



Lexington Direct Vent Gas Fireplace

Installation and Operating Instructions
Models: LX32DV, LX36DV

WARNINGS

IF THE INFORMATION IN THESE INSTRUCTIONS ARE NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.

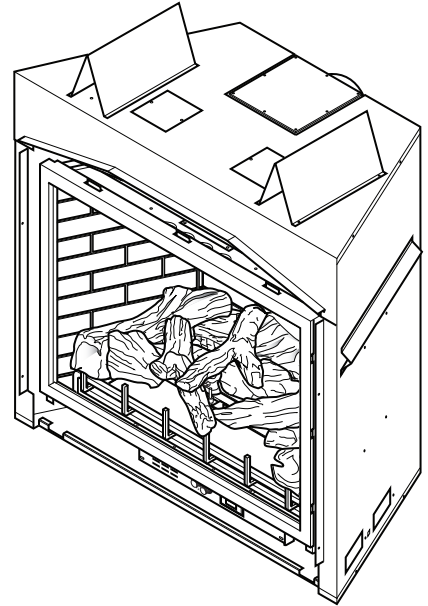
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier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

WARNING: Improper installation, adjustment, alteration, services 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.

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.

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

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



DUE TO HIGH TEMPERATURES, THE APPLIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.

CHILDREN AND ADULTS SHOULD BE ALERTED TO THE HAZARDS OF HIGH SURFACE TEMPERATURE AND SHOULD STAY AWAY TO AVOID BURNS OR CLOTHING IGNITION.

YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

KEEP THE ROOM AREA CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASOLINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.

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

Congratulations!

You have purchased a state-of-the-art gas appliance featuring the Lex-Fire Burn System available exclusively on MHSC gas appliances.

The Lex-Fire Burn System sets a new standard for flame appearance through innovative log design, burner technology and ember placement. Each element affecting combustion and flame appearance was carefully scrutinized and strategically balanced during the design process.

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INSTALLER

Please leave these instructions with the appliance.

OWNER

Please retain these instructions for future reference.

WARNING

- **Read this owner’s manual carefully and completely before trying to assemble, operate, or service this fireplace.**
- **Any change to this fireplace or its controls can be dangerous.**
- **Improper installation or use of this fireplace can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.**

This fireplace is a vented product. This fireplace must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, combustion leakage can occur.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, the fireplace may not have been installed properly. Get fresh air at once! Have the 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.

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.
 - 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.

4. Never install the fireplace
 - in a recreational vehicle
 - where curtains, furniture, clothing, or other flammable objects are less than 42" from the front, top, or sides of the fireplace
 - in high traffic areas
 - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. Do not modify fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.
8. Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair the fireplace. Have burner system 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, pet hair, 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 37.
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. Never place anything on top of fireplace.

14. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on rating plate.
15. 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*.
16. 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.
17. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, you must set appliance on a metal or wood panel or hearth pad extending the full width and depth of the appliance.
18. 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.
19. Do not operate fireplace if any log is broken.
20. Do not use a blower insert, heat exchanger insert, or any other accessory not approved for use with this fireplace.
21. Do not operate the fireplace with glass door removed, cracked, or broken.
22. **For Massachusetts Residents Only:** This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts. Flexline installation must not exceed 36".



**IMPORTANT:
PLEASE READ THE FOLLOWING
CAREFULLY**

It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

**IMPORTANT:
PLEASE READ THE FOLLOWING
CAREFULLY**

It is not unusual for gas fireplace to give off some odor the first time it is burned. This is due to the manufacturing process.

Please ensure that your room is well ventilated during burn off — open all windows.

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. Place the fan switch in the "OFF" position during this time.

WARNING

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

**NATIONAL
FIREPLACE
INSTITUTE**



CERTIFIED
www.nficertified.org

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.

CODE APPROVAL

Direct Vent type appliances draw all combustion air from outside of the dwelling through the vent pipe.

These appliances have been tested by CSA and found to comply with the established standards for DIRECT VENT GAS FIREPLACE HEATERS in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACE HEATER

TESTED TO: ANSI Z21.88-2009 / CSA 2.33-2009 STANDARDS

PRODUCT SPECIFICATIONS

- This appliance has been certified for use with either natural or propane gas. See appropriate data plates.
- This appliance is not for use with solid fuels.
- The appliance is approved for bedroom or bedsitting room installations.
- The appliance must be installed in accordance with local codes if any. If none exist use the current installation code. ANSI Z223.1/NFPA 54 in the USA, CSA B149 in Canada.
- This appliance is mobile home approved.
- The appliance must be properly connected to a venting system.

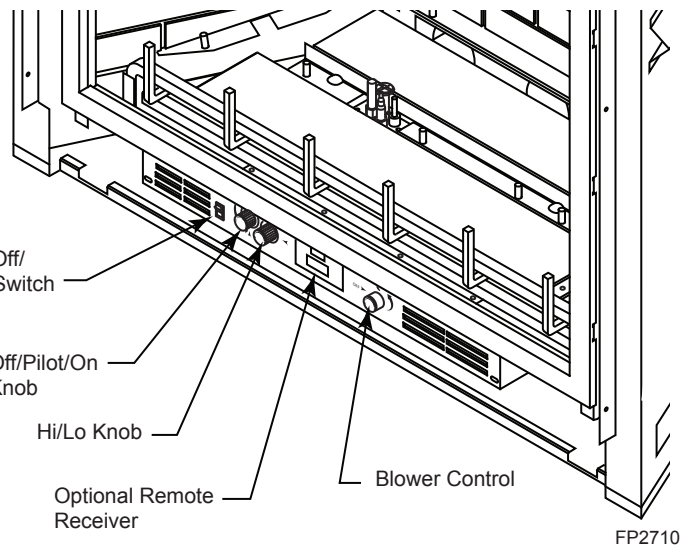


Figure 1 - LXDV Fireplace Controls

HIGH ELEVATIONS

Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370 m) above sea level.

For elevations above 4,500 feet (1,370 m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.

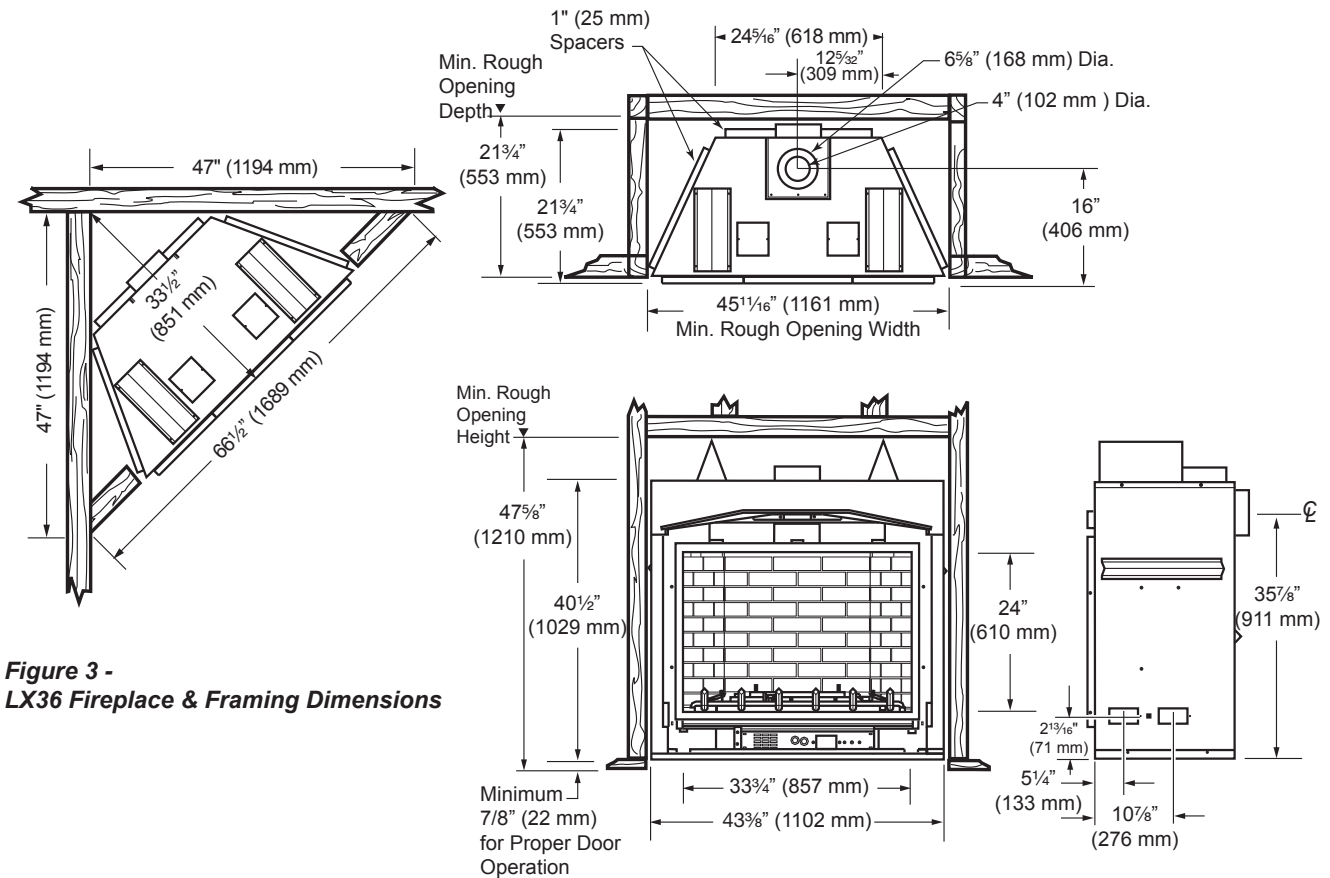
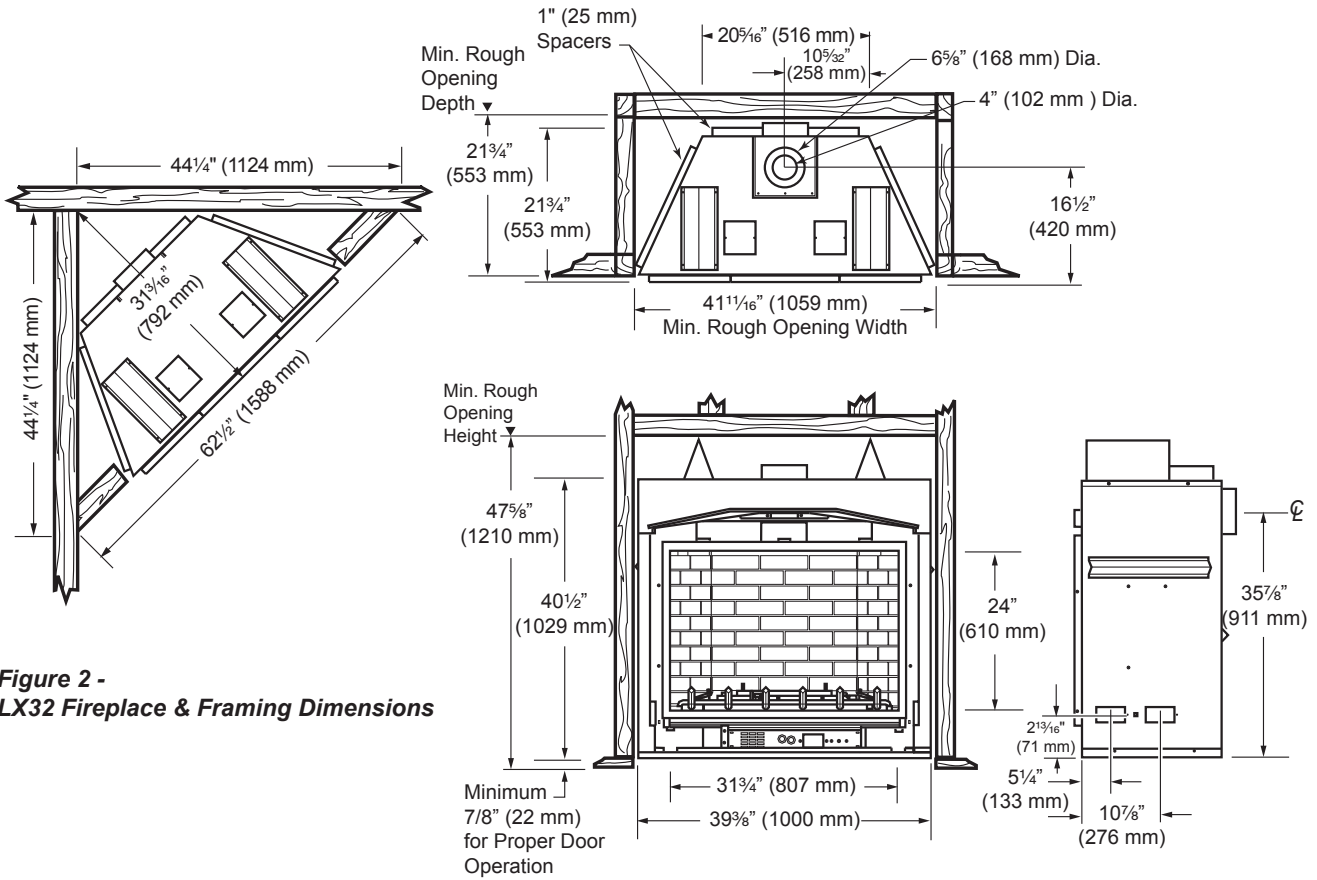
In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370 m).

GAS SPECIFICATIONS & ORIFICE SIZE

Model	Fuel	Max. Input BTU/h	Min. Input BTU/h	Orifice Size	
				Front	Rear
LX32NV	Nat.	36,000	26,000	#46	#43
LX32PV	LP	36,000	22,000	3/64"	#55
LX36NV	Nat.	44,000	30,000	#41	#38
LX36PV	LP	44,000	32,000	#55	#53

GAS PRESSURES

	Natural	Propane (LP)
Inlet Minimum	4.5" w.c.	11.0" w.c.
Inlet Maximum	10.5" w.c.	13.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.



BEFORE YOU START

Read this homeowner manual thoroughly and follow all instructions carefully. Inspect all contents for shipping damage and immediately inform your dealer if any damage is found. Do not install any unit with damaged, incomplete, or substitute parts. Check your packing list to verify that all listed parts have been received. You should have the following:

- Fireplace (Firebox and Burner System)
- Log Set
- Propane Conversion Kit
- Rock Wool
- Deflector Shield (to be used with Simpson Horizontal Termination – P/N 985)

ITEMS REQUIRED FOR INSTALLATION

Tools and Building Supplies:

- Phillips Screwdriver
- Hammer
- Saw and/or saber saw
- Level
- Measuring Tape
- Pipe Wrench
- Electric Drill and Bits
- Tee Joint
- Pliers
- Square
- Framing Materials
- Wall Finishing Materials
- Piping Complying with Local Codes
- Caulking Material (Noncombustible)
- Fireplace Surround Material (Noncombustible)
- Pipe Sealant Approved for use with Propane/LPG (Resistant to Sulfur Compounds)

FIREPLACE FRAMING

Firebox framing can be built before or after the appliance is set in place. Construct firebox framing following *Figure 2 or 3*. The framing headers may rest on the top of the firebox standoffs.

The firebox may be installed directly on a combustible floor or raised on a platform of an appropriate height. When the firebox is installed directly on carpeting, tile, or other combustible material, other than wood flooring, the firebox shall be installed on a metal or wood panel extending the full width and depth of the enclosure.

To access control door, build a platform to make the bottom of appliance equal to or higher than top of finished hearth extension, or elevate unit a minimum of 7/8" above subfloor.

NOTE Fireplace must be raised minimum 7/8" to allow door to open.

WARNING The 1" standoffs on back and sides and 6" standoffs on top of fireplace are designed to separate fireplace from framing. These standoffs may contact framing but no material may be placed between standoff and side of fireplace.

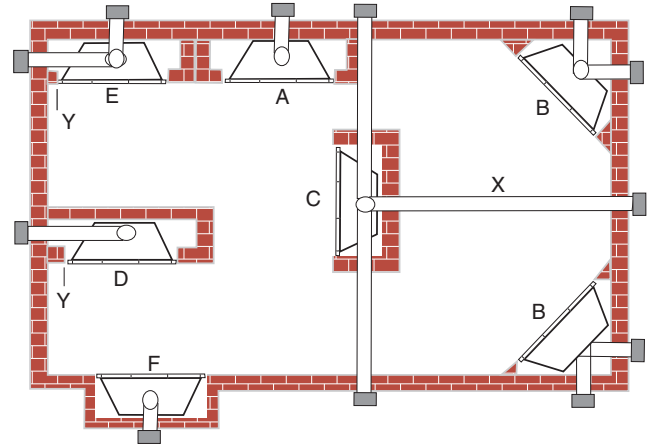
WARNING Do not fill spaces around firebox with insulation or other materials. This could cause a fire.

FIREPLACE LOCATION

Plan for the installation of your appliance. This includes determining where the unit is to be installed, the vent configuration to be used, framing and finishing details, and whether any optional accessories (i.e. blower, wall switch, or remote control) are desired. Consult your local building code agency to ensure compliance with local codes, including permits and inspections.

The following factors should be taken into consideration:

- Clearance to side-wall, ceiling, woodwork, and windows. Minimum clearances to combustibles **must be maintained**.
- This fireplace may be installed along a wall, across a corner, or use an exterior chase. Refer to Figure 4 for suggested locations.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from appliance.
- Never obstruct the front opening of the fireplace.
- Do **not** install in the vicinity where gasoline or other flammable liquids may be stored.
- Vent pipe routing. See VENTING section found in this manual for allowable venting configurations.
- These units can be installed in a bedroom. See National Fuel Gas Code ANSI Z233.1/NFPA 54 — (current edition), the Uniform Mechanical Code — (current edition), and Local Building Codes for specific installation requirements.



