

# Installation Instructions

Listed Certified for USA. and Canada

The ZDV3624NB, ZDV3624LPB, ZDV3628N, ZDV3628LP, ZDV3632N, ZDV3632LP

This appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Model Numbers ZDV3624, ZDV3624B, ZDV3628, ZDV3632

Stock #'s: ZDV3624N, ZDV3624LP

are Certified to: ANSI Z21.50a-2000, CSA 2.22a-2000, CGA 2.17-M91, CSA P.4.1-02

Stock #'s: ZDV3624NB, ZDV3624LPB, ZDV3628N, ZDV3628LP, ZDV3632N and ZDV3632LP

are Certified to: ANSI Z21.88b-2003, CSA-2.33b-2003, CGA 2.17-M91, CSA P.4.1-02

## “Zero Clearance” Direct Vent Gas Fireplace



**Read this complete manual before beginning installation.  
These instructions must be kept with the unit for future reference.**

### FOR YOUR SAFETY

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

Warning: Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Refer to this manual. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

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.

Extinguish any open flame.

Do not touch any electrical switch.

Do not use any phone in your building.

Immediately call your gas supplier from a neighbour's phone.

If you can not reach your gas supplier, call the fire department.



A Division of R-Co. Inc.  
2340 Logan Avenue  
Winnipeg, Manitoba, Canada R2R 2V3  
Ph: (204) 632-1962

### Why does my fireplace or stove give off odour?

It is normal for your fireplace to give off some odour. This is due to the curing of the paint, adhesives, silicones and any undetected oil from the manufacturing process as well as the finishing materials used with the installations (e.g. marble, tile and the adhesives used to adhere this product to the walls can react with heat and cause odours).

It is recommended that you burn your gas fireplace or stove for a minimum of four hours at a time with the fan off after the curing of the paint has been completed. These odours can last upward to 40 hours of burn time, keep burning at a minimum of four hours per use until odours dissipate.

### About curing of the paint

Your stove or fireplace has been painted with the highest quality silicone stove paint. This paint dries quickly in 15-20 minutes when first applied at the factory. However, due to the high temperature silicone components, the paint will cure when heat is applied to the appliance as it is first used.

The following information **applies to the curing process** to get the paint fully hard and durable.

Fire the appliance four successive times for 10 minutes each firing and a 5 minute cool down between each. Be aware during log and firebox paint curing that a white deposit may be developing on the inside of the glass doors. It is important to remove this white deposit from the glass doors with an appropriate cleaner to prevent build-up (such as Windex or a commercial fireplace glass cleaner).

- Babies, small children, pregnant women and pets should leave the area during the cure phase.
- Ventilate well, open doors and windows.
- Do not touch during curing.

### Noise coming from the fireplace?

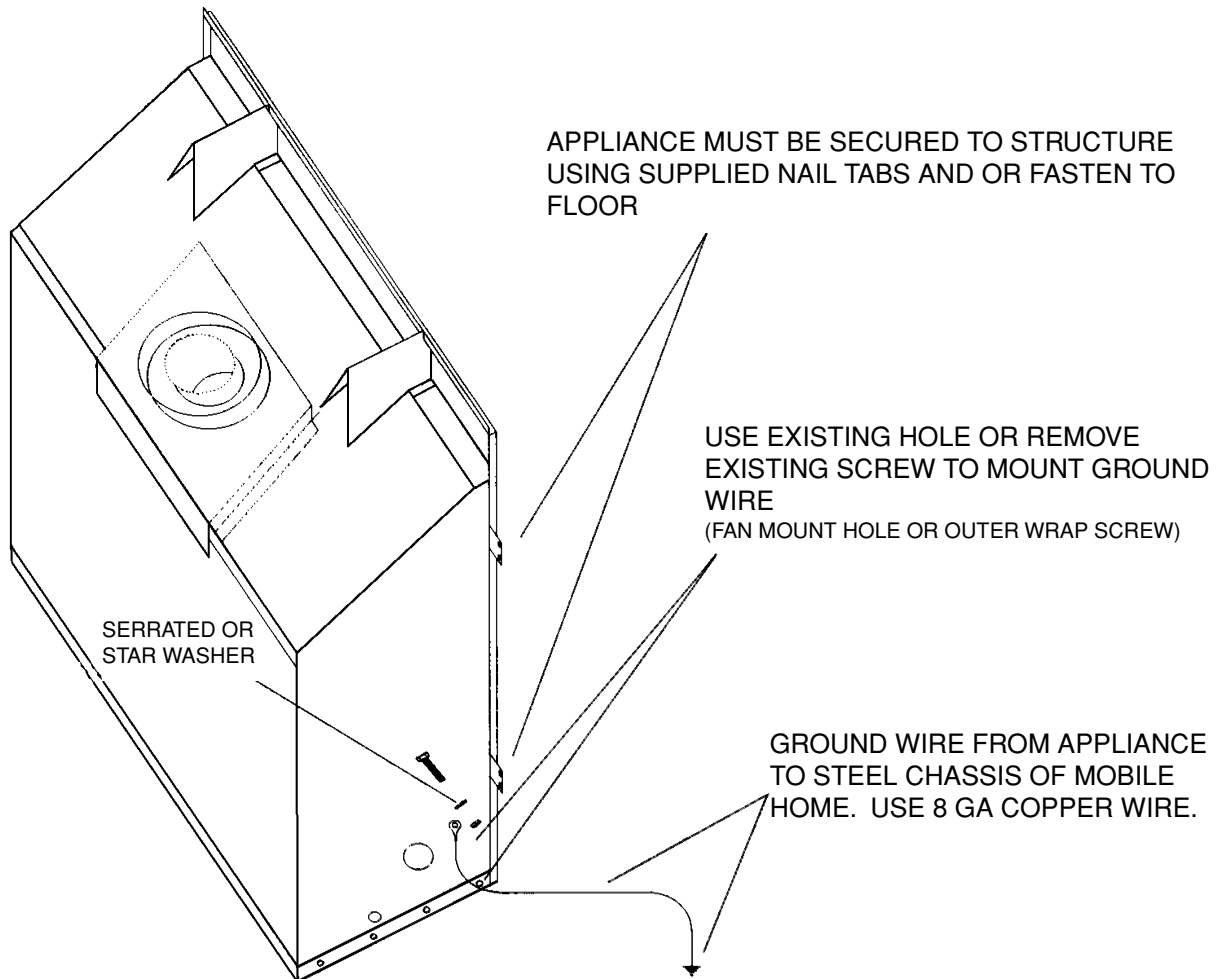
- Noise caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of your fireplace.

## Table of Contents

Mobile Home/Manufactured Housing Installation . . . . .	4
Installation and operation . . . . .	5
Locating your appliance . . . . .	6
Framing your gas fireplace . . . . .	7,8
Mantels and Clearances . . . . .	8
Gas Line Installation . . . . .	9
General glass information . . . . .	10
Log Placement . . . . .	10
Log Placement Guides . . . . .	11-16
Fan kit installation . . . . .	17
Millivolt system, lighting, & burner control . . . . .	18
Brick Installation . . . . .	19
Vent termination . . . . .	20
Venting graph . . . . .	21
General vent installation information . . . . .	22
Installation of side wall venting . . . . .	22
Venting vertical . . . . .	23
Conversion Kit Instructions . . . . .	24
Gas Conversion Kit for	
Top Convertible Pilot . . . . .	25
Back Vent . . . . .	26
Repair parts list . . . . .	26
Trouble shooting the gas control system . . . . .	28
Kingsman Industries Gas Fireplace – Limited Warranty . . . . .	29

## Mobile Home/Manufactured Housing Installation

This Direct Vent System Appliance must be installed in accordance with the manufacturer's installation instructions and the Manufactured Home Construction and Safety Standard Title 24 CFR, Part 3280, or the current Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities ANSI/NFPA 501A, and with CAN/CSA Z240 MH Mobile Home Standard in Canada.



**THE ZDV3624NB, ZDV3624LPB, ZDV3628N, ZDV3628LP, ZDV3632N and ZDV3632LP MAY BE INSTALLED IN MANUFACTURED (MOBILE) HOMES AFTER FIRST SALE IN THE USA. IN CANADA THE ZDV3628N, ZDV3628LP, ZDV3632N AND ZDV3632LP MAY BE INSTALLED IN MANUFACTURED (MOBILE) HOMES.**

Please follow the current ANSI/NFPA 70 National Electrical Code in the USA and CAN/CSA C22.1 Canadian National Electrical Code in Canada.

An appliance must be grounded to the steel chassis of the home with 8 ga. copper wire using a serrated or star washer to penetrate paint or protective coating to insure grounding.

Use carriage bolt at the attachment point (see diagram above) to secure the appliance to the floor.

**Warning:** Do not compromise the structural integrity of the manufactured home wall, floor or ceiling, during installation of appliance or venting.

*For required venting components see venting installation in appropriate section of this manual.*

Certified for installation in a bedroom or bedsitting room. In Canada must be installed with listed milli volt thermostat. In USA see local codes.

# Installation and Operation

## Installation Regulations

This gas appliance must be installed by a qualified installer in accordance with local building codes, or in the absence of local codes, with the current CAN/CGA-B149.1 or .2 Installation Code (in Canada) or the current National Fuel Gas Code Z223.1 when installed in the United States.

This appliance, when installed, must be electrically connected and grounded in accordance with local codes, or in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code or with the national Electrical Code; ANSI/NFPA 70-1987 when installed in the United States.

### Vertical Venting in Cold Climates

In cold climate conditions where temperatures go below -10 degrees Celsius or 14 degrees Fahrenheit, we recommend that the chase be insulated and where the vent pipe enters into the attic space that the pipe be wrapped with an insulated mylar sleeve. This will increase the temperature of the vent and help the appliance to vent properly in cold weather conditions.

It is also important in vertical vented direct vent appliances that the appliance be operated daily during the winter months as this will help stop the Termination from freezing up. We recommend using a thermostat set at room temperature to allow the unit to cycle.

## FOR SAFE INSTALLATION AND OPERATION OF YOUR GAS FIREPLACE PLEASE NOTE THE FOLLOWING:

1. **This appliance gives off high temperatures and should be located out of heavy traffic areas and away from furniture and draperies.**
2. **Children and adults should be alerted to the hazards of the high surface temperatures of this appliance and should stay away to avoid burns or ignition of clothing.**
3. **Children should be carefully supervised when they are in the same room as your fireplace appliance.**

**NOTE:** It is recommended that a Carbon Monoxide (CO) Detector be installed in or near bedrooms and on all levels of your home. Place a detector about 15 feet (4.5 meters) outside the room that houses your gas appliance.

This gas appliance should be installed by a qualified installer in accordance with local building codes and with current CAN/CGA - B149 (.1 or .2) installation codes for Gas Burning Appliances and Equipment.

**Warning:** When purging the gas line, the glass front must be removed.

Never use your gas fireplace as a cooking device.

The Burner/Log Assembly has been engineered and permanently adjusted for proper flame control.

**Do not alter gas orifice.**

4. **Under no circumstances should this appliance be modified. Any parts that have to be removed for servicing should be replaced prior to operating this appliance.**
5. **Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.**
6. **Control compartments, burners and air passages in this appliance should be kept clean and free of dust and lint. Make sure that the gas valve and pilot light are turned off before you attempt to clean this unit.**
7. The venting system (chimney) of this appliance should be inspected at least once a year and if needed, your venting system should be cleaned.
8. **Clothing or other flammable material should not be placed on or near the appliance.**  
**This appliance should not be used as a drying rack for clothing nor should Christmas stockings or decorations be hung from it.**
9. Under no circumstances should any solid fuels (wood, paper) be used in this appliance.
10. For safe operation, glass doors must be closed.
11. Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.
12. **WARNING: Do not operate appliance with the glass front removed, cracked or broken. Replacement of glass should be done by a licenced or qualified service person.**
13. Do not operate appliance unless completely installed as per installation instructions.

Periodically remove the logs from the grate assembly and vacuum any loose particles from the grate and burner areas.

See log Placement on Pages 11-20 to remove logs, vacuum burner parts and replace logs.

**Note: It is normal for your gas fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.**

Please ensure that your room is well ventilated - open all windows.

It is recommended that you burn your gas fireplace for at least four (4) hours the first time you use it without the fan on.

Make adequate accessibility clearances for servicing and proper operation.

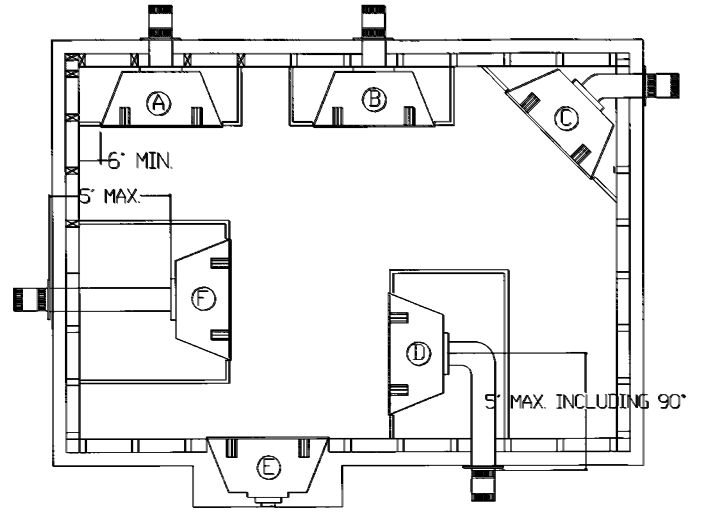
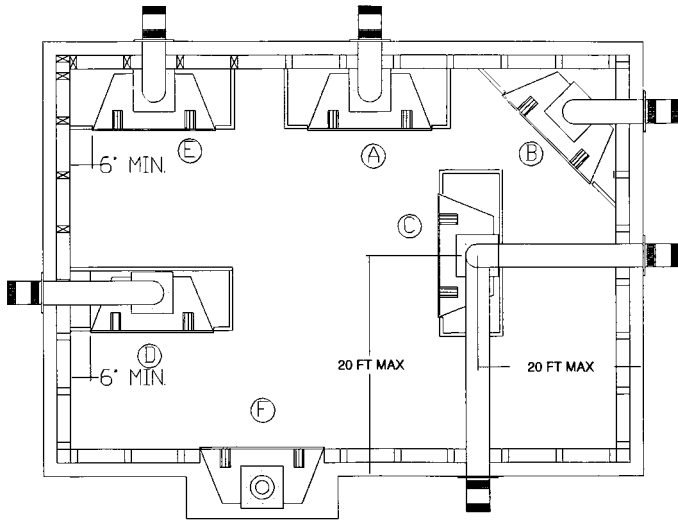
This appliance must not be connected to a chimney flue serving a separate solid fuel burning appliance.

Be sure that the flow of combustion and ventilation air is not obstructed.

# Locating your Appliance

(above or below grade)  
**Installing with Top Vent**

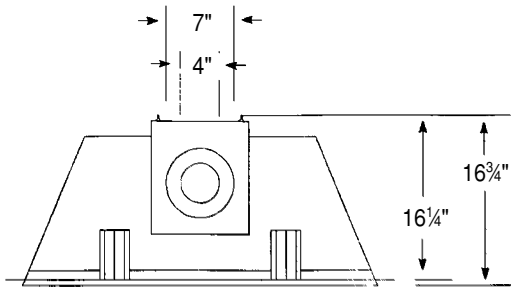
(above grade)  
**Installing with Back Vent**



Island installation with a top vent is possible as long as the horizontal portion of the vent system does not exceed 20 feet (6.1 m). When you install your fireplace as in position 'B', 'D' or 'E', a minimum of 6 inches (153mm) clearance must be maintained from the perpendicular wall and the front of the appliance.

