
Burner backfires during combustion.	<ol style="list-style-type: none"> <li>1. Manifold pressure is too low.</li> <li>2. Burner orifice is clogged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Contact local gas company.</li> <li>2. Clean burner or replace burner orifice.</li> </ol>
Slight smoke or odor during initial operation.	<ol style="list-style-type: none"> <li>1. Burner orifice is clogged or damaged.</li> <li>2. Burner is damaged.</li> <li>3. Gas regulator defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean burner or replace burner orifice.</li> <li>2. Replace burner.</li> <li>3. Replace gas regulator.</li> </ol>
Logs appear to smoke after initial operation.	<ol style="list-style-type: none"> <li>1. Vapors from paint or curing process of logs.</li> <li>2. Vapors or smoke continue after heater has run with damper or window open for several hours.</li> </ol>	<ol style="list-style-type: none"> <li>1. 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.</li> <li>2. Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.</li> </ol>
Heater produces a whistling noise when burner is lit.	<ol style="list-style-type: none"> <li>1. Turning control knob to HIGH position when burner is cold.</li> <li>2. Air in gas line.</li> <li>3. Dirty or partially clogged burner orifices.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn control knob to LOW position and let warm up for a minute.</li> <li>2. Operate burner until air is removed from line. Have gas line checked by local gas company.</li> <li>3. Clean burner or replace burner orifice.</li> </ol>
No gas to pilot.	<ol style="list-style-type: none"> <li>1. LP-regulator shut down due to inlet pressure too high.</li> </ol>	<ol style="list-style-type: none"> <li>1. Verify LP tank regulator is installed and set at 11" to 13" w.c.</li> <li>2. Replace regulator on heater.</li> </ol>



**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.

**DFS Firebox**

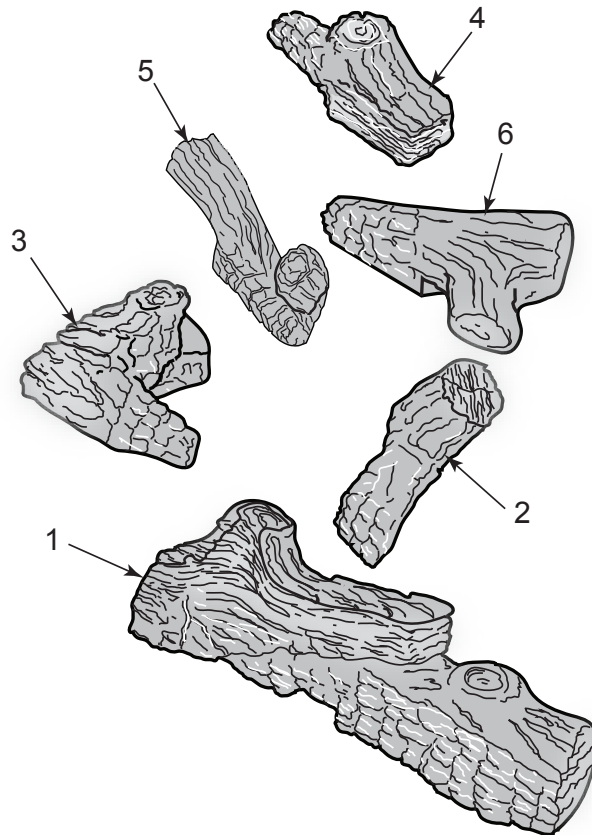
Ref.	Description	Qty.	DFS32	DFS36	DFS42
1.	Canopy	1	71D0010K	71D0011K	71D0012K
2.	Screen Assy	1	71D0004TK	71D0005TK	71D0006TK
3.	Trim Kit - Black	1	BLMTK32C	BLMTK36C	BLMTK42C
4.	Junction Box (not shown)	1	26D2128	26D2128	26D2128

**Options**

5.	Louver Kit - Brass	1	L32BRM	L36BRM	L42BRM
5.	Louver Kit - Pewter	1	L32PVM	L36PVM	P42PVM
5.	Louver Kit - Black	1	26D0695	26D0697	26D0699
6.	Blower w/Rheostat	1	BLOTMC	BLOTMC	BLOTMC

