



# Installation and Operation Instructions

## Mission™ B-Vent Fireplaces Millivolt System

P/N 126753-01 REV. M 9/2019

Ce manuel est disponible en français, simplement en faire la demande. Numéro de la pièce 126753-02.



P126753-01



### Models

Mission36TMN	Mission42TMN
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<b>INSTALLER:</b> Leave this manual with the appliance. <b>CONSUMER:</b> Retain this manual for future reference.	<b>Installateur :</b> Laissez cette notice avec l'appareil. <b>Consommateur :</b> Conservez cette notice pour consultation ultérieure.
<b>Decorative Product:</b> Not for use as a heating appliance.	<b>NOTICE:</b> Fireplace is not to be operated by a thermostat.
This appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or 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, unless a certified kit is used.	
Cet appareil peut installé dans une maison préfabriquée (mobile) déjà installée à demeure, si les règlements locaux le permettent. Ce appareil doit être utilisé uniquement avec le type de gaz indiqué sure la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz, sauf si une trousse de conversion est utilisée.	

**⚠ WARNING:**  
**FIRE OR EXPLOSION HAZARD**  
Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- 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.
  - Leave the building immediately.
  - 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.

**⚠ AVERTISSEMENT:**  
**RISQUED'INDENNIE OU D'EXPLOSION**  
Le non-respect Des avertissements de sécurité pourrait d'entraîner des blessures graves, la mort ou des dommages matériels.

- Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- **QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:**
  - Ne pas tenter d'allumer d'appareil.
  - Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
  - Sortez immédiatement de bâtiment.
  - Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
  - Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

**Thank you for your purchase. We appreciate your business!**

Please carefully read and follow all instructions in this manual. **Pay special attention to all warnings and safety information.**

Following these safety, care, and operation instructions will help ensure many years of dependable and enjoyable service from your fireplace.

**Please read and understand these instructions before installing or operating.**

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## SAFETY

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

**NOT FOR USE WITH SOLID FUEL CHECK LOCAL CODES PRIOR TO INSTALLATION**

### SAVE THIS BOOK

**This book is valuable. In addition to instructing you on how to install and maintain your appliance, it also contains information that will enable you to obtain replacement parts or optional accessory items when needed. Keep it with your other important papers.**

**This fireplace may not be installed in manufactured (mobile) housing constructed to HUD standards. The fireplace may be installed in aftermarket, non-HUD manufactured housing provided its installation complies with State and Local Codes and in the absence of these codes complies with the National Fuel Gas Code ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.**

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

**NOTICE: Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental burns. A physical Children and adults should be alerted is recommended if there are to be at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of and away from hot surfaces.**

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

## SAFETY *Continued*

### **WARNING**

**This product can expose you to chemicals including Carbon Black, which is known to the State of California to cause cancer, and Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**

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

** DANGER: Carbon monoxide poisoning may lead to death!**

**IMPORTANT: This appliance uses room air for combustion. It is imperative that provisions for adequate combustion and ventilation air be made. This appliance is NOT designed to and will not operate in a significant negative pressure environment (pressure within the home is less than pressures outside). Significant negatively pressured environments caused by weather, home design, or other devices will impact the operation of these appliances. Negative pressures may result in poor flame appearance, sooting, damage to property and/or severe personal injury. Contact your dealer if you suspect a negative pressure situation exists.**

This fireplace is a vented product. This fireplace will not produce any gas leakage into your home if properly installed. This fireplace must be properly installed by a qualified service person. If this unit is not properly installed by a qualified service person, gas leakage can occur.

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

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

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

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

1. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases unless a certified kit is used.
2. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
3. If you smell gas
  - shut off gas supply
  - do not try to light any appliance
  - Leave the building immediately.
  - do not touch any electrical switch; do not use any phone in your building
  - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions
  - if you cannot reach your gas supplier, call the fire department.
4. Never install the fireplace
  - in a recreational vehicle
  - where curtains, furniture, clothing or other flammable objects are less than 42" from front, top or sides of fireplace
  - in high traffic areas
  - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. A hearth extension is not required with this appliance. If one is installed, it is for aesthetic purposes only and does not have to meet the standard requirements.
8. Turn fireplace off and let cool before servicing or repairing. Only a qualified service person should install, service or repair this fireplace. Have fireplace inspected annually by a qualified service person.
9. You must keep control compartments, burners and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, etc. Turn off the gas valve and pilot light before cleaning fireplace.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See **Cleaning and Maintenance, Page 19**.
11. Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.
12. Do not use this fireplace to cook food or burn paper or other objects.
13. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on fireplace nameplate.
14. This appliance, 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 or the Canadian Electrical Code, CSA C22.1.
15. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
16. Do not install fireplace directly on carpeting, vinyl tile or any combustible material other than wood. The fireplace must set on a metal or wood panel extending the full width and depth of the fireplace.

## SAFETY *Continued*

17. Do not use fireplace if any part has been exposed to or under water. Immediately call a qualified service person to arrange for replacement of the unit.
18. Do not operate fireplace if any log is broken.
19. Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this fireplace.
20. Provide adequate clearances around air openings.
21. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
22. Clothing or other flammable material should not be placed on or near the appliance.
23. The draft hood be installed so as to be in the same atmospheric pressure zone as the combustion air inlet to the appliance and shall be located so that the relief opening is accessible for checking vent operation.

## UNPACKING

The following items are packed inside the firebox. Remove before positioning firebox into framing.

- Transition Collar - For vent connection
- Ceramic Log Pack - Shrink-wrapped on cardboard
- Three (3) plastic bags containing volcanic stone rock, pan and ember materials
- Rear Log - Remove the two plastic quick ties from around the burner and grate
- Grate Stand - Lift off of burner pan

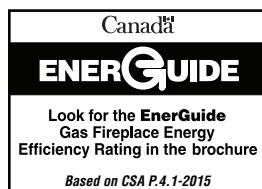
Check all items for any shipping damage. If damaged, promptly inform dealer or distributor where you purchased the product.

Safely retain these items for later installation.

## CODES AND STANDARDS

These fireplaces comply with National Safety Standards and are tested and listed by PFS Corporation (Report No. F09-143) to ANSI Z21.50 (in Canada, CSA-2.22) in both USA and Canada, as vented gas fireplaces. The installation must conform to local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54—latest edition (In Canada, the current CAN/CGA-B149.1 installation code). The fireplace, when installed, must be electrically grounded and wired in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70—latest edition, or the Canadian Electrical Code, CSA C22.1—latest edition.

These appliances comply with CSA P.4.1-2015 “Testing Method for Measuring Annual Fireplace Efficiency. P4 (EnerGuide) is a measurement of the Canadian Office of Energy Efficiency.



## COMMONWEALTH OF MASSACHUSETTS REQUIREMENTS

These appliances are approved for installation in the US state of Massachusetts if the following additional requirements are met:

- Install this appliance in accordance with Massachusetts Rules and Regulations 248 C.M.R. Sections 4.00 through 8.00.
- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 inches (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.

## INTRODUCTION

All 36" and 42" models listed are vented gas fireplaces that use a millivolt gas control valve with a millivolt ignition system. A 6" B-Type venting system and a listed type vent cap are not supplied but are required for proper operation. See venting instructions on **Pages 9 and 10**.

**⚠ WARNING: This gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.**

## BEFORE YOU BEGIN

Before beginning the installation of your appliance, read these instructions through completely.

This INNOVATIVE HEARTH PRODUCTS, LLC (IHP) appliance and its approved components are safe when installed according to this installation manual and are operated as recommended by IHP. Unless you use IHP approved components tested for this appliance, YOU MAY CAUSE A FIRE HAZARD!

The IHP warranty will be voided by and IHP disclaims any responsibility for the following actions :

- A) Modification of the appliance or any of the components.
- B) Use of any component part not approved by IHP in combination with this appliance.
- C) Installation and/or operation in a manner other than instructed in this manual.
- D) Burning of anything other than the type of gas approved for use in this gas appliance.

## INTRODUCTION *Continued*

**⚠ WARNING: Installation of this appliance should be done by a qualified service person well trained in the installation of such appliances. You will also need a building permit from your local Building and Safety Commissioner before installing this appliance; otherwise your insurance co. may not cover this appliance.**

**NOTICE: Decorative product not for use as a heating appliance.**

The appliance and its individual shutoff valve must be disconnected from gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

For the purpose of input adjustment two pressure taps (for IN and OUT pressures) are provided on the gas control valve for test gauge connections to the appliance.

**⚠ CAUTION: Do not connect appliance before pressure testing gas piping. Damage to gas valve may result and an unsafe condition may be caused.**

### SELECTING LOCATION

To determine the safest and most efficient location for your appliance, you must take into consideration the following guidelines:

1. The location must allow for proper clearances (*see Clearances, Page 7*).

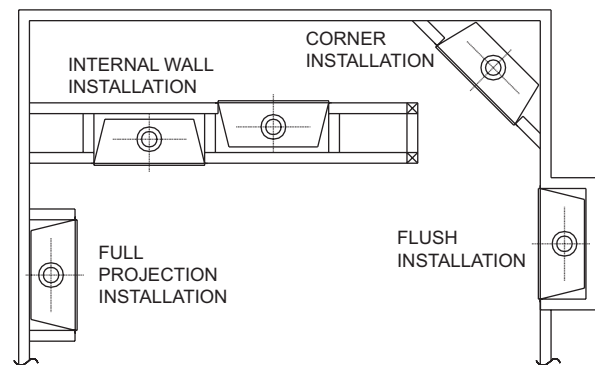
2. Consider a location where heat output would not be affected by drafts, air conditioning ducts, windows or doors.
3. A location that avoids the cutting of joists or roof rafters will make installation easier. **Figure 1** shows a plan view of a few common locations.

**Flush installations** are recommended where living space is limited or at a premium and since the space required to enclose the appliance would be located beyond an outside wall, this would also reduce the cutting of joists, roof rafters and such. Check local codes for any restrictions.

**Projected installations** can extend any distance into the room. A projection may be ideal for a new addition on an existing, finished wall.

**Corner installations** make use of space that may not normally be used and provides a wider and more efficient range for radiant heat transference.

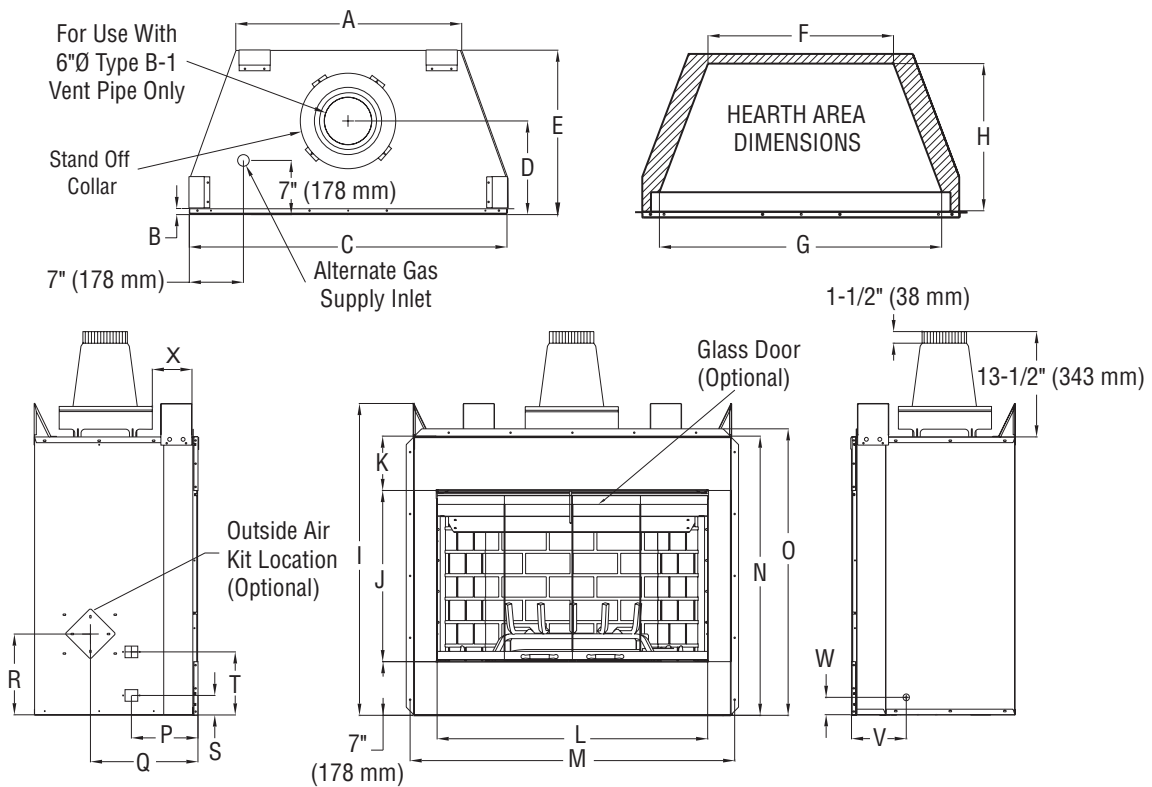
**Internal wall installations** provide a discreet option for room separation and can also be ideal as an addition to an existing wall.



