



P/N 850023M REV. E 04/2013

This manual is one of a set of two supporting this product.
Refer to P/N 875024M for Care and Operation Instructions.

Ce manuel est disponible en français, simplement
en faire la demande. Numéro de la pièce 850023CF.

INSTALLATION INSTRUCTIONS

**MPB B-Vent See-Through
Gas Fireplaces**

MERIT Plus[®]
SERIES

MODELS

MILLIVOLT:
MPB35ST-NM-B
MPB35ST-PM-B

ELECTRONIC:
MPB35ST-NE-B



OTL Report No. 116-F-27-5

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.
INSTALLATEUR : Laissez cette notice avec l'appareil.
CONSOMMATEUR : Conservez cette notice pour consultation ultérieure.

Decorative Product: Not for use as a heating appliance.

NOTICE: Fireplace is not to be operated by a thermostat.

WARNING / AVERTISSEMENT / AVISO

**HOT GLASS WILL
CAUSE BURNS.
DO NOT TOUCH GLASS
UNTIL COOLED
NEVER ALLOW CHILDREN
TO TOUCH GLASS.**



**UNE SURFACE VITRÉE CHAUDE
PEUT CAUSER DES BRÛLURES.
LAISSER REFROIDIR LA SURFACE
VITRÉE AVANT D'Y TOUCHER.
NE PERMETTEZ JAMAIS À UN ENFANT
DE TOUCHER LA SURFACE VITRÉE.**

**EL VIDRIO CALIENTE
CAUSARÁ QUEMADURAS.
USTED DEBE NUNCA
TOCAR EL VIDRIO CALIENTE.
LOS NIÑOS DEBEN NUNCA
TOCAR EL VIDRIO.**

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury, or death.

- 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.

AVERTISSEMENT : Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

- 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.
 - 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.

TABLE OF CONTENTS

Packaging	Page 2
Introduction	Page 2
General Information	Page 2
Requirements for the	
Commonwealth of Massachusetts	Page 4
Cold Climate Insulation	Page 5
Location	Page 5
Vent Termination Clearances	Page 6
Appliance and Vent Clearances	Page 7
Pre-Installation Steps	Page 8
Typical Installation Sequence	Page 8
Step 1. Framing.....	Page 8
Fireplace Specifications.....	Page 9
Step 2. Routing Gas Line	Page 10
Step 3. Install the Venting System ..	Page 11
Step 4. Field Wiring.....	Page 12
Step 5. Connecting Gas Line	Page 13
Step 6. Outside Air Kit Installation ..	Page 14
Step 7. Verify Unit Operation.....	Page 15
Step 8. Install Grate, Vermiculite	
Embers and Logs	Page 15
Step 9. Installing/Removing Glass	
Enclosure Panels	Page 18
Step 10. Burner Adjustment.....	Page 19
Step 11. Vent Operation Test and	
Safety Limit Switch Operation	Page 20
Step 12. Hood Installation.....	Page 20
Finishing Requirements	Page 20
Step 13. Attaching Safety-in-	
Operation Warnings	Page 21
Gas Conversion Kits.....	Page 22

Please read and understand these instructions before beginning your installation.



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

PACKAGING

The assembled vented gas fireplace is packaged with:

- 1 - One log set, with one plastic bag of vermiculite, is packaged in a carton located within the firebox.
- 2 - One plastic bag of glowing embers located in the control compartment.
- 3 - One envelope containing the literature package, which consists of the care and operation manual, installation instructions, safety in operation warning labels, warranty, 8 nailing flanges; envelope is located in the control area.
- 4 - Two hoods taped to the top of the fireplace.
- 5 - One Grate, located in firebox.
- 6 - One Electrical Outlet Kit which consists of a junction box, 2 screws, an receptacle outlet, an OFF/ON rocker switch and a snap bushing. *Note: All the components in the electrical kit will Not be used by every model.*
7. Carton Support (must be removed from the control area prior to first burning).

INTRODUCTION

The **Millivolt** appliances have a millivolt gas control valve with piezo ignition system.

The **Electronic** appliances have an electronic intermittent pilot ignition system. External electrical power is required to operate these units.

Use Only These Approved Vent Components

- These vented gas fireplaces are designed for residential applications. They must be installed with approved Type-B, 5" diameter double wall vent pipe systems and a listed vent termination routed to the outside atmosphere.

GENERAL INFORMATION

! WARNING

B-Vent appliances are not designed to operate in negatively pressured environments (pressure within the home is less than pressures outside). Significant negatively pressured environments caused by weather, home design, or other devices may impact the operation of these appliances. Negative pressures may result in poor flame appearance, sooting, damage to property and/or severe personal injury. Do not operate these appliances in negatively pressured environments.

! WARNING

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 contact burns. A physical barrier is recommended if there are 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 the room and away from hot surfaces.

! AVERTISSEMENT

Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

Les enfants et les adultes devraient être informés des dangers que posent les températures de surface élevées et se tenir à distance afin d'éviter des brûlures ou que leurs vêtements ne s'enflamment.

DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THE APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION MAY VOID THE WARRANTY, CERTIFICATION AND LISTINGS OF THIS UNIT.

WARNING

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

WARNING

Failure to comply with these installation instructions will result in an improperly installed and operating appliance, voiding its warranty. Any change to this appliance and/or its operating controls is dangerous.

WARNING

Clothing or other flammable material should not be placed on or near the appliance.

AVERTISSEMENT

On ne devrait pas placer de vêtements ni d'autres matières inflammables sur l'appareil ni à proximité.

WARNING

Any safety screen or guard removed for servicing the appliance must be replaced prior to operating the appliance.

AVERTISSEMENT

Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

WARNING

THIS APPLIANCE MAY ONLY BE FITTED WITH DOORS CERTIFIED FOR USE WITH THE APPLIANCE.

Note: Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etcetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.

Remarque : L'installation et la réparation devrait être confiées à un technicien qualifié. L'appareil devrait faire l'objet d'une inspection par un technicien professionnel avant d'être utilisé et au moins une fois l'an par la suite. Des nettoyages plus fréquents peuvent être nécessaires si les tapis, la literie, et cetera produisent une quantité importante de poussière. Il est essentiel que les compartiments abritant les commandes, les brûleurs et les conduits de circulation d'air de l'appareil soient tenus propres.

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.

Ne pas utiliser cet appareil s'il a été plongé, même partiellement, dans l'eau. Appeler un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de commande et toute commande qui a été plongée dans l'eau.

Only trim kit(s) supplied by the manufacturer shall be used in the installation of this appliance.

Seules les trousse de garniture fournies par le fabricant doivent être utilisées pour l'installation de cet appareil.

These appliances comply with National Safety Standards and are tested and listed by OMNI-Test Laboratories, Inc. (Report No. 116-F-27-5) to ANSI Z21.50 (in Canada, CSA 2.22), and CAN/CGA-2.17-M91 in both USA and Canada, as vented gas fireplaces.

Both millivolt and electronic versions of these appliances may be used in bedrooms (USA only) when the room is an "unconfined space" as defined by the National Fuel Gas Code. Use in bedrooms may not be allowed by your local building codes. You should obtain prior approval from the Authority having jurisdiction prior to installation.

Misc. Codes / Standards -

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 appliance, 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*.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front or back viewing surfaces of the appliance.

These appliances are designed to operate on natural or propane gas only. The use of other fuels or combination of fuels will degrade the performance of this system and may be dangerous.

These replaces are designed as decorative appliances and are not intended for use as area heaters. They must Not be equipped with wall thermostats or remote controls with thermostat functions.

These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.

The appliance area be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Outside Combustion Air Hook Up -
(All manufactured home installations require the use of an Outside Combustion Air Hook-Up Kit)

These appliances are equipped with an integral combustion air door and actuator arm. Combustion air kits are optional. Install as shown in **Step 6 on Page 14**.

Millivolt Models - The millivolt appliances are manually controlled and feature a spark igniter (piezo) that allows the appliance's pilot gas to be lit without the use of matches or batteries. This system provides continued service in the event of a power outage.

Millivolt models come standard with a manually-modulated gas valve; flame appearance and heat output can be controlled at the gas valve. Input of for these models are shown in **Table 1**.

Input (BTU) Manually-Modulated Gas Valves (millivolt models)		
Model	Natural Gas	Propane Gas
	BTU/HR	BTU/HR
MPB35ST-B	23,000 to 30,000	22,000 to 28,000

Table 1

Electronic Models - Electronic models have a fixed rate gas valve. Input of electronic models is shown in **Table 2**.

Input (BTU) Fixed-Rate Gas Valves (electronic models)		
Model	Natural Gas	Propane Gas
	BTU/HR	BTU/HR
MPB35ST-B	30,000	28,000

Table 2

Gas Pressure - All Models

Tables 3 and 4 show the units' gas pressure requirements:

Inlet Gas Supply Pressure (all models)		
Fuel #	Minimum	Maximum
Natural Gas	5.0" WC (1.24 kPa)	10.5" WC (2.62 kPa)
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.24 kPa)

Table 3

Manifold Gas Supply Pressure (all models)		
Fuel #	Low (millivolt only)	High
Natural Gas	(Lo) 2.2" WC (0.55 kPa)	(Hi) 3.5" WC (0.87 kPa)
Propane	(Lo) 6.3" WC (1.57 kPa)	(Hi) 10.0" WC (2.49 kPa)

Table 4

Test gauge connections are provided on the front of the millivolt gas control valve, identified IN for the inlet and OUT for the manifold side. A 1/8" NPT Test gauge connection is provided at the inlet and outlet side of the electronic gas control valve.

Propane tanks are at pressures that will cause damage to valve components. Verify that the tanks have step down regulators to reduce the pressure to safe levels.

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 psi (3.5 kPa).

The appliance must be isolated from the 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 psi (3.5 kPa).

Orifice Sizes - Sea Level to High Altitude (All Models)

These appliances are tested and approved for installation at elevations of 0-4500 feet (0-1372 meters) above sea level using the standard burner orifice sizes (marked with an "*" in **Table 5**). For elevations above 4500 feet, contact your gas supplier or qualified service technician.

Deration - At higher elevations, the amount of BTU fuel value delivered must be reduced by either:

- Using gas that has been derated by the gas company.
- Changing the burner orifice to a smaller size as regulated by the local authorities having jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition or, in Canada, the CAN/CGA-B149.1 codes - latest edition.

Install the appliance according to the regulations of the local authorities having jurisdiction and, in the USA, the National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition or, in Canada, the CAN/CGA-B149.1 - latest edition.

NOTE: Flame appearance will diminish 4% per thousand feet.

In Canada - CAN/CGA-2.17-M91 (R2009) (high altitude): THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REPRESENTATIVE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 OR CAN/CGA-B149.2 INSTALLATION CODES.

Burner Orifice Sizes Elevation 0-4500 feet (0-1372 meters)		
Model Series	Nat. Gas drill size (inches)	Propane drill size (inches)
MPB35ST-B	#37 (.104") * 24M10 •	1.55 mm (.061") * 42M79 •

Table 5

* Standard size installed at factory
• Part/Cat. Number

Burner Orifice Sizes (all models)		
Elevation Feet (meters)	Natural Gas drill size (inches)	Propane Gas drill size (inches)
0 - 4500 (0-1372)	#37 * (.104")	1.55 mm * (.061")

* Standard size installed at factory

Table 8

Gas Valve Diagrams

See **Figure 1** for Millivolt models and **Figure 2** For Electronic Models.

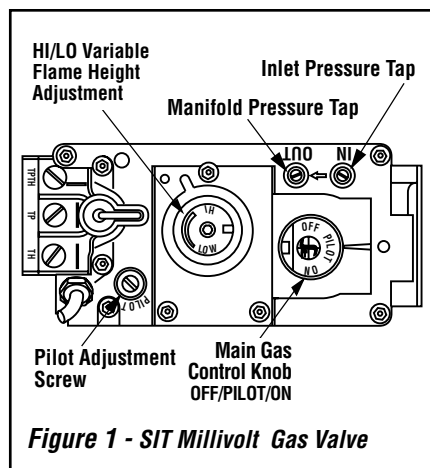


Figure 1 - SIT Millivolt Gas Valve

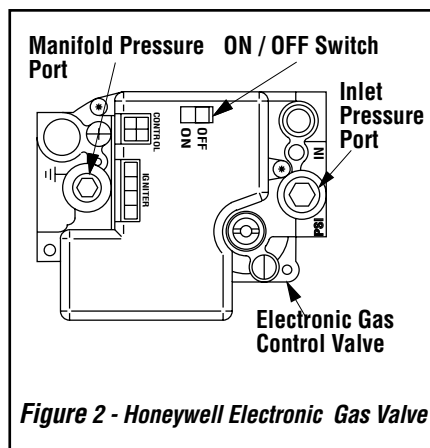


Figure 2 - Honeywell Electronic Gas Valve

REQUIREMENTS FOR THE COMMONWEALTH OF MASSACHUSETTS

Installation of these fireplaces 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. Sec. 5.08 2(a) through 2(e).
- 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.

COLD CLIMATE INSULATION

For cold climate installations, seal all cracks around your appliance with noncombustible material and wherever cold air could enter the room. It is especially important to insulate outside chase cavity between studs and under floor on which appliance rests, if floor is above ground level. Gas line holes and other openings should be caulked or stuffed with unfaced fiberglass insulation.

If the fireplace is being installed on a cement slab in cold climates, a sheet of plywood or other raised platform can be placed underneath to prevent cold transfer to the fireplace and into the room. It also helps to sheetrock inside surfaces and tape for maximum air tightness and caulk firestops.

MANUFACTURED HOUSING

B-Vent Fireplaces are not approved for use in OEM or aftermarket manufactured housing built to HUD standards.