**Accessories**

3.	Curved Design Trim - Brass	1	BRTK32C	BRTK36C	BRT42C
3.	Curved Design Trim - Pewter	1	PWTK32C	PWTK36C	PWTK42C
3.	Curved Design Trim - Black	1	BLTK32C	BLTK36C	BLTK42C
3.	Trim Kit - Brass	1.	BRMTK32C	BRMTK36C	BRMTK42C
3.	Trim Kit - Pewter	1	PWMTK32C	PWMTK36C	PWMTK42C
7.	Firebrick - Cottage Red	1	FB32C	FB36C	FB42C
8.	Outsid Air Kit (not shown)	1	AK-4	AK-4	AK-4
1.	Canopy - Wide Brass	1	BRC32	BRC36	BRC42

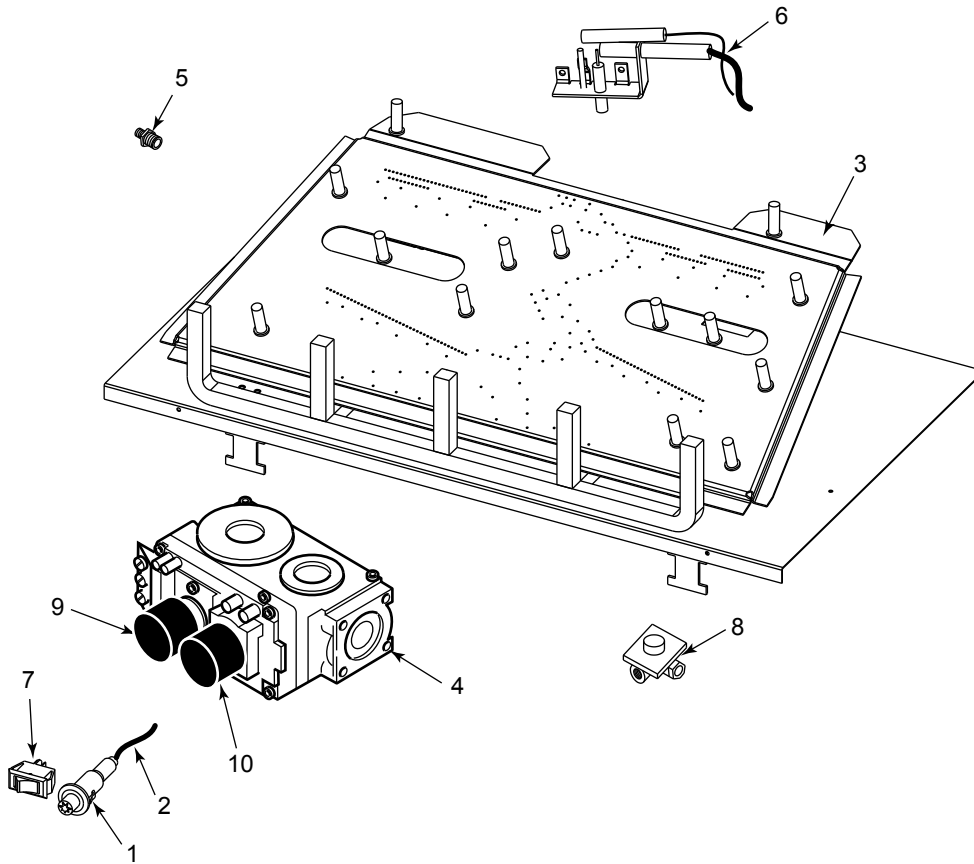


**DFS Logs**

Ref.	Description	Qty.	DFS32	DFS36	DFS42
1.	Rear Log - #1	1	70D0031	70D0031	70D0221
2.	Right Base Log - #2	1	70D0032	70D0032	70D0222
3.	Left Base Log - #3	1	70D0033	70D0033	70D0223
4.	Right Front Log - #4	1	70D0037	70D0037	70D0227
5.	Left Top Log - #5	1	70D0065	70D0065	70D0229
6.	Right Top Log - #6	1	70D0034	70D0034	70D0224

**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.



**DFS Millivolt Control**

Ref.	Description	Qty.	DFSNVC	DFSPVC
1.	Piezo Igniter	1	14D0503	14D0503
2.	Piezo Wire	1	00K0632	00K0632
3.	Burner	1	70D0010	70D0010
4.	Control Valve	1	14D0467	14D0468
5.	Injector	1	70D0064	57D0680
6.	ODS Pilot Assy.	1	14D0473	14D0477
7.	On/Off Switch	1	32D0232	32D0232
8.	Pilot Regulator	1	14D0469	n/a
9.	Hi/Lo Knob	1	37D0011	37D0011
10.	Pilot On/Off Knob	1	37D0010	37D0010

**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.

**OPTIONAL EQUIPMENT**

**FORCED AIR KIT**

If you are installing the forced air kit, Model BLOTMC, 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.