**Figure 1 - Possible Locations for Installing Appliance**

## PRODUCT SPECIFICATIONS

GAS RATING - NATURAL		
	Mission36TMN	Mission42TMN
Max. Input Rating:	40,000 Btu/Hr	45,000 Btu/Hr
Manifold Pressure:	3.5" WC (.87 kPa)	3.5" WC (.87 kPa)
Minimum Supply Pressure:	4.5" WC (1.12 kPa)	4.5" WC (1.12 kPa)
Maximum Supply Pressure:	10.5" WC (2.62 kPa)	10.5" WC (2.62 kPa)
Orifice Size:	# 31	# 29
GAS RATING - PROPANE/LP		
Max. Input Rating:	31,000 Btu/Hr	37,000 Btu/Hr
Manifold Pressure:	10" WC (2.50 kPa)	10" WC (2.50 kPa)
Minimum Supply Pressure:	11" WC (2.74 kPa)	11" WC (2.74 kPa)
Maximum Supply Pressure:	13" WC (3.23 kPa)	13" WC (3.23 kPa)
Orifice Size:	# 52	# 50



Model 36		Model 42		Model 36		Model 42		Model 36		Model 42	
A	29" (737 mm)	36" (915 mm)	I	40 1/4" (1023 mm)	44 1/4" (1124 mm)	Q	13 7/8" (353 mm)	14" (356 mm)			
B	5/8" (16 mm)	5/8" (16 mm)	J	21" (534 mm)	24" (610 mm)	R	10 1/2" (267 mm)	12 1/2" (318 mm)			
C	41" (1042 mm)	48" (1220 mm)	K	8" (204 mm)	9" (229 mm)	S	2 1/2" (64 mm)	2 1/2" (64 mm)			
D	12" (305 mm)	14" (356 mm)	L	34 3/4" (883 mm)	42" (1067 mm)	T	8 1/8" (207 mm)	8 1/8" (207 mm)			
E	21 1/4" (540 mm)	23" (585 mm)	M	42" (1067 mm)	49" (1245 mm)	U	11" (280 mm)	12 3/4" (324 mm)			
F	22 1/4" (566 mm) 24" (610 mm) w/o Brick	29 1/4" (743mm) 31" (788 mm) w/o Brick	N	36" (915 mm)	40" (1016 mm)	V	7" (178 mm)	7" (178 mm)			
G	32 5/8" (829 mm) 34" (864 mm) w/o Brick	39 1/2" (1004 mm) 41 1/4" (1048 mm) w/o Brick	O	37" (940 mm)	41" (1042 mm)	W	2 1/4" (58 mm)	2 1/4" (58 mm)			
H	15 3/4" (400 mm) 16 3/4" (426 mm) w/o Brick	17 3/4" (451 mm) 18 3/4" (477 mm) w/o Brick	P	8 5/8" (220 mm)	10 1/2" (267 mm)	X	5" (127 mm)	4 1/2" (115 mm)			

**Figure 2 - Appliance Dimensions**

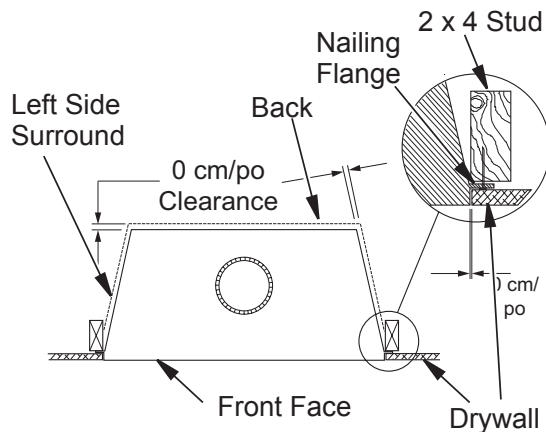
## PRE-INSTALLATION PREPARATION

### CLEARANCES

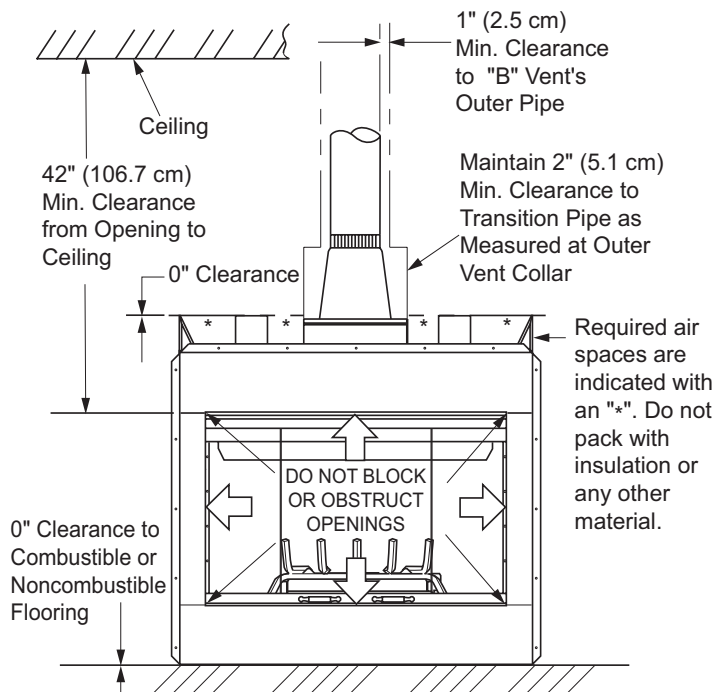
Minimum clearances to combustibles are:

Back and Sides of Outer Surround	0" (0 mm) min.
Drywall to Sides of Front Face (Nailing Flanges)	0" (0 mm) min.
"B" Vent Surfaces	1" (26 mm) min.
Ceiling to Opening	42" (1067 mm) min.
Floor	0" (0 mm) min.
Perpendicular Wall	See <b>Figure 6</b>
Front Service Clearance	3' (0.9 M)

**CAUTION:** Do not block required air spaces with insulation or any other material. Do not obstruct effective opening of appliance with any type of facing material.



**Figure 3 - Minimum Clearances (Top View)**



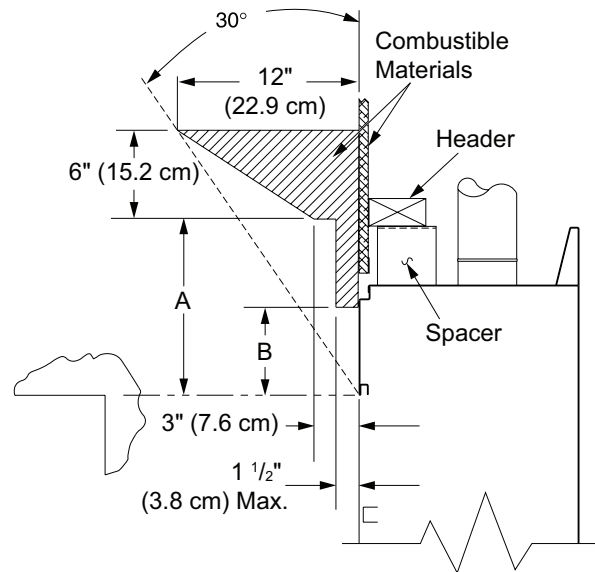
**Figure 4 - Minimum Clearances (Front View)**

### MANTEL CLEARANCES AND WALL DETAILS

A combustible mantel shelf may be installed a maximum 12" (22.9 cm) from the wall. **Figures 5 and 6** show the minimum allowable distances from various combustible mantel components in relation to fireplace opening.

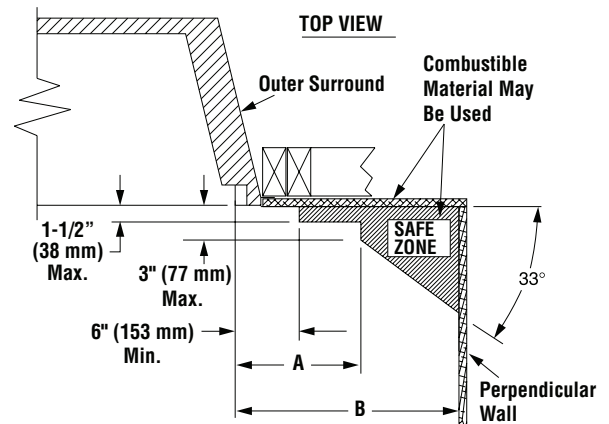
**Minimum clearance requirements include any projections such as shelves, window sills, mantels, etc. above the appliance.**

**NOTE:** To avoid heat-related finish damage, we recommend the use of high temperature paint (rated 175° F or higher) on the underside of the mantel.



	Mission36TMN (F0859, F0861)	Mission42TMN (F0865, F0867)
A	14" (35.6 cm)	15" (38 cm)
B	8" (20.3 cm)	9" (22.9 cm)

**Figure 5 - Mantel Clearances - Side View (Cross Section)**



	Mission36TMN (F0859, F0861)	Mission42TMN (F0865, F0867)
A	9" (229 mm)	6" (153 mm)
B	12" (305 mm)	9" (229 mm)

**Figure 6 - Side Clearances - Top View (Cross Section)**

## PRE-INSTALLATION PREPARATION *Continued*

### FRAMING

1. Frame appliance enclosure as illustrated in **Figures 7 and 8**.

**NOTE:** If a wall covering is used to line the enclosure, then all measurements must be from the surface of the covering.

2. Place the appliance into the framing and secure it.

**NOTE:** If appliance is to be raised above floor level, a platform must be built to support the appliance.

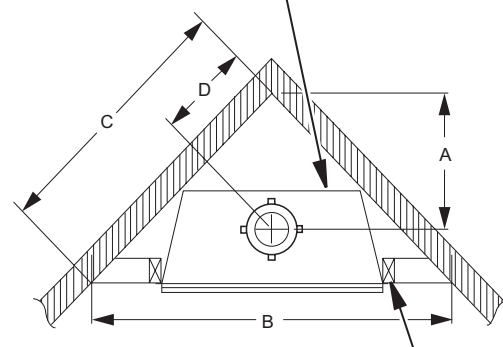
3. Install the supply line to the appliance using a 1/2" NPT black iron gas line terminating 2-5/16" above the bottom of the appliance. The gas line must be installed through the lower left side access point or alternate access hole in the bottom of the appliance (see **Figure 16, Page 12**).

4. Repack insulation around the gas line to cover any remaining openings in the conduit sleeve. Prepare the incoming gas line with teflon tape or pipe joint compound and hook-up incoming gas line to the flexible gas line.

**NOTE:** If 1/2" NPT black iron pipe does not mate with fitting at the end of flexible gas line, remove fitting and replace with a 37° flare 3/4"-12, 1/2" NPT (female) fitting.

**⚠ WARNING:** When finishing appliance, do not overlap combustible material onto the black front face. Brick, tile or other noncombustible materials may be applied to the face provided that any gap is between the material used and the face is caulked with a non-combustible caulking.

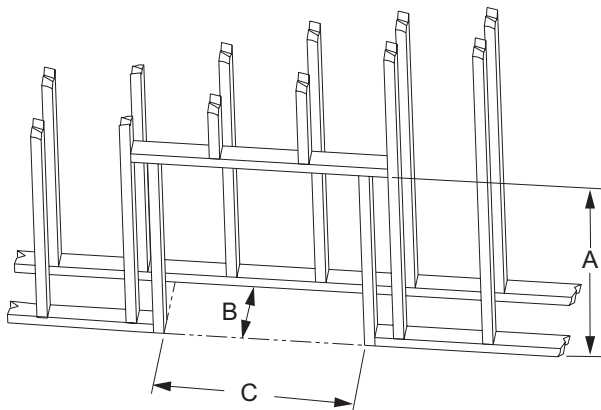
These Dimensions Allow for a 3/4" Clearance at Sides and Back of Fireplace. However, 0" Clearance is Permitted.



3/4" Clearance Not Required at Nailing Flanges

	<b>Mission36TMN (F0859, F0861)</b>	<b>Mission42TMN (F0865, F0867)</b>
A	24 1/2" (62.2 cm)	27 9/16" (70 cm)
B	73 7/8" (187.6 cm)	83 7/8" (213 cm)
C	52 3/16" (132.6 cm)	59 5/16" (150.6 cm)
D	17 1/4" (43.8 cm)	19 1/2" (49.5 cm)

**Figure 8 - Corner Installation Guidelines**

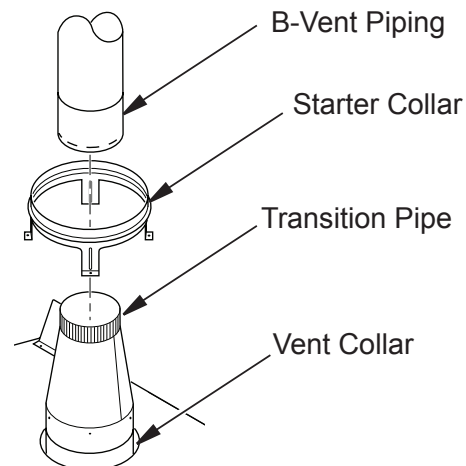


	<b>Mission36TMN (F0859, F0861)</b>	<b>Mission42TMN (F0865, F0867)</b>
A	40 3/8" (102 cm)	44 3/8" (112 cm)
B	21 3/8" (54.3 cm)	23 1/8" (58.7 cm)
C	41 1/4" (104.8 cm)	48 1/4" (122.6 cm)

**Figure 7 - Rough Opening for Installing in Wall**

### INSTALLING TRANSITION PIPE AND STARTER COLLAR

The transition pipe and starter collar shown in **Figure 9** are supplied with the fireplace, unattached and ready for installation. Remove starter collar and set aside. Slide transition pipe over vent collar and attach with a minimum of three screws. Replace starter collar over transition pipe and attach using four screws located on leg stands (five used on 42" models). To install B-vent piping, slide the first piece of B-vent over transition pipe and attach with either a minimum of two screws or other means approved by the vent manufacturer.



**Figure 9 - Installing Transition Pipe and Starter Collar**



## VENTING INSTALLATION

A B-type venting system must be connected to the appliance for venting to the outside of the building.

The following section is provided as a guide to a standard B-type vent installation.

Standing codes requirements concerning B-type vent installations may vary within your state, province or local codes jurisdiction. Therefore, it is recommended that you check with your local building codes for specific requirements or in absence of local codes, follow Section 7.0 of the current National Fuel Gas Code ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

This gas appliance must be vented to the outdoors only and may not be terminated into an attic space or into a chimney flue servicing a solid fuel burning appliance.

This appliance may be vented through a manufactured chimney system or a masonry chimney using a B-vent adaptor or a chimney liner system if all are listed, inspected and approved by local codes and/or building authorities.

The examples shown in Figure 10, are typical of most B-vent installations and codes practices. A minimum of 3 feet vertical rise (off the top of the unit) before offset is recommended.

**Example 1:** Shows the minimum allowable system height and lateral offset for a 60° or greater inclination. Code specifies that offsets at 60° or greater are considered horizontal and must follow the 75% rule for lateral to total vertical system height. Codes also allow only one offset in the total system when at 60° or greater. The total vertical height in this example represents the minimum height of 8 feet and therefore the allowable lateral is 6 feet when the 75% rule applies. If the lateral length must exceed 75% then the system must be sized in accordance with Category I venting tables.