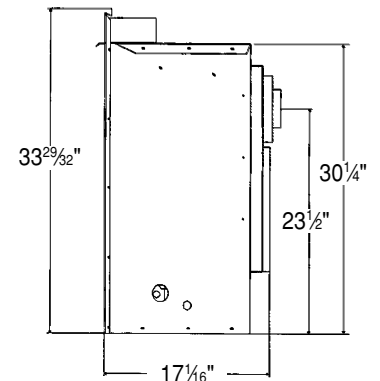
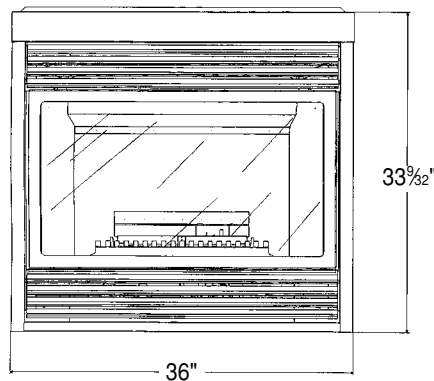
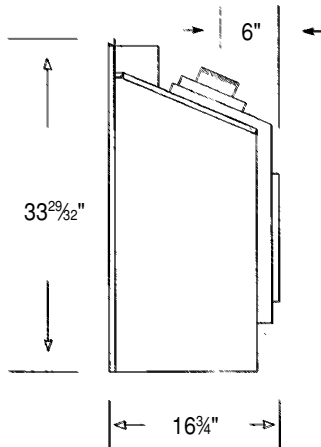
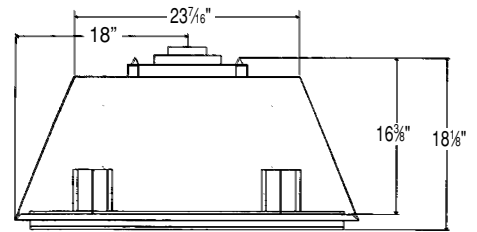
- A - Flat on a wall
- B - Across the corner
- C - As an island
- D - As a room divider
- E - Flat on wall corner
- F - Exterior wall

## Top Vent



## ZDV3624B

## Back Vent



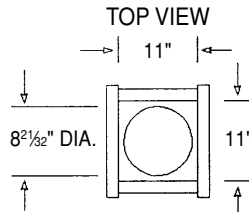
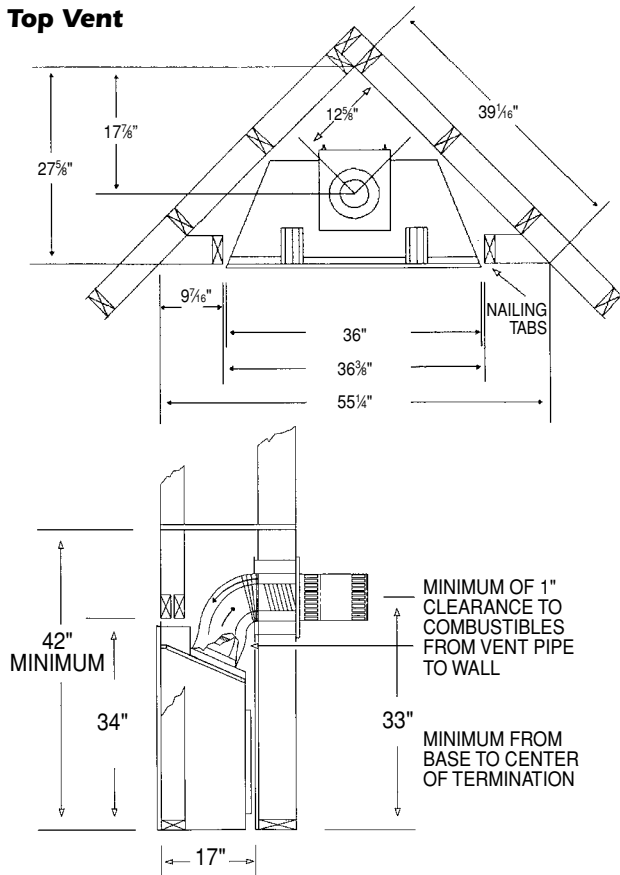
# Framing for your Gas Fireplace

## Framing Specifications

1. Cold climate installation recommendation: When installing this fireplace against non insulated exterior wall or chase, it is recommended that the outer walls be insulated to conform to applicable insulation codes. Drywall should be installed over insulation to prevent contact of insulation and unit.
2. Choose fireplace location and frame in accordance with the fireplace framing dimensions specified (See Framing Diagrams). Bend nailing tabs forward on left and right of unit and place fireplace into framed enclosure. This allows for 1/2" in front of framing tabs for finishing materials.

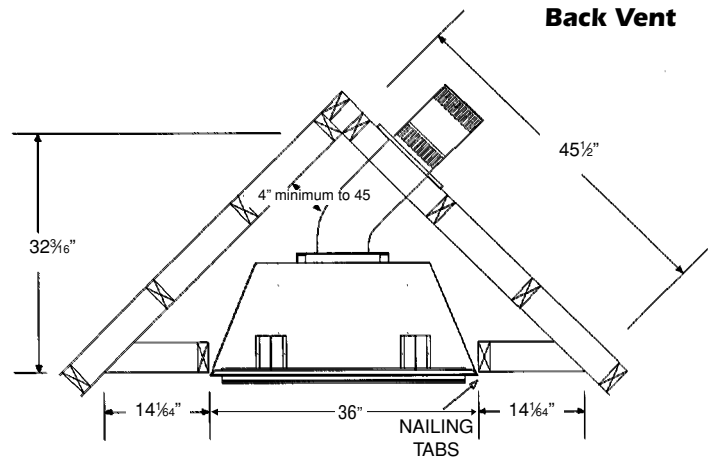
3. Drywall or other material can extend flush with the appliance on the bottom, sides and top of fireplace.
4. When installing horizontal with a 90 degree bend maintain a minimum of two and a half (2.5") inches above the bend in enclosures.
5. Hearth is not mandatory but is recommended for aesthetic purposes. Combustible floors cannot raise above the bottom of the fireplace. We recommend a non-combustible hearth projecting out 12" (305mm) or more in front of the fireplace.

### Top Vent

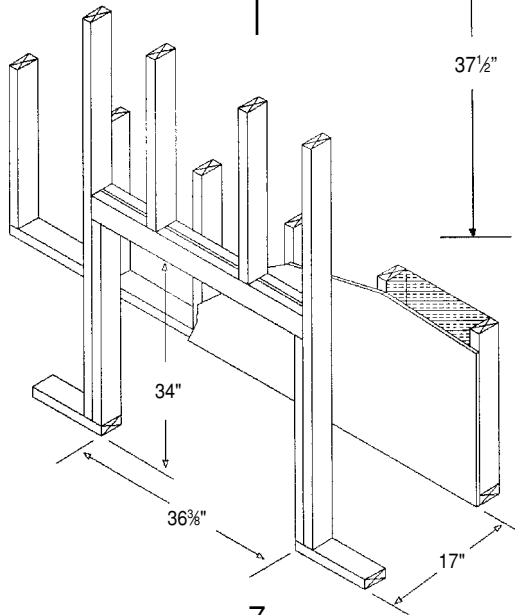
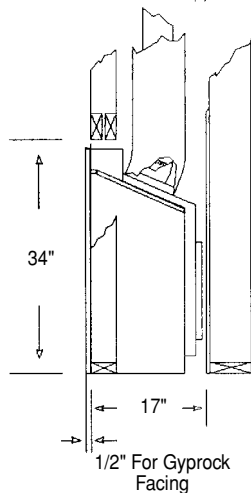


It is recommended for **Propane Horizontal Installations** that the venting should be a minimum of one foot vertical off the flue before the elbow on any horizontal runs of one foot or greater. This allows for cleaner combustion and greatly reduces carboning and cleaning of glass. (Does not apply to Back Flue Models).

### Back Vent



ON VERTICAL VENTING "MUST" MAINTAIN 1" CLEARANCE TO COMBUSTIBLES



**Back Vent Model Only**  
On horizontal venting, 1/4" rise per foot up to 3ft, over 3ft up to the 5ft maximum horizontal run 1 1/2" rise per foot is needed.

## Clearance to Combustibles

Back (from Standoffs)	0 inches/0 mm
Side (from standoffs)	0 inches/0 mm
Ceiling (from bottom of fireplace)	60 inches/150 cm
Floor	0 inches/0 mm
Top (from standoffs)	0 inches/0 mm
Top of 90 degree bend in Minimum Enclosure of 42 inches	5 1/2 inches/140 mm / All Vent Systems
Top of 90 degree bend in Enclosure over 42 inches	2 1/2 inches/64 mm / All Vent Systems
Top of Horizontal Pipe	1 1/2 inches/38 mm / All Vent Systems
Side & Bottom of Horizontal Pipe	1 inch/25.5mm / All Vent Systems
Vertical Vent Pipe	1 inch/25.5mm / Kingsman Vent Systems
Vertical Vent Pipe	1 1/4 inch/32mm / Simpson/AmeriVent/Selkirk Systems

(NOTE -Floor) if installing the appliance directly on carpeting or other combustible materials other than wood flooring, the appliance shall be installed on a metal or wood panel, the full width and depth of the appliance. Carpet may extend 1/2 inch above the floor of appliance.

Note: See Mantel Chart

## Mantels

Depending on the depth of the fireplace mantel, it may be installed higher or lower from the top of the fireplace opening. See drawings for proper installation height of your combustible mantel. Non-combustible mantels may be installed at any height above the fireplace opening.

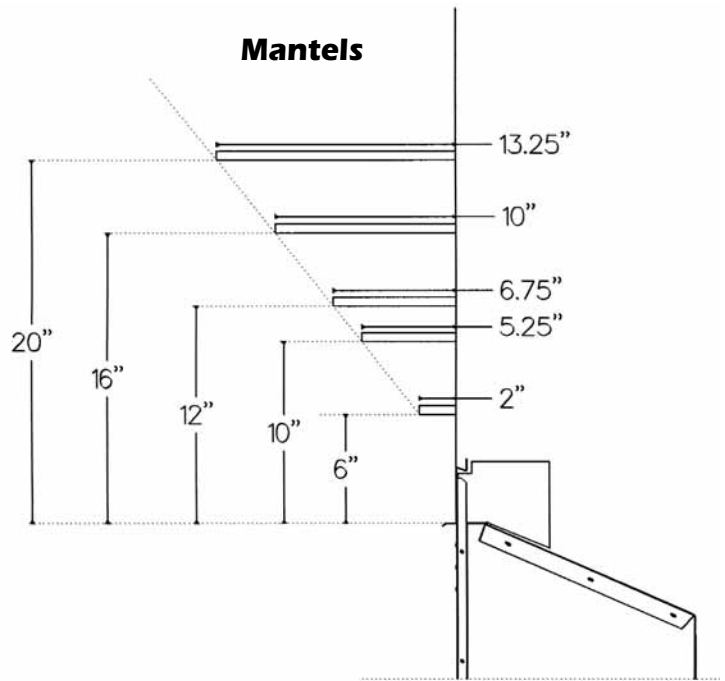
Non combustible materials such as brick, tile, etc. can extend up to or over the front face of the fireplace (NO PORTION OF GRILL AREA OR DOOR AREAS CAN BE COVERED).

Combustible material can extend flush to unit up to the top, bottom and sides of fireplace to stand-offs.

If slim line brass surround is used, brick, tiles or other NON-COMBUSTIBLE materials may extend past the front of unit giving a recessed appearance. For COMBUSTIBLE materials extending in front of fireplace consult (Mantel and Mantel Leg Drawings).

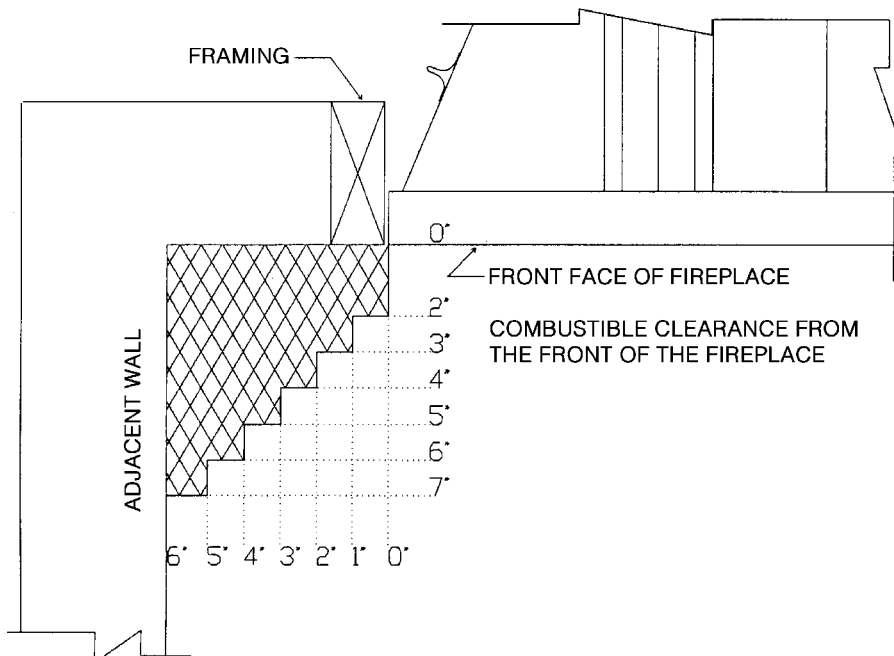
If wide brass surround is used finish materials must be flush with front of unit.

Note: When using paint or lacquer to finish the mantel, such paint or lacquer must be heat resistant (250°F) to prevent discoloration.



**Warning:** Combustible objects must not be placed on a non-combustible mantel unless the non-combustible mantel meets the minimum height and width requirements for a combustible mantel.

## Mantel Leg Clearances

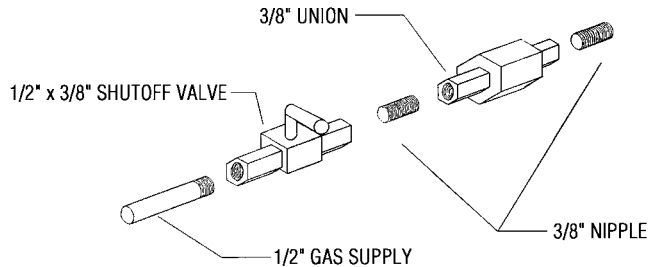




# Gas Line Installation

This gas appliance should be installed by a qualified installer in accordance with local building codes and with current CAN/CGA - B149.1 or .2 installation codes for Gas Burning appliances and equipment in Canada and the National Fuel Gas Code ANSI Z223 in the U.S.A.

