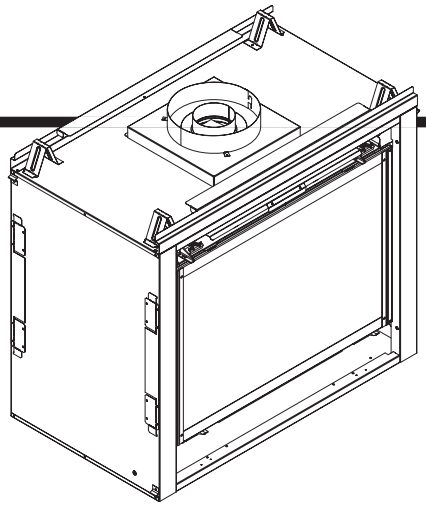
heatilator®
The first name in fireplaces

Owner's Manual
Installation and Operation

Model:
GBST4336I
GBFL4136I



GAS-FIRED
c UL us
LISTED

NOTICE

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

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

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

⚠ WARNING

HOT SURFACES!
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away

- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.

A CO detector shall be installed in the room where the appliance in installed.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory trained professionals, or technicians supervised by an NFI certified professional.

Read this manual before installing or operating this appliance.
Please retain this owner's manual for future reference.

A. Congratulations

Congratulations on selecting a Heatilator gas fireplace, an elegant and clean alternative to wood burning fireplaces. The Heatilator gas fireplace you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new fireplace, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest that you keep it with your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Heatilator gas fireplace will give you years of durable use and trouble-free enjoyment. Welcome to the Heatilator family of fireplace products!

Homeowner Reference Information

We recommend that you record the following pertinent information about your fireplace.

Model Name: _____ Date purchased/installed: _____

Serial Number: _____ Location on fireplace: _____

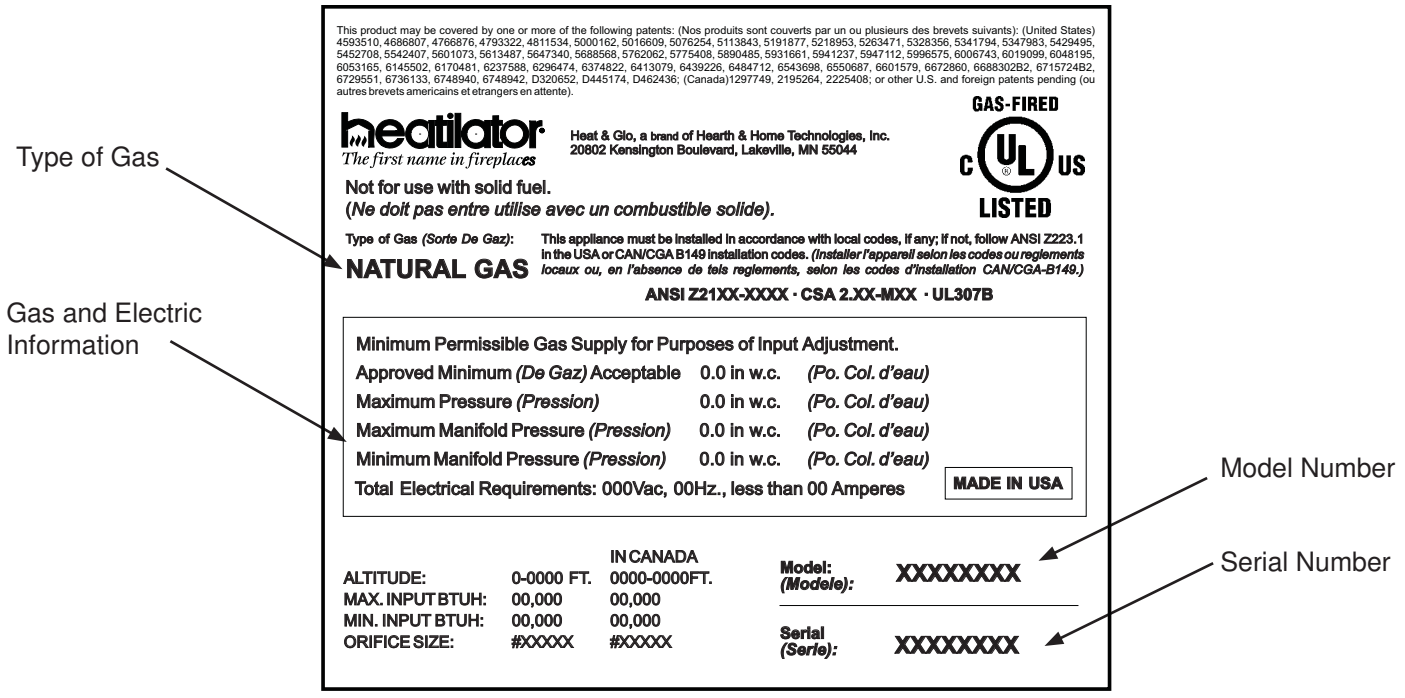
Dealership purchased from: _____ Dealer Phone: _____

Notes: _____

_____

Listing Label Information/Location

The model information regarding your specific fireplace can be found on the rating plate usually located in the control area of the fireplace.



⚠ Safety Alert Key:

- ***DANGER!*** *Indicates a hazardous situation which, if not avoided will result in death or serious injury.*
- ***WARNING!*** *Indicates a hazardous situation which, if not avoided could result in death or serious injury.*
- ***CAUTION!*** *Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.*
- ***NOTICE:*** *Used to address practices not related to personal injury.*

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➔ = Contains updated information.

B. Limited Lifetime Warranty

heatilator®
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Gas Appliance (Fireplace)
Limited Lifetime Warranty

HEARTH & HOME TECHNOLOGIES INC. ("HHT") extends the following warranty for HEATILATOR® gas appliances installed in the United States of America or Canada (the "Appliance"). Dealers and employees of HHT have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty.

Limited Lifetime Warranty

HHT warrants the Appliance for component failure due to a manufacturing defect of any of the following components: combustion chamber, burner pan, and logs. The Limited Lifetime Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the period the Appliance is owned by the original homeowner only, and is nontransferable.

1 Year Limited Warranty

HHT warrants the Appliance to be free from failure of any of the following components for a period of one year after installation: valve, flexible gas line connector, glass panel, fan, direct vent chimney components, factory paint, gasket, piezo ignitor, thermopile, thermocouple, junction box, pilot assembly, shutoff valve, high limit switch, refractory liners, transformer, and control box. If the Heatilator Appliance is found to be defective in either material or workmanship within one year of the date of original installation, HHT will provide replacement parts at no charge and pay reasonable labor and freight costs, and is for the period of one year following the date of original installation of the Appliance.

Conditions, Exclusions, & Limitations of Liability

A. Both the Limited Lifetime and 1 Year Limited Warranties supplied by HHT apply only while the Appliance is in its location of original installation. HHT's obligation under this warranty does not extend to damages resulting from (1) installation, operation or maintenance of the Appliance not in accordance with the Installation Instructions, Operating Instructions, and the Listing Agent Identification Label furnished with the Appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other causes; (5) use of fuels other than those specified in the Operating Instructions; (6) installation or use of components not supplied with the Appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the Appliance not expressly authorized and approved by HHT in writing. This warranty is limited to only the component parts manufactured or supplied by HHT.

B. HHT's liability under both the Limited Lifetime Warranty and the 1 Year Limited Warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) or at HHT's discretion, providing replacement parts at no charge and paying reasonable labor and freight costs.

C. EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.

D. Some states do not allow exclusions or limitations of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights which vary from state to state.

How to Obtain Service

To obtain service under this warranty you must:

1. Send written notice of the claimed condition to Heatilator Technical Service Department, Hearth & Home Technologies, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641-1563. You may also register your claim online at www.heatilator.com.
2. Provide proof of purchase, model number, serial number, and manufacturing date code to HHT.
3. Provide HHT reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Appliance prior to any repair or replacement work and before the Appliance or any component of the Appliance has been removed from the place of original installation.
4. Obtain HHT's consent to any warranty work before the work is done.

ADDITIONAL INFORMATION:

If you would like information on current HEATILATOR products or want to locate a dealer in your area, call 1-800-927-6841.

1 Listing and Code Approvals

A. Appliance Certification

MODELS: **GBST4336I, GBFL4136I**

LABORATORY: **Underwriters Laboratories, Inc. (UL)**

TYPE: **B-Vent Decorative**

STANDARD: **ANSI Z21.50-2007 • CSA 2.22-2007**

This product is listed to ANSI standards for "Vented Gas Fireplaces" and "Gas Fired Appliances for Use at High Altitudes".

This model (natural gas and propane) can be installed in a bedroom (in the United States) which has a total volume of unconfined space appropriate to the particular installation. Refer to the **National Fuel Gas Code ANSI Z223.1/ NFPA 54 (current edition), The Uniform Mechanical Code - (current edition)**, and local Building Officials for the options allowed in obtaining an effective bedroom volume of unconfined space.

This model may be installed in a sleeping room when the provisions for combustion, ventilation and dilution air are met per the requirements of ANSI 223.1/NFPA 54 National Fuel Gas Code. In Canada, installation in a sleeping room requires installation with a thermostat certified for use with this product. Consult your local authorities having jurisdiction.

NOTICE: *This installation must conform with local codes. In the absence of local codes you must comply with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A. and the CAN/CGA B149 Installation Codes in Canada.*

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE. This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Tempered Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** and **CPSC 16 CFR 1202** (Safety Glazing Certification Council **SGCC# 1595** and **1597**. Architectural Testing, Inc. Reports **02-31919.01** and **02-31917.01**).

This statement is in compliance with **CPSC 16 CFR Section 1201.5** "Certification and labeling requirements" which refers to **15** U.S. Code **(USC) 2063** stating "…Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

C. BTU Specifications

Models *(U.S. or Canada)*		**Maximum Input BTU/h**	**Minimum Input BTU/h**	**Orifice Size (DMS)**
GBST4336I (NG) GBFL4136I (NG)	*US (0-2000 FT)*	37,000	26,000	32
	CANADA (2000-4500 FT)	33,300	23,400	33
GBST4336I (LP) GBFL4136I (LP)	*US (0-2000 FT)*	36,000	27,000	50
	CANADA (2000-4500 FT)	32,400	24,300	51

D. High Altitude Installations

NOTICE: *If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.*

When installing above 2000 feet elevation:

- In the USA: Reduce burner orifice 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce burner orifice 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

E. Non-Combustible Materials Specification

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof.

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 ºC** and **UL763** shall be considered non-combustible materials.

F. Combustible Materials Specification

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or plastered or unplastered shall be considered combustible materials.

A. Gas Fireplace Safety

⚠ WARNING

HOT SURFACES!
Glass and other surfaces are hot during operation AND cool down.

Hot glass will cause burns.
- **DO NOT** touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away

- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures.

High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

If you expect that small children or vulnerable adults may come into contact with this fireplace, the following precautions are recommended:

- Install a physical barrier such as:
  - A decorative firescreen.
  - Adjustable safety gate.
- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.
- Never leave children alone near a hot fireplace, whether operating or cooling down.
- Teach children to NEVER touch the fireplace.
- Consider not using the fireplace when children will be present.

Contact your dealer for more information, or visit: www.hpba.org/staysafe.

To prevent unintended operation when not using your fireplace for an extended period of time (summer months, vacation/trips, etc):

- Remove batteries from remote controls.
- Turn off wall controls.
- Unplug 3 volt adapter plug and remove batteries on IPI models.

B. Your Fireplace

WARNING! DO NOT operate fireplace before reading and understanding operating instructions. *Failure to operate fireplace according to operating instructions could cause fire or injury.*

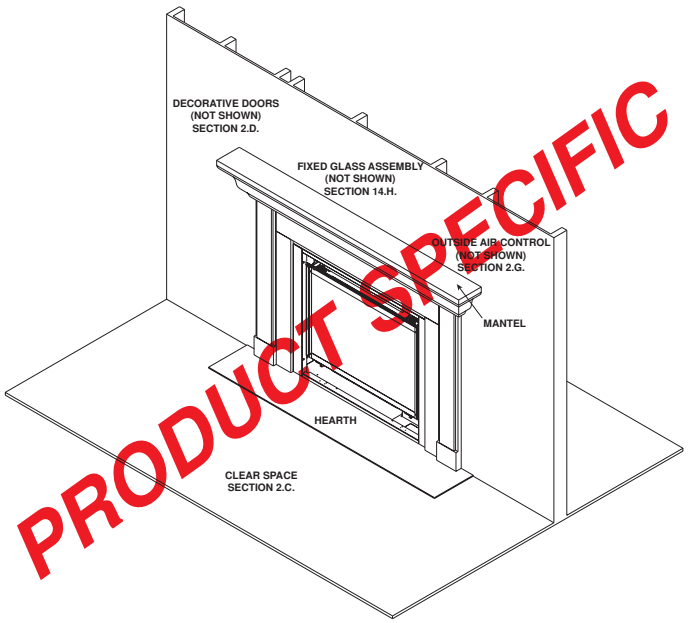


Figure 2.1 General Operating Parts

C. Clear Space

WARNING! DO NOT *place combustible objects in front of the fireplace or block louvers. High temperatures may start a fire. See Figure 2.2.*

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.

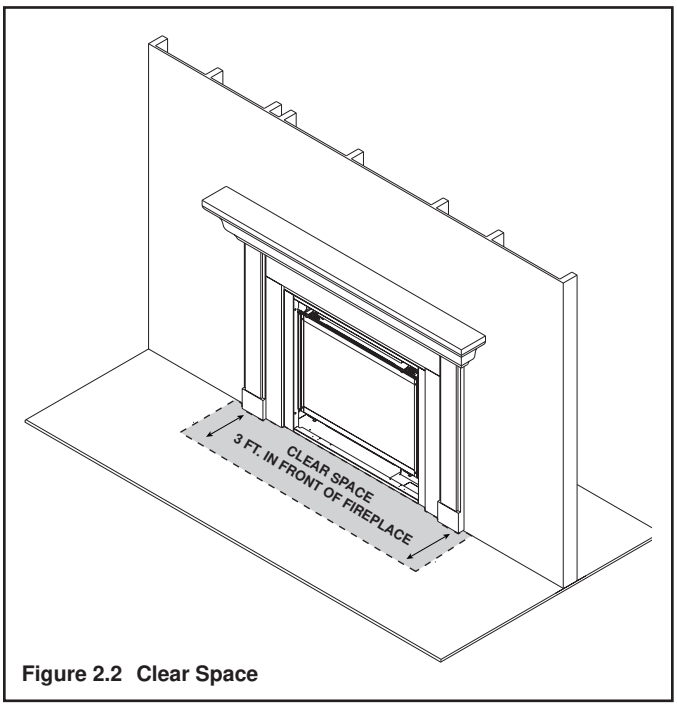


Figure 2.2 Clear Space

D. Decorative Doors and Fronts

WARNING! Risk of Fire! *Install ONLY doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts may cause fireplace to overheat.*

This fireplace has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. DO NOT operate the fireplace with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

For more information refer to the instructions supplied with your decorative door or front.

E. Fixed Glass Assembly

See Section 14.K.

F. Remote Controls, Wall Controls and Wall Switches

Follow the instructions supplied with the control installed to operate your fireplace:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

See your dealer if you have questions.

G. Outside Air (optional)

The outside air kit supplies some fresh combustion air for your fireplace. It may help reduce the effects of negative air pressure. (See Section 6.B.)

- Refer to Figure 2.1 for location of control.
- Close the inlet to prevent cold drafts when the fireplace is not being used.

CAUTION! Risk of Burns! *The outside air control handle is HOT when fireplace is in operation. Adjust BEFORE lighting fire.*

H. Before Lighting Fireplace

Before operating this fireplace for the first time, **have a qualified service technician**:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, ember material and/or other decorative materials.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position and that the integral barrier is in place.

WARNING! Risk of Fire/Asphyxiation! DO NOT *operate fireplace with fixed glass assembly removed.*

I. Lighting Instructions (IPI)

The IPI system may be operated with two D-cell batteries. When using batteries, unplug the transformer. To prolong battery life, remove them when using the transformer.

FOR YOUR SAFETY READ BEFORE LIGHTING

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

A. This appliance is equipped with an intermittent pilot ignition (IPI) device which automatically lights the burner. **DO NOT** try to light the burner by hand.

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

WHAT TO DO IF YOU SMELL GAS

- **DO NOT** try to light any appliance.
- **DO NOT** touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

C. DO NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

WARNING:

DO NOT CONNECT 110 VAC TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

Keep burner and control compartment clean. See installation and operating instructions accompanying appliance.

CAUTION:

Hot while in operation. **DO NOT** touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

DO NOT operate the appliance with fixed glass assembly removed, cracked or broken. Replacement of the fixed glass assembly should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

For use with natural gas and propane. A conversion kit, as supplied by the manufacturer, shall be used to convert this appliance to the alternate fuel.

Also Certified for Installation in a Bedroom or a Bedsitting Room.

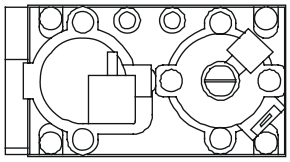
For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

For additional information on operating your Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

LIGHTING INSTRUCTIONS (IPI)

1. Turn off all electric power to the appliance.
2. This appliance is equipped with an ignition device which automatically lights the burner. **DO NOT** try to light the burner by hand.

GAS VALVE



3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you do not smell gas, go to next step.
4. Turn on all electric power to the appliance.
5. To light the burner, flip the ON/OFF switch to the "ON" position. (The ON/OFF switch may include a wall switch if so equipped).
6. If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Turn wall control or ON/OFF switch to "OFF".
2. Turn off all electric power to the appliance if service is to be performed.

593-913F

Final inspection by _____

J. After Fireplace is Lit

Initial Break-in Procedure

- The fireplace should be run three to four hours continuously on high.
- Turn the fireplace off and allow it to completely cool.
- Remove fixed glass assembly. See Section 14.K.
- Clean fixed glass assembly. See Section 3.
- Replace the fixed glass assembly and run continuously on high an additional 12 hours.

