

# heatilator®

*The first name in fireplaces*

Hearth & Home Technologies-Mt. Pleasant  
1915 W. Saunders Street  
Mt. Pleasant, Iowa 52641  
Division, HON INDUSTRIES  
www.heatilator.com



## INSTALLATION & OPERATING INSTRUCTIONS

### BCDV36 BUILDER'S CHOICE DIRECT VENT DECORATIVE GAS APPLIANCE



**BCDV36 BUILDER'S CHOICE**  
U.S. PATENT 5,613,487

**WARNING:** If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

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

**CAUTION:**

Do not expose the appliance to the elements (such as rain, etc.).

**WARNING!**

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

## Please retain this manual for future reference.

### CONTENTS

A. Appliance Specifications .....	3
B. Nomenclature .....	5
C. Location and Clearances .....	6
D. Framing .....	7
E. Setting the Appliance .....	7
F. Venting .....	8
G. Assembling Vent Sections .....	13
H. Utilities .....	15
I. Finishing .....	17
J. Appliance Preparation .....	18
K. Lighting Instructions .....	19
L. Seasonal Checklist .....	20
M. Fuel Conversion .....	21
N. Start-up Issues .....	21
O. Maintenance Instructions .....	21
P. Optional Components .....	23
Q. Replacement Parts .....	24
Index .....	27
Warranty .....	28

### SAFETY PRECAUTIONS

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause an appliance malfunction resulting in serious injury and/or property damage.
2. Always check your local building codes prior to installation. This installation must comply with all local, regional, state and national codes and regulations.
3. Installation and repair should be done by a qualified service person. This appliance should also be inspected annually by a qualified service person. More frequent inspections/cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.
4. This is a vented decorative gas appliance. Do not burn wood or other material in this appliance.
5. NEVER leave children unattended when there is a fire burning in the appliance.
6. This appliance may only use the approved venting systems shown in these installation instructions. Venting must not be connected to chimney flue servicing a solid fuel burning appliance or a gas fuel burning appliance.
7. NEVER use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this appliance. Keep any flammable liquids a safe distance from the appliance.
8. While servicing this appliance, always shut off all electricity and gas to the appliance. This will prevent possible electrical shock or burns. Also, make sure the appliance is completely cooled before servicing.
9. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.
10. Be sure to provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

## A. APPLIANCE SPECIFICATIONS

### 1. U.S. AND CANADA CERTIFICATION

The Builder's Choice Series Gas Appliance has been tested in accordance with the **ANSI standard Z21.50b-1998** and **U.L. 307B** in the United States; in Canada, the current **CAN/CGA-M2.22-M98**, and has been LISTED by Underwriters Laboratories Inc. for installation and operation as described in this manual. All components are UL, AGA, CGA or CSA safety certified.

### 2. LOCAL CODES

This installation must conform with local codes. In the absence of local codes, 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.

The Builder's Choice Series gas appliance has been tested and listed for use in manufactured housing (mobile homes). These installation instructions conform with the **Home Construction and Safety Standard, Title 24 CFR, Part 3280**, or when such a standard is not applicable, the standard for **Manufactured Home Installations, ANSI A225.1**.

If any assistance is required during installation, please contact your local dealer or contact Heatilator Technical Services Department, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641, 1-800-843-2848.

HEATILATOR® is a registered trademark of Heatilator Inc., a Division of Hearth & Home Technologies

### 3. GLASS CERTIFICATIONS/SPECIFICATIONS

Hearth & Home Technologies gas appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the CPSC. The tempered glass has been tested and certified to the requirements of **ANSI Z97.1-1984** 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 **SPCS 16 CFR Section 1201.5** "Certification and labeling requirements" which refers to **15 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.

**WARNING!**

**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.**

**CAUTION:**

**Do not expose the appliance to the elements (such as rain, etc.).**

**Note:** Minimum and maximum clearances must be maintained at all times. Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installation may vary slightly due to individual design preferences.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

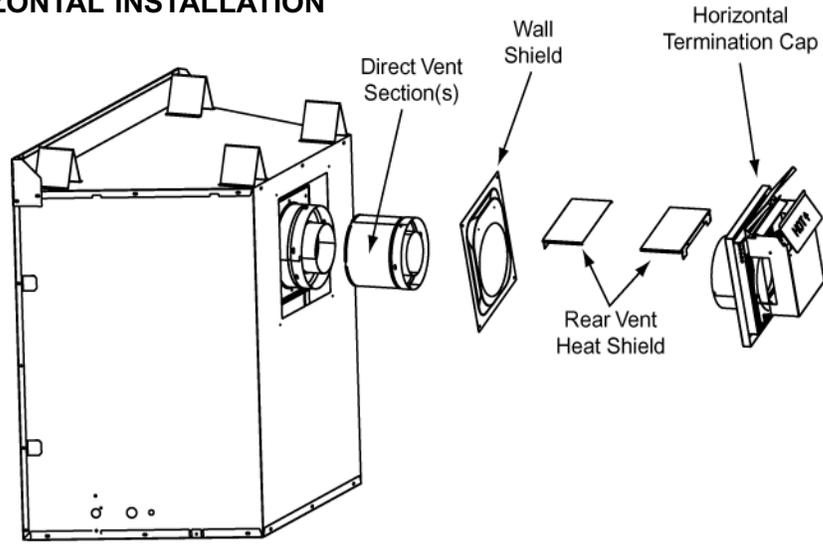
**Tools and building supplies normally required for installation:**

Saw	Wall-finishing materials
Pliers	Framing material
Hammer	Appliance surround
Phillips screwdriver	Caulking material
Tape measure	Safety gloves
Plumb line	Framing square
Level	Electric drill and bits
Safety glasses	

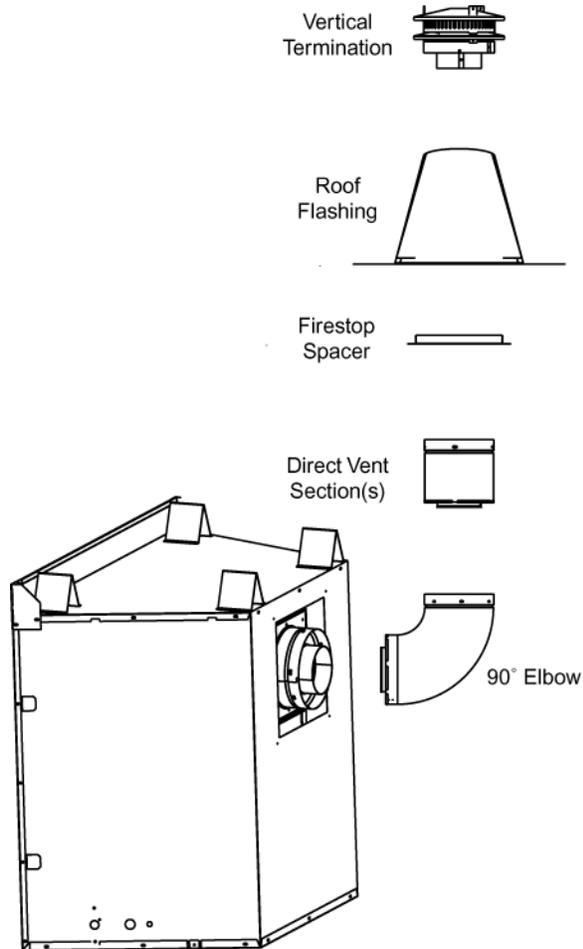
The first name in fireplaces

The first name in fireplaces

**TYPICAL HORIZONTAL INSTALLATION**



**TYPICAL VERTICAL INSTALLATION**



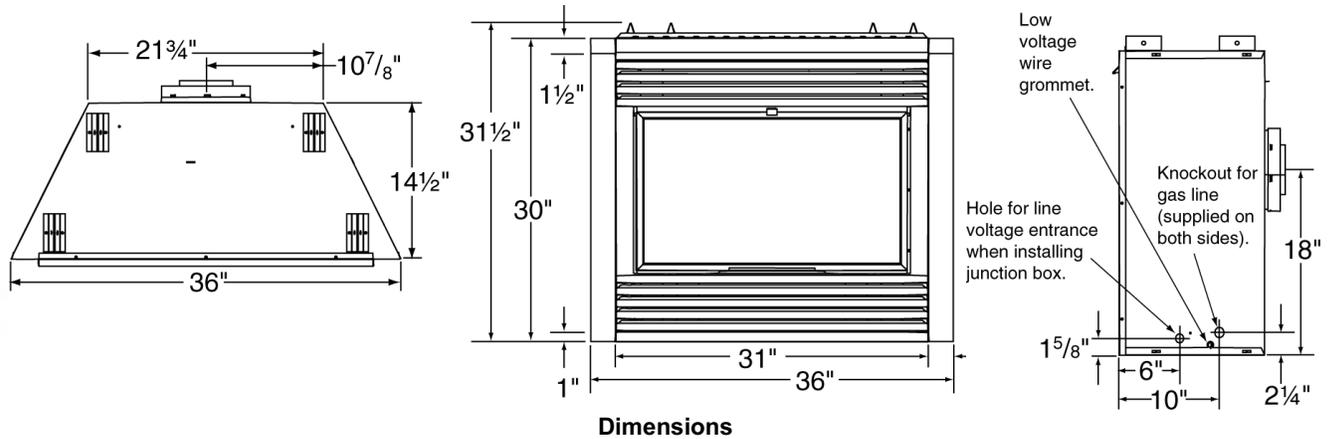
## B. NOMENCLATURE

### BUILDER'S CHOICE NOMENCLATURE

Catalog #	Description
<b>BCDV - Builders Choice</b>	
BCDV (no suffix)	Standing pilot, natural gas
BCDVL	Standing pilot, propane gas
CS	Direct Vent Cap Shield for horizontal termination only
VP-TV	Vertical Termination Cap
VP45	45° Elbow
FS6	Firestop Spacer
VP90	90° Elbow
VP4	4" Vent Pipe
VP6	6" Vent Pipe
VP12	12" Vent Pipe
VP24	24" Vent Pipe
VP36	36" Vent Pipe
VP48	48" Vent Pipe
WS6	Wall Heat Shield (to ensure horizontal clearance)
VSS2	Vinyl Soffit Shield
RF6	Roof Flashing (vertical termination) - 0/12 to 6/12 pitch
VP6-9	6-9" Slip Section
VP9-14	9-14" Slip Section
VP14-24	14-24" Slip Section
VP12MI	12" Vent Section, non-unitized so it can be cut to length
VP24MI	24" Vent Section, non-unitized so it can be cut to length
VP-TH	Horizontal Termination Cap
VP-VT1X	High Wind Horizontal Termination Cap
VP-TB1	Basement Horizontal Termination Cap
VP-TRK	Rear Vent Horizontal Kit: Cap, Wall Shield, Heat Shield, 6-9" Slip Section
VP-TRK2	Rear Vent Horizontal Kit: Cap, Wall Shield, Heat Shield, 4" Vent Section
VS4	Vertical Vent Support
HS1	Rear Vent Flue Heat Shield