**OPTIONAL TRIM**

Optional brass or pewter trim kits can be used in place of the factory supplied black trim.

**OPTIONAL BRICK**

Optional Tavern Brown and Cottage Red firebrick kits can be installed. Refer to installation instructions provided with kit.

<b>WARNING</b>	<b>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.</b>
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**Optional Accessories**

<b>Description</b>	<b>Part Number</b>
Wall Thermostat Kit	WT
Remote - On/Off	RCB, RCBE, RCM, WMTD, TMSC
Thermostat Remote	RCST, RCSTE, RCT, WWTD, TSST
Remote Receiver Cover Ember	RRCE
Remote Receiver Cover Metal	RRCM
Cast Iron Grate and Andirons	CIGA (Not available for DFS32)
Rock Wool - Bag	TPB18-RW

1. Remove top and bottom louver assemblies by disengaging hooks. Pull assemblies up and away from unit. *Figure 28*

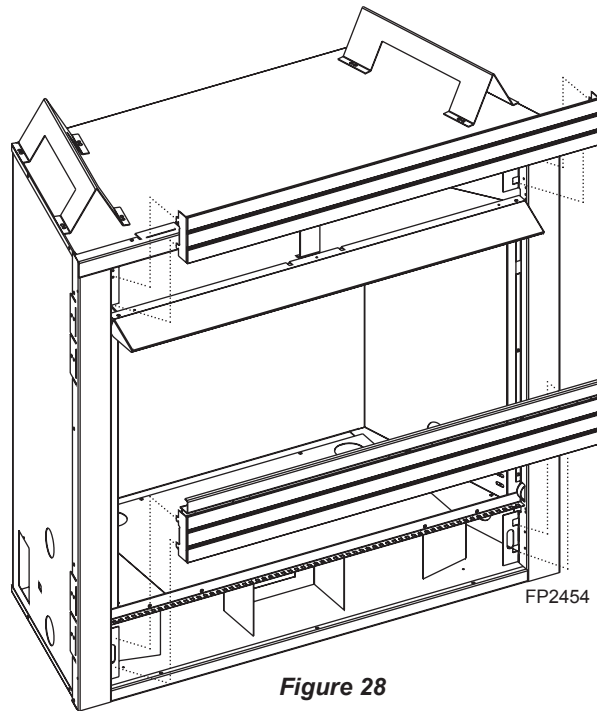


Figure 28

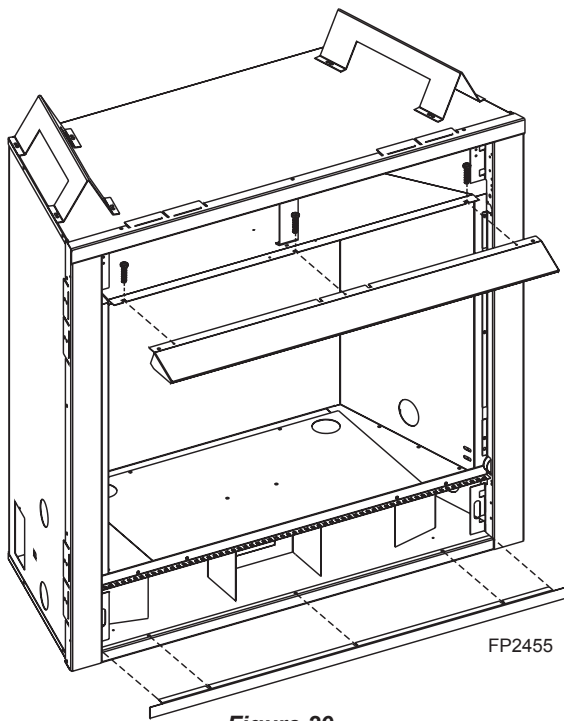


Figure 29

2. Remove canopy by removing screws and pulling canopy away from unit. *Figure 29*
3. Set bottom trim kit piece in place on bottom of face. Bottom piece will be held in place by the side pieces. *Figure 29*