LOCATION

In selecting the location, the aesthetic and functional use of the appliance are primary concerns. However, vent system routing to the exterior and access to the fuel supply are also important.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies (Figure 3).

En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures (Figure 3).

The location should also be free of electrical, plumbing or other heating/air conditioning ducting.

Be aware that this is a heat producing appliance. Objects placed above the unit are exposed to elevated temperatures.

Do not insulate the space between the appliance and the area above it.

The appliance must be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

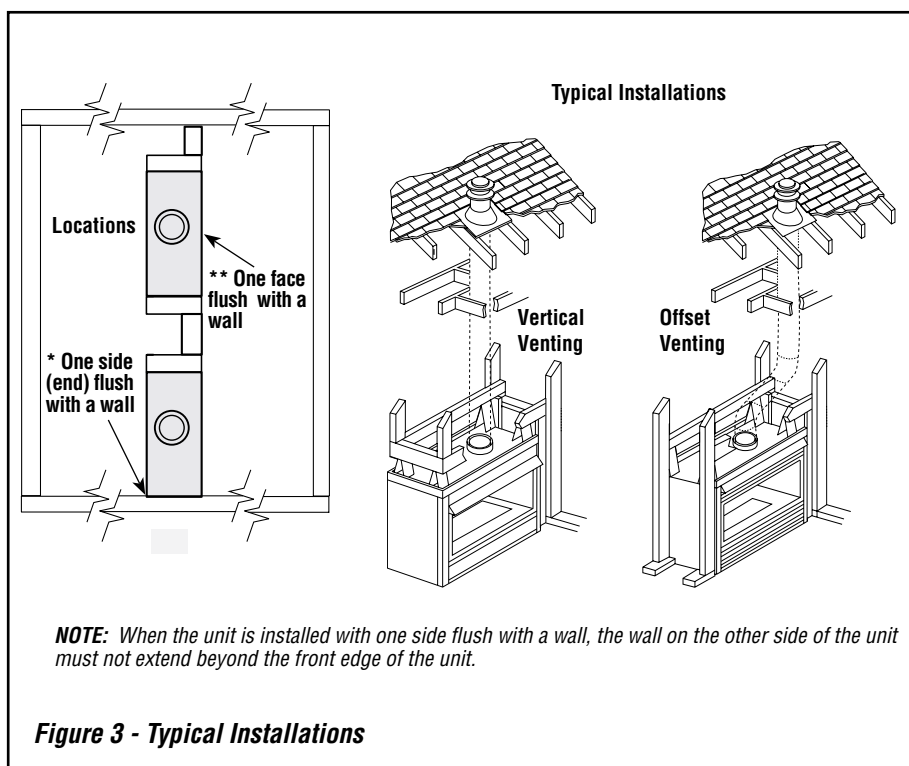


Figure 3 - Typical Installations

VENT TERMINATION CLEARANCES

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CGA-B149.1 in Canada.

Gas Vent Rule—Gas vent caps are not permitted within 8 ft. (2.4 m) of a vertical wall or similar obstruction. Gas vent caps that are located 8 ft. or more from a portion of a building which extends at an angle greater than 45° upward from the horizontal may terminate in accordance with **Figure 4**, provided that in no case shall any discharge opening on the cap be less than 2 ft. (.6 m) horizontally from the roof surface (National Fuel Gas Code ANSI Z223.1 (NFPA 54) (CAN/CGA B149.1).

Multiple Terminations

These appliances may vent adjacent to and at the same level with any other gas appliances (including direct-vent appliances) provided that there is at least 2 ft. (0.6m) between the proximal edges of the vent caps. These appliances may be vented adjacent to a chimney vent servicing a solid fuel fireplace provided the B-vent cap is at least 2 ft. (0.6m) away from the nearest point of the chimney opening.

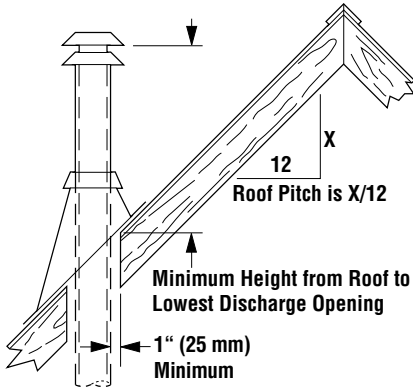
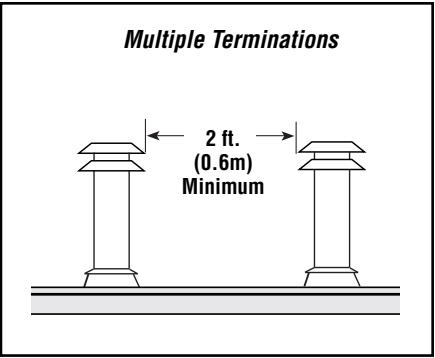


Figure 4 - Vertical Vent Termination Clearances

Termination Heights For Vents Above Flat Or Sloped Roofs Ref. NFPA 54 / ANSI Z223.1, 7.6		
Roof Pitch	Feet	Meters
Flat to 6/12	1.0	0.3
6/12 to 7/12	1.25	0.38
7/12 to 8/12	1.5	0.46
8/12 to 9/12	2.0	0.61
9/12 to 10/12	2.5	0.76
10/12 to 11/12	3.25	0.99
11/12 to 12/12	4.0	1.22
12/12 to 14/12	5.0	1.52
14/12 to 16/12	6.0	1.83
16/12 to 18/12	7.0	2.13
18/12 to 20/12	7.5	2.29
20/12 to 21/12	8.0	2.44

MINIMUM CLEARANCES TO COMBUSTIBLES

Appliance And Vent Clearances

Maintain clearances from appliance to combustible materials as detailed in **Table 6** with the following exception: **When the unit is installed with one side flush with a wall, the wall on the other side of the unit must not extend beyond the front edge of the unit.** In addition, when the unit is installed in the middle of a room, the side walls surrounding the unit must not extend beyond the front or rear edge of the unit. See **Figure 3**.

MINIMUM CLEARANCES Inches (millimeters)	
Sides	1/2 (13)
Top Spacers	0 (0)
Floor	0 (0)
Bottom of Appliance To Ceiling	72 (1829)
Vent	1 (25.4)
SERVICE CLEARANCES Feet (meters)	
Front and Back Faces	3 ft. (0.9 m)

Table 6

***NOTE:** 3" (75 mm) above any inclined vent component.

****NOTE:** See **Page 8, Step 1** and **Figure 8** for clearance requirements to the nailing flange located at each side of the unit and any screw heads adjacent to it.

Hearth Extension - A hearth extension is not required with this appliance. If a hearth extension is used, do not block the control compartment access panel. Any hearth extension used is for appearance only and does not have to conform to standard hearth extension installation requirements.

Wall Finishes / Surrounds / Mantels

Note: Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front face (black sheet metal). Never allow combustible materials to be positioned in front of or overlapping the appliance front face. See **Figure 37**.

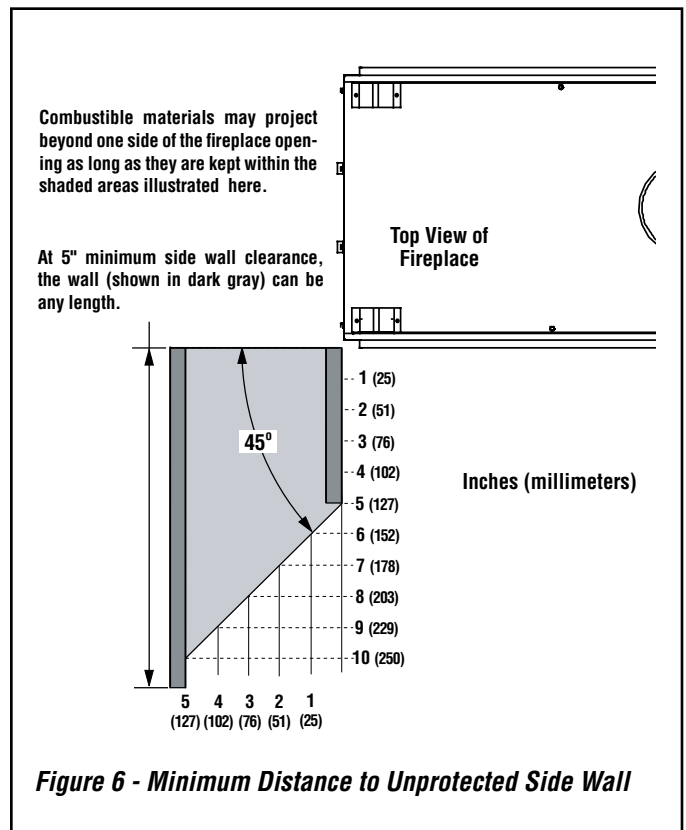
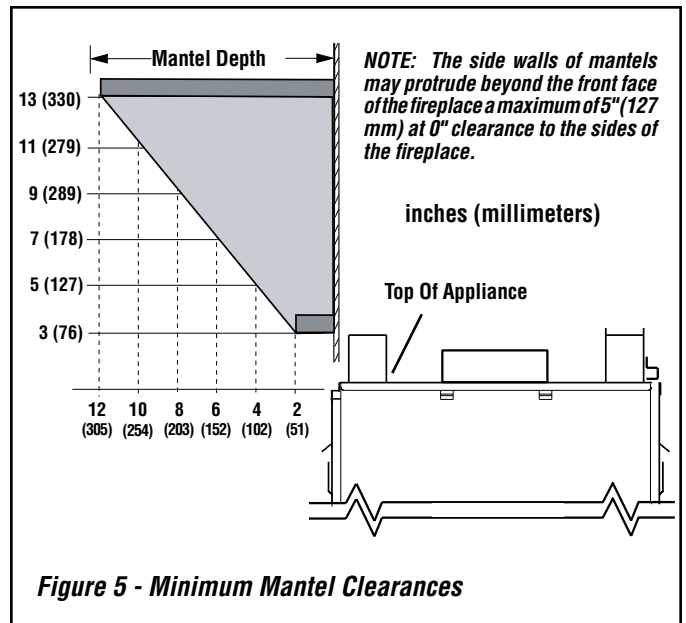
Non-combustible materials, such as surrounds and other appliance trim, may be installed on the appliance front and back faces with the following exception: **The material must NOT cover any portion of the glass, louvers or top radiant panel (optional kit).**

Vertical installation clearances to combustible mantels vary according to the depth of the mantel. (See **Figure 5**). Mantels constructed of non-combustible materials may be installed at any height above the appliance opening; however, do not allow anything to hang below the hood.

These instructions should be used as a guideline and do not supersede local codes in any way.

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

Note: We recommend the use of high temperature paint (rated 175° F or higher) on the underside of the mantel.



! 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.

! AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

PRE-INSTALLATION STEPS

The appliance is shipped with all gas controls and components installed and pre-wired.

1. Remove the shipping carton. Remove the shipping pad, exposing the front glass door.
2. Open the two latches (located under the fire-box floor) securing the glass door. Remove the door by tilting it outward at the bottom and lifting it up. Set the door aside protecting it from inadvertent damage. See *Removing Glass Panels* on **Page 18**.

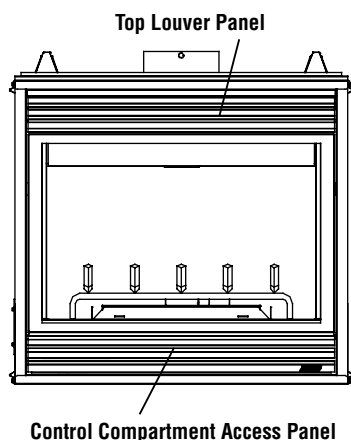


Figure 7 - Unit Parts Identification

*** NOTE: INSTALLATION DIAGRAMS AND INSTRUCTIONS SHOW THE FRONT OF THE APPLIANCE AS THE SIDE WHICH HAS VALVE ACCESS, EXCEPT WHERE NOTED.**

TYPICAL INSTALLATION SEQUENCE

The typical sequence of installation is outlined below. However, each installation is unique and may result in variations to the steps described.

See the page number references in the following steps for detailed procedures.

- Step 1. (Page 8)** - Construct the appliance framing. Position the appliance within the framing and secure with nailing flanges.
- Step 2. (Page 10)** Route gas supply line to appliance location.
- Step 3. (Page 11)** Install the vent system and exterior termination.
- Step 4. (Page 12)** Field Wiring
 - a. Millivolt Appliances – Install the OFF/ON burner control switch.
 - b. Electronic Appliances – Connect 120 VAC electrical power to the appliance receptacle.
- Step 5. (Page 13)** Make connection to gas supply.
- Step 6. (Page 14)** Outside Air Kit Installation.
- Step 7. (Page 15)** Verify appliance operation.
- Step 8. (Page 15)** Install grate, vermiculite, embers and logs.
- Step 9. (Page 18)** Installation/Removal of glass enclosure panels.
- Step 10 (Page 19)** Adjust burner primary air shutter to achieve proper flame appearance.
- Step 11. (Page 20)** Vent operation test and (safety limit) switch operation.
- Step 12. (Page 20)** Install the decorative trims and hoods.
- Step 13. (Page 21)** Attach Safety in Operation Warnings.

Step 1. FRAMING

Frame these appliances as illustrated in **Figure 9**. All framing details must allow for a minimum clearance to combustible framing members as shown in **Table 6** on **Page 7**.

If the appliance is to be elevated above floor level, a solid continuous platform must be constructed below the appliance.

Headers may be in direct contact with the appliance top spacers but must not be supported by them or notched to fit around them. All construction above the appliance must be self-supporting, **DO NOT** use the appliance for structural support.