The first name in fireplaces

## C. LOCATION AND CLEARANCES



**Dimensions**

### WARNING!

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

### 1. APPLIANCE LOCATIONS AND SPACE REQUIREMENTS

Figure 1 illustrates a variety of ways the appliance may be located in a room. The Builder's Choice Series may be installed directly on the floor or on a hearth. These appliances are certified for installation in a bedroom, bed/sitting room or in mobile homes in the U.S. and Canada.

**Note:** Dimensions represent minimum space required for a centered corner installation. Actual requirements will vary with individual construction.

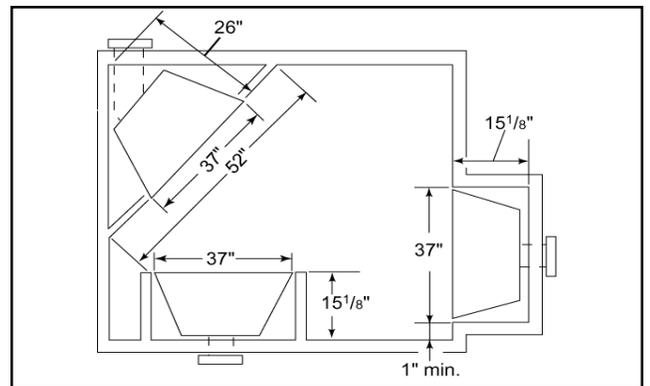
### 2. CLEARANCES

#### a. For the appliance:

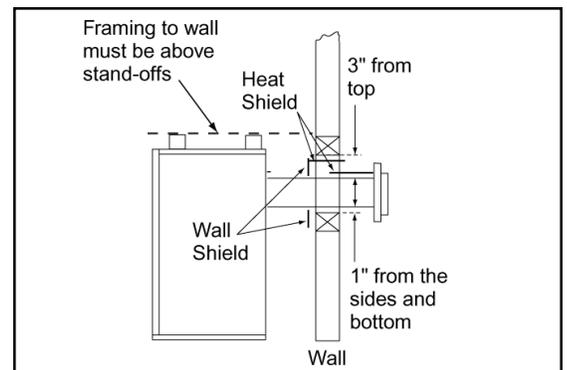
Top of standoffs	0"
Floor	0"
Back of appliance	1/2"
Sides	1/2"
Front Face to Ceiling	30"

#### b. Minimum Venting Clearances (see Figure 2).

- 1) **Horizontal runs off of the back of the appliance to the wall shield:**  
0" above the top of the appliance standoffs  
1" sides and bottom of the vent
- 2) **Horizontal runs inside a wall (heat shields must be installed)**  
3" air space on top of the vent  
1" from sides and bottom of vent
- 3) **Vertical runs**  
1" air space around the vent



**Figure 1 - Appliance Locations**



**Figure 2 - Rear Vented Appliances Venting Clearances**

## D. FRAMING

Figure 3 shows a typical framing of this appliance using combustible materials. Figure 4 shows the mantel heights for mantel projections. All required clearances to combustibles must be adhered to.

**CAUTION:**  
Wear gloves and safety glasses for protection.

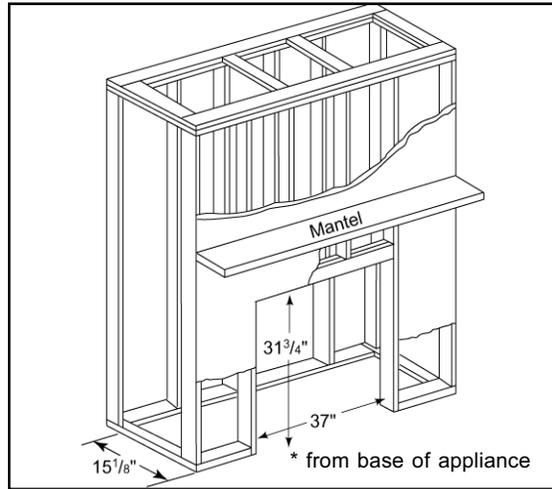


Figure 3 - Framing

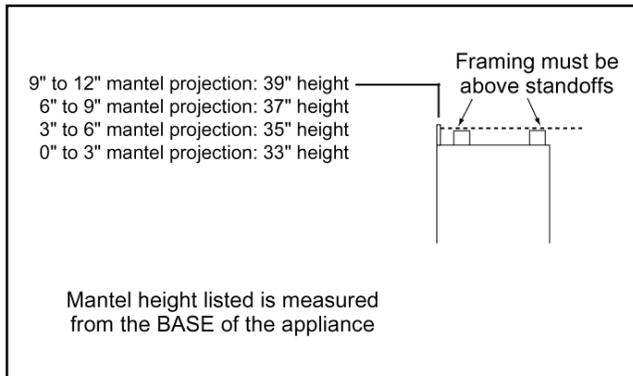


Figure 4 - Mantel Height

**CAUTION:**  
Provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

**WARNING!**  
To prevent contact with sagging or loose insulation, the appliance must not be installed against vapor barriers or exposed insulation. Localized overheating could occur and a fire could result.

## E. SETTING THE APPLIANCE

This appliance may be placed on a smooth combustible or noncombustible continuous, flat surface. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance. Slide the appliance into position and level the appliance from side-to-side and front-to-back. Shim as necessary.

Secure the appliance by bending out the nailing flanges on each side of the appliance and nail to framing. The nailing flanges have been positioned 5/8 inch back from the front of the appliance to allow the addition of drywall.

The first name in fireplaces

**F. VENTING**

The first name in fireplaces

**WARNING - RISK OF FIRE!**  
Air space clearances must be maintained at all times.

**CAUTION:**  
Provisions shall be made to provide adequate combustion and ventilation air.

**WARNING - RISK OF FIRE!**  
The horizontal run of vent must have a 1/4" rise for every 1 ft. of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and may present a fire hazard.

**WARNING - RISK OF FIRE!**  
If you have chosen horizontal termination, be sure there are no present nor future obstructions from trees, bushes, snow drifts, etc.

Use only pipe supplied and listed for use with this appliance. See page 5 for a description of the listed components. See the directions on page 13 for assembling vent sections.

**1. HORIZONTAL TERMINATION**

**a. Installing the Interior Wall Shield**

Frame a hole in a combustable wall for an interior wall shield as shown in Figure 5. This shield maintains minimum clearances and prevents cold air infiltration.

**b. Termination**

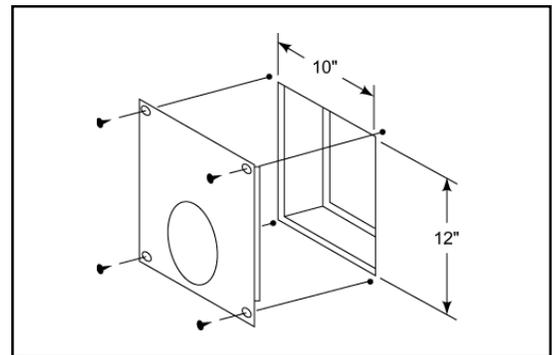
Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap.

Install the cap as shown in Figure 6. The cap pipe sections should overlap the vent pipe by 1-1/2". Caulk the outside edges of the cap.

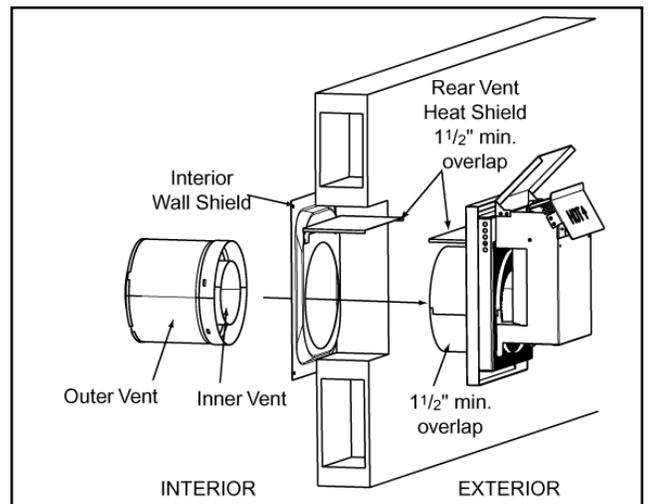
Local codes may require the installation of a shield (product #CS) which prevents the cap from accidentally touching anything or anyone.