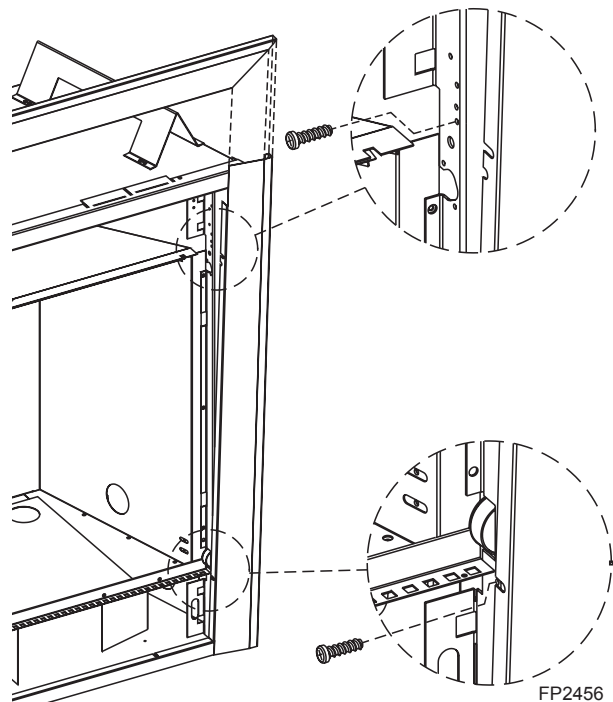
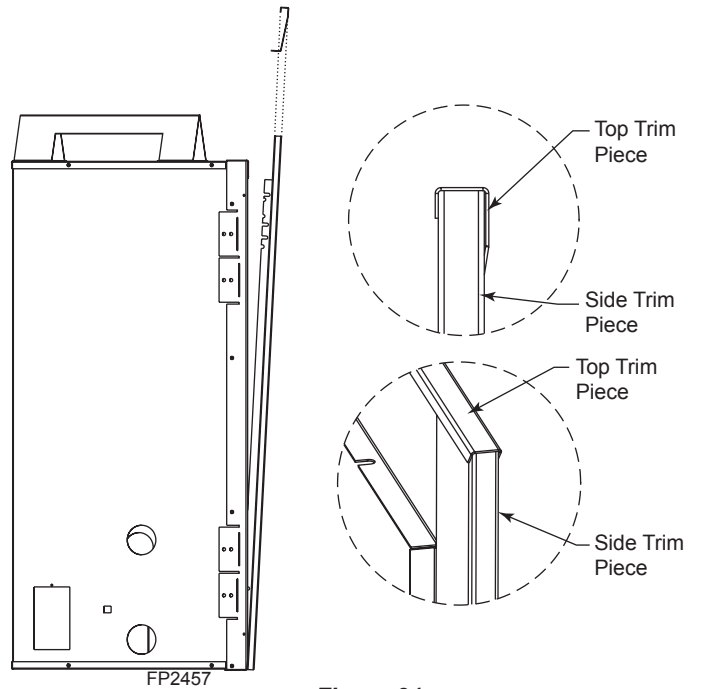


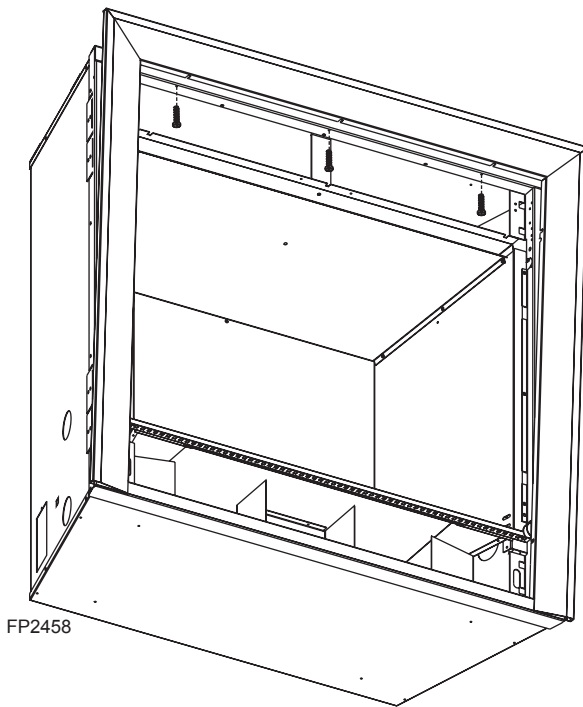
Figure 30

4. Loosely install four supplied screws into left and right sides of unit face. Leave approximately 1/8th in. of screw shaft protruding from unit in each location. *Figure 30*