Side Nailing Flanges

The fireplace should be secured to the side framing members using the unit's nailing flanges - one top and bottom on each side of the fireplace front. See **Figure 8** using the existing screws. Position the fireplace within the framing. When required, the tabs may be bent 90 degrees by hand or with the assistance of a hammer. Use wood screws to secure the nailing flanges to the framing. See **Table 6** on **Page 7** for clearances of framing members to cabinet parts. The nailing flange itself can directly contact framing.

Floor Nailing Tabs

Secure the fireplace to the floor as shown in **Figure 8**.

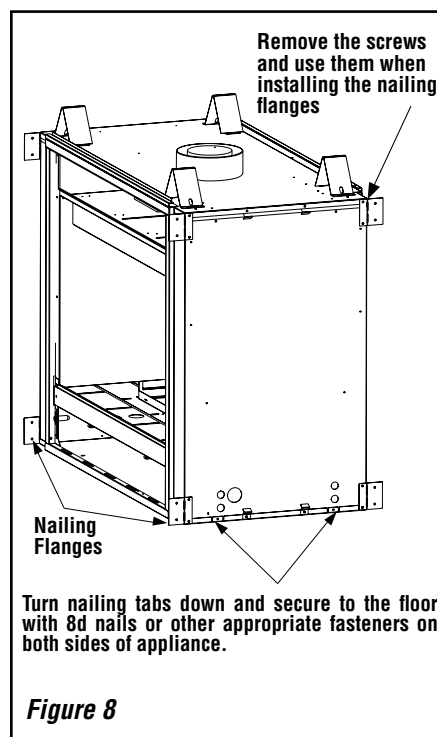


Figure 8

FIREPLACE SPECIFICATIONS - MPB35ST

SPECIFICATIONS

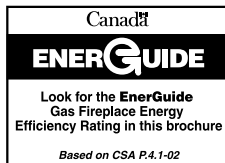
Natural Gas BTU Input	30,000
Propane Gas BTU Input	28,000
B-Vent Size	5" (127 mm)

NOTES

Diagrams, illustrations and photographs are not to scale. Consult installation instructions. Product designs, materials, dimensions, specifications, colors, and prices are subject to change or discontinuance without notice.

PRODUCT REFERENCE INFORMATION

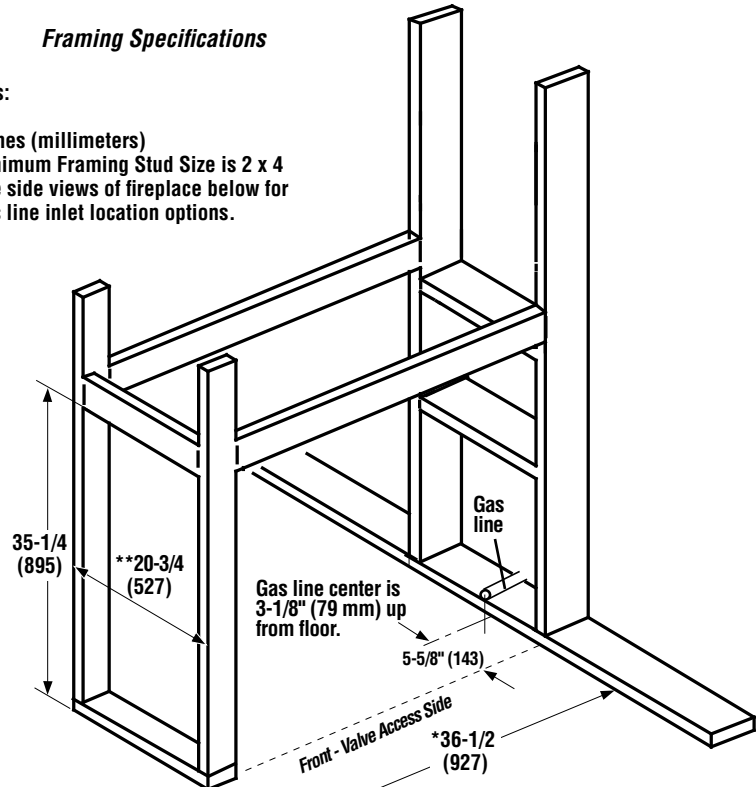
Cat. No.	Model	Ship Weight	Ship. Volume
H7808	MPB35ST-NM-B	200 lbs	46W x 26D x 43H (30 cu.ft.)
H7809	MPB35ST-PM-B	200 lbs	46W x 26D x 43H (30 cu.ft.)
H7810	MPB35ST-NE-B	200 lbs	46W x 26D x 43H (30 cu.ft.)



Framing Specifications

Notes:

- Inches (millimeters)
- Minimum Framing Stud Size is 2 x 4
- See side views of fireplace below for gas line inlet location options.

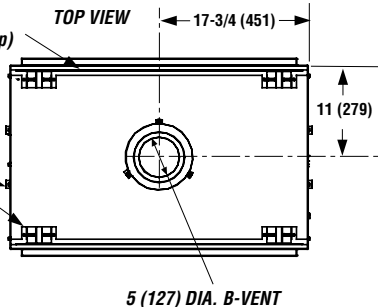


** This dimension based on 5/8" drywall. For 1/2" drywall use 21" (533 mm). The finished dimension should be 22" (558 mm).

* This dimension does not include the addition of drywall to the inside of framing. Adjust accordingly for your installation.

FINISH WALL BRACKET
(Front and back edge of unit top)

FRAMING SPACER
(Top and Both Sides)



Fireplace Specifications

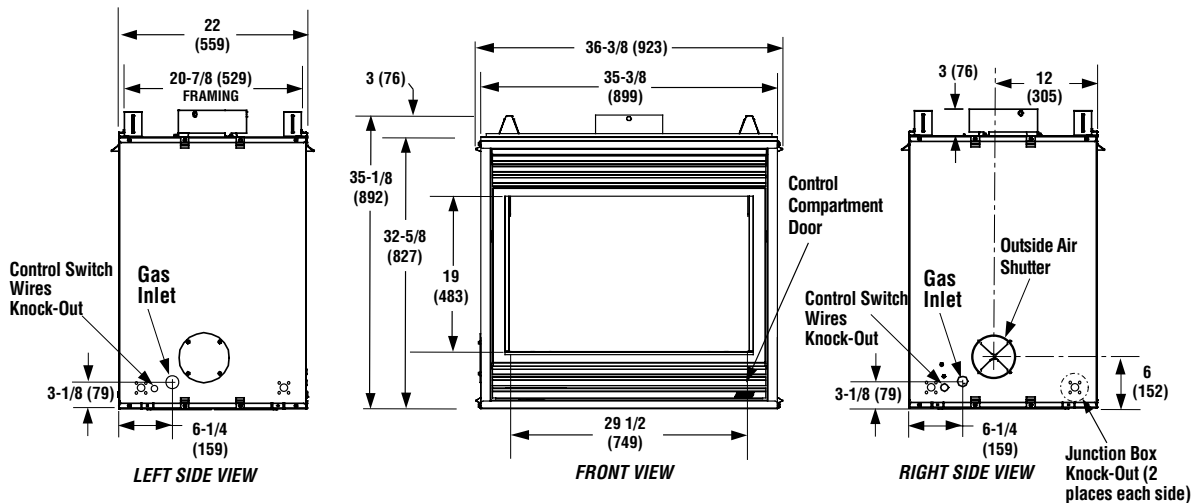
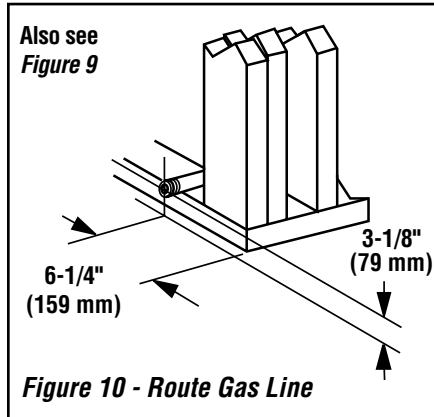


Figure 9

Step 2. ROUTING GAS LINE

Route a 1/2" (13 mm) gas line along the inside of the right side framing as shown in **Figure 10**. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations. All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve. (See **Step 5 on Page 13**).



Proper Sizing of Gas Line

Properly size and route the gas supply line from the supply regulator to the area where the appliance is to be installed per requirements outlined in the National Fuel Gas Code, NFPA 54 - latest edition (USA) or CAN/CGA-B149.1 - latest edition (Canada).

Never use galvanized or plastic pipe. Refer to **Table 7** for proper sizing of the gas supply line, if black iron pipe is being used. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations. We recommend that a qualified individual such as a plumber or gas fitter be hired to correctly size and route the gas supply line to the appliance. Installing a gas supply line from the fuel supply to the appliance involves numerous considerations of materials, protection, sizing, locations, controls, pressure, sediment, and more. Certainly no one unfamiliar and unqualified should attempt sizing or installing gas piping.

Schedule 40 (black iron) Pipe Inside Diameter (Inches)		
Schedule 40 Pipe Length (feet)	Natural Gas	Propane Gas
0-10	1/2	3/8
10-40	1/2	1/2
40-100	1/2	1/2
100-150	3/4	1/2
150-200	3/4	1/2

Table 7

Notes:

- All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve (see **Figure 19 on Page 14**).
- See **Massachusetts Requirements on Page 4** for additional requirements for installations in the state of Massachusetts in the USA.
- The gas supply line should Not be connected to the appliance until **Step 5 (Page 13)**.
- A pipe joint compound rated for gas should be used on the threaded joints. **Ensure propane resistant compounds are used in propane applications.** Be very careful that the pipe compound does not get inside the pipe.
- It is recommended to install a sediment trap in the supply line as close as possible to the appliance (see **Figure 19 , Page 14**). Appliances using propane should have a sediment trap at the base of the tank.
- Check with local building official for local code requirements (i.e. are below grade penetrations of the gas line allowed?, etc).

IMPORTANT: If propane is used, be aware that if tank size is too small (i.e. under 100-lbs, if this is the only gas appliance in the dwelling. Ref. NFPA 58), there may be loss of pressure, resulting in insufficient fuel delivery (which can result in sooting, severe delayed ignition or other malfunctions). Any damage resulting from an improper installation, such as this, is not covered under the limited warranty.

Step 3. INSTALL THE VENT SYSTEM & EXTERIOR TERMINATION:

General Information

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CGA-B149.1 in Canada.

Ensure clearances are in accordance with local installation codes and the requirements of the gas supplier.

Dégagement conforme aux codes d'installation locaux et aux exigences du fournisseur de gaz.

Use only approved venting components. See *Approved Vent Components* on Page 2.

These fireplaces must be vented directly to the outside.

Slip the first 5" (127 mm) section of B-Vent over the fireplace flue outlet and secure with four sheetmetal screws (# 8 or larger), and install the remainder of the B-Vent to the outside. Minimum overall height of the vent system and appliance must be 10' (2.54 m) vertical - no offset (see Figure 12); or 12' (3.7 m) when an offset up to 60 degrees from the vertical is used - this offset may start at the fireplace flue collar (see Figure 12). The maximum overall height of the vent system and appliance should not exceed 40 feet.

Install the B-vent system in accordance with the vent manufacturer's instructions.

Use only approved venting components. See *Approved Vent Components* on Page 2.

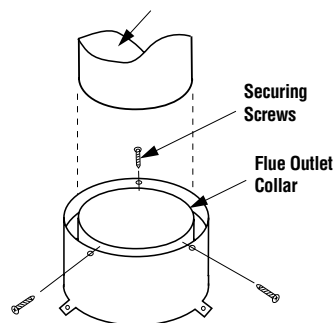


Figure 11

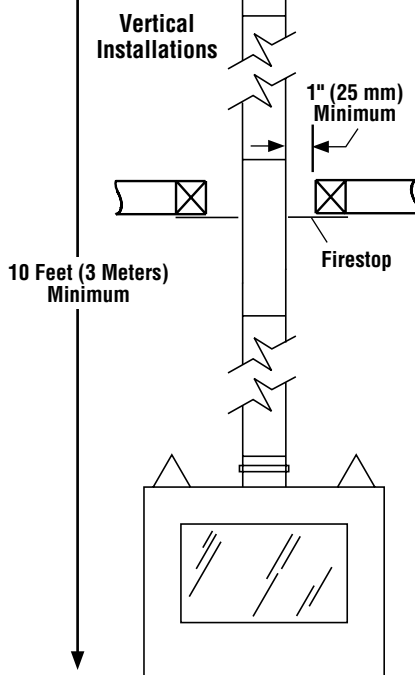
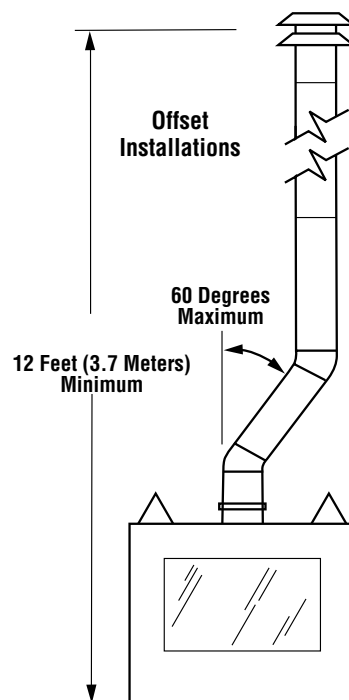


Figure 12

The maximum overall height of the vent system and appliance should not exceed 40 feet.



CAUTION

This appliance cannot be vented horizontally.

NOTE: Refer to the vent manufacturers installation instructions for variations of venting techniques. If common venting of several units is contemplated, it should be discussed with an architect and the local Building Department.