1. The gas pipeline can be brought in through either the right or the left side of the appliance. A knockout is provided at either location to allow for the gas pipe installation and testing of any gas connection.
2. The gas control inlet is 3/8" NPT. Typical installation layout for rigid pipe is shown at right.
3. When using **copper or flex connector**, use only approved fittings. Always provide a union so that gas line can be easily disconnected for burner or fan servicing. See gas specification for pressure details and ratings.
4. When a vertical section of gas pipe is required for the installation, a condensation trap is needed. See CAN/CGA-B149.1 or .2 for code details.
5. For natural gas, a minimum of 3/8" iron pipe with gas minimum pressure of 4.5" w.c. must be used for supply from the gas meter. Consult with the local gas utility if any questions arise concerning pipe sizes.
6. A 1/8" NPT plugged tappings are accessible for test gauge connection both on the inlet and outlet of the gas valve.
7. Turn the gas supply ON and check for leaks. **DO NOT USE OPEN FLAME FOR THIS PURPOSE.** Use an approved leak testing solution.
8. The appliance and its individual 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 PSIG (3.5 KPa).
9. The appliance must be isolated from the gas supply piping system by closing its individual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSIG (3.5 KPa).



**Important:** Always check for gas leaks with a soap and water solution. Do not use open flame for leak testing.

For the state of Massachusetts a **T-handle gas shut-off valve** must be used on a gas appliance. This T-handle gas shut-off valve must be listed and approved by the state of Massachusetts. This is in reference to the state of Massachusetts state code CMR238.

**Note:** The gas line connection may be made of 1/2" rigid pipe or an approved flex connector. Since some municipalities have additional local codes, it is always best to consult your local authorities and the current CAN/CGA - B149.1 or .2 installation code in Canada or the National Fuel Gas code ANSI Z223.1 in the U.S.A.

## Gas Specifications

Models	Top Flue ZDV3624N	Top Flue ZDV3624LP	Back Flue ZDV3624NB	Back Flue ZDV3624LPB	ZDV3628N	ZDV3628LP	ZDV3632N	ZDV3632LP
Fuel	Natural	Propane	Natural	Propane	Natural	Propane	Natural	Propane
Gas Control	Millivolt adjustable	Millivolt adjustable	Millivolt adjustable	Millivolt adjustable	Millivolt adjustable	Millivolt adjustable	Millivolt adjustable	Millivolt adjustable
Maximum	24,000 BTU High	22,000 BTU High	24,000 BTU High	22,000 BTU High	28,000 BTU High	26,000 BTU High	30,500 BTU High	29,200 BTU High
Input	14,000 BTU Low	15,000 BTU Low	14,000 BTU Low	15,000 BTU Low	20,000 BTU Low	19,000 BTU Low	20,600 BTU Low	22,200 BTU Low
Maximum	n/a	n/a	17,040 BTU	15,620 BTU	21,000 BTU High	19,500 BTU High	22,900 BTU	21,900 BTU
<b>Output</b>								
Orifice Size	#42	#53	#42	#53	#37	#52	#36	#51
(0 - 4500 ft)								
Air Shutter	1/8"	Fully Open	.188	Fully Open	.25"/.218" Open	5/8"/Fully Open	.187	.312
Gas Inlet Size	S.I.T. 820 Nova, 3/8" NPT							
Gas Supply Pressure	Minimum	Normal	Maximum					
Natural Gas	5.5"	7"	9"					
Liquid Propane	11"	11"	12"					
Manifold Pressure	Natural Gas				Liquid Propane			
Manifold Pressure High	3.5 IN. W.C./ .87 KPa				10 IN. W.C./ 2.61 KPa			
Manifold Pressure Low	1.6 IN. W.C./ .40 KPa				6.3 IN. W.C./ 1.57 KPa			

## General Glass Information

### Glass Cleaning

It will be necessary to clean the glass periodically. During start-up, condensation, which is normal, forms on the inside of the glass and causes dust, lint etc. to cling to the glass surface. Also, initial paint curing can deposit a slight film on the glass. It is therefore recommended that initially the glass be cleaned two or three times with non-abrasive common household glass cleansers and warm water. After that, the glass should be cleaned two or three times a season depending on the circumstances.

### Cautions and Warnings

- Do not clean when the glass is hot.
- The use of substitute glass will void all product warranties.
- Care must be taken to avoid breakage of the glass.
- Do not operate this fireplace without the glass front or with a broken glass front.
- Do not strike or abuse glass.

### Glass Replacement

#### REPLACEMENT GLASS FOR BOTH DIRECT VENT UNITS

Model Series ZDV3624 can use either tempered glass or Robax ceramic or coated Neoceram glass. Must be 5mm thick.

Only Robax ceramic or coated Neoceram glass may be used for replacement for model ZDV3628 and ZDV3632. Must be minimum 5mm thick.

To replace glass, clean all materials from door frame. Scrape off old silicone down to metal. Using a high heat silicone temperature-resistant to 500°F (260°C) apply a continuous bead of approximately 1/32" to all four sides of frame and insert glass with new gasket. Frame should be on flat surface, with a small amount of weight pressing glass into silicone. Let dry approximately 15 to 20 minutes. The door can be re-installed by reversing Steps 1 & 2. Use caution when removing broken glass, wear gloves.

### Removal of the Glass Door

1. Remove the two screws located behind upper grill or unfasten latches if so equipped.
2. To remove, pull frame forward and lift from bottom door retainer channel.

## Appliance/Log Reference Chart/Log Placement

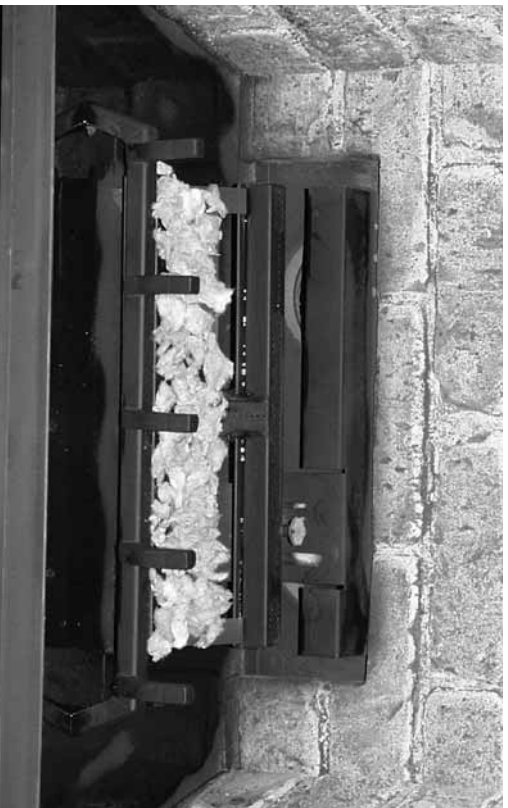
The following is a list of models and appropriate log sets that can be used with each model. It is important that the appropriate log set is used with the correct model in order for the appliance to work properly.

Appliance	LOGC42	LOGC43	LOGC44	LOGC60
ZDV3624N or LP	✓	✓	✓	
ZDV3624NB or LPB	✓	✓		
ZDV3628N or LP	✓	✓	✓	
ZDV3632N or LP				✓

# LOGC42 - LOG C43 LOG PLACEMENT GUIDELINES - FOR MODELS ZDV3624/ZDV3628 (4-PIECE LOG SET)



**FIGURE A** - Log set Ember kit and Crushed rock



**Step (4)** Break glowing embers into thumbnail size. Place glowing embers on to the surface of the front burner. to the surface of the ember plates and over crossover to the same height as ember plates. Height on front burner 1/2" to 3/4". Height on ember plates 3/4" to 1". Do not cover back air openings on ember plates.



**FIGURE B** - Rear log holder.

**Step (1)** Units are equipped with screws or latches. To remove glass door, either remove screws or unfasten latches and lift door off bottom door retainer.

**Step (2)** Remove logs from carton and inspect each log.

**Step (3)** Verify to see that the ember plates (2 pcs) are between front and back burner.

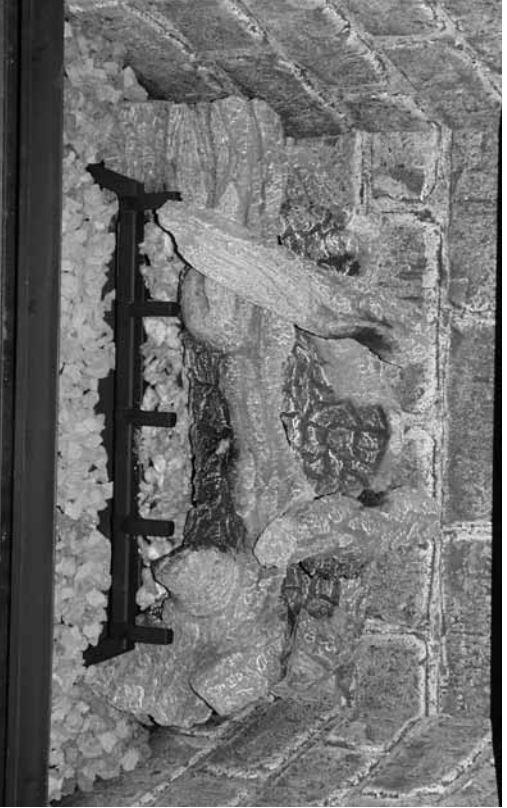


**Step (5)** Place front log over burner, against decorative grate. Be sure that front log is tight up against the decorative grate.

# LOG C42 - LOGC43 LOG PLACEMENT (continued) - FOR MODELS ZDV3624/ZDV3628



**Step (6)** Place rear log on to the log retainer 1/2" away from back of fire-place. (If refractory liner is used, make sure refractory liner is installed first then back log is to be pushed up against it as tight as possible.)



**Step (8)** Place left crossover log across front and back logs using the log placement pin as a guide.

**Step (9)** Place decorative moon rock on bottom of fireplace to simulate ash.  
**DO NOT PUT ANY ROCK ON BURNERS!**



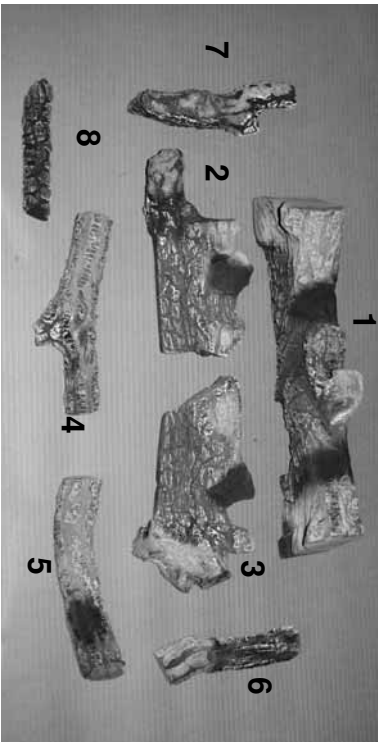
**Step (7)** Place right crossover log across front and back logs using the log placement pin as a guide.



**Step (10)** Purge lines and test pilot operation.  
**Step (11)** Replace glass door.

# LOGC44 PLACEMENT GUIDELINES - FOR MODELS ZDV3624/ZDV3628

NOT FOR USE WITH BACK FLUE MODEL ZDV3624NB OR ZDV3624LPB (8-PIECE LOG SET)



**FIGURE A** - Log set Ember kit and Crushed rock



**Step (1)** Position rear log over rear log holder and lower into position. Be sure that the log does not sit on rear burner, but behind and lower than burner.

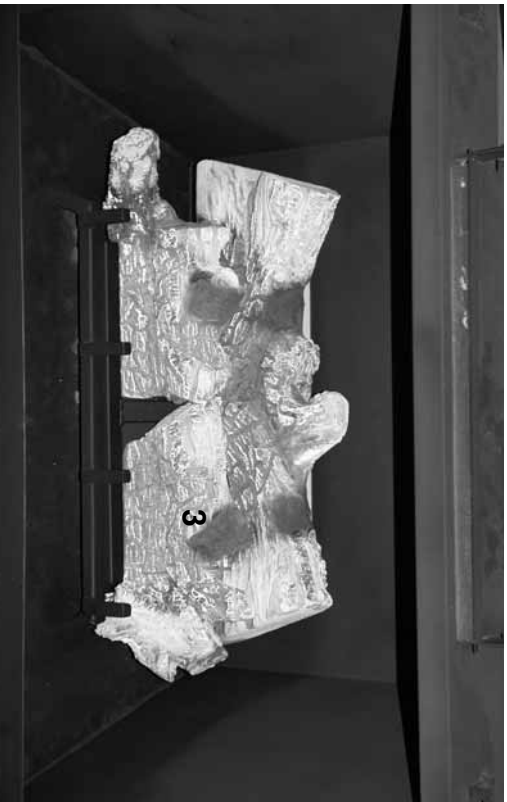


**FIGURE B** - Rear log holder. If using LOGC44, bend rear tabs 90° down.



**Step (2)** Locate flat surface on Log (2) and place directly onto left ember plate, push log fully to the right until it touches the crossing-tube.

# LOGC44 PLACEMENT (continued) - FOR MODELS ZDV3624/ZDV3628 NOT FOR USE WITH BACK FLUE MODEL ZDV3624NB OR ZDV3624LPB



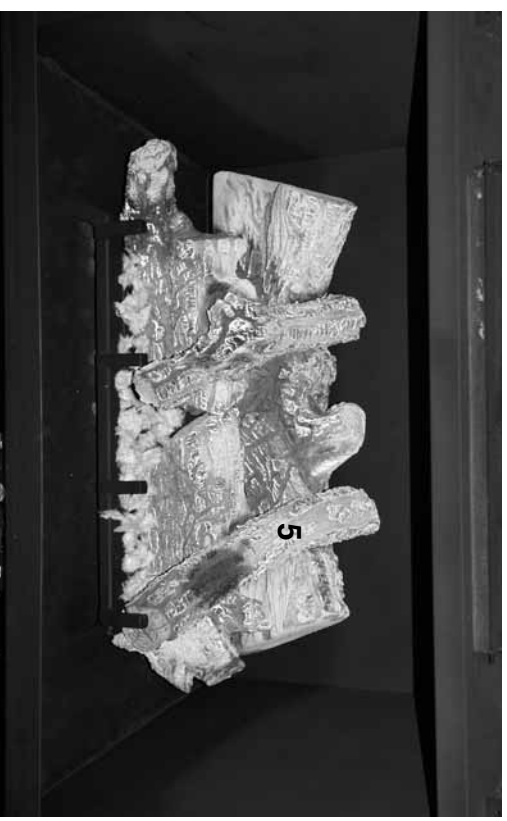
**Step (3)** Locate flat surface on Log (3) and place directly on to right Ember plate; push log fully to the left until it touches Log (2)



**Step (5)** Position Log (4) into grooved areas of Logs (1) and (2).



**Step (4)** Remove Ember material from plastic bag, tear off dime and nickel sized pieces and place directly onto front burner tube and crossover tube. (NOTE: Do not place embers onto rear burner tube)



**Step (6)** Position Log (5) into grooved area of Logs (1) and (3).

# LOGC44 PLACEMENT (continued) - FOR MODELS ZDV3624/ZDV3628 NOT FOR USE WITH BACK FLUE MODEL ZDV3624NB OR ZDV3624LPB



**Step (7)** Position Log (6) up against the 2nd grate post from the right, and position upper section of Log (6) into grooved area of Log (5).



**Step (9)** Position Log (8) up against the 3rd grate post from the right, and position upper section of Log (8) against Logs (2) and (7).