**IMPORTANT NOTICE**

**ANSI Z223.1/NFPA 54 (USA), or CSA B149.1 (Canada) defines minimum space requirements for the installation of this appliance.**

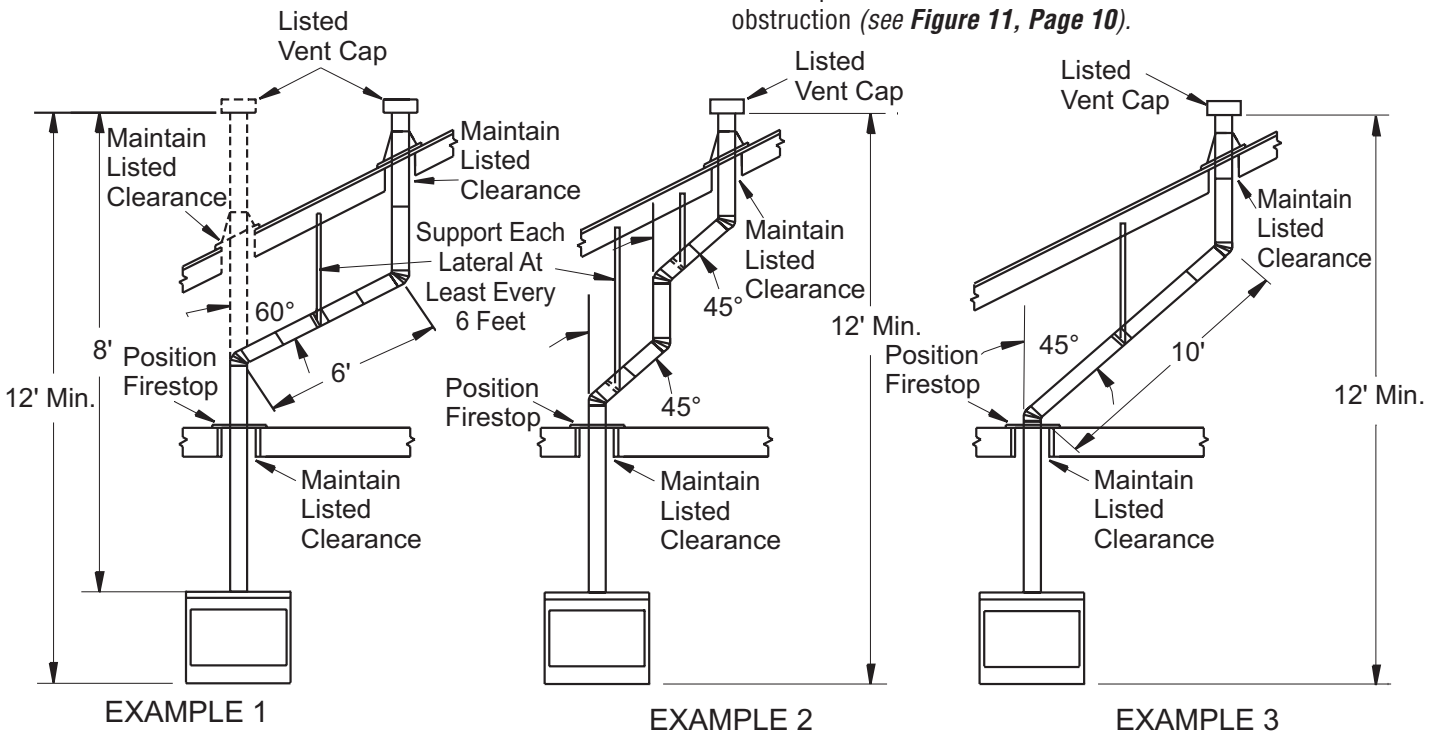
**This fireplace must be installed in an unconfined space with a minimum of 50 cubic feet per 1,000 BTUs of gas output. Therefore 36" models require 2,650 cubic feet, 42" models require 3,100 cubic feet and 50" models require 3,300 cubic feet. If the space you wish to install the fireplace does not meet these requirements ANSI Z223.1/NFPA 54 or CSA B149.1 details several actions that may be taken.**

**Example 2:** Shows a multiple offset each at 45° of inclination. Multiple offsets are permitted if they do not exceed 45° of inclination. The total lengths of the two offsets are not required to meet the 75% allowable rule.

**Example 3:** Shows a single offset at 45° of inclination and therefore the lateral length at 10 feet of offset does not have to meet the 75% rule.

In each case the offsets must be supported and firestops must be positioned wherever the vent must pass through a sub-floor, ceiling joist or an attic overhang. The vent pipe must terminate vertically into a listed type vent cap and extend a sufficient height through an approved roof flashing, roof jack or a roof thimble (38FST recommended). At all points listed clearances must be maintained.

Vent terminations must be located in accordance with height and proximity rules of NFPA No. 54. These rules apply to vents at 12" diameter or less and require a minimum height in accordance with the roof pitch and a minimum of 8 ft. distance from a vertical wall or obstruction (see *Figure 11, Page 10*).



**Figure 10 - Typical B-Vent Configuration**

## VENTING INSTALLATION *Continued*

Some codes areas allow the use of existing B-type vent systems if the system is at or above the recommended diameter of the flue, in this case 6".

The flue connection must be made using listed B-type connectors and the existing system must be code inspected for damage and proper installation.

It is not recommended that this appliance be common vented with an existing gas burning appliance.

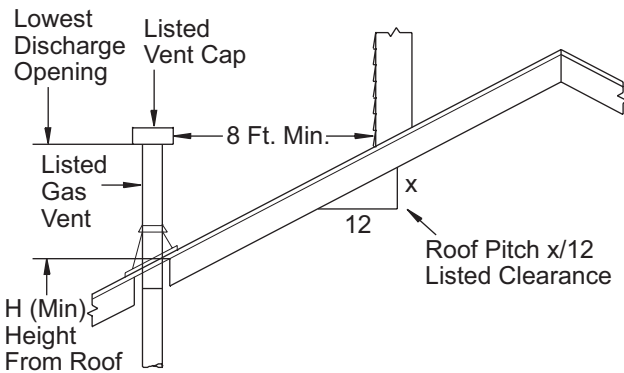
**NOTE:** Before connecting this appliance to an existing vent system consult with your local architect, planner or building official.

**⚠ WARNING:** This appliance must be properly connected to a system and must not be connected to a chimney flue servicing a separate solid fuel burning appliance.

### CHECKING FOR PROPER VENTING

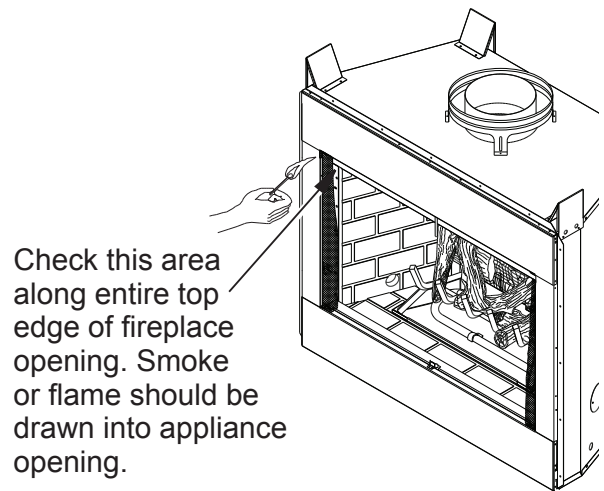
After completing and checking electrical, gas and vent connections, follow the lighting instructions and allow main burner to run for approximately 5 minutes. Hold a lighted match or cigarette near the top edge of fireplace opening and play it along entire length of opening (see **Figure 12**). Proper venting should tend to draw the flame or smoke into the appliance. Improper venting or escaping of spillage of burned gas, is indicated when the match flickers or goes out. Smoke from a cigarette will also tend to disperse away from the appliance. If appliance is found to be improperly venting, shut it off and notify your installer or a qualified service agency to inspect the venting system.

**NOTICE:** This appliance is equipped with a vent safety shutoff switch which will shut down the appliance in the case of a venting problem. Do not bypass the vent safety switch. If the appliance should shut down, contact a qualified installer, service agency or your gas supplier to have the vent inspected before operating.



Roof Pitch	H (Min.) Feet	Meter
Flat to 6/12	1.0	ax 0.30
6/12 to 7/12	1.25	0.38
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2.0	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4.0	1.22
Over 12/12 to 14/12	5.0	1.52
Over 14/12 to 16/12	6.0	1.83
Over 16/12 to 18/12	7.0	2.13
Over 18/12 to 20/12	7.5	2.27
Over 20/12 to 21/12	8.0	2.44

**Figure 11 - B-Vent Terminations**



**Figure 12 - Checking for Spillage**

## INSTALLATION

### WALL SWITCH INSTALLATION

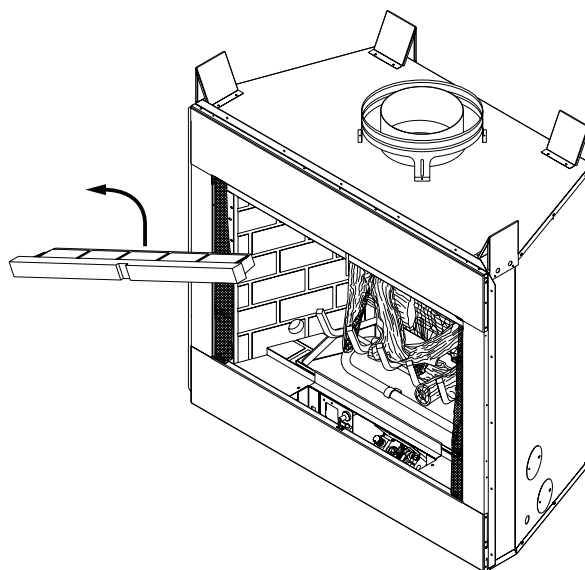
The installation of a wall switch allows you to activate the gas control valve without normal household electricity since valve operates on millivolt current supplied by heat generated by the thermopile. To install wall switch:

1. Remove front refractory access panel by lifting up and angling out of firebox opening (see **Figure 13**).
2. Use wire and connectors provided. Attach red wire to terminal marked TH/TP on control valve. Attach white wire to blade connector on open end of safety circuit wiring (see **Wiring Diagram, Page 20**).

**NOTE:** If any of the original wire from unit control must be replaced, use the same type or a higher rated wire (25 ft. maximum length).

**⚠ WARNING: Do not wire remote wall switch to main power supply (Standard 120v household current).**

3. Locate wall switch in a convenient location.
4. After wire connections are complete, replace refractory access panel.



**Figure 13 - Removing Front Refractory Access Panel**

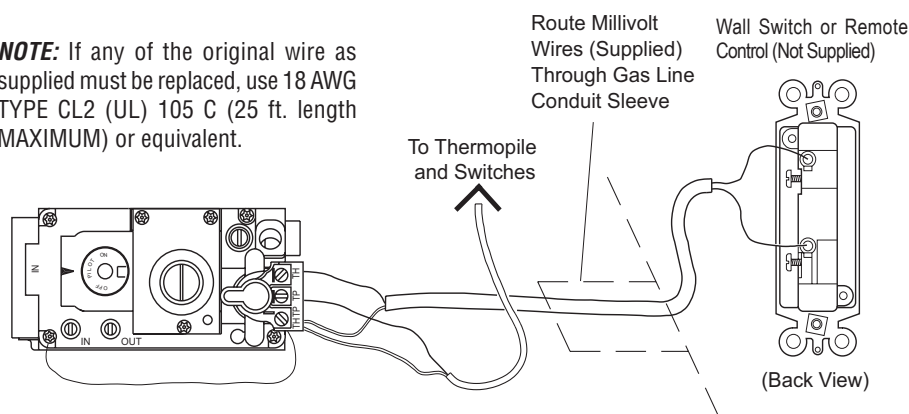
### INSTALLING WIRELESS HAND-HELD REMOTE CONTROL MRC SERIES

**NOTE:** If using optional wireless hand-held remote control, the wall switch is no longer operational.

#### Installing Receiver

1. Remove front refractory access panel by lifting up and angling out of firebox opening (see **Figure 13**) to expose controls.
2. Locate brown "wall switch wire" that is connected to the valve. Strip the ends of the brown wire to expose one red and one white wire. These wires shall be connected the remote receive box or wall switch (figures 14 & 14A). The remote receiver can be placed either in the bottom of the firebox (figure 14B) or mounted in a convenient location on the wall.
3. See remote instructions for further information.

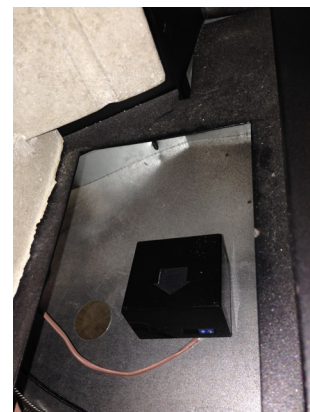
**NOTE:** If any of the original wire as supplied must be replaced, use 18 AWG TYPE CL2 (UL) 105 C (25 ft. length MAXIMUM) or equivalent.



**Figure 14 - Wall Switch Wiring Diagram**



**Figure 14A - Remote Receiver**



**Figure 14B - Remote Receiver on Firebox Bottom**

## INSTALLATION *Continued*

### GAS LINE HOOK-UP

**⚠ WARNING:** Gas line hookup should be done by your gas supplier or a qualified service person.

**⚠ WARNING:** Before you proceed, make sure your gas supply is OFF.

A manual shutoff valve has been included in the appliance's gas supply system. You may consider installing an extra gas shutoff valve outside appliance's enclosure (check with local codes) where it can be accessed more conveniently with a key through a wall as shown in **Figure 15**.

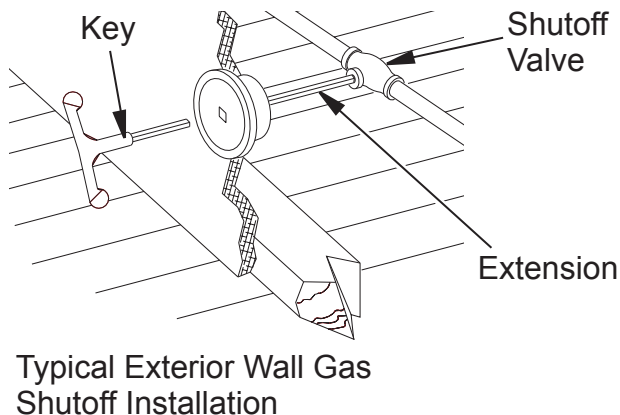
In conformance with local codes, route a 1/2" NPT gas line to appliance through hole in left side of firebox or sub-floor as shown in **Figure 16**.