Do not place insulation materials within 1" of the gas vent system.

Step 4. FIELD WIRING



CAUTION

Ground supply lead must be connected to the wire attached to the green ground screw located on the outlet box. See **Figure 18**. Failure to do so will result in a potential safety hazard. The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70-latest edition. (In Canada, the current CSA C22.1 Canadian Electrical Code).

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

ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de câblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Verify proper operation after servicing.

S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

Refer to Section A for millivolt appliances and Section B for electronic appliances.

A. Millivolt Wiring (See **Figure 14**) –

1. Install and wire in the burner control switch (install either "a" or "b" below, NOT BOTH)
 - a. **Standard OFF/ON Switch** - Install the OFF/ON burner control switch (rocker switch) as shown in **Figures 13 and 14**.
 - b. **Optional Control Switch** (OFF/ON wall switch or remote control receiver). Install snap bushing (provided in Electrical Outlet Kit) into control switch knock-out in side panel (see **Figure 9** on **Page 9**). Wire the optional control switch within the millivolt control circuit (as shown in **Figure 14**) using the 15 feet of 2 conductor wire supplied (route wires through the snap bushing to the optional control switch). Mount the optional wall switch in a convenient location on a wall near the fireplace.

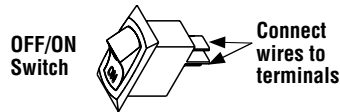
CAUTION: DO NOT CONNECT OPTIONAL CONTROL SWITCH TO 120 V POWER SUPPLY.

CAUTION: REMOVE THE CARTON SUPPORT FROM THE CONTROL COMPARTMENT BEFORE OPERATING THE APPLIANCE.

CAUTION: ENSURE THAT WIRES ARE POSITIONED AWAY FROM HOT SURFACES AND SHARP EDGES.

Install OFF/ON Switch (millivolt models)

1. Connect the 2 wires (provided in Electrical Outlet Kit) to the TP/TH and TH terminals on valve.
2. Pass the 2 wires through the opening where OFF/ON switch will be installed (left of piezo, below valve).
3. Connect the two wires to the OFF/ON Switch.



4. Press the OFF/ON switch into bracket as shown below (it will snap into place).

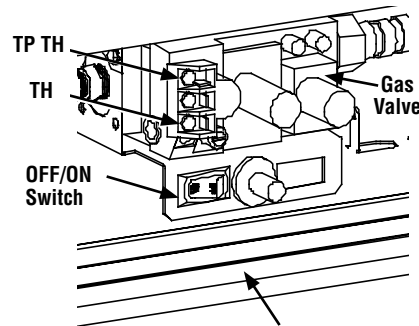


Figure 13

Control Compartment
Access panel

Millivolt Wiring Diagram

If any of the original wire as supplied must be replaced, it must be replaced with Type AWM105 C - 18 gage wire.

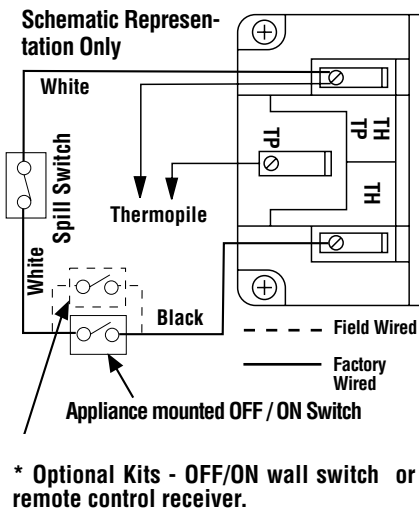


Figure 14

B. Electronic Wiring (also see **Figure 18** on **Page 13**)

Note: The electronic appliance must be connected to the main 120 VAC power supply.

1. Locate the Electrical Outlet Kit provided (packaged in firebox - contents: junction box, 2 screws, an receptacle outlet, a snap bushing and an OFF/ON rocker switch - for millivolt units only).

Note: The junction box can be installed in any of the 4 outside corners of the control compartment (outlet installed in front left corner is shown in **Figure 17**).

2. Route a 3-wire, 120 VAC, 60 Hz, 1 ph power supply to the location on appliance where junction box is to be installed.
3. Open the control compartment access panel (see **Control Compartment Access Instructions** on **Page 14**).
4. Wire and install the outlet receptacle to junction box, then install into the chosen corner of the control compartment as shown in **Figure 17**.
5. After the receptacle/junction box wiring is complete, install the field-provided metal junction box cover plate (see **Figure 17**).
6. Install the snap bushing (provided in kit) into the selected cabinet knockout opening in side cabinets (see **Electrical Inlets, Figure 9** on **Page 9**). The snap bushing provides protection for the wires (see note below) passing through side cabinet going to an optional burner control switch. Wire in the burner control switch to the low voltage circuit as shown in **Figure 18**.

Note: The supplied 15 feet of 2 conductor wire has one end of each conductor connected to the gas valve circuit and the other end of each conductor placed loose on top of the appliance.

Important Note: The gas valve OFF/ON switch is shown in **Figure 18** on **Page 13**. It is integral with the gas valve and should be set to the **ON** position.

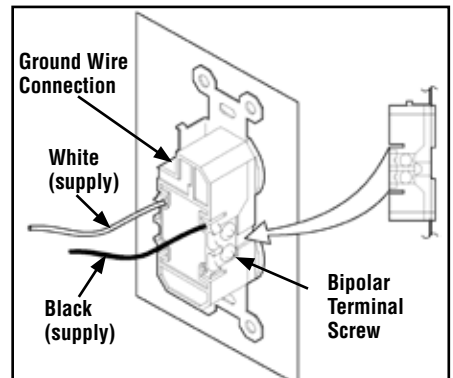
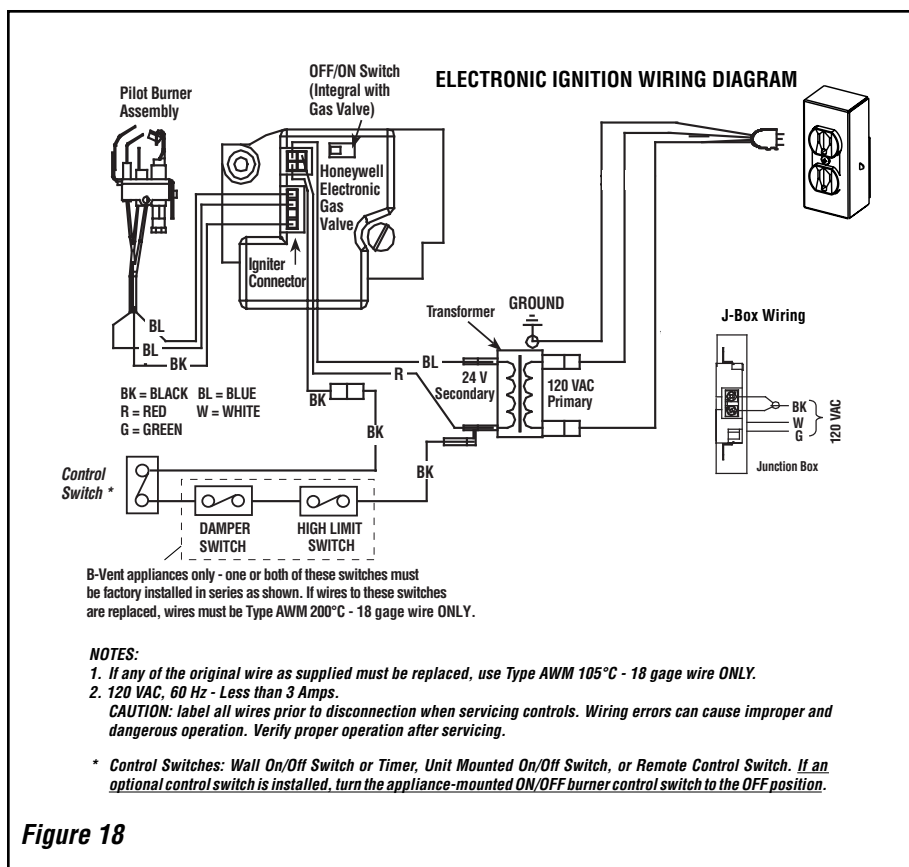
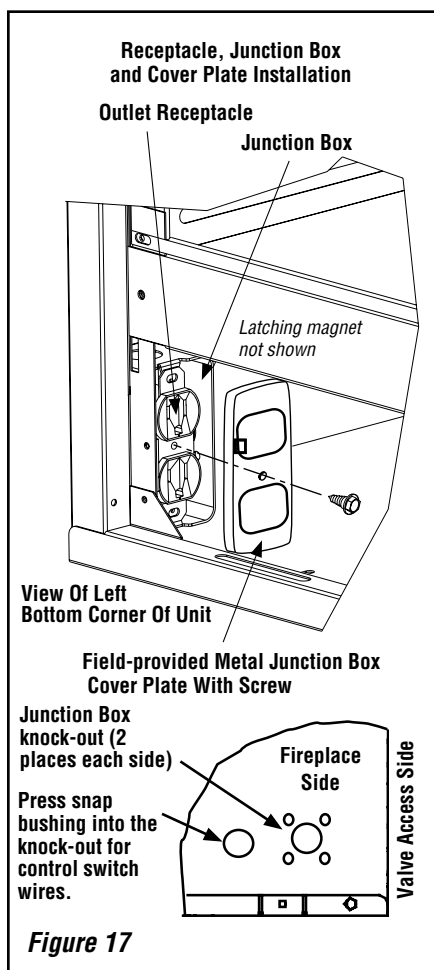
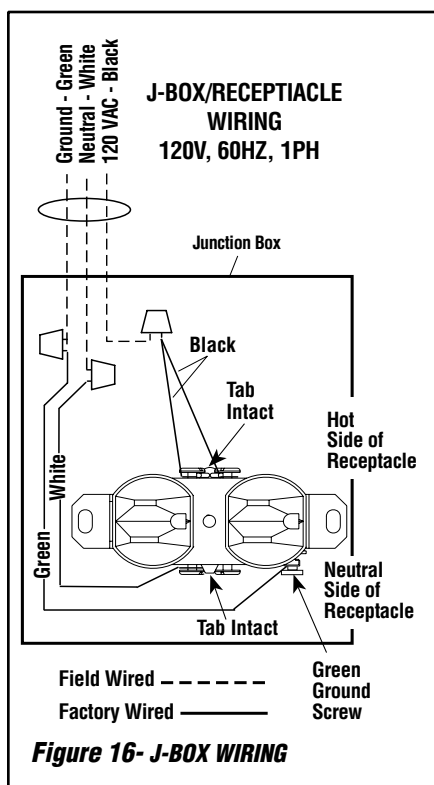


Figure 15



Step 5. CONNECTING GAS LINE

All codes require a shut-off valve mounted in the supply line. The orientation of the shut-off valve should face the front. **Figure 19** illustrates two methods for connecting the gas supply. A Sediment Trap is recommended to prevent moisture and debris in gas line from damaging the valve.

The flex-line method is acceptable in the U.S.A. where local codes permit, however, Canadian requirements vary depending on locality. Installation must be in compliance with local codes. These appliances are equipped with a gas flex-line for use in connecting the unit to the gas line. See **Figure 19** for flex-line description. The flex-line is rated for both natural and propane gas. A manual shut off valve is also provided with the flex-line.

The gas control valve is located in the lower control compartment.

To access the valve open the lower control compartment door (**see Figure 21**).

The millivolt control valve has a 3/8" (10 mm) NPT thread inlet port. The electronic control valve has a 1/2" (13 mm) NPT thread inlet port and is fitted with a 1/2" x 3/8" (13 mm x 10 mm) NPT fitting.

Secure all joints tightly using appropriate tools and sealing compounds (ensure propane resistant compounds are used in propane applications). It is recommended to seal around the gas line to prevent cold air leakage.

Acquire the shut-off valve and gas flex line and pull the assembly forward out of the compartment. Separate the shut-off valve from the gas flex-line. Determine the length of pipe needed to route the gas line from the last fitting (shown in **Figure 19** on **Page 14**) to a point within the control compartment that will allow the shut-off valve to be easily attached by hand to the gas flex-line.

Using pipe-dressing materials appropriate for the gas type, securely affix the shut-off valve to this determined pipe length at a convenient location **outside** of the appliance lower control compartment.

TEST ALL CONNECTIONS FOR GAS LEAKS (FACTORY AND FIELD):

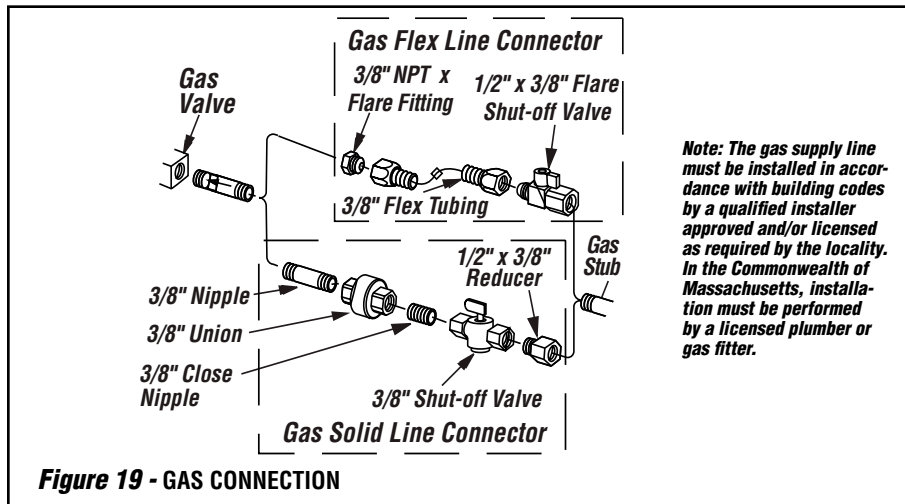
⚠ WARNING

Never use an open flame to check for leaks.