Figure 11 illustrates cap locations prescribed by current ANSI Z273.1 and CAN/CGA-B149 Installation Codes.

The termination cap height must meet all local and national codes and not be easily blocked or obstructed. If the hole being penetrated is of noncombustible materials, a 9" diameter hole is acceptable.



**Figure 5**  
**Interior Wall Shield**

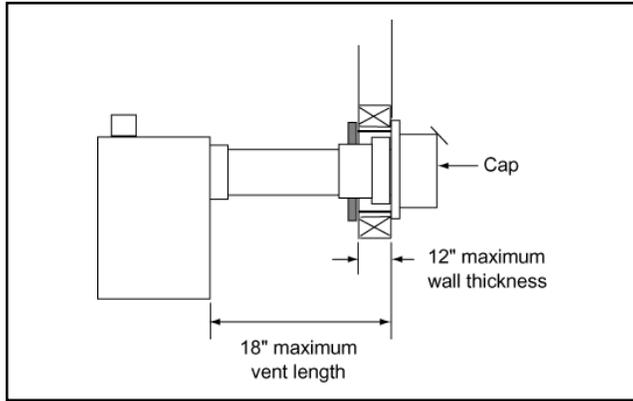


**Figure 6**  
**Venting Through the Wall**

**BUILDER'S CHOICE SERIES INSTALLATION INSTRUCTIONS**

**c. No Elbows**

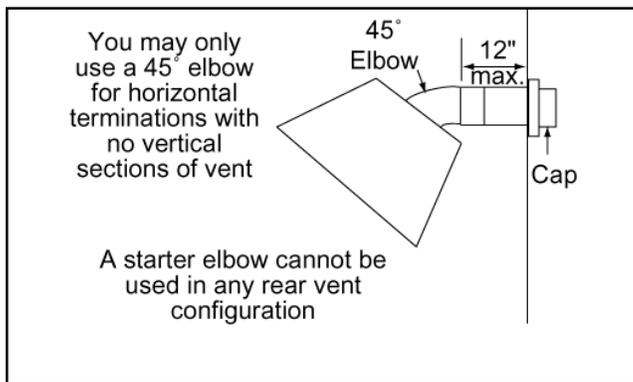
The maximum horizontal run with no vertical sections of vent is 18" from the back of the appliance to the base of the cap. See Figure 7.



**Figure 7**  
**Rear Vented Appliances**

**d. A 45° Elbow**

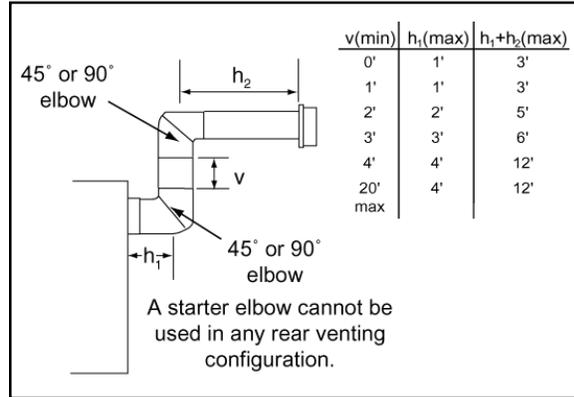
For corner venting, a maximum of one 45° elbow may be used. The maximum horizontal run following the elbow is 12" to the base of the cap. See Figure 8.



**Figure 8**  
**One 45° Elbow**

**e. Two Elbows**

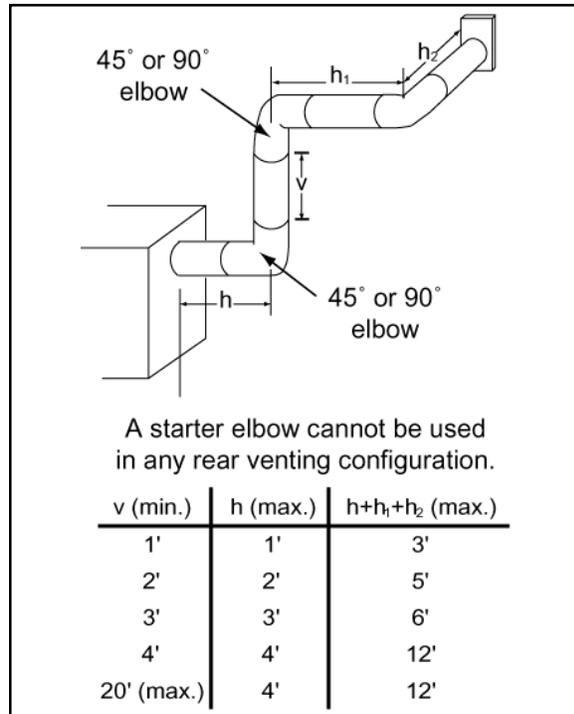
Figure 9 shows various venting configurations using two elbows to terminate horizontally. The maximum vertical run is 20' and the maximum horizontal run is 14'.



**Figure 9**  
**Two Elbows**

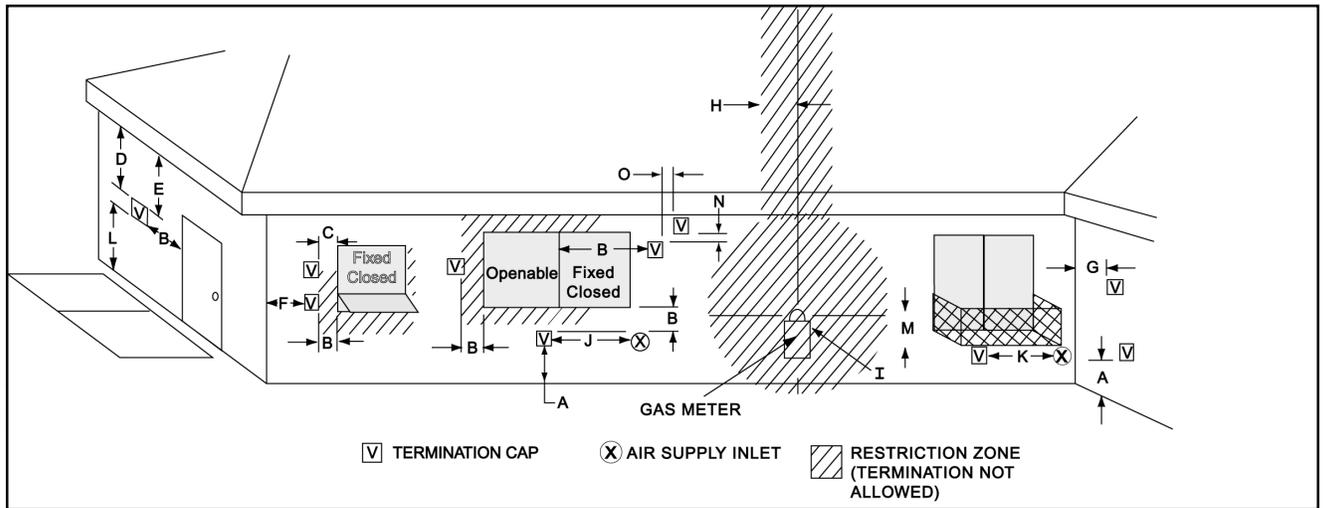
**f. Three Elbows - One Elbow Horizontal**

Figure 10 shows various venting configurations using three elbows to terminate horizontally. The maximum vertical run is 20' and the maximum horizontal run is 12'.



**Figure 10**  
**Three Elbows**

The first name in fireplaces



**Figure 11 - Termination Cap Locations**

**DIMENSION DESCRIPTIONS**

- A** Clearance above the ground, a veranda, porch, deck or balcony - 12 inches (30 cm) minimum. \*
- B** Clearance to window or door that may be opened – 10,000 BTUs or less, 6 inches (15 cm) minimum; 10,000-50,000 BTUs, 9 inches (23 cm) minimum; over 50,000 BTUs, 12 inches (30 cm) minimum. \*
- C** Clearance to permanently closed window – 12 inches (30 cm) minimum - recommended to prevent condensation on window.
- D** Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 feet (60 cm) from the centerline of the termination – 18 inches (46 cm) minimum. \*\*
- E** Vertical clearance to unventilated soffit - 12 inches (30 cm) minimum. \*\*
- F** Clearance to outside corner - 6 inches (15 cm) minimum.
- G** Clearance to inside corner - 6 inches (15 cm) minimum.
- H** Not to be installed above a meter/regulator assembly within 3 feet (90 cm) horizontally\* from the center line of the regulator
- I** Clearance to service regulator vent outlet - 6 feet (1.8m) minimum. \*
- J** Clearance to non-mechanical air supply inlet into building or the combustion air inlet to any other appliance - 12 inches (30 cm) minimum. \*
- K** Clearance to mechanical air supply inlet - 6 feet (1.8 m) minimum. \*
- L** Clearance above a paved sidewalk or paved driveway located on public property - 7 feet (2.1 m) minimum.  
A vent may not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- M** Clearance under veranda, porch, deck or balcony - 12 inches (30 cm) minimum. \* Recommended 30 inches (76 cm) for vinyl or plastic.  
Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor. \*
- N** Vertical clearance between two horizontal termination caps – 12 inches (30 cm) minimum.

- O** Horizontal clearance between two horizontal termination caps – 12 inches (30 cm) minimum.
- \* As specified in CGA B149 Installation Codes

Note: Local codes or regulations may require different clearances.