**⚠ CAUTION:** Do not kink flexible gas line.

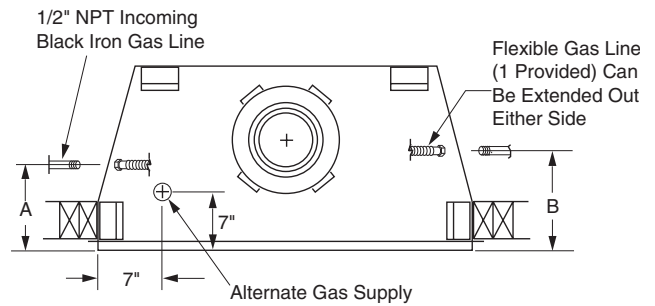
#### IMPORTANT NOTICE

**NFPA 54 defines minimum space requirements for the installation of this fireplace.**

**This fireplace must be installed in an unconfined space with a minimum of 50 cubic feet per 1,000 BTUs of gas output. Therefore 36" models require 2,650 cubic feet, 42" models require 3,100 cubic feet.. If the space you wish to install the fireplace does not meet these requirements NFPA 54 details several actions that may be taken.**

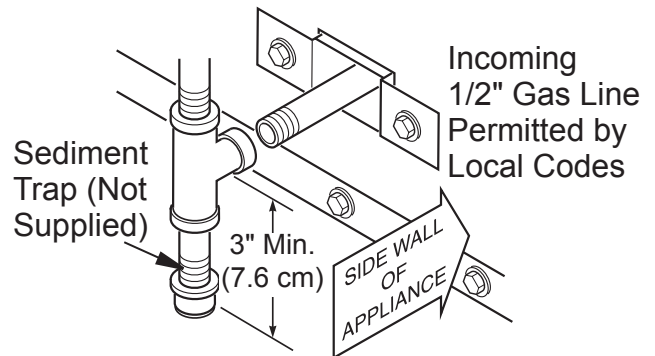


*Figure 15 - Manual Shutoff Valve Installation*



	<b>Mission36TMN (F0859, F0861)</b>	<b>Mission42TMN (F0865, F0867)</b>
A	8 5/8" (21.9 cm)	10 1/2" (26.7 cm)

*Figure 16 - Routing Incoming Gas Line*



*Figure 17 - Sediment Trap*

IHP recommends that a black iron gas line be routed from the gas source, through a sediment trap (see **Figure 17**) and into appliance. Once connected through appliance, a flexible gas line may be used for ease of installation to gas control valve (see **Figure 18, Page 13**). Before connecting black iron gas line to inside of appliance a sediment trap must be included outside appliance between gas line and gas shutoff valve. It must extend down 3" beyond center of pipe. Prepare incoming black iron gas line with teflon tape or pipe joint compound (Check with local building codes).

**⚠ CAUTION:** Compounds used on threaded joints of gas piping shall be resistant to the action of Liquefied Petroleum (LP or propane) and should be applied lightly to ensure excess sealant does not enter the gas line.

**⚠ WARNING:** All gas piping and connections must be tested for leaks after the installation is completed. After ensuring that the gas valve is on, apply a commercial leak detection solution to all connections and joints. If bubbles appear, leaks can be detected and corrected. Do not use an open flame for leak testing and do not operate any appliance if a leak is detected.

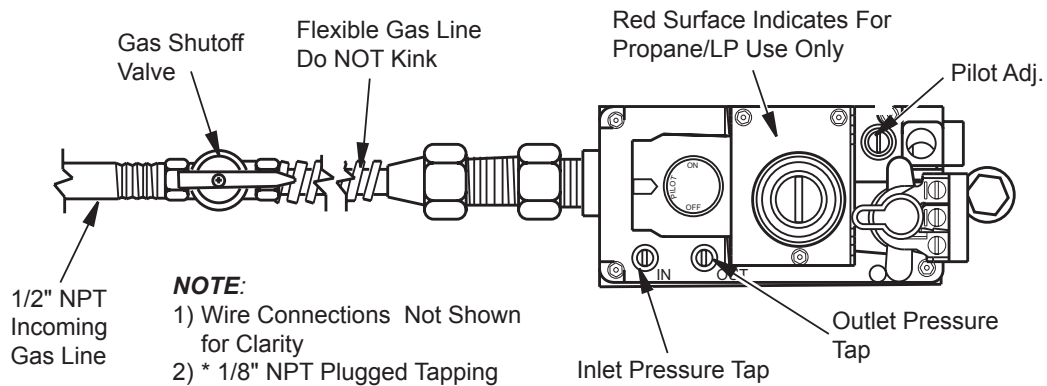
## INSTALLATION *Continued*

Complete your gas installation by connecting incoming gas line with flexible gas line. Secure tightly with wrench but **DO NOT OVERTIGHTEN**.

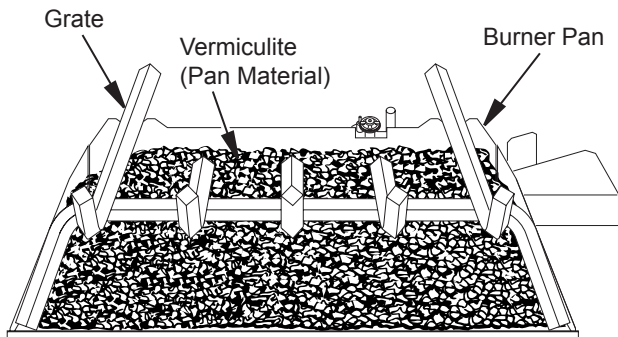
### EMBER AND PAN MATERIAL PLACEMENT

**NOTE: It is important to ensure proper log and ember placement per the manual when installing these units. Verify pilot flame is not obstructed. See "Correct Pilot Flame Pattern" on Page 19.**

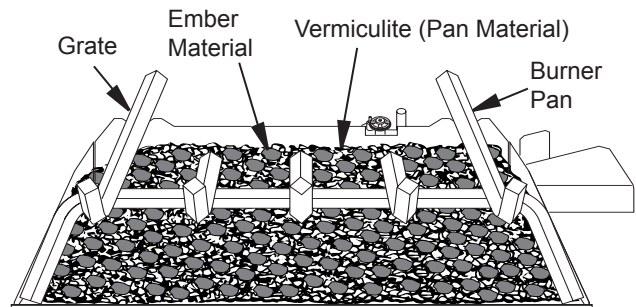
1. Open bag(s) of vermiculite and fill until it is even across burner pan (see **Figure 19**).
2. Smooth pan material just even with edges of burner pan.
3. Remove ember material from bag and flatten small amounts into quarter size pieces and lay on top of surface of pan material (see **Figure 20**).
4. Place just enough ember material to cover burner pan material. Leave a 1/2" space between pieces.



**Figure 18 - Connecting Flexible Gas Line to Millivolt Valve**



**Figure 19 - Place Vermiculite on Burner Pan per Instructions**



**Figure 20 - Ember Material on Surface of Pan Material (Vermiculite)**



**Figure 21 - Completed Installation of Vermiculite and Embers**

## INSTALLATION *Continued*

### LOG PLACEMENT FOR Mission36TMN (F0859, F0861) MODELS

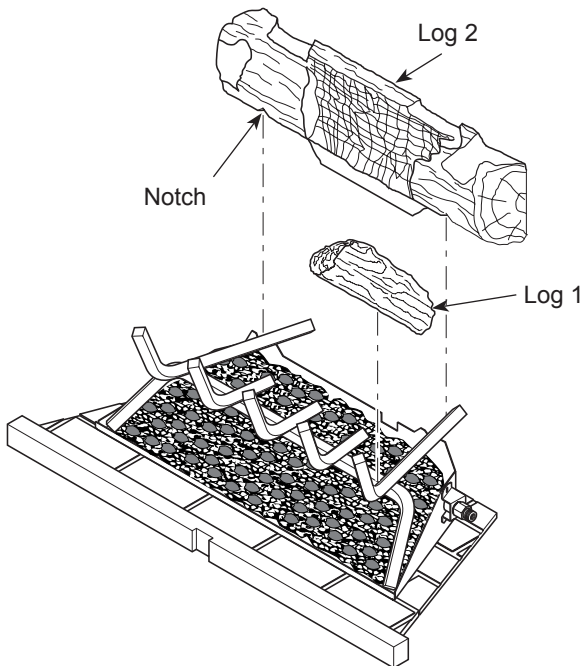
1. Place small front right log (log 1) on right front of grate as shown in **Figure 22**.
2. Place large back log (log 2) onto grate making sure notches rest over grate as shown in **Figure 22**.
3. Place log 3 into notch on log 2, resting front end on top of log 1 (see **Figure 23**).
4. Place upper end of log 4 into notch on log 2 as shown in **Figure 23**. Rest lower end of log 4 onto middle grate finger as shown in **Figure 24**.
5. Place upper end of log 5 into notch on left of log 2 (see **Figure 24**). Rest lower end of log 5 on grate as shown in **Figure 25**.
6. Insert lower end of log 6 between first two grate fingers as shown in **Figure 25** and position upper end of log 6 into notched area on front of log 2 as shown in **Figure 25**.

As an option to enhance the look of the hearth, you may place the volcanic stone rock provided around front and sides of burner.

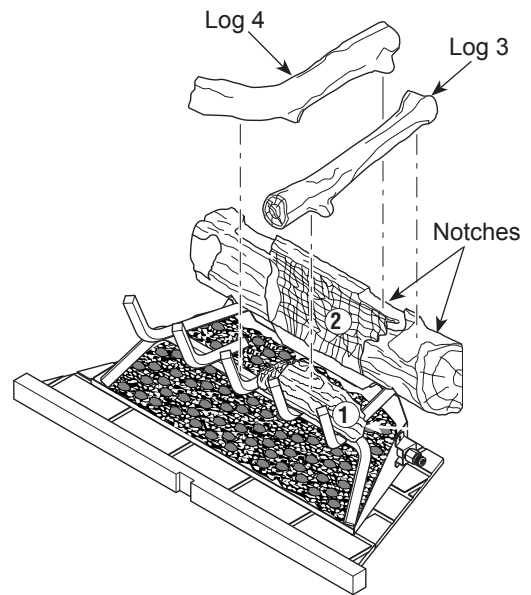
**NOTE:** It is important to ensure proper log placement per the manual when installing these units. Verify pilot flame is not obstructed. See *Inspecting Pilot and Burner Flame Patterns* on **Page 19**.

**NOTICE:** Do not put volcanic stone inside the burner pan or around the air mixer fitting. Placing volcanic stone inside the burner pan or blocking the openings of the propane/LP air mixer could cause performance problems.

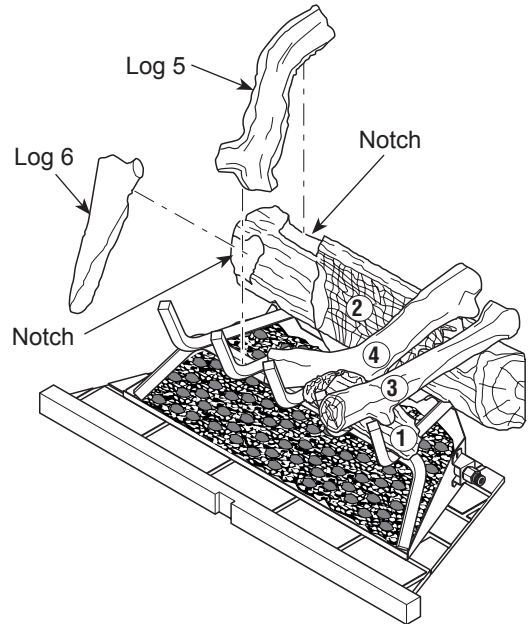
1	J4246	LOG, FIREPIT SPLIT 9"
2	J7241	LOG, REAR 22"
3	J4242	LOG, TOP ROUND 11-3/4"
4	J4243	LOG, TOP SPLIT 16"
5	J4244	LOG, Y TOP SPLIT 13-1/2"
6	J4245	LOG, TOP 11"



**Figure 22 - Installing Logs 1 and 2**



**Figure 23 - Installing Logs 3 and 4**



**Figure 24 - Installing Logs 5 and 6**



**Figure 25 - Logs Installed for 36" Models**

## INSTALLATION *Continued*

### LOG PLACEMENT FOR Mission42TMN (F0865, F0867) MODELS

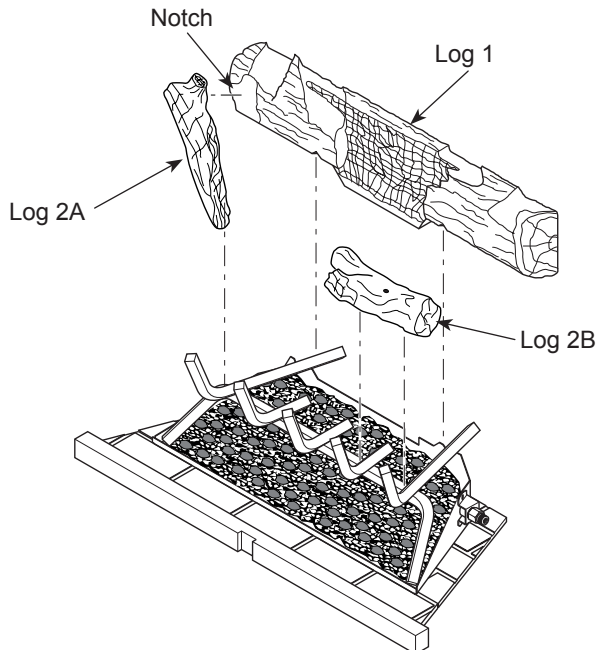
1. Place large back log (log 1) onto grate making sure notches rest over grate (see **Figure 26**).
2. Insert lower end of log 2A between first two grate fingers and position upper end into notch on front of log 1. See **Figure 26**. Place log 2B on front right side of grate as shown in **Figure 26**.
3. Place log 3 into notch on top left of log 1, resting lower end on left two grate fingers (see **Figure 27**).
4. Place upper end of log 4 into notch on log 1 as shown in **Figure 27**. Rest lower end of log 4 on middle grate finger as shown in **Figure 28**.
5. Place upper end of log 5 into notch on top inner right of log 1 (see **Figure 28**). Rest lower end of log 5 on middle grate finger as shown in **Figure 29**.
6. Place log 6 into notch on top right of log 1 (see **Figure 28**). Rest lower end of log 6 on top of log 2B (see **Figure 29**).

As an option to enhance the look of the hearth, you may place the volcanic stone provided around front and sides of burner pan.

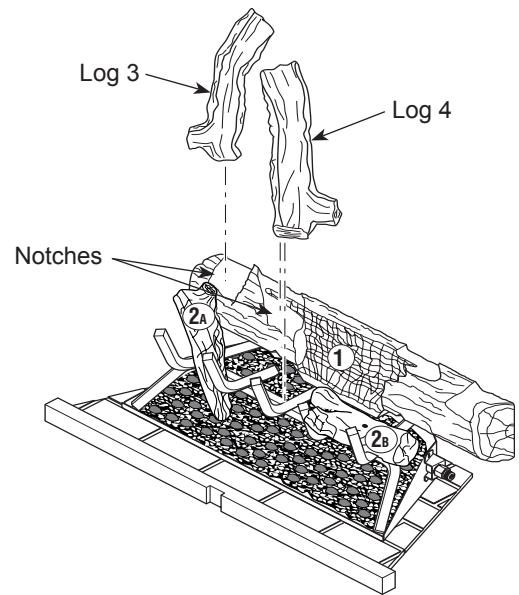
**NOTE:** It is important to ensure proper log placement per the manual when installing these units. Verify pilot flame is not obstructed. See *Inspecting Pilot and Burner Flame Patterns* on **Page 19**.

**NOTICE:** Do not put volcanic stone inside the burner pan or around the air mixer fitting. Placing volcanic stone inside the burner pan or blocking the openings of the propane/LP air mixer could cause performance problems.