Turn on gas supply and test for gas leaks using Turn on gas supply and test for gas leaks, using a gas leak test solution (also referred to as bubble leak solution). **Note:** *Using a soapy water solution is an effective leak test solution but it is not recommended, because the soap*

residue that is left on the pipes/fittings can result in corrosion over time.

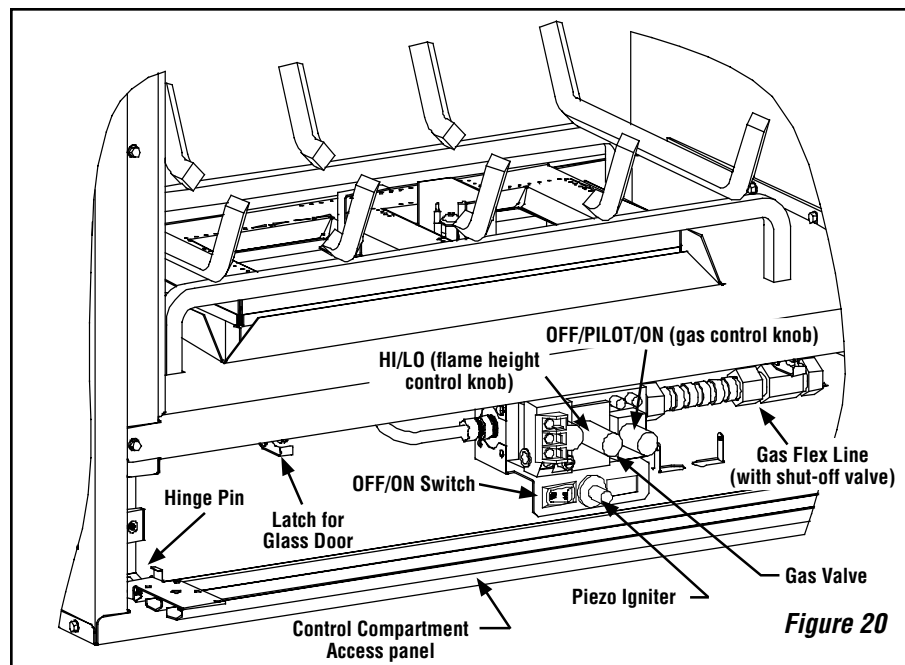
- Light the appliance (refer to the lighting instructions label in the control compartment or in the Care and Operation Instructions manual).
- Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the gas control knob (off/pilot/on) to the "OFF" position. Either tighten or refasten the leaking connection, then retest as described above.
- When the gas lines are tested and leak free, be sure to rinse off the leak testing solution.



CONTROL COMPARTMENT ACCESS INSTRUCTIONS (Ref. Figure 20)

Opening Control Compartment Door: Gently depress the outer top corners of the louvered Control Compartment Access Panel until the spring-loaded magnetic catches "pop" it free, allowing it to swing out and down to open.

Removing Control Compartment Door: With the panel in the open position, depress the spring-loaded hinge pin on left side until it disengages from the left cabinet panel hole. Pull panel away from fireplace.



Step 6. OUTSIDE AIR KITS

Optional outside make-up air kits, Model FOAK-4 or FAOK-4LD (see **Figure 22 on Page 15**), may be used with these appliances. Refer to the installation instructions packaged with the air kits for specific installation information. If used, the outside air kit must be installed before the fireplace is framed and enclosed in the finished wall.

Outside air drawn into the fireplace supplies air to the fire for combustion. Only one outside air duct is necessary, if installed. See **Figure 9, Page 9** for the location of the units outside air inlet.

If additional length of duct is necessary, purchase locally available U.L. Class 0 or Class 1 metallic ducting. The duct may extend up to 50' (15.24 m) in any direction.

Note: When installing the air duct vertically, **DO NOT** terminate the duct closer than 3 feet below the chimney top.

Outside combustion air ducting may be run upwards or vertically through framing and ceiling joists, with the hood installed through an outside wall and 3 feet (1 m) below the termination. Ducting may also be run downward through floor joists and under the home to a ventilated crawlspace not considered part of the living area of the home.

Note: Do not terminate outside air kit in attic space under any circumstances.

⚠ CAUTION

Never locate inlet where it can be blocked by shrubs, snow drifts, etc. Never locate inlet in garage or any area where there is another fuel burning appliance or products emitting combustible gases such as paint, gasoline, etc. In cold climates, it is recommended the outside air duct be insulated.

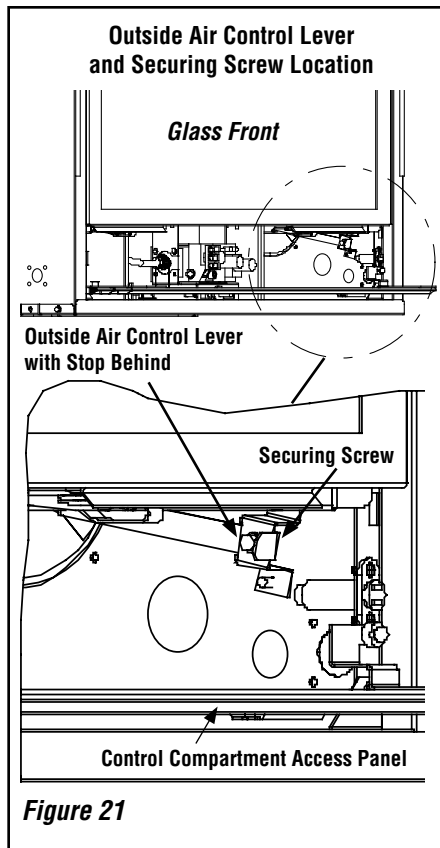
After completing the installation of the optional outside air vent system, the outside air control lever must be put in service and tested to ensure proper operation before completing any enclosure around the firebox. Failure to do so may result in extensive and costly rework. Before the operation of the vent system can be tested, the lever securing screw must be removed. See **Figure 21 on Page 15**.

The hand operated outside air control lever is located on the right side of the fireplace opening. See **Figure 21**.

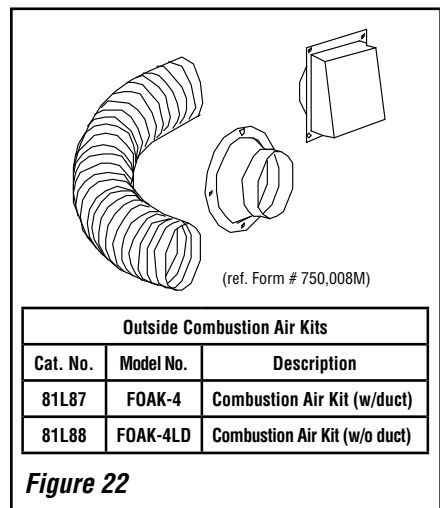
To open the outside air, open the bottom control access panel, reach into the gap between the firebox bottom and pull the outside air control lever all the way out.

The outside air shutter should be fully open when the fireplace is in use and completely closed when the fireplace is not being used. Closing it when not in use will prevent outside cold air from entering the dwelling.

Operate the actuator through several cycles including the closed position. Ensuring proper operation and freedom of movement. Return the actuator arm to the closed position.



Outside Air Kits - Outside Air kits are available with duct (FOAK-4) and without duct (FOAK-4LD) for use if outside combustion air is required or desired. If model FOAK-4LD is used it must be used in conjunction with locally purchased, non-combustible Class 1 or Class 0 flexible duct.



Step 7. VERIFY APPLIANCE OPERATION

With gas line installed run initial system check-out before closing up the front of the unit. Follow the pilot lighting instructions provided in the Care and Operation Instructions manual. For piezo igniter location see **Figure 20** on **Page 14** (millivolt appliances only).

Note: The (pull-out) Lighting instructions label can be found in the control compartment (see **Figure 20**).

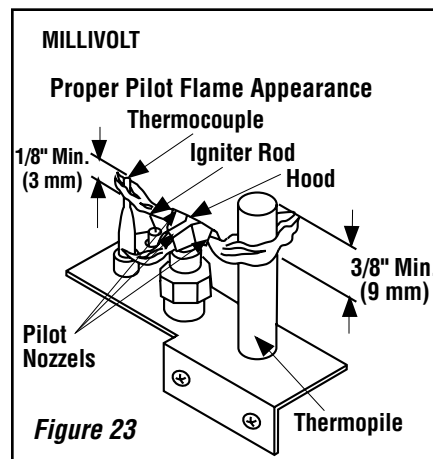
When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated in the instruction manual. Subsequent lightings of the appliance will not require such purging. Inspect the pilot flame.

Millivolt Appliance Checkout

The pilot flame should be steady and, not lifting or floating. Flame should be blue in color with traces of orange at the outer edge.

The top 3/8" (10 mm) at the pilot generator (thermocouple) and the top 1/8" min (tip) of the quick drop out thermocouple should be engulfed in the pilot flame. The flame should project 1" (25 mm) beyond the hood at all three ports (**Figure 23**).

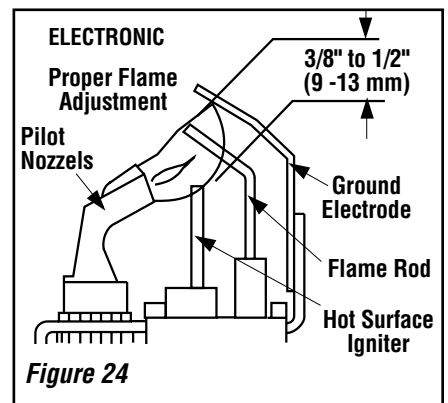
To light the burner; rotate the gas valve control knob counterclockwise to the "ON" position then turn "ON" the OFF/ON switch (installed at **Step 4, Page 12**).



Observe the individual tongues of flame on the burner. Make sure all ports are open and producing flame evenly across the burner. If any ports are blocked, or partially blocked, clean out the ports.

Electronic Appliance Checkout

To light the burner, turn "ON" the OFF/ON switch (located below valve) and turn the gas control switch to the "ON" position. Ensure the igniter lights the pilot. The pilot flame should engulf the flame rod as shown in **Figure 24**.



Step 8. INSTALL GRATE, VERMICULITE, GLOWING EMBERS AND LOGS

WARNING

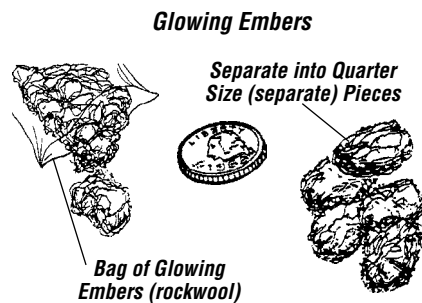
- **DO NOT** attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks and the initial burner operation has been checked out.
- The size and position of the log set was engineered to give the appliance a safe, reliable and attractive flame pattern. Any attempt to use a different log set in the fireplace will void the warranty and will result in incomplete combustion, soot-ing, and poor flame quality.
- Logs get very hot and will remain hot up to one hour after gas supply is turned off. Handle only when logs are cool. Turn off all electricity to the appliance before you install grate and logs.
- This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.
- If logs are not installed according to the log installation instructions, flame impingement and improper combustion could occur and result in soot and/or excessive production of carbon monoxide (CO), a colorless, odorless, toxic gas.

LOG SET - IDENTIFICATION

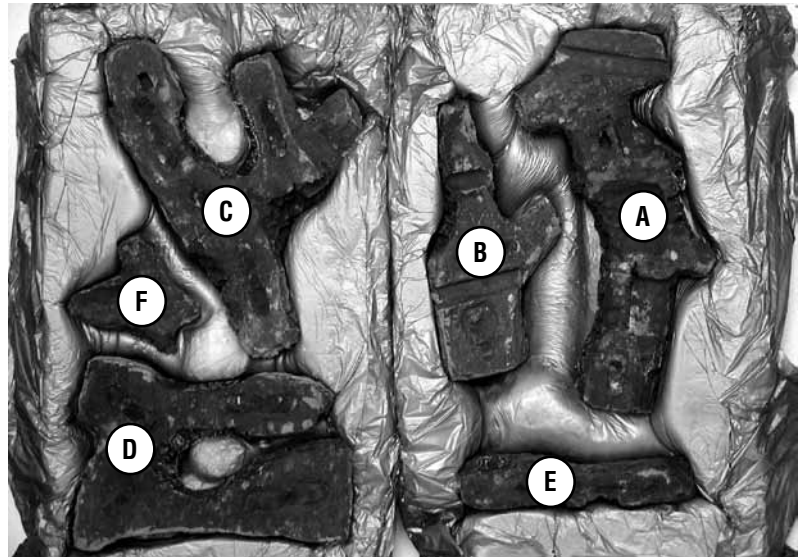
LOG SET Catalog Number H3210	
* Item	Description
A	Log, Center
B	Log, Left Rear
C	Log, Left Front
D	Log, Right Rear
E	Log, Top Center
F	Log, Front Center