- A Flat on Wall
- B Cross Corner
- C Island**
- D Room Divider*
- E Flat on Wall Corner*
- F Chase Installation
- Y 9" Minimum

** Island (C) and room divider (D) installation is possible as long as the horizontal portion of vent system (X) does not exceed 20'. See *Installing Horizontal Termination Configuration* on Pages 20 and 21.

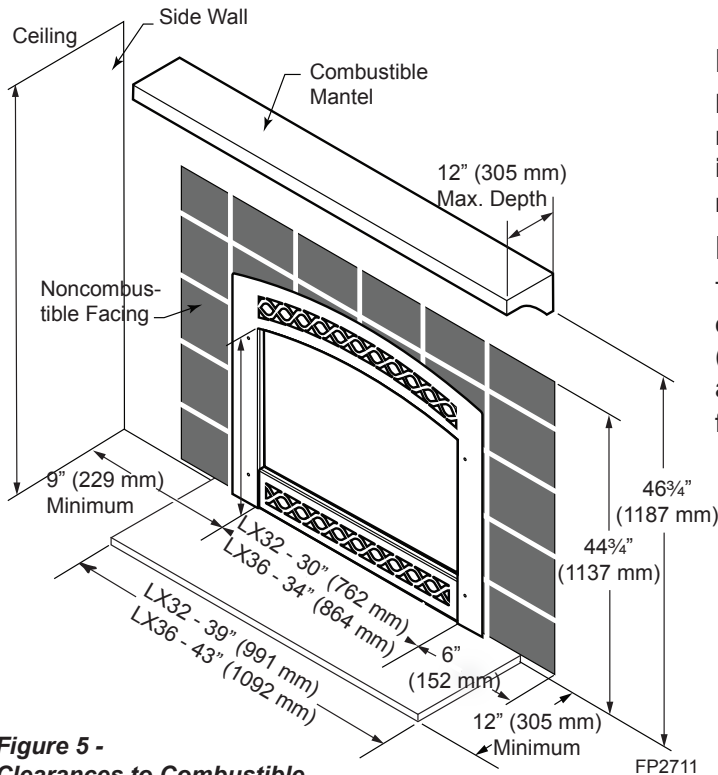
* When you install your fireplace in (D) room divider or (E) flat on wall corner positions (Y), a minimum of 6" clearance must be maintained from perpendicular wall and front of fireplace.

**Figure 4 -
Locating Gas Fireplace**

CLEARANCES TO COMBUSTIBLES

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

The appliance cannot be installed on a carpet, tile or other combustible material other than wood flooring. If installed on carpet or vinyl flooring, the appliance shall be installed on a metal, wood or noncombustible material panel extending full width and depth of the appliance.



MANTEL CLEARANCES

NOTE: The combustible area above the facing must not protrude more than 3/4" from the facing. If it does, it is considered a mantel and must meet the mantel requirements listed in this manual.

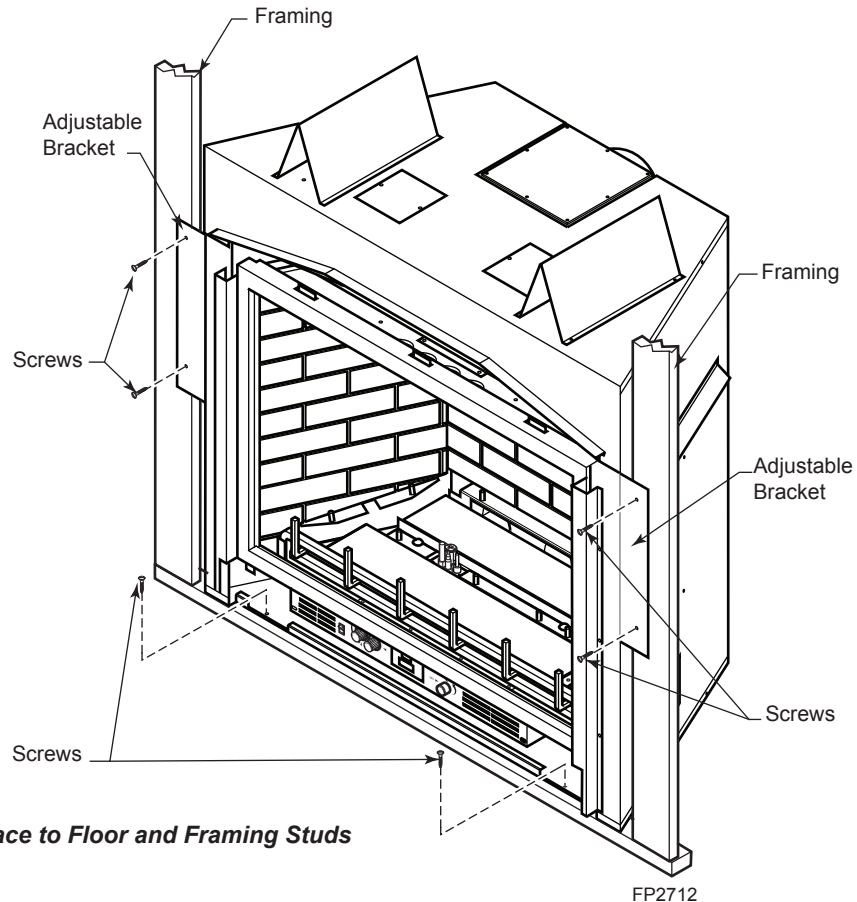
HEARTH REQUIREMENTS

The fireplace must be installed on a non-combustible hearth extending a minimum of 12" from the fireplace opening (local codes may require a larger hearth). The hearth must also extend to both sides of the face (see the table above for the exact width of the face).

Figure 5 - Clearances to Combustible Materials

FP2711

The fireplace must be secured to the floor and/or to framing studs as shown in *Figure 6*. Use two (2) wood screws or masonry/ concrete screws to secure fireplace to the floor. Use four (4) screws to attach fireplace to framing. The side brackets are adjustable from 1/2" to 5/8" to accommodate different thickness of noncombustible material.



**Figure 6 -
Securing Fireplace to Floor and Framing Studs**

FP2712

NOTE: Do not allow combustibles (drywall) to touch top and side edges of black-painted metal face of fireplace. Only use noncombustibles. A 4" wide or more cement board may touch the top and side edges of black-painted metal face of fireplace.

Do not allow any combustible to overlap the black-painted face of fireplace.

WARNING

Never obstruct or modify the air inlet or outlet grills (louvers). This may create a fire hazard.

FINISHING MATERIAL

NOTE: Any remote wiring (i.e. remote control, wall switch, and optional fan) must be done prior to final finishing to avoid costly reconstruction.

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black surface of the appliance. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

WARNING

After conversion to top vent configuration the 4" (102 mm) flue pipe should be concentric within the 6⁵/₈" (175 mm) outer collar (within 1/4").

OPTIONAL TOP VENT APPLICATION

The appliance is shipped as a rear vent unit. If the installation layout requires the unit to be a top vent configuration the appliance can be converted by the following steps.

When removing and refitting the plates and adapter be sure the associated gaskets are undamaged and refitted as required.

1. Remove the eight (8) screws securing the flue pipe adapter to the fireplace body. *Figure 7*
2. Set the flue pipe adapter aside, complete with the gasket. Do not damage the gaskets as the adapter and gasket must be refitted.
3. Remove the eight (8) screws securing the flue pipe cover to the top of the intake box and remove the cover and gasket. *Figure 7*

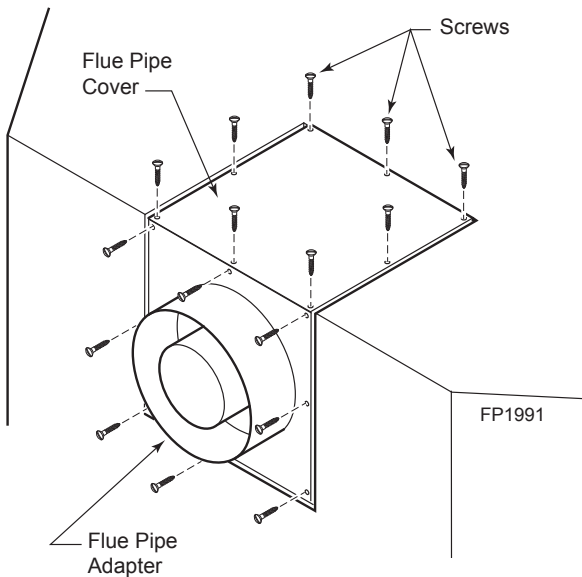


Figure 7 - Remove 16 Screws from Flue Pipe Adapter and Flue Pipe Cover

4. Remove eight (8) screws securing the flue pipe to the back of the intake box and remove the pipe and gasket. *Figure 8*
5. Replace flue pipe to top of firebox. Ensure the gasket is in place and undamaged. Secure with eight (8) screws. *Figure 9*
6. Place the flue pipe cover and gasket removed in step 3 over the flue opening in bottom of the intake box.

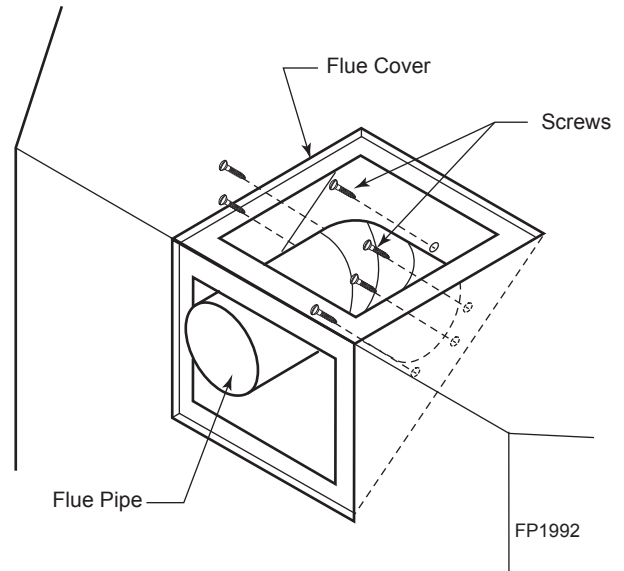


Figure 8 - Remove Flue Pipe

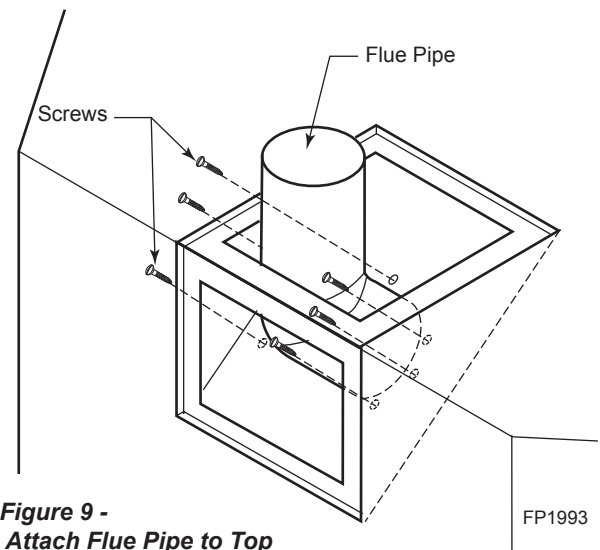


Figure 9 - Attach Flue Pipe to Top Vent Configurations

7. Refit the flue pipe adapter and gasket to the top of fireplace. Secure the adapter with eight (8) screws removed in Step 1.

WARNING

Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.

NOTICE

Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing vent kit, the installer must read this fireplace manual and vent kit instructions.

Only a qualified installer/service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when on rooftops.
- Be aware of electrical wiring locations in walls and ceilings.

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component.
- Unauthorized modification of the venting system.
- Installation of any component part not manufactured or approved by MHSC.
- Installation other than permitted by these instructions.

COMBUSTIBLE CLEARANCES FOR VENT PIPE

WARNING This fireplace must be vented to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

WARNING Horizontal sections of this vent system require a minimum of 3" clearances to combustibles at the top of the flue and 1" clearance at the sides and bottom *until the flue penetrates the outside wall*. A minimum 1" clearance all around the flue is acceptable at this point of penetration. Vertical sections of this vent system require a minimum of 1" clearance to combustibles on all sides of the pipe.

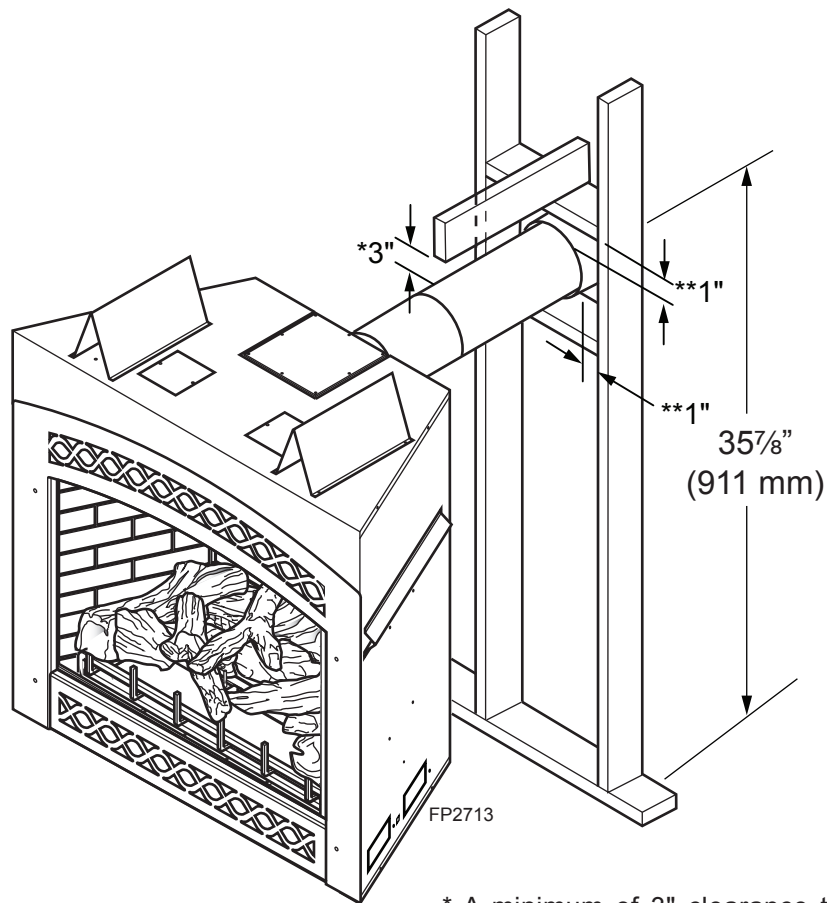


Figure 10 - Combustible Clearances for Vent Pipe

* A minimum of 3" clearance to the top is required along horizontal length until flue pipe penetrates outside wall.

** A minimum 1" clearance to combustibles permitted all around flue at outside wall

INSTALLATION PLANNING

There are two basic types of direct-vent installation:

- Horizontal Termination
- Vertical Termination

It is important to select the proper length of vent pipe for the type of termination you choose. It is also important to note the wall thickness.

WARNING

Never run the vent pipe level or downward. This may cause excessive temperatures which could cause a fire.

FOR HORIZONTAL TERMINATION

Select the amount of vertical rise desired. All horizontal run of venting must have minimum 1/4" rise for every 12" of run towards the termination.

You may use up to three 90° elbows in this vent configuration. Refer to *Horizontal (Through the Wall) Termination Configurations* on Page 18.

FOR VERTICAL TERMINATION

Measure the distance from the fireplace floor to the ceiling. Add the ceiling thickness, the vertical rise in an attic or second story, and allow for sufficient vent height above the roof line.

NOTE: You may use two 45° elbows in place of a 90° elbow. You must follow rise to run ratios when using 45° elbows. The appliance is approved for use with three 90° elbows maximum or a combination of 90° and 45° elbows up to a maximum of 270°.

For two-story applications, firestops are required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required.

You may use a chase with a vent termination with exposed pipe on the exterior of the house. See *Installing Vent System in a Chase* below. If pipe is enclosed in chase, it is not exposed.

It is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust. Certain limitations apply to vent configurations and must be strictly followed.

INSTALLING A VENT SYSTEM IN AN OUTSIDE CHASE

A chase is a vertical boxlike structure built to enclose venting that runs along the outside of a building. A chase is required for such venting.

NOTICE

Treatment of firestops and construction of the chase may vary from building type to building type. These instructions are not substitutes for the requirements of local building codes. You must follow all local building codes.

NOTICE

When installing in a chase, you should insulate the chase as you would the outside walls of your home. This is especially important in cold climates. Insulation should be considered a combustible material. Maintain proper clearances to all combustible materials.

WARNING

Always maintain minimum clearances around vent systems. The minimum clearances to combustibles for horizontal vent pipe are 3" at the top and 1" at the sides and bottom of the vent system until the pipe penetrates the nearest vertical wall. A 1" minimum clearance all around the pipe must be maintained. Do not pack the open air spaces with insulation or other materials. This could cause high temperatures and may present a fire hazard.

