

## Addendum to Owner's Guide 200-2870A and 200-2871A Direct Vent Gas Heater Models 2560 / 2570

THE INFORMATION PRESENTED IN THIS ADDENDUM SUPERCEDES THAT GIVEN IN THE ABOVE MANUALS PROVIDED WITH DIRECT VENT GAS HEATERS 2560/2570. INSTALLATION REQUIREMENTS FOR THE NEW VARIABLE GAS REGULATOR, AS WELL AS RELATED VERTICAL AND HORIZONTAL VENTING REQUIREMENTS, ARE PROVIDED HEREIN.

SPECIFI	CATIONS
Propane	Natural Gas
Orifice:82-300	Orifice:82-900
Input:30,000 max. / 24,000 min.	Input:30,000 max./ 24,000 min.
Manifold Pressure: 10.0 max./ 6.4 min.	Manifold Pressure:3.5 max. / 2.2 min.
Inlet Pressure:Min 11.0 / Max 13.0	Inlet Pressure: Min 5.0 / Max 11.0

#### The Variable Regulator

The burner Control Valve on this appliance has been equipped with a variable regulator that allows the operator to adjust the gas input rate between 24,000 btu/hr, (LO) and 30,000 btu/hr, (HI). This new feature provides an additional level of user control over the heat output and fuel consumption of the appliance. See Fig. 1.

#### **New Venting Requirements**

The Direct Vent gas heater is now approved for through-the-roof installations. The vertical vent may terminate up to 25' (7.5 m) above the appliance flue collar. See Figs. 2 and 3.

The approved horizontal venting configurations have also changed. The horizontal run may now extend up to 8' (2.5 m).and include a vertical rise of up to 12' (3.7 m). See Fig. 4.

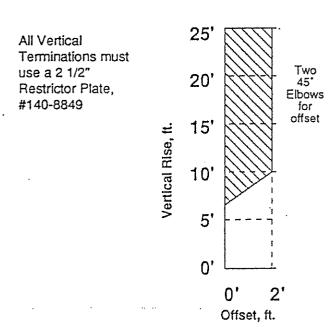


Figure 2. Vertical Vent Termination

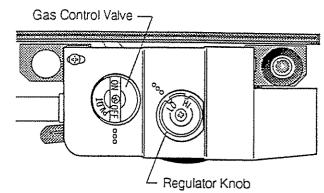


Figure 1. The Control Valve and variable Regulator.

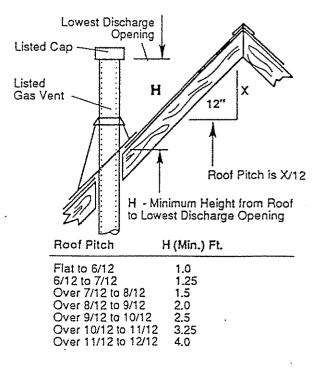
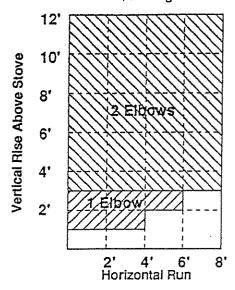


Figure 3. Vent (Chimney) Height

Fig. 4. Horizontal Vent Termination, (Through-the-wall).



#### Approved Venting Components

The following is an updated list of approved vent parts that may be used to install the Direct Vent appliance in a vertical or horizontal configuration.