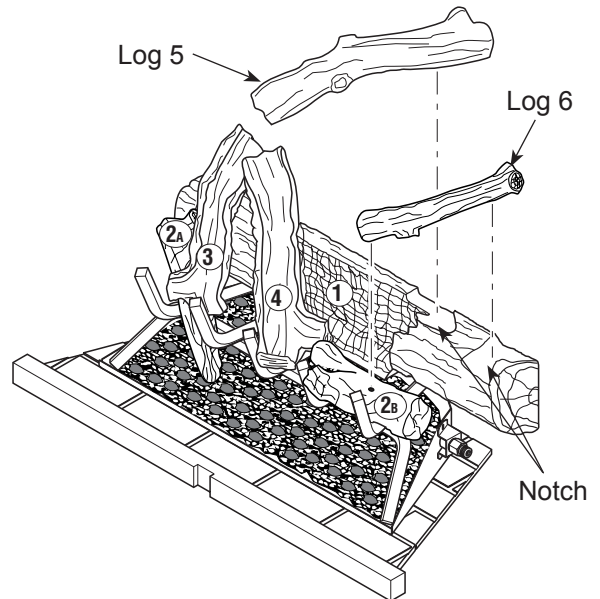
1	J7242	Log, Rear 27"
2A	J4245	Log, Top 11"
2B	J4262	Log, Fire Pit Rnd "Y" 15-3/4"
3	J4244	Log, Y Top Split 13-1/2"
4	J4261	Log, Firepit Split 15-3/4"
5	J4243	Log, Top Split 16"
6	J4242	Log, Top Round 11-3/4"



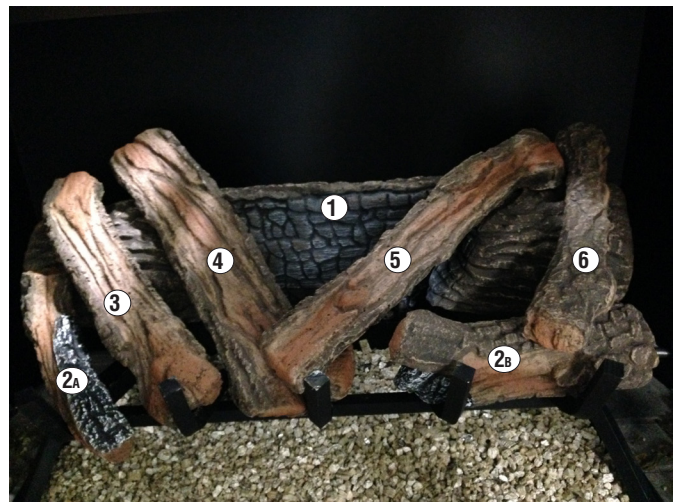
**Figure 26 - Installing Logs 1, 2A and 2B**



**Figure 27 - Installing Logs 3 and 4**



**Figure 28 - Installing Logs 5 and 6**



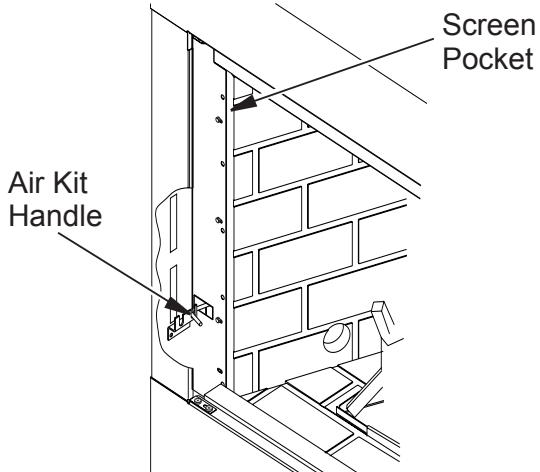
**Figure 29 - Logs Installed for 42" Models**

## INSTALLATION *Continued*

### COMBUSTION AIR KIT MODEL AK4 (OPTIONAL)

The outside air kit may be installed on the left side of fireplace only. The vent can be installed through any outside wall a minimum of three feet below fireplace termination cap. The handle to operate damper door for outside air inlet will be located inside the left “screen pocket” of firebox (see **Figure 30**). Pull handle to open or push to close.

**CAUTION:** Air inlet ducts are not to terminate in attic space.

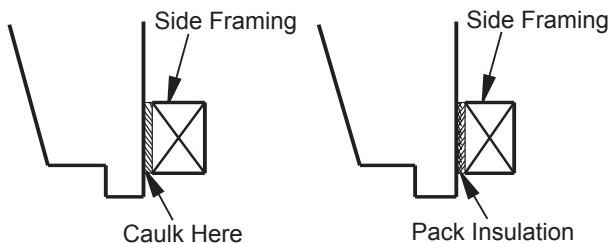


**Figure 30 - Air Kit Handle Location**

### APPLIANCE ENCLOSURE

Before finishing enclosure around appliance, inspect all joints around outer surround. Any gaps between nailing flanges and framing should be sealed with noncombustible insulation or caulking.

If appliance is mounted on a raised platform, it must be a continuous surface and not on blocks without a solid surface. This will prevent the entry of cold air by means of conduction through the total bottom of appliance (see **Figure 31**).



**Figure 31 - Sealing Between Appliance and Framing**

### INSTALLING OPTIONAL GLASS DOOR ACCESSORY

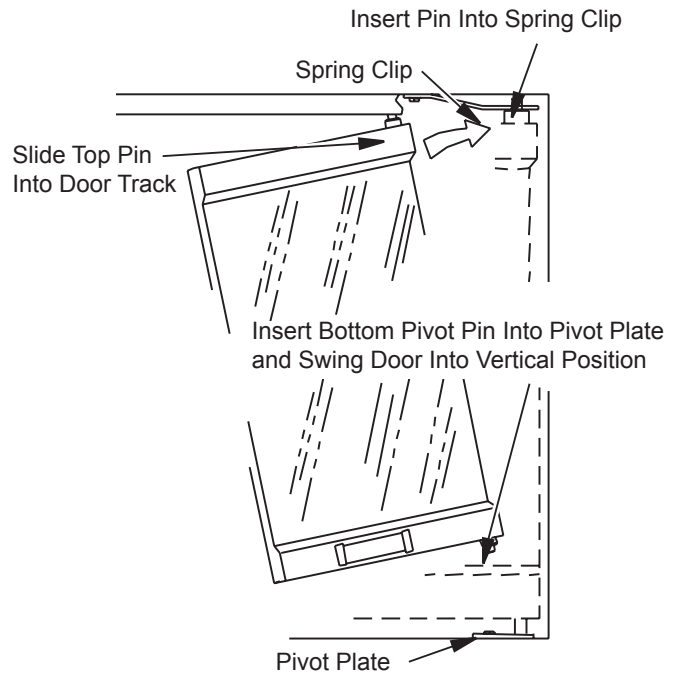
**CAUTION:** Use only glass doors certified for use with this appliance.

**NOTE:** Glass door may be heavy for some individuals. Please request help if needed.

The MISSION36TMN and MISSION42TMN B-vent fireplaces are approved for use with optional bi-fold glass doors (see *Accessories*, **Page 28**). Glass panels may be ordered and installed anytime after fireplace installation is complete.

Follow these steps to install left and right panels:

1. With handle at the bottom, completely fold panel on its hinges.
2. With handle facing center of firebox opening, insert lower pivot pin on glass door panel into hole in pivot plate on bottom edge of fireplace opening (see **Figure 32**).
3. Keeping folded door tilted, slide upper two pins into guide track found under upper facial edge of firebox opening.
4. Tilt glass assembly fully vertical until outer pivot pin snaps into mounting hole in upper spring clip (see **Figure 32**).
5. Once top and bottom pins are secured, unfold door into the closed position.



**Figure 32 - Installing Optional Glass Door**



## INSTALLATION *Continued*

6. Repeat the process for the opposite door assembly.
7. To adjust doors, slide them partially open. Using a screwdriver, loosen hold-down screws in the spring clip (see **Figure 33**) and pivot plate.
8. Close both doors until evenly joined at the middle and note the gap at outer edges of face.
9. Reopen one door at a time and retighten upper and lower hold-down screws.
10. Repeat process until both doors are evenly joined, spaced and working freely.

**CAUTION:** The glass panels become very hot while the appliance is operating. Do not attempt to adjust or clean the glass doors until the appliance has fully cooled.

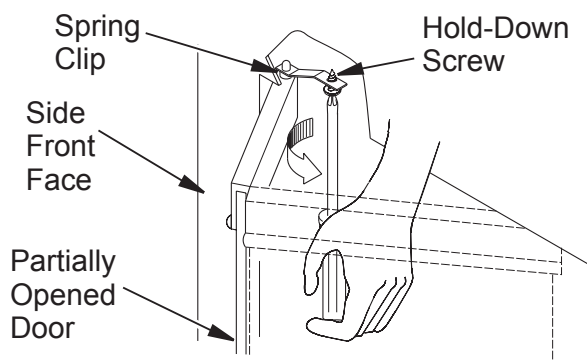
The doors may be removed for replacement or cleaning as follows:

1. Partially open door and press up on upper spring clip with a screwdriver until outer top pivot pin is free of clip.
2. Fully fold frame assembly and slide upper edge towards center of firebox opening until guide pins are free of frame rail (see **Figure 34**).

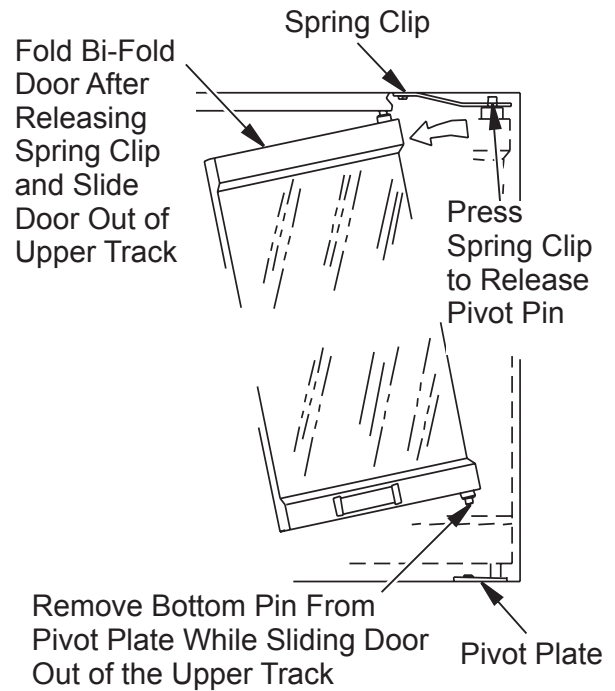
**CAUTION:** Always operate the appliance with the doors either fully opened or fully closed. Operating the appliance with the doors partially open can result in improper venting of flue products.

**WARNING:** Discontinue use of the appliance immediately if doors are damaged and contact a qualified installer for repair. Only doors certified with the appliance shall be used.

**WARNING:** Do not slam or strike doors. Damage can result in a hazardous condition.



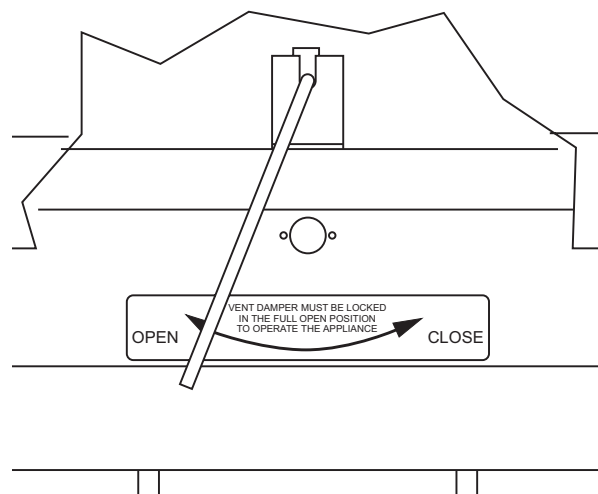
**Figure 33 - Adjusting Glass Doors**



**Figure 34 - Removing Glass Doors**

### OPENING VENT DAMPER

Vent damper must be locked in the full open position before operating fireplace. If vent damper is not open, fireplace will not light.



**Figure 35 - Opening Vent Damper**

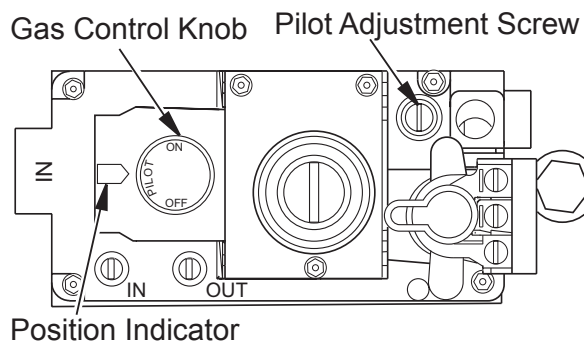
## OPERATION

### FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.  
**WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician or gas supplier. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

10. Push in knob all the way and hold in. Immediately light the pilot manually. Continue to hold control knob in for about one minute after pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
  - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
  - If the pilot will not stay lit after several tries, turn the gas control knob to OFF and call your service technician or gas supplier.
11. Turn gas control knob counterclockwise ↶ to "0". Knob can be turned to ON only if the control knob is popped out.
12. Replace front refractory brick access panel.
13. Fully close glass doors if installed.
14. Turn on all electric power to appliance.



**Figure 36 - Control Knob in the PILOT position**

### LIGHTING INSTRUCTIONS

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

1. STOP! Read the safety information, column 1.
2. Turn wall switch to the OFF position.
3. Turn off all electric power to appliance.
4. Place damper in full open position.
5. Fully open glass doors if installed.
6. Remove front refractory brick access panel.
7. Turn gas control knob clockwise ↷ to the OFF position (see **Figure 36**).
8. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information, column 1. If you don't smell gas, go to the next step.
9. Turn control knob counterclockwise ↶ to the PILOT position.

### TO TURN OFF GAS TO APPLIANCE

1. Turn off wall switch.
2. Turn off all electric power to appliance if service is to be performed.
3. Fully open glass doors if installed.
4. Remove front hearth brick and control access panel.
5. Turn gas control knob clockwise ↷ to OFF. Do not force.
6. Replace front refractory brick access panel.
7. Fully close glass doors if installed.

### OPTIONAL HAND-HELD REMOTE OPERATION

**NOTE:** The receiver and hand-held remote control kit must be purchased separately (see **Accessories, Page 28**). See **Installing Wireless Hand-Held Remote Control MRC Series** on **page 11** for remote control installation instructions.