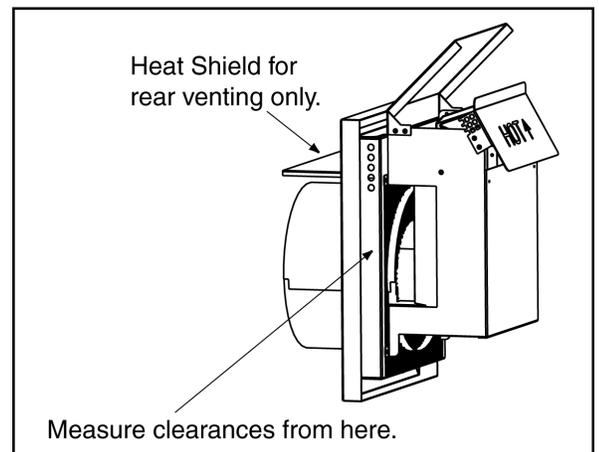
- \*\* Clearance required to vinyl soffit material – 30 inches (76 cm) minimum. With a vinyl soffit shield – 18 inches (46 cm) minimum.

**WARNING!**

**In the U.S.:** Vent system termination is NOT permitted in screened porches. You must follow side wall, overhang and ground clearances as stated in the instructions.

**In Canada:** Vent system termination is NOT permitted in screened porches. Vent system termination is permitted in porch areas with two or more sides open. You must follow all side wall, overhang and ground clearances as stated in the instructions.

Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.



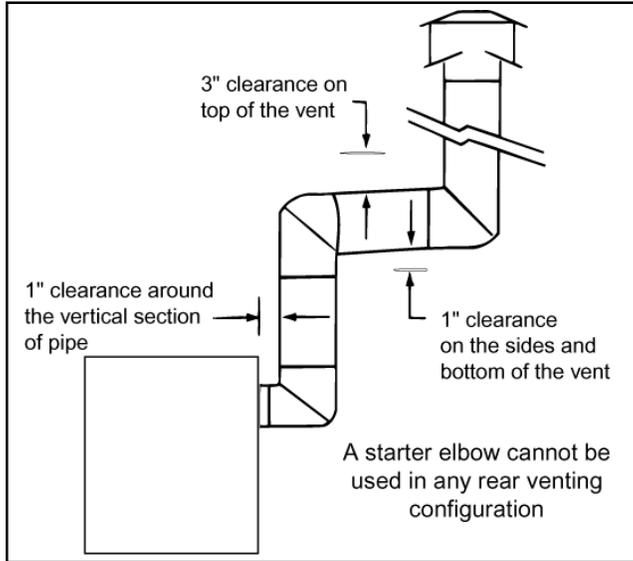
**Figure 12 - Cap Clearances**

**BUILDER'S CHOICE SERIES INSTALLATION INSTRUCTIONS**

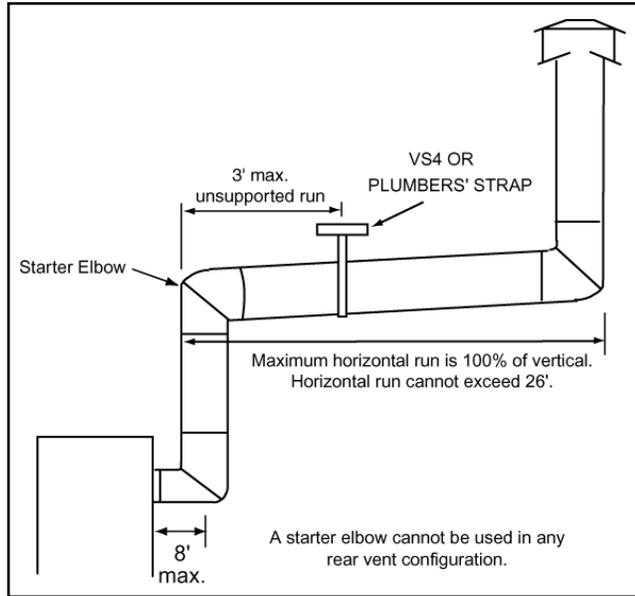
**2. VERTICAL TERMINATION**

**a. Clearances**

See Figure 13 for clearance information.



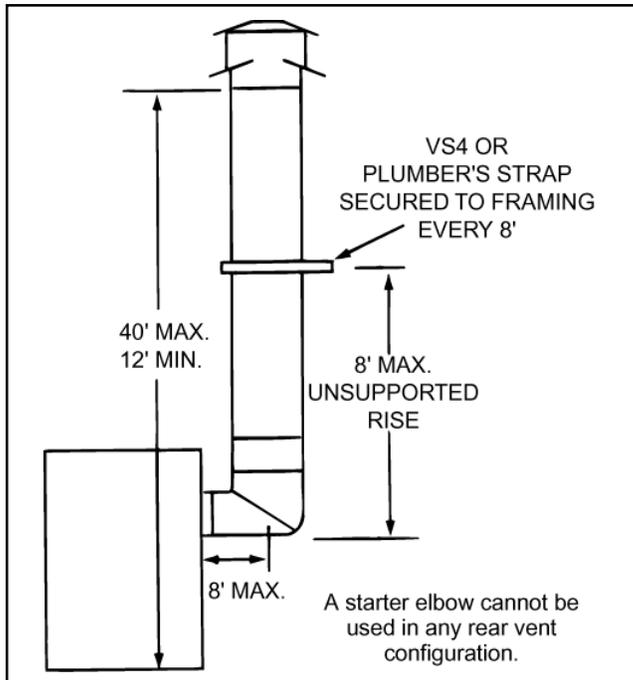
**Figure 13  
Vent Clearances**



**Figure 15  
Vent Support**

**b. Vent Lengths**

Various venting configurations are shown in Figures 14 and 15 from which the maximum vent runs can be determined.



**Figure 14 - Vent Lengths**

**WARNING!**  
A gas appliance must not be connected to a chimney flue servicing a separate solid fuel burning appliance.

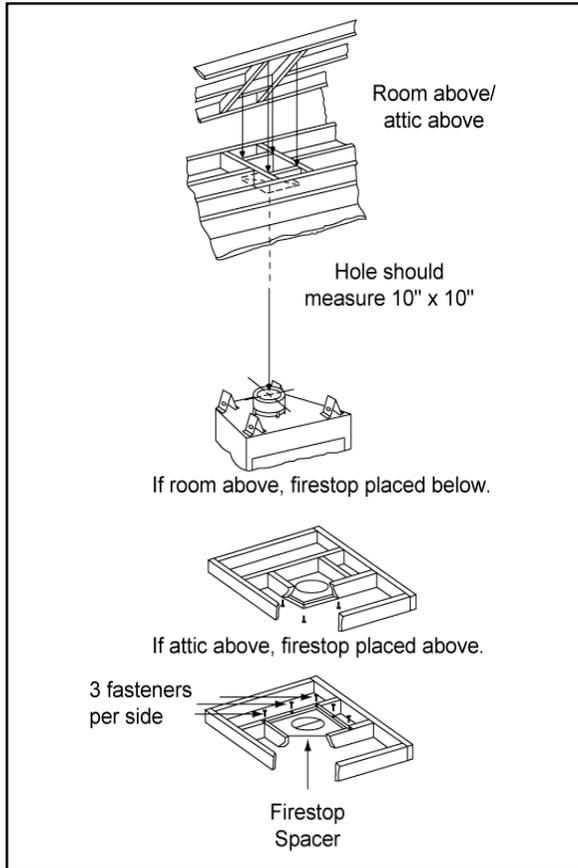
**WARNING - RISK OF FIRE!**  
Always maintain minimum clearances or greater around the chimney system. Do not pack air spaces with insulation or other material.

**WARNING!**  
The horizontal run of vent must have a 1/4" rise for every 1' of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and present a fire hazard.

*The first name in fireplaces*

**c. Firestop Spacer/Chimney Installation**

Frame an opening and install an FS6 Firestop Spacer whenever the vent penetrates a ceiling/floor area, as shown in Figure 16. Frame the opening with the same sized lumber as used in the ceiling/floor joists. **Do not** pack insulation around the chimney.



**Figure 16**  
Installing the Firestop Spacer

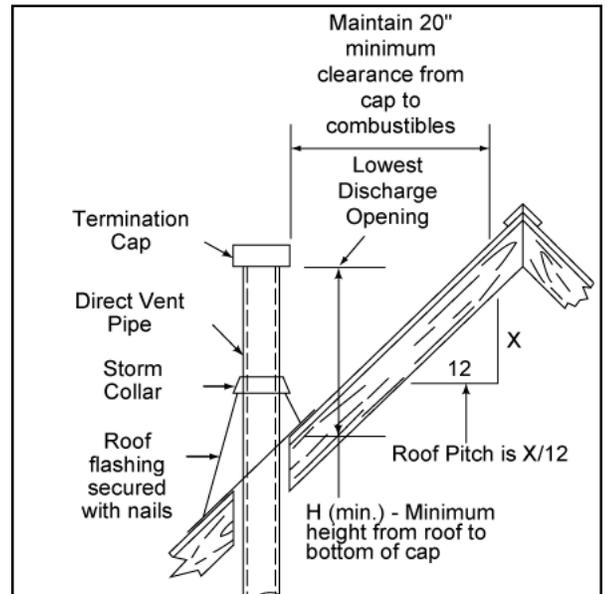
Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0
6/12 to 7/12	1.25
Over 7/12 to 8/12	1.5
Over 8/12 to 9/12	2.0
Over 9/12 to 10/12	2.5
Over 10/12 to 11/12	3.25
Over 11/12 to 12/12	4.0
Over 12/12 to 14/12	5.0
Over 14/12 to 16/12	6.0
Over 16/12 to 18/12	7.0
Over 18/12 to 20/12	7.5
Over 20/12 to 21/12	8.0

**Table 1**  
Chimney Height

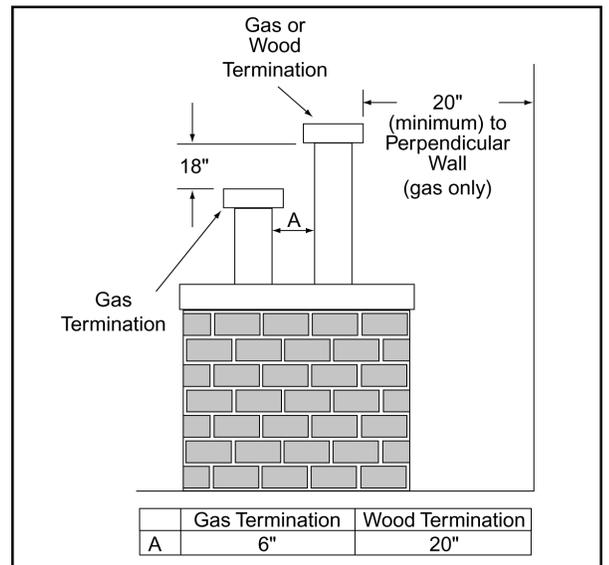
**d. Chase/Termination Installation**

Figures 17 and 18, and Table 1 specify minimum chimney heights for various pitched roofs.