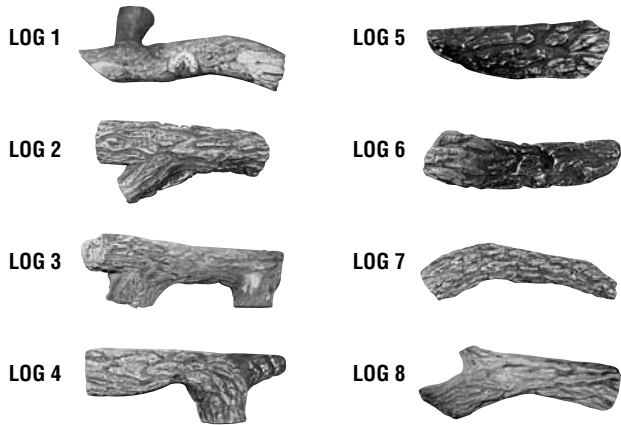


**Step (8)** Slide Log (7) between Log (1) and Log (2)

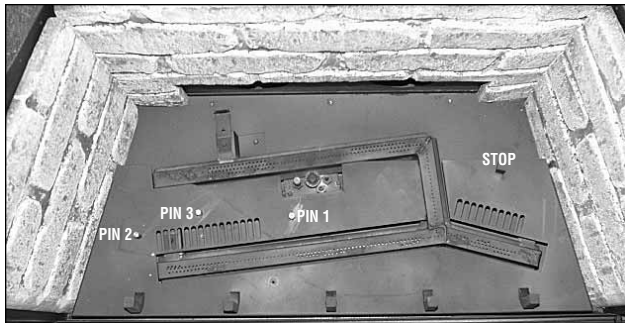


**Step (10)** Place crushed rocks onto firebox bottom.  
(NOTE: Do not place crushed rock onto burner tubes)

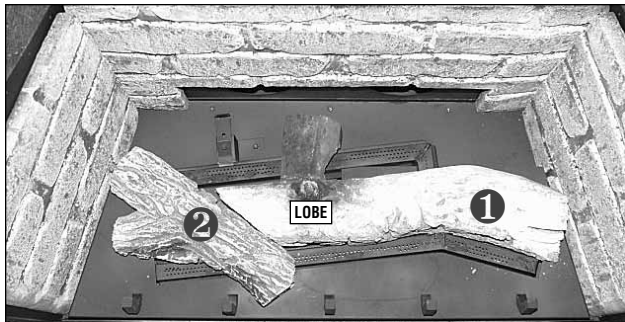
## Instructions for installing Log Set C-60 for Models ZDV3632, ZDV4232, and ZDV4732



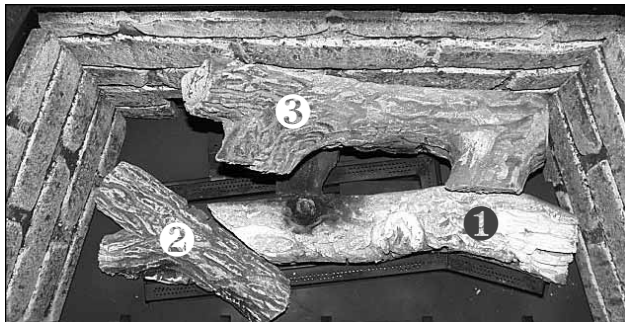
**STEP 1:** Log 1 is to be positioned onto Pin 1 with locating hole on bottom of log. The rear right of Log 1 will be placed against stop. (Do not place log on top of stop.)



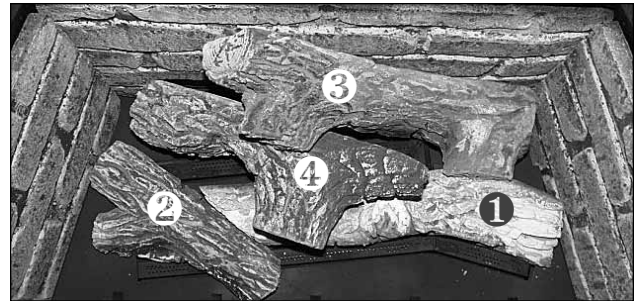
**STEP 2:** Locate the two holes on bottom of Log 2 and position these down onto the locating Pins 2 and 3.



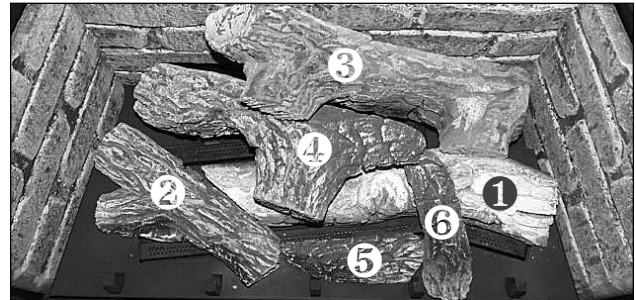
**STEP 3:** Place log 3 behind the rear burner tube as shown in the photograph.



**STEP 4:** (Note hole on Log 4, bottom of main knot and flat area near end of log.) Raise Log 3 approx. 2 inches and position Log 4 under the top knot of Log 3. Position the hole of Log 4 onto locating lobe of Log 1, lower Log 3 down into place as shown. Place flat area of Log 4 onto left rear burner log mount and push back against tab.

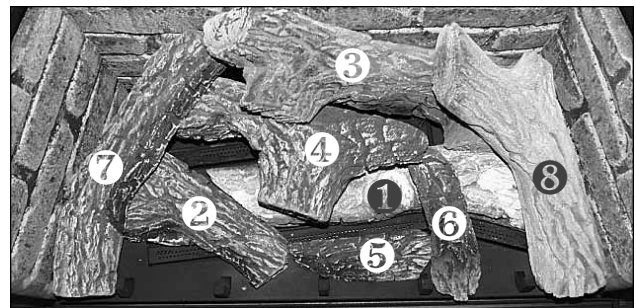


**STEP 5:** Place Log 5 against grate bars and position Log 6 along side of Log 5 and onto Log 1 as shown in the photograph.

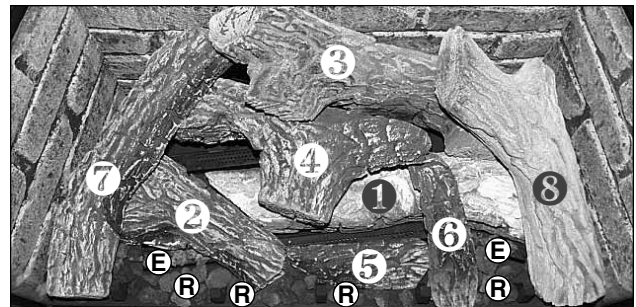


**STEP 6:** Place the narrow end of Log 7 onto Log 4. The left front of Log 7 should touch the firebox wall or brick panel.

**STEP 7:** Place Log 8 onto Log 3. The right front of Log 8 should touch the firebox wall or brick panel. Verify that Logs 7 and 8 do not extend into the glass front or enter into the flame path.



**STEP 8:** Place a small amount of glowing ember material (E) onto the front burner tube ends. (Too much ember material causes a blue flame.) (When placing embers onto burner, leave an air space between the log and the embers; this will help produce a yellow flame in these areas.) Place rocks (R) onto false bottom only. Do not place rocks onto burner tubes.





# Fan Kit Installation for Fan Assembly Z36FK

## Fan Mounting Instructions

1. Install Thermdisc provided with Fan kit. Screws and washer spacers are Factory installed in bottom of firebox. Washer spacers are to be placed in between firebox and thermdisc.
2. (NEW STYLE MOUNTING SYSTEM). The bottom of the unit has 2 tabs prepunched (bent upwards) for the rubber grommets in fan bracket. Place fan bracket over tabs. This will secure the fan.
3. Junction box should be mounted to opposite side and wired to variable speed control and 120v power.
4. Plug fan into junction box and attach the 2 leads exiting the fan housing into the thermdisc.
5. Close lower access cover.
6. Turn the wall switch on (clockwise). Turn the fireplace on. Once the sensor unit reaches operating temperature in approximately 10 to 15 minutes the fan will turn on. The fan can be switched off, if desired, by turning the wall switch fully counter-clockwise.
7. To set the minimum fan speed, if desired, remove the variable speed switch from the wall mount. Turn the variable speed wall controller to its minimum setting (fully clockwise). Use the set screw on the side of the variable speed controller to increase or decrease the minimum fan speed. (It may be desirable to lower minimum fan speed to decrease the sound level created by the fan.) Reinstall switch into wall mount and cover with face plate.

## Electrical Services

All optional fan kits are equipped with a 120V, 60Hz blower.

Note: All electric connections are to be made in accordance with CSA Standard C22.1 - Canadian Electrical Code part I or with the National Electrical Code, ANSI/NFPA 70 (latest edition) and/or in accordance with local codes.

**WARNING: Electrical Grounding Instructions.** This appliance is equipped with a three-pronged (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

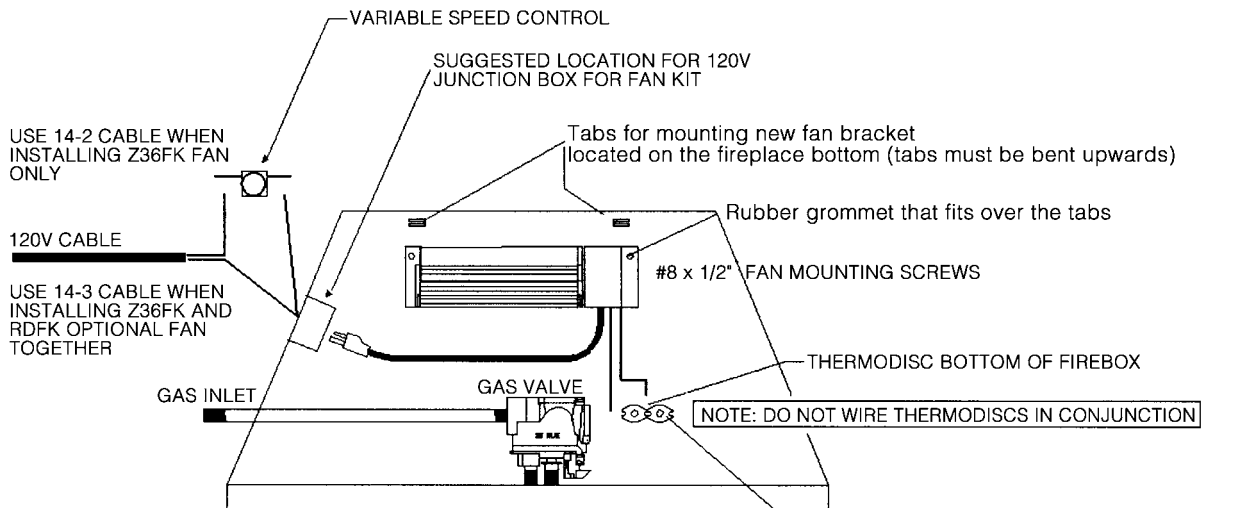
**Caution: Label all wires prior to disconnection when servicing controls.** Wiring errors can cause improper and dangerous operation.

Verify proper operation after servicing.

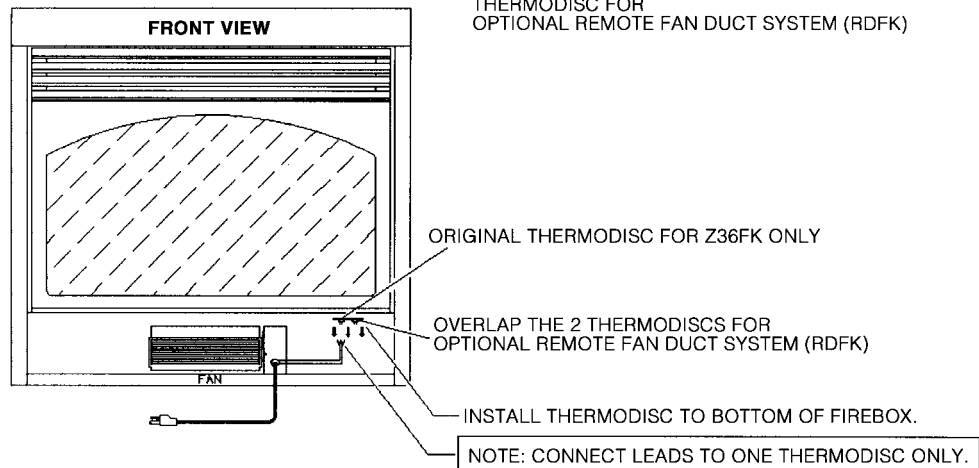
### Parts List:

- 1 ea. fan comes with 4 ft cord. Two 14' leads (female ends)
- 2 ea #8 x 1/2" screws
- 1 ea variable speed control (wall mount type)
- 1 ea thermdisc

TOP VIEW



FRONT VIEW



**Caution:** Should this fan require servicing, the power supply must be disconnected.

# Millivolt System, Lighting, & Burner Control

## 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.**

### BEFORE LIGHTING



- A** This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B** 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 an appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.
- C** Use only your hand to push or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified 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 which has been under water.

## LIGHTING INSTRUCTIONS

1. Stop! Read the safety information above on this label.
2. Set the thermostat to lowest setting.
3. Turn off all electrical power to the appliance.
4. Locate valve under the burner assembly.
5. If the control knob is not already in the off position, ie. the word "OFF" in the 9 o'clock position, then push in the gas control knob slightly and turn  clockwise to "OFF".  
NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not use force.
6. Wait five (5) minutes to clear out any gas. If you then smell gas. STOP! Follow "B" in the safety information above on this label. If you don't smell gas then go to the next step.
7. Now push in the control knob slightly and turn counter-clockwise  to the "PILOT" position.
8. Push in the control knob all the way and hold it. With the other hand push in the red ignitor button until you hear a click. Now observe closely the pilot burner located on the rear center-left hand side of the main burner. If a flame has appeared then continue to depress the control knob for 20 seconds. If the flame did not appear then continue to depress the red ignitor button every 5 seconds until a flame is established. NOTE: If after 30 seconds a flame has not yet been established then turn the control knob back to the off position and repeat steps 5, 6 & 7.
9. Once the pilot has been established hold the control knob in the depressed position for approximately 25 seconds before releasing. If the flame goes out then repeat steps 7 and 8.
10. Now turn the control knob to the "ON" position. The burner will not light unless the wall switch thermostat or remote control is turned "ON" or in the case of the thermostat there is a call for heat.
11. Close the access door and turn all electric power back to the appliance.

## TO TURN OFF THE APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Open the control access door.
4. Push in the gas control knob slightly and turn clockwise  to the "OFF" position. Do not force.
5. Replace control access panel.

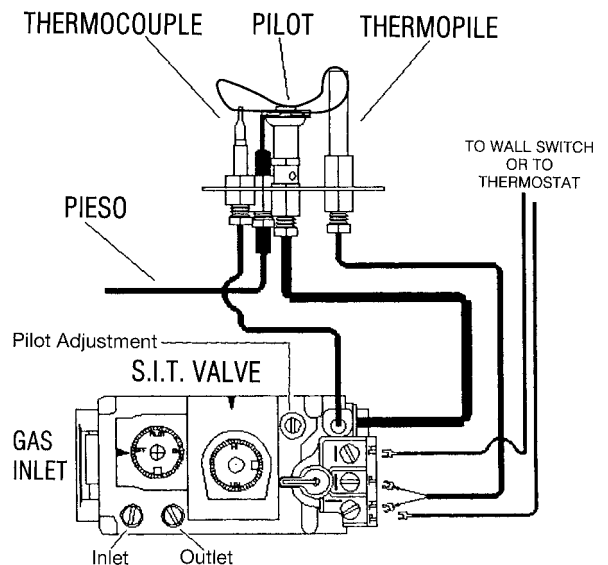
### Recommended Maximum Lead Length (Double Wire) When Using Wall Switch or Thermostat

Wire Size	Max. Length
14 GA.	100 FT.
16 GA.	64 FT.
18 GA.	40 FT.
20 GA.	25 FT.
22 GA.	16 FT.