5. Set left and right side piece of trim kit in place on unit. Lean the top of each piece away from the unit and towards you in order to install top trim kit piece. Top piece should fit with sides as shown. *Figure 31*



**Figure 31**

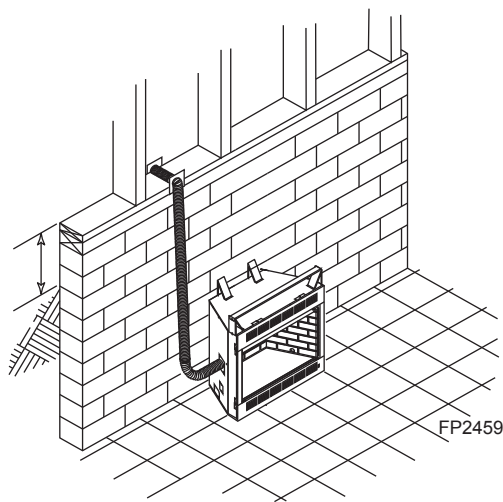


**Figure 32**

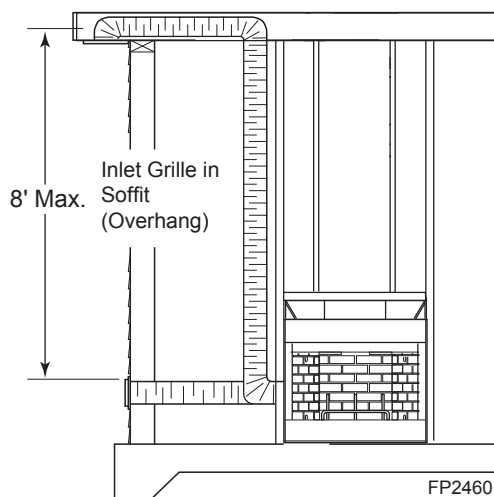
6. Hold trim kit together by gripping the top left and right corners. Tilt trim kit away from you and into place snugly against unit. Tighten screws installed in Step 4.
7. Secure the top trim piece to unit by installing supplied screws. *Figure 32*
8. Secure canopy back in place on unit.

**COMBUSTION AIR**

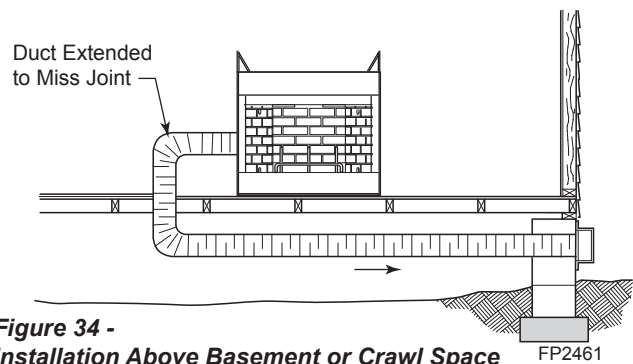
1. Locate combustion air assembly at an exterior location which is not likely to be accidentally blocked in any manner. Locate assembly a min. of 12" above the snow line to prevent blockage by snow accumulation.
2. Never mount the combustion air inlet assembly in a garage or storage area where combustible fumes such as gasoline might be drawn into the fireplace.
3. Combustion air can be drawn from the crawl space under a house when an adequate supply of air is provided by open ventilation.
4. **CAUTION: Do not take combustion air from attic space or garage space.**
5. Locate air supply inlet at least 3' away from any appliance vent terminal.
6. Avoid extremely long runs and numerous turns in the duct leading from the fireplace to the combustion air assembly. These conditions increase the resistance to the free flow of air through the duct. Refer to Figures 33 through 36 for methods of installing the outside air for combustion assemblies.