These chimney heights are necessary for safety and do not ensure draft-free operation. Trees, buildings, adjoining roof lines, adverse conditions, etc. may create a need for a taller chimney should down drafting occur.



**Figure 17**  
Chimney Height for Vertical Termination



**Figure 18**  
Multiple Vertical Termination Clearances

**Note:** To ensure proper operation, verify all venting and the termination are unobstructed.

## G. ASSEMBLING VENT SECTIONS

### 1. ATTACHING THE VENTING TO THE APPLIANCE

To attach the first VP section to the appliance collars, simply slide the flared end of the inner vent of the VP section over the inner collar on the appliance. At the same time, insert the outer vent into the outer collar on the appliance. Push the vent section into the appliance collar until all the lances have snapped in place. Tug slightly on the vent to confirm it has completely locked into place.

### 2. ASSEMBLING VENT SECTIONS

- a. Start the flared inner flue of section "A" over the inner flue of section "B".
- b. Insert the outer flue of section "A" into the outer flue of section "B". See Figure 19. Once both inner and outer flues are started, press section "A" into section "B" firmly until all lances have snapped into place. Tug slightly on section "A" to confirm it has completely locked into place. See Figure 20.

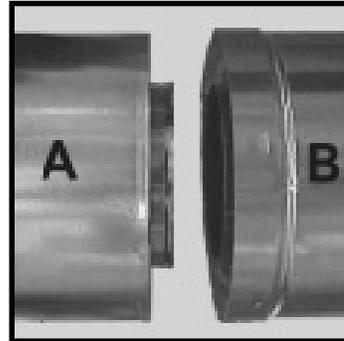


Figure 19

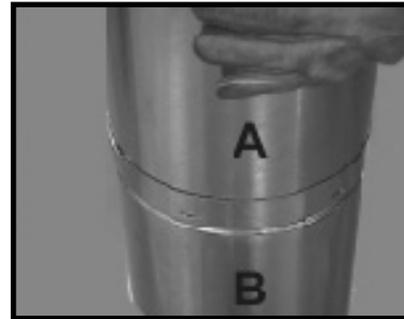


Figure 20

**Note:** Squeezing the pipe slightly to fit may be necessary.

**Note:** Make sure that the seams are not perfectly aligned to prevent unintentional disconnection.

### 3. ASSEMBLING MINIMUM INSTALLATIONS (MI) SECTIONS

MI sections are non-unitized so that they can be cut to a certain length. To use these sections, they must be cut to length from the non-expanded end. See Figure 21. They can then be attached by first connecting the expanded end of the MI inner vent with the inner vent from the adjacent vent section and securing with three screws. The expanded portion of the MI inner vent must overlap completely with the untreated end of the adjacent vent section. The outer vent can then be inserted into the adjacent outer vent expanded end and attached to the next vent section with three screws. The other end of the MI vent section can then be attached by fitting a snap lock section to it and snapping it together as normal.

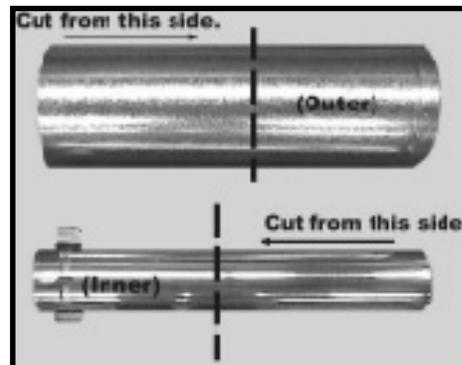


Figure 21

The first name in fireplaces

**4. ASSEMBLING SLIP SECTIONS**

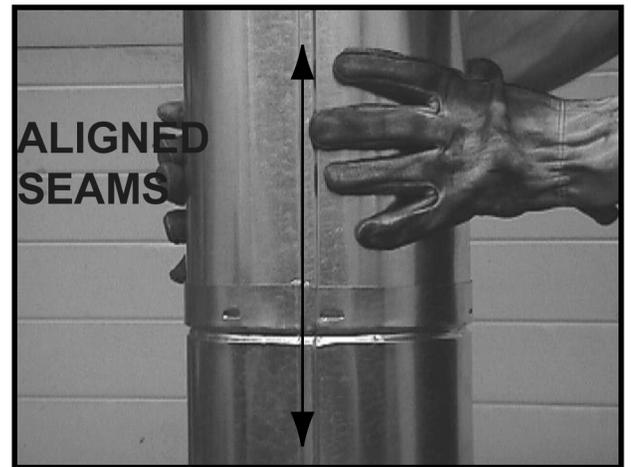
Slip sections should be snapped into the first mating piece, then expanded to their desired length, making sure that a 1.5" overlap is maintained between the two sections of the slip section. The two sections of the slip section then need to be secured by driving two screws through the overlapping portions of the outer vent. See Figure 22. This will secure the slip section to the desired length and prevent it from separating. The slip section can then be attached to the next section of vent.

**5. DISASSEMBLING VENT SECTIONS (ONLY IF NECESSARY)**

To disassemble any two pieces of pipe, rotate either section so that the seams on both pipe sections are perfectly aligned as shown in Figure 23. They can then be carefully pulled apart.



**Figure 22**



**Figure 23**

## H. UTILITIES

### 1. GAS LINE CONNECTION

Open the control access panel as shown in Figure 24. See Figure 25 to connect the gas line properly. All connections must be checked for leaks with a soap and water solution or a leak detector. Bleed the gas line to extract any air that may have been trapped inside the pipe.

This appliance is supplied with a 3/8" flare connection to the gas valve. Installation of flexible connector and/or manual gas valve must conform to local codes. In the absence of local codes, with the **National Flue Gas Code ANSI Z223.1-latest edition** in the U.S.A. and the **CAN/CGA B149 Installation Codes** in Canada.

This appliance has been tested for installation of a manual shutoff valve in the bottom compartment of the appliance.

The Commonwealth of Massachusetts requires this to be a T-handle type manual shutoff valve.



Figure 24 - Control Access Panel

BCDV36		
	N.G.	L.P.
Minimum Inlet Pressure for Purpose of Input Adjustment	4.5*	11*
Maximum Inlet Pressure	10.5*	14*
Optimal Manifold Pressure	3.5*	10*
Minimum Manifold Pressure	1.7*	5.4*
Maximum Input BTU/H	20,000	18,500
Orifice Size - Inches	0.089	0.052

\* Inches of Water Column

Table 2 - Gas Information for Standing Pilot Appliances

### 2. GAS PRESSURE

On the standing pilot gas control valve, a pressure tap is included on the front face of the valve.

Table 2 shows the optimum gas pressure information. Consult your local gas company for assistance in determining the proper orifice for your altitude or refer to **ANSI Z223.1 - latest edition**.

**WARNING!**

**This valve has been preset at the factory. Altering settings may result in fire hazard or bodily injury.**

### 3. GAS CONVERSIONS

Natural or propane gas conversions necessary to meet the application need to be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

In the event your appliance must be converted to use propane, you must use a **CKP Conversion Kit**. To be converted to use natural gas, you must use a **CKN Conversion Kit**. See Figure 26.

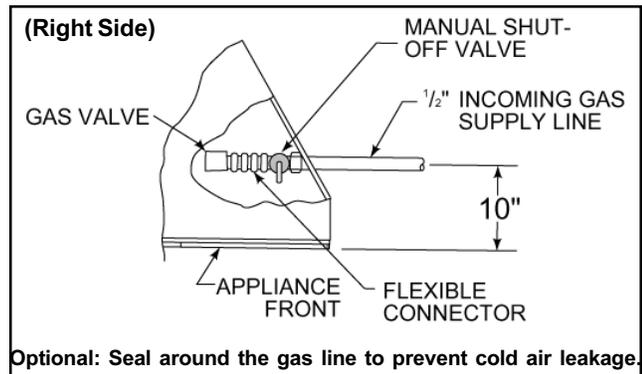


Figure 25 - Gas Line

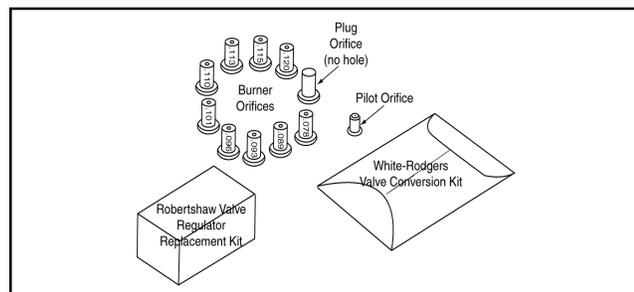


Figure 26 - Conversion Kit

**Note:** This appliance and its manual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa). The appliance must be isolated from the gas supply piping system by closing its manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi (3.5 kPa).