VCI NO.	COMPONENT D	URAVENT NO.
923V	APPLIANCE ADAPTOR	923V
9908	90" ELBOW, BLK.	9908
N/A	90° ELBOW, GAL.	990
945B	45" ELBOW, BLK.	458
945G	45° ELBOW, GAL.	945
908B	6" STRAIGHT, BLK.	9088
907B	9" STRAIGHT, BLK.	9078
9068	12" STRAIGHT, BLK.	9068
906G	12 STRAIGHT, GAL.	906
904B	24" STRAIGHT, BLK.	9048
904G	24" STRAIGHT, GAL,	904
903B	36" STRAIGHT, BLK.	9038
903G	36" STRAIGHT, GAL.	903
N/A	48" STRAIGHT, BLK.	902B
N/A	48" STRAIGHT, GAL.	902
9118	11" - 14 5/8" STRAIGHT	9118
984B	HORIZONTAL VENT CAP	984
940B	WALL THIMBLE / CEILING SUPPORT	BOX 940
950B	VINYL SIDING STANDOFF	950
982B	SNORKEL TERMINATION - 14"	982
981B	SNORKEL TERMINATION - 36°	981
5084	MINIMUM HORIZONTAL VENT KIT	N/A
988G	WALL STRAP	988
941B	CATHEDRAL CEILING SUPPORT BOX	941
953G	STORM COLLAR	953
963G	FIRESTOP SPACER	963
943G	FLASHING 0/12 - 6/12	943
9438	FLASHING 6/12 - 12/12	9438
991G	VERTICAL TERMINATION CAP	991

## Restrictor Plate Installation, (Though-the roof vent systems)

Note that a Restrictor Plate, (#140-8849) is included with the appliance in the hardware bag. This disc must be installed between the gasket and the Inner Adaptor Pipe to insure that a proper air/fuel ratio is maintained in an appliance vented through the roof. See Figs. 5 and 6. See also Page 9 of the Owner's Guide.

**Step 1.** Attach the adhesive-backed gasket to the Restrictor Plate.

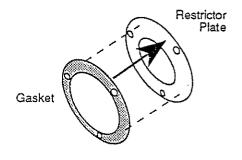


Figure 5. Gasket Assembly

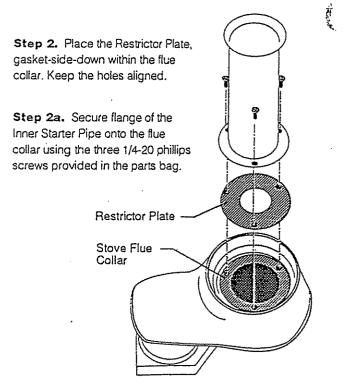


Figure 6. Restrictor Plate and Inner Starter Pipe Installation.

<sup>&</sup>lt;sup>a</sup>May 1995, Vermont Castings, Inc.
Parts and specifications subject to change without notice.
Printed in the U.S.A.



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SPECIFICATIONS		
Propane	Natural Gas	
Orifice:	Orifice:	
Input: 30,000 max. / 24,000 min.	Input:30,000 max./ 24,000 min.	
Manifold Pressure: 10.0 max./ 6.4 min.	Manifold Pressure:3.5 max. / 2.2 mín.	
Inlet Pressure: Min 11.0 / Max 13.0	Inlet Pressure: Min 5.0 / Max 11.0	

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The burner Control Valve on this appliance has been equipped with a variable regulator that allows the operator to adjust the gas input rate between 24,000 btu/hr, (LO) and 30,000 btu/hr, (HI). This new feature provides an additional level of user control over the heat output and fuel consumption of the appliance. See Fig. 1.

#### **New Venting Requirements**

The Direct Vent gas heater is now approved for through-the-roof installations. The vertical vent may terminate up to 25' (7.5 m) above the appliance flue collar. See Figs. 2 and 3.

The approved horizontal venting configurations have also changed. The horizontal run may now extend up to 8' (2.5 m).and include a vertical rise of up to 12' (3.7 m). See Fig. 4.