## INSPECTING PILOT AND BURNER FLAME PATTERNS

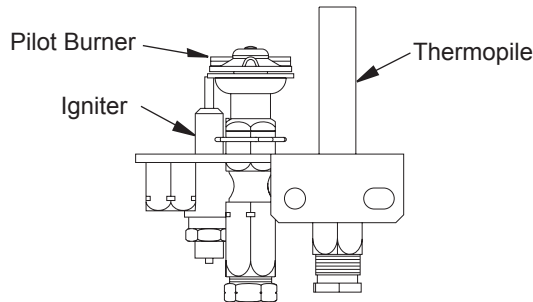
Periodically check pilot flame pattern and burner flame patterns often.

### PILOT ASSEMBLY

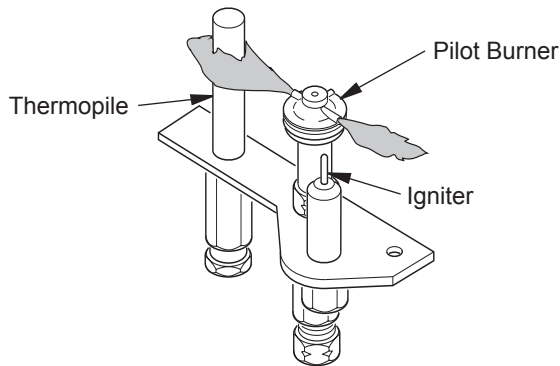
The pilot assembly is factory preset for the proper flame height. Alterations may have occurred during shipping and handling. The pilot is located on the back right hand side of the burner.

The height of the thermopile must be  $3/8"$  to  $1/2"$  above the pilot flame. The flame from the pilot burner must extend beyond the thermopile. If your pilot assembly does not meet these requirements:

- Turn adjustment screw marked pilot clockwise to decrease or counterclockwise to increase the flame to proper size (see [Figure 36, Page 18](#)). Do not remove adjustment screw.
- see [Troubleshooting, Page 21](#)



**Figure 37 - Pilot**



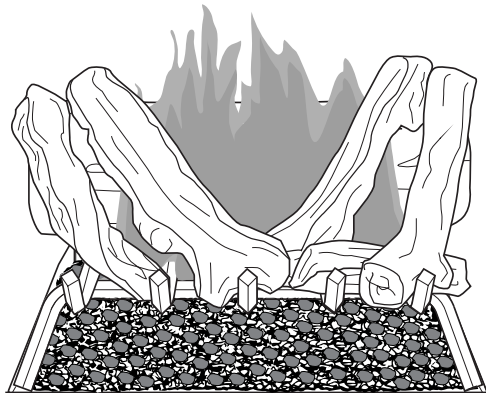
**Figure 38 - Correct Pilot Flame Pattern**

### BURNER FLAME PATTERN

Burner flames will be steady, not lifting or floating. Flames should go up through the middle of log set. Flames should not "spill" to edges of pan or sides of log set.

[Figure 39](#) shows a typical flame pattern. If burner flame pattern differs from that described:

- turn appliance off (see [To Turn Off Gas to Appliance, Page 18](#))
- see [Troubleshooting, Page 21](#)



**Figure 39 - Typical Flame Pattern**

## CLEANING AND MAINTENANCE

**⚠ WARNING: Installation and repair should be done by a qualified service person. The appliance should be inspected before each use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, pet hair, etc. It is imperative that the control compartments, burners and circulating air system be kept clean.**

**⚠ WARNING: The logs can be hot. Handle only when cool.**

**⚠ WARNING: Turn off gas and electrical power before servicing appliance.**

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

### PILOT AND BURNER

- Remove logs and ember material before cleaning burner and replace when cleaning is complete.
- Burner and controls should be cleaned with compressed air to remove dust, dirt or lint.
- Use a vacuum cleaner or small, soft bristled brush to remove excess dust, dirt or lint.

### LOGS

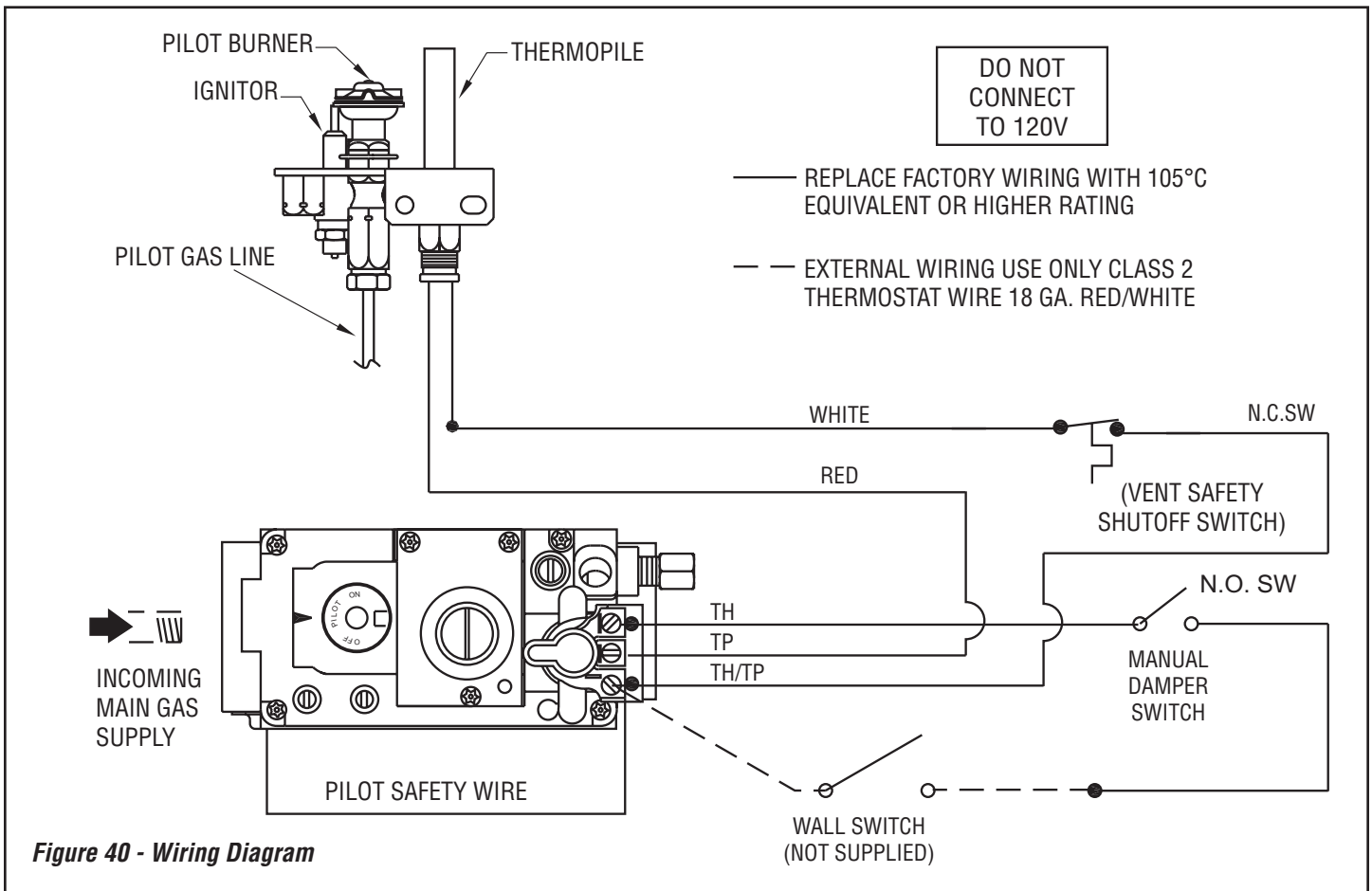
- If you remove logs for cleaning, refer to log placement information on [Page 13](#) to properly replace logs.
- Use a vacuum cleaner to remove any carbon buildup on logs.
- Replace log(s) if broken. See [Replacement Parts, Page 23](#).
- Replace ember material periodically as needed. See [Replacement Parts, Page 23](#).

### INSPECT VENTING SYSTEM

The appliance and venting system should be thoroughly inspected before initial use and at least annually by a qualified service technician (inspection should include ensuring that venting system is unobstructed and vent components are properly assembled and not damaged). Homeowner must contact a qualified service technician at once if any abnormal condition is observed.

If the venting system is disassembled for any reason, a qualified service technician should follow vent installation instructions for proper reassembly and proper sealing of the venting system components.

## WIRING DIAGRAM



**Figure 40 - Wiring Diagram**

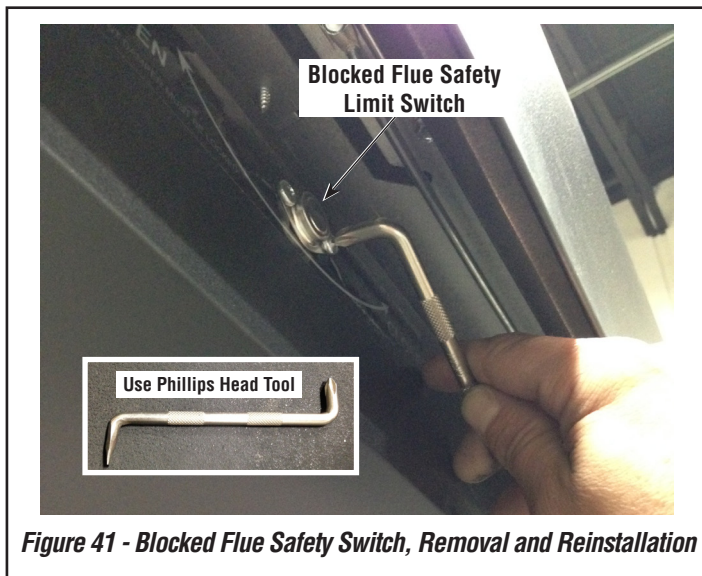
### MANUALLY-RESET SAFETY LIMIT SWITCH

This appliance is equipped with a manually-reset blocked flue safety limit switch. Refer to **Figure 41** for its location. If, during appliance operation, the flame goes out (independently of the burner on/off wall switch), it may be due to the operation of this safety limit switch. **First allow the appliance to cool**, then reset the safety switch by pressing the red reset button on the back of the switch.

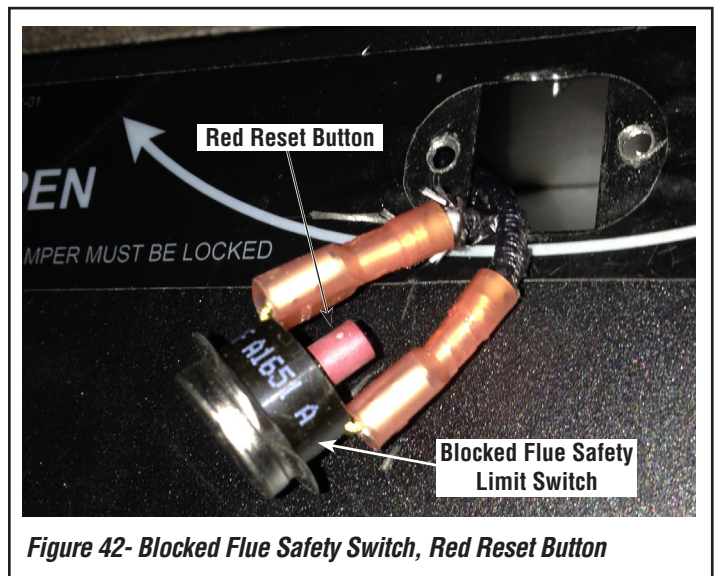
**To access the blocked flue safety limit switch, refer to Figure 41:**

1. To access the blocked flue safety switch, remove the two (2) phillips head screws (*shown in Figure 41*) and pull out switch.
2. Press the red reset button on the switch (*see Figure 42*).
3. Reinstall switch.

The appliance should then relight and remain lit. If this does not occur, **turn off the appliance and call a qualified service technician.**



**Figure 41 - Blocked Flue Safety Switch, Removal and Reinstallation**



**Figure 42- Blocked Flue Safety Switch, Red Reset Button**

## TROUBLESHOOTING

**NOTE:** Before troubleshooting the system, make sure the gas shutoff valve is ON. The two most common causes of a malfunctioning gas appliance are:

1. Loose wiring connections
2. Construction debris clogging pilot and/or gas control valve filter

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Pilot will not light	<ol style="list-style-type: none"> <li>1. No gas supply or shutoff valve is OFF</li> <li>2. Air in gas line</li>   <li>3. Construction debris clogging pilot orifice</li> <li>4. Low gas pressure</li> <li>5. Control valve knob is not on the PILOT position</li> <li>6. Kinked pilot line</li> <li>7. Bad valve</li>   <li>8. Vent damper not fully open</li> </ol>	<ol style="list-style-type: none"> <li>1. Check to see if you have gas supply</li> <li>2. Hold regulator control valve in the PILOT position for 2 to 3 minutes to purge air. If you smell gas stop and wait for a few minutes before trying to light fireplace</li> <li>3. Remove debris and dirt, inspect and clean any other possible obstructions</li> <li>4. Contact your gas supplier</li> <li>5. Refer to section on pilot lighting</li>   <li>6. Have a qualified technician replace pilot line</li> <li>7. Replace regulator valve (<i>see Accessories, Page 28</i>)</li> <li>8. Open vent damper until fully locked in OPEN position</li> </ol>
Pilot will not stay lit	<ol style="list-style-type: none"> <li>1. Loose wiring on thermopile to regulator valve. No millivolt current is being sent back to regulator</li> <li>2. If valve knob and wall switch are in the ON position, probable defective regulator valve</li> <li>3. Vent damper not fully open</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring connections. Refer to wiring diagram shown in <u>Wall Switch Installation, Page 11</u></li> <li>2. Have a qualified technician replace valve</li>   <li>3. Open vent damper until fully locked in OPEN position</li> </ol>
No gas to burner, although wall switch and valve are set to the ON position	<ol style="list-style-type: none"> <li>1. Wall switch wires defective or too long</li> <li>2. Thermopile not generating sufficient voltage</li> </ol>	<ol style="list-style-type: none"> <li>1. Check electrical connections</li> <li>2. See <u>Pilot will not stay lit</u>, above</li> </ol>
Frequent pilot outage	<ol style="list-style-type: none"> <li>1. Pilot flame may be too low, causing safety pilot to “drop out”</li> <li>2. Improper venting or excessive blockage</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean and adjust pilot flame for maximum flame impingement on thermopile</li> <li>2. Have vent system inspected, including termination cap. Remove any restriction or obstruction</li> </ol>
Pilot goes out when wall switch is ON	<ol style="list-style-type: none"> <li>1. Millivolt output on thermopile too high</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace thermopile</li> </ol>
Spark igniter will not light pilot after repeated triggering of red button	<ol style="list-style-type: none"> <li>1. Defective igniter (no spark at electrode)</li>   <li>2. Defective pilot or misaligned electrode at pilot (spark at electrode)</li>   <li>3. No gas or low gas pressure</li>   <li>4. If using propane/LP gas, no propane/LP gas in tank</li> </ol>	<ol style="list-style-type: none"> <li>1. Check for spark at electrode and pilot. If no spark and electrode wire is properly connected, replace igniter</li> <li>2. Using a match, light pilot. If pilot lights, turn off pilot and trigger the red button again. If pilot lights, an improper gas/air mixture caused the improper lighting and a longer purge period is recommended. If pilot will not light, check gap at electrode and pilot. Gap should be 1/8" to have a strong spark. If okay, replace pilot</li> <li>3. A) Check remote shut off valves from fireplace. Usually there is a valve near the fireplace and sometimes there is a valve near the main. There can be more than one valve between fireplace and main B) Low pressure can be caused by a variety of situations such as bent line, or gas supplier</li> <li>4. Check propane/LP supply and contact local propane/LP supplier</li> </ol>
Fireplace produces a clicking/ticking noise just after burner is lit or shut off	<ol style="list-style-type: none"> <li>1. Metal expanding while heating or contracting while cooling</li> </ol>	<ol style="list-style-type: none"> <li>1. This is normal with most fireplaces. If noise is excessive, contact qualified service person</li> </ol>