This cures the materials used to manufacture the fireplace.

NOTICE! Open windows for air circulation during fireplace break-in.

- *Some people may be sensitive to smoke and odors.*
- *Smoke detectors may activate.*

K. Frequently Asked Questions

ISSUE	SOLUTIONS
Condensation on the glass	This is a result of gas combustion and temperature variations. As the fireplace warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the fireplace is allowed to burn for 20 to 40 minutes.
Odor from fireplace	When first operated, this fireplace may release an odor for the first several hours. This is caused by the curing of materials from manufacturing. Odor may also be released from finishing materials and adhesives used near the fireplace. These circumstances may require additional curing related to the installation environment.
Film on the glass	This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3 to 4 hours of initial burning. A non-abrasive cleaner such as gas appliance glass cleaner may be necessary. See your dealer.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the fireplace.

3 Maintenance and Service

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

When properly maintained, your fireplace will give you many years of trouble-free service. We recommend annual service by a qualified service technician.

A. Maintenance Tasks-Homeowner

Installation and repair should be done by a qualified service technician only. The fireplace should be inspected before use and at least annually by a professional service person.

The following tasks may be performed annually by the homeowner. If you are uncomfortable performing any of the listed tasks, please call your dealer for a service appointment.

More frequent cleaning may be required due to lint from carpeting or other factors. Control compartment, burner and circulating air passageway of the fireplace must be kept clean.

CAUTION! Risk of Burns! *The fireplace should be turned off and cooled before servicing.*

Glass Cleaning

Frequency: Seasonally

By: Homeowner

Tools Needed: Protective gloves, glass cleaner, drop cloth and a stable work surface.

CAUTION! Handle fixed glass assembly with care. *Glass is breakable.*

- *Avoid striking, scratching or slamming glass*
- *Avoid abrasive cleaners*
- ***DO NOT*** *clean glass while it is hot*

- Prepare a work area large enough to accommodate fixed glass assembly and door frame by placing a drop cloth on a flat, stable surface.

Note: Fixed glass assembly and gasketing may have residue that can stain carpeting or floor surfaces.

- Remove door or decorative front from fireplace and set aside on work surface.
- See Section 14.K for instructions to remove fixed glass assembly.
- Clean glass with a non-abrasive commercially available cleaner.
  - Light deposits: Use a soft cloth with soap and water
  - Heavy deposits: Use commercial fireplace glass cleaner (consult with your dealer)
- Carefully set fixed glass assembly in place on fireplace. Hold glass in place with one hand and secure glass latches with the other hand.
- Reinstall door or decorative front.

Doors, Surrounds, Fronts

Frequency: Annually

By: Homeowner

Tools needed: Protective gloves, stable work surface

- Assess condition of screen and replace as necessary.
- Inspect for scratches, dents or other damage and repair as necessary.
- Check that louvers are not blocked.
- Vacuum and dust surfaces.

Remote Control

Frequency: Seasonally

By: Homeowner

Tools needed: Replacement batteries and remote control instructions.

- Locate remote control transmitter and receiver.
- Verify operation of remote. Refer to remote control operation instructions for proper calibration and setup procedure.
- Place batteries as needed in remote transmitters and battery-powered receivers.
- Place remote control out of reach of children.

If not using your fireplace for an extended period of time (summer months, vacations/trips, etc), to prevent unintended operation:

- Remove batteries from remote controls.
- Unplug 3 volt adapter plug on IPI models.

Venting

Frequency: Seasonally

By: Homeowner

Tools needed: Protective gloves and safety glasses.

- Inspect venting and termination cap for blockage or obstruction such plants, bird nests, leaves, snow, debris, etc.
- Verify termination cap clearance to subsequent construction (building additions, decks, fences, or sheds). See Section 6.
- Inspect for corrosion or separation.
- Verify weather stripping, sealing and flashing remains intact.
- Inspect draft shield to verify it is not damaged or missing.

B. Maintenance Tasks-Qualified Service Technician

The following tasks must be performed by a qualified service technician.

Gasket Seal and Glass Assembly Inspection

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, drop cloth and a stable work surface.

- Inspect gasket seal and its condition.
- Inspect fixed glass assembly for scratches and nicks that can lead to breakage when exposed to heat.
- Confirm there is no damage to glass or glass frame. Replace as necessary.
- Verify that fixed glass assembly is properly retained and attachment components are intact and not damaged. Replace as necessary.

Logs

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves.

- Inspect for damaged or missing logs. Replace as necessary. Refer to Section 14 for log placement instructions.
- Verify correct log placement and no flame impingement causing sooting. Correct as necessary.

Firebox

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, sandpaper, steel wool, cloths, mineral spirits, primer and touch-up paint.

- Inspect for paint condition, warped surfaces, corrosion or perforation. Sand and repaint as necessary.
- Replace fireplace if firebox has been perforated.

Control Compartment and Firebox Top

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, dust cloths

- Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided.
- Remove all foreign objects.
- Verify unobstructed air circulation.

Burner Ignition and Operation

Frequency: Annually

By: Qualified Service Technician

Tools needed: Protective gloves, vacuum cleaner, whisk broom, flashlight, voltmeter, indexed drill bit set, and a manometer.

- Verify burner is properly secured and aligned with pilot or igniter.
- Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
- Replace ember materials with new dime-size pieces. **DO NOT** block ports or obstruct lighting paths. Refer to Section 14 for proper ember placement.
- Verify batteries have been removed from battery back-up IPI systems to prevent premature battery failure or leaking.
- Check for smooth lighting and ignition carryover to all ports. Verify that there is no ignition delay.
- Inspect for lifting or other flame problems.
- Verify air shutter setting is correct. See Section 14 for required air shutter setting. Verify air shutter is clear of dust and debris.
- Inspect orifice for soot, dirt and corrosion. Verify orifice size is correct. See Service Parts List for proper orifice sizing.
- Verify manifold and inlet pressures. Adjust regulator as required.
- Inspect pilot flame pattern and strength. See Figure 3.1 and 3.3 for proper pilot flame pattern. Clean or replace orifice spud as necessary.
- Inspect IPI flame sensing rod for soot, corrosion and deterioration. Clean with emery cloth or replace as required.
- Verify IPI millivolt output. Replace as necessary.

Figure 3.1 IPI Pilot Flame Patterns

A. Typical Appliance System

NOTICE: *Illustrations and photos reflect typical installations and are for design purposes only. Illustrations/diagrams are not drawn to scale. Actual product may vary from pictures in manual*

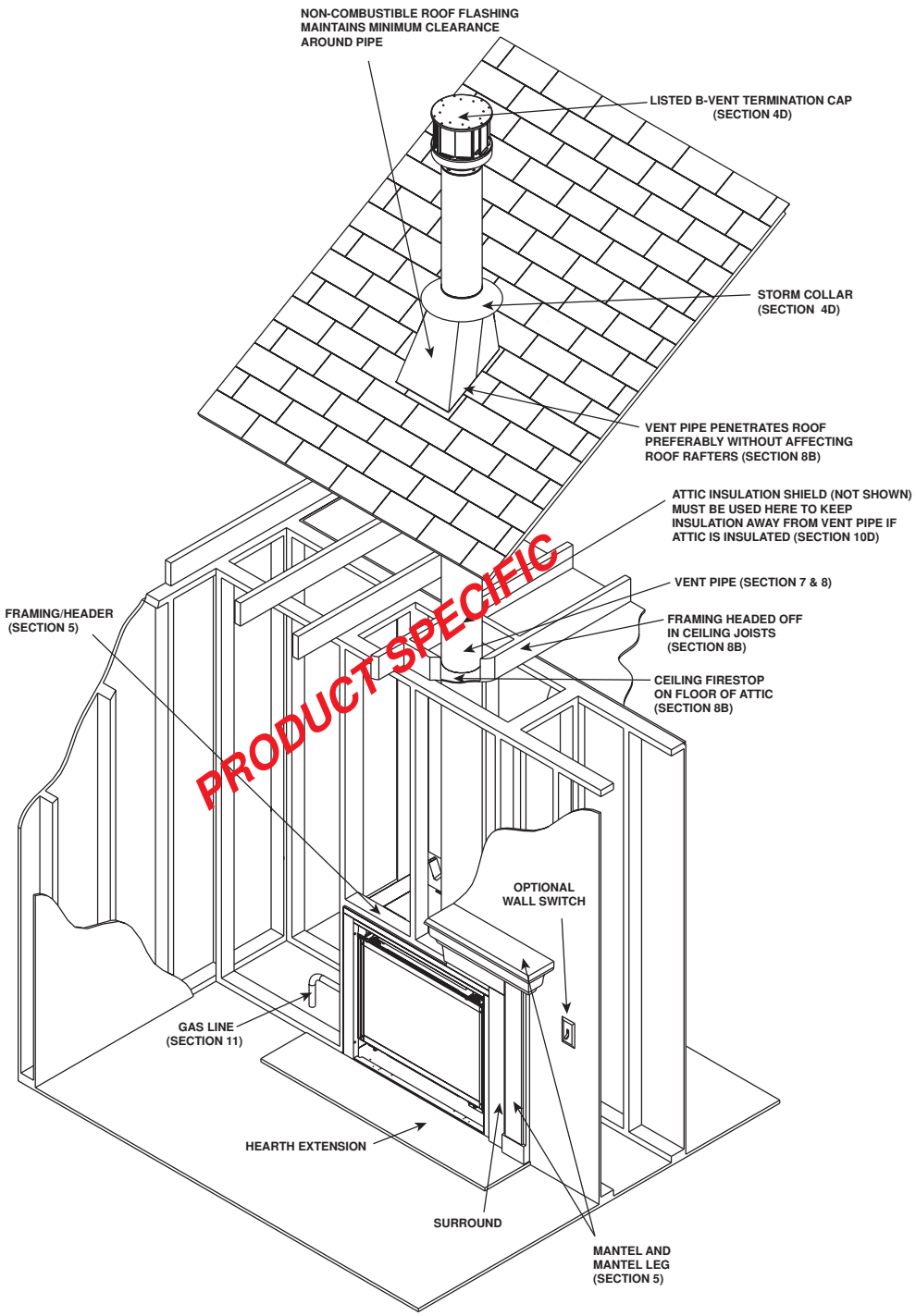


Figure 4.1 Typical System

B. Design and Installation Considerations

Heatilator B-type vent gas appliances are designed to operate with all exhaust gases expelled to the outside of the building, and combustion air pulled from the room.

Installation MUST comply with local, regional, state and national codes and regulations. Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Before installing, determine the following:

- Where the appliance is to be installed.
- The vent system configuration to be used.
- Gas supply piping.
- Electrical wiring requirements.
- Framing and finishing details.
- Whether optional accessories—devices such as a fan, wall switch, or remote control—are desired.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.

C. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Tape measure	Framing material
Pliers	High temperature caulking material
Hammer	Phillips screwdriver
Gloves	Framing square
Voltmeter	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Level	Reciprocating saw
Manometer	Flat blade screwdriver

Noncorrosive leak check solution

1/2 - 3/4 in. length, #6 or #8 Self-drilling screws

One 1/4 in. female connection (for optional fan).

D. Inspect Appliance and Components

The following B-vent components are needed for installation (see Figure 4.2).

- Fireplace Box
- Pipe Components
- Firestops
- Attic Insulation Shield
- Elbows
- Strapping
- Roof Flashing or Chase Top
- Termination Cap
- Storm Collar
- Carefully remove the appliance and components from the packaging.
- The vent system components and decorative doors and fronts may be shipped in separate packages.
- If packaged separately, the log set and appliance grate must be installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**

WARNING! Risk of Fire or Explosion! *Damaged parts could impair safe operation.* ***DO NOT i****nstall damaged, incomplete or substitute components. Keep appliance dry.*

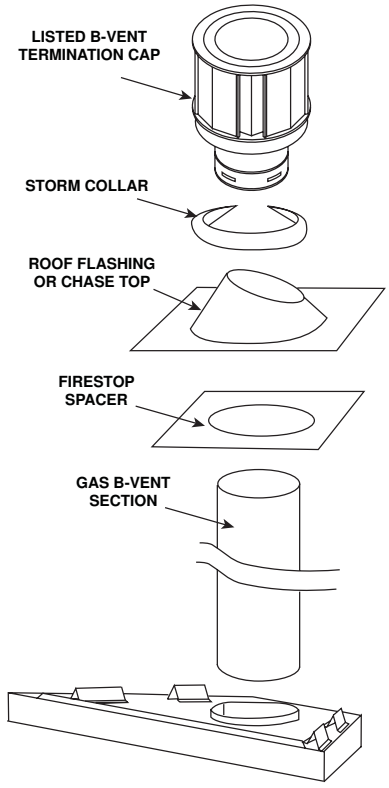


Figure 4.2 Typical Vertical Installation

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

WARNING! Risk of Fire, Explosion or Electric Shock! ***DO NOT*** *USE THIS APPLIANCE IF ANY PART HAS BEEN UNDER WATER. Call a qualified technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water.*

E. Negative Pressure

WARNING! Asphyxiation Risk! *Negative pressure can cause spillage of combustion fumes and soot. Fireplace needs to draft properly for safety.*

Draft is the pressure difference needed to vent fireplaces successfully. Considerations for successful draft include:

- Preventing negative pressure
- Location of fireplace and chimney

Negative pressure results from the imbalance of air available for the fireplace to operate properly. Causes for this imbalance include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks (recessed lighting, attic hatch opening, duct leaks)

To minimize the effects of negative air pressure, the following must be considered:

- Install the fresh air kit. Install the intake on the side of the house towards prevailing winds during the heating season.
- Ensure adequate outdoor air is supplied for combustion appliances and exhaust equipment.
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the fireplace.
- Avoid installing the fireplace near doors, walkways or small isolated spaces.
- Recessed lighting should be of "sealed can" design; attic hatches weather stripped or sealed; and attic mounted ductwork and air handler joints and seams taped or sealed.
- Basement installations should be avoided due to stack effect. Stack effect creates negative pressure in lower levels. Hearth & Home Technologies recommends the use of direct vent fireplaces in basements.

Location of the fireplace and chimney will affect performance. As shown in Figure 4.2, the chimney should:

- Be installed through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die-down of the fire.
- Penetrate the highest part of the roof. This minimizes the effects of wind turbulence.
- Be located away from trees, adjacent structures, uneven roof lines and other obstructions.

Offsets can restrict draft so their use should be minimized. Consider the fireplace location relative to floor and ceiling and attic joists.

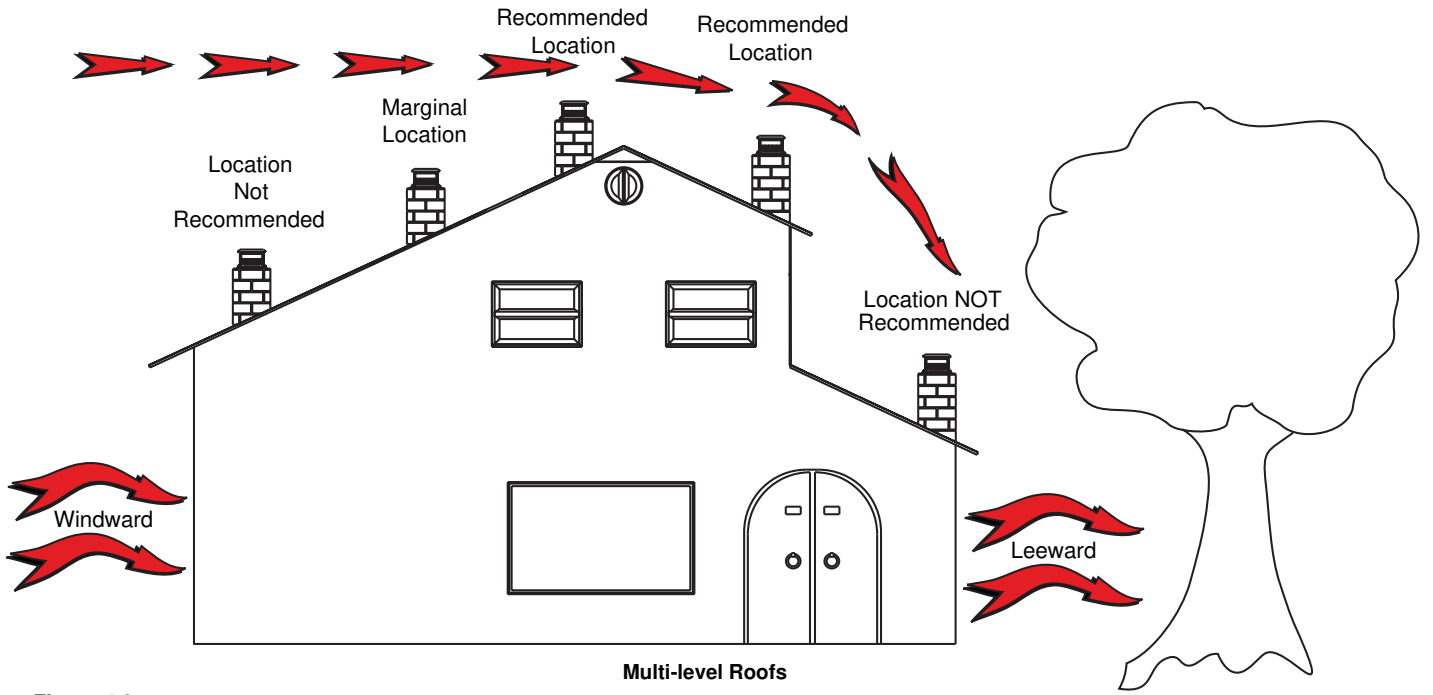


Figure 4.2

5 Framing and Clearances

A. Selecting Appliance Location

When selecting a location for the appliance it is important to consider the required clearances to walls (see Figure 5.1).