** Item "letters" above correspond to photos on right*

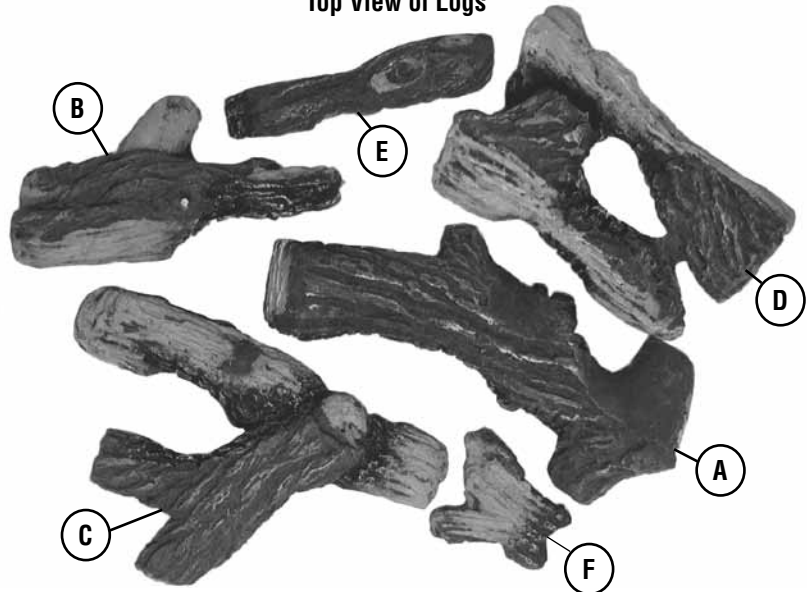
REFERENCE Firebox Accessories / Parts		
Cat. No.	Model No.	Description
88L53	FGE	Bag of Glowing Embers
H6319		Vermiculite, Bag (2 liters)



Bottom View of Logs (in packaging)



Top View of Logs



Top View of Logs - Installed

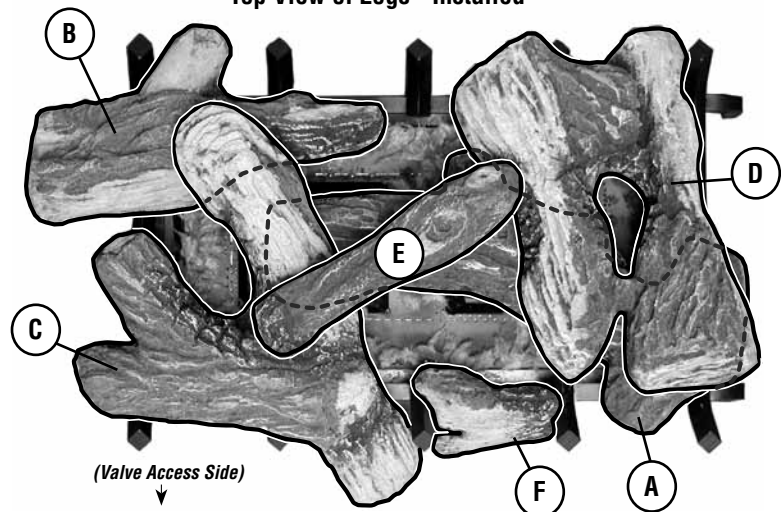
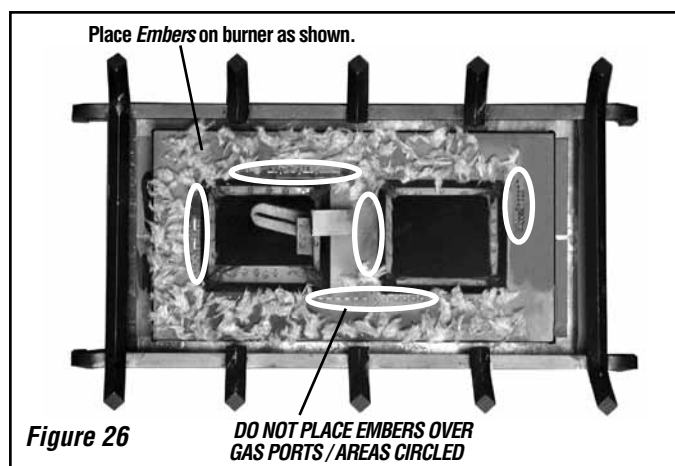


Figure 25

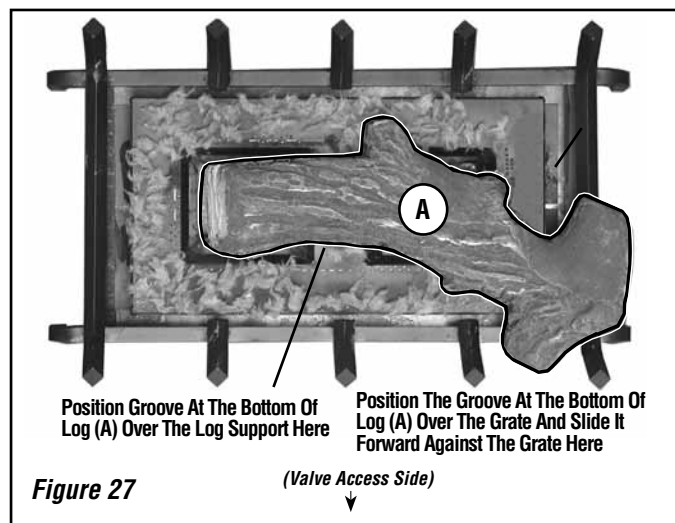
INSTALLATION STEPS:

READ WARNINGS ON Page 15 BEFORE PROCEEDING

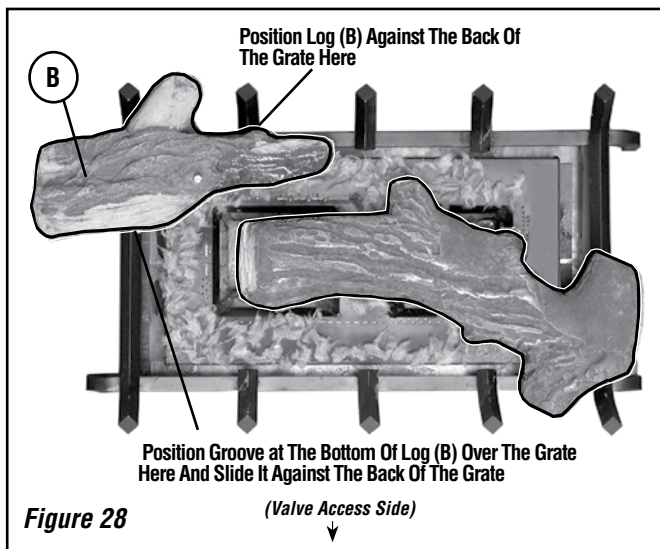
1. **Remove the front glass enclosure panel** (see *Glass Enclosure Panel Removal Instructions, Page 18*)
2. **Remove the following from firebox:** log set, bag of embers and bag of vermiculite. **Handle logs carefully to prevent breakage.**
3. **Ensure the Grate is properly installed** in the firebox with the 4 legs of the grate fitting into the 4 dimples on the firebox floor.
4. **Install Vermiculite** - Place some vermiculite on the firebox floor around the grate (the entire bag of vermiculite will NOT be used). See **Figure 34 on Page 19. DO NOT PLACE ANY VERMICULITE ON THE BURNER.**
5. **Placement of Glowing Embers** - Separate the Embers (rockwool) into pieces about the size of a quarter (see **Figure 25**). Keep the pieces fluffed up, not matted. Distribute these pieces over the surface of the burner, as shown in **Figure 26**. Do not use more than is necessary. Ensure that the main burner ports remain uncovered by the ember material.
Note: This appliance is provided with enough Glowing Embers for several applications, do not use all that is in a new bag at one time. For best glowing effect, replace the ember material annually. Replacement Glowing Embers are available (order Catalog Number 88L53).



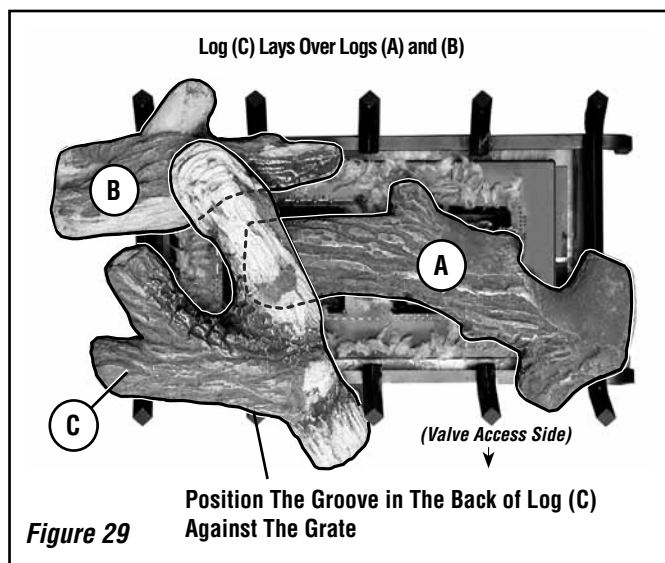
6. Place Log (A) on the grate as shown in **Figure 27**.



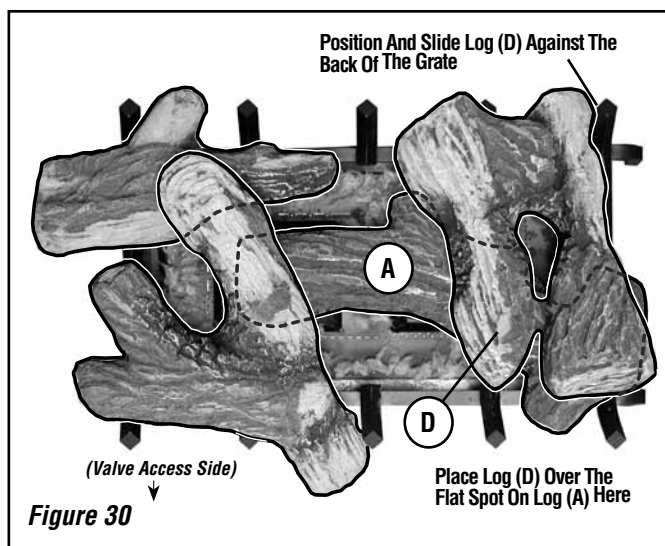
7. Place Log (B) as shown in **Figure 28**.



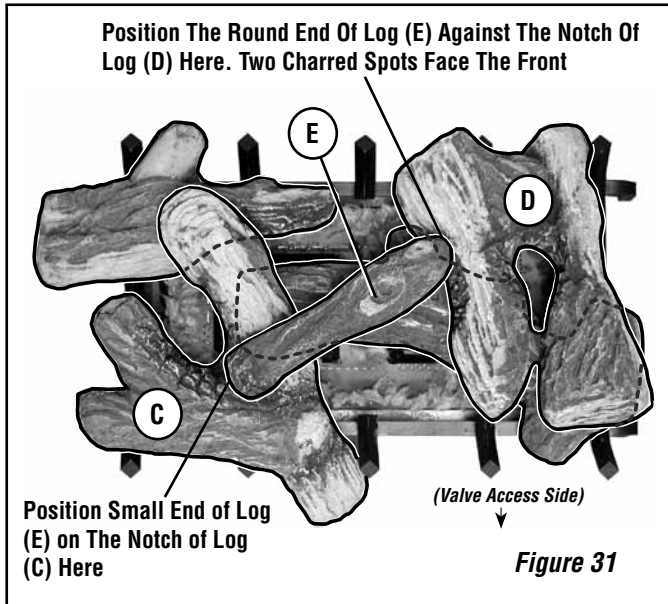
8. Place Log (C) as shown in **Figure 29**.



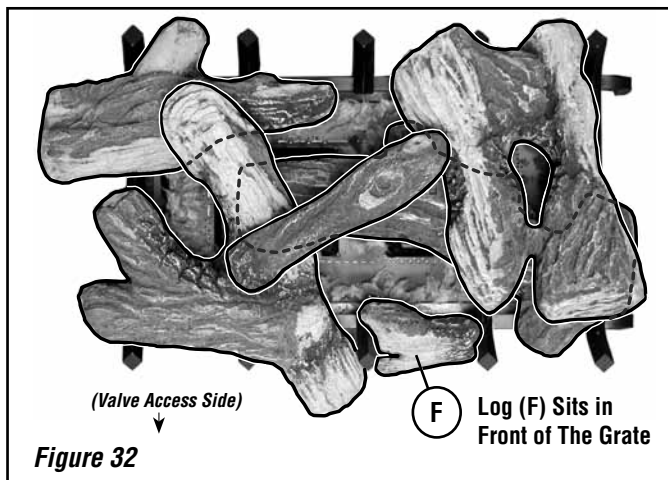
9. Place Log (D) as shown in **Figure 30**.



10. Place Log (E) as shown in **Figure 31**.



11. Place Log (F) as shown in **Figure 32**.



Step 9. INSTALLING/REMOVING GLASS ENCLOSURE PANELS

! WARNING

- Do not attempt to substitute the materials used on these doors, or replace cracked or broken glass.
- Handle this glass with extreme care! Glass is susceptible to damage – Do not scratch or handle roughly while reinstalling the glass door frame.
- The glass door(s) of this appliance must only be replaced as a complete unit as provided by the manufacturer. Do not attempt to replace broken, cracked or chipped glass separately.
- Do not attempt to touch the front enclosure glass with your hands while the fireplace is in use.

! WARNING

Do not operate appliance with the glass front removed, cracked or broken.

! AVERTISSEMENT

Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.

Only doors certified with the appliance shall be used.