#### Pilot Burner Adjustment

1. Adjust pilot screw to provide proper sized flame.

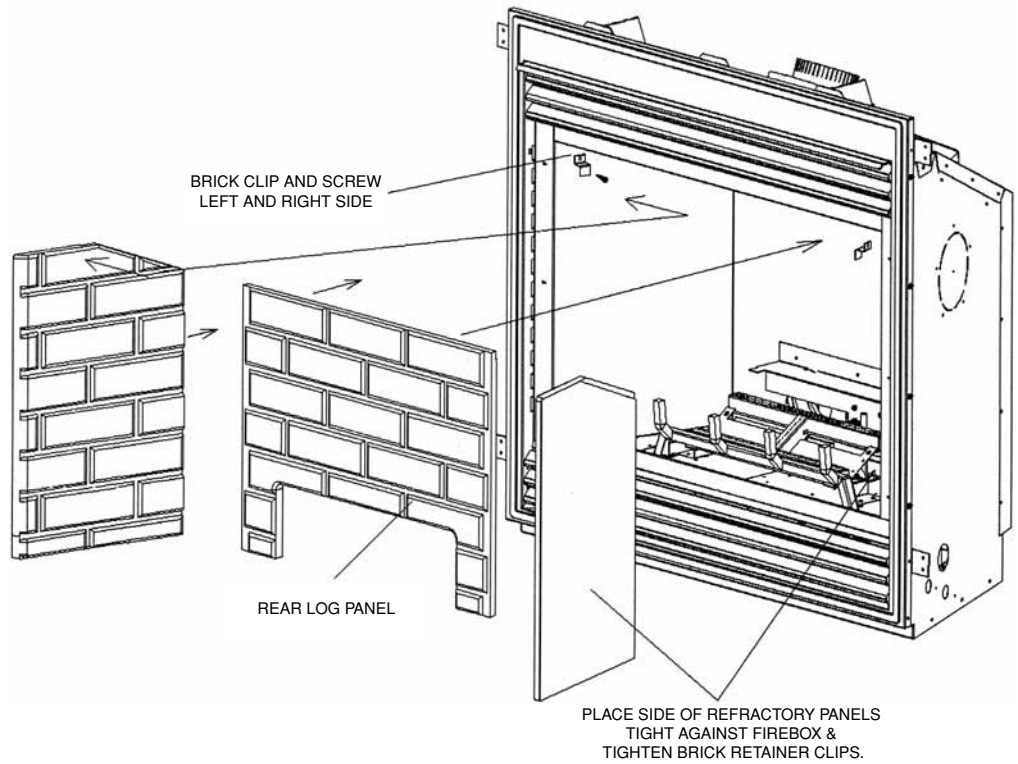
**CAUTION: DO NOT WIRE 120 VOLT POWER TO MILLI-VOLT SWITCHES OR THERMOSTAT.**



## Brick Installation

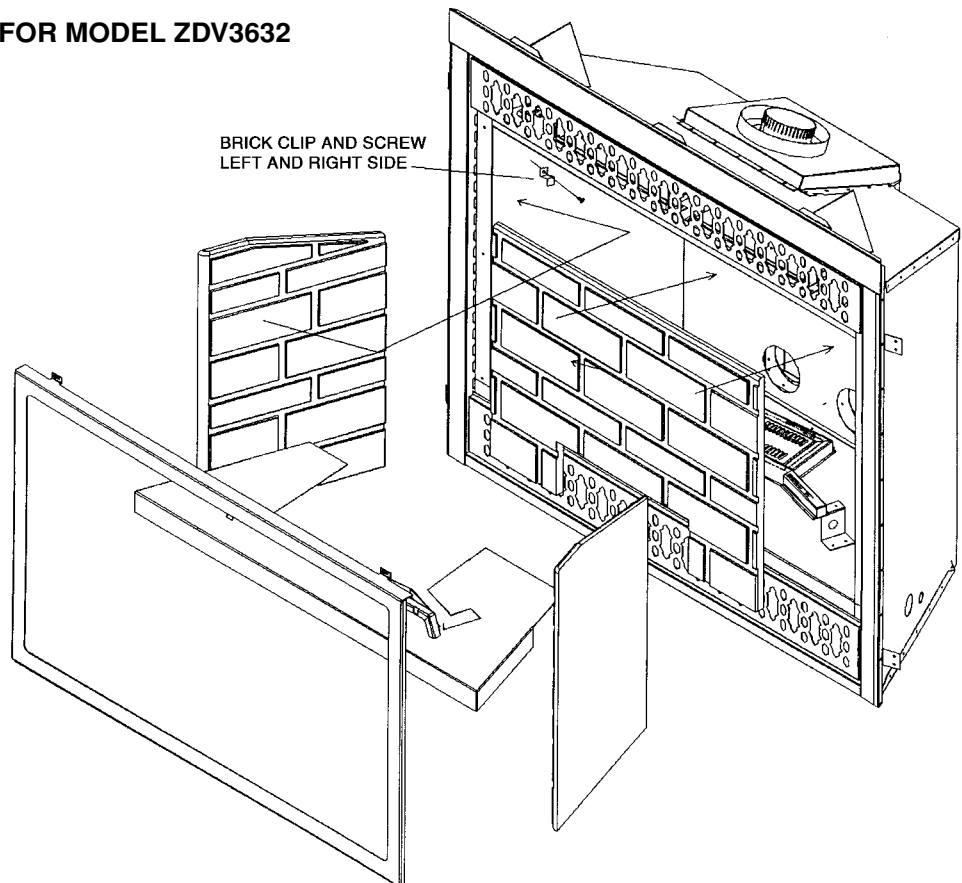
### INSTALLING BRICK PANELS FOR MODEL ZDV3624 AND ZDV3628

1. PLACE REAR BRICK PANEL AGAINST REAR OF FIREPLACE
2. LOOSEN SCREW HOLDING BRICK CLIPS IN POSITION, MOVE CLIPS UP OUT OF THE WAY AND PLACE SIDE BRICKS UP TO REAR BRICK AND FLUSH AGAINST SIDE WALL OF FIREBOX. POSITION CLIPS OVER BRICK AND TIGHTEN SCREWS.

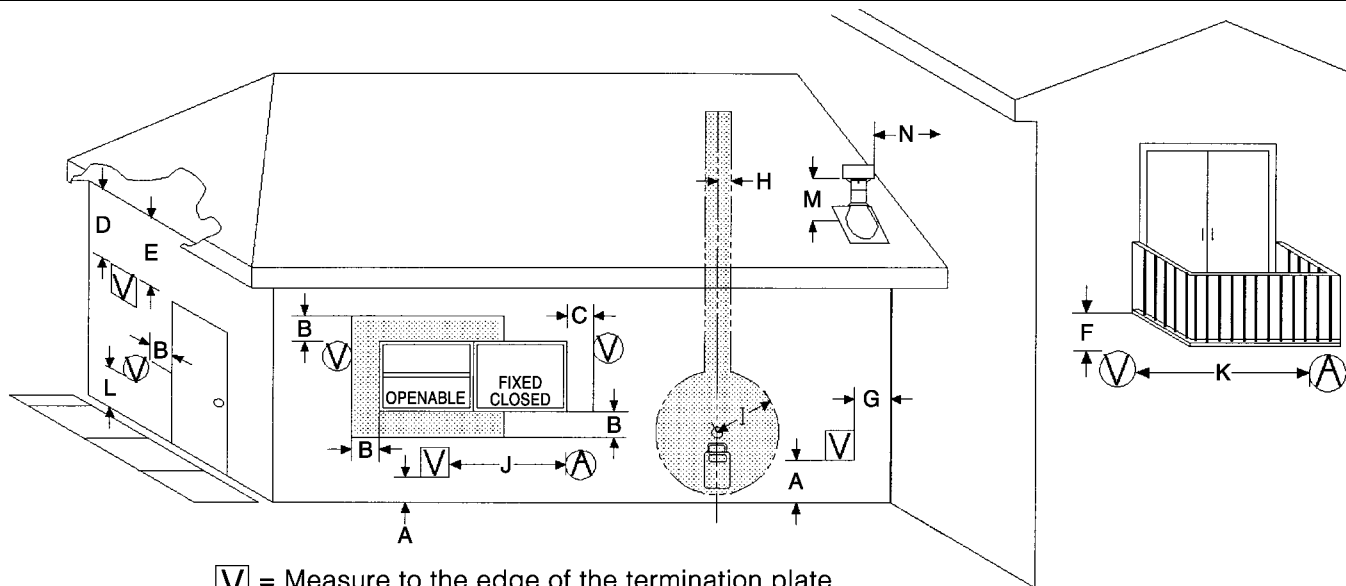


### INSTALLING BRICK PANELS FOR MODEL ZDV3632

1. REMOVE GLASS DOOR FROM THE UNIT BY UNLATCHING THE 2 LATCHES ON TOP OF THE UNIT.
2. REMOVE THE FALSE BOTTOM FROM THE UNIT BY LIFTING STRAIGHT UP. IT MAY NEED TO BE WIGGLED.
3. PLACE REAR BRICK PANEL UP AGAINST THE REAR OF THE FIREBOX.
4. LOOSEN SCREWS HOLDING BRICK CLIPS IN POSITION, MOVE CLIPS UP OUT OF THE WAY AND PLACE SIDE BRICKS UP TO REAR BRICK AND FLUSH AGAINST SIDE WALL OF FIREBOX. POSITION CLIPS OVER BRICK AND TIGHTEN SCREWS.
5. REPLACE FALSE BOTTOM
6. INSTALL LOGSET AS PER INSTRUCTIONS.
7. REATTACH DOOR.



# Vent Termination



Ⓜ = Measure to the edge of the termination plate.

Ⓞ = Measure to the edge of the round termination.

Ⓜ Vent Terminal

Ⓞ Air Supply

■ Area Where Terminal Not Permitted.

- A - Clearance above grade, veranda, porch, deck, or balcony 12 inches (30cm) minimum.<sup>1,2</sup>
- B - Clearance to window or door that may be opened. 12 inches (30cm) minimum for appliances 100 000 Btuh (30 kW) and lower, in Canada. 9 inches<sub>2</sub> (23cm) for appliances 50 000 Btuh and lower, in USA.
- C - Clearance to permanently closed window minimum 12 inches (30cm) recommended to prevent condensation on window, in Canada. 9 inches<sub>2</sub> (23cm) for appliances 50 000 Btuh and lower, in USA.
- D - Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 feet (60cm) from the center line of the termination. 18 inches (46cm) minimum.<sub>3</sub>
- E - Clearance to unventilated soffit 12 inches (30cm) minimum.
- F - Clearance under veranda, porch, deck or balcony 12 inches<sub>1</sub> (30cm) minimum.<sub>4</sub> US<sub>5</sub>
- G - Clearance from a perpendicular inside wall or outer corner to the edge of the vent terminal plate is 3" (minimum).
- H - Clearance to each side of center line extended above meter/regulator assembly 3 feet (91cm) within a height 15 feet (4.5m) above the meter/regulator assembly.
- I - Clearance to service regulator vent outlet 3 feet (91cm) minimum.<sub>1</sub> US<sub>3</sub>
- J - Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance: In Canada, 6 inches (15cm) for appliances ≤10,000 Btuh (3kW), 12 inches<sub>1</sub> (30cm) minimum for appliances >10,000 Btuh (3kW) and ≤100,000 Btuh (30kW), 36 inches (91cm) for appliances >100,000 Btuh (30kW). In the USA, 6 inches<sub>2</sub> (15cm) for appliances ≤10,000 Btuh (3kW), 9 inches (23cm) for appliances >10,000 Btuh (3kW) and ≤50,000 Btuh (15kW), 12 inches (30cm) for appliances >50,000 Btuh (15kW).
- K - Clearance to a mechanical air supply inlet 6 feet (1.8m) minimum.<sub>1</sub> in Canada. In USA, 3 feet (91cm) above if within 10 feet<sub>2</sub> (3m) horizontally.
- L - Clearance above paved sidewalk or a paved driveway located on public property 7 feet (2.1m) minimum.<sub>3</sub>
- M - Clearance above highest point of exit on roof 18 inches (45cm).
- N - Clearance to perpendicular wall 24 inches (60 cm). (Recommended to prevent re-circulation of exhaust products. For additional requirements check local codes.)

**NOTE: Clearances are to the edge of terminal plate, add 6-3/4" to clearances to arrive at center line.**

**NOTE: Local Codes or Regulations may require different clearances.**

## Termination

It is imperative that the vent termination be located observing the minimum clearances as shown. There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" from the front of the termination plate.

Do not locate termination where excessive snow or ice build-up may occur. Be sure to check vent termination area after snow falls and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

## General Venting Information

The gas fireplace is approved to be vented either through the side wall or vertically through the roof.

This appliance is approved with Kingsman flex vent system and also approved for use with Simpson Duravent Direct Vent System (model DV-GS series), AmeriVent Direct Vent Pipe System and Selkirk Direct Temp.

Kingsman flex vent system can be used with Simpson Duravent Direct Vent termination's (model DV-GS series).

When using Simpson Duravent, AmeriVent Direct Vent pipe or Selkirk Direct Temp a Kingsman/Duravent adapter must be used.

**ONLY VENTING COMPONENTS SPECIFICALLY APPROVED AND LABELLED FOR THIS FIREPLACE MAY BE USED.**

Minimum clearance to combustibles on venting is 1" with the following exceptions as follows: Top of horizontal 1 1/2". Top of 90 degree elbow in an enclosure under 42" is 5 1/2". Top of 90 degree elbow in an enclosure over 42" is 2 1/2".

Venting terminal shall not be recessed into a wall or siding. If finishing the outside wall with vinyl or wood siding it is recommended that a Siding Shield be installed, Part Number ZDVSSLR.

- 1 - In accordance with the current *CSA B149.1, Natural Gas and Propane Code.*
- 2 - In accordance with the current *ANSI Z223.1/NFPA 54, National Fuel Gas Code.*
- 3 - A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.
- 4 - Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.
- 5 - Clearance in accordance with local installation codes and the requirements of the gas supplier.

## Venting Routes And Components

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

The table showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths.

The maximum horizontal run with the 90 degree bend at the fireplace flue outlet is 4 ft/122cm (Figure #1). The maximum horizontal run is 20 ft/6.1 m when the vertical run is 7 ft/2.1m (Figure #2). Note: 1/4" vertical rise is required for every 12" of horizontal run.

The maximum number of 45 degree bends per side wall installation is two (2) in the horizontal run and then you must reduce the length of the horizontal by 18 inches for each 45 degree bend.