## TROUBLESHOOTING *Continued*

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

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fireplace produces unwanted odors	<ol style="list-style-type: none"> <li>1. Fireplace burning vapors from paint, hair spray, glues, etc. (See IMPORTANT statement above)</li> <li>2. For propane/LP gas, low fuel supply</li> <li>3. Gas leak. <b>See Warning statement at top of Page</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Ventilate room. Stop using odor causing products while fireplace is running</li> <li>2. Contact local propane/LP supplier</li> <li>3. Locate and correct all leaks (<i>see Gas Line Hook-Up, Page 12</i>)</li> </ol>
Gas odor even when control knob is in OFF position	<ol style="list-style-type: none"> <li>1. Gas leak. <b>See Warning statement at top of Page</b></li> <li>2. Control valve defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Locate and correct all leaks (<i>see Gas Line Hook-Up, Page 12</i>)</li> <li>2. Replace control valve</li> </ol>
Gas odor during combustion	<ol style="list-style-type: none"> <li>1. Foreign matter between control valve and burner</li> <li>2. Gas leak. <b>See Warning statement at top of Page</b></li> </ol>	<ol style="list-style-type: none"> <li>1. Take apart gas tubing and remove foreign matter</li> <li>2. Locate and correct all leaks (<i>see Gas Line Hook-Up, Page 12</i>)</li> </ol>
Dark residue on logs or inside of fireplace	<ol style="list-style-type: none"> <li>1. Improper log placement</li> <li>2. Air holes at burner inlet blocked</li> <li>3. Burner flame holes blocked</li> <li>4. Improper venting or excessive blockage</li> <li>5. Excessive amounts of embers and pan material</li> </ol>	<ol style="list-style-type: none"> <li>1. Properly locate logs</li> <li>2. Clean out air holes at burner inlets. Periodically repeat as needed</li> <li>3. Remove blockage or replace burner</li> <li>4. Have vent system inspected, including termination cap. Remove any restrictions or obstruction</li> <li>5. Clear excess embers until a minimum gap of 1/2" remains under the grate</li> </ol>

## SERVICE HINTS

When Gas Pressure Is Too Low

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

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

## TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. Please contact your IHP dealer for any questions or concerns. When contacting your dealer please have your model and serial numbers of your fireplace ready. You can also visit our web site at [Astria.us.com](http://Astria.us.com).

## REPLACEMENT PARTS

See **Pages 24 to 27** for a complete replacement parts list. Use only parts supplied from the manufacturer.

Normally, all parts should be ordered through your IHP distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering repair parts, always give the following information:

1. The model number of the fireplace.
2. The serial number of the fireplace.
3. The part number.
4. The description of the part.
5. The quantity required.
6. The installation date of the fireplace.

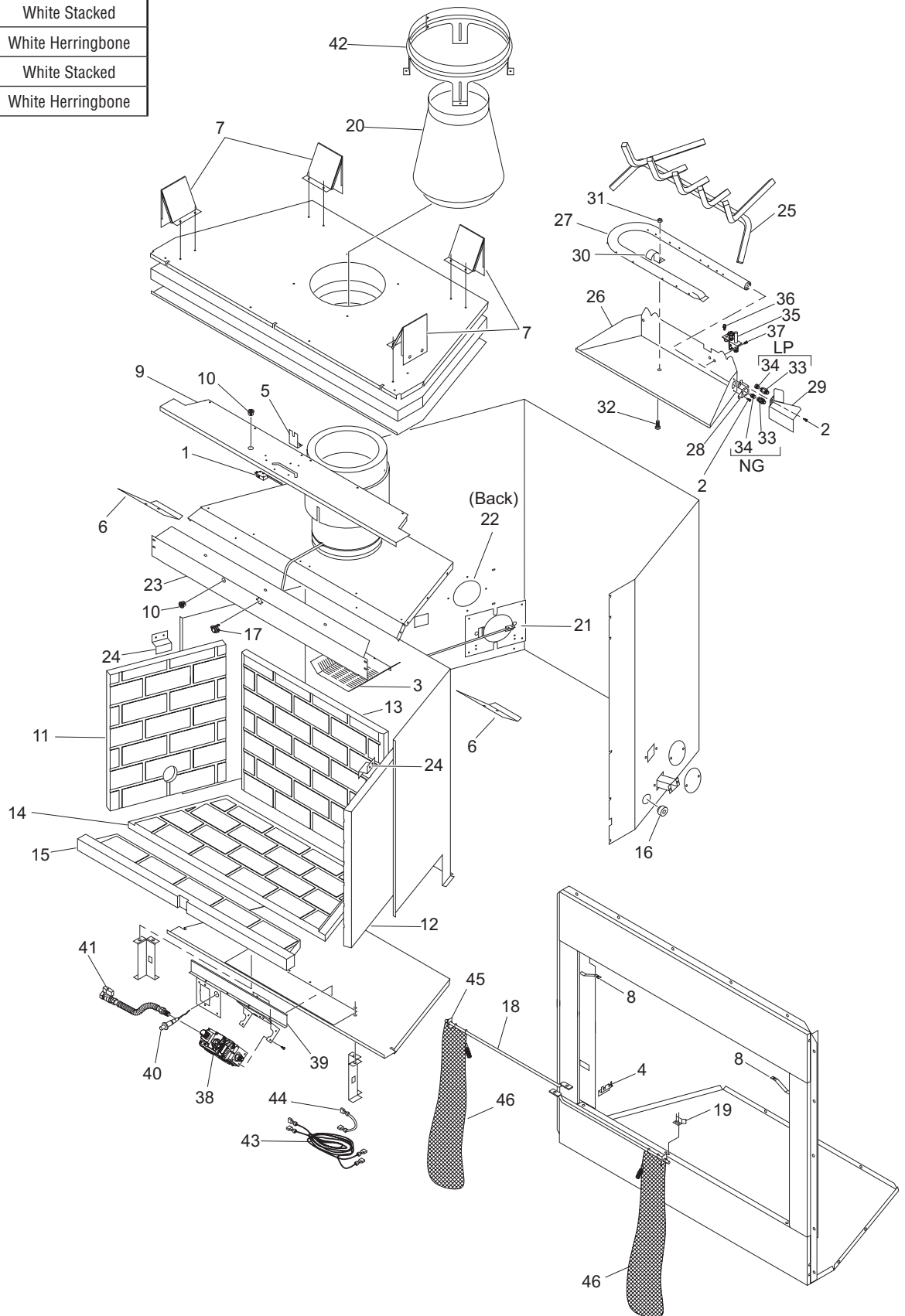
If you encounter any problems or have any questions concerning the installation or application of this fireplace, please contact your dealer.

**IHP**  
**1769 East Lawrence Street**  
**Russellville, AL 35654**  
**Visit us at [Astria.us.com](http://Astria.us.com)**

## PARTS

**⚠ WARNING: Contact an IHP dealer to obtain any of these parts. Never use substitute materials not approved by IHP. Use of non-approved parts can result in poor performance and safety hazards.**

MODEL	CAT. NO.	INTERIOR
F0859	Mission36TMN	White Stacked
F0861	Mission36TMN	White Herringbone
F0865	Mission42TMN	White Stacked
F0867	Mission42TMN	White Herringbone





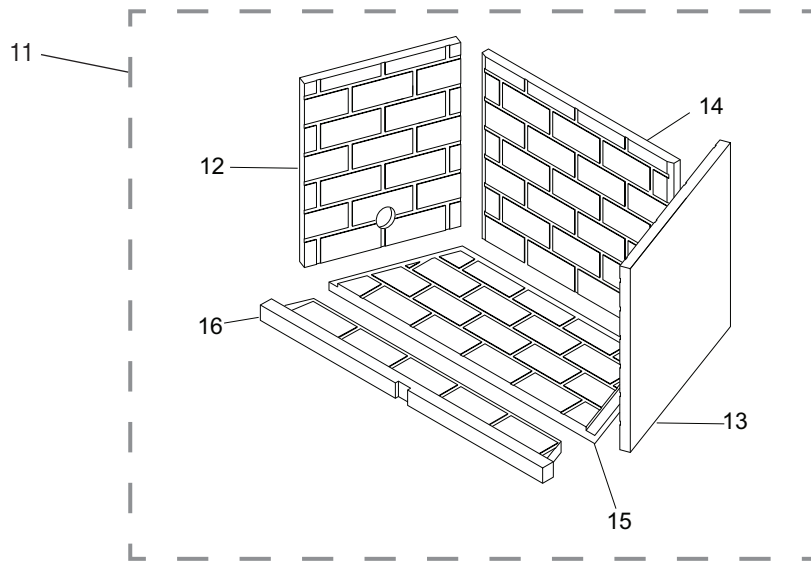
## PARTS

This list contains replaceable parts used in your fireplace. When ordering parts, follow the instructions listed under Replacement Parts on **Page 23** of this manual.

KEY NO.	CATALOG NO.	DESCRIPTION	Mission36TMN	Mission42TMN	QTY
1	J6811	MICRO SWITCH	•	•	1
2	J4667	SCREW, #10 X 5/8 PH AB BLK	•	•	2
3	J6976	DIVERTER, DRAFT GL3000	•		1
	J6977	DIVERTER, DRAFT GL4000		•	1
4	J3946	RETAINER, AIR ROD	•	•	1
5	J3947	RETAINER, DAMPER ROD	•	•	1
6	F2880	EXTENSION DEFLECTOR	•		2
	F2881	EXTENSION DEFLECTOR		•	2
7	J6918	SPACER, TOP 42GC17	•	•	4
8	J6905	CLIP, SPRING G36GC16-1	•	•	2
9	J3952	SEPARATOR, AIR	•		1
	J4060	SEPARATOR, AIR M42		•	1
10	J4955	BUSHING DBL INSUL	•	•	2
11	See Page 26	LEFT REFRACTORY			1
12	See Page 26	RIGHT REFRACTORY			1
13	See Page 26	REAR REFRACTORY			1
14	See Page 26	BOTTOM REAR REFRACTORY			1
15	See Page 26	BOTTOM FRONT REFRACTORY			1
16	J6802	STRAIN RELIEF	•	•	1
17	H6243	SWITCH, HIGH LIMIT 290 DEG F	•	•	1
18	J3975	ROD, SCREEN FORMED 36" C.C.	•		2
	J4084	ROD, SCREEN FORMED 42" C.C.		•	2
19	J6903	STOP, DOOR G36GC17-2	•	•	1
20	J3976	COLLAR, TRANSITION 6" B-VENT	•	•	1
21	J3980	ASSY, AIR KIT DOOR 36"	•		1
	F3457	ASSY, AIR KIT DOOR 42"		•	1
22	J6900	PLATE, OUTSIDE AIR COVER 36E44-6	•	•	1
23	J3992	DEFLECTOR, SMOKE	•		1
	J4081	DEFLECTOR, SMOKE		•	1
24	J6895	RETAINER, REFRACTORY 36E28	•	•	2
25	J4054	GRATE, ASSEMBLY	•		1
	J4055	GRATE, ASSEMBLY		•	1
26	J4048	PAN, BURNER	•		1
	J4049	PAN, BURNER		•	1
27	J4053	TUBE, BURNER	•		1
	J4083	TUBE, BURNER		•	1
28	J4051	BRACKET, BURNER	•	•	1
29	J4094	SHIELD, PILOT	•		1
	J4095	SHIELD, PILOT		•	1
30	J7320	CLIP, BURNER	•	•	1
31	J4769	NUT 10-24 HEX	•	•	1
32	J4605	SCREW 10-24X1/2 PPH MS BLK. OX	•	•	1
33	J7221	HOLDER, INJECTOR (NG)	•	•	1
34	J7203	INJECTOR (NG) #31	•		1
	J7204	INJECTOR (NG) #30		•	1
35	J4116	PILOT, NG #51 TP, CONV.36 199.761	•	•	1
36	J4121	PILOT INJECTOR, NG #51	•	•	1
37	J4489	SCREW #8 X 3/8 PPH B ZINC	•	•	2
38	H6244	VALVE, NAT, DEBIE FIXED, SIT (0.820.618)	•	•	1
39	J4044	BRACKET, VALVE	•	•	1
40	J3546	PIEZO IGNITER, WITH NUT, 097159-04	•	•	1
41	J4533	GAS LINE FLEX 18" W/SHUT OFF	•	•	1
42	J6893	COLLAR, CHIMNEY STARTER, 36C19-1	•	•	1
43	J4098	HARNESS, WIRE, M36	•	•	1
44	J4099	HARNESS, WIRE, JUMPER	•	•	1
45	J4956	NUT, PUSH-ON .765 X .445 X .011 BLCK	•	•	2
46	J5666	SCREEN, 22 X 21	•		2
	J4085	SCREEN, 26H X 24.5		•	2
<b>PARTS AVAILABLE NOT SHOWN</b>					
	J7274	VERMICULITE, PLAIN BAG , #1.00	•	•	1
	J7275	EMBER PAN MATERIAL - 0.4# PLAIN BAG	•	•	1
	80L42	VOLCANIC STONE, BAG, 2.50# LB	•	•	1

## PARTS

**⚠ WARNING: Contact an IHP dealer to obtain any of these parts. Never use substitute materials not approved by IHP. Use of non-approved parts can result in poor performance and safety hazards.**