The first name in fireplaces

The first name in fireplaces

**4. WIRING**

**Standing Pilot Ignition - Millivolt System**

**a. Appliance Requirements**

A wiring diagram is shown in Figure 27.

**b. Wall Switch**

The installer shall supply UL or in Canada, CSA-listed wall switch and wiring between appliance and wall switch. This appliance was tested with eighteen feet of UL Listed 18 ga. Type CL2 105°C, two conductor "thermostat wire." If other wiring materials are used they shall comply with local codes or in the absence of local codes, with **National Electrical Code ANSI/NFPA 70-latest edition** or **Canadian Electrical Code CSA C22.1**.

**c. Optional Accessories Requirements**

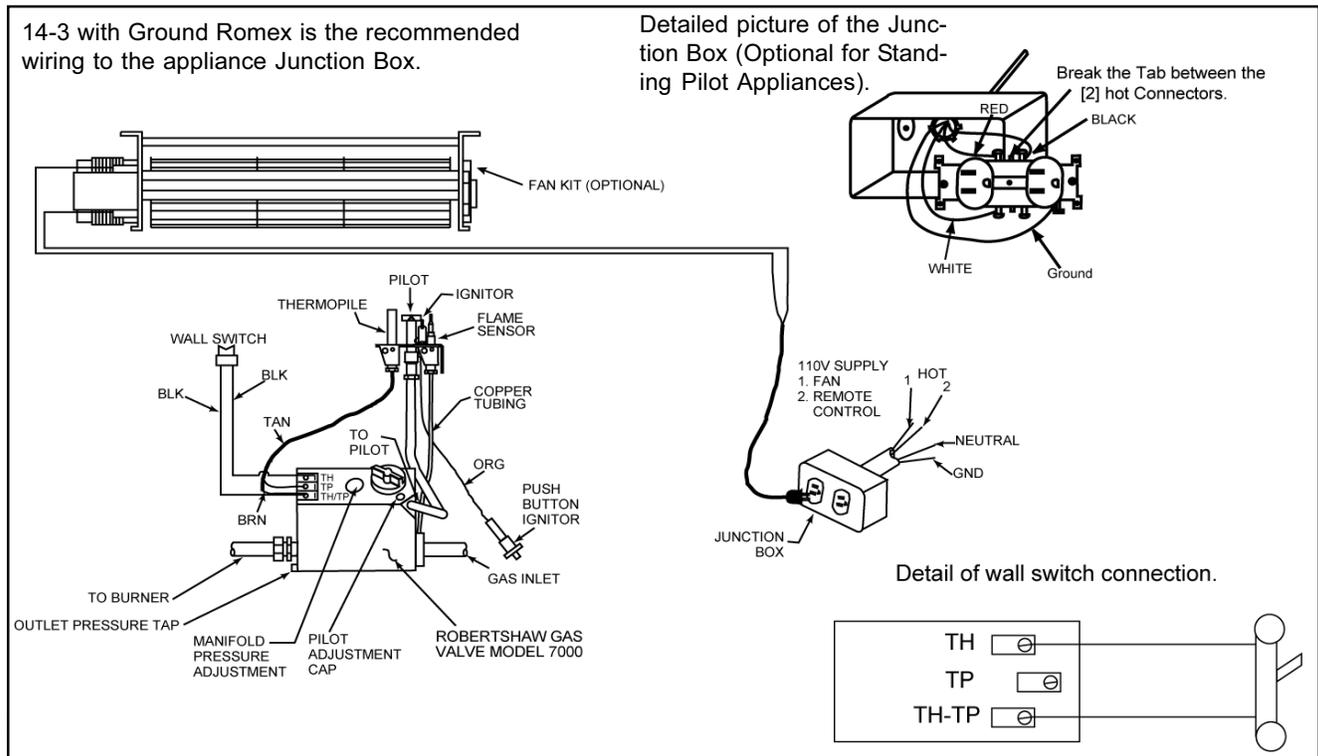
Wiring for optional accessories should be done now to avoid reconstruction.

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

**WARNING!**  
**This standing pilot appliance does not require a 110V AC power supply for operation. Connecting the appliance/wall switch to a 110V AC will cause the appliance to malfunction and destroy the valve and thermopile.**

**5. JUNCTION BOX INSTALLATION AND WIRING**

Refer to the installation instructions included with the JK9 Junction Box Kit and the insert of Figure 27.



**Figure 27**  
**Standing Pilot Ignition Wiring Diagram**

## I. FINISHING

### 1. COMBUSTIBLE FINISHING MATERIAL

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame proofed or not, plastered or unplastered (this includes drywall) are considered to be combustible.

### 2. NONCOMBUSTIBLE FINISHING MATERIAL

Material which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or combination thereof, or have a UL Fire rating of Zero (0).

### 3. HIGH TEMPERATURE SEALANT MATERIAL

Sealants that will withstand high temperatures: General Electric RTV103 (Black) or equivalent; Rutland, Inc. Appliance Mortar #63 or equivalent.

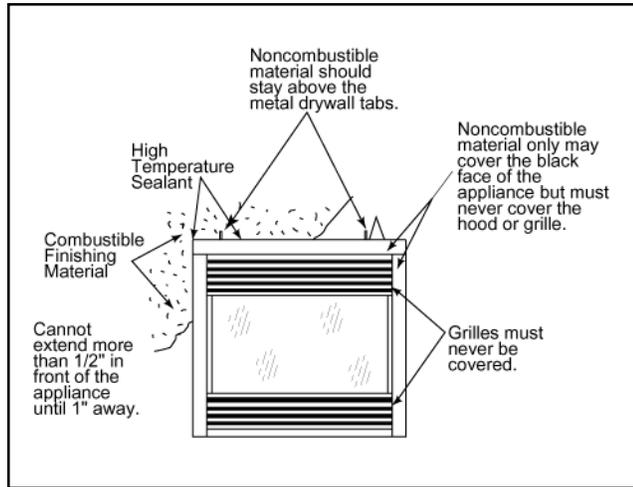
A high temperature sealant, 1/8" wide minimum, must be used to close off gaps between the appliance and facing to prevent cold air leaks. See Figure 28.

### 4. ATTACHING THE HOOD

The hood must be attached or a fire hazard may result. Simply slide the hood under the three screws above the appliance opening. See Figure 29.

### 5. GLASS AND SCREEN REMOVAL

See page 22 of this manual.



**Figure 28**  
Finishing Materials



**Figure 29**  
Hood Placement

**WARNING!**

Grilles and hoods on this appliance cannot, in any way, be covered as it may create a fire hazard.

The first name in fireplaces

## J. APPLIANCE PREPARATION

### 1. LOG SET

The log set should look similar to that in Figure 30.



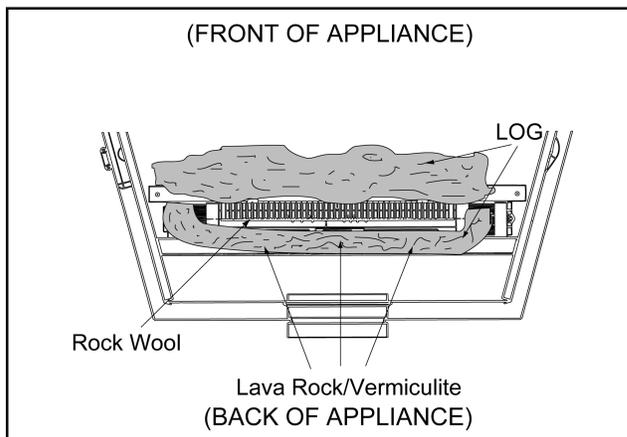
**Figure 30**  
**BCDV36 Gas Log Set**

### 2. PLACING THE VERMICULITE AND LAVA ROCK

See Figure 31.

### 3. PLACING THE ROCK WOOL

Place a small amount of 1/2" diameter pieces (dime sized) of rock wool on the ember tray above the burner



**Figure 31**  
**Placing the Rock Wool**  
**(top logs removed for clarity)**

tube. This will provide a glowing ember look to the appliance when burning. See Figure 31.

### 4. GLASS AND SCREEN REPLACEMENT

See page 22 of this manual.

**WARNING!**  
**RISK OF CARBON MONOXIDE!**  
Never operate this appliance with the glass removed or not sealed.

**WARNING!**  
**RISK OF CARBON MONOXIDE!**  
Do not hit or strike the glass. Do not operate this appliance if the glass is broken or cracked.

*The first name in fireplaces*

## K. LIGHTING INSTRUCTIONS

### FOR YOUR SAFETY READ BEFORE LIGHTING

**WARNING!**

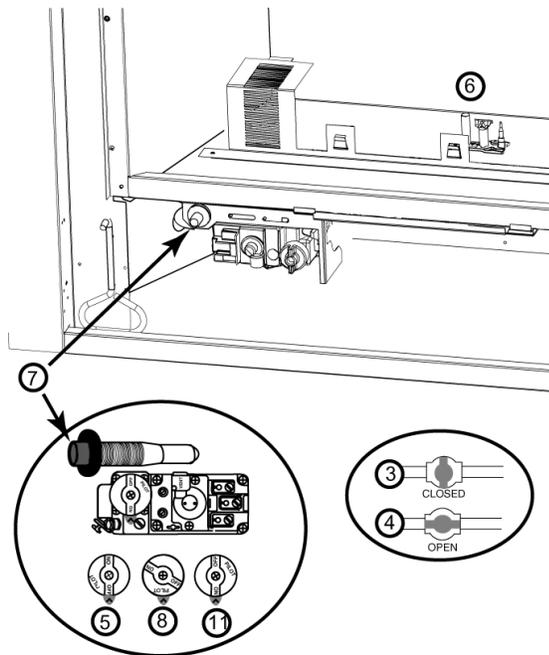
If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. **BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.  
**WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn 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 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 as been under water.