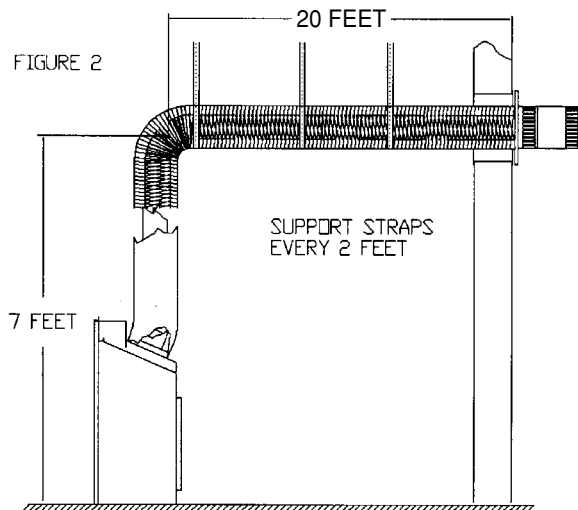
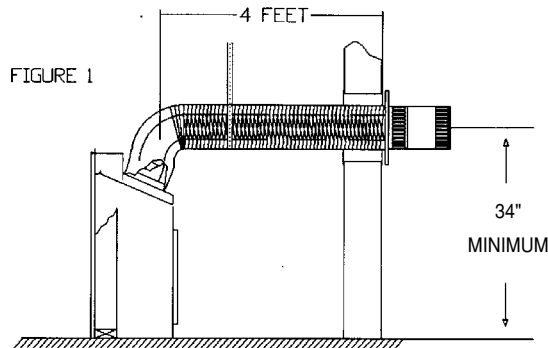
The maximum vertical run is 40 ft/12.2 meters.

**Special Note: For each 45 degree bend installed in the horizontal run, the length of the horizontal run must be reduced by 18" (45cm). This does not apply if the 45 degree bends are installed on the vertical part of the vent system.**

**Example:** If according to the table, the length of the horizontal run is 10 feet, and two 45 degree bends are required, the horizontal run length must be reduced to 7 feet.

2 additional 90° bends or equals are allowed. The horizontal run must be reduced by 36" per each 90° bend, or 18" per each 45° bend.

**Important:** Always locate the fireplace in such a way that a minimum of off-sets and/or horizontal runs are required. 1/4" vertical rise is required for every 12" horizontal run.



## How To Use The Horizontal Vent Table

1. Determine the height of the system and the number of bends required.
2. Having determined the vertical distance determine the maximum horizontal section allowed.
3. Vent table has been established for 90° horizontal/vertical runs. With use of flex pipe distance not having 90° bends will not fall into vent table standards. See Fig. B.

## Horizontal Venting Table From Bottom of Fireplace

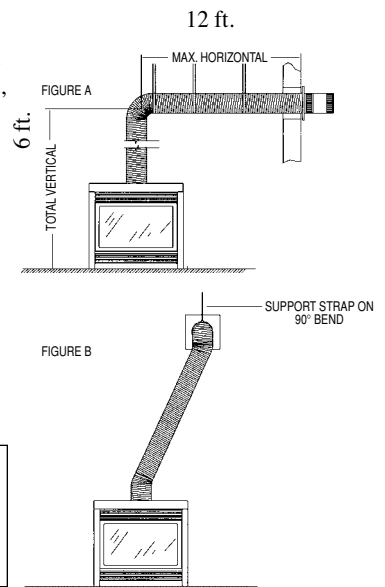
for venting to a maximum of 40 ft. (12.2 meters)

Total Vertical		Max Total Horizontal	
Feet	Meters	Feet	Meters
4	1.2	5	1.5
5	1.5	8	1.2
6	1.8	12	3.7
7	2.1	20	6.1
8	2.4	20	6.1
9	2.7	20	6.1
10	3.0	20	6.1
11	3.4	20	6.1
12	3.7	20	6.1
13	4.0	20	6.1
14	4.3	20	6.1
15	4.6	20	6.1
16	4.9	20	6.1
17	5.2	20	6.1
18	5.5	20	6.1
19	5.8	20	6.1
20	6.1	20	6.1
25	7.5	15	4.6
30	9	10	3.0
40	12.2	0	0

Example A:

If the vertical dimension from the floor of the fireplace is 6ft, the horizontal run to the wall flange of the vent termination must not exceed 12ft.

**NOTE: The final location of the fireplace must be such that the horizontal vent dimensions fall within those stated on the graph. The Maximum Vertical vent run is 40ft. (12.2 meters).**



**Important:** Minimum clearance between vent pipes and combustible materials is 1 inch (25mm).

It is recommended for **Propane Horizontal Installations** that the venting should be a minimum of one foot vertical off the flue before the elbow on any horizontal runs of one foot or greater. This allows for cleaner combustion and greatly reduces carboning and cleaning of glass. (Does not apply to Back Flue Models).

# General Vent Installation Information

This gas appliance is approved to be vented either through the side wall or vertically through the roof. **Only Kingsman venting kits and components specifically approved and LABELLED for this stove may be used.** This appliance is also approved for use with Simpson-Duravent Direct Vent system (Model DV-GS Series), Ameri-Vent Direct Vent Pipe System and Selkirk Direct Temp.

## SIMPSON DURAVENT, AMERIVENT OR SELKIRK DIRECT TEMP

When using Simpson Duravent, AmeriVent pipe or Selkirk Direct Temp a Duravent hardpipe adapter must be used (part # ZDVDFa for fireplaces/part # ZDVdKa for back-flue models). Follow installation instructions provided by Simpson Duravent/Amerivent and Selkirk Direct Temp for installation of pipe and adhere to the clearance to combustibles provided in this manual. Apply a bead of Mill Pac high temp sealant to all joints of pipes, adapters and termination, when using Kingsman venting and Simpson Duravent venting.

**WARNING: DO NOT** mix parts from different systems unless stated in the manual.

## Flex Pipe Venting

Flex pipe is shipped in unexpanded length. When installing pipe expand the lengths. Pipe can be expanded to twice their lengths e.g. 4ft. to 8ft.

Do not use more than 2 couplers to extend short pipes. Single sections are preferred in an installation attaching at the fireplace and termination.

Place the spring spaces provided approximately every two feet to stabilize 4" flex in the center of 7" flex. When forming bends place spring in bend or before and after. (See Fig. 1).

Horizontal runs require support metal straps every 2 feet. In off set installation support straps should be used to stabilize pipe.

Expand 4" and 7" flex pipe to the point that the 7" protrudes approximately 2 to 3 inches past outer wall and the 4" flex protrudes approximately 2 to 3 inches past the 7" flex. See Fig. 1. Attach the 4" pipe to the termination first and secure with sealant and screws then attach the 7" flex to the termination with caulking and screws. Termination may then be moved back to the outer wall and attached to home screwing into the framing. Silicone around termination to waterproof. If siding shield is going to be used attach this using same attaching hole as the top of termination after termination has been caulked for water proofing.

## Use Hi Temp Sealant

Apply a bead of mill pac high temp sealant to all joints and use four screws to secure each pipe at fireplace, termination and any joint if joining any sections of pipe.

## FRAMING DIMENSION

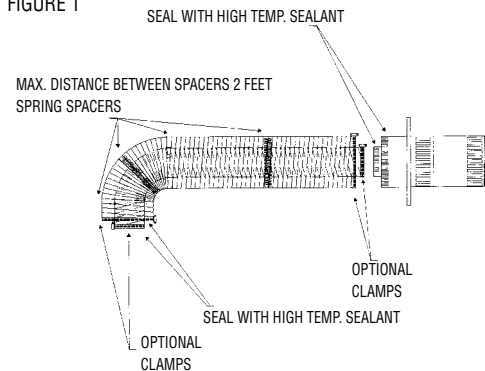
### Combustible Wall

Cut a 11" hole through exterior wall and frame as shown below.

### Non combustible Wall

Cut or drill 8" or 204mm diameter hole.

FIGURE 1

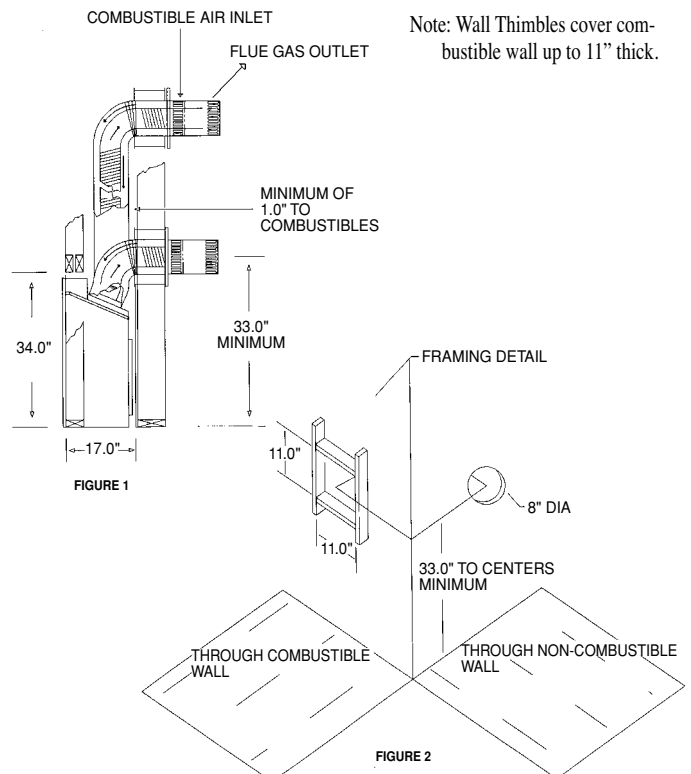


**NOTE:** It is critical to the proper and safe operation of this fireplace that on all connections the inner liner and the outer casing are both caulked with liberal amounts of sealant. Do not use any kind of tape or silicone other than that recommended in this manual. Mill Pac Sealant

## Installation Of Side Wall Venting

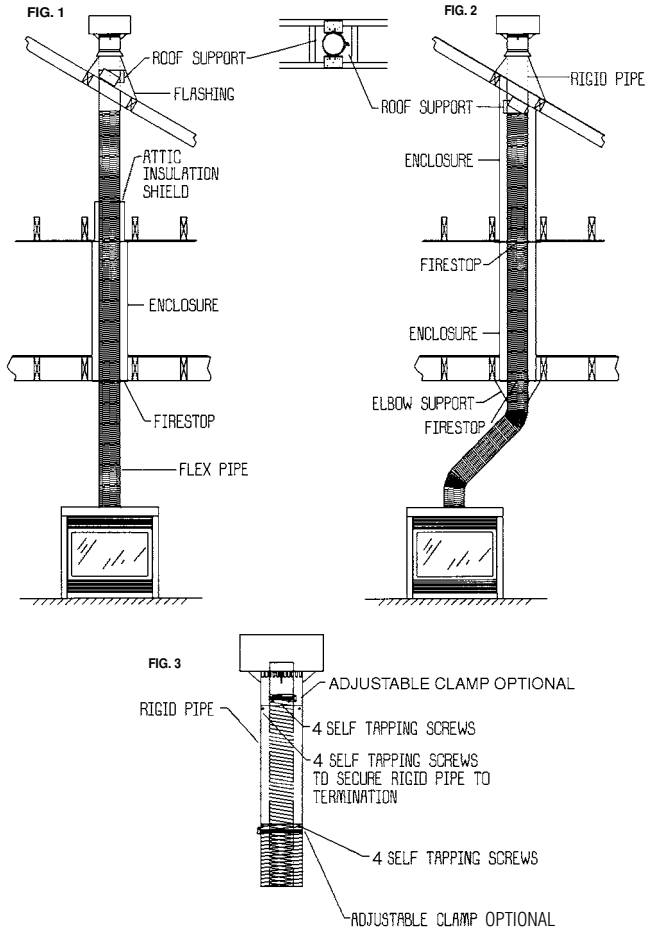
1. The minimum distance from the bottom of fireplace to centre of vent is 33 inch (85 cm) (See Figure 1). Cut a hole through the wall allowing for a 11" x 11" (inside diameter) in combustible walls for wall thimble or an 8" diameter hole in a non-combustible wall (See Figure 2).
2. Note clearance to combustible above 90 degree bend is 2 1/2".
3. Select the approximate vent length, precise measurements are not needed as your flex pipe can be expanded to twice its shipped length for ease of installation.
4. To install wall thimble centre over 11" x 11" (inch) framing from both sides of wall and secure. Route flex vent pipe through wall thimble (See Figure 1).
5. Before joining pipes, apply a bead of high temperature sealant (Mill Pac) to end of pipe. First attach the four inch (4") flue pipe to the vent termination with sealant, and secure with the four screws provided. At this time make sure the spacer springs are attached to the (4") flex pipe as required. Then attach the seven inch (7") pipe by the same method.
6. Mount vent termination and seal to wall using caulking around the wall thimble to weather proof. After installing the vent termination, double check to make sure the pipe extends properly through wall thimble and into vent termination.
7. Before joining pipes to fireplace flue, apply a bead of high temperature sealant (Mill Pac) to end of pipe. First attach the four inch (4") flue pipe to fireplace with sealant, and secure with the four screws provided. At this time verify that the spacer springs are attached properly to the (4") flex pipe as required. Then attach the seven inch (7") pipe by the same method.
8. Support horizontal pipes every two (2) feet (61 cm) with metal strap bands. Re-check fireplace to make sure it is levelled and properly positioned and secured.
9. Support vertical pipes to maintain a minimum of 1" or greater clearance to combustibles with metal strapping bands.
10. If finishing the outside wall with vinyl or wood siding it is recommended that a Siding Shield be intalled, Part Number ZDVSSLR.

Note: Vent Termination must not be recessed into wall or siding.



## Venting Straight Up Through Roof

1. An Attic Insulation Shield must be installed where the vent passes from a lower living space into an attic space where the chimney is not enclosed. It is designed to keep insulation materials away from the chimney. See Fig. 1.
2. When installing the Attic Insulation Shield where the chimney passes from a living space to an attic space, install the shield from below and nail in place using 1" spiral nails.
3. A fire stop must be installed on the bottom side of the joists when passing through a ceiling or floor. If an attic insulation shield is to be used, a fire stop is not required.



## Using Flex Bends

4. Avoid cutting joists by offsetting the flex pipe. See Fig. 2.
5. When using 45° bends a bend support is required directly above the highest bend.
6. When installing a bend in a joist area a minimum of 2 1/2" clearance to combustibles to the top of bend must be maintained, sides and bottom of pipe, a 1" clearance to combustibles must be maintained. If running horizontal through an area a 1 1/2" minimum clearance to the top of the horizontal pipe must be maintained.
7. Maximum vertical height of system should not exceed 40 feet.
8. Use roof support and 7" rigid pipe at roof level. Flex not permitted within roof support.
9. When penetrating the roof a rigid 7" galvanized pipe must be used. Attach the 7" flex to the 7" rigid with high temperature sealant, secure with four screws assuring the flex and rigid pipe are secured. 4" flex pipe must be secured the same way with 4 screws but must penetrate the 4" flex and 4" section of termination. Attach 7" rigid pipe to 7" termination with sealant and screw with 4 sheet metal screws. (See Fig. 3).
10. Vertical termination clearance is 18" (inches) above the roof, measured from highest point of exit on the roof line.
11. Support vertical pipes to maintain minimum of one inch or greater clearances to combustibles.

## Roof Flashing

Ensure that you have the proper roof flashing by checking your roof pitch using a level and two rulers, or by using a roof pitch card. See figure below.