All Vertical Terminations must use a 2 1/2" Restrictor Plate, #140-8849

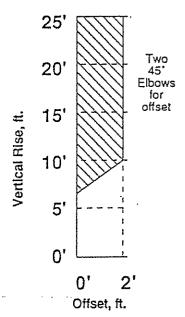


Figure 2. Vertical Vent Termination

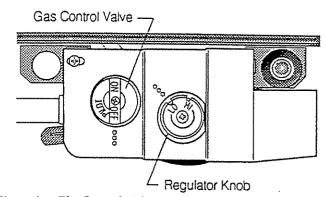


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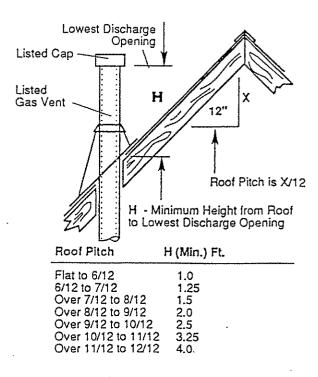
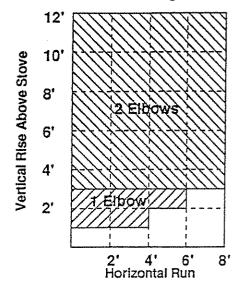


Figure 3. Vent (Chimney) Height

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	945G	45' ELBOW, GAL.	945
	9088	6" STRAIGHT, BLK.	908B
	9078	9" STRAIGHT, BLK.	907B
	906B	12 STRAIGHT, BLK.	9068
	906G	12" STRAIGHT, GAL.	906
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	N/A	48 STRAIGHT, BLK.	9028
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	981B	SNORKEL TERMINATION - 36°	981
	5084	MINIMUM HORIZONTAL VENT KIT	N/A
	988G	WALL STRAP	988
	9418	CATHEDRAL CEILING SUPPORT 80X	( 941
	953G	STORM COLLAR	953
	963G	FIRESTOP SPACER	963
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Note that a Restrictor Plate, (#140-8849) is included with the appliance in the hardware bag. This disc must be installed between the gasket and the Inner Adaptor Pipe to insure that a proper air/fuel ratio is maintained in an appliance vented through the roof. See Figs. 5 and 6. See also Page 9 of the Owner's Guide.

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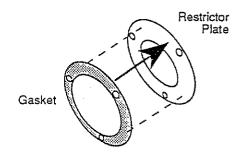


Figure 5. Gasket Assembly

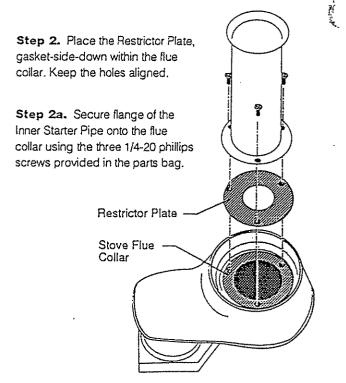


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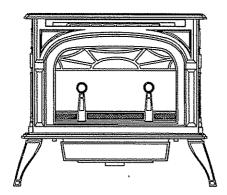
# Radiance

Model 2560

Direct Vent Gas Heater

## Owner's Guide

For use in North America



**LISTED TO ANSI STANDARD Z21.44-1995** 

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 IFYOU 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.



VERMONT CASTINGS, INC.



The Radiance Direct Vent Gas Heater, Model #2560, is a vented gas appliance listed to the ANSI standard Z21.44-1995 and CAN/CGA-2.19-M86 for Direct Vent Wall Furnaces. It is also tested to CGA Interim Requirement #41 for Direct Vent Gas Fireplaces.

The Radiance Direct Vent Gas Heater is certified for bedroom and aftermarket mobile home installations.

"Direct vent" is a term used to describe a sealed combustion system in which incoming outside air for combustion and outgoing exhaust enter and exit through two separate concentric passageways within the same sealed vent system.

The direct vent system permits the gas appliance to be vented directly to the outside atmosphere though the side of the house unlike conventional venting systems that take air from the room for combustion and vent the exhaust vertically up through the roof to the atmosphere.

The installation of the Radiance Direct Vent Gas Heater must conform with local codes, or in the absence of local codes, with National Fuel Gas Code, ANSI Z223.1 — latest edition and CAN 1 B1-149.1 and .2 Installation Code. (EXCEPTION: Do not derate this appliance for altitude. Maintain the manifold pressure at 3.5 inches W.C. for Natural Gas and 10 inches W.C. for LP gas.)