WARNING! Risk of Fire or Burns! *Provide adequate clearance around air openings and for service access.* ***Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.***

NOTICE: *Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY. Illustrations/diagrams are not drawn to scale. Actual installation may vary due to individual design preference.*

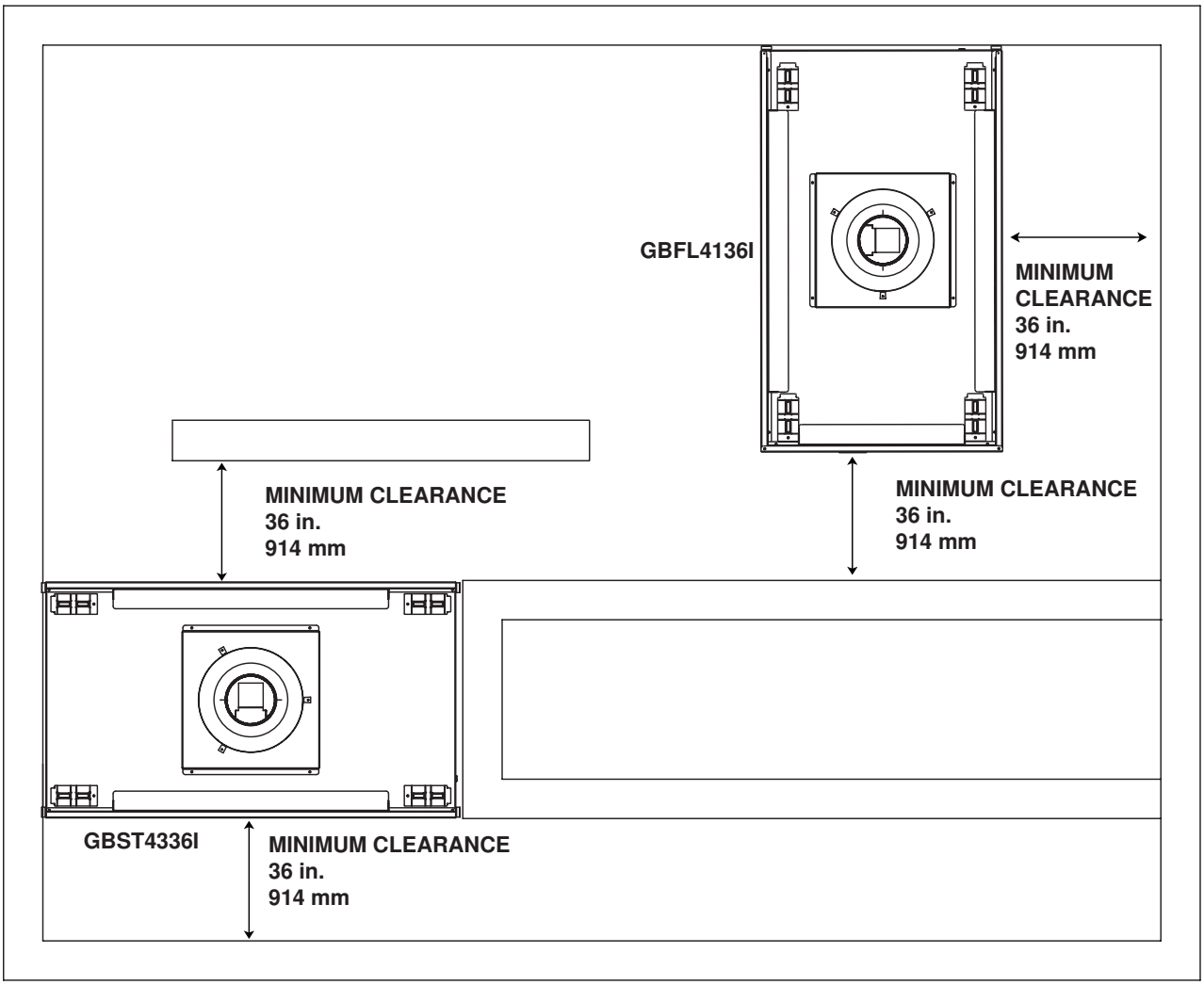


Figure 5.1 Appliance Locations

B. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should enclosed inside the chase.

NOTICE: *Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps.*

Chases should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner.

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheetrocked and taped for maximum air tightness.

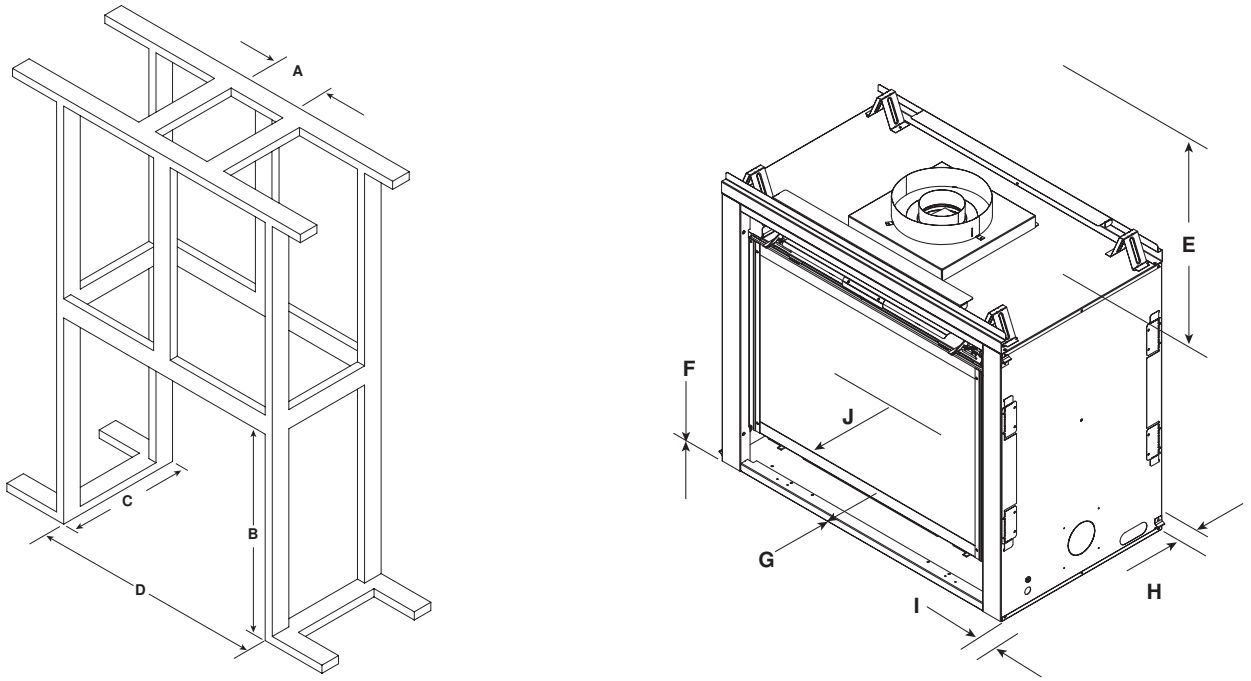
To further prevent drafts, the wall shield and ceiling firestops should be caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temp caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

C. Clearances

NOTICE: *Install appliance on hard metal or wood surfaces extending full width and depth.* ***DO NOT*** *install directly on carpeting, vinyl, tile or any combustible material other than wood.*

WARNING! Risk of Fire! *Maintain specified air space clearances to appliance and vent pipe:*

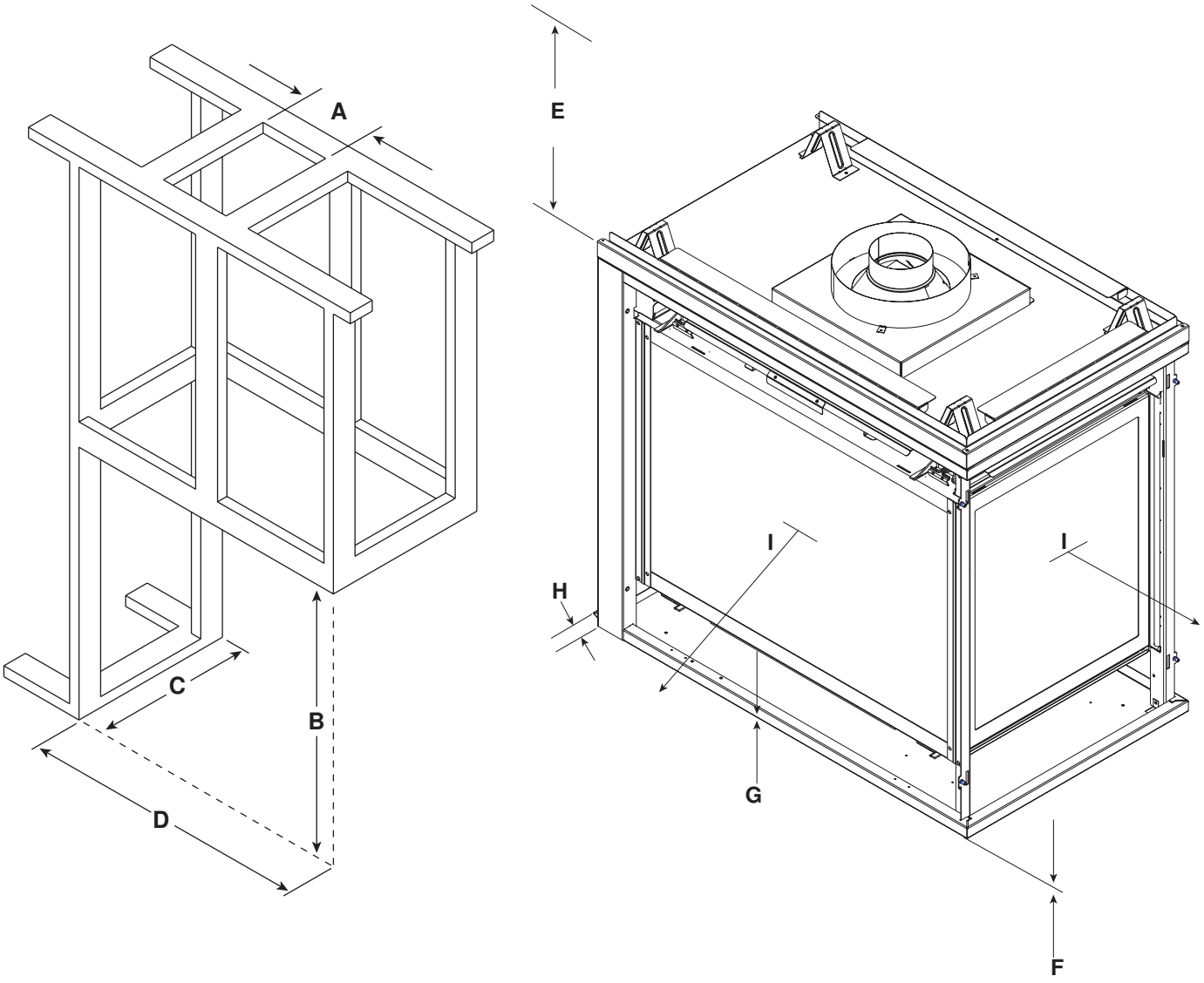
- Insulation and other materials must be secured to prevent accidental contact.
- Failure to maintain airspace may cause overheating and a fire.



MINIMUM FRAMING DIMENSIONS*										
GBST4336I	A	B	C*	D	E	F	G	H	I	J
	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance
Inches	7	38-1/2	23	43	31-5/8	0	0	36	1/2	36
Millimeters	178	978	584	1092	803	0	0	914	13	914

* Adjust framing dimensions for interior sheathing (such as sheetrock)

Figure 5.2 Clearances to Combustibles, Model GBST4336I



MINIMUM FRAMING DIMENSIONS*									
GBFL4136I	A	B	C*	D	E	F	G	H	I
	Rough Opening (Vent Pipe)	Rough Opening (Height)	Rough Opening (Depth)	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	End of Appliance	Sides of Appliance
Inches	**	38-1/2	23	41	31-5/8	0	0	1/2	36
Millimeters	**	978	584	1041	803	0	0	13	914

* Adjust framing dimensions for interior sheathing (such as sheetrock)
**See pipe manufacturer's installation instructions

Figure 5.3 Clearances to Combustibles, Model GBFL4136I

D. Mantel and Wall Projections

WARNING! Risk of Fire! *Comply with all minimum clearances to combustibles as specified. Framing or finishing material closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc).*

GBST4336I Mantel Projection

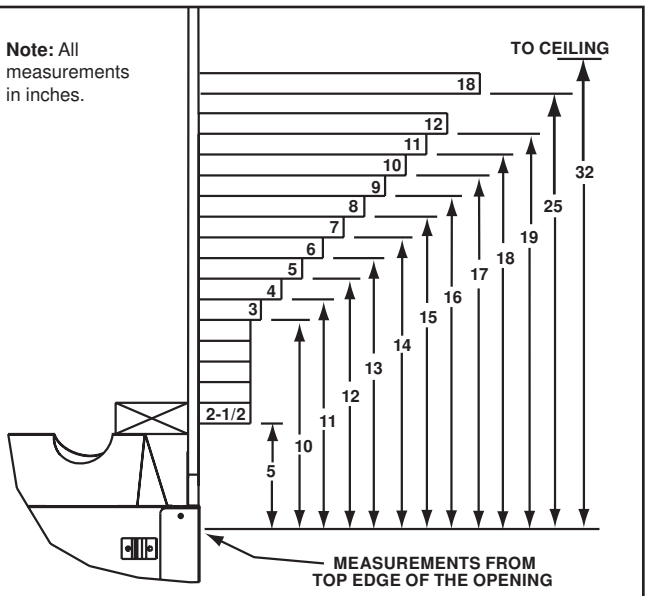


Figure 5.4 Minimum Clearances to Combustible Mantels or Other Combustibles Above Appliance

GBFL4136I Mantel Projection

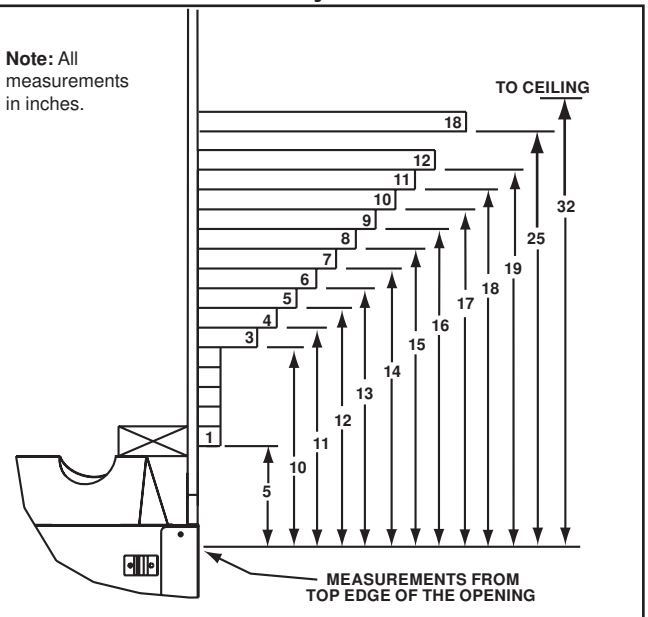


Figure 5.5 Minimum Clearances to Combustible Mantels or Other Combustibles Above Appliance

Combustible Mantel Legs or Wall Projections

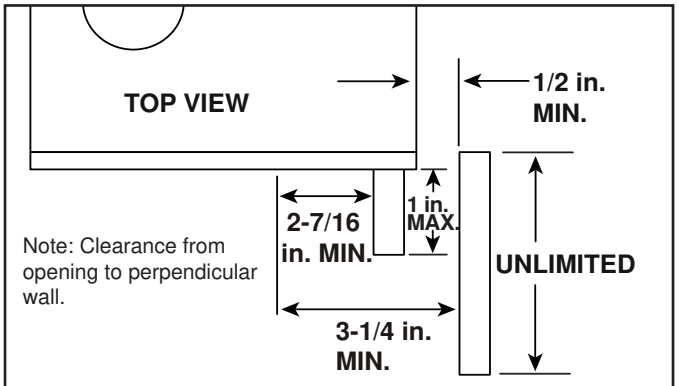


Figure 5.6 Clearances to Combustible Mantel Legs or Wall Projections (Acceptable on both sides of opening.)

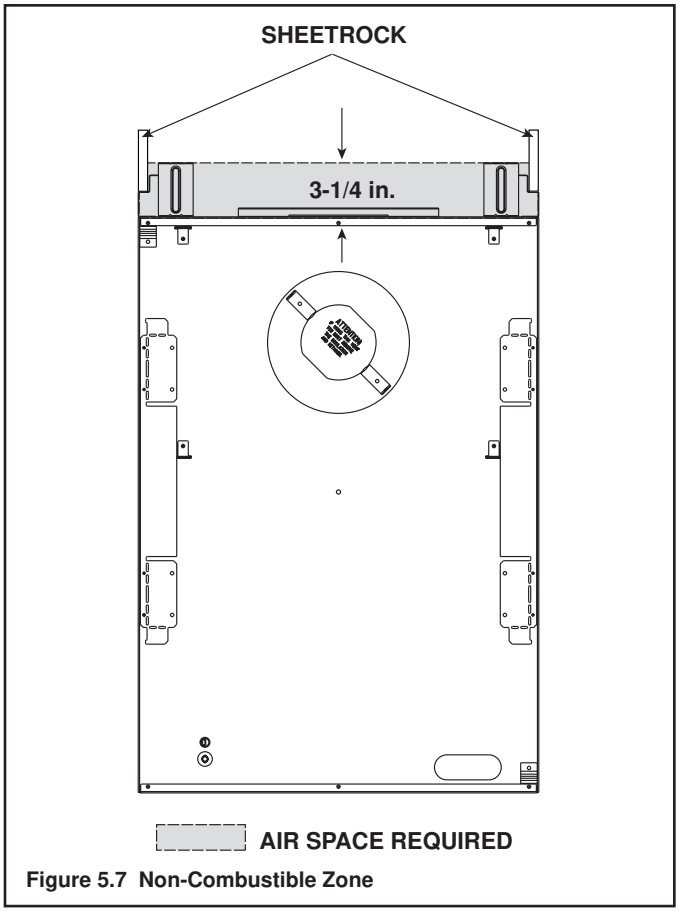


Figure 5.7 Non-Combustible Zone

6 Termination Locations

A. Vent Termination Minimum Clearances

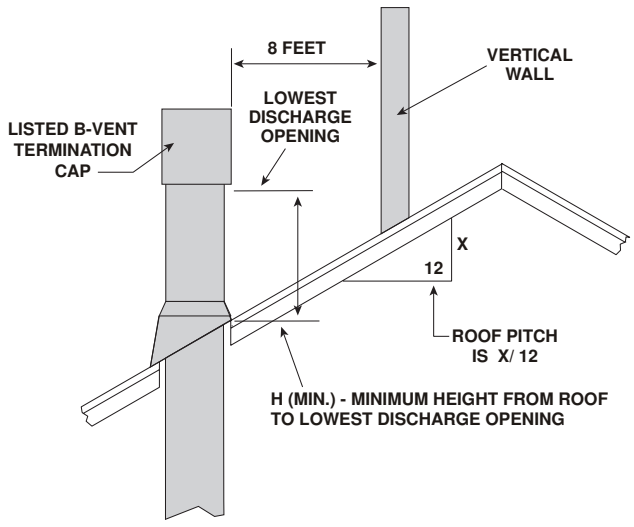
⚠ WARNING

Fire Risk.