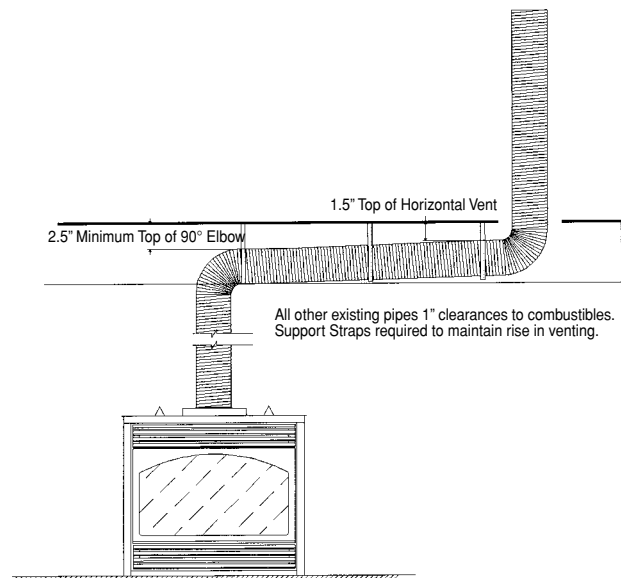
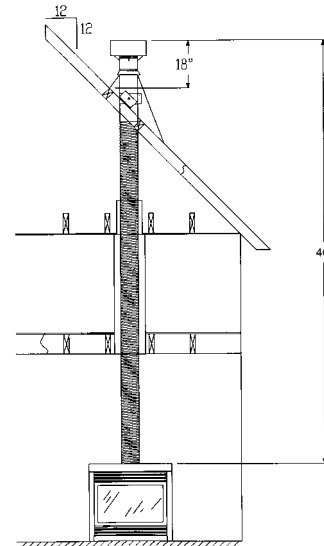
Slide a Roof Flashing suitable to your roof slope over the vent. Place the edge of the flashing plate that will be on the higher part of the roof slope under the shingles. Both the sides and the lower edge lay on top of the shingles.

**NOTE: At the top edge of the flashing plate, lift the shingles and nail the plate to the roof deck, then cement the shingles to the plate with a suitable waterproof mastic.**

Ensure that the chimney is plumb. Square up the flashing plate and nail in place to the roof deck. Use 12 nails with neoprene washers or cover the heads with a suitable waterproof mastic.

Wrap the storm collar around the vent above the flashing. Secure the ends together loosely with nut and bolt supplied. Slide the collar down the vent until it comes in contact with the flashing. Tighten the bolt and seal the Storm Collar to the vent with a suitable waterproof non-combustible mastic.

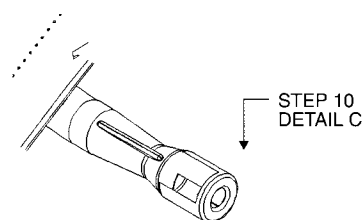
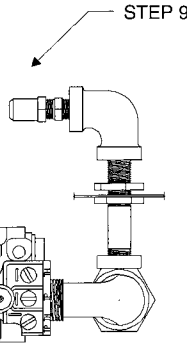
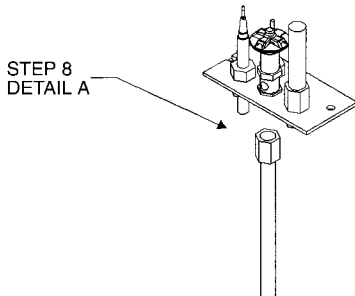
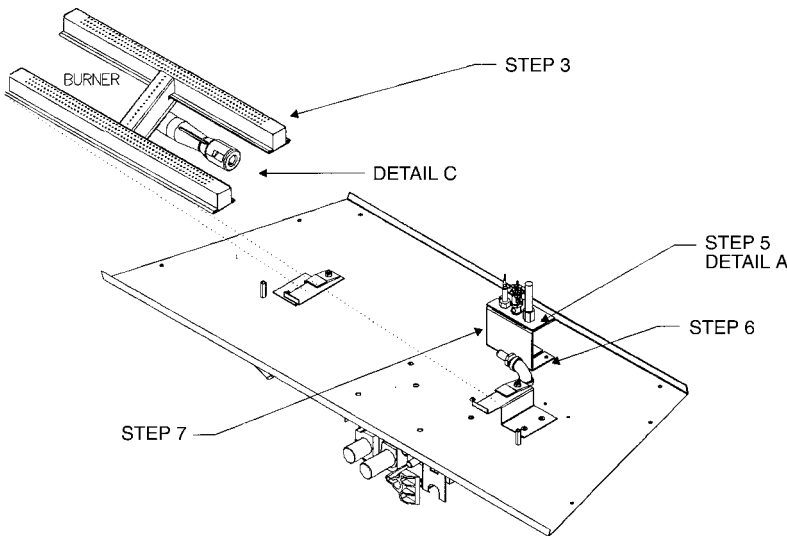
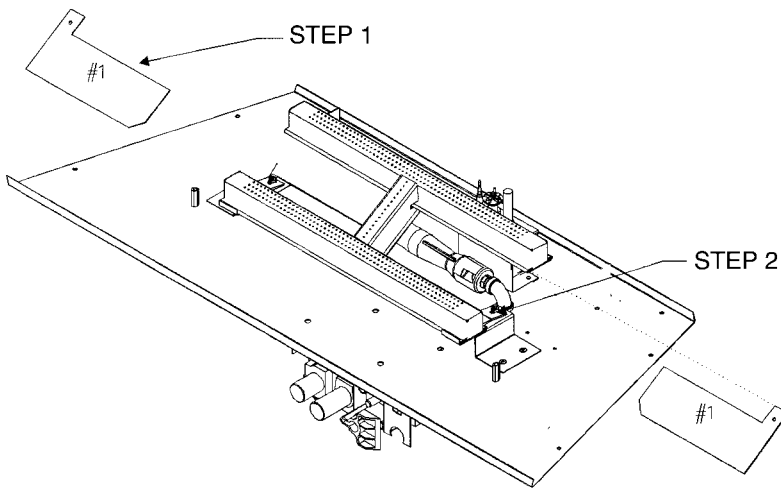
The flashing and storm collar should be painted to match the roof shingles. This will extend its life and improve the appearance. Clean, prime and paint with suitable painting products.





# CONVERSION KIT INSTRUCTIONS

PLEASE CONFIRM THAT STEP 4 IS UNDERSTOOD BEFORE PROCEEDING WITH CONVERSION.



## "Warning"

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

## SECTION A

- Step 1: Remove the 2 ember plates from the burner. This step may not be required, depending on the type of burner assembly.
- Step 2: Loosen the 2 screws holding the burner in place.
- Step 3: Slide the burner to the left to expose the orifice.

**Step 4: Before going any further you need to verify which pilot system is in use:**  
 – If there is a spring clip below the pilot hood, proceed to the other side of page, Section B, Step 5.

- Step 5: Remove the 2 screws that hold the pilot to the bracket.
- Step 6: Remove the 2 screws that attach the pilot bracket to the firebox bottom.
- Step 7: Remove the pilot bracket to expose the pilot assembly.
- Step 8: Remove the pilot tube and nut from the pilot assembly using a 10mm wrench, slide the tube and nut down. You may have to tap the pilot hood lightly to release the pilot orifice. Place new pilot orifice into the pilot assembly and reinstall the pilot tube and nut. Tighten with wrench.  
Reinstall pilot bracket at this time.
- Step 9: Remove main orifice using a 1/2" wrench and replace with new conversion orifice.
- Step 10: Adjust the primary air setting to the correct setting as specified in the manual or label plate. To adjust the air setting, loosen the screw on the side of the tube and rotate to the correct opening using a drill bit or tape measure. Retighten screw.  
Reinstall burner at this time reversing STEPS 3, 2 and 1.
- Step 11: Follow instructions supplied with the conversion HI LOW to convert the valve from one type of fuel to the other.
- Step 12: Check for gas leaks around the pilot burner tube and face of valve.
- Step 13: Attach conversion label to label plate on bottom of unit, writing information as needed.



# Section B Installation Instructions

## GAS CONVERSION KIT FOR TOP CONVERTIBLE PILOT **SERIES 019065X**



Instructions for converting SIT 190 series pilot burner injection from NG to LPG and from NG to LPG Only. This information should be considered as supplemental to the Appliance Manufacturer's Instructions.

### **WARNING!**

**The installation of this conversion kit must only be undertaken by a qualified and certified gas appliance installer.**

- 1 Shut off the gas supply to the appliance.
- 2 Allow the pilot burner to cool to room temperature.  
**WARNING: Touching a hot pilot burner can result in injury.**
- 3 The pilot hood is held in place by spring pressure. Remove the hood by pulling it directly up from the pilot bracket (1).
- 4 Insert a 5/32" or 4mm Allen wrench into the hexagonal key-way of the injector (2), and rotate it counter clockwise until it is free of the injector journal (3).
- 5 Verify that the new injector is proper for the application. The injector size is stamped on the side of the injector near the top. LPG injectors have a groove machined around their circumference near the top, while NG injectors do not have a groove (5). Refer to the Appliance Manufacturers instruction sheet for the proper injector size.
- 6 Insert the Allen wrench into the end of the injector. Then, insert into injector journal, and rotate the injector clockwise until a torque of 9 in-lbs. is achieved.
- 7 Replace the pilot hood by aligning the tab on the base of the hood with the slot in the side of the pilot journal, and push the hood down, directly onto the pilot bracket (4). The hood must sit squarely on the bracket for proper operation. Check to insure that the hood is properly seated onto the pilot bracket.
- 8 Proceed to Section A, Step 9.



fig. 1



fig. 2



fig. 3



fig. 4

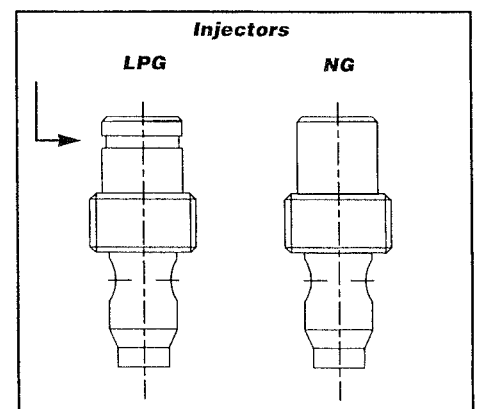


fig. 5

### **WARNING!**

**This conversion kit must only be applied as part of a conversion kit supplied by the appliance Manufacturer for the specific appliance, and type of gas being converted.**

**INSTALLER NOTICE. These instructions must be left with appliance.**

# Installation of Back Vents

## General Back Vent Installation and Specification

Straight Back max vent length 60" Vent Kit # ZDVHSK  
 45° Corner Max Number of 45° Bends One or ZDVHSK5  
 Max Vent Length after 45° Bend 54"

**NOTE: Minimum clearance between vent pipes and combustible materials is one inch or 25mm side and bottom. 1 1/2" top.**

### Step 1

Locate vent opening on the wall. COMBUSTIBLE WALLS cut a 11" x 11" (280mm x 280mm) minimum hole and frame as shown. NON-COMBUSTIBLE WALL hole opening must be 8.5" (216mm) in diameter. Install wall thimble for vent pipe routing through wall. See Fig. 3.

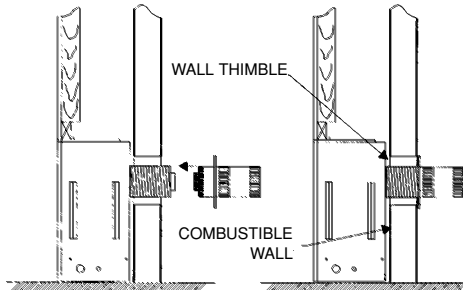
### Step 2

Place fireplace into place and attach vent pipes, four inch (4") first. Make sure pipes are pushed on securely. Seal with millpac sealant and secure with 4 screws/washers per pipe.

### Step 3

**Straight Back Venting.** Measure wall thickness. If wall is thinner than (1ft.) then 1 foot unexpanded length in ZDVHSK must be expanded and cut. 7" should extend past outer wall approximately 2" to 3" and 4" flex approximately 2" past the 7" flex that allows enough room to secure pipe to termination with high heat millpac and 4 screws, then press termination back to outer wall and seal. Place spacer spring over 4" flex to stabilize it in the 7" flex if length is over a foot.

### Step 4



**Cover Back Venting.** Only one - 45° bend per installation. Install as per above length. May not exceed Figure 1 page 16 and must be cut to comply.

Install wall thimble. Place fireplace into place and secure to floor with nailing tabs.

### Step 5

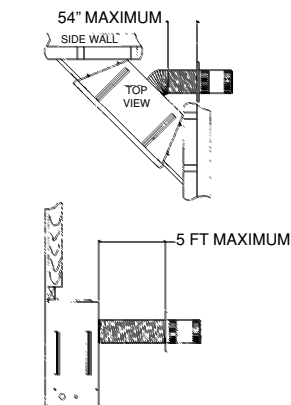
Mount vent termination, make sure 4" and 7" pipes are siliconed. Caulk around wall thimble to weatherproof.

On horizontal venting, 1/4" rise per foot up to 3ft, over 3ft up to the 5ft maximum horizontal run 1 1/2" rise per foot is needed.

## Corner Installation Location

**NOTE: When the fireplace is installed cross corner it is necessary to bend the flex pipe. Use Kit ZDVHSK5.**

Note: Venting Terminals shall not be recessed into wall or siding. If finishing the outside wall with vinyl or wood siding it is recommended that a Siding Shield be installed, Part Number ZDVSSLR.



# Parts List

PART NO.	DESCRIPTION
<b>Replacement Burner Assembly</b>	
3624-BNGSI	BURNER ASSEMBLY - NATURAL GAS C/W VALVE SYSTEM (ZDV3624N)
3624-BLPSI	BURNER ASSEMBLY - LIQUID PROPANE C/W VALVE SYSTEM (ZDV3624LP)
3628-BNGSI	BURNER ASSEMBLY - NATURAL GAS C/W VALVE SYSTEM (ZDV3628N)
3628-BLPSI	BURNER ASSEMBLY - LIQUID PROPANE C/W VALVE SYSTEM (ZDV3628LP)
3632-BNGSI	BURNER ASSEMBLY - NATURAL GAS C/W VALVE SYSTEM (ZDV3632N)
3632-BLPSI	BURNER ASSEMBLY - LIQUID PROPANE C/W VALVE SYSTEM (ZDV3632LP)
<b>Valve System Parts</b>	
If Serial Number is LESS than: ZDV3624LP - 8952 / ZDV3624N - 9154 ZDV3624LPB - 360767 / ZDV3624NB - 360766 / ZDV3628LP - 3697 ZDV3628N - 3698 / ZDV3630LP - 420371 / ZDV3630N - 420372	
1000-P136WR	Thermopile GOAI-524
1001-P035SI	Electrode Sparker 915.035 SIT
1001-P129SI	Thermocouple 290.129 SIT unified
1001-P157SI	Orifice Pilot LP 977.157 SIT
1001-P159SI	Orifice Pilot NG 977.159 SIT
1001-P508SI	HT Cable 16
1001-P633SI	Valve Nova LP Hi/Lo 0820633
1001-P634SI	Valve Nova NG Hi/Lo 0820634
1001-P605SI	Pilot Burner LP 190.605 unified SIT
1001-P606SI	Pilot Burner NG 190.606 unified SIT
<b>Valve System Parts - New Top convertible SIT</b>	
If Serial Number is GREATER than above	
1000-P136WR	Thermopile GOAI-524
1001-P069SI	Electrode Sparker 915.069 TC SIT
1001-P216SI	Thermocouple 290.216 TC SIT
1001-P165SI	Orifice Pilot NG 977.165 TC SIT
1001-P167SI	Orifice Pilot LP 977.167 TC SIT
1001-P508SI	HT Cable 16
1001-P633SI	Valve Nova LP Hi/Lo 0820633
1001-P634SI	Valve Nova NG Hi/Lo 0820634
1001-P713SI	Pilot Burner LP 199.713 TC SIT
1001-P714SI	Pilot Burner NG 199.714 TC SIT
<b>Miscellaneous Parts</b>	
1000-150GE	#SILICONE GE RED IS806 #736
1000-150MP	#HI-TEMP MILL PAC SEALANT 840099
1000-214	#PIEZO-IGNITOR 1244-17 MARK 21
1000-215	#PAL NUT (18MMX1.5MM)BLK (1364.03)
1000-218	#SWITCH IVORY (1451/001)
1000-227	#COVER IVORY (86001/001)
1000-255	#ORIFICE BRASS - (State Size)
1000-EMBER	#MOON ROCK
6000-130	#EXPLOSION FELT GASKET
2000-080	#THERMODISC 2450 (For Blower)
2000-081	#BLOWER MOTOR QLN65/2400
1000-085	#CONTROL VARIABLE SPEED KBWC-13BV
1000-306	THERMALCORD - ADHESIVE BACK FOR DOOR FRAME
1000-305	CERAMIC GLASS - FOR ALL ZDV3600
3600-311	TEMPERED GLASS - FOR ZDV3624 MODEL