Installation and replacement of gas piping, gas utilization equipment or accessories, and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation, or company that either in person or through a representative is engaged in and is responsible for (a) installation or replacement of gas piping, or (b), the connection, installation, repair, or servicing of equipment, who is experienced in such work, familiar with all precautions required, and has complied with all the requirements of the authority having jurisdiction.

The Radiance Direct Vent Gas Heater should be inspected before use and at least annually by a qualified service agency. 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 Radiance Direct Vent Gas Heater be kept clean.

The Radiance Direct Vent Gas Heater and its individual shut-off valve must be disconnected from the gas supply piping during any pressure testing of that system at test pressures in excess of 1/2 psig. (3.5 kPa).

The Radiance Direct Vent Gas Heater must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig.

A 1/8-inch N.P.T. plugged tapping, accessible for test gage connection, should be installed on the inlet gas connection.

The Radiance Direct Vent Gas Heater, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code ANSI/NFPA 70, (latest edition), or of the current Canadian Electrical Code C22.1.

This appliance may be installed in bedrooms or in an aftermarket\* manufactured (mobile) home, where not prohibited by state or local codes.

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

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

WARNING: This appliance is hot while in operation. Keep children, clothing, and furniture away. Contact may cause burns or ignition of combustible materials.

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 this appliance.

Clothing or other flammable materials should not be placed on or near this appliance.

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

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

The flow of combustion and ventilation air must not be obstructed.

WARNING: Do not operate this appliance with the glass panel removed, cracked or broken. Replacement of the panel should be done by a licensed or qualified service person.

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.

Do not burn wood, trash or any other material for which this appliance was not designed. This appliance is designed to burn either natural gas or propane only.

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

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

Verify proper operation after servicing.

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

## Welcome

Congratulations on your choice of a Vermont Castings Radiance Direct Vent Gas Heater. With this purchase, you have made a commitment to make the hearth a place of warmth, beauty and comfort in your home. At Vermont Castings, we share that joy and appreciation for the hearth and we show it in all our cast iron products.

We are equally committed to your satisfaction as a customer. That is why we maintain an exclusive network of the finest dealers in the industry. These dealers are chosen for their expertise and dedication to customer service. They are factory-trained to know all details of every Vermont Castings product. Contact your Authorized Vermont Castings Dealer any time you have a question about your Radiance or its performance.

Be assured that your cast iron Radiance has been made with the utmost care and will provide you with many years of service.

This manual contains valuable instructions on the installation and operation of your Vermont Castings Radiance Direct Vent Gas Heater. It also contains useful information on maintenance and assembly of this product. We urge you to read the manual before installing and operating your Radiance.

Sincerely,

## All of us at Vermont Castings

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Warranty Back Cover

Save these instructions for future reference.

## Installation

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 - latest edition. (EXCEPTION: Do not derate this appliance for altitude. Maintain the manifold pressure at 3.5 inches W.C. and 10 inches W.C. for Propane).

In Canada, installation must be in accordance with the current CAN 1 B1-149.1 and .2 Installation Codes and/or local codes.

The installation should be done by a qualified service person who is familiar with the building codes and installation techniques appropriate for your area to accomplish a safe and effective installation.

Your Vermont Castings dealer or your local gas supplier will be able to refer a qualified service person.

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

THE SURFACE OF THIS HEATER IS HOT WHEN IT IS IN USE. YOUNG CHILDREN SHOULD BE WATCHED CAREFULLY WHEN THEY ARE IN THE SAME ROOM WHEN THE RADIANCE IS IN USE, AND THEY SHOULD BE TAUGHT TO AVOID THE HOT SURFACE. KEEP ANY OBJECTS THAT CAN BURN WELL AWAY FROM THE HEATER AND OBSERVE THE RECOMMENDED CLEARANCES THAT FOLLOW.