Maintain vent clearance to combustibles as specified.

- **DO NOT** pack air space with insulation or other materials.

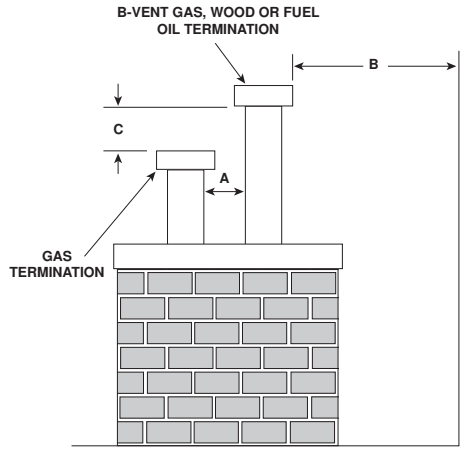
Failure to keep insulation or other materials away from vent pipe may cause overheating and fire.



Roof Pitch	H (Min.) Ft.
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
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

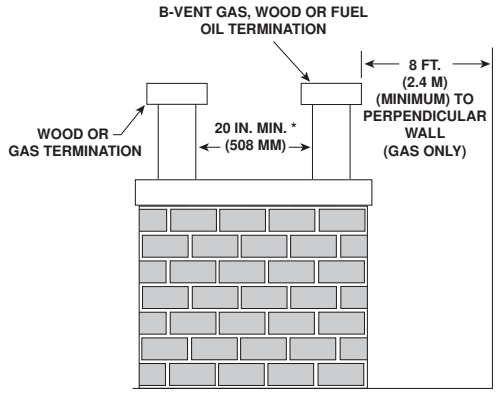
* 3 foot minimum in snow regions

Figure 6.1 Minimum Height From Roof To Lowest Discharge Opening



	Termination	Wood & Fuel Oil Termination	Comments
A	6 in.	20 in. min.	Horizontal distance between terminations
B	8 ft.	8 ft. min.	Distance to perpendicular wall
C	18 in.	18 in.	Vertical distance between terminations

Figure 6.2 Staggered Termination Caps



* IF USING DECORATIVE CAP COVER(S), THIS DISTANCE MAY NEED TO BE INCREASED. REFER TO THE INSTALLATION INSTRUCTIONS SUPPLIED WITH THE DECORATIVE CAP COVER.

Figure 6.3 Leveled Termination Caps

7 Vent Information and Diagrams

A. Vent Guidelines

WARNING! Fire Risk/Asphyxiation! *This appliance requires the specified pipe for operation. Incorrect pipe may cause spillage, condensation and overheating.*

These models require the following size B-Vent double wall, or single wall rigid or flex vent pipe.

Models	Pipe Size
GBST4336I	5 inches
GBFL4136I	5 inches

- Follow pipe manufacturer's installation guidelines when installing the appliance.

WARNING! Fire Risk/Explosion/Asphyxiation! DO NOT *connect this gas appliance to a chimney flue serving a separate solid-fuel or gas burning appliance.*

- *Vent this appliance directly outside.*
- *Use separate vent system for this appliance.*

May impair safe operation of this appliance or other appliances connected to the flue.

B. Vent System Configuration

CAUTION! Risk of Fire! *ALL vent configuration specifications MUST be followed. This product is tested and listed to these specifications. Appliance performance will suffer if specifications are not followed.*

Rise to Run Ratio = 2:1

Maximum Total Horizontal Run = 15 ft.

Minimum Total Vertical Rise for 0-2 Elbows = 12 ft.

Maximum Total Vertical Rise = 50 ft.

Maximum Number of Elbows: Four 90º or Four 45º

Maximum Total Vertical Rise for Four 90º Elbows=16 ft.

See Figures 7.1, 7.2, 7.3.

WARNING! Risk of Fire or Explosion! *Insulation and other combustibles must not infringe on clearances.*

- *ALWAYS maintain specified clearances around venting and firestop systems.*
- *Install firestops as specified.*

Failure to keep insulation or other material away from vent pipe may cause fire.

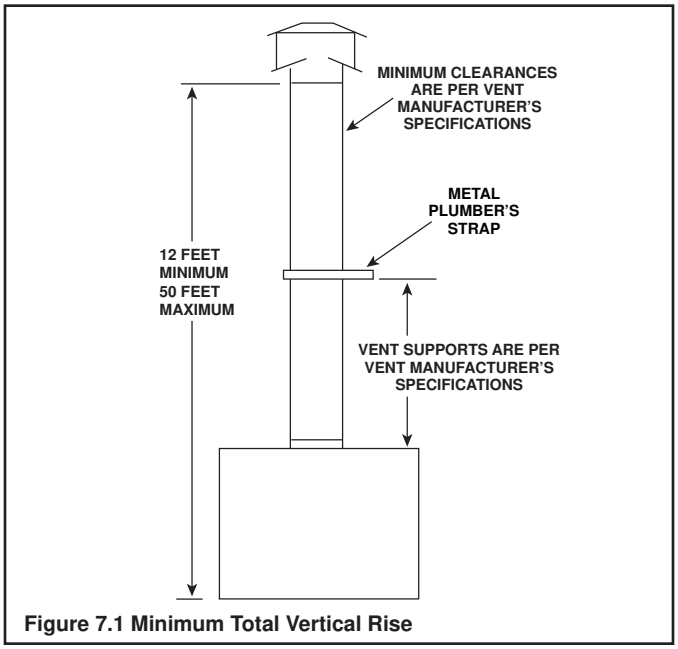


Figure 7.1 Minimum Total Vertical Rise

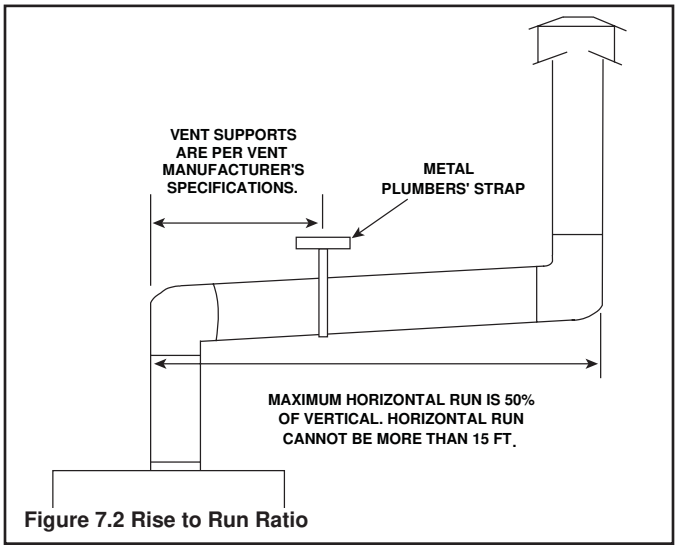


Figure 7.2 Rise to Run Ratio

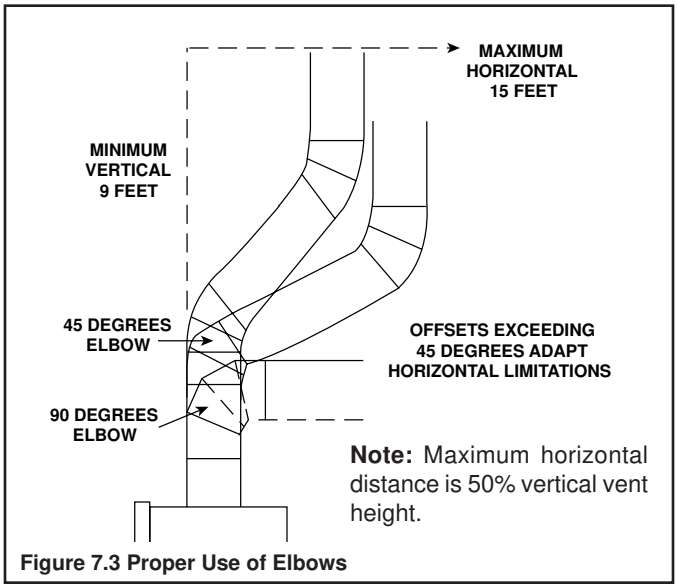


Figure 7.3 Proper Use of Elbows

8 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

Vent clearances are per vent manufacturer's specifications. MUST be Listed B-Vent pipe.

WARNING! Risk of Fire! *Maintain air space clearance to vent.* ***DO NOT*** *pack insulation or other combustibles:*

- *Between ceiling firestops*
- *Between wall shield firestops*
- *Around vent system*

Failure to keep insulation or other material away from vent pipe may cause over heating and fire.

B. Wall and Ceiling Penetration Framing

For a wall or ceiling penetration consult B-vent pipe manufacturer's instructions to provide adequate clearances. Use same size framing materials as those used in the wall or ceiling construction. Firestop spacers must be used in wall and ceiling penetrations per the B-Vent pipe manufacturer's specifications and national, regional and local codes.

Note: MUST terminate vertically.

C. Vertical Penetration Framing

WARNING! Fire Risk. DO NOT *allow loose materials or insulation to touch vent. Hearth & Home Technologies Inc. requires the use of an attic shield.*

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet specified clearance and be secured in place.

Use B-vent manufacturer's firestops to provide adequate clearances.

9 Appliance Preparation

A. Installing Outside Air Kit Damper Assembly

CAUTION! Risk of Cuts/Abrasions/Flying Debris. *Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.*

WARNING! Risk of Fire/Asphyxiation. DO NOT *draw outside combustion air from:*

- *Wall, floor or ceiling cavity.*
- *Enclosed space such as an attic or garage.*
- *Close proximity to exhaust vents or chimneys.*

Fumes or odor may result.

- Remove and discard cover plate or knockout from side of appliance.
- Open air kit damper slightly.
- Locate door hinge toward back of appliance (see Figure 9.1).

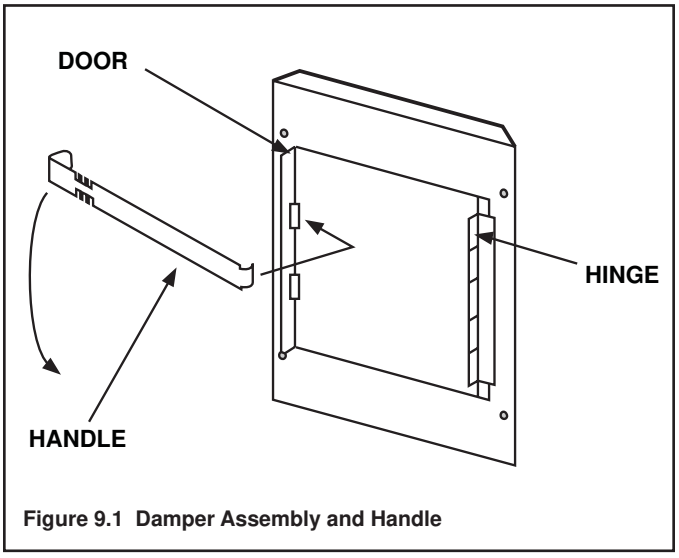


Figure 9.1 Damper Assembly and Handle

- Attach damper assembly to appliance using screws provided (see Figure 9.2).
- Insert narrow end of handle through tab and into upper slot of door.
- Check handle operation. Pull handle out to open, and in to close.

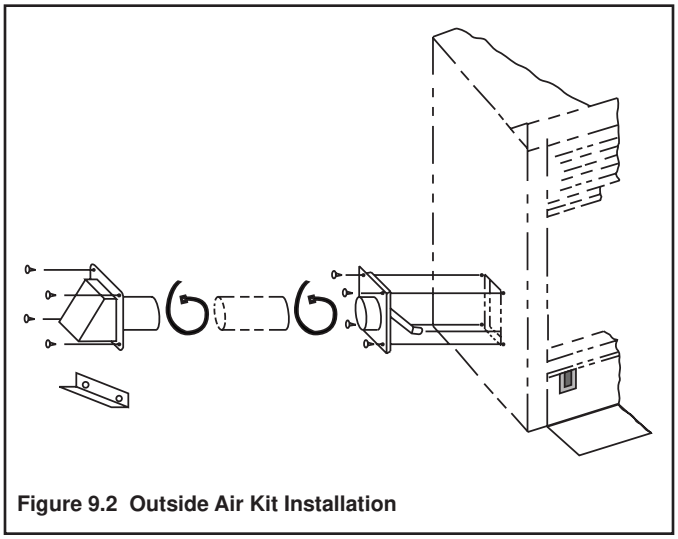


Figure 9.2 Outside Air Kit Installation

B. Gas and Electrical Connections

If applicable, ensure that gas and electrical connections are installed at this time. Refer to Sections 11 and 12.

C. Securing and Leveling the Appliance

WARNING! Risk of Fire! *Prevent contact with:*

- *Sagging or loose insulation*
- *Insulation backing or plastic*
- *Framing and other combustible materials*

Block openings into the chase to prevent entry of blown-in insulation. Make sure insulation and other materials are secured.

DO NOT *notch the framing around the appliance standoffs.*

Failure to maintain air space clearance may cause overheating and fire.

NOTICE: *Failure to ensure that the fireplace opening is square may result in the decorative front not fitting properly.*

The diagram shows how to properly position, level, and secure the appliance (see Figure 9.3). Nailing tabs are provided to secure the appliance to the framing members.

1. Venting - refer to Vent Clearances and Framing (Section 8) for hole location.
2. Place the appliance into position, making sure to maintain proper clearance to combustibles.
3. Level the appliance from side to side and front to back. It is acceptable to use wood shims under the appliance.
4. Fasten the appliance to the floor.
5. Bend out nailing tabs on each side making sure to keep the nailing tabs flush with the framing.
6. Using a framing square, make sure that the sides of the appliance are square to the bottom as shown in Figure 9.4.
7. Secure the appliance to the framing by using nails or screws through the nailing tabs. It is acceptable to use plumber strap to secure the unit to the framing if necessary.

Note: Once appliance is setup for top or rear venting, it CANNOT be changed at a later time.

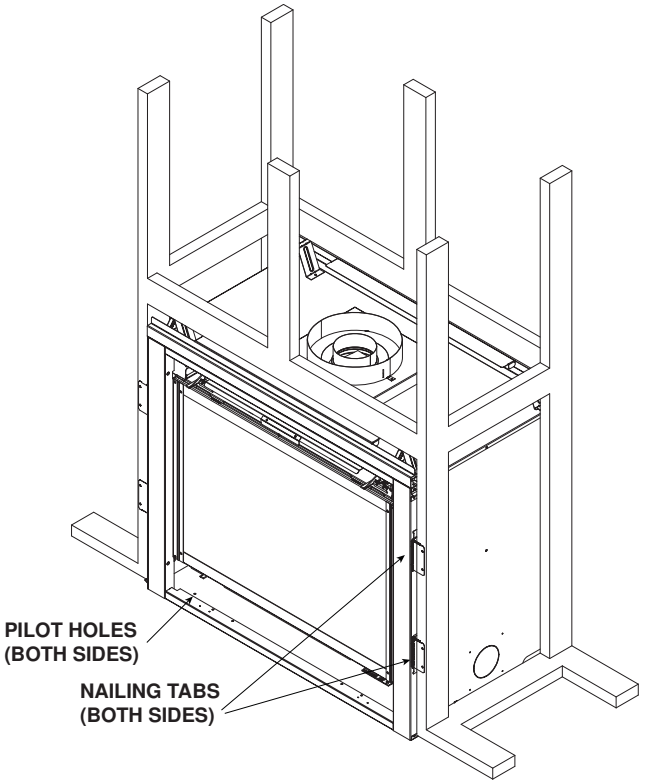


Figure 9.3 Proper Positioning, Leveling And Securing of an Appliance

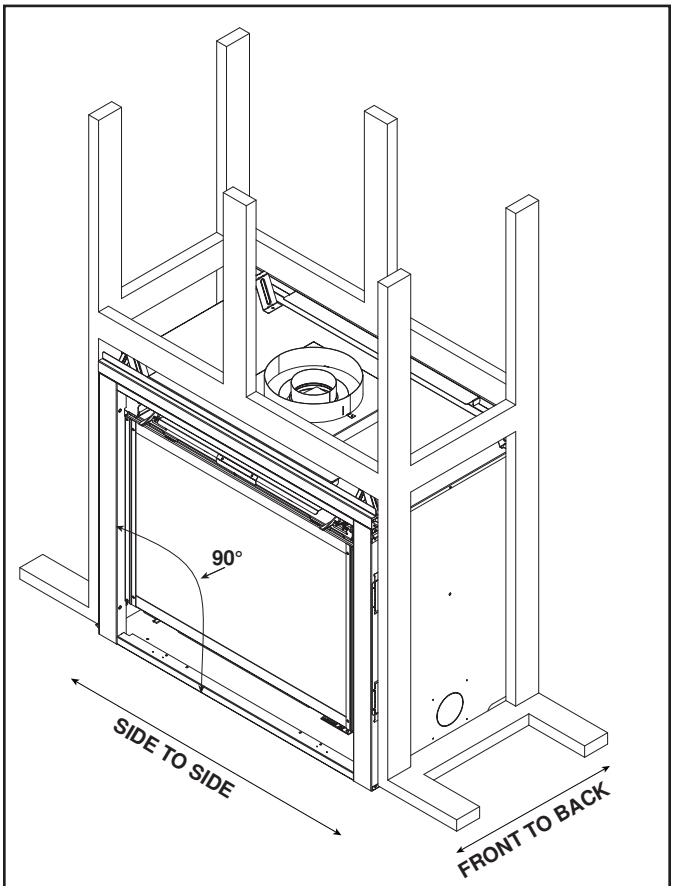


Figure 9.4 Proper Positioning, Leveling And Securing of an Appliance

10 Installing Vent Pipe

A. Assembly of Vent Sections

This B-Vent appliance requires 5 in. B-vent double-wall pipe. Follow the pipe manufacturer's installation guidelines when installing the unit. This will ensure proper operation and prevent safety hazards.