GENERAL VENTING INFORMATION - TERMINATION LOCATION

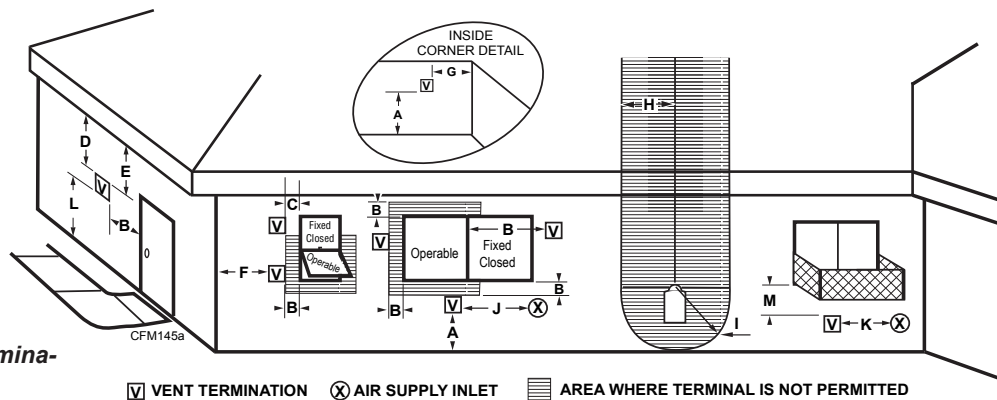


Figure 11 - Horizontal Vent Termination Locations

☐ VENT TERMINATION ⊗ AIR SUPPLY INLET ▨ AREA WHERE TERMINAL IS NOT PERMITTED

	Canadian Installations ¹	US Installations ²
A = Clearance above grade, veranda, porch, deck, or balcony	12" (30 cm)	12" (30 cm)
B = Clearance to window or door that may be opened	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 12" (30 cm) for appliances > 10,000 Btuh (3kW) and < 100,000 BTU/h (30kW), 36" (91 cm) for appliances > 100,000 BTU/h (30kW)	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 9" (23 cm) for appliances > 10,000 Btuh (3kW) and < 50,000 BTU/h (15kW), 12" (30 cm) for appliances > 50,000 BTU/h(15kW)
C = Clearance to permanently closed window	12" (305 mm) recommended to prevent window condensation	12" (305 mm) recommended to prevent window condensation
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2' (610mm) from the center line of the terminal	18" (458 mm)	18" (458 mm)
E = Clearance to unventilated soffit	12" (305 mm)	12" (305 mm)
F = Clearance to outside corner	see next page	see next page
G = Clearance to inside corner (see next page)	see next page	see next page
H = Clearance to each inside of center line extended above meter/regulator assembly	3' (91 cm) within a height of 15' (5 m) above the meter/regulator assembly	3' (91 cm) within a height of 15' (5 m) above the meter/regulator assy
I = Clearance to service regulator vent outlet	3' (91 cm)	3' (91 cm)
J = Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliances	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 12" (30 cm) for appliances > 10,000 BTU/h (3kW) and < 100,000 Btuh (30kW), 36" (91 cm) for appliances > 100,000 BTU/h (30kW)	6" (15 cm) for appliances < 10,000 BTU/h (3kW), 9" (23 cm) for appliances > 10,000 BTU/h (3kW) and < 50,000 BTU/h (15kW), 12" (30 cm) for appliances > 50,000 BTU/h(15kW)
K = Clearance to a mechanical air supply inlet	6' (1.83 m)	3' (91 cm) above if within 10' (3 m) horizontally
L = Clearance above paved sidewalk or paved driveway located on public property	7' (2.13 m)†	7' (2.13 m)†
M = Clearance under veranda, porch, deck or balcony	12" (30 cm)‡	12" (30cm)‡

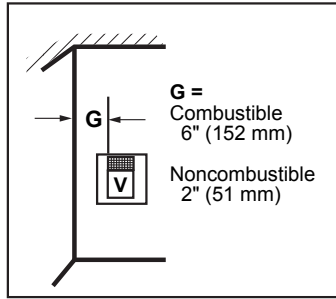
1 In accordance with the current CSA-B149 Installation Codes
 2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes
 † A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings
 ‡ only permitted if veranda, porch, deck or balcony is fully open on a minimum 2 sides beneath the floor:

NOTE: 1. Local codes or regulations may require different clearances.
 2. The special venting system used on Direct Vent Fireplaces are certified as part of the appliance, with clearances tested and approved by the listing agency.
 3. MHSC assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

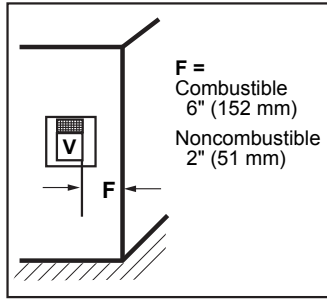
Termination Clearances

Termination clearances for buildings with combustible and noncombustible exteriors.

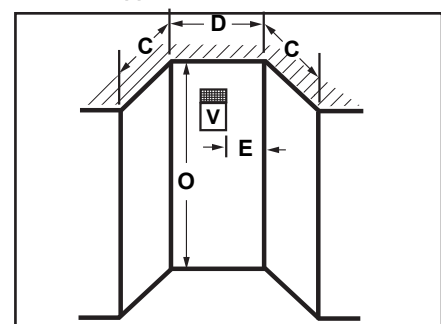
Inside Corner



Outside Corner

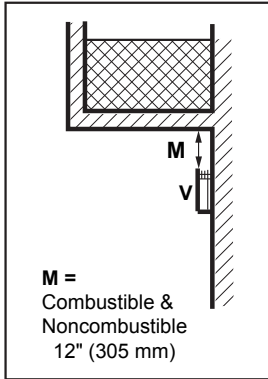


Alcove Applications*



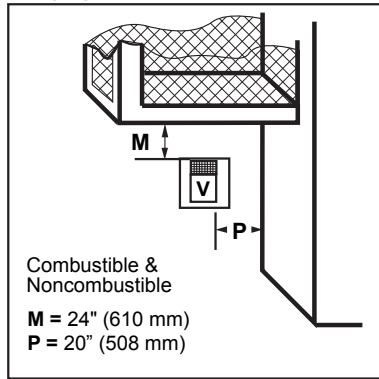
E = Min. 6" (152 mm) for non-vinyl sidewalls
 Min. 12" (305 mm) for vinyl sidewalls
 O = 8' (2.4 m) Min.

Balcony - with no side wall



M = Combustible & Noncombustible 12" (305 mm)

Balcony - with perpendicular side wall



Combustible & Noncombustible
 M = 24" (610 mm)
 P = 20" (508 mm)

Figure 12 - Allowable Venting

No. of Caps	D _{Min.}	C _{Max.}
1	3' (914 mm)	2 x D _{Actual}
2	6' (1.8 m)	1 x D _{Actual}
3	9' (2.7 m)	2/3 x D _{Actual}
4	12' (3.7 m)	1/2 x D _{Actual}

D_{Min.} = # of Termination caps x 3
 C_{Max.} = (2 / # termination caps) x D_{Actual}

584-15

***NOTE:** Termination in an alcove space (spaces open only on one side and with an overhang) is permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be a 3' (914 mm) minimum between termination caps. 2. All mechanical air intakes within 10' (1 m) of a termination cap must be a minimum of 3' (914 mm) below the termination cap. 3. All gravity air intakes within 3' (914 mm) of a termination cap must be a minimum of 1' (305 mm) below the termination cap.

HOW TO USE THE VENT GRAPH

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions of the vent system.

1. Determine the height of the center of the horizontal vent pipe exiting through the outer wall. Using this dimension on the Sidewall Vent Graph, locate the point intersecting with the slanted graph line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Select the indicated dimension, and position the fireplace in accordance with same.

Example: If the vertical dimension from the floor of the fireplace is 11' (3.4 m) the horizontal run to the face of the outer wall must not exceed 14' (4.3 m).

Example: If the vertical dimension from the floor of the unit is 7' (2.14 m), the horizontal run to the face of the outer wall must not exceed 8½' (2.6 m).

Sidewall Vent Graph showing the relationship between vertical and horizontal dimensions for a Direct Vent flue system.

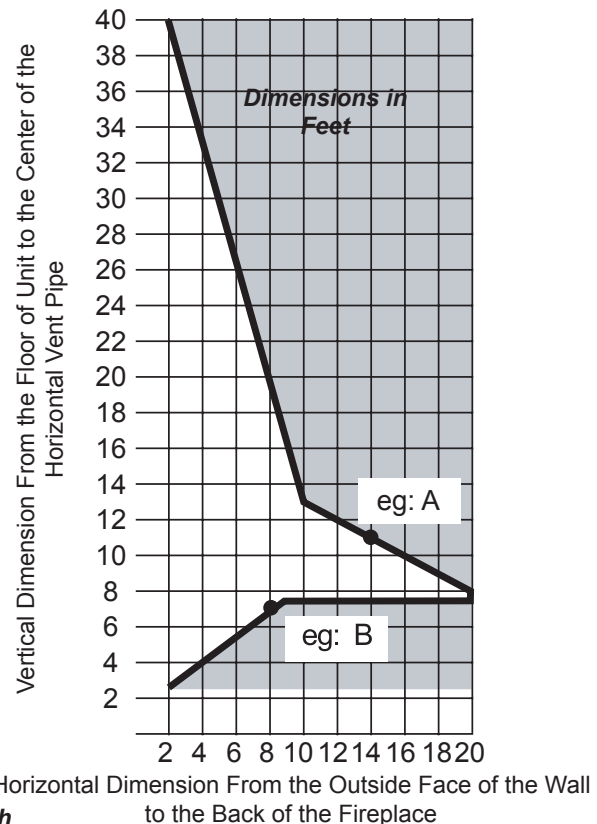


Figure 13 - Rear Wall Venting Graph

REAR WALL VENT INSTALLATION

When installed as a rear vent unit this appliance may be vented directly to a termination located on the rear outside termination behind the appliance

- 45° elbows may only be attached to rear when used to direct the flue skyward (to achieve additional rise). Do not attach 45° elbows to rear of appliance in which the flue turns either left or right and terminates horizontal.
- The maximum horizontal distance between the rear of the appliance and the outside face of the outside termination is 20" (508 mm). *Figure 15*

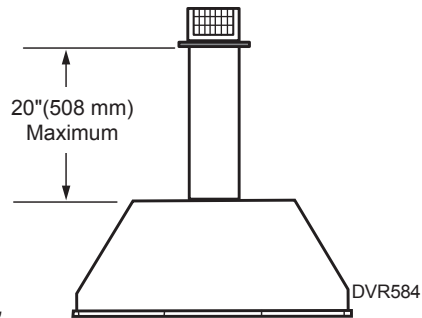


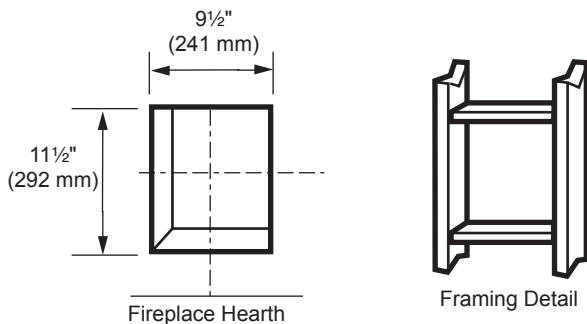
Figure 14 - Rear Vent Application, Maximum Horizontal Distance

1. Locate and cut the vent opening in the wall. For combustible walls first frame in opening. *Figure 15*

Combustible Walls: Cut a 11½"H x 9½" W (292 x 241 mm) hole through the exterior wall and frame as shown. *Figure 15*

Noncombustible Walls: Hole opening should be 7½" (190 mm) in diameter.

Vent Opening for Combustible Walls



Vent Opening for Noncombustible Wall

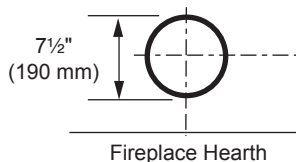


Figure 15 - Locate Vent Opening on Wall

VO584-100

2. Rigid vent pipes and fittings have special twist-lock connections. Assemble the desired combination of pipe and elbows to the appliance adaptor with pipe seams oriented towards the wall or floor.

Twist-lock Procedure: The female ends of the pipes and fittings have three locking lugs (indentations). These lugs will slide straight into matching slots on the male end of adjacent pipes and fittings. Push the pipe sections together and twist one section clockwise approximately one-quarter turn until the sections are fully locked. *Figure 16*

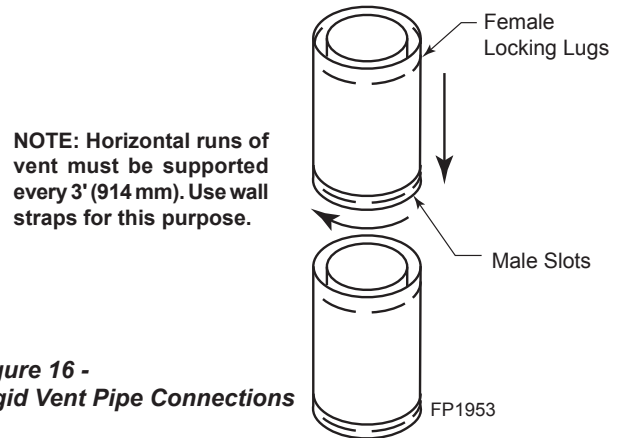


Figure 16 - Rigid Vent Pipe Connections

3. Attach vent pipe assembly to the fireplace. Set fireplace in front of its permanent location to insure minimum clearances. Mark the wall for a 11½"H x 9½"W (292 x 241 mm) rectangle hole (for noncombustible material such as masonry block or concrete, a 7½" [190 mm] diameter hole is acceptable). *Figure 15*. The center of the hole should line up with the center line of the horizontal rigid vent pipe end. Be sure to allow for minimum rise. Cut a 11½" x 9½" (292 X 241 mm) rectangle hole through combustible exterior wall (7½" [190 mm] diameter hole if noncombustible). Frame as necessary. Allow ¼" minimum rise per foot. *Figure 15*
4. Apply a bead of non-hardening mastic around the outside edge of vent cap. Position the vent cap in the center of hole on the exterior wall with the word "UP" on the vent cap facing up. Insure proper clearance of 1" to combustibles is maintained. Attach the vent cap with four wood screws supplied. *Figure 17*

NOTE: Replace the wood screws with appropriate fasteners for stucco, brick, concrete, or other types of siding.

WARNING Do not recess vent termination into any wall. This will cause a fire hazard.

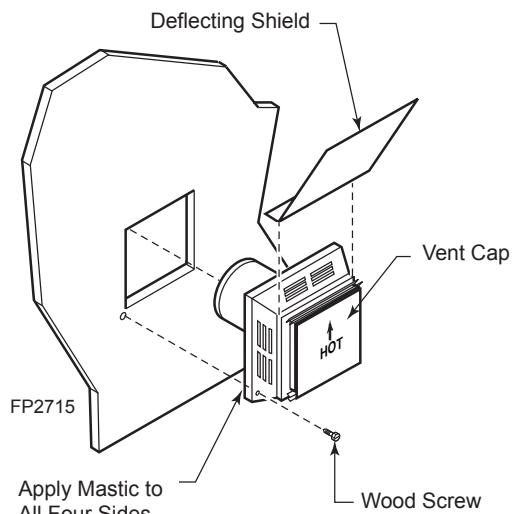


Figure 17 -
Installing Horizontal Vent Cap

For vinyl siding, stucco, or wood exterior use vinyl siding standoffs between vent cap and exterior wall. The vinyl siding standoff prevents excessive heat from melting the vinyl siding material. Bolt the vent cap to the standoff. Apply non-hardening mastic around outside edge of the standoff instead of the vent cap assembly. Use wood screws provided to attach the standoff. *Figure 18*

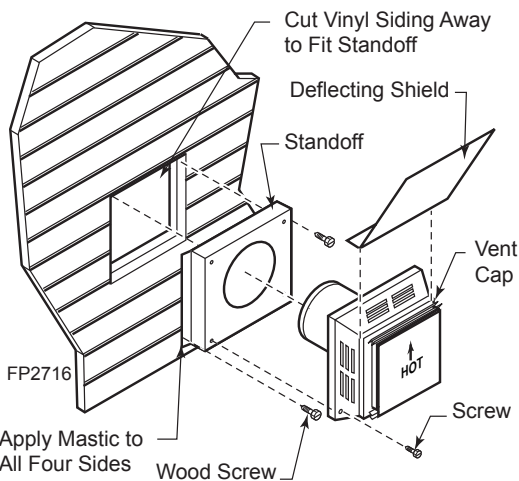


Figure 18 -
Install Vinyl Siding Standoff

5. Slide fire stop over the vent pipe before connecting the horizontal run to the vent cap. *Figure 19*
6. The pipe overlap should be a minimum of 1¼". Apply silicone to the outer pipe connection. Fasten all vent connections with screws provided.
7. Slide fire stop against the interior wall surface and attach with screws. *Figure 19*

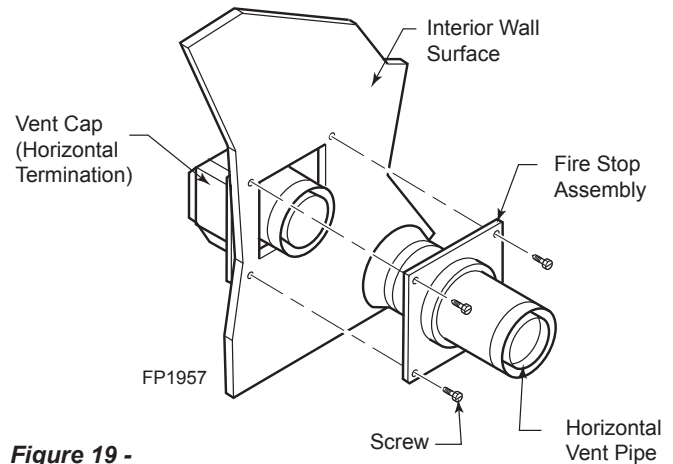


Figure 19 -
Connect Vent Cap with Horizontal Vent Pipe

HORIZONTAL (THROUGH THE WALL) TERMINATION CONFIGURATIONS

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The Vent Graph, showing the relationship between vertical and horizontal side wall venting, will help to determine the various dimensions allowable. *Refer to Page 16*

Minimum clearance between vent pipes and combustible materials is 3" on top and 1" from bottom and sides unless otherwise noted.