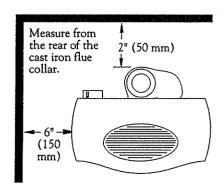
### Hearth Requirements

This appliance must be installed on rigid flooring. Any carpeting under the unit must be removed. When the appliance is installed directly on any combustible surface other than wood flooring, a metal or wood panel extending the full width and depth of the unit must be used as the hearth. There are no other hearth requirements.

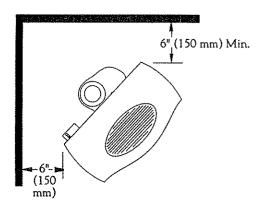
### Keep the Stove a Safe Distance from Surrounding Materials

The Radiance will heat nearby surfaces when operating. A safe installation requires that adequate *clearance* be maintained between the stove and nearby combustible materials to ensure that such materials do not overheat. The diagrams that follow illustrate the minimum clearances for the Radiance Direct Vent Gas Heater in parallel, corner, and alcove installations.

#### Stove Clearances



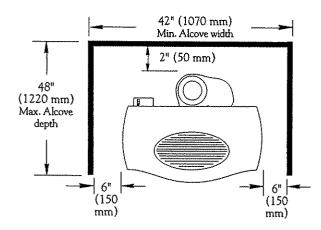
Minimum Clearances; Parallel Installation See Page 10 for specific installation procedures.



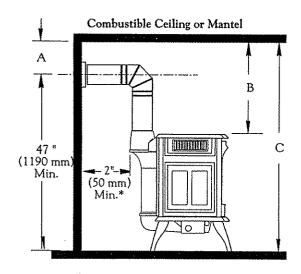
Minimum Clearances; Corner Installation

#### Alcove Installation

The Radiance Direct Vent Gas Heater is approved for installation into alcove construction composed of combustible materials.



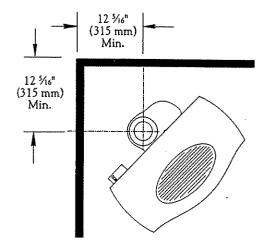
Minimum Alcove Clearances: See Page 10 for specific installation procedures.



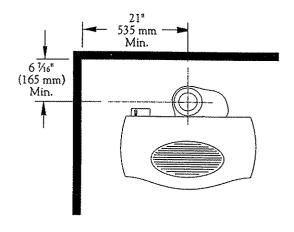
Minimum Clearances to Ceiling or Mantel

-	A	В	С
Min. Approved:	4"	22 3/4"	51"
	100mm	580mm	1275mm
Effective Min.	6 1/2"	25 1/4"	53 1/2"
w/ Wall Thimble:	165mm	630mm	1340mm
Effective Min. w/ Wall Thimble and 2" Rear Clearance: See Page 10 for details	9 1/2"	28 1/4"	56 1/2"
	235mm	710mm	1420mm

## Flue Collar Centerline from the Wall



Flue collar centerline from wall; Corner Installation.



Flue collar centerline from wall; Parallel Installation.

### Venting Requirements and Options

The Radiance Direct Vent Heater must be located to allow venting to the outside through a nearby wall. It may be installed parallel to the wall and vented to the rear or it may be installed in a corner and vented to either side. The Radiance Direct Vent Gas Heater is approved only for venting through a side wall with a horizontal termination.