WARNING! Risk of Fire/Exhaust Fumes! *Assemble pipe sections per B-vent manufacturer's instructions. Use support tabs for screws. Pipe may separate if not properly joined.*

B. Attaching Vent to Firebox

Attach the first B-Vent component to the flue outlet collar using 3 self-tapping screws. See Figure 8.1.

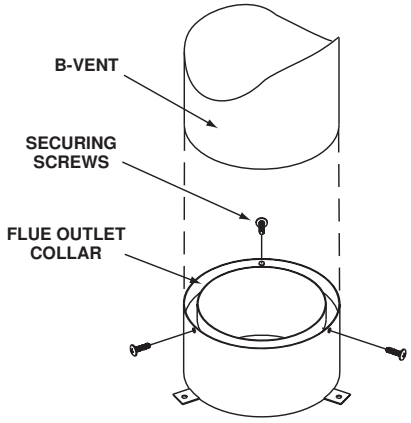


Figure 8.1

C. Securing Vent Sections

Secure vent sections with vent supports following B-vent manufacturer's instructions.

WARNING! Risk of Fire or Explosion! *Use vent run supports per vent manufacturer's installation instructions. Connect vent sections per vent manufacturer's installation instructions. Maintain all clearances to combustibles. Maintain specified slope (if required). Improper support may allow vent to sag or separate.*

D. Install Attic Insulation Shield

WARNING! Fire Risk. DO NOT *allow loose materials or insulation to touch vent. Hearth & Home Technologies Inc. requires the use of an attic shield.*

The National Fuel Gas Code ANSI Z223.1 and NFPA 54 requires an attic shield constructed of 26 gauge minimum metal that extends at least 2 in. (51 mm) above insulation.

Attic shields must meet specified clearance and be secured in place.

11 Gas Information

A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician (NFI certified or factory-trained) using Hearth & Home Technologies specified and approved parts.

B. Gas Pressure

- Optimum appliance performance requires proper input pressures.
- Gas line sizing requirements will be determined in ANSI Z221.3 National Fuel Gas Code in the USA and CAN/CGA B149 in Canada.
- Pressure requirements are:

Gas Pressure	Natural Gas	Propane
Minimum inlet pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum inlet pressure	14.0 in. w.c.	14.0 in. w.c.
Manifold pressure	3.5 in. w.c.	10.0 in. w.c.

WARNING! Risk of Fire or Explosion! *High pressure will damage valve. Low pressure may cause explosion.*

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 1/2 psig.

⚠ WARNING

Fire Risk.

Explosion Hazard.

High pressure will damage valve.

- Disconnect gas supply piping BEFORE pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve BEFORE pressure testing gas line at test pressures equal to or less than 1/2 psig.

Note: Have the gas supply line installed in accordance with local codes, if any. If not, follow ANSI 223.1. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter).

Note: A listed (and Commonwealth of Massachusetts approved) 1/2 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2in. (13 mm) control valve inlet.

- **If substituting for these components, please consult local codes for compliance.**

C. Gas Connection

- Refer to Reference Section 16 for location of gas line access in appliance.
- Gas line may be run through knockout(s) provided.
- The gap between supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, unfaced insulation to prevent cold air infiltration.
- Ensure that gas line does not come in contact with outer wrap of the appliance. Follow local codes.
- Pipe incoming gas line into valve compartment.
- Connect incoming gas line to the 1/2 in. (13 mm) connection on manual shutoff valve.

WARNING! Risk of Fire or Explosion! *Support control when attaching pipe to prevent bending gas line.*

- A small amount of air will be in the gas supply lines.

WARNING! Risk of Fire or Explosion! *Gas build-up during line purge could ignite.*

- *Purge should be performed by technician certified by NFI or factory-trained.*
- *Ensure adequate ventilation.*
- *Ensure there are no ignition sources such as sparks or open flames.*

Light the appliance. It will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

WARNING! Risk of Fire, Explosion or Asphyxiation! *Check all fittings and connections with a non-corrosive commercially available leak-check solution.* ***DO NOT*** *use open flame. Fittings and connections could have loosened during shipping and handling.*

WARNING! Risk of Fire! DO NOT *change valve settings. This valve has been preset at the factory.*

D. High Altitude Installations

NOTICE: *If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.*

When installing above 2000 feet elevation:

- In the USA: Reduce burner orifice 4% for each 1000 feet above 2000 feet.
- In CANADA: Reduce burner orifice 10% for elevations between 2000 feet and 4500 feet. Above 4500 feet, consult local gas utility.

12 Electrical Information

A. Wiring Requirements

NOTICE: *This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with* **National Electric Code ANSI/NFPA 70-latest edition** *or the* **Canadian Electric Code CSA C22.1.**

- Wire the appliance junction box to 110-120 VAC. This is required for use of optional accessories (standing pilot ignition) or proper operation of the appliance (Intellifire ignition).
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

WARNING! Risk of Shock or Explosion! DO NOT *wire 110V to the valve or to the appliance wall switch. Incorrect wiring will damage controls.*

B. Intellifire Ignition System Wiring

- Wire the appliance junction box to 110 VAC for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! *DO NOT wire IPI controlled appliance junction box to a switched circuit. Incorrect wiring will override IPI safety lockout.*

- Refer to Figure 12.2, Intellifire Pilot Ignition (IPI) Wiring Diagram.
- This appliance is equipped with an Intellifire control valve which operates on a 3 volt system.
- Plug the 3-volt AC transformer into the appliance junction box to supply power to the unit OR install two D cell batteries (not included) into the battery pack before use.

NOTICE: *Batteries should not be placed in the battery pack while using the transformer. Remove batteries before using the transformer, and unplug the transformer before installing the batteries. Battery polarity must be correct or module damage will occur.*

C. Optional Accessories Requirements

- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

D. Electrical Service and Repair

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

WARNING! Risk of Shock! *Replace damaged wire with type 105° C rated wire. Wire must have high temperature insulation.*

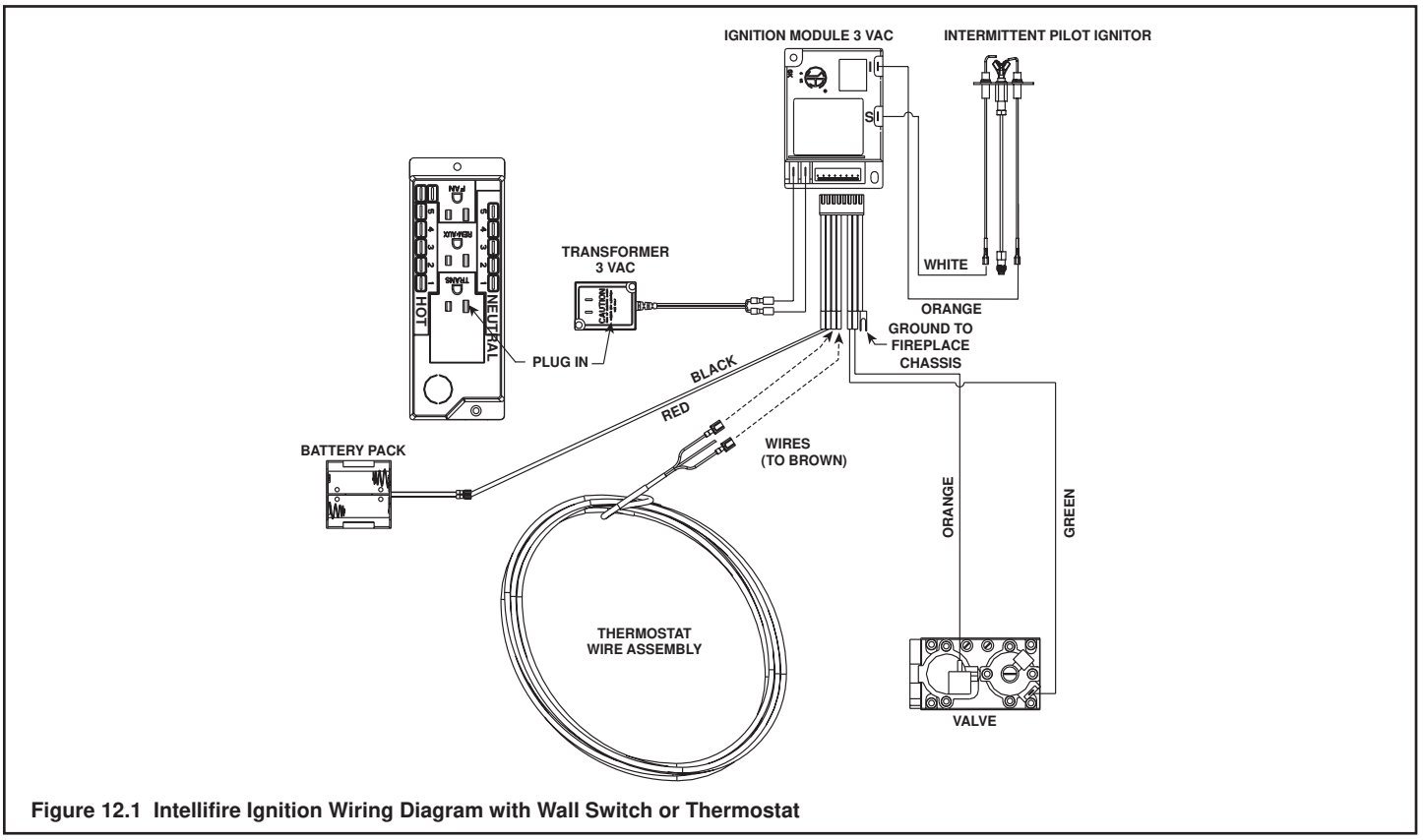


Figure 12.1 Intellifire Ignition Wiring Diagram with Wall Switch or Thermostat

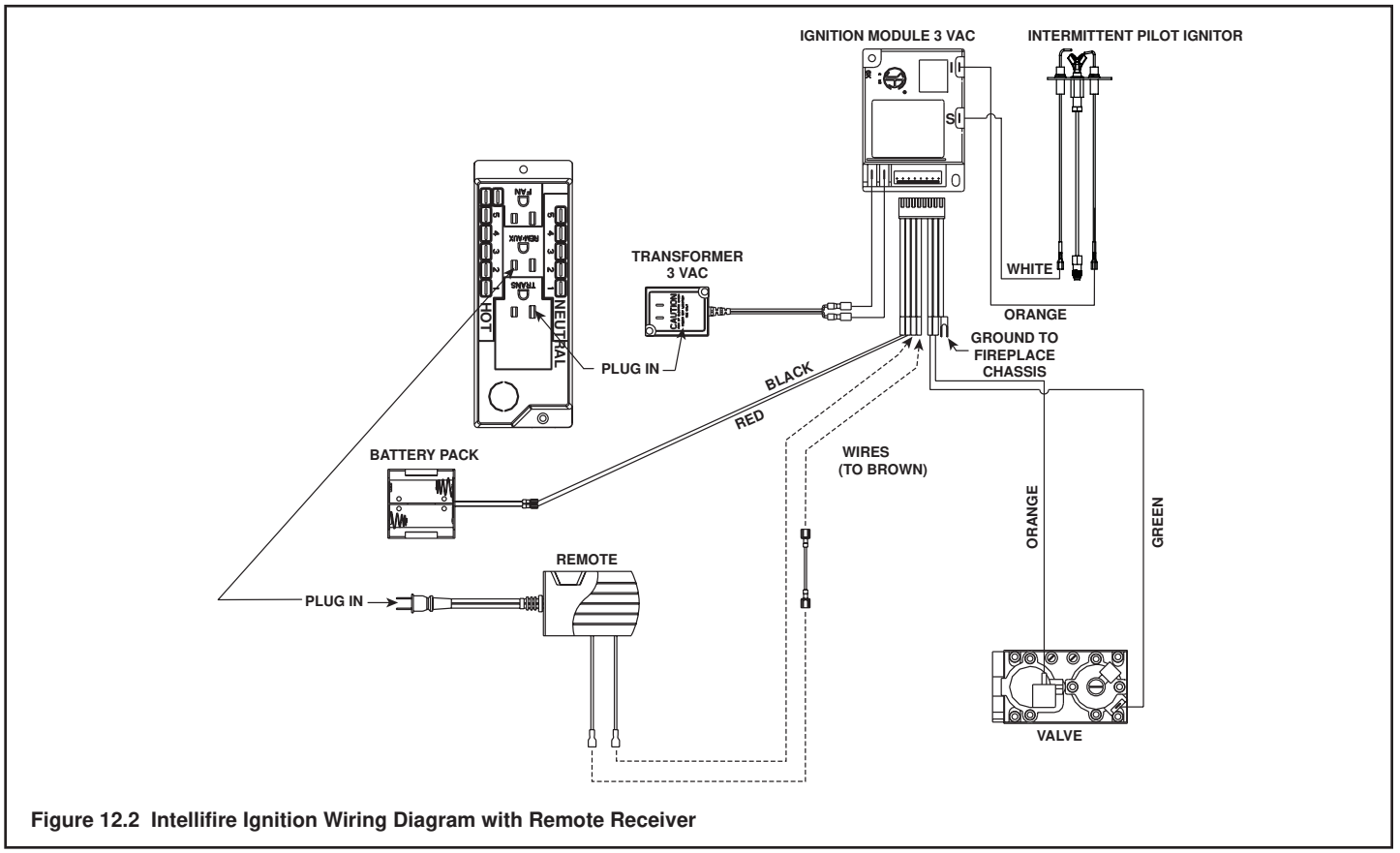


Figure 12.2 Intellifire Ignition Wiring Diagram with Remote Receiver

E. Junction Box Installation

The junction box must be wired from the **INSIDE** of the appliance:

- Determine which side of the appliance the junction box is located on.
- Pull the electrical wires from outside the appliance through the knockout making sure to use a Romex connector to fasten the electrical wires to the unit.
- Pull enough wire into the valve compartment to easily reach the junction box location.
- Remove the screw attaching the junction box to the junction box bracket and set it aside.
- Route the wire from the bottom through the hole in the junction box bracket.
- Wire the junction box and reattach it to the bracket by inserting the tab in the slot and attaching with screw previously removed. Ensure that a Romex connector is used to attach the electrical wires to the junction box bracket.