When vent termination exits through foundations less than 20" below siding outcrop, the vent pipe must flush up with the siding.

It is best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

WARNING

When installing the appliance as a rear vent unit, the 90°, 45° transition elbow attached directly to the rear of the unit is NOT INCLUDED in the following criteria and calculations, and unless specifically mentioned should be ignored when calculating venting layouts.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the outer wall.

- The maximum number of 90° elbows per side wall installation is three (3). *Figure 20*
- If a 90° elbow is fitted directly on top of the fireplace flange the maximum horizontal vent run before the termination or a vertical rise is 36" (914 mm). *Figure 21*
- If a 90° elbow is used in the horizontal vent run (level height maintained) the horizontal vent length is reduced by 36" (914 mm). This does not apply if the 90° elbows are used to increase or redirect a vertical rise. *Figure 23*

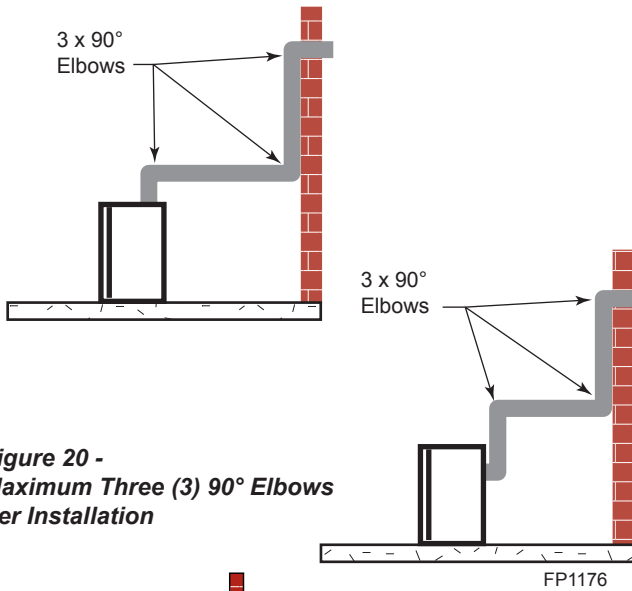


Figure 20 -
Maximum Three (3) 90° Elbows
Per Installation

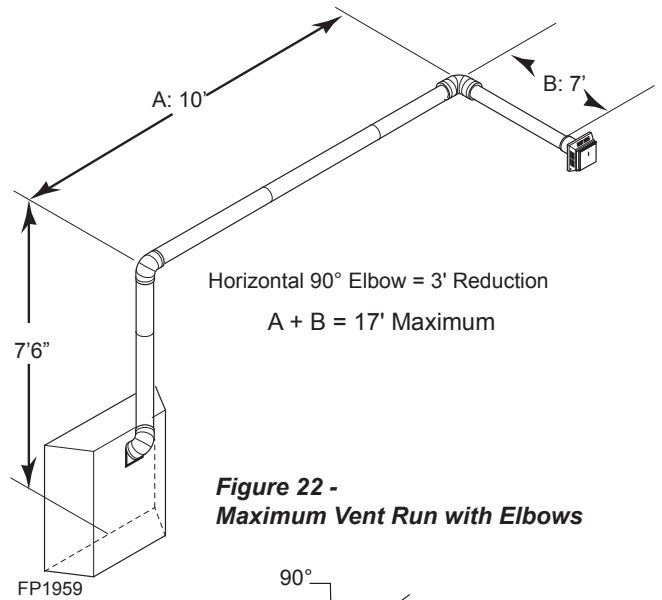


Figure 22 -
Maximum Vent Run with Elbows

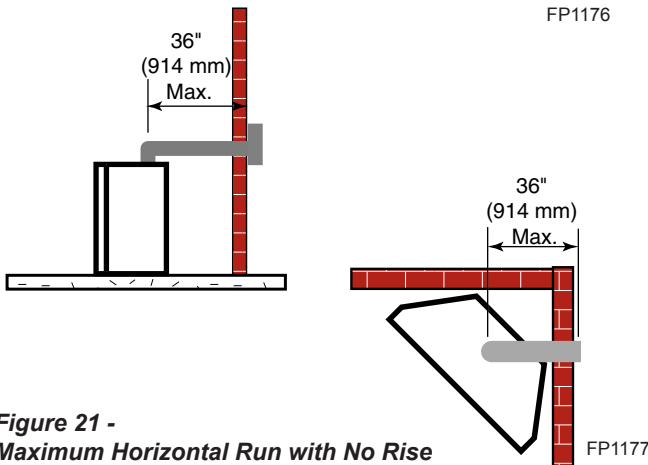


Figure 21 -
Maximum Horizontal Run with No Rise

Example: According to the vent graph (Page 16) the maximum horizontal vent length in a system with a 7.5' vertical rise is 20' (6 m). If a 90° elbow is required in the horizontal vent it must be reduced to 17' (5.2 m).

In Figures 22 and 23, Dimension A plus B must not be greater than 17' (5.2 m).

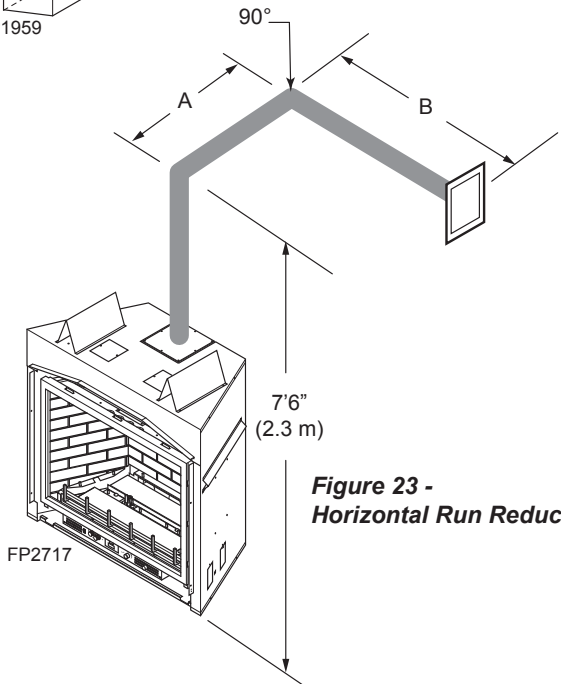


Figure 23 -
Horizontal Run Reduction

- The maximum number of 45° elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run **MUST** be reduced by 18" (457 mm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. *Figure 24*

Example:	Elbow 1	=	90°
	Elbow 2	=	45°
	Elbow 3	=	45°
	Elbow 4	=	90°
	Total Angular Variation	=	270°

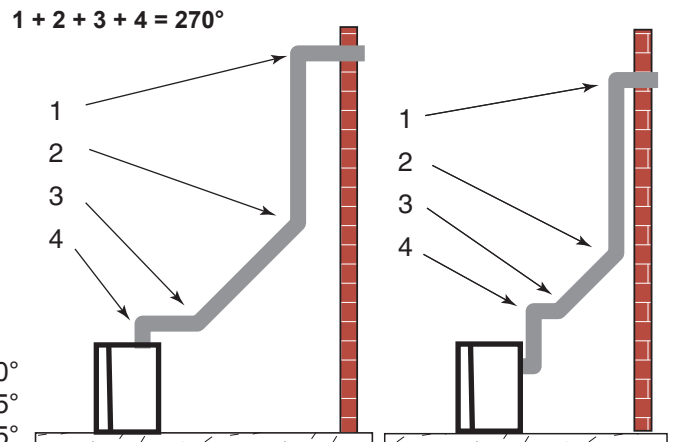


Figure 24 -
Maximum Elbow Usage

BELOW GRADE INSTALLATIONS

When it is not possible to meet the required vent terminal clearances of 12" above grade level, a snorkel kit is recommended. It allows installation depth down to 7" (178 mm) below grade level. The 7" (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure that sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

If installing a snorkel, a minimum 24" vertical rise is necessary. The maximum horizontal run with the 24" (610 mm) vertical pipe is 36" (914 mm). This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24".

1. Establish vent hole through the wall. *Page 17, Figure 15*
2. Remove soil to a depth of approximately 16" (406 mm) below base of snorkel. Install drain pipe. Install window well (not supplied). Refill hole with 12" (305 mm) of coarse gravel leaving a clearance of approximately 4" below snorkel. *Figure 25*
3. Install vent system.
4. Ensure a watertight seal is made around the vent pipe coming through the wall.
5. Apply high temperature sealant caulking (supplied) around the 4" and 7" snorkel collars.
6. Slide the snorkel into the vent pipes and secure to the wall.
7. Level the soil so as to maintain a 4" clearance below snorkel. *Figure 25*

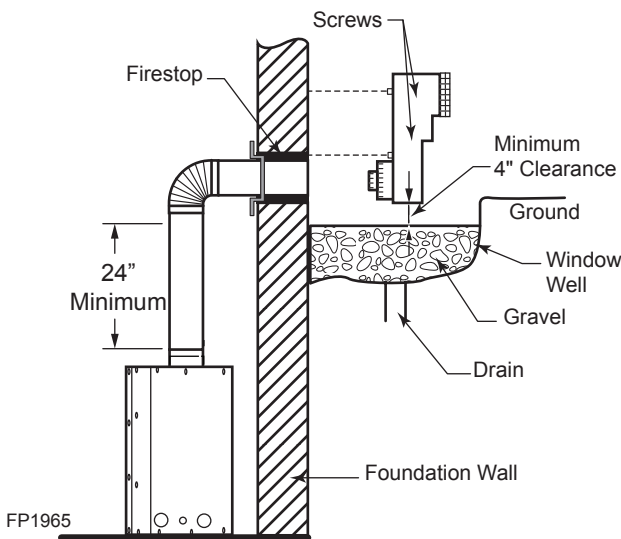


Figure 25 - Below Grade Installation

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8 x 1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. *Figure 26*

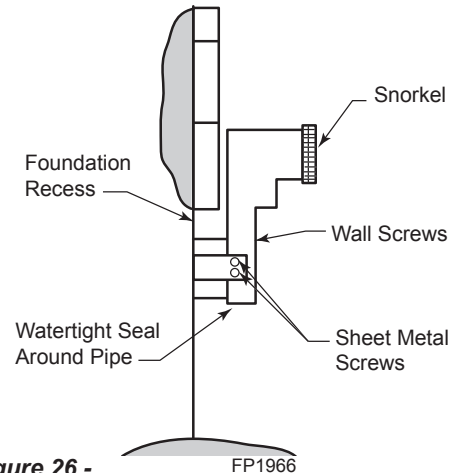


Figure 26 - Snorkel Installation, Recessed Foundation

WARNING	<ul style="list-style-type: none"> • Do not back fill around snorkel. • A clearance of at least 4" must be maintained between the snorkel and the soil.
----------------	---

VERTICAL THROUGH-THE-ROOF APPLICATIONS

This Gas Fireplace has been approved for,

- Vertical installations up to 40' (12 m) in height. Up to a 10' (3 m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. *Figure 27*
- Install restrictor disk on vertical runs of 10' or more.
- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450 mm).

Example: Maximum horizontal length

- No elbows = 10' (3 m)
- 1 x 45° elbows = 8.5' (2.6 m)
- 2 x 45° elbows = 7' (2.1 m)

- A minimum of an 8' (2.5 m) vertical rise is required.
- Two sets of 45°elbows offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. *Figure 28*
- The maximum angular variation allowed in the system is 270°. *Figure 28*
- See termination height on *Page 22*.

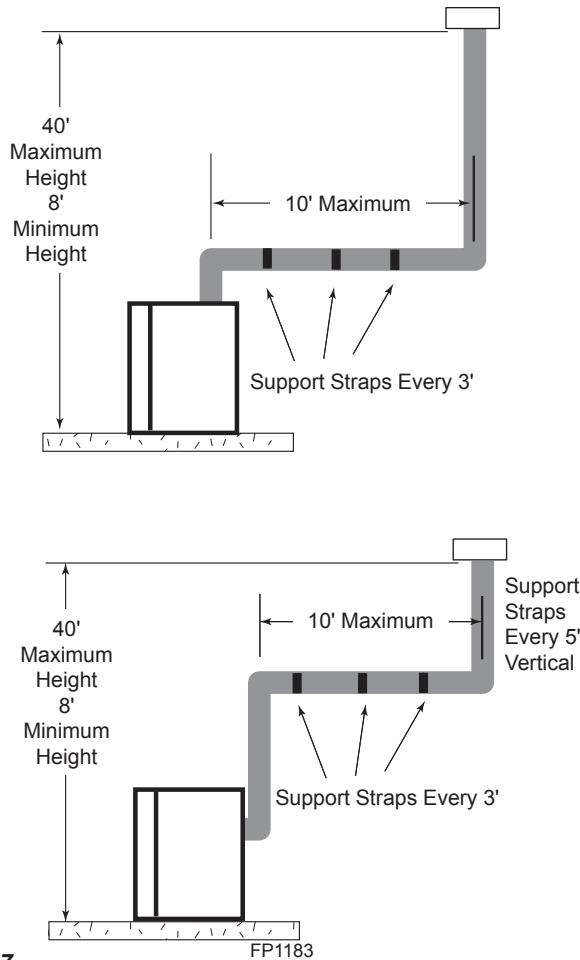


Figure 27 - Support Straps for Horizontal Runs

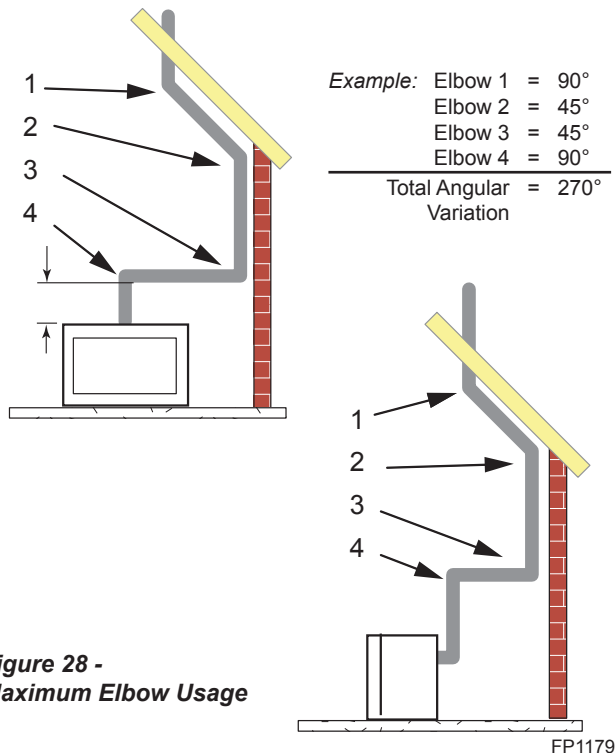


Figure 28 - Maximum Elbow Usage

INSTALLATION FOR VERTICAL TERMINATION

1. Determine the route your vertical venting will take. If ceiling joist, roof rafters or other framing will obstruct the venting system, consider an offset. Figure 29 to avoid cutting load bearing members.

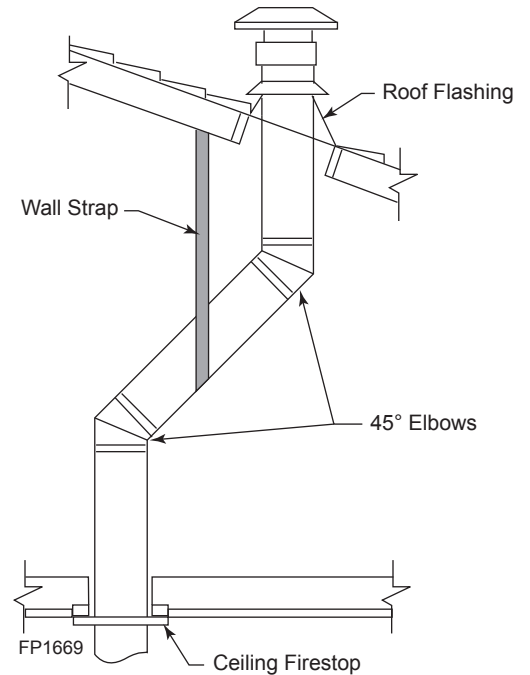


Figure 29 - Offset with Wall Strap and 45° Elbows

NOTE: Pay special attention to these installation instructions for required clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, etc. Do not pack air spaces with insulation. Also note maximum vertical rise of the venting system and any maximum horizontal offset limitations. Offsets must fall within the parameters shows on Page 16, Figure 13.

2. Set fireplace in desired location. Drop a plumb line down from the ceiling to the position of the flue exit. Mark the center point where the vent will penetrate the ceiling. Drill a small locating hole at this point.
Drop a plumb line from the inside of the roof to the ceiling locating hole in the ceiling. Mark the center point where the vent will penetrate the roof. Drill a small locating hole at this point.

FLAT CEILING INSTALLATION

1. Cut a 9½" (241 mm) square hole in the ceiling using the locating hole as a center point The opening should be framed to 9½" x 9½" (241 x 241 mm) inside dimensions as shown in Figure 31 using framing lumber the same size as the ceiling joist. If the area above the ceiling is an insulated ceiling or a room, nail firestop from the top

side. This prevents loose insulation from falling into the required clearance space. *Figure 30*. Otherwise, install firestop below the framed hole. The firestop should be installed with no less than three nails per side. *Figure 35*.