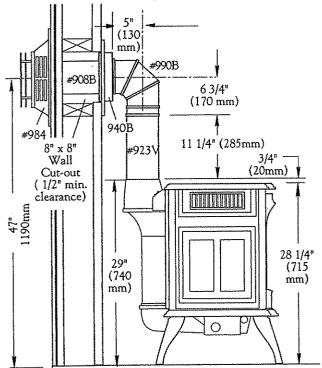
The Radiance Direct Vent Gas Heater is approved for venting with use of the following components available from DuraVent Corporation or your Vermont Castings Authorized Dealer:

CHICKING LYCKICK	
Appliance Adaptor*	923V
90° Elbow*	990 & 990B
45° Elbow	945 & 945B
6" Straight*	908B
9" Straight	907B
12" Straight	906 & 906B
24" Straight	904 & 904B
36" Straight	903 & 903B
48" Straight	902 & 902B
11 - 14 5/8" Straight	911B
Horizontal Vent Cap*	984 & 984B
Wall Thimble*	940 & 940B
Vinyl Siding Stand-off	950 & 950B
Snorkel Termination - 14"	982 & 982B

All Straight vent pipe sections have a net length 1-1/2" less than the nominal dimension; i.e., a 6" Straight pipe section has an effective length of 4-1/2".

The Appliance Adaptor 923V, when installed, terminates 12" (300 mm) above the stove.

\*Included in Vermont Castings Standard Vent System #5084



Common vent configuration through a combustible wall.

#### Vent Clearances

When planning your installation, the location of the vent terminal and clearances must be considered. Some of the most common clearances to keep in mind are shown on these pages.

## IMPORTANT: ALL VENT CLEARANCES MUST BE MAINTAINED. CHECK YOUR VENT CLEARANCES AGAINST APPENDIX A, PAGE 22.

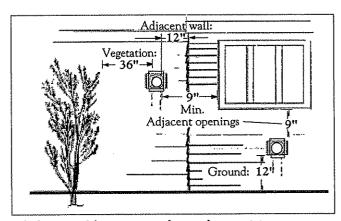
The vent should be placed so that people cannot be burned by accidentally touching the vent surfaces when the stove is operating.

The vent termination should be located where it cannot be damaged by such things as automobile doors, lawnmowers or snowblowers and it should be located away from areas where it could become obstructed by snow, etc.

Some considerations are:

- Obstructions or impediments to venting.
- Nearby combustible materials that could come into contact with combustion exhaust gases.
- Other nearby openings (within 9") through which exhaust gas could re-enter the building.
- All vegetation within 3' that may interfere with the draft.
- Vinyl siding requires protection from vented heat directly above the vent opening. Use Vinyl Siding Heat Shield Kit #950 or 950B.

Other factors that influence where the installation will be sited include the location of outside walls, where additional heat may be desired in the home, where the family members gather most regularly, and perhaps most importantly, the distance limitations of the venting system.



The location of the vent terminal must observe minimum clearances to these common outdoor fixtures. See Appendix A, Page 22 for complete information.

#### WARNING:

- ALWAYS MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO NEARBY COMBUSTIBLES TO PREVENT FIRE HAZARD. DO NOT FILL AIR SPACES WITH INSULATION. ALL VENTING COMPONENTS MUST MAINTAIN A 1/2" (12MM) CLEARANCE TO COMBUSTIBLE MATERIALS.
- THE GAS APPLIANCE AND VENT SYSTEM MUST BE VENTED DIRECTLY TO THE OUTSIDE OF THE BUILDING AND NEVER BE ATTACHED TO A CHIMNEY SERVING A SEPARATE SOLID FUEL OR GAS-BURNING APPLIANCE. EACH DIRECT VENT APPLIANCE MUST USE IT'S OWN SEPARATE VENT SYSTEM. COMMON VENTS ARE PROHIBITED.

Refer to the vent manufacturer's instructions included with the venting system for complete installation procedures.

### It is important to note the following:

- The horizontal termination must not be recessed into the exterior wall or siding.
- Horizontal vent runs must be level or rise 1/4" per foot toward the vent termination.
- Clearances around the vent termination must be maintained.
- Parallel installations with minimum wall clearance have restricted access for connecting the Horizontal Vent Cap straps to the vent pipe. See Page 11 of the Assembly section for recommended installation procedures.

MUST USE VINYL SIDINGE-SHERCD.