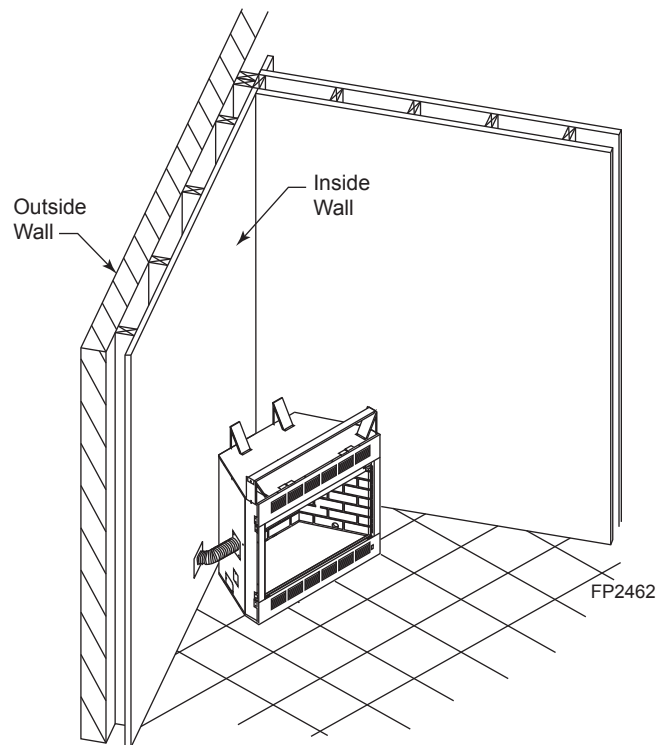
**Figure 33 -  
Basement Installation**



**Figure 35 -  
Concrete Slab Installation  
(Optional Outside Air runs)**



**Figure 34 -  
Installation Above Basement or Crawl Space**



**Figure 36 -  
45° Corner Installation on Slab Floor**



The use of outside air for combustion is optional unless required by building codes. It is only necessary to supply outside combustion air to one side of the fireplace. Use the model AK4 combustion air kit.

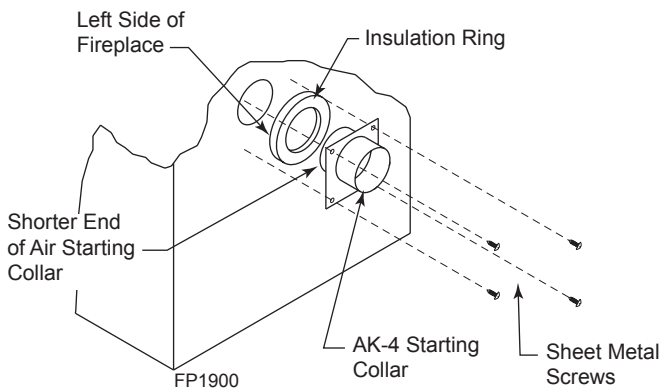
**MODEL AK-4 COMBUSTION AIR ASSEMBLY**

1. Remove the cover plate from the 4" outlet opening location on the left or right outside of the fireplace.
2. Place the insulation ring between the AK-4 starting collar and fireplace wall.
3. Place the starting collar (4") into the hole on the side of fireplace. Fasten it in place with the four sheet metal screws provided. *Figures 37 and 38*

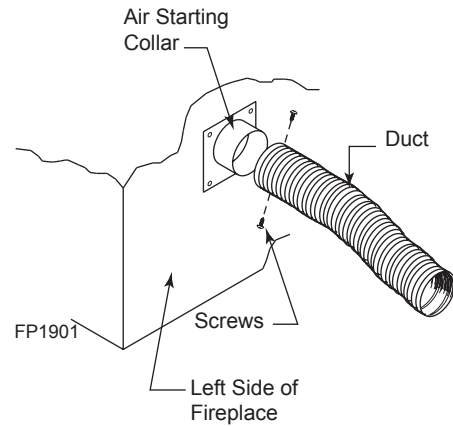
**NOTE:** The air starting collar extends through the fireplace outer wrap. When the air starting collar is securely attached, it will form a seal against the fireplace wall.