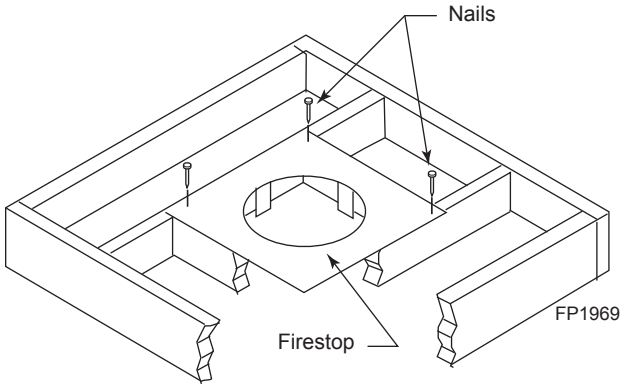


Figure 30 -
If area above is a room, install firestop above framed hole as shown

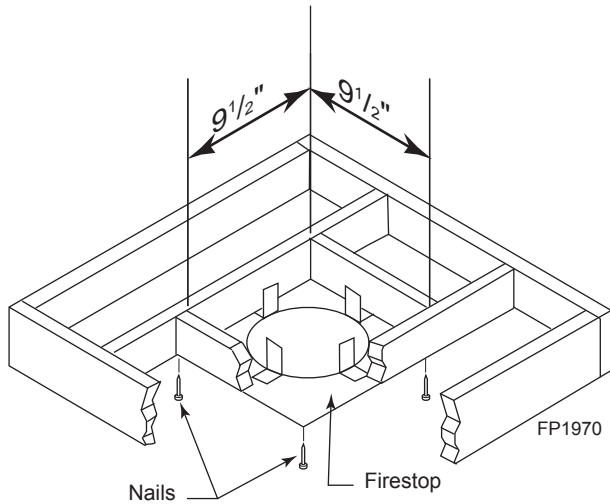


Figure 31 -
If area above is not a room, install firestop below framed hole as shown

2. Assemble the desired lengths of pipe and elbows necessary to reach from the burner system flue up through the firestop. Be sure pipe and elbow connections are fully twist-locked. *Page 17, Figure 16*
3. Cut a hole in the roof using the locating hole as a center point. (Cover any exposed open vent pipes before cutting hole in roof). The 9 1/2" x 9 1/2" (241 x 241 mm) hole must be measured on the horizontal. Actual length may be larger depending on the pitch of the roof. There must be a 1" minimum clearance from the vent pipe to combustible materials. (Insulation should be considered a combustible material) Frame the opening as shown on *Page 17, Figure 15*.

4. Connect a section of pipe and extend up through the hole.

NOTE: If an offset is needed to avoid obstructions, you must support the vent pipe every three (3) feet. Use wall straps for this purpose. Refer to *Figures 27 & 29*. Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of the flue gases and intake air.

5. Place the flashing over the pipe section(s) extending through the roof. Secure the base of the flashing to the roof and framing with roofing nails. Be sure roofing material overlaps the top edge of the flashing. There must be a 1" clearance from the vent pipe to combustible materials.

6. Continue to add pipe sections until the height of the vent cap meets the minimum requirements below.

NOTE: You must increase vent height for steep roof pitches. Nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors may cause poor draft or down-drafting in high winds. Increasing the vent height may solve this problem.

NOTE: If the vent pipe passes through any occupied areas above the first floor, including storage spaces and closets, you must enclose pipe. You may frame and sheetrock the enclosure with standard construction material. Make sure to meet the minimum allowable clearances to combustibles. Do not fill any of the required clearance spaces with insulation.

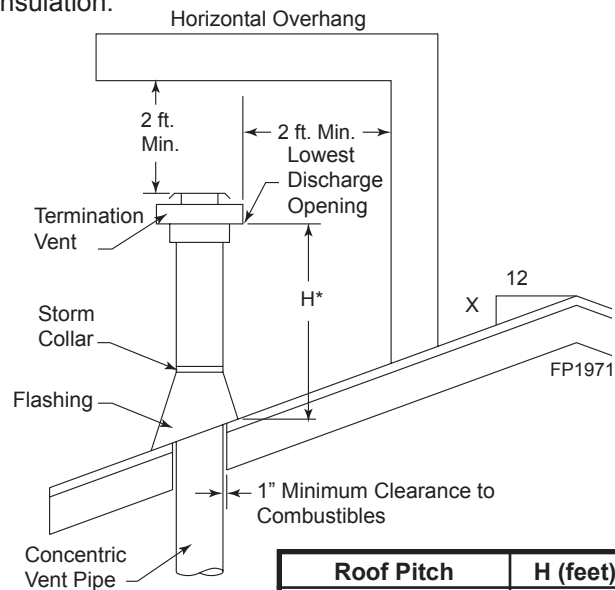


Figure 32 -
Minimum Chimney Clearance

Roof Pitch	H (feet)
Flat to 6/12	1.0
Over 6/12 to 7/12	1.25
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	2.0
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0

*H - Minimum height from roof to lowest discharge opening of vent

CHECK GAS TYPE

Use proper gas type for the fireplace you are installing. If you have conflicting gas type, do not install fireplace. See dealer where you purchased the fireplace for proper fireplace according to your gas type.

INSTALLING GAS PIPING TO FIREPLACE LOCATION

WARNING
A qualified installer or service person must connect appliance to gas supply. Follow all local codes.

CAUTION
For propane/LP units, never connect fireplace directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

INSTALLATION ITEMS NEEDED

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

- External regulator (supplied by installer)
- Equipment shutoff valve*
- approved flexible gas line with gas connector (if allowed by local codes — not provided)
- Piping (check local codes)
- Test gauge connection*
- Tee joint
- Sealant (resistant to propane/LP gas)
- Sediment trap (recommended)
- Pipe wrench

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

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 13 inches of water. If you do not reduce incoming gas pressure, burner system regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 33*. Pointing the vent down protects it from freezing rain or sleet.

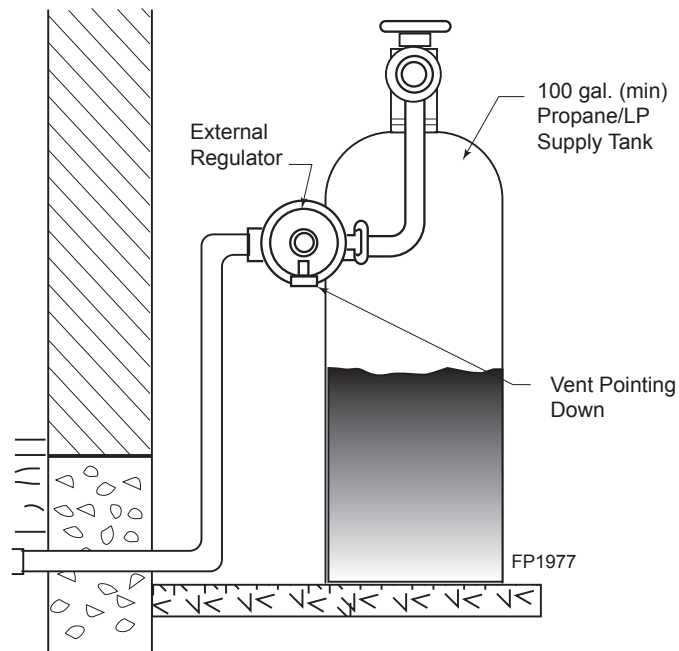


Figure 33 - External Regulator with Vent Pointing Down (Propane/LP Only)

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

WARNING
External regulators may be necessary for natural gas. One- or two-pound systems will damage this appliance and may cause fire hazard.

When using copper or flex connectors use only fittings approved for gas connections. The gas control inlet is 3/8" NPT.

WARNING

Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

CAUTION

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 34*

NOTE : The gas line connection may be made using 1/2" rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CSA-B149 (1 or 2) Installation Code.

A listed manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *Figure 34*

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

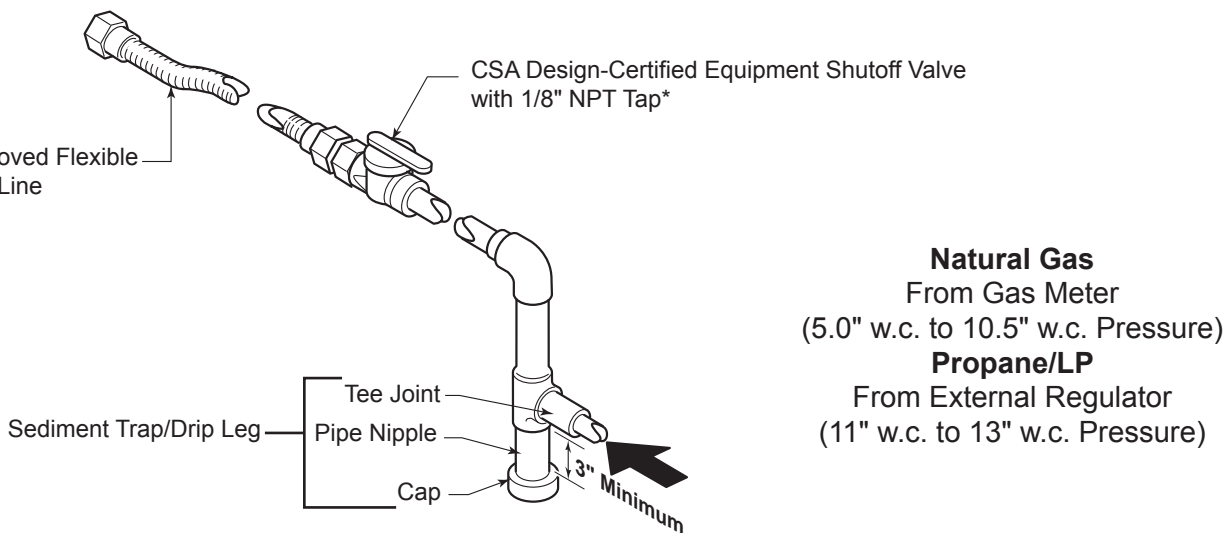
Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

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

We recommend that you install a sediment trap/drip leg in supply line as shown in *Figure 34*. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into the burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

CAUTION

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



**Figure 34 -
Gas Connection**

1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, **STOP!** Do not install the appliance. Contact your dealer immediately.
2. To ease installation, a 30" (mm) flex line with manual shut-off valve has been provided with on this appliance. Install and attach 1/2" gas line onto shut-off valve.
3. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/40 water and soap or a gas sniffer.
4. To adjust flame height, turn HI/LO knob to HI to get maximum pressure to burner. Turn HI/LO knob to LO to get minimum pressure.
5. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *Figure 35*. After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.

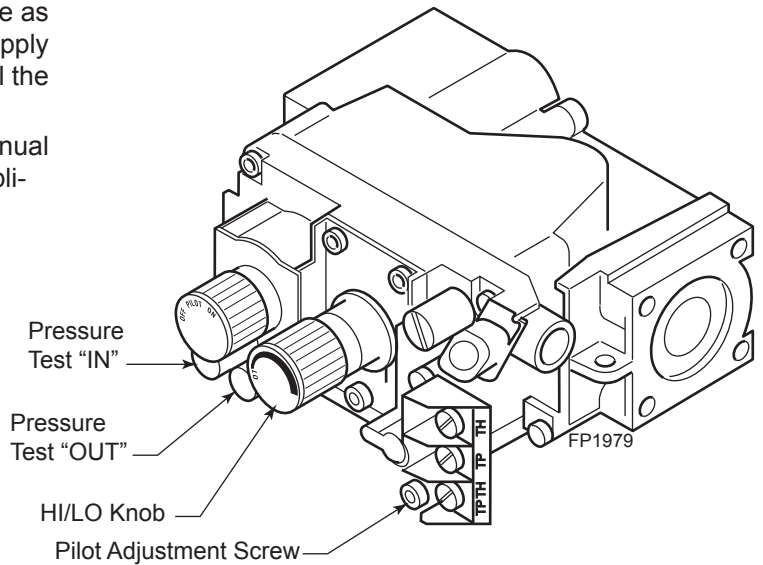


Figure 35 - Gas Pressure Check at Gas Valve

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

ELECTRICAL WIRING

This fireplace will work without any electrical supply. Electricity is only needed to operate blower.

NOTE: If installed in mobile home, fireplace must be bolted securely to floor.

WARNING
Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city and state codes. The 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 (latest edition) and Canadian Electrical Code, CSA C22.1.

CAUTION
Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

Verify proper operation after servicing.

REMOTE WALL MOUNTED SWITCH

A remote wall switch and up to fifteen (15) feet of 18 Ga. wire may be used with this appliance. Attach the wall switch in a junction box at the desired location on the wall. *Figure 36*. Do not extend beyond the wall switch wire length provided.

NOTE: Extended lengths of wire may cause the fireplace not to function properly. Longer length of wire is permitted if the wire is made out of larger gauge (diameter) wire. Always check with local code.

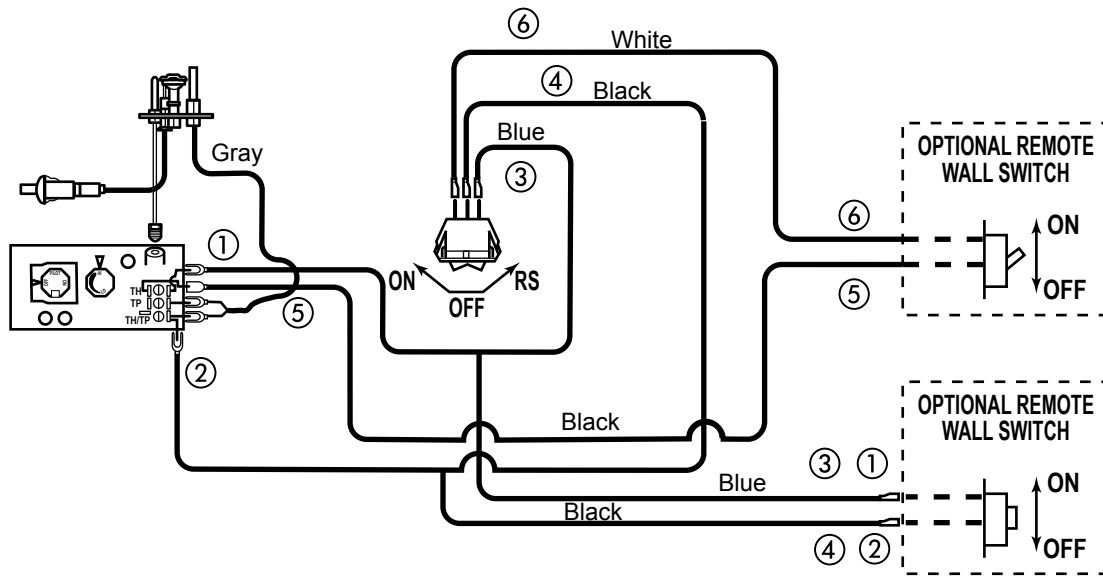


Figure 36 -
Wiring Diagram for Wall Switch

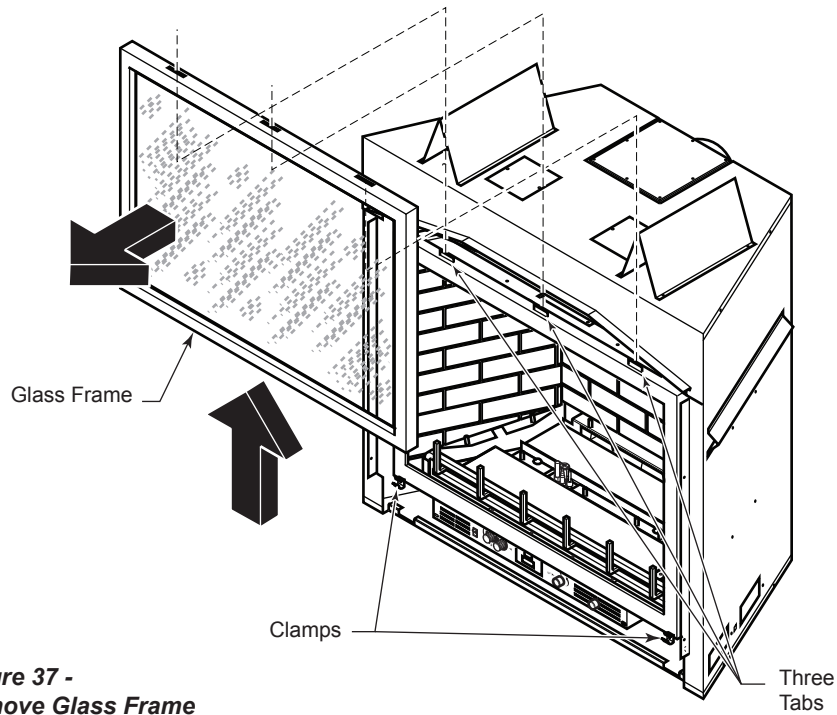
WARNING Do not connect wall switch to heater (110V) circuit.

GLASS FRAME REMOVAL

1. Release two clamps on bottom of fireplace. *Figure 37*
2. Tilt glass frame out and lift glass frame up until it clears three tabs on top of fireplace.
3. Set glass frame aside.

CAUTION

Each clamp has a quick spring force. When reinstalling clamps, keep fingers clear.