KEY			Mission36		QTY
NO.	CATALOG NO.	DESCRIPTION	White Stacked	White Herringbone	
11	F3225	Refractory Set, White Herringbone		•	1
11	F3224	Refractory Set, White Stacked	•		1
12	---	Refractory, Left	•	•	1
13	---	Refractory, Right	•	•	1
14	---	Refractory, Rear	•	•	1
15	---	Refractory, Bottom	•	•	1
16	J6379	Refractory, Bottom Front, White Herringbone		•	1
16	J6374	Refractory, Bottom Front, White Stacked	•		1

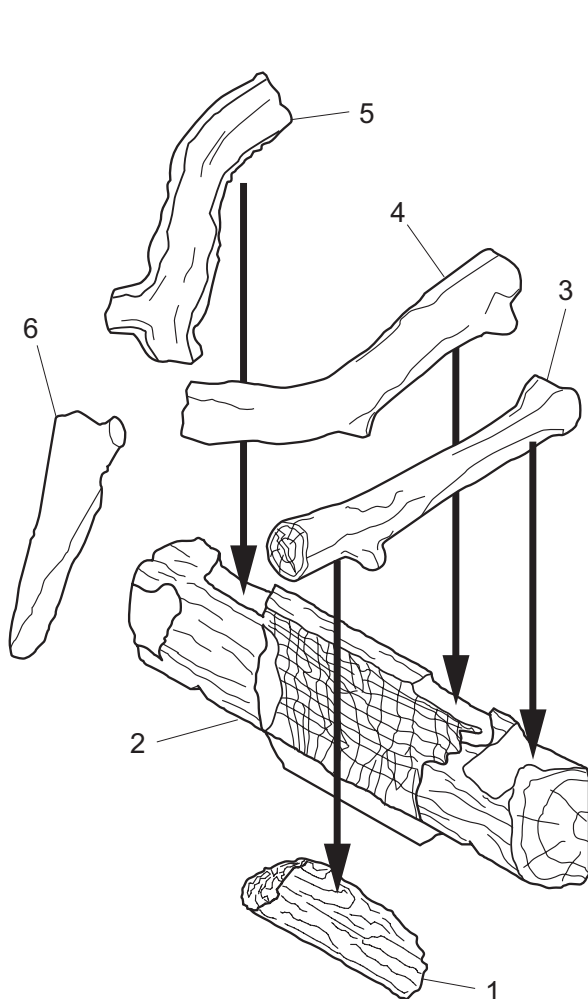
KEY			Mission42		QTY
NO.	CATALOG NO.	DESCRIPTION	White Stacked	White Herringbone	
11	F3227	Refractory Set, White Herringbone		•	1
11	F3226	Refractory Set, White Stacked	•		1
12	---	Refractory, Left	•	•	1
13	---	Refractory, Right	•	•	1
14	---	Refractory, Rear	•	•	1
15	---	Refractory, Bottom	•	•	1
16	J6395	Refractory, Bottom Front, White Herringbone		•	1
16	J6387	Refractory, Bottom Front, White Stacked	•		1

## PARTS

**⚠ WARNING:** Contact an IHP dealer to obtain any of these parts. Never use substitute materials not approved by IHP. Use of non-approved parts can result in poor performance and safety hazards.

### LOG SETS FOR 36" MODELS

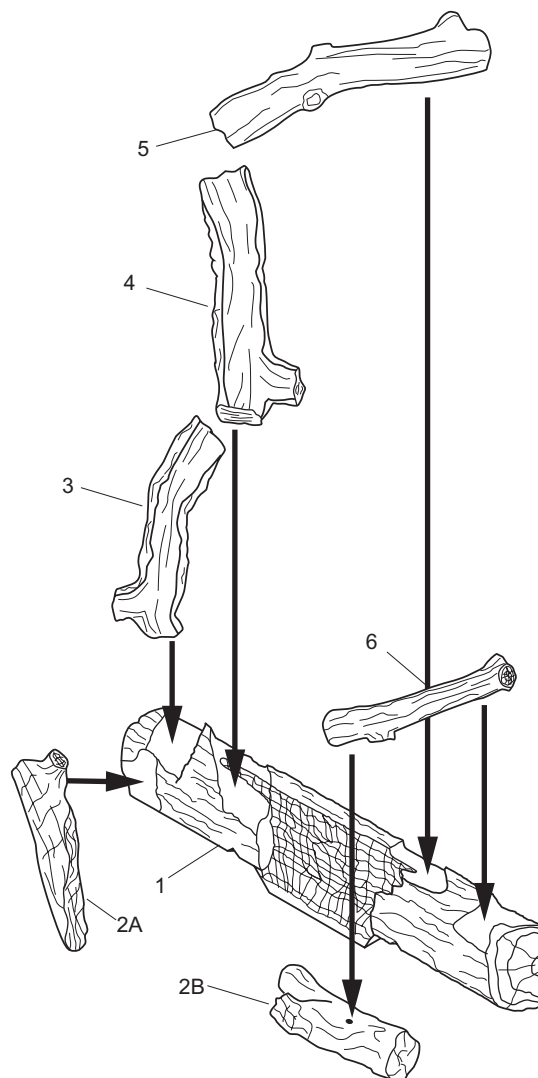
MODEL	CAT. NO.
Mission36TMN	F0859
	F0861



KEY NO.	CATALOG NO.	DESCRIPTION	QTY.
-	J4096	LOG SET	
1	J4246	LOG, 9" FIREPIT SPLIT	1
2	J7241	LOG, REAR, 22"	1
3	J4242	LOG, 11.75" TOP ROUND	1
4	J4243	LOG, 16" TOP SPLIT	1
5	J4244	LOG, 13.5" Y TOP SPLIT	1
6	J4245	LOG, 11" TOP	1

### LOG SETS FOR 42" MODELS

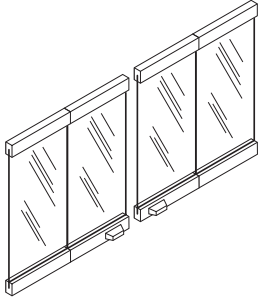
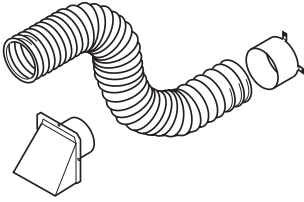

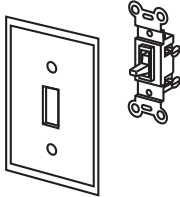
MODEL	CAT. NO.
Mission42TMN	F0865
	F0867



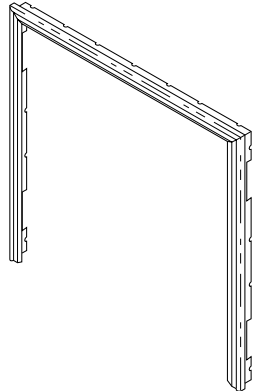



KEY NO.	CATALOG NO.	DESCRIPTION	QTY.
-	J4097	LOG SET	
1	J7242	LOG, REAR 27"	1
2A	J4245	LOG, 11" TOP	1
2B	J4262	LOG, FIRE PIT 15.75" RND "Y"	1
3	J4244	LOG, 13.5" Y TOP SPLIT	1
4	J4261	LOG, 15.75" FIREPIT SPLIT	1
5	J4243	LOG, 16" TOP SPLIT	1
6	J4242	LOG, 11.75" TOP ROUND	1

## ACCESSORIES

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

CAT NO.	MODEL	DESCRIPTION	
<b>EXTRUDED ALUMINUM BI-FOLD GLASS DOORS</b>			
F0981	BD36	36" Standard Bi-Fold Glass Door - Black finish	
F0984	BD42	42" Standard Bi-Fold Glass Door - Black finish	
<b>OPTIONAL OUTSIDE AIR KIT FOR FLOOR INSTALLATION</b>			
<p>Optional kit helps offset the negative pressure often existing in today's tightly constructed homes. Negative pressure may occur when other appliances in the home draw on air, possibly leading to poor operation, soot, or spillage.</p>			
F1091	AK4	Complete Outside Air Kit w/Collars Hood & 4" x 3' Flex	
F1092	AK4X	4" Air Kit, Collar & Hood Only	
F1094	AK4B	50 piece Bulk Outside Air Kit - Collar Only Kit	
<b>REMOTE CONTROL KIT</b>			
F2236	RCKIT4001	On/Off Remote and Receiver with White Wall Plate	
<b>WALL SWITCH KIT</b>			
F0245	GWMS2	ON/OFF WALL SWITCH KIT	

## ACCESSORIES *Continued*

CAT NO.	MODEL	DESCRIPTION	
<b>PERIMETER TRIM KIT</b>			
F1042	PT36	36" Perimeter Trim Kit - Black	
F1045	PT42	42" Perimeter Trim Kit - Black	
<b>PROPANE/NATURAL GAS CONVERSION KIT</b>			<b>(Not Shown)</b>
F1122	PCBM-36	36": Millivolt - NG to LP	
F1123	NCBM-36	36": Millivolt - LP to NG	
F1126	PCBM-42	42": Millivolt - NG to LP	
F1127	NCBM-42	42": Millivolt - LP to NG	
<b>TOUCH-UP PAINT KITS</b>			
F3373	HTIPSB	Black touch-up paint, firebox interior	
F1882	SCTPSAB	Black touch-up paint, powder coat exterior	
<b>BRICK LINER KIT</b>			<b>(Not Shown)</b>
F1059	BL36	36" Texture Refractory Brick Liner Kit	
F1060	BL36H	36" Texture Refractory Herringbone Brick Liner Kit	
F10561	BL42	42" Texture Refractory Brick Liner Kit	
F1062	BL42H	42" Texture Refractory Herringbone Brick Liner Kit	
<b>REFRACTORY STAIN KITS</b>			 <div style="display: flex; justify-content: space-around; font-size: small;"> <span>Creamer</span> <span>Rust</span> <span>Cappuccino</span> </div>
<p>Use the refractory stain kits to give white refractory panels a new look. Kit includes foam roller handle, paint tray, and one can of stain. Available stain colors are creamer (ivory), Rust (terra cotta), and Cappuccino (rosy taupe).</p>			
H8176	BSK-CR	Stain Kit (Rfry) 1 Qt. Creamer	
H8177	BSK-RT	Stain Kit (Rfry) 1 Qt. Rust	
H8178	BSK-CP	Stain Kit (Rfry) 1 Qt. Cappuccino	



# Innovative Hearth Products Superior® Brand Gas Fireplaces, Stoves and Inserts 20 Year Limited Warranty

## THE WARRANTY

Innovative Hearth Products ("IHP") 20 Year Limited Warranty warrants your Superior® Brand gas fireplace, Stove or Insert ("Product") to be free from defects in materials and workmanship at the time of manufacture. The product body, firebox and barrier carry the 20 Year Limited Warranty. Ceramic glass carries the 20 Year Limited Warranty against thermal breakage only. After installation, if covered components manufactured by IHP are found to be defective in materials or workmanship during the 20 Year Limited Warranty period and while the Product remains at the site of the original installation, IHP will, at its option, repair or replace the covered components. If repair or replacement is not commercially practical, IHP will, at its option, refund the purchase price or wholesale price of the IHP product, whichever is applicable. IHP will also pay IHP prevailing labor rates, as determined in its sole discretion, incurred in repairing or replacing such components for up to five years. THERE ARE EXCLUSIONS AND LIMITATIONS to this 20 Year Limited Warranty as described herein.

## COVERAGE COMMENCEMENT DATE

Warranty coverage begins on the date of purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product by an independent IHP dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from IHP, regardless of the installation or occupancy date.

## EXCLUSIONS AND LIMITATIONS

This 20 Year Limited Warranty applies only if the Product is installed in the United States or Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through a listed supplier of IHP and proof of purchase must be provided. The product body, firebox and barrier carry the 20 Year Limited Warranty from the date of installation. Vent components, trim components and paint are excluded from this 20 Year Limited Warranty. The following do not carry the 20 Year Limited Warranty but are warranted as follows:

- Burner** – Repair or replacement for one year from the date of installation
- Gas components** – Repair or replacement for one year from the date of installation
- Gaskets** – Repair or replacement for one year from the date of installation
- Logs** – Replacement for one year from the date of installation against thermal breakage only
- Optional blowers & remote controls** – Repair or replacement for one year from the date of installation
- Optional glass doors** – Repair or replacement for 90 days from the date of installation
- Tempered glass** - Replacement for one year from the date of installation
- Labor coverage** – Prevailing IHP labor rates apply for the warranty period of the component

**Parts not otherwise listed carry a 90 day warranty from the date of installation.**

**Whenever practicable, IHP will provide replacement parts, if available, for a period of 10 years from the last date of manufacture of the Product.**

IHP will not be responsible for: (a) damages caused by normal wear and tear, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance (The Product must be subjected to normal use. The Product is designed to burn either natural or propane gas only. Burning conventional fuels such as wood, coal or any other solid fuel will cause damage to the Product, will produce excessive temperatures and could result in a fire hazard.); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

IHP is not responsible for inadequate fireplace system draft caused by air conditioning and heating systems, mechanical ventilation systems, or general construction conditions which may generate negative pressure in the room in which the appliance is installed. Additionally IHP assumes no responsibility for drafting conditions caused by venting configurations, adjoining trees or buildings, adverse wind conditions or unusual environmental factors and conditions that affect the operation of the unit.

This 20 Year Limited Warranty covers only parts and labor as provided herein. In no case shall IHP be responsible for materials, components or construction, which are not manufactured or supplied by IHP or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking IHP factory.

## LIMITATION ON LIABILITY

It is expressly agreed and understood that IHP's sole obligation and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall IHP be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after repair or replacement, and whether such damage is caused by IHP's negligence. IHP has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

IHP makes no expressed warranties except as stated in this 20 Year Limited Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this 20 Year Limited Warranty or to create for IHP any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this 20 Year Limited Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

## INVESTIGATION OF CLAIMS AGAINST WARRANTY

IHP reserves the right to investigate any and all claims against this 20 Year Limited Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this 20 Year Limited Warranty, the appliance must be installed and repaired by a licensed contractor approved by IHP.

Contact IHP at the address provided herein to obtain a listing of approved dealers/distributors. **IHP shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining IHP's prior written consent.**

## HOW TO REGISTER A CLAIM AGAINST WARRANTY

In order for any claim under this warranty to be valid, you must contact the IHP dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify IHP in writing. IHP must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the IHP Warranty Department at 1769 East Lawrence Street; Russellville, AL 35654 or visit our website at [WWW.SUPERIORFIREPLACES.US.COM](http://WWW.SUPERIORFIREPLACES.US.COM).

**Astria.us.com**

Record the following important information about your fireplace:

Fireplace model number	
Fireplace serial number	
Date fireplace was installed	
Type of gas fireplace uses	
Dealer name	

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IHP reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.