#### Maximum Vent Run

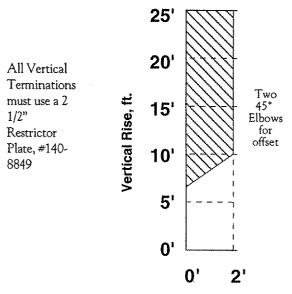
#### Venting Requirements

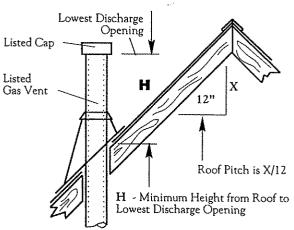
The vertical vent may terminate up to 25' (7.5 m) above the appliance flue collar.

Note: All vertically terminated vent systems require the use of the 2 1/2" restrictor plate. Please see page 10.

The horizontal run may extend up to 8' (2.5 m) and include a vertical rise of up to 12' (3.7 m).

Vertical Vent Termination

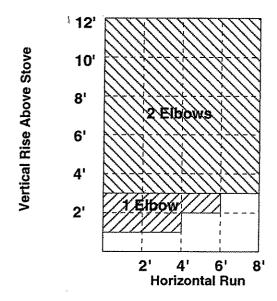




Vent (Chimney) Height

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

Horizontal Vent Termination (through the wall)



Approved vent systems must terminate within the hatched area.

### Approved Venting Components

The following components are approved vent for use with the Direct Vent appliance in a vertical or horizontal configuration.

VCI NO.	COMPONENT E	DURAVENT NO.
923V	APPLIANCE ADAPTOR	923V
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907B	9" STRAIGHT, BLK.	907B
906B	12" STRAIGHT, BLK.	906B
906G	12" STRAIGHT, GAL.	906
904B	24" STRAIGHT, BLK.	904B
904G	24" STRAIGHT, GAL.	904
903B	36" STRAIGHT, BLK.	903B
903G	36" STRAIGHT, GAL.	903
N/A	48" STRAIGHT, BLK.	902B
N/A	48" STRAIGHT, GAL.	902
911B	11" - 14 5/8" STRAIGHT	911B
984B	HORIZONTAL VENT CAP	984
940B	WALL THIMBLE / CEILING SUPPORT	FBOX 940
950B	VINYL SIDING STANDOFF	950
982B	SNORKEL TERMINATION - 14"	982
981B	SNORKEL TERMINATION - 36"	981
5084	MINIMUM HORIZONTAL VENT KIT	N/A
988G	WALL STRAP	988
941B	CATHEDRAL CEILING SUPPORT BOX	
953G	STORM COLLAR	953
963G	FIRESTOP SPACER	963
943G	FLASHING 0/12 - 6/12	943
9438	FLASHING 6/12 - 12/12	9435
991G	VERTICAL TERMINATION CAP	991

## **Assembly**

### Install the Legs and Leg Levellers

The leg bolts have been installed in the mounting holes in the stove bottom at the factory. Washers and leg levellers are located in the bag with this manual. (The leg levellers are pre-installed in enamelled legs.) **Handle enamelled castings tenderly to avoid chipping!** 

If assistance is available, it is most easy to install the legs by tilting the stove forward to rest on its front. The Front Panel of the stove must be removed before tilting the stove. Use the following procedure.

Prepare a padded surface, such as a thick carpet or a thick blanket folded two or three times, to protect the stove and the floor while the legs are installed.

Step 1. Remove the small retainer blocks that have been stapled to the pallet in front of the stove. Remove any staples from the pallet to prevent scratching the stove.

Step 2. Disengage the two compression latches on the stove bottom by pulling each latch down and forward. Fig. 1.

Step 3. Lift the Front Panel from the bottom and pull it up and forward away from the stove. Fig. 2.

Step 4. Carefully tilt the stove forward onto the padding.

Step 5. Remove each leg bolt from the holes in the bottom and attach the legs using the bolts and washers. Tighten the bolts firmly with a 9/16" wrench.