**Figure 37 -
Remove Glass Frame**

! WARNING



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

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

WARNING

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

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

INSTALL LOGS AND ROCK WOOL (EMBER MATERIAL) IN FIREBOX

1. Carefully remove logs from wrapping.
2. Remove glass frame. Refer to *Glass Frame Removal*, Page 27

3. Place bottom right log (#3) on two pins against right side of firebox. *Figure 38*

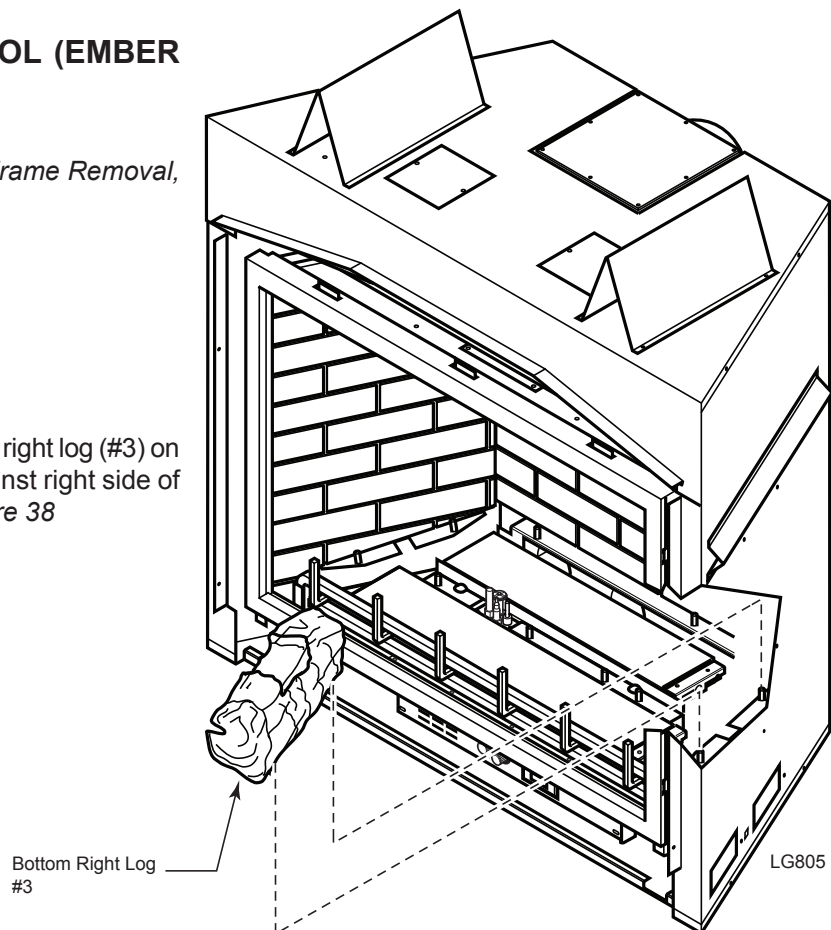


Figure 38

- 4. Place rear log (#1) on two pins against back side of firebox. *Figure 39*

Rear Log #1

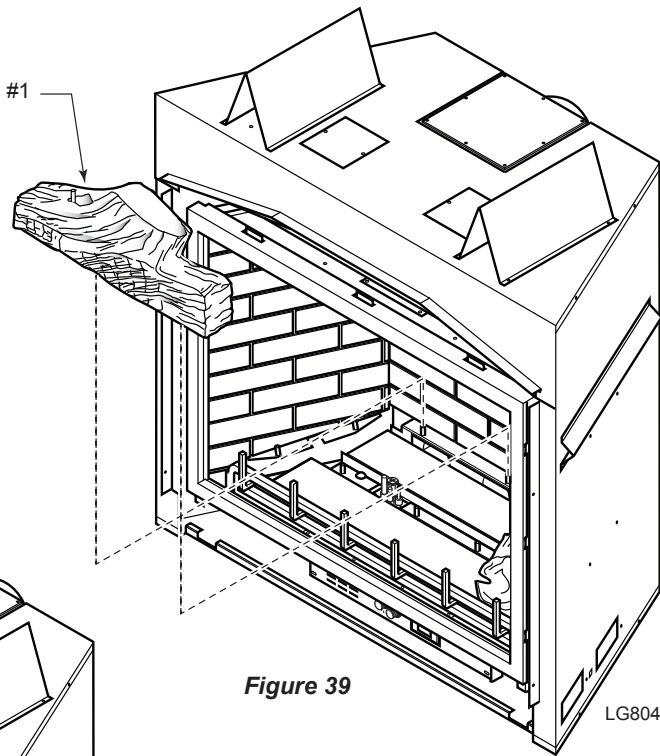


Figure 39

Bottom Left Log #2

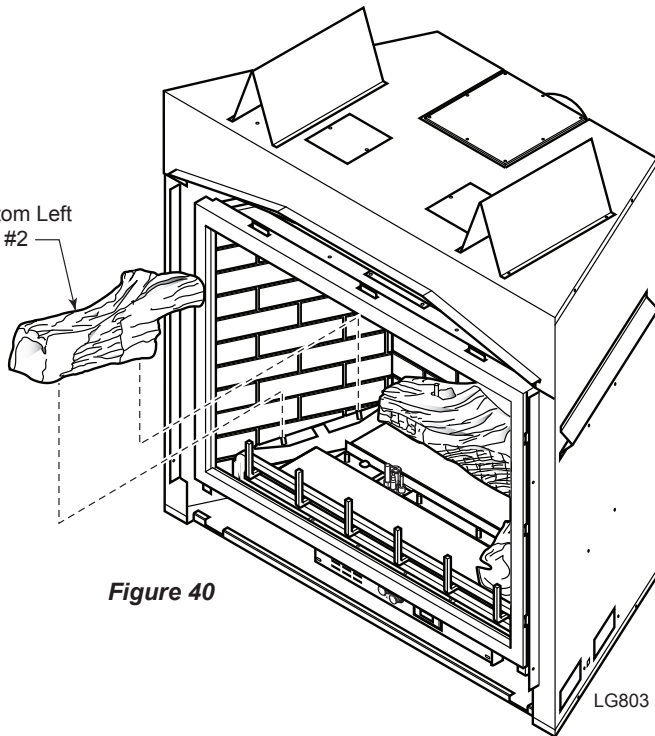


Figure 40

- 5. Place bottom left log (#2) on two pins against left side of firebox. *Figure 40*

- 6. Place left mid log (#6) on two left pins on burner assembly. *Figure 41*

Left Mid Log #6

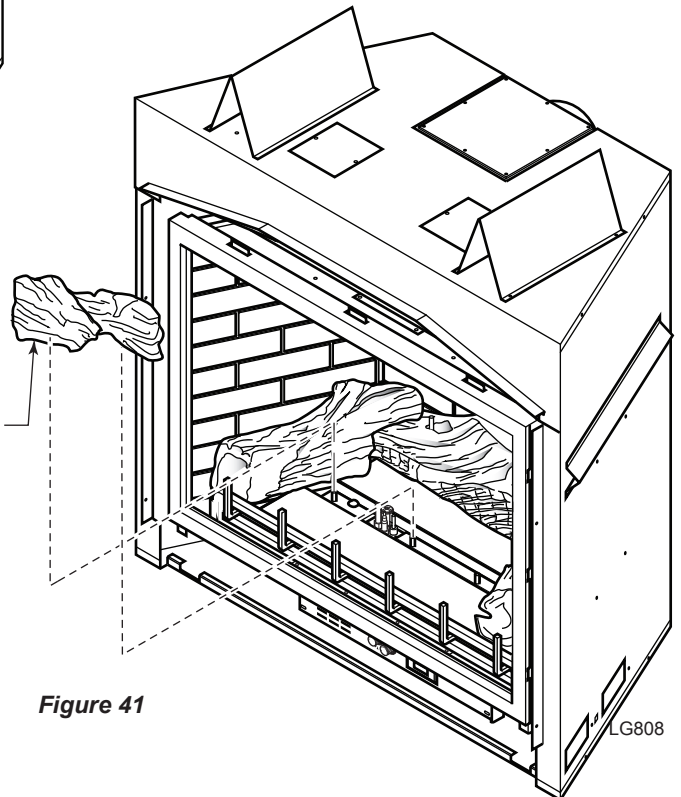


Figure 41

7. Place right mid log (#7) on two right pins on burner assembly. *Figure 42*

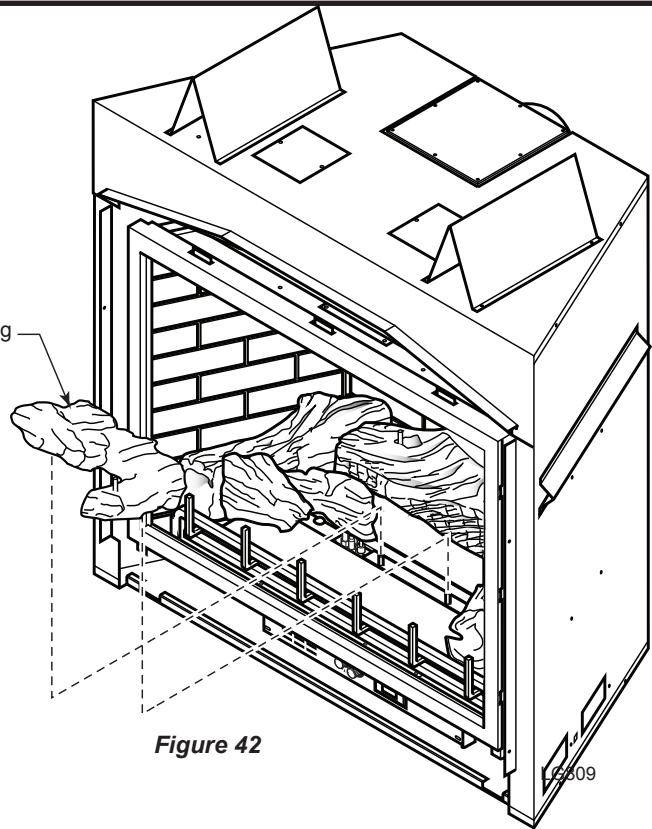


Figure 42

Top Left Log #4

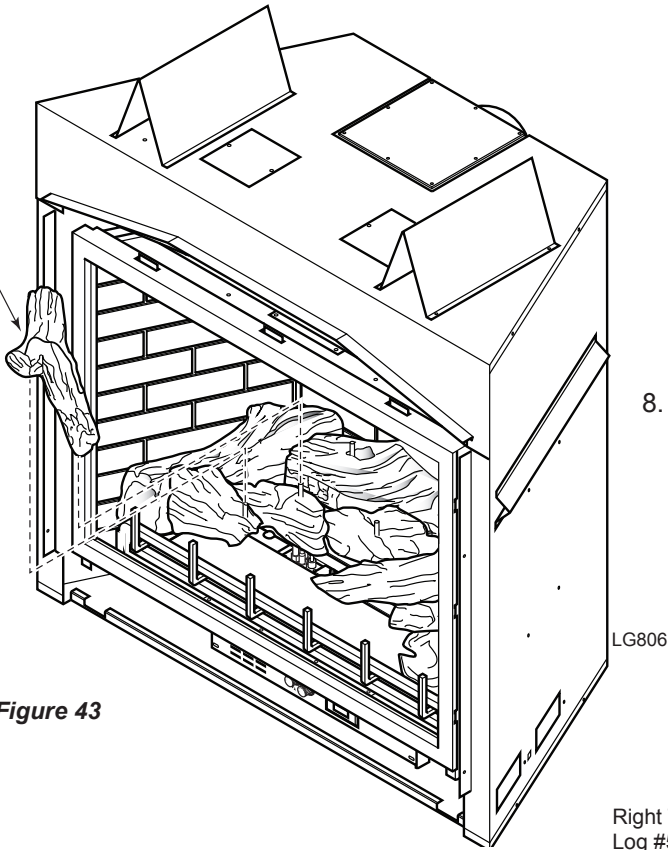


Figure 43

8. Place top left log (#4) on two pins on left mid log. *Figure 43*

9. Place right top log (#5) on two pins on middle left log. *Figure 44*

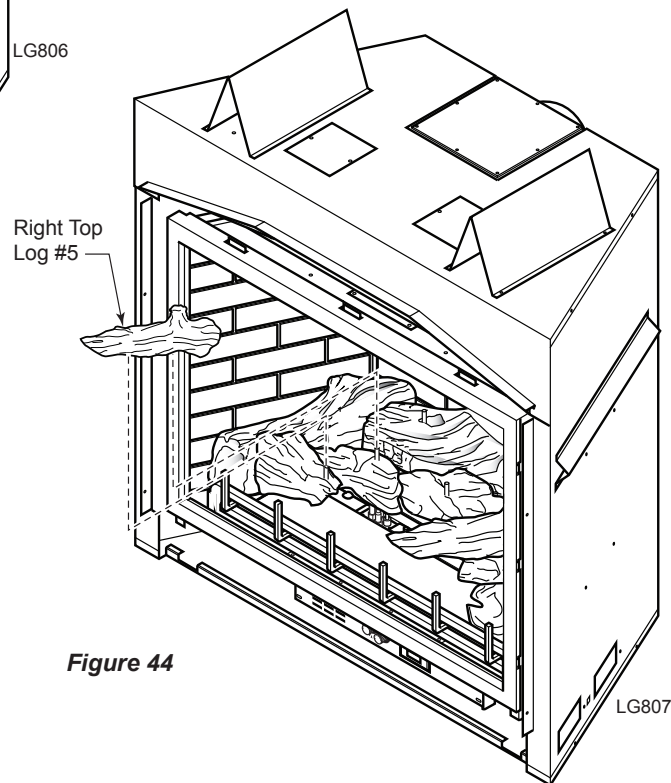


Figure 44

- 10. Place top center log (#8) across rear log (#1) pin and left mid log (#6) pin. *Figure 45*

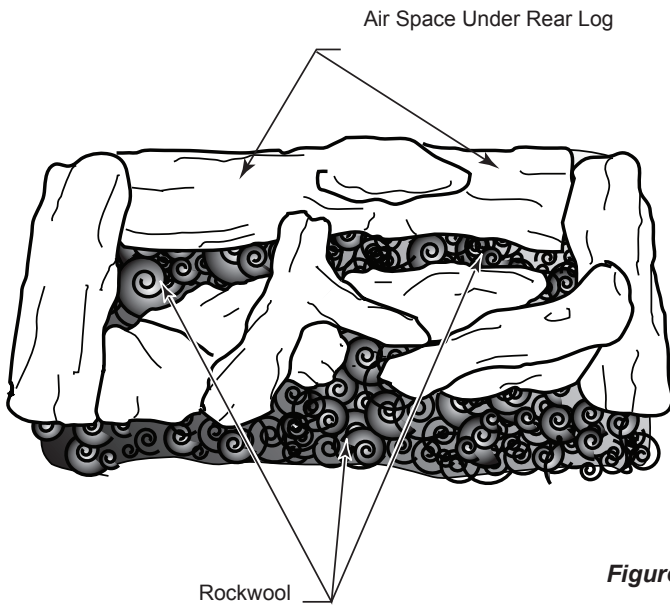
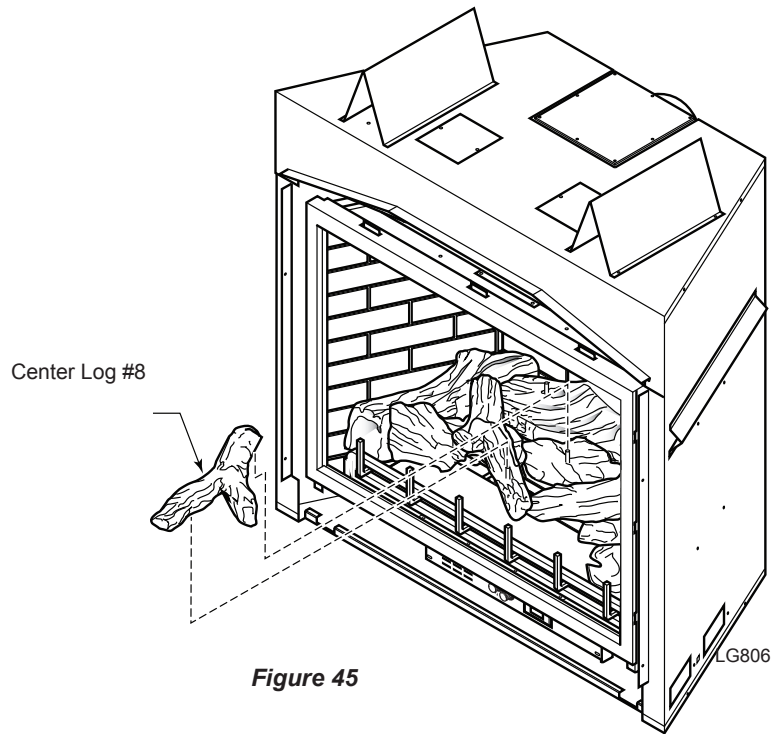
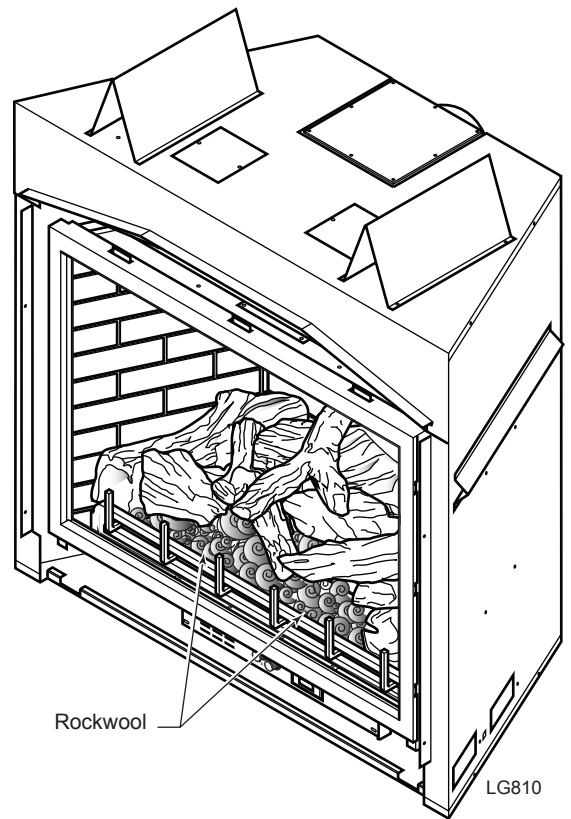
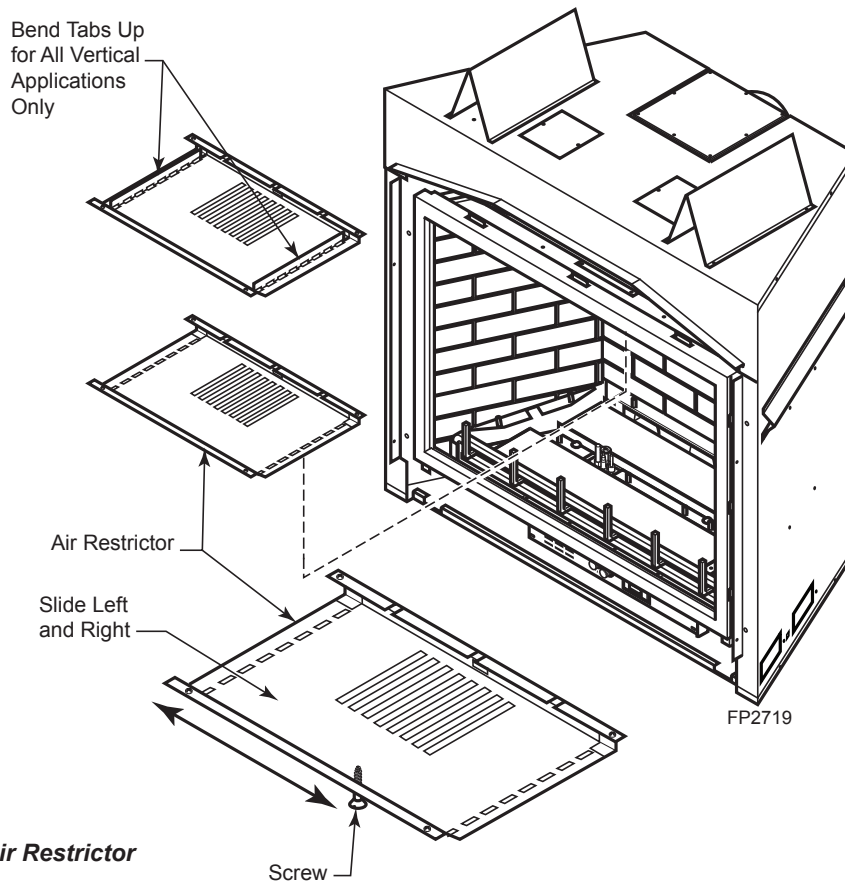