## Fireplace Part Numbers

ZDV3624N	FIREPLACE DECORATIVE RATED NG, TEMPERED GLASS, 24,000 BTU WITH GLOWING EMBER BED, BEDROOM APPROVED
ZDV3624LP	FIREPLACE DECORATIVE RATED LP, TEMPERED GLASS, 22,000 BTU WITH GLOWING EMBER BED, BEDROOM APPROVED
ZDV3624NB	FIREPLACE HEATER BACK FLUE NG, TEMPERED GLASS, 24,000 BTU, BRA-MHA 75% EFFICIENT
ZDV3624LPB	FIREPLACE HEATER BACK FLUE LP, TEMPERED GLASS, 22,000 BTU, BRA-MHA 75% EFFICIENT
ZDV3628N	FIREPLACE HEATER RATED NG, CERAMIC GLASS, 28,000 BTU WITH GLOWING EMBER BED BRA-MHA
ZDV3628LP	FIREPLACE HEATER RATED LP, CERAMIC GLASS, 26,000 BTU WITH GLOWING EMBER BED BRA-MHA
ZDV3632N	FIREPLACE HEATER RATED TOP FLUE NG, CERAMIC GLASS, 30,500 BTU AT 75% EFFICIENT. APPROVED FOR BEDROOM AND MOBILE HOME.
ZDV3632LP	FIREPLACE HEATER RATED TOP FLUE NG, CERAMIC GLASS, 29,200 BTU AT 75% EFFICIENT. APPROVED FOR BEDROOM AND MOBILE HOME.

## FIREPLACE REQUIREMENTS

### Grills

Z36GBA	Grill Kit - Classic Builder Antique Brass
Z36GBC	Grill Kit - Classic Builder Chrome
Z36GBP	Grill Kit - Classic Builder Polish Brass
Z1GBL	Grill Kit - Black
Z1GAB	Grill Kit - Antique Brass
Z1GPB	Grill Kit - Polish Brass
Z36GCR	Grill Kit - Chrome
Z36PBL	Panel Grill Kit - Black

### LOG SETS: (Required for each unit)

LOGC42	Log Set - 4 pce. - Classic Oak (ZDV3320, 3624/28, 4224/28 Series)
LOGC43	Log Set - 4 pce. - Traditional Oak (ZDV3320, 3624/28, 4224/28 Series)
LOGC44	Log Set - 8 pce. - Burnt Oak (ZDV3320, 3624/28, 4224/28 Series) Not for use in back flue models.
LOGC60	Log Set - 7 pce. - Burnt Oak (ZDV3632, 4232, 4732 Series)

### Bay Window Kits: (for ZDV3628, ZDV3630, and ZDV3632 ONLY)

Z36WBAB	Bay Window (as above) with Antique Brass Louvres
Z36BWCR	Bay Window (as above) with Chrome Louvres
Z36BWPB	Bay Window (as above) with Polish Brass Louvres

## Fireplace Accessories Options:

Z36SAB	Surround - Antique Brass (Coverage New Style 34 1/2" H x 41 1/8" W)
Z36SCR	Surround - Chrome (Coverage New Style 34 1/2" H x 41 1/8" W)
Z36SPB	Surround - Polish Brass (Coverage New Style 34 1/2" H x 41 1/8" W)
Z36SLAB	Surround Slim Line - Antique Brass (Coverage 34 1/4" H x 37 1/2" W)
Z36SLCR	Surround Slim Line - Chrome (Coverage 34 1/4" H x 37 1/2" W)
Z36SLPB	Surround Slim Line - Polish Brass (Coverage 34 1/4" H x 37 1/2" W)
Z36SLBL	Surround Slim Line - Gun Metal Black (Coverage 34 1/4" H x 37 1/2" W)
Z1ADBL	Arch Door Frame - Black
Z36ADDX	Arch Door Frame - Deluxe Black (352))
Z36ADTH	Arch Door Frame - Top Half Black (353T)
Z36ADDA	Arch Door Frame - Double Arch Black (354)
Z36ADDD	Arch Door Frame - Double Door Arch Black (355)
Z1ADAB	Arch Door Frame - Antique Brass
Z36ADCR	Arch Door Frame - Chrome
Z1ADPB	Arch Door Frame - Polish Brass
RDFK	Remote Duct Fan Kit (for ZDV3628/ZDV3632 models only)
Z36FK	Fan Kit w/Variable Speed Wall Mount Control (Temperature Sensing)
Z1MT	Thermostat Millivolt Wall Mount
Z80PT	Thermostat Programmable Digital Millivolt Wall Mount (1F80-40)
Z1RC	Remote Control Millivolt (On/Off with LED) (Model I)
ZART	Remote Control Thermost Millivolt (Model K)
RMCBN	Remote Control - Basic - Natural Gas (On/Off, Hi/Lo Flame Adjustment)
RMCBP	Remote Control - Basic - Liquid Propane (On/Off, Hi/Lo Flame Adjustment)
DCHS	Remote Control Heatshield
Z36RL	Refractory Liner (3 piece)

### Designer Doors for 36" Fireplaces - Operative

Z36DDA1BL	Designer Door Arch - Series 1 - Black
Z36DDTA1A	Trim - Antique for Designer Arch - Series 1
Z36DDTA1C	Trim - Chrome for Designer Arch - Series 1
Z36DDTA1P	Trim - Polish for Designer Arch - Series 1
Z36DDS1BL	Designer Door Straight - Series 1 - Black
Z36DDS2BL	Designer Door Straight - Series 2 - Black
Z36DDS3BL	Designer Door Straight - Series 3 - Black
Z36DDTS1A	Trim - Antique for Designer Straight - Series 1
Z36DDTS1C	Trim - Chrome for Designer Straight - Series 1
Z36DDTS1P	Trim - Polish for Designer Straight - Series 1

### Child Safety Screens

Z36CSS	Child Safety Screen - 36" DV Fireplaces
--------	---

### Conversion Kit (Sit Valve Only)

3624-CKLP	LP Conversion Kit for ZDV3624
3624-CKNG	NG Conversion Kit for ZDV3624
3628-CKLP	LP Conversion Kit for ZDV3628
3628-CKNG	NG Conversion Kit for ZDV3628
3632-CKLP	LP Conversion Kit for ZDV3632
3632-CKNG	NG Conversion Kit for ZDV3632

# Kingsman Fireplace Venting

## Catalog Number

## Description

ZDVHSK	Horizontal Vent Starter Kit - 3 FT Length Horizontal Vent Termination, Wall Thimble, 36" Flex Pipe, Mill Pac, screws/washers, springs.
ZDVHSK5	Horizontal Vent Starter Kit - 5 FT Length Horizontal Vent Termination, Wall Thimble, 60" Flex Pipe, Mill Pac, screws/washers, springs.
FDVVT40	Vertical Vent Termination Converts from 15' -40' to 15' and under
FDVHT	Horizontal Vent Termination
FDVHSQ	Horizontal Square Termination
ZDVST	Horizontal Snorkel Termination (34" Tall, 24" Center to Center)
FDVHSC	Safety Cage for Horizontal Termination
ZDVAIS	Attic Insulation Shield
ZDVVOS	Offset Support
ZDVFS	Firestop Spacer
ZDVRS	Roof Support
ZDVWT	Wall Thimble (Horizontal Venting)
ZDVSS	Siding Shield
ZDV48GP	Galvanized Pipe 7" Dia. x 48" (Vertical Installations)

ZDVAAF	Flashing 7" c/w Storm Collar (1/12 to 7/12)
ZDVAF2	Flashing 7" c/w Storm Collar (8/12 to 12/12)
ZDVAF3	Flashing 7" c/w Storm Collar Flat
ZDV7SC	Storm Collar 7"
ZDVFK5	Flex Kit (4" & 7" Dia.) x 2.5' (Unexpanded) 5' Expanded
ZDVFK8	Flex Kit (4" & 7" Dia.) x 4' (Unexpanded) 8' Expanded
ZDVFK20	Flex Kit (4" & 7" Dia.) x 10' (Unexpanded) 20' Expanded *Kits are complete with spring stand-offs, silicone.
ZDV4FC	Flex Connector 4" Diameter
ZDV7FC	Flex Connector 7" Diameter
ZDV4SS	Spring 4" Standoff Spacer
ZDV DFA	Simpson Dura-Vent Fireplace Adapter (for ZDV33/36/42/47, ZDV6000, MDV30/38)

ZDVHKSQ	<b>Horizontal Square Termination Vent Starter Kit - 3 FT Length</b> Horizontal Vent Termination, Wall Thimble, Wall Thimble, 36" Flex Pipe, Mill Pac
FDVHSQ	Horizontal Square Vent Termination
ZDVSSLR	Siding Shield - Large Return

## Trouble Shooting The Gas Control System

**WARNING: BEFORE DOING ANY GAS CONTROL SERVICE WORK, REMOVE THE GLASS FRONT.**

**NOTE: Before troubleshooting the gas control system, be sure external gas shut off is in the "On" position.**

Problem	Possible Causes	Corrective Action
Spark igniter will not light.	Defective or misaligned electrode at pilot.	Check for spark at electrode and pilot: if no spark and electrode wire is properly connected, replace igniter.
	Defective igniter (push-button)	Using a match, light pilot. If pilot lights, turn off pilot and push the red button again. If pilot will not light - check gap at electrode and pilot should be 1/8" to 1/4" to have a strong spark.
Pilot will not stay lit after carefully following lighting instructions.	Defective thermocouple (flame switch where applicable)	Check pilot flame. Must impinge on generator and thermocouple. Clean and/or adjust pilot for maximum flame impingement on generator and thermocouple. Replace thermocouple if pilot will not hold. (Hand tight 1/8 turn on replacement)
	Defective valve magnet.	Replace valve, if pilot won't hold after the thermocouple is replaced.
Pilot burning, no gas to burner, Valve knob "ON", Wall Switch "ON"	Wall switch or wires defective.	Check wall switch and wires for proper connections. Jumper wire across terminals at wall switch. If burner comes on, replace defective wall switch. If okay, jumper wires, across wall switch wires at valve. If burner comes on, wires are faulty or connections are bad.
	Generator may not be generating sufficient voltage.	Check generator with millivolt meter. Take reading at generator terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in pilot position and wall switch "off" Replace faulty generator if reading is below specified minimum.
	Plugged burner orifice.	Check burner orifice for stoppage and remove.
	Defective automatic valve operator.	Remove wall switch wires from gas valve. Install jumper wires from top bottom terminals of gas valve. Turn valve on "ON". If main burner does not light, replace valve.
Frequent Pilot outage problem.	Pilot flame may be too low or blowing (high) causing the pilot safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on generator and thermocouple.
Flame lifts off burner and goes out in less than 30 seconds	Inner 4" liner has come off flue or termination, flame is starving for oxygen	Attach 4" liner to flue or termination using screws, silicone and clamps as stated in manual
Flame lifts off burner on one side while the rest of the flame remains lit.	Improper installation of firebrick. Firebrick is likely leaning.	Be sure to position firebrick against firebox walls and be sure to use brick clips attached to the inner side of firebox.



## LIMITED LIFETIME WARRANTY

This Limited Lifetime Warranty applies only while the unit remains at the site of the original installation and only if the unit is installed inside the continental United States, Alaska, Hawaii, and Canada. The warranty applies only if the unit is installed and operated in accordance with the printed instructions and in compliance with applicable installation and building codes and good trade practices.

### BASIC ONE YEAR WARRANTY

During the first year after installation, we will provide a replacement for any component part of your unit found to be defective in materials or workmanship, including labour costs. Repair work requires prior approval by Kingsman, labour costs are based on a predetermined rate schedule and any repair work must be done through an authorized Kingsman dealer.

### LIMITED LIFETIME WARRANTY

The heat exchanger, combustion chamber and burner of every Kingsman product excluding the Outdoor Firepit are warranted against materials or workmanship during the period the product is owned by the original owner. The part to be replaced must be returned to our distributor in exchange for the replacement part. Any labor, material, freight and/or handling charges associated with any repair or replacement pursuant to this Limited Lifetime Warranty will not be covered by this warranty.

### GENERAL TERMS

In lieu of providing a replacement part, we may, at our option, provide the distributor's component purchase price from us or a credit equal to the distributors component purchase price from us toward the purchase of any new unit which we distribute. If a credit is given in lieu of a replacement part, the rating plate from the unit being replaced must be submitted on a warranty claim, and the unit being replaced must be made available to our distributor for disposition.

In establishing the date of installation for any purpose, including determination of the starting date for the term of this Limited Lifetime Warranty, reasonable proof of the original installation date must be presented\*, otherwise the effective date will be based upon the date of manufacture plus thirty (30) days.

We will not be responsible for and you, the user, will pay for: (a) damages caused by accident, abuse, negligence, misuse, riot, fire, flood, or Acts of God (b) damages caused by operating the unit where there is a corrosive atmosphere containing chlorine, fluorine, or any other damaging chemicals (other than in a normal residential environment) (c) damages caused by any unauthorized alteration or repair of the unit affecting its stability or performance (d) damages caused by improper matching or application of the unit or the unit's components (e) damages caused by failing to provide proper maintenance and service to the unit (f) any expenses incurred for erecting, disconnecting or dismantling the unit (g) parts or supplies used in connection with service or maintenance (h) damage repairs, inoperation or inefficiency resulting from faulty installation or application (i) electricity or fuel costs or any increase in electricity or fuel cost whatsoever including additional or unusual use of supplemental electric heat.

We shall not be liable for any incidental, consequential, or special damages or expenses in connection with any use or failure of this unit. We have not made and do not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose. We make no express warranties except as stated in this Limited Lifetime Warranty. No one is authorized to change this Limited Lifetime Warranty or to create for us any other obligation or liability in connections with this unit. Any implied warranties shall last for one year after the original installation. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages or do not allow limitations on how long an implied warranty or condition lasts, so the above limitations or exclusions may not apply to you. The provisions of this limited warranty are in additions to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

Save this certificate. It gives you specific legal rights, and you may also have other rights which may vary from state to state and province to province.

In the event your unit needs servicing, contact your dealer or contractor who installed or serviced your unit. When requesting service, please have the model and serial number from each unit readily available. If your dealer needs assistance, the distributor is available for support and we, in turn support the distributor's efforts.

Fill in the installation date and model and serial numbers of the unit in the space provided below and retain this limited warranty for your files.

**Model No.** \_\_\_\_\_ **Serial No.** \_\_\_\_\_ **Date installed** \_\_\_\_\_

**Dealer or Contractor Name:** \_\_\_\_\_

\*To receive advantage of your warranty, you must retain the original records that can establish the installation date of your unit.