Use the leg levellers if the stove will be standing on an uneven surface. Screw a leveller all the way into the foot of each leg and adjust as necessary when the stove is in its final position.

If no assistance is available, the legs can be installed one corner at a time by gradually sliding the stove off of the shipping pallet as follows. You will need a 9/16" socket wrench and extension. Install the leg levellers before attaching the legs to the stove.

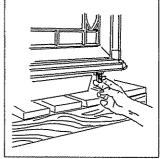
**Step 1.** Remove the small wood blocks stapled to the pallet in front of the stove. Be sure to remove all of the staples to prevent scratching the stove.

Step 2. Carefully pivot the stove until one front corner overhangs the pallet enough to attach a leg to the stove. Remove the hex head leg bolt from the stove bottom and use it together with a flat washer to attach the leg to the stove. Fig. 3.

Step 3. Slide the stove forward and swing the other front corner off of the pallet enough to secure the other front leg. Fig. 4.

Step 4. Carefully swing the stove out over a front corner of the pallet just enough to allow access to the rear corners. Be sure the stove bottom is adequately supported by the pallet. Attach both rear legs. Fig. 5.

Step 5. Walk the stove into the final position.





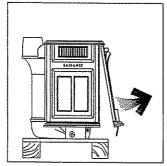


Figure 2.

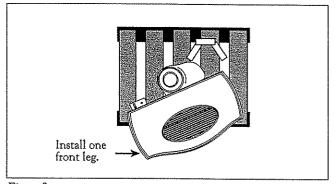


Figure 3.

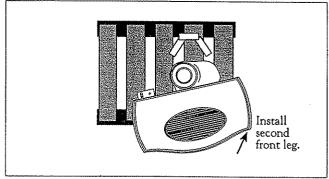


Figure 4.

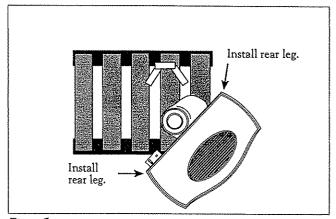
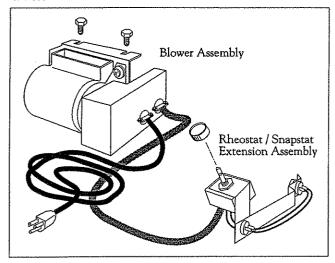


Figure 5.

## Install the Optional Convection Fan Kit, #5081

The fan kit consists of a Blower Assembly and a Rheostat Assembly that are connected by a cable. The Blower Assembly mounts to the rear bottom of the stove and the Rheostat mounts within the Remote Switch box on left rear corner of the stove.



Fan Kit Components.

The Rheostat contains a "snapstat", a temperaturesensing switch that extends into the stove's heat exchanger and automatically turns the fans "On" or "Off", above or below approximately 109°F.

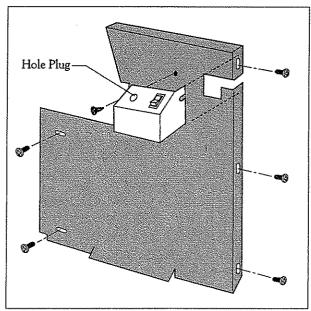
The Rheostat also provides a range of fan speed settings from Off, (which overrides the snapstat function), to High. Detailed installation/operation instructions are included in the kit.

#### Step 1. Inspect the blower assembly.

• Remove any packing debris that may have fallen into the housing. Make sure the fan spins freely.

#### Step 2. Remove the Shroud and Switch Box.

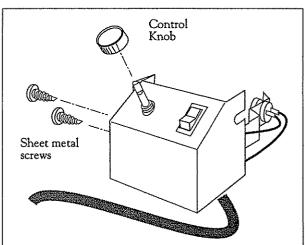
- Facing the back of the stove, remove the three 1/4-20 phillips screws on the right side of