Figure 46



- 11. Break up rock wool (ember material) into dime-sized pieces. Place evenly across both burner surfaces. *Figure 46*. Do not exceed 1/2" depth of coverage. **For best flame and glow, do not block air space between burners and logs with rock wool.**



**Figure 47 -
Adjust Baffle on Air Restrictor
Plate**

The fireplace is equipped with a restrictor plate that is located inside the top chamber of the fireplace. Depending upon the vent configuration, you may be required to adjust the restrictor position

1. Remove glass frame. *Refer to Glass Frame Removal, Page 27.*
2. Using a Phillips screw driver, loosen the screw that secures the air restrictor. Do not back the screw all the way out.
3. Slide the baffle on top of the restrictor plate such that it blocks a percentage of the grill opening. Refer to the chart for recommended settings.

NOTE: All the settings above are based on the testing at the factory and provided as a guide for startup. On certain applications, adding a restrictor disc will help to achieve flame aesthetics.

Venting Height (feet)	% of Grill Opening
8 to 20	100% (Factory Setting)
20 to 30	50%
30 to 40	0%

NOTICE

Your firescreen's finish has been covered at the factory with a protective enamel coating and should never be polished, nor should it ever need to be polished. Instead of polishing, clean with a mild soap solution using a clean cotton terry cloth, then dry. To remove any stubborn stains from the glass, use a mild soap solution, followed by a dampened towel (dampened with clean water only), followed by a dry towel without using soap. Do not use ammonia or ammonia-based glass cleaner on the firescreen, as these types of cleaners may damage the finish of your firescreen. Minor finish scratches and fingerprints can be removed by applying 50/50 vinegar and water solution before lighting the heater. Any fingerprints left on the facing will be permanent when heater is lit.

INSTALL FACING

Figure 48

1. Align the four (4) holes on the facing with the four (4) holes on the fireplace.
2. Attach facing with four (4) fasteners provided.

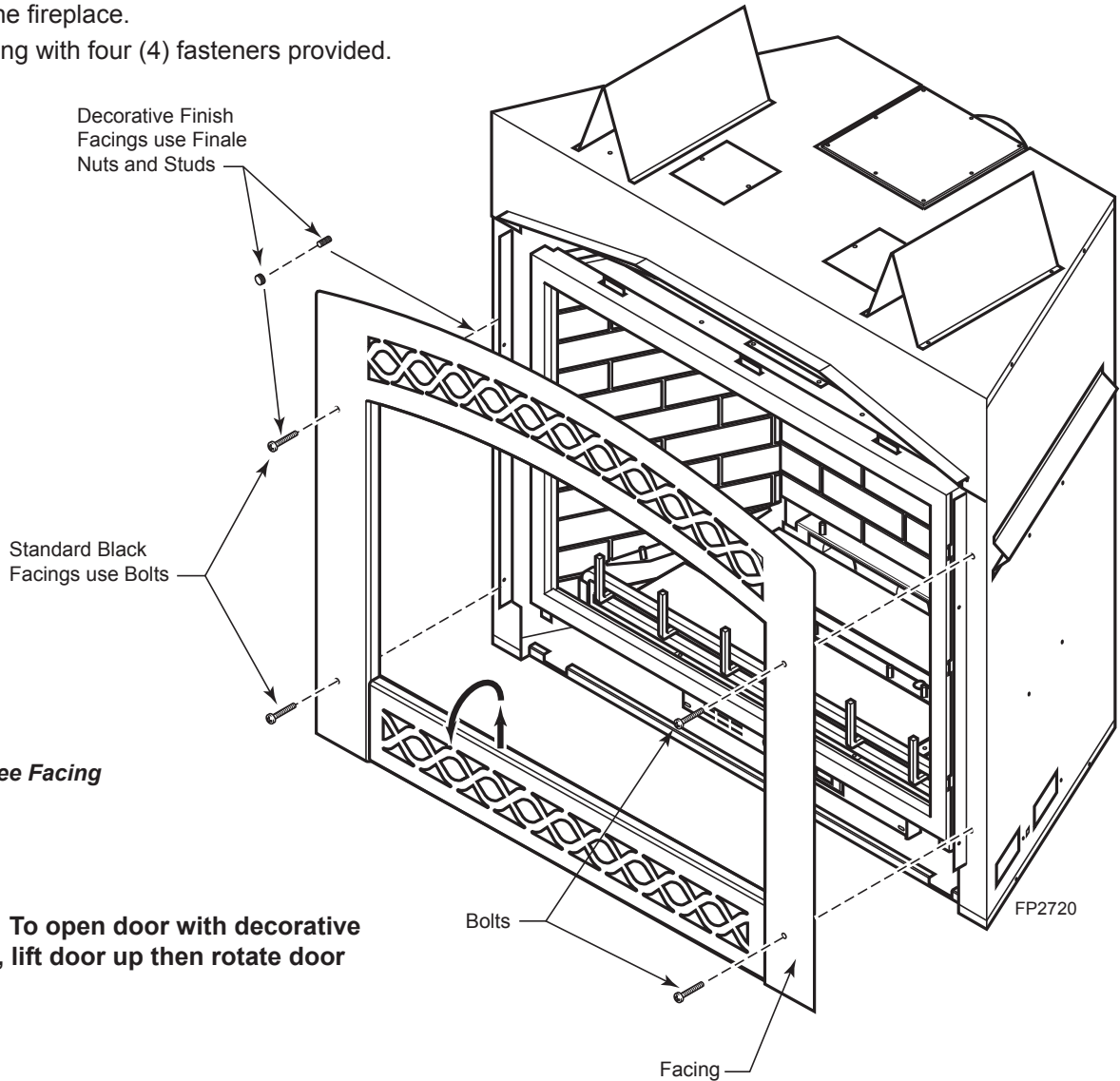


Figure 48 - Install Filigree Facing

IMPORTANT: To open door with decorative finish facing, lift door up then rotate door down.

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING

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

A. This appliance is equipped with a pilot which must be lit with built-in ignitor while following these instructions exactly.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS:

- Turn off all gas to the appliance.
 - Open windows.
 - Do not attempt to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C.** Use only your hand to push in, or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D.** Do not use this appliance if any part of it has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

LIGHTING PILOT FOR THE FIRST TIME

INITIAL LIGHTING

Purge air from the supply line as follows:

- Open main shutoff valve.
- Unscrew main pressure test point.
- Leave inlet test screw open until gas comes in.
- When gas is flowing, tighten inlet screw immediately.

LEAK TESTING

1. Follow the pipe from the gas supply line connection to the gas valve. Check connection for leaks with soap and water mixture.
2. Next check for gas leaks at the burner with soap and water mixture.
3. Check the pilot for gas leaks with soap and water mixture.

WARNING

Never use an open flame to check for gas leaks.

LIGHTING PILOT FOR THE FIRST TIME

APPROVED LEAK TESTING METHOD

You may check for gas leaks with the following methods only:

- Soap and water solution
- An approved leak testing spray
- Electronic sniffer

DANGER

Never check for gas leak with open flame!

WARNING


If using a soap and water solution to test for leaks, DO NOT spray solution onto control body.

NOTE: Remove any excessive pipe compound from the connections. Excessive pipe compound can set off electronic sniffers.

Check for gas leaks in each of the following locations:

- Pipe from the gas supply line connection to the gas valve
- Burner connections
- Pilot
- Each joint or connection
- Field made joints / gas shutoff valve
- Factory made joints
- All joints on valve and control body

LIGHTING PILOT

1. Depress and turn knob counterclockwise  to pilot position.
2. Depress fully and hold pilot gas knob. Depress piezo ignitor as many times as needed to ignite the pilot. Keep knob fully depressed for a few seconds. Release and check that pilot continues to burn.

If the pilot does not stay lit, repeat steps 1 and 2.

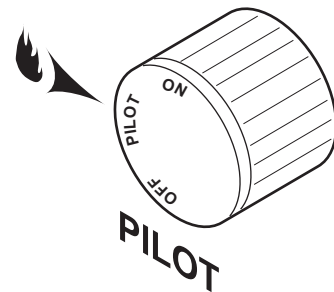
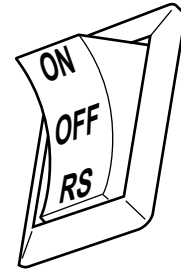


Figure 49 - Pilot Position

LIGHTING BURNER


MAIN BURNER SWITCH

The “ON/OFF/RS” switch for the main burner can be found behind door of the fireplace. This switch allows you to turn on and to turn off the main burner without using the gas valve knob. Make sure the button is in the “ON” position to light the main burner. *Figure 50*



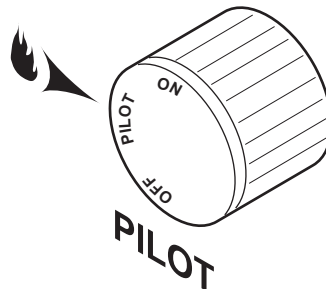
*Figure 50 -
On/Off/RS Switch*

LIGHTING THE BURNER

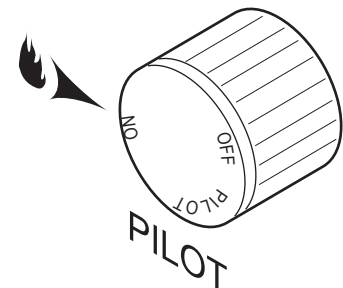
Depress and turn the knob counterclockwise  to the “ON” position. *Figure 51*. It will take less than four (4) seconds for the burner to ignite.

PILOT POSITION

Depress and turn knob to pilot position to keep burner off while maintaining the pilot light. *Figure 52*



*Figure 52 -
Pilot Position*



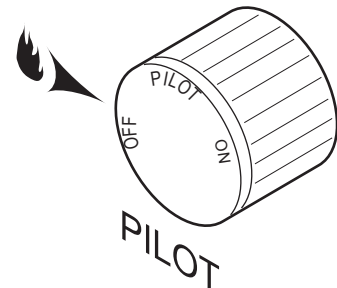
*Figure 51 -
On Position*

TO TURN OFF GAS

Depress and turn knob clockwise  to “OFF” position. *Figure 53*

WARNING

The control is fitted with a safety interlock device which prevents unsafe ignition of the pilot burner after the control knob has been turned to the OFF position. The knob may only be rotated back to the PILOT position after the safety magnet has been released (approximately 60 seconds). You will hear a “click” when the safety magnet releases.



*Figure 53 -
Off Position*

WARNING

Turn off gas before servicing fireplace. It is recommended that a qualified service technician perform these check-ups at the beginning of each heating season

CAUTION

Allow glass to cool before cleaning. Do not clean glass when it is hot. Damage could occur.

Make sure the gas valve knob is in the "OFF" position. Wait at least five (5) minutes before start-ing maintenance. Fireplace must be cold before starting maintenance.

WARNING

Make sure clearances to combustibles allow room for maintenance and service.

VENTING SYSTEM

A qualified agency should examine the venting system annually.

CLEANING GLASS

Clean the ceramic glass periodically. Condensation will sometimes form on the glass during a cold startup. This is normal for all gas fireplaces. This condensation often attracts dust and lint to the surface of the glass. The initial paint curing of the appliance can also leave a slight film on the glass.

Your should clean the glass after the first two weeks of use. After that, you should clean the glass no more than two or three times a season. Use a mild glass cleaner to clean the door.

DO NOT USE ABRASIVE CLEANERS. THEY WILL DAMAGE THE GLASS SURFACE.

PILOT AND BURNER FLAMES

Visually check pilot and burner flames periodically. Refer to Figure 54 for typical burner flame. Refer to Figure 55 for typical pilot flame.

FIREBOX CLEANING

1. Carefully remove log set, and embers from combustion chamber.
2. Vacuum burner compartment thoroughly.
3. Vacuum any dust off logs.
4. Remove any lint from main burner and pilot.
5. Carefully replace log set, and embers in their correct positions. *Page 28*
6. Replace door (if it has been removed).
7. Relight pilot. *Page 35*
8. Turn on main burner.

WARNING

Carefully reassemble and reseal fireplace properly after any cleaning or servicing.

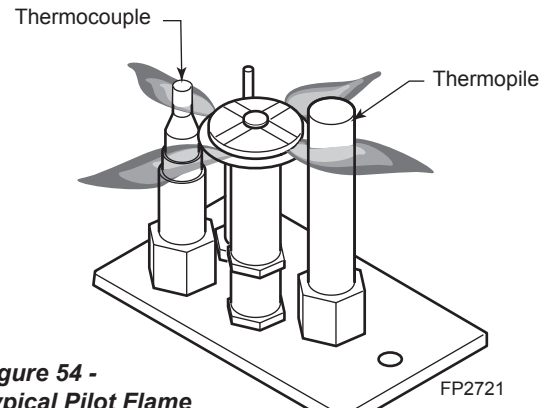


Figure 54 - Typical Pilot Flame

FP2721

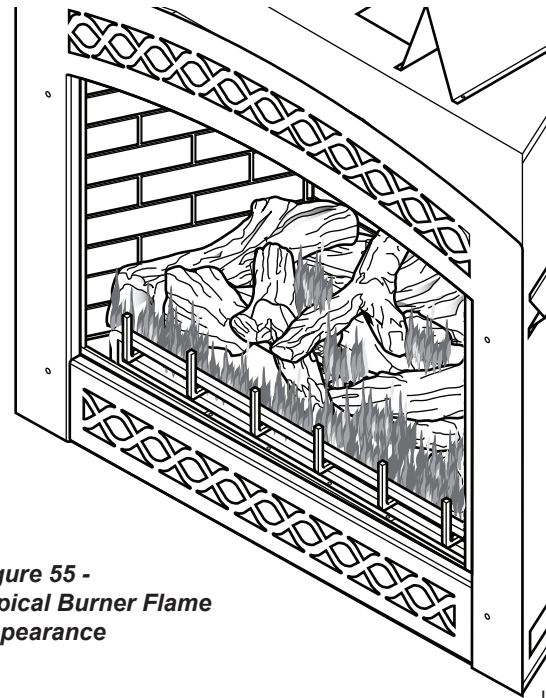


Figure 55 - Typical Burner Flame Appearance

LG812

CAUTION

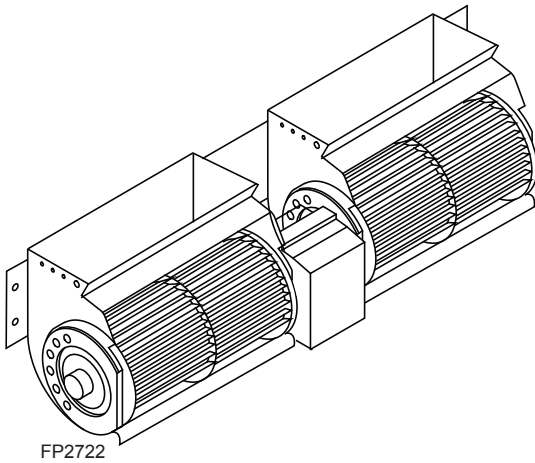
Always use gloves when handling broken glass.