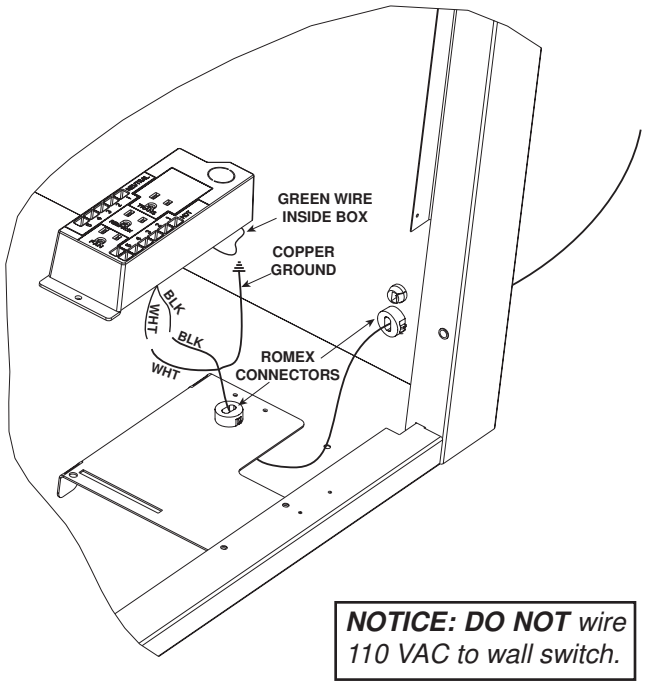


Figure 12.4 Junction Box Detail

13 Finishing

A. Mantel and Wall Projections

WARNING! Risk of Fire! *Comply with all minimum clearances to combustibles as specified. Framing closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.) Failure to comply could cause fire.*

GBST4336I Mantel Projection

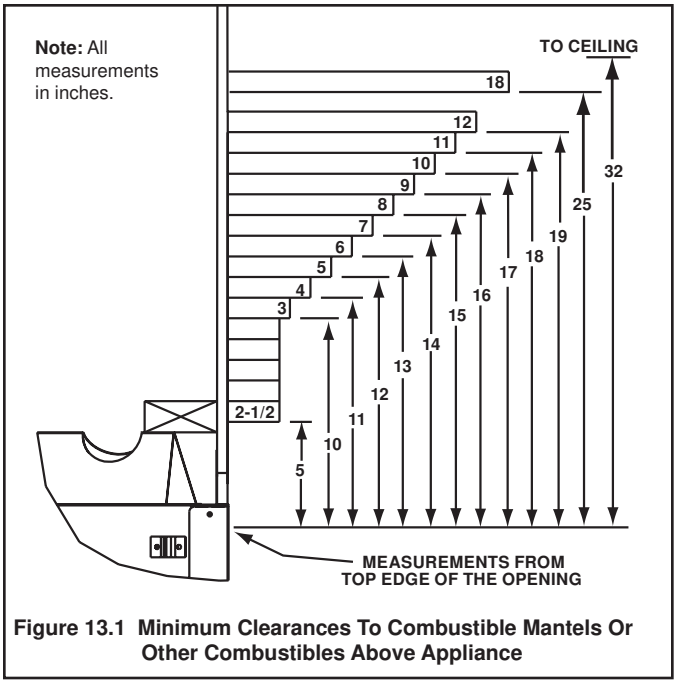


Figure 13.1 Minimum Clearances To Combustible Mantels Or Other Combustibles Above Appliance

GBFL4136I Pier Mantel Projection

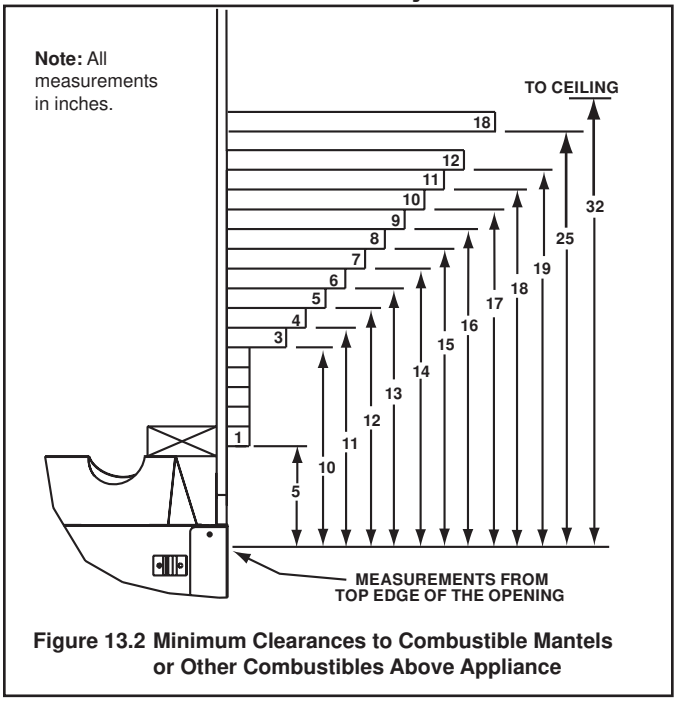


Figure 13.2 Minimum Clearances to Combustible Mantels or Other Combustibles Above Appliance

Combustible Mantel Legs or Wall Projections

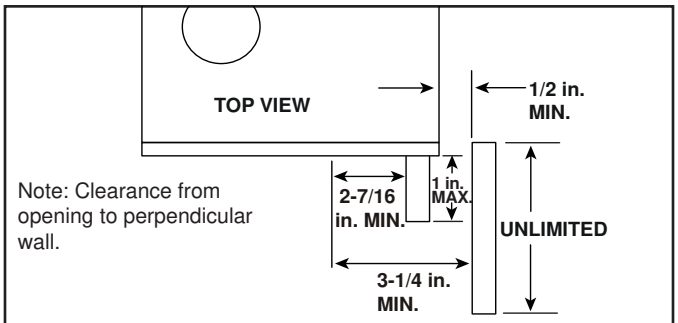


Figure 13.3 Combustible Mantel Leg or Wall Projections (Acceptable on both sides of opening)

B. Facing Material

- Metal front faces may be covered with non-combustible materials only.
- Facing and/or finishing materials must not interfere with air flow through louvers, operation of louvers or doors, or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.
- Seal joints between the finished wall and appliance top and sides using a 300 °F minimum sealant. Refer to Figure 13.3.

WARNING! Risk of Fire! DO NOT *apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation of doors and louvers.*

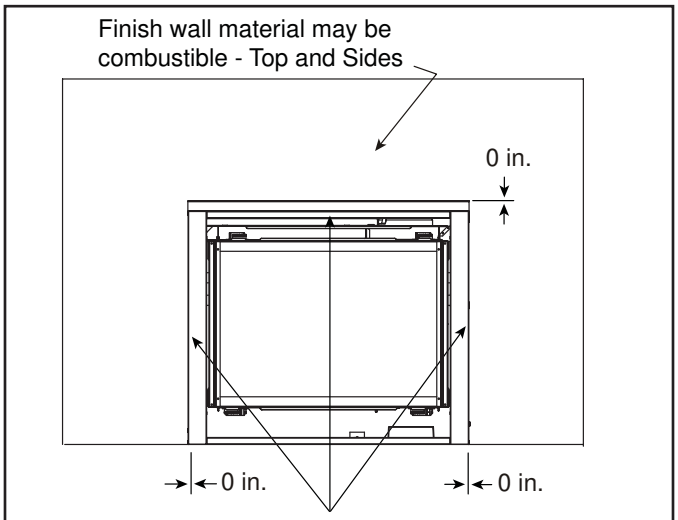


Figure 13.4 Noncombustible Facing Diagram

C. Splatter Guard

The splatter guard is a piece of corrugated material used to protect the appliance during the installation process before finishing work on the whole hearth is complete.

Splatter guards must be removed before appliance is fired.

⚠ WARNING

Risk of Fire

- Splatter guard must be removed before lighting appliance.
- Before splatter guard is installed: Close ball valve to prevent accidental lighting.

Step 1. Turn off gas to valve. Red gas shutoff knob is located on ball valve. Disconnect the 3 volt transformer from the junction box. See Figure 13.5.

Figure 13.5 Preparation to Install Splatterguard

To install the Splatter Guard:

Step 2. Crease flap on top side of splatter guard using the scored line as the guide. See Figure 13.6.

Figure 13.6 Folding Top Flap

Step 3. Crease flaps on left and right sides of splatter guard using the scored line as the guide. See Figure 13.7.

Figure 13.7 Folding of Right and Left Sides of Splatter Guard

Step 4. Center the splatter guard in front of the unit as shown in Figure 13.8. Place the splatter guard in the unit by guiding the top flap into proper position and then continuing to guide the tabs on the side flaps into the top slot on the left and right sides of the appliance. The top slot is indicated in Figure 13.9. Take care not to bend or break off the tabs.

Figure 13.8 Installation of Splatter Guard

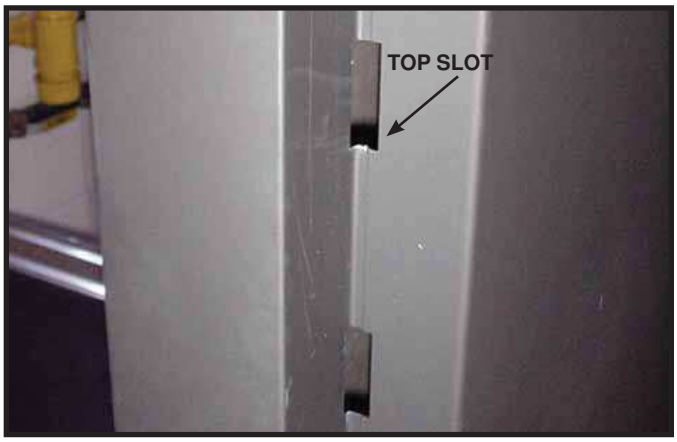


Figure 13.9 Top slot

Step 5. Fold bottom flap along score line as indicated in Figure 13.10 and tuck into valve access area of appliance. Splatter guard should fit securely on front of unit.

Figure 13.10 Folding Bottom Flap

Figure 13.11 Prepare to Open Lower Access Panel

Step 6. To open lower access panel of splatter guard, place one hand above score line and place two fingers from other hand in the round holes on the front of the splatter guard. See Figure 13.11. Pull out and fold up the panel as shown in Figure 13.12. Disengage the tabs on left and right bottom of splatter guard and fit them into the square holes. The tabs are now inside the front of the splatter guard; carefully bend them down. See Figure 13.13.

Figure 13.12 Opening Lower Access Panel

Figure 13.13 Securing Tabs Inside Front of Splatter Guard

Once plumbing and wiring are complete on the fireplace, the lower access panel may be closed until the time that the splatter guard must be removed for firing the appliance.

Figure 13.14 Splatter Guard with Lower Access Panel Open

To Close the Lower Access Panel:

Carefully disengage the tabs from the square holes and bend the access panel to its original position. Bend the center bottom flap and insert it into the bottom of the appliance.

Figure 13.15 Splatter Guard with Lower Access Panel Closed

To Remove the Splatter Guard:

Carefully grab splatter guard on or near the vertical center on the left and right sides. Pull outward gently, but firmly, taking care not to tear or remove the inserted tabs.

14 Appliance Setup

A. Remove Glass Assembly

See Section 14G.

B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

C. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.

D. Accessories

Install approved accessories per instructions included with accessories. Contact your dealer for a list of approved accessories.

WARNING! Risk of Fire and Electric Shock! *Use ONLY Hearth & Home Technologies-approved optional accessories with this appliance. Using non-listed accessories could result in a safety hazard and will void the warranty.*

E. Lava Rock and Glowing Ember Placement

WARNING! Risk of Explosion! *Follow ember placement instructions in manual.* ***DO NOT*** *place embers directly over burner ports. Replace ember material annually. Improperly placed embers interfere with proper burner operation.*

Ember material is shipped with this gas appliance. To place the ember material:

- Embers CANNOT be placed directly over ports. Care should be taken not to cover the lighting trail of ports (from back to front).
- When placing Glowing Embers® onto the burner care should be taken so that the ports are not covered. Place the dime-size ember pieces just in front of the port trail, but not on or in between the ports (see Figure 14.1). Failure to follow this procedure will likely cause lighting and sooting problems.
- Place Lava Rock on the base pan away from burner. Use this material to give the appliance a realistic ash bed.
- Save the remaining ember materials for use during appliance servicing. The embers provided should be enough for 3 to 5 applications.

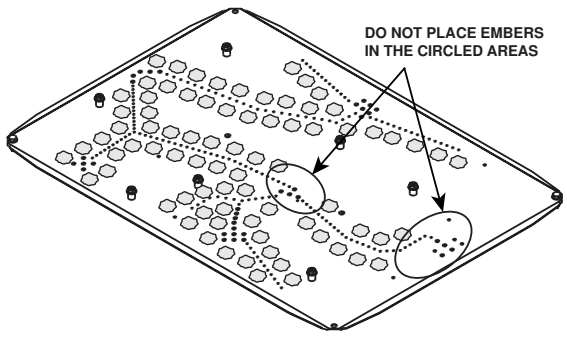


Figure 14.1 Placement of Embers

F. Install the Log Assembly

LOG PLACEMENT INSTRUCTIONS

Log Set Assembly: LOGS-2129
Models: GDST4336I, GDFL4136I, GDCL4136I, GDCR4136I, GBST4336I, GBFL4136I

CAUTION: DO NOT reposition logs that have been factory installed! Follow these instructions to position the logs that were packaged separately.

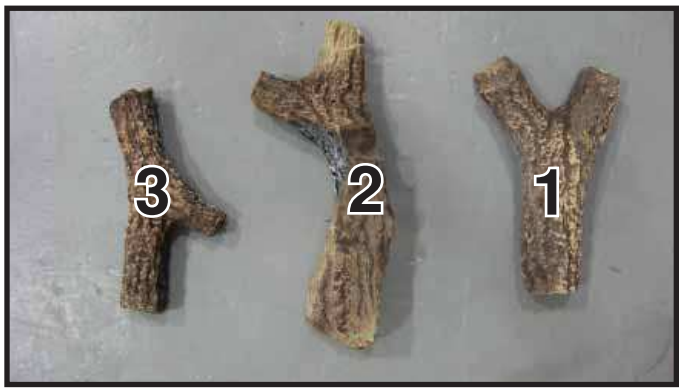


Figure 14.2 Log Assembly Components

Figure 14.3. Log Assembly Location

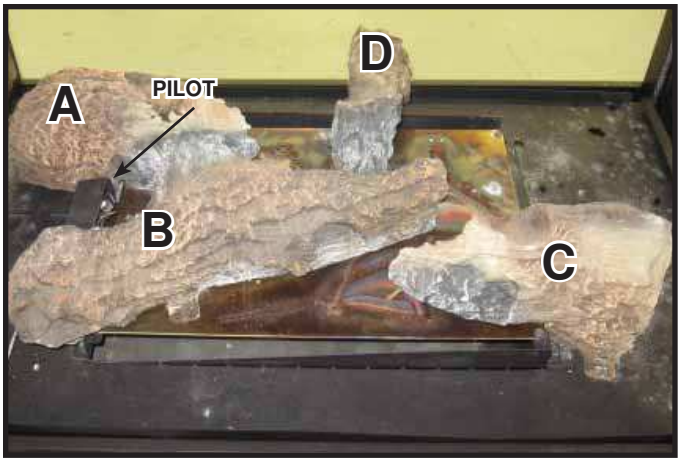


Figure 14.4 Factory Installed Logs and Pilot Position

STEP 1. ***CAUTION! Logs are fragile!*** Carefully remove the logs and cardboard tray from the inside of the fireplace. See Figure 14.3. Remove the microfoam and inspect the logs for damage. Inspect the four factory installed logs for damage. Locate the pilot in order to verify your position in relation to the appliance. See Figure 14.4

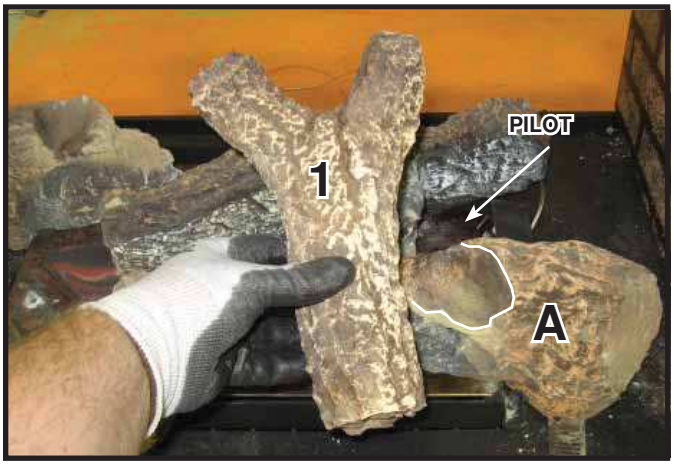


Figure 14.5. Placement of Log #1

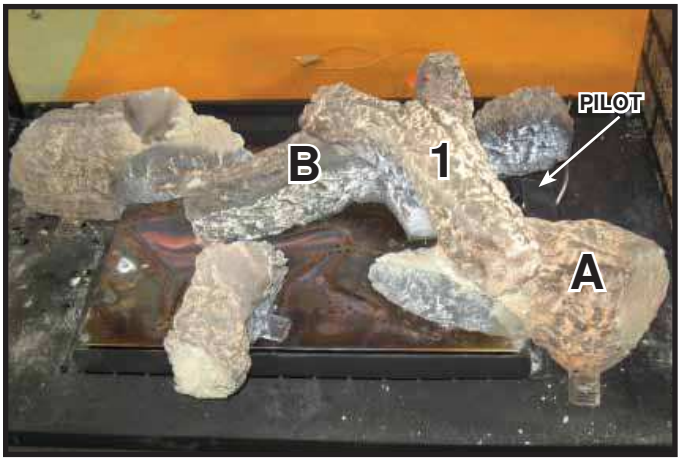


Figure 14.6 Placement of Log #1

STEP 2. Log #1 (SRV2129-704): Place Log #1 on Log A. The end and bottom of Log #1 fit into the indentation on Log A highlighted in Figure 3. The Y-shaped end of Log #1 will rest on the smooth area of Log B as shown in Figure 14.6.

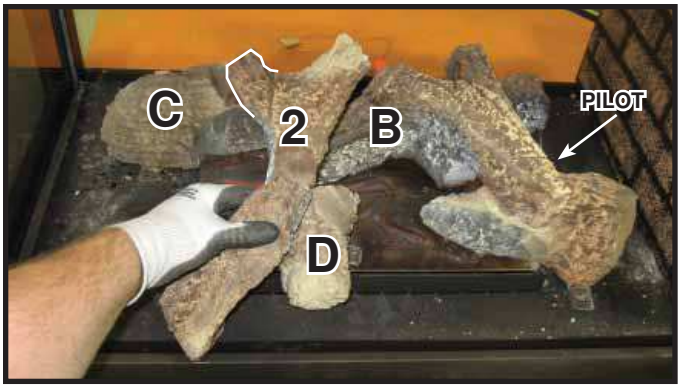


Figure 14.7. Placement of Log #2

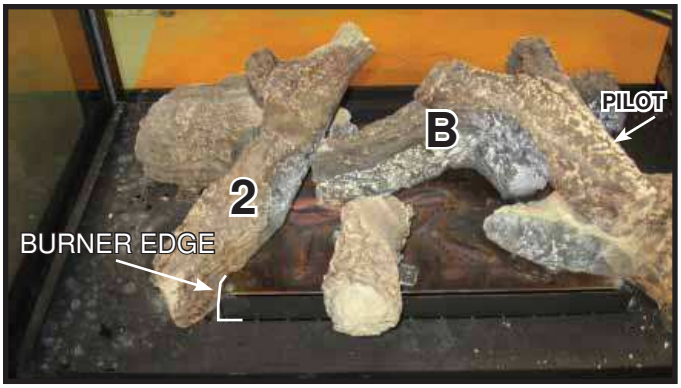


Figure 14.8. Placement of Log #2

STEP 3. Log #2 (SRV2129-705): Locate portion of Log #2 that is highlighted in Figure 5. Place that portion of Log #2 on the indentation on Log C. Log #2 will rest on the tip of Log B. Slide the bottom of Log #2 up to the edge of the burner as shown in Figure 14.8.