## LIGHTING INSTRUCTIONS

STOP! Read the safety information above on this label!

1. Turn off all wall switches to the appliance or remote.
2. Open the control access panel.
- 3 Turn gas line to "CLOSED". Wait 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 above on this label. If you don't smell gas, go to the next step.
- 4 Turn gas line valve to "OPEN".
- 5 Turn pilot knob clockwise to "OFF" (knob may have to be depressed to pass the "PILOT" position).
- 6 Locate pilot assembly inside appliance.
- 7 Locate red ignitor button in the bottom of the appliance.
- 8 Turn pilot knob to "PILOT" and push in.
9. Continue to hold in pilot knob and push the red ignitor button 12-15 times until small blue pilot flame appears.
10. Continue to hold in pilot knob for approximately one minute. Pilot should remain lit. If pilot goes out, wait 5 minutes and repeat Steps 4-9.
- 11 Release and turn the knob counterclockwise to "ON". Turn the wall switch to "ON" to light the main burner.  
**Do not light by hand!**
12. 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 THE GAS TO THE APPLIANCE

1. Turn off the wall switch or set thermostat to lowest setting.
2. Close the control access panel.
3. Turn gas line to CLOSED position. Do not force.
4. Close control access panel.

The first name in fireplaces

**WARNING!**

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition. Young children should be carefully supervised when they are in the same room as the appliance.

**CAUTION:**

Any safety screen or guard removed for servicing an appliance must be replaced prior to operating this appliance. Clothing or other flammable material should not be placed on or near the appliance.

## L. SEASONAL CHECKLIST

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

**WARNING!**

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.

### 1. PRIOR TO OPERATION

Before operating this appliance, have a qualified technician:

- a. Review proper placement of logs, rock wool and vermiculite.
- b. Check wiring.
- c. Ensure there are no gas leaks.
- d. Ensure the glass is sealed and in proper position.
- e. Ensure the flow of combustion and ventilation air is not obstructed.
- f. Check the air shutter adjustment.

### 2. STANDING PILOT OPERATION

Hearth & Home Technologies recommends you leave the pilot on year round.

- a. **Lighting the Appliance During Regular Use**  
Turn the wall switch to "ON".
- b. **Shutdown During Regular Use**  
Turn the wall switch to "OFF".
- c. **If you decide to shut down the appliance for a long period of time:**
  - 1) Turn all wall switches to "OFF" (if applicable).
  - 2) Turn pilot knob on valve to "OFF".
  - 3) Turn the gas line valve to "CLOSED".
  - 4) To relight the appliance, see page 19.

**WARNING!**

Keep the area near the appliance clear and free from combustible materials, Gasoline and other flammable vapors and liquids.

## M. FUEL CONVERSION

Do not burn wood or other material in this appliance.

Natural or propane gas conversions necessary to meet the application need to be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

**In the event your appliance must be converted to use propane, you must use a CKP Conversion Kit. To be converted to use natural gas, you must use a CKN Conversion Kit. See Figure 26.**

## N. START-UP ISSUES

Issue	Causes and Possible Solutions	
1.	Condensation on the glass:	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation should disappear.
2.	Blue flames:	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn.
3.	Odor from the appliance:	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off any any oils remaining from manufacturing.
4.	Film on the glass:	This is a normal result of the curing process of the paint and logs. If the glass is not cleaned within 4-6 hours of initial burning, this may require a nonabrasive cleaner to remove, such as Brasso.

**WARNING!**  
Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid or similar liquids in this appliance. Keep any flammable liquids a safe distance from the appliance.

## O. MAINTENANCE INSTRUCTIONS

### 1. CLEANING THE BURNER AND CONTROL COMPARTMENT

Keep the control compartment clean by brushing and vacuuming at least once a year. Failure to do so may shorten the life of the components. Always turn off the wall switch (or remote control) and gas valve before cleaning. Failure to do so may shorten the life of the components.

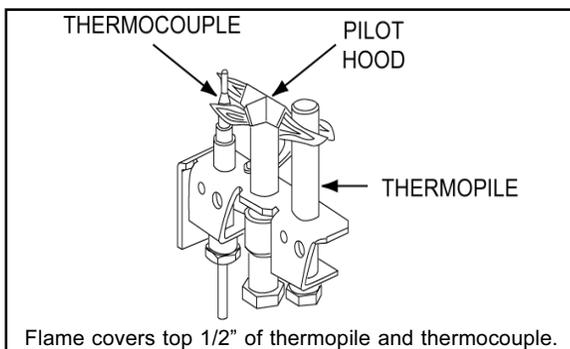
### 2. CHECKING FLAME PATTERNS

Check the flame of the burner periodically, making sure the flames are steady, not lifting or floating. The flame color should be blue with yellow tips. The thermopile and thermocouple tips should be covered with flame. See Figure 32.

If the vent configuration is installed incorrectly, the venting may cause the flames inside the appliance to lift or "ghost", which is a dangerous situation. Inspect the flames after installation to ensure proper performance. See Figure 33. If the vent configuration is correct, yet the flames are lifting or ghosting, shut off the gas to the appliance and contact the dealer.

### 3. VENTING SYSTEM INSPECTION

The appliance and venting system should be inspected before use and at least annually by a qualified field service person to ensure that the flow of combustion and ventilation air is not obstructed.



**Figure 32 - Standing Pilot**



**Figure 33 - Flame Patterns**

The first name in fireplaces

#### 4. CLEANING THE GLASS

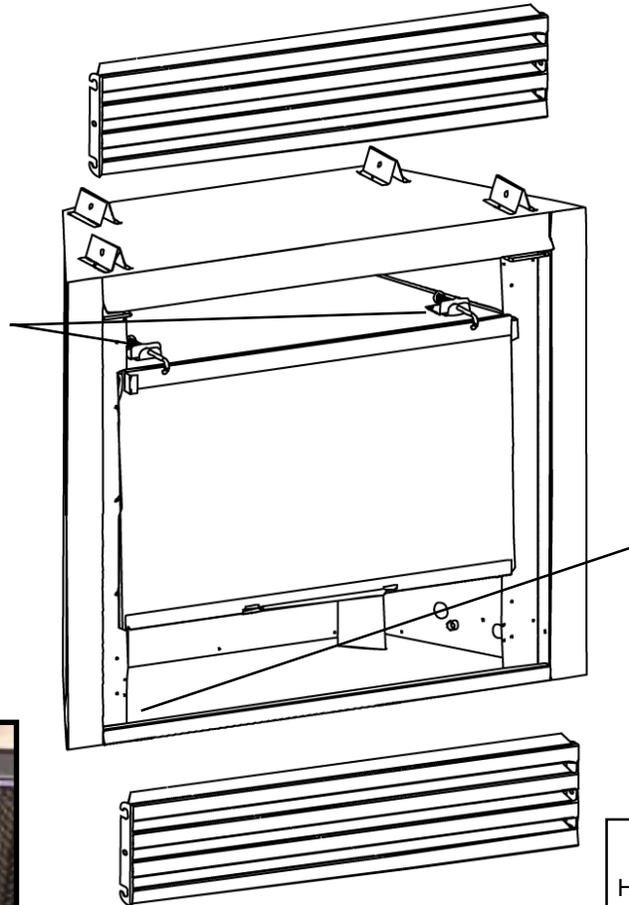
See Figure 34. Never operate this appliance without the glass properly secured in place or if the glass is broken or chipped.

In the event of glass breakage, carefully remove the glass frame. This will allow the removal of all glass fragments and sheet metal edge protection strips. Vacuum all remaining glass pieces with a shop vac. **DO NOT VACUUM IF PIECES ARE HOT!** Replace glass only with a Heatilator glass panel assembly through your local distributor. Never use substitute material. Only fully tempered soda lime safety glass or ceramic glass may be used on this appliance.

1. Lift and pull out upper grille and control access panel.
2. Lift and pull out the bottom of the screen, then pull down out of top corner retainers.
3. Pull and release the two Quick Access Latches™ using handle provided and stored in valve compartment.
4. Angle top of glass out and remove from the lower retainer.
5. Set the glass safely on a nonabrasive surface. Clean using a mild, nonabrasive cleaning solution (i.e. Brasso).



Quick Access Latch™



**Figure 34**  
Glass Cleaning

6. To replace the glass, ensure the glass bottom is set completely down in the bottom retainer and replace the two Quick Access Latches™ to the "secure" position.
7. To replace the screen, place the top of the screen in the two corner catches. Raise the screen until it clears the bottom retainer, then lower into position.
8. Replace Quick Access Latch™ handle in its clips on the lower corner behind the grille.
9. Replace the upper grille and control access panel.

**Safety Note:**

Handle glass with care to avoid striking, scratching or slamming shut. Never clean glass when hot. Keep children and pets a safe distance away.

#### 5. LOG REMOVAL/REPLACEMENT

If removal of the logs becomes necessary, remove the two screws at each side of the front log. Grasp the front log. Pull the log toward the front and up, off the burner. See Figure 35.

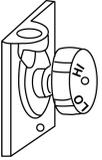
To replace the logs, grasp the front log. Lower the log set so that the back log rests on the shelf in the back of the appliance and the two tabs behind the back log are inserted into the slots in the back of the firebox. Replace the two screws removed earlier at each end of the front log.