WARNING

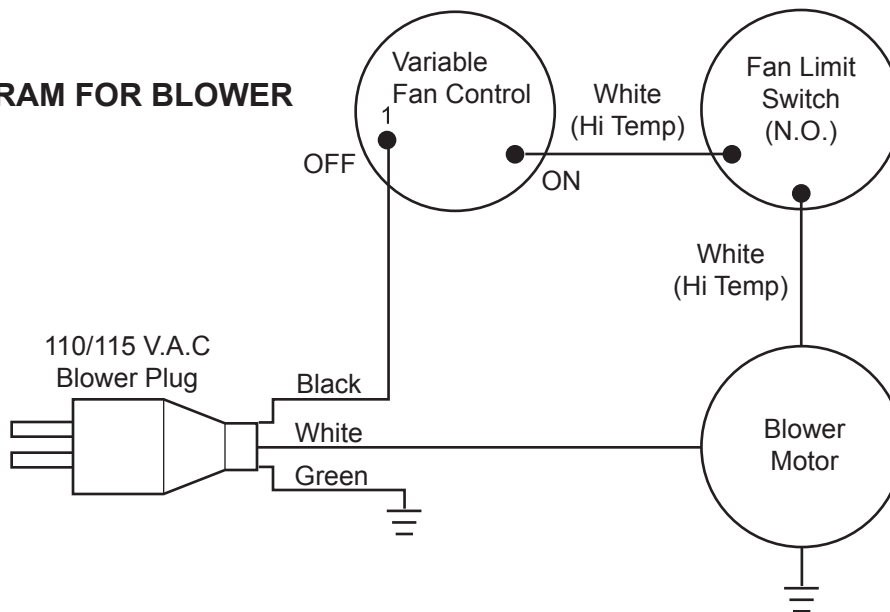
Make sure the glass panel edges do not touch any metal parts during thermal expansion.

- Never operate fireplace if glass is broken.
- Replace any glass that is chipped, cracked, or broken. Replacement glass assemblies **MUST** be supplied by fireplace manufacturer — **No substitute materials may be used.**

BLOWER



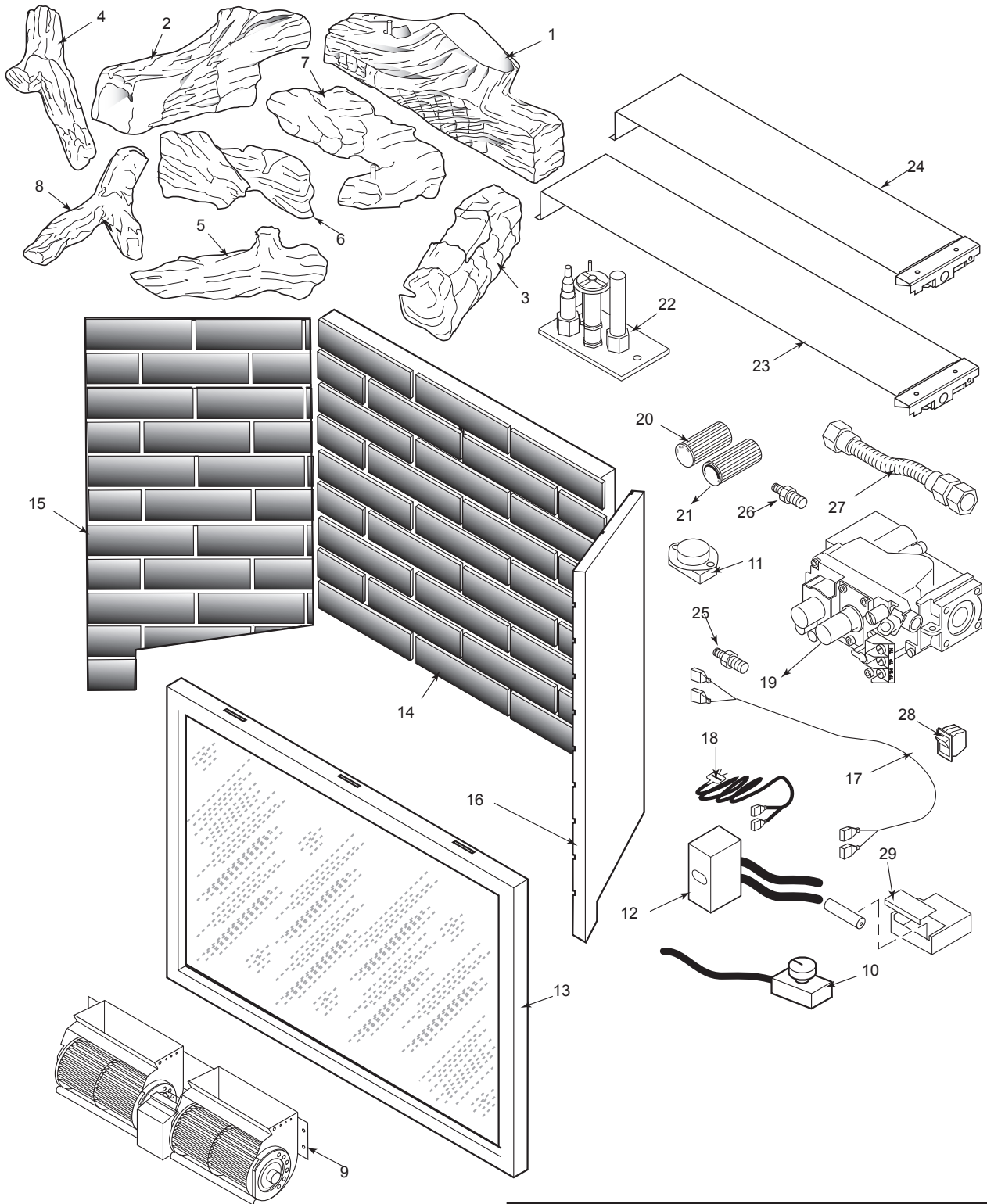
WIRING DIAGRAM FOR BLOWER



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

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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Spark ignitor will not light the pilot after repeated pressing of spark ignitor.	<ol style="list-style-type: none"> 1. Battery needs replacing 2. Defective ignitor 3. Misaligned spark electrode 4. Bad wire. 	<ol style="list-style-type: none"> 1. Replace battery 2. Check connections to ignitor. Replace ignitor if ignitor connections are good, but there is no spark. 3. Check for spark arcing from the electrode to pilot. Adjust and retighten. 4. Replace with new wire.
Pilot will not stay lit.	<ol style="list-style-type: none"> 1. Defective thermocouple. Loose thermocouple 2. Air in gas line 3. No gas 	<ol style="list-style-type: none"> 1. A. Check for proper connection of thermocouple to rear of valve. B. Check thermocouple output. 2. Bleed line. Contact dealer 3. Check shutoff valve and gas supply (LPG tank)
Burner will not light when valve and burner switch are both on.	<ol style="list-style-type: none"> 1. Defective switch 2. Defective thermopile 3. Thermostat set too low/defective 	<ol style="list-style-type: none"> 1. Check switch connections. Jump wires at switch. 2. A. Check thermopile output. B. Check connections to valve. Contact dealer. 3. Turn up thermostat to start unit. Check thermostat connections.
Glass fogs up	<ol style="list-style-type: none"> 1. Normal condition 	<ol style="list-style-type: none"> 1. Allow appliance to warm up. Glass will clear. Additives in the gas may dirty glass. Clean glass when cool.
Blue flames	<ol style="list-style-type: none"> 1. Normal during start up 	<ol style="list-style-type: none"> 1. Flames will yellow as appliance heats up. Adjust rock wool placement per instructions.
Sooting	<ol style="list-style-type: none"> 1. Flame impingement 	<ol style="list-style-type: none"> 1. Check log position. Open shutters to increase primary air.



WARNING

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

REPLACEMENT PARTS

LX Series Direct Vent Gas Fireplace

Ref.	Description	Qty.	LX32DV		LX36DV	
			Natural	Propane	Natural	Propane
1.	Rear Log	1	51D0402	51D0402	51D0002	51D0002
2.	Bottom Left Log	1	51D0403	51D0403	51D0003	51D0003
3.	Bottom Right Log	1	51D0404	51D0404	51D0004	51D0004
4.	Left Top Log	1	51D0405	51D0405	51D0005	51D0005
5.	Right Top Log	1	51D0406	51D0406	51D0006	51D0006
6.	Left Mid Log	1	51D0407	51D0407	51D0007	51D0007
7.	Right Mid Log	1	51D0408	51D0408	51D0008	51D0008
8.	Center Log	1	51D0409	51D0409	51D0009	51D0009
9.	Blower UPPCO	1	26D0748	26D0748	26D0748	26D0748
10.	Speed Control	1	26D0746	26D0746	26D0746	26D0746
11.	Thermostat Sensor	1	26D2870	26D2870	26D2870	26D2870
12.	Junction Box	1	26D2128K	26D2128K	26D2128K	26D2128K
13.	Glass Assembly	1	51D0417K	51D0417K	51D0417K	51D0417K
14.	Firebrick Center	1	51D0411	51D0411	51D0012	51D0012
15.	Firebrick Left	1	51D0013	51D0013	51D0013	51D0013
16.	Firebrick Right	1	51D0192	51D0192	51D0192	51D0192
17.	Wire Harness Male	1	44D0501	44D0501	44D0501	44D0501
18.	Wire Harness Female	1	44D0500	44D0500	44D0500	44D0500
19.	SIT 820 Nova Valve	1	37D0117	37D0118	37D0117	37D0118
20.	Knob Extension Hi/Lo	1	43D0095	43D0095	43D0095	43D0095
21.	Knob Extension On/Off	1	43D0094	43D0094	43D0094	43D0094
22.	Pilot Assembly	1	37D0018	37D0019	37D0018	37D0019
23.	Front Burner Assembly	1	51D0037K	51D0037K	51D0037K	51D0037K
24.	Rear Burner Assembly	1	51D0431K	51D0431K	51D0041K	51D0041K
25.	Injector Front Burner	1	51D0425K	51D0423K	51D0032K	51D0030K
26.	Injector Rear Burner	1	51D0425K	51D0422K	51D0031K	51D0029K
27.	Flexhose w/Shutoff Valve	1	23D6046	23D6046	23D6046	23D6046
28.	Rocker Switch	1	41D0048	41D0048	41D0048	41D0048
29.	Ignitor Battery Assembly	1	45D0242K	45D0242K	45D0242K	45D0242K
Accessories (not shown)						
Thermostatic Remote Control				RCT		
Remote Control On/Off				RCM		
Wall Switch Kit				MVWS		
Wall Thermostat Kit				MVWTS		
Deflector Shield				37D0115K		

Fuel Conversion Kits

Natural Gas to LP

LX32DVNV Kit #LX32CKP LX32HAKP*

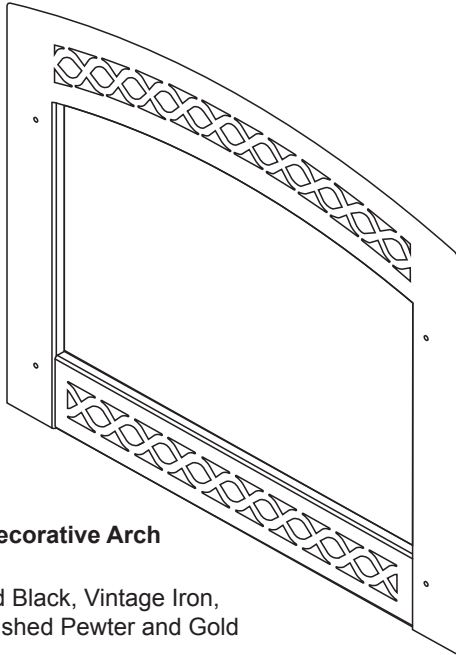
LX36DVNV Kit #LX36CKP LX32HAKP*

LP to Natural Gas

LX32DVPV Kit #LX32CKN LX32HAKN*

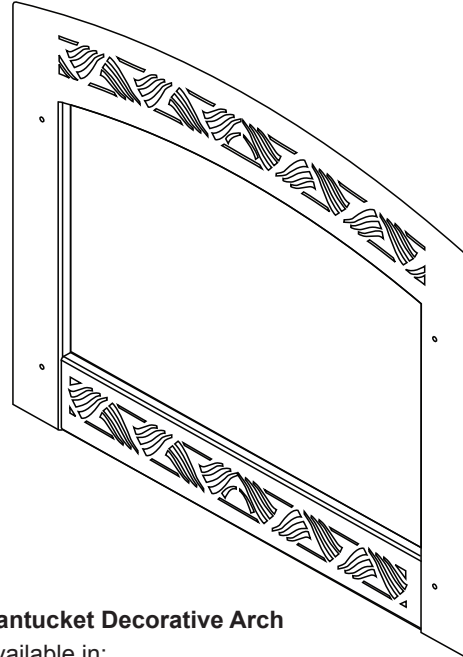
LX36DVPV Kit #LX36CKN LX32HAKN*

*High Altitude Conversion Kits



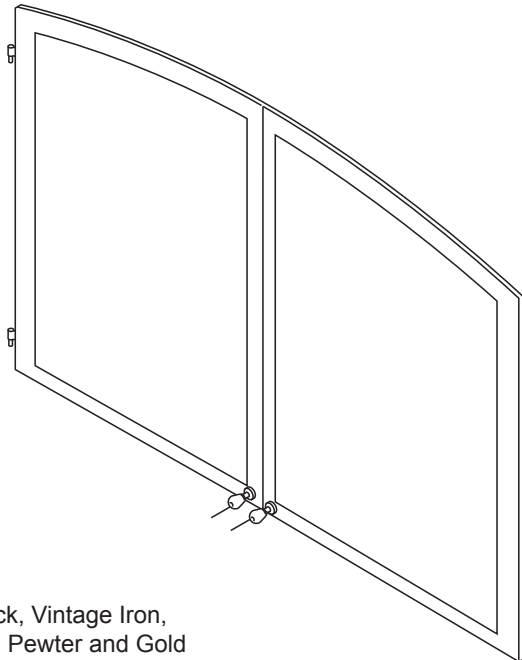
Rolling "O" Decorative Arch

Available in:
Black, Textured Black, Vintage Iron,
Gold Tone, Brushed Pewter and Gold



Nantucket Decorative Arch

Available in:
Black, Textured Black, Vintage Iron,
Gold Tone, Brushed Pewter and Gold



Firescreen Doors

Available in:
Black, Textured Black, Vintage Iron,
Gold Tone, Brushed Pewter and Gold

OPTIONAL ACCESSORIES*LX Series Direct Vent Gas Fireplace*

Decorative Fronts Description	LX32	LX36	Door Option Available
Black Rolling "O" Decorative Arched Facing	LX32RBL	LX36RBL	no
Black Nantucket Decorative Arched Facing	LX32NBL	LX36NBL	no
Rectangular Front Nantucket Black	LX32RNBL	LX36RNBL	no
Textured Black Rolling "O" Decorative Arched Facing	LX32RTB	LX36RTB	yes
Textured Black Decorative Arched Facing	LX32NTB	LX36NTB	yes
Rectangular Front Nantucket Black	LX32RNTB	LX36RNTB	yes
Vintage Iron Rolling "O" Decorative Arched Facing	LX32RVI	LX36RVI	yes
Vintage Iron Nantucket Decorative Arched Facing	LX32NVI	LX36NVI	yes
Rectangular Front Nantucket Vintage Iron	LX32RNVI	LX36RNVI	yes
Gold Tone Rolling "O" Decorative Arched Facing	LX32RGT	LX36RGT	yes
Gold Tone Nantucket Decorative Arched Facing	LX32NGT	LX36NGT	yes
Brushed Pewter Rolling "O" Decorative Arched Facing	LX32RBP	LX36RBP	yes
Brushed Pewter Nantucket Decorative Arched Facing	LX32NBP	LX36NBP	yes

Firescreen Doors Description	LX32	LX36
Textured Black Fire Screen Doors	LX32FDDTB	LX36FDDTB
Gold Tone Fire Screen Doors	LX32FDDGT	LX36FDDGT
Vintage Iron Fire Screen Doors	LX32FDDVI	LX36VDDVI
Brushed Pewter Fire Screen Doors	LX32FDDBP	LX36FDDBP

Massachusetts Residents Only — Please read and follow these special requirements

NOTE REGARDING VENTED PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

Any residence with a direct vent product must have a CO detector installed in the residence.

Installation of the fireplace or vented gas log in the State of Massachusetts requires the damper to be permanently removed or welded in the fully open position.

In addition, a naturally vented gas log may not be installed in a bedroom or bathroom in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

NOTE REGARDING VENT FREE PRODUCTS

This product must be installed by a licensed plumber or gas fitter when installed within the Commonwealth of Massachusetts.

In addition, vent free products may not be installed in a bedroom or bathroom regardless of size or type in the State of Massachusetts.

Flex line installation must not exceed 36 inches and must have a T shutoff valve.

CARBON MONOXIDE DETECTOR REQUIREMENTS

(2) Revise 10.8.3 by adding the following additional requirements:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. **Installation of carbon monoxide detectors.** At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. **Approved Carbon Monoxide Detectors.** Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. **Signage.** A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS."

4. **Inspection.** The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

(b) **Exemptions:** The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) **Manufacturer requirements — Gas Equipment Venting System Provided.** When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) **Manufacturer requirements — Gas Equipment Venting System Not Provided.** When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems," the following requirements shall be satisfied by the manufacturer:

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design

LIMITED LIFETIME WARRANTY POLICY

LIFETIME WARRANTY

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

FIVE YEAR WARRANTY

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

BASIC WARRANTY

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

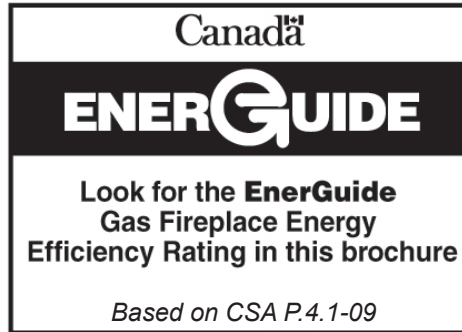
This Limited Lifetime Warranty will be void if the appliance is not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with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

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

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

IF WARRANTY SERVICE IS NEEDED...

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



Efficiency Ratings	
Model	EnerGuide Ratings Fireplace Efficiency (%)
LX32DVN	65.1
LX32DVP	66.2
LX36DVN	66.8
LX36DVP	69.1

MHSC

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