Figure 14.9. Placement of Log #3

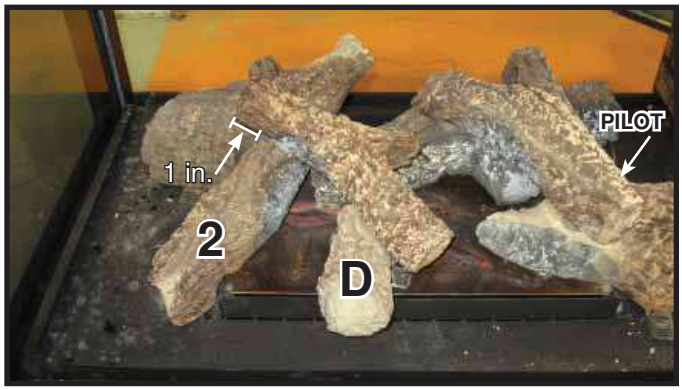


Figure 14.10. Placement of Log #3

STEP 4. Log #3 (SRV2129-707): Place Log #3 so that it rests on the indentations located on Log #2 and Log D. Log 3 should extend beyond Log #2 by one inch.

G. Fixed Glass Assembly

Removing Fixed Glass Assembly

WARNING! Risk of Asphyxiation! *Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.*

- ***DO NOT*** *strike, slam or scratch glass.*
- ***DO NOT*** *operate fireplace with glass removed, cracked, broken or scratched.*
- *Replace as a complete assembly.*

Removing Fixed Glass Assembly

- Pull the four glass latches out of the grooves on the glass frame top and bottom.
- Remove the glass door from the appliance.
- Multiple sides may be able to be removed based upon model.

Replacing Fixed Glass Assembly

- Replace the glass door on the appliance.
- Pull out the four glass latches and place in the grooves on the glass frame top and bottom.
- Make sure all sides are replaced properly.

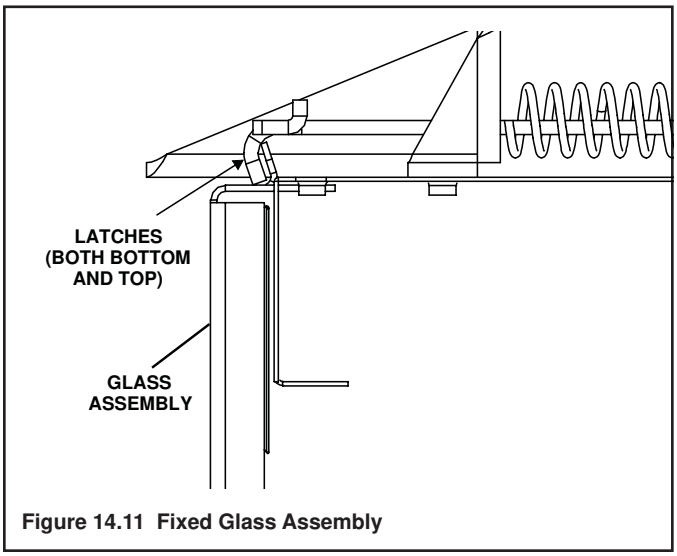


Figure 14.11 Fixed Glass Assembly

H. Install Trim Kits and Surrounds

- Install optional trim kits and/or surrounds using the instructions included with the accessory.
- Use non-combustible materials to cover the gap between the sheet rock and the appliance (if desired).

I. Air Shutter Setting

This appliance has an adjustable air shutter (which controls the primary air) factory set for the minimum vertical vent run (see Figure 14.12). If your installation has more than the minimum required vertical vent length, adjustment of the air shutter may be necessary to obtain optimal flame appearance. **This should be adjusted by a qualified installer at the time of installation.**

By pushing the air shutter handle towards the pilot, you will be closing the air shutter. To adjust loosen the wing nut. Care should be taken when adjusting the air shutter so as not to cause the appliance to soot. If sooting occurs the air shutter will need to be opened by pushing the handle away from the pilot. When finished tighten wing nut.

NOTICE: *If sooting occurs, provide more air by opening the air shutter.*

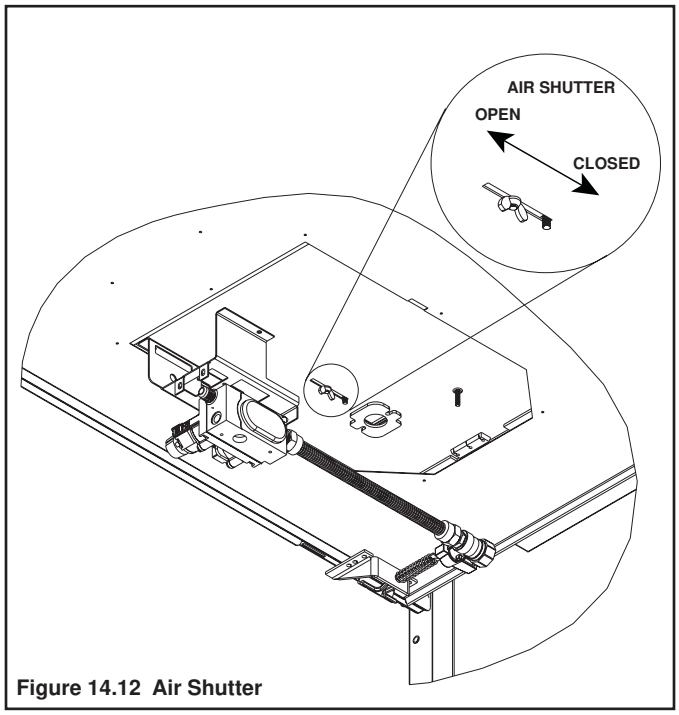


Figure 14.12 Air Shutter

Air Shutter Settings

	NG	LP
Burner	Adjustable	Fully open

15 Troubleshooting

With proper installation, operation, and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified technician in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified technician. Contact your dealer to arrange a service call by a qualified technician.

A. Intellifire Ignition System

Symptom	Possible Cause	Corrective Action
1. Pilot won't light. The ignitor/module makes noise, but no spark.	a. Incorrect wiring.	Verify "S" wire (white) for sensor and "I" wire (orange) for ignitor are connected to correct terminals on module and pilot assembly.
	b. Loose connections or electrical shorts in the wiring.	Verify no loose connections or electrical shorts in wiring from module to pilot assembly. Verify connections underneath pilot assembly are tight; also verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure, mesh screen if present, or any other metal object.
	c. Ignitor gap is too large.	Verify gap of igniter to right side of pilot hood. The gap should be approximately .17 inch or 1/8 in. (3 mm).
	d. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place a grounded wire about 3/16 in. (5 mm) away from "I" terminal on module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode. Replace pilot if necessary.
2. Pilot won't light, there is no noise or spark.	a. No power or transformer installed incorrectly.	Verify that transformer is installed and plugged into module. Check voltage of transformer under load at spade connection on module with ON/OFF switch in ON position. Acceptable readings of a good transformer are between 3.2 and 2.8 volts AC.
	b. A shorted or loose connection in wiring configuration or wiring harness.	Remove and reinstall the wiring harness that plugs into module. Verify there is a tight fit. Verify pilot assembly wiring to module. Remove and verify continuity of each wire in wiring harness. Replace any damaged components.
	c. Improper wall switch wiring.	Verify that 110/VAC power is "ON" to junction box.
	d. Module not grounded.	Verify black ground wire from module wire harness is grounded to metal chassis of appliance.
	e. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire "I" from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at "I" terminal module must be replaced. If there is a spark at "I" terminal, module is fine. Inspect pilot assembly for shorted sparker wire or cracked insulator around electrode.
3. Pilot sparks, but Pilot will not light.	a. Correct gas supply.	Verify that incoming gas line ball valve is "open". Verify that inlet pressure reading is within acceptable limits, inlet pressure must not exceed 14 in. W.C.
	b. Ignitor gap is incorrect.	Verify that spark gap from ignitor to pilot hood is .17 in. or 1/8 in (3 mm).
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance.
	d. Module voltage output / Valve/Pilot solenoid ohms readings.	Verify battery voltage is at least 2.7 volts. Replace batteries if voltage is below 2.7.

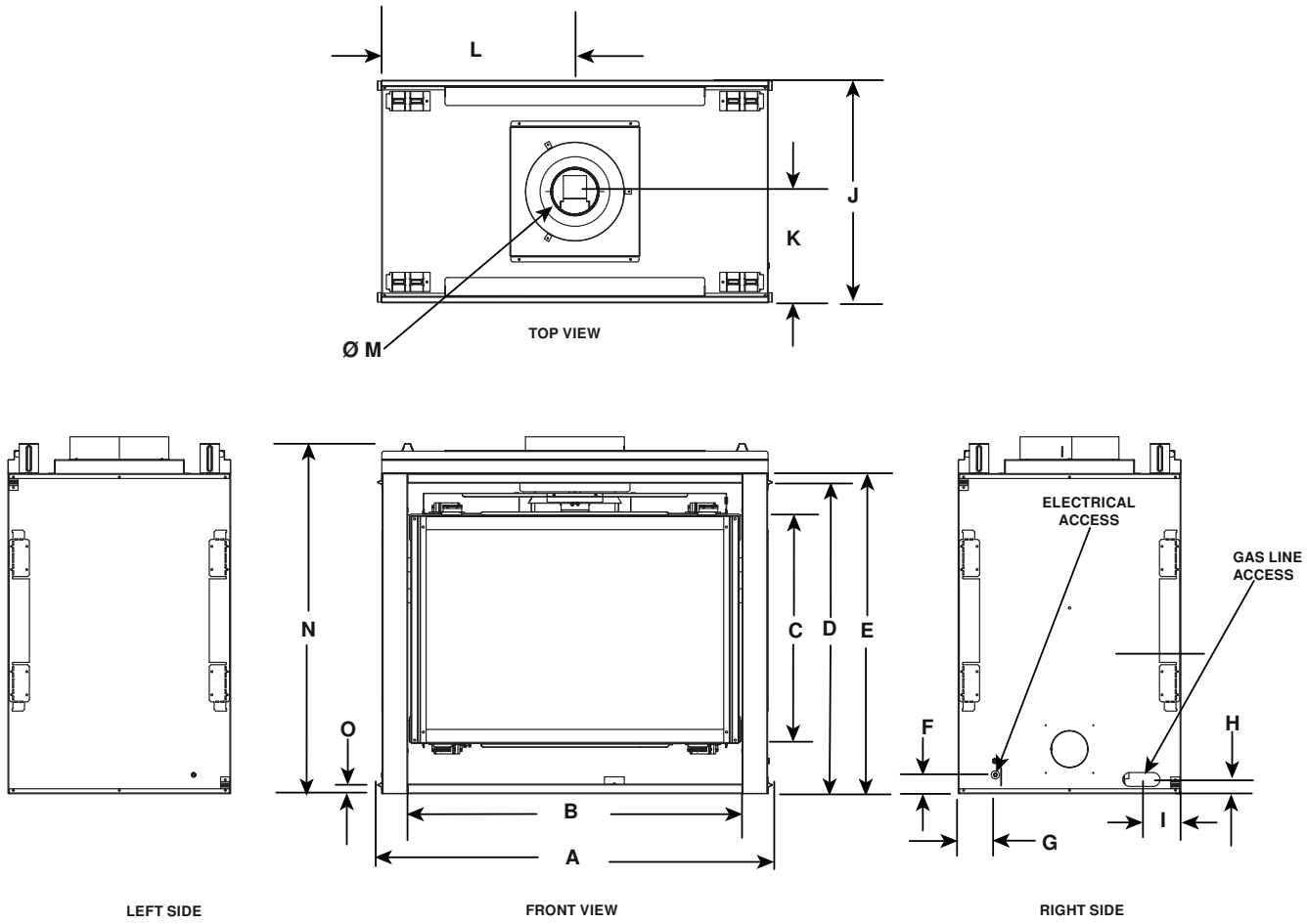
Intellifire Ignition System - (continued)

Symptom	Possible Cause	Corrective Action
4. Pilot lights but continues to spark, and main burner will not ignite. (If the pilot continues to spark after the pilot flame has been lit, flame rectification has not occurred.)	a. A shorted or loose connection in flame sensing rod.	Verify all connections to wiring diagram in manual. Verify connections underneath pilot assembly are tight. Verify connections are not grounding out to metal chassis, pilot burner, pilot enclosure or screen if present, or any other metal object.
	b. Poor flame rectification or contaminated flame sensing rod.	With fixed glass assembly in place, verify that flame is engulfing flame sensing rod on left side of pilot hood. Flame sensing rod should glow shortly after ignition. Verify correct pilot orifice is installed and gas inlet is set to pressure specifications.
	c. Module is not grounded.	Verify module is securely grounded to metal chassis of appliance. Verify that wire harness is firmly connected to the module.
	d. Damaged pilot assembly or contaminated flame sensing rod.	Verify that ceramic insulator around the flame sensing rod is not cracked, damaged, or loose. Verify connection from flame sensing rod to white sensor wire. Clean flame sensing rod with emery cloth to remove any contaminants that may have accumulated on flame sensing rod. Verify continuity with a multimeter with ohms set at lowest range. Replace pilot if any damage is detected.
	e. Faulty module.	Turn ON/OFF rocker switch or wall switch to OFF position. Remove ignitor wire “I” from module. Place ON/OFF rocker switch or wall switch in ON position. If there is no spark at “I” terminal module must be replaced. If there is a spark at “I” terminal, module is fine.

16 Reference Materials

A. Appliance Dimension Diagram

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 3.

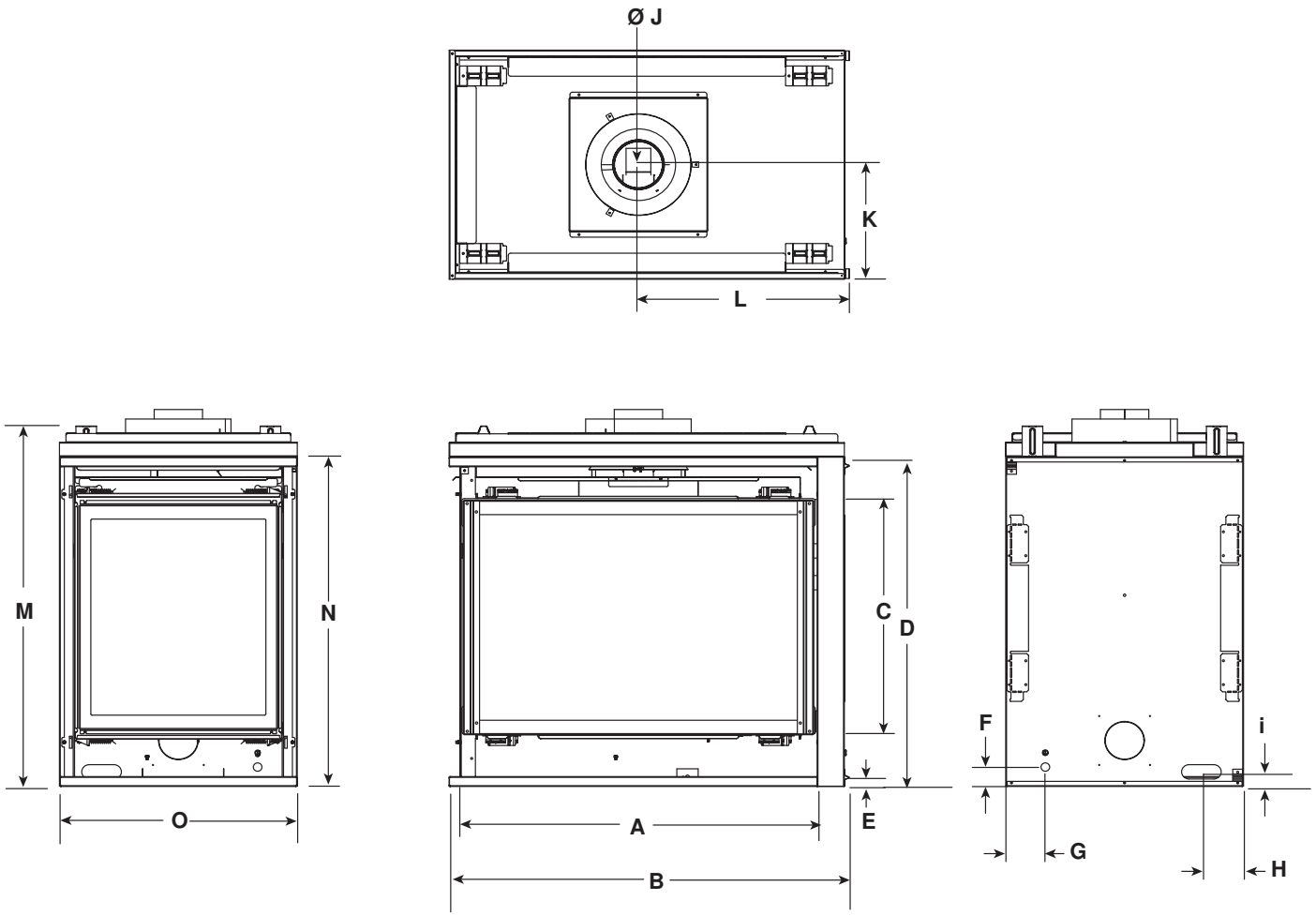


Appliance Dimensions Table

Location	Inches	Millimeters
A	42-5/8	1083
B	36	914
C	24-1/8	613
D	33-1/2	851
E	34-5/8	879
F	2-1/8	54
G	4-1/8	105
H	1-1/2	38

Location	Inches	Millimeters
I	4-1/4	108
J	24	610
K	12	305
L	21-5/16	541
M	5	127
N	38	965
O	1	25