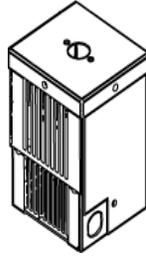
**Figure 35 - Log Removal**

## P. OPTIONAL COMPONENTS

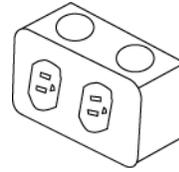
Contact your local Heatilator Dealer by calling: 1-800-843-2848.



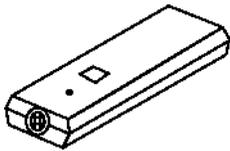
**MF1, MF2**  
High/Low Flame  
Adjustment



**BC10**  
Fan Motor Rheostat  
Control



**JK9**  
Junction Box Kit

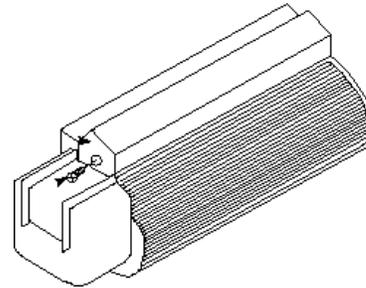


**RC-SMART-HTL**  
Remote Control

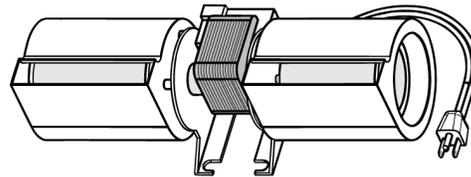
**RC-BATT-HTL**  
Battery-operated (standing pilot)  
Remote Control

**RC-SMART-BATT-HTL**  
Battery-operated Remote Control  
with Thermostat Control

**RC-SMART-STAT-HTL**  
Remote Control  
with Thermostat Control



**FK4**  
Fan Kit

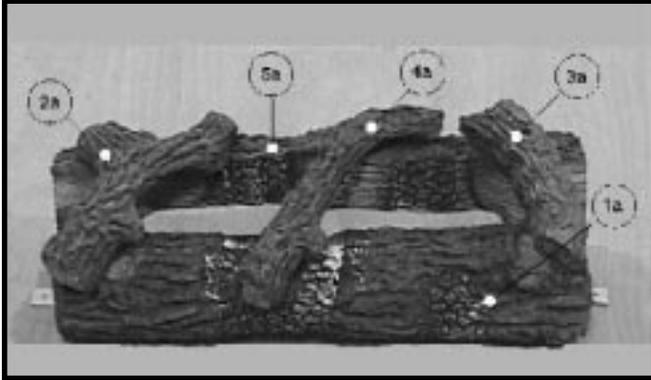


**FK160**  
Fan Kit

*The first name in fireplaces*

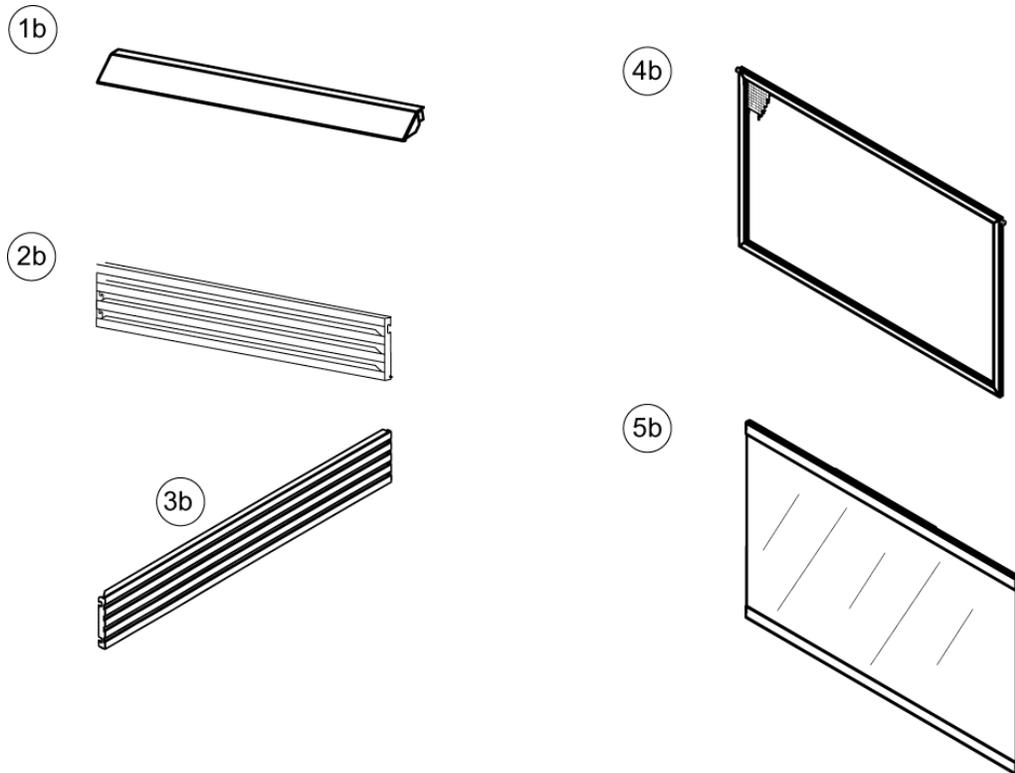
## Q. REPLACEMENT PARTS

Replacement parts are available from your distributor/dealer.



ITEM	PART #	DESCRIPTION	QTY.
1	29416	BCDV36 Gas Log Assy.	1
1a	28589	Front Log	1
2a	25226	Top Left Log	1
3a	27127	Top Right Log	1
4a	29414	Top Middle Log	1
5a	28590	Back Log	1

Item 1  
BCDV36 Gas Log Assembly



ITEM	PART #	DESCRIPTION	QTY.
1b	31715	Hood	1
2b	33465	Bottom Grille Assembly	1
3b	33457	Top Grille Assembly	
4b	28963	Screen Assembly	1
5b	33242	Glass Assembly	1

The first name in fireplaces

---

## HOMEOWNER'S NOTES

*The first name in fireplaces*

## **HOMEOWNER'S NOTES**

*The first name in fireplaces*

## Index

### A

Access Panel 15  
Air Shutter Adjustment 20  
Appliance Preparation 18

### B

Bathtub Areas 3  
BC10 23  
BTUs 15  
Building Codes 3, 8  
Burner 21

### C

Cap Clearances 10  
Carbon Monoxide 18  
Certification 3  
Chase Installation 12  
Chimney Height 12  
Chimney Height for Vertical Termination 12  
Chimney Installation 12  
Clearances 3, 6, 7, 8  
    Cap 10  
    Minimum Venting 6  
    Vertical Termination 11  
Codes  
    Building 3, 8  
    Electric 16  
    Gas 3, 15  
    Manufactured Housing 3  
Combustible Material 17  
Control Compartment 21  
Conversion Kits 15  
Conversions 15  
    Gas 21

### E

Elbows  
    45° 9  
    None 9  
    Two 9  
Electric Codes 16

### F

Fan Kit 23  
Fan Motor Rheostat Control 23  
Finishing 17  
Firestop Spacer 12  
Flame Patterns 21  
Framing 7  
Fuel 15, 21  
Fuel Conversions 15

### G

Gas  
    Conversions 15  
    Pressure 15  
    To turn off 19  
Gas Codes 3, 15  
Gas Conversions 21  
Gas Leaks 20  
Gas Line connection 15  
Gas Log Assembly 24  
Gas Log Set 18  
Glass 17, 18, 20  
    Certifications/Specifications 3

### H

Hood 17  
Horizontal Termination 8

### I

Input Rate 15  
Interior Wall Shield 8

### J

Junction Box 16, 23

### L

Lava Rock 18  
Lighting Instructions 19  
Local Codes 3  
Location and Clearances 6  
Log Removal/Replacement 22  
Log Set 18

### M

Maintenance Instructions 21  
Mantel 7  
Manufactured Housing Codes 3  
Massachusetts 15  
MF1 23  
Minimum Installations 13  
Multiple Vertical Termination 12

### N

Nomenclature 5  
Noncombustible Material 17

### O

Obstructions 8  
Optional Components 23

### Q

Quick Access Latch 22

### R

Remote Control 23  
Replacement Parts 24  
Rock Wool 18

### S

Screen 17  
Sealant Material 17  
Seasonal Checklist 20  
Shutdown 20  
Slip Sections 14  
Space Requirements 6  
Standing Pilot 21  
Standing Pilot Ignition 16  
Standing Pilot Operation 20  
Standing Pilot Wiring Diagram 16  
Start-up Issues 21

### T

Termination  
    Horizontal 8  
Termination Cap Locations 10  
Termination Installation 12  
Typical Horizontal Installation 4  
Typical Vertical Installation 4

### U

Utilities 15

### V

Vent Support 11  
Venting 8  
    Disassembly 14  
    MI Sections 13  
    Slip Section Assembly 14  
    System Inspection 21  
Venting Through the Wall 8  
Vermiculite 18  
Vertical Termination 11  
    Chase Installation 12  
    Chimney Height 12  
    Clearances 11, 12  
    Firestop Spacer/Chimney Installation 12  
    Vent Lengths 11  
    Vent Support 11

### W

Wall Switch 16  
Water 3  
Wiring 16

*The first name in fireplaces*



## Gas Appliance (Fireplace) Limited Lifetime Warranty

**HEARTH & HOME TECHNOLOGIES (“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/contact.asp](http://www.heatilator.com/contact.asp).
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 1-800-843-2848.

©2001 Heatilator® is a Registered Trademark of Hearth & Home Technologies