4. Attach outside duct to starting collar with duct clamp or screws. *Figure 39*

**WARNING** DO NOT remove the cover if the outside air will not be connected.



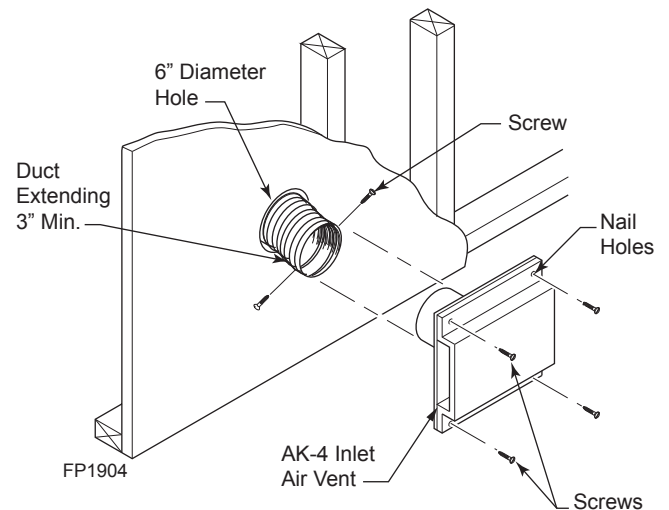
**Figure 37 - Attach Outside Air Starting Collar and Insulation Ring to Left Side of Fireplace**



**Figure 38 - Attach Outside Duct to Starting Collar**

5. Cut a 6-inch diameter opening for model AK-4 in the outside wall covering where the outside vent is to be located. *Figure 39*
6. Select and cut a piece of duct long enough to attach to the fireplace and stick out at least 3" beyond the face of the wall to which the AK-4 inlet air vent will be attached. *Figure 38*

**WARNING** Use FP-4 U duct for maximum efficiency and safety. Do not use a combustible duct. Always use UL Listed Class ) or 1 duct material.



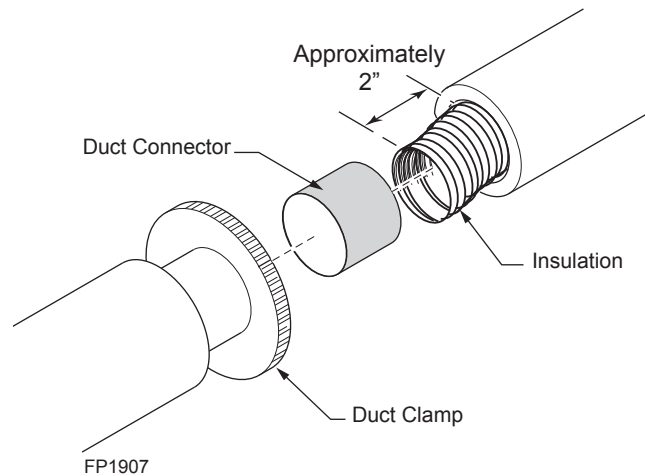
**Figure 39 - Combustion Air Assembly for Model No. AK-4**

7. If the duct is the insulated type, push the insulation back from one end of the duct approximately 2". *Figure 40*
8. Slip the exposed end of the duct over the starting collar on the fireplace.
9. Using the sheet metal screws provided, secure the duct end to the collar attached to the fireplace.
10. Nail or screw the combustion air assembly to the surface of the wall.

**NOTE:** If the wall covering is brick or stone, use appropriate masonry fasteners. If necessary, splice the duct. Use a model 403-duct connector to splice duct sections.

### INSTALL MODEL 403 DUCT CONNECTOR

1. Push insulation back approximately 2" from the end of each duct.
2. Slip each duct over duct connector until an equal length of connector extends into each duct.
3. Place duct clamp over the end of each duct. Tighten duct clamp down snugly.
4. Push insulation back into place and over duct clamp.



**Figure 40 -  
Install Duct Connector 403**

# LIMITED LIFETIME WARRANTY POLICY

## LIFETIME WARRANTY

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

## FIVE YEAR WARRANTY

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

## BASIC WARRANTY

MHSC 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 MHSC in the appliance are found to be defective in materials or workmanship, MHSC will, at its option, replace or repair the defective components at no charge to the original owner. MHSC will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from 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, alterations, 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. MHSC does not assume for it any other obligations or liabilities in connection with sale or use of the appliance. It 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 the Limited Lifetime Warranty.

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

## IF WARRANTY SERVICE IS NEEDED...

1. Contact your supplier. Make sure you have your warranty, your sales receipt and the model/serial number of your MHSC product.
2. DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.

**MHSC**

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[www.mhsc.com](http://www.mhsc.com)