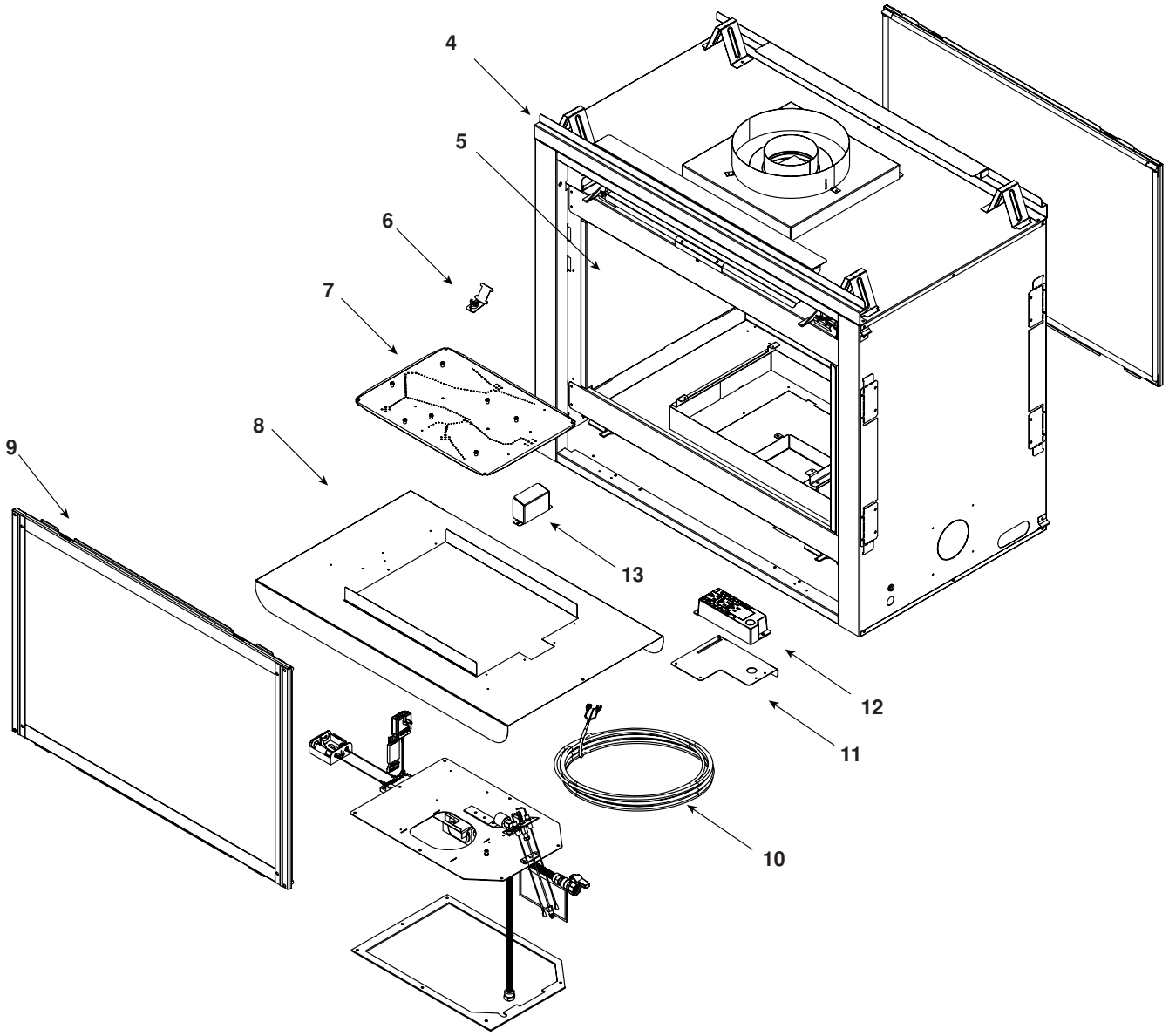
Figure 16.1 GBST4336I Appliance Dimensions



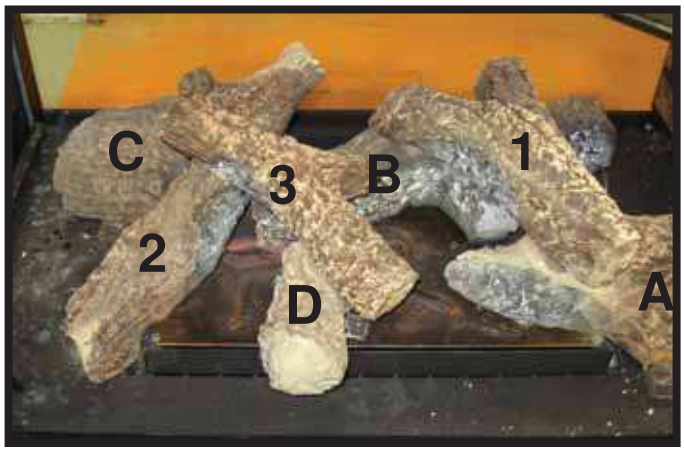
Location	Inches	Millimeters
A	36	914
B	40-1/2	1029
C	24-1/8	613
D	33-1/2	851
E	1	25
F	2-1/8	54
G	4-1/8	105
H	4-1/4	108

Location	Inches	Millimeters
I	1-1/2	38
J	5	127
K	12	305
L	21-5/16	541
M	38	965
N	34-5/8	880
O	24	610

Figure 16.2 GBFL4136I Appliance Dimensions



Log Set Assembly

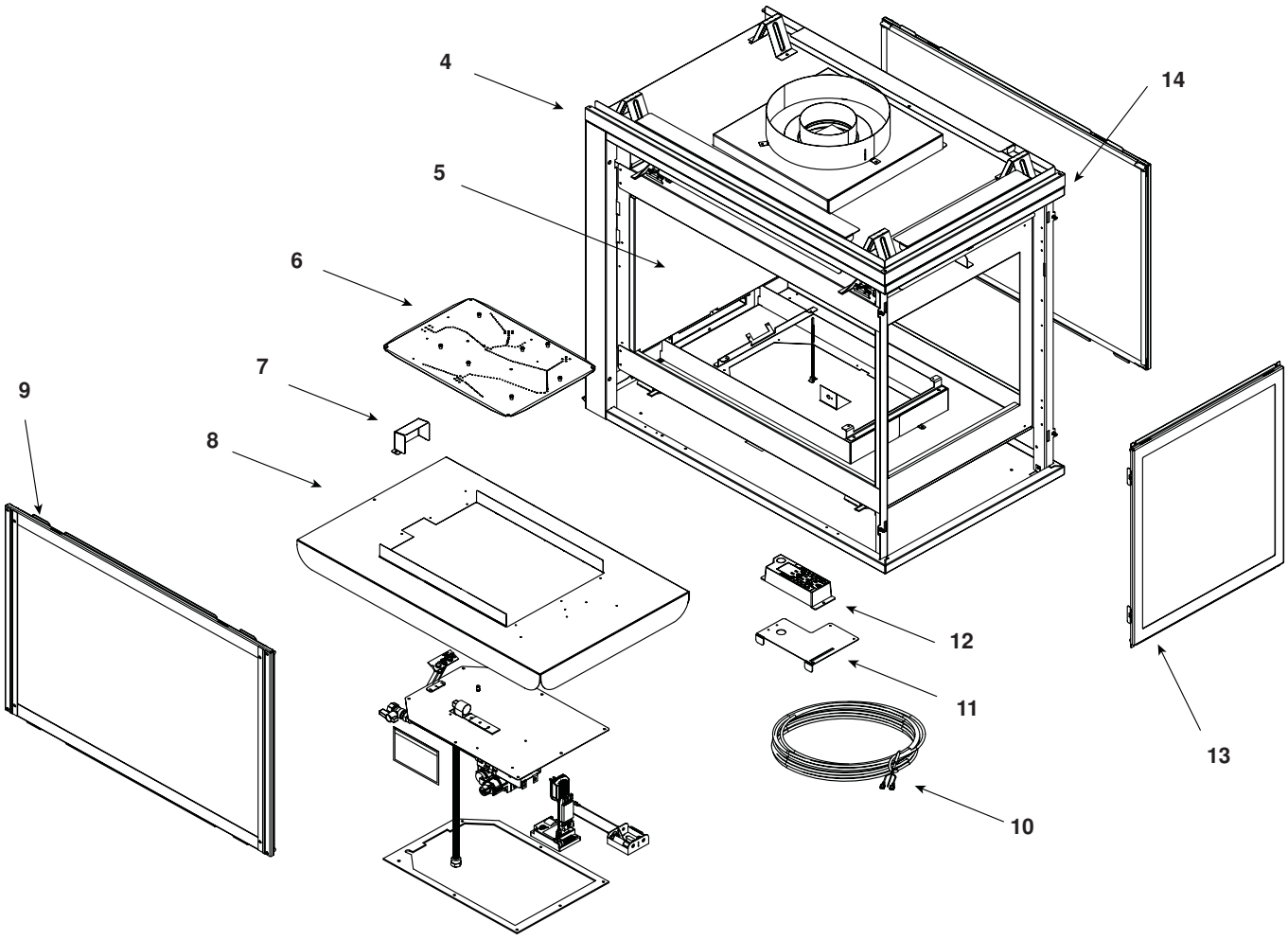


Part number list on following page.

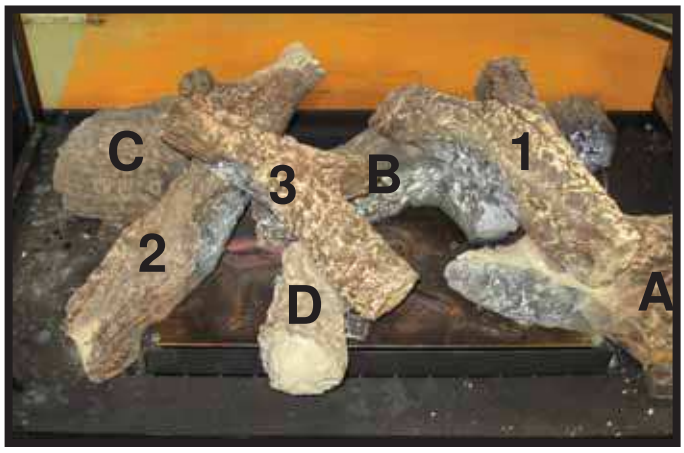
IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	SERIAL #	PART NUMBER	Stocked at Depot
	Log Set Assembly		LOGS-2129	Y
A	Log A		SRV2129-701	N
B	Log B		SRV2129-703	N
C	Log C		SRV2129-702	N
D	Log D		SRV2129-706	N
1	Log 1		SRV2129-704	N
2	Log 2		SRV2129-705	N
3	Log 3		SRV2129-707	N
4	Sheetrock Ledge		2128-118	N
5	Refractory		2129-017	N
6	Limit Switch Assembly		2134-052	Y
7	Burner NG, LP		2128-007	Y
8	Base Pan		2132-015	N
9	Glass Door Assembly		GLA-750TR	Y
10	Thermostat Wire		2118-170	Y
11	Junction Box Bracket		2128-128	N
12	Junction Box		4021-013	Y
13	Pilot Shield		2128-124	N
	72 Inch Wire Assembly		258-501A	Y
	80 Inch Wire Asembly		522-501A	Y
	Glass Latch Assembly		386-122A	Y
	Mineral Wool		050-721	N
	Lava Rock		2005-790	N
	Gasket Assembly Contains Vent, Seal Cap, Burner Neck, Shutter Bracket and Valve Plate Gaskets		2128-081	N
	Touch Up Paint		TUP-GBK-12	N
	Conversion Kit NG		NGK-MS36	Y
	Conversion Kit LP		LPK-MS36	Y
	Pilot Orifice NG		593-528	Y
	Pilot Orifice LP		593-527	Y
	Regulator NG		NGK-DXV	Y
	Regulator LP		LPK-DXV	Y

Additional service part numbers appear on following page.



Log Set Assembly



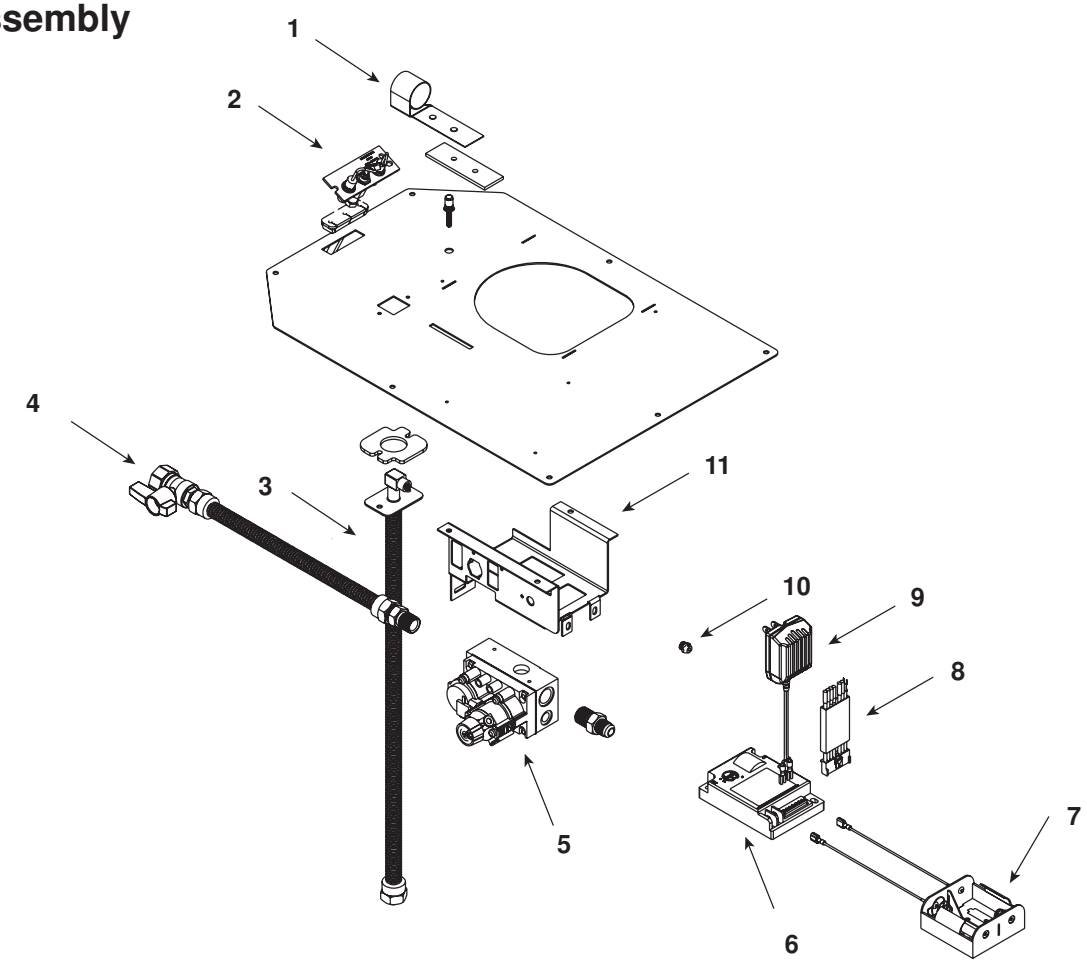
Part number list on following page.

IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	SERIAL #	PART NUMBER	Stocked at Depot
	Log Set Assembly		LOGS-2129	Y
A	Log A		SRV2129-701	N
B	Log B		SRV2129-703	N
C	Log C		SRV2129-702	N
D	Log D		SRV2129-706	N
1	Log 1		SRV2129-704	N
2	Log 2		SRV2129-705	N
3	Log 3		SRV2129-707	N
4	Sheetrock Ledge (side)		2130-118	N
5	Refractory Panel		2129-017	N
6	Burner NG, LP		2128-007	Y
7	Pilot Shield		2128-124	N
8	Base Pan		2132-115	N
9	Glass Door Assembly (Side)		GLA-750TR	Y
10	Thermostat Wire		2118-170	Y
11	Junction Box Bracket		2128-128	N
12	Junction Box		4021-013	Y
13	Glass Door Assembly (End)		GLA-2130	Y
14	Sheetrock Ledge (End)		2130-126	N
	Glass Latch Assembly		386-122A	Y
	Mineral Wool		050-721	N
	Flue Restrictor		385-128	N
	Lava Rock		2005-790	N
	Gasket Assembly Contains Vent, Seal Cap, Burner Neck, Shutter Bracket and Valve Plate Gaskets		2128-081	N
	Touch Up Paint		TUP-GBK-12	N
	Conversion Kit NG		NGK-MS36	Y
	Conversion Kit LP		LPK-MS36	Y
	Pilot Orifice NG		593-528	Y
	Pilot Orifice LP		593-527	Y
	Regulator NG		NGK-DXV	Y
	Regulator LP		LPK-DXV	Y

Additional service part numbers appear on following page.

IPI Valve Assembly



IMPORTANT: THIS IS DATED INFORMATION. When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed in this manual may be ordered from an authorized dealer.

ITEM	DESCRIPTION	SERIAL #	PART NUMBER	Stocked at Depot
1	Shutter Bracket Assembly		2118-121	Y
2	Pilot Assembly NG		2090-012	Y
	Pilot Assembly LP		2090-013	Y
3	Flexible Gas Connector		530-302A	Y
4	Flex Ball Valve Assembly		302-320A	Y
5	Valve NG		750-500	Y
	Valve LP		750-501	Y
6	Module		593-592	Y
7	Battery Pack		593-594A	Y
8	Module Wire Assembly		593-590A	Y
9	3 Volt Transformer		593-593A	Y
10	Orifice NG (#32C)		582-832	Y
	Orifice LP (#50C)		582-850	Y
11	Valve Bracket		2118-104	N

C. Contact Information

heatilator®
The first name in fireplaces

Heatilator, a brand of Hearth & Home Technologies Inc.
20802 Kensington Boulevard, Lakeville, MN 55044
www.heatilator.com

Please contact your Heatilator dealer with any questions or concerns.
For the location of your nearest Heatilator dealer,
please visit www.heatilator.com.

- NOTES -

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NOTICE

DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.