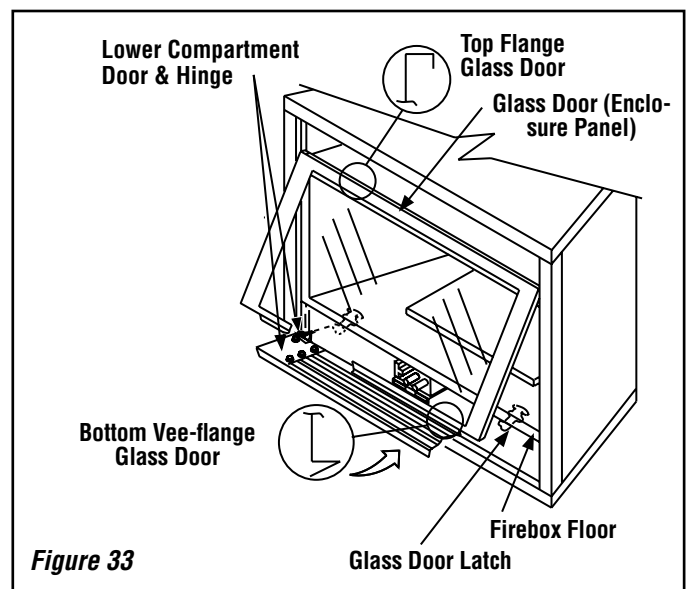
Seules des portes certifiées pour cet appareil doivent être utilisées.

WARNING: DO NOT abuse glass door by striking or slamming shut.

These are B-vent appliances. They are designed to operate only when the glass enclosure panels are installed. Generally the glass enclosure panels should not be removed except to gain access to the components within the firebox.

1. Visually inspect the gasket on the backside of the panels. The gasket surface must be clean, free of irregularities and seated firmly.
2. Position the glass enclosure panel in front of the firebox opening at a 45 degree angle and engage the top flange over the lip at the top of the firebox opening. **See Figure 33.**
3. Swing the glass enclosure panel down and back. Ensure the gasket seats evenly as the panel draws shut. Engage the Vee-flange at the bottom of the panel with the latches and close the latches to secure the panel.
4. Reinstall the bottom control compartment access panel (if necessary) by inserting the right side locating pin into the right side cabinet panel and then the left side spring-loaded pin into the left side cabinet panel.

Glass Enclosure Panel Removal Instructions (see **Figure 33**) - Locate the two (2) latches at the top of the control compartment. Open the two latches from the bottom vee-flange of the glass enclosure panel (reach for the handles located towards the back of the latches and pull the handles down toward the front of the appliance).



Step 10. BURNER ADJUSTMENTS

Flame Appearance and Sooting

Proper flame appearance is a flame which is blue at the base and becomes yellowish-orange in the body of the flame.

When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 15 minutes of operation. After 15 minutes of operation, if the flame is blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter opening is closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination.

Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellowish-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs. If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more closed position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

The following chart is provided to aid you in achieving the correct air shutter adjustment for your installation.

Air Shutter Adjustment Guidelines:		
Amount of Primary Air	Flame Color	Air Shutter Adjustment
If air shutter is closed too far →	Flame will be orange →	Air shutter gap should be increased
If air shutter is open too far →	Flame will be blue →	Air shutter gap should be decreased

Burner Air Shutter Adjustment Procedure



WARNING

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Ensure glass enclosure panels are in place and sealed during adjustment.



CAUTION

- Soot will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.
- The air shutter door and nearby appliance surfaces are hot. Exercise caution to avoid injury while adjusting flame appearance.

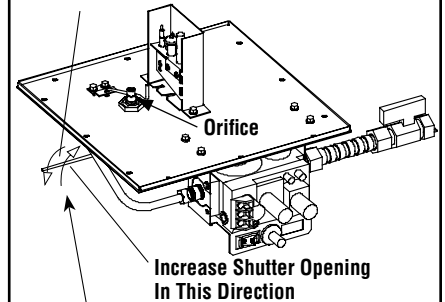
Burner Air Shutter Adjustment Procedure

1. Locate adjustment rod and adjust air shutter to the standard setting as shown in **Figure 35** (adjustment rod is located in the lower control area).
Note: Rotating the adjustment rod counterclockwise decreases air and clockwise increases air.
2. Light appliance (follow lighting procedure on lighting label in control compartment or see care and operation instructions manual).
3. Allow the burner to operate for at least 15 minutes while observing the flame continuously to ensure that the proper flame appearance has been achieved (see **Figure 34**).

If the following conditions are present, adjust accordingly.

- If flame appears weak or sooty, adjust the air shutter, incrementally, to a more open position until the proper flame appearance is achieved.
 - If flame stays lowered blue, adjust the air shutter, incrementally, to a more closed position until the proper flame appearance is achieved.
4. Leave the control knob (off/pilot/on) in the ON position (millivolt appliances) and the burner OFF/ON switch OFF (and remote switches, if applicable).
 5. When satisfied that the burner flame appearance is normal, close the lower control compartment door then proceed to finish the installation.

Decrease Shutter Opening
In This Direction



Air Shutter
Adjusting Rod

NOTE: Burners are omitted in this view for clarity.

Main Burner Factory Air Shutter Opening Setting - All Models

Model	Natural Gas	Propane Gas
MPB35ST	1/8" 3.2mm	1/4" 6.4mm

Figure 35 Adjustment Rod Positions
(when viewed from above)

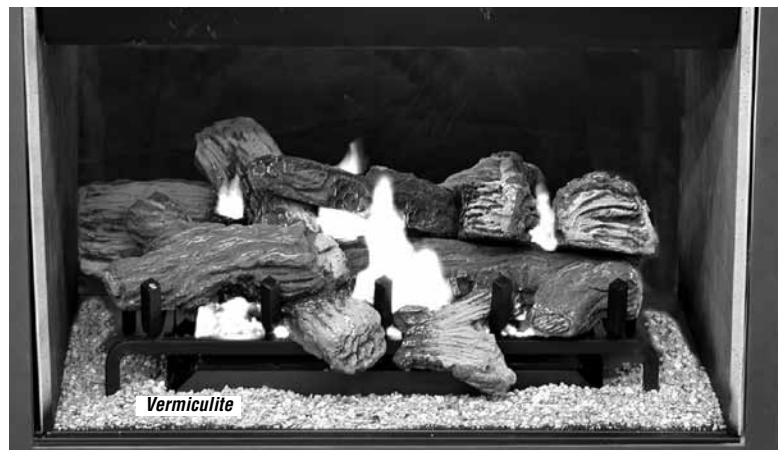


Figure 34 - Burner Flame Appearance

Step 11. VENT OPERATION TEST

A vent operation test is required as part of the installation to verify that proper venting conditions exist and should be done periodically to ensure nothing has changed that would affect proper venting of the appliance.

Procedure:

1. ENSURE APPLIANCE IS OFF (PILOT ONLY) AND COOL.
2. Open both latches on one of the glass enclosure doors and slightly prop it open at the bottom (approx. 1/4" gap). See **Figure 33 on Page 18**.
3. Turn on all the exhaust fans in the dwelling (and any other appliances which remove air from the dwelling, such as a furnace or clothes dryer, etc)..
4. Ensure that all the doors and windows in the room where the fireplace is located are closed.
5. Light the appliance (see Lighting Instructions in Control Compartment or Care and Operation Instructions Manual). Adjust flame height to highest setting and operate for approximately 5-10 minutes. Do not leave appliance unattended.

6. Take a smoke producing device and move it along the bottom edge of the glass door (where it is cracked open). If smoke is drawn into the firebox, the vent operation is adequate. **IF THE SMOKE IS NOT DRAWN INTO THE FIREBOX, TURN THE APPLIANCE OFF AND CALL A QUALIFIED SERVICE TECHNICIAN.**

Manual-Reset (safety limit) Spill Switch

This appliance is equipped with a (*safety limit*) spill switch that is designed to "trip" and disconnect the burner circuit if flue spillage occurs (because of improper venting of combustion products or vent blockage). If, during appliance operation, the burner flame goes out (independently of the burner OFF/ON wall switch), it may be due to the operation of this (*safety limit*) spill switch. If this switch "trips" it will need to be manually reset by pressing the reset button on switch (see **Figure 36**).

Procedure to Reset (safety limit) Spill Switch

ALLOW APPLIANCE TO COOL COMPLETELY BEFORE ACCESSING AND RESETTING

To access the spill switch:

1. Pull off the top louvered panel.

2. Locate and press the red reset button on the switch (it will click and lock in).

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

Step 12. HOOD INSTALLATION

All of these appliances must have hoods installed prior to operating on all sides with glass enclosure panels.

On all clean face units (with optional radiant panels), slide the hoods into the slots on the lower edges of the radiant panel (**Figure 37**).

FINISHING REQUIREMENTS (Wall Details)

Complete finished interior wall. To install the appliance facing flush with the finished wall, position framework to accommodate the thickness of the finished wall (**Figure 37**)

See Page 5 for Cold Climate Insulation and Page 7 for Clearances.

SPILL SWITCH

Remove Top Louvered Panel (or optional radiant panel, if applicable)

Press Reset Button on Spill Switch

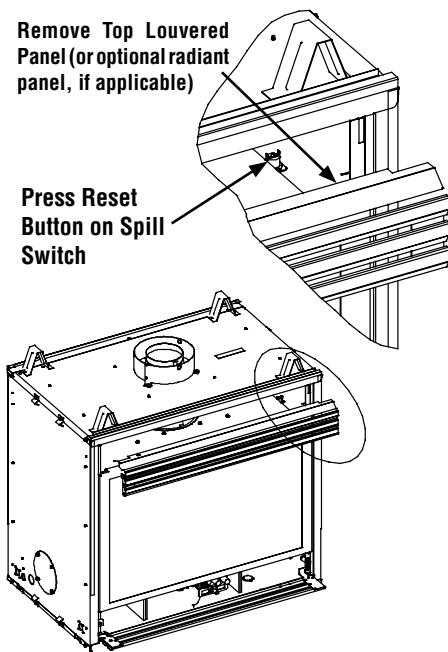


Figure 36

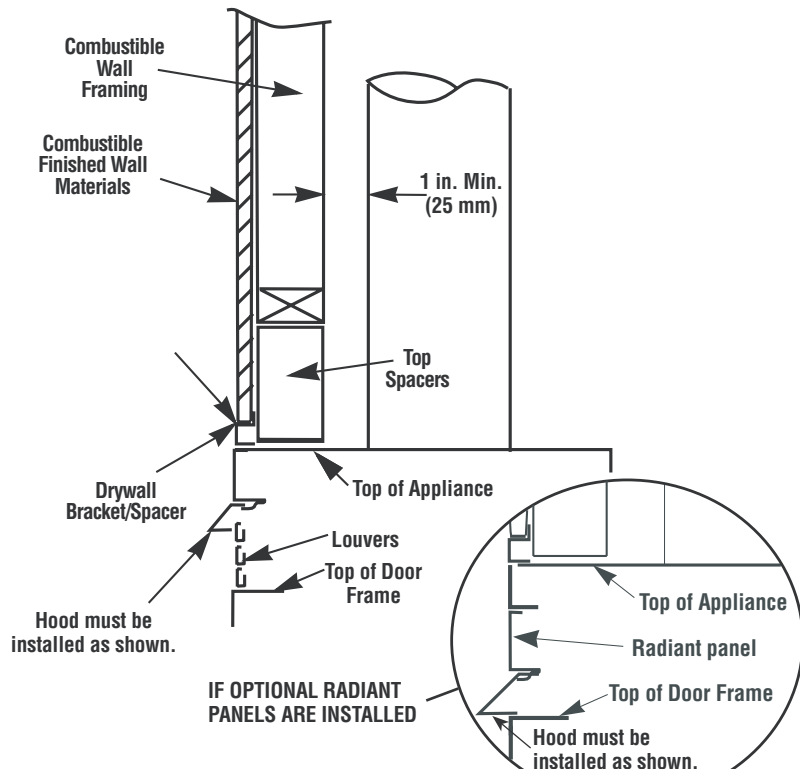


Figure 37 - FINISHING REQUIREMENTS

STEP 13. ATTACHING SAFETY IN OPERATION WARNINGS

It is the installers responsibility to ensure these warnings are properly affixed during installation. These warning labels are a critical step in informing consumers of safe operation of this appliance.

ATTACHING SAFETY IN OPERATION WARNINGS

It is required that the safety instruction labels furnished with the fireplace be affixed to the operation and control point of the fireplace. A safety instruction label must be affixed to the wall switch plate where the fireplace is turned on and off (See **Figure A**) and if used on the remote control handheld transmitter (**Figure B**). To properly complete the installation of this fireplace, locate the multi-lingual adhesive labels provided with the Care and Operation Instructions and proceed as follows:

1. Locate the wall switch that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall switch plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall switch that controls the fireplace (**Figure A**). Choose the language primarily spoken in the home. If unknown, affix the English language label.
2. If a remote control is used to control the fireplace, locate the transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (**Figure B**). Choose the language primarily spoken in the home. If unknown, affix the English language label.
3. If you are unable to locate the labels, please call Lennox Hearth Products or your nearest Lennox Hearth Products dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

LENNOX HEARTH PRODUCTS
1-800-655-2008

Note: English is red text on clear label. French and Spanish are white text on black label.

SAFETY LABEL DIAGRAMS



APPOSITION DES MISES EN GARDE RELATIVES À LA SÉCURITÉ D'UTILISATION

Il est impératif que les étiquettes de sécurité fournies avec le foyer soient collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité doit être collée sur la plaque de l'interrupteur contrôlant l'allumage du foyer (voir **Figure A**) et, le cas échéant, sur le boîtier de la télécommande (**Figure B**). Pour achever l'installation correcte de ce foyer, procédez comme suit avec les étiquettes adhésives en langues étrangères fournies avec les instructions d'utilisation et d'entretien :

1. Repérez l'interrupteur qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque murale de l'interrupteur pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque de l'interrupteur mural qui contrôle le foyer (**Figure A**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
2. Si une télécommande est utilisée pour contrôler le foyer, nettoyez la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande (**Figure B**). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
3. Si vous ne trouvez pas les étiquettes, veuillez appeler Lennox Hearth Products ou votre distributeur Lennox Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

Étiquettes de remplacement, n° cat. H8024

LENNOX HEARTH PRODUCTS
1-800-655-2008

Remarque : Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.

DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Se requiere que las etiquetas de instrucciones de seguridad incluidas con la chimenea se coloquen en el punto de operación y control de la misma. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared desde el cual se enciende y se apaga la chimenea (ver la **Figura A**) y en el transmisor de control remoto (**Figura B**) si se usa. Para completar correctamente la instalación de esta chimenea, encuentre las etiquetas adhesivas multilingües incluidas con las instrucciones de cuidado y operación y haga lo siguiente:

1. Identifique el interruptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del interruptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del interruptor que controla la chimenea (**Figura A**). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
2. Si se usa un control remoto para controlar la chimenea, encuentre el transmisor y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (**Figura B**). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
3. Si no puede encontrar las etiquetas, sírvase llamar a Lennox Hearth Products o al distribuidor de Lennox Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

Juego de etiquetas de repuesto - N° de cat. H8024

LENNOX HEARTH PRODUCTS
1-800-655-2008

Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.

DIAGRAMAS DE ETIQUETAS DE SEGURIDAD



*Illustrations are for example only.
Your accessories may be different.*

*Les illustrations sont par exemple
uniquement. Vos accessoires
peuvent être différents.*

*Las ilustraciones son sólo ejemplos.
Tu accesorios pueden ser diferentes.*

Figure A



Figure B



GAS CONVERSION KITS

WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit. The qualified service agency performing this installation assumes responsibility for this conversion.

AVERTISSEMENT

Cette trousse de conversion doit être installée par un technicien agréé, selon les instructions du fabricant et selon toutes les exigences et tous les codes pertinents de l'autorité compétente. Assurez-vous de bien suivre les instructions dans cette notice pour réduire au minimum le risque d'incendie, d'explosion ou la production de monoxyde de carbone pouvant causer des dommages matériels, des blessures ou la mort. Le technicien agréé est responsable de l'installation de cette trousse. L'installation n'est pas adéquate ni complète tant que le bon fonctionnement de l'appareil converti n'a pas été vérifié selon les instructions du fabricant fournies avec la trousse. Le fournisseur de service qualifié ayant réalisé l'installation assume les responsabilités liées à la conversion.

In Canada:

THE CONVERSION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE PROVINCIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.1 INSTALLATION CODE.

LA CONVERSION DEVRA ÊTRE EFFECTUÉE CONFORMÉMENT AUX RECOMMANDATIONS DES AUTORITÉS PROVINCIALES AYANT JURIDICTION ET CONFORMÉMENT AUX EXIGENCES DU CODE D'INSTALLATION CAN/CGA-B149.1.

Gas conversion kits are available to adapt your appliance from the use of one type of gas to the use of another. These kits contain all the necessary components needed to complete the task including labeling that must be affixed to ensure safe operation.

Kit part numbers are listed here and the following steps detail the conversion procedure. Refer to the instructions provided with the conversion kit when performing any gas conversion.

Millivolt SIT Systems Natural Gas To Propane Gas Conversion Kits	
Models	Catalog No.
GCK35STMPN	H3360

Millivolt SIT Systems Propane Gas to Natural Gas Conversion Kits	
Models	Catalog No.
GCK-MPB40MPN	H2014

Electronic Systems Natural Gas To Propane Gas Conversion Kits	
Models	Catalog No.
GCK35STENP	H3361

Electronic Systems Propane Gas To Natural Gas Conversion Kits	
Models	Catalog No.
GCK-MP40EPN	26M65

INSTALLATION INSTRUCTIONS

Step 1. TURN OFF THE GAS SUPPLY TO THE APPLIANCE and disconnect power supply at the circuit breaker. Ensure appliance is cold.

CAUTION: THE GAS SUPPLY SHALL BE SHUT OFF PRIOR TO DISCONNECTING THE ELECTRICAL POWER, BEFORE PROCEEDING WITH THE CONVERSION.

ATTENTION. AVANT D'EFFECTUER LA CONVERSION, COUPEZ D'ABORD L'ALIMENTATION EN GAZ, ENSUITE, COUPEZ L'ALIMENTATION ÉLECTRIQUE.

Step 2. Remove the front glass door/frame. See **Figure 33**.

- Remove the control compartment door (see *Removing Control Compartment Door, Page 14*).
- Remove the glass panel enclosure (on valve access side) - Locate the two (2) latches at the top of the control compartment. To disengage the two latches from the bottom vee-flange of the glass enclosure panel, reach for the handles located towards the back of the latches and pull the handles down toward the front of the appliance.
- Swing the bottom of the door out and raise it slightly to lift the top flange of the door frame away from the appliance.

Step 3. Carefully remove the logs. **Exercise care so as not to break the logs.**

Step 4. Referring to **Figure 38**, remove the burner.

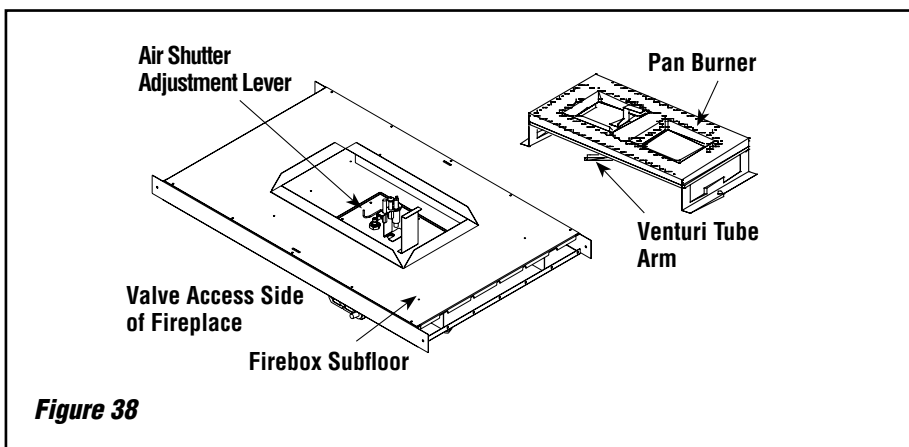
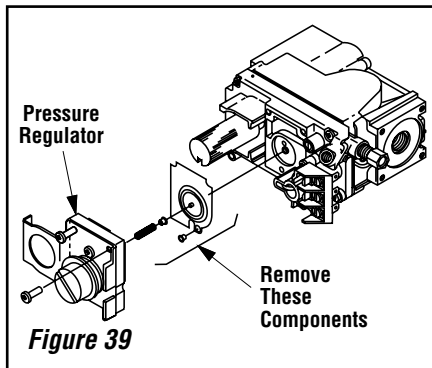
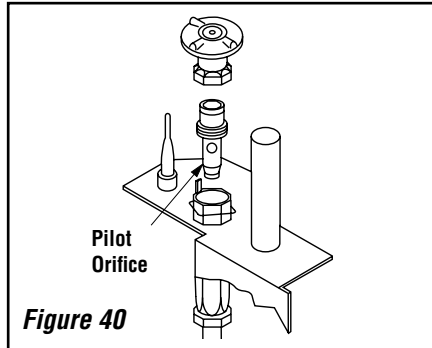


Figure 38

Step 5. Refer to **Figure 39** and the instructions provided with the kit. Using a Torx T20 (with 1/4" shank and center hole), remove and discard the three pressure regulator mounting screws. Remove the pressure regulator, spring, poppet, diaphragm and bushing. **Discard all removed components.** Ensure the rubber gasket installed on the back of the replacement pressure regulator is properly positioned and install the new pressure regulator using the new screws supplied with the kit. Tighten screws to 25 in-lbs of torque.



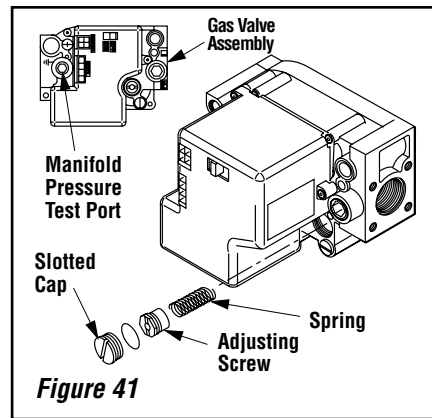
Step 5. Refer to **Figure 40** and remove the pilot hood assembly to access the hexed pilot orifice. Remove and replace the orifice with the one provided with the kit.



Electronic Appliances

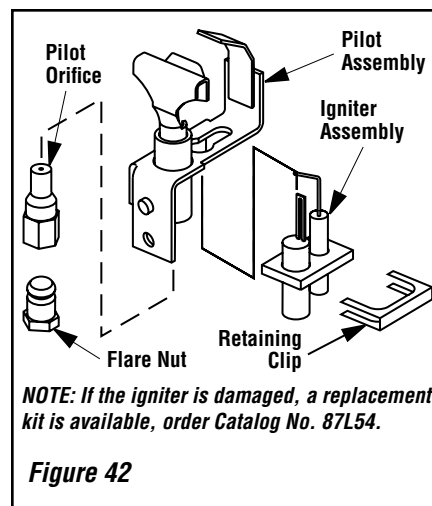
Step 6. Honeywell Electronic Valves - See **Figure 41** and the instructions provided with the kit. Remove the slotted cap screw, o-ring, pressure-regulating adjusting screw and spring. Retain all parts for possible later use. Install new components from the kit. Black cap and red spring for propane gas appliances. Silver cap and stainless steel spring for natural gas appliances. Before installing the cap, attach manometer to the manifold side pressure test fitting and adjust screw until pressure reads 3.5" water column (0.87 kPa) for natural gas, and 10.0" water column (2.49 kPa) for propane gas.

See **Figure 42** and replace the pilot orifice as follows: Remove the igniter assembly retainer clip, and carefully remove the igniter assembly.



Exercise extreme care to prevent damage to or breakage of the igniter assembly. Remove the screw securing the pilot assembly to its mounting bracket. Back off the flare nut at the end of the pilot gas line to free the pilot assembly from the gas line. Remove the pilot orifice and replace it with the one provided with the conversion kit. Reinstall the pilot assembly by reversing the steps detailed here.

When reinstalling the igniter assembly, use extreme care to prevent damage and breakage. Do not apply any leverage to the igniter assembly while restoring the retainer clip to its original position.



All Models

Step 7. (Refer to **Figure 38 on Page 22** and **Figure 43**)

VERIFY THE PROPER ORIFICE SIZE BEFORE INSTALLING IT.

a. Remove the orifice from the manifold and replace it with the one provided in the kit. **Table 8** shows the orifice sizes for natural and propane models. **Figure 43** illustrates the orifice. Use pipe joint compound or Teflon tape on all pipe fittings before installing (ensure propane resistant compounds are used in propane applications, do not use pipe joint compounds on flare fittings).

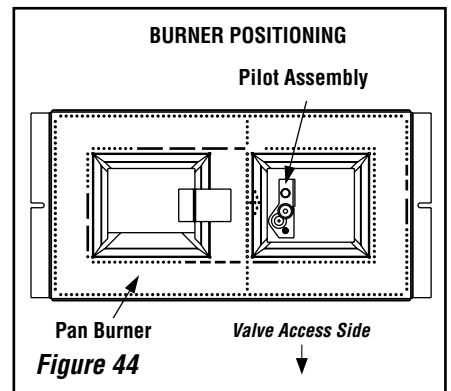
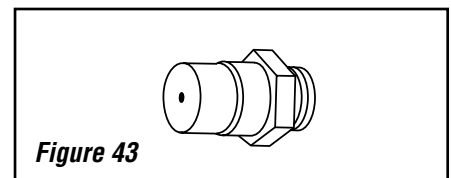
b. Install the burner as shown in **Figure 38**.

Ensure that the arm of the venturi of the burner is hooked onto the air shutter adjustment lever (refer to **Figure 38 on Page 22**). The primary air opening can be adjusted by rotating the adjustment lever from beneath the firebox floor. Refer to **Figure 35 on Page 19** for the recommended minimum primary air shutter opening setting.

Burner Orifice Sizes Elevation 0-4500 feet (0-1372 meters)		
Model Series	Nat. Gas drill size (inches)	Propane drill size (inches)
MPB35ST-B	#37 (.104") * 24M10 •	1.55 mm (.061") * 42M79 •

Table 8

* Standard size installed at factory
• Part/Cat. Number



Step 8. Reassemble the remaining components by reversing the procedures outlined in the preceding steps. Use pipe joint compound or Teflon tape on all pipe fittings before installing (ensure propane resistant compounds are used in propane applications, do not use pipe joint compounds on flare fittings).

Step 9. Attach the conversion label provided in the conversion kit to the rating plate on the appliance.

Step 10. Turn on gas supply and test for gas leaks.

Step 11. Attach manometer to the manifold side pressure test fitting and verify manifold pressure reads 3.5" water column (0.87 kPa) for natural gas, and 10.0" water column (2.49 kPa) for propane gas.

ALWAYS TEST PRESSURES WITH THE VALVE REGULATOR CONTROL AT THE HIGHEST SETTING.

Lennox Hearth Products 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.

LENNOX®, the LENNOX design, DAVE LENNOX, the image of DAVE LENNOX and other related LENNOX marks are registered or common law trademarks of Lennox Industries Inc. and are used with permission.

Printed in U.S.A. © 2005 Lennox Hearth Products LLC

P/N 850023M REV. E 04/2013



1508 Elm Hill Pike, Suite 108 • Nashville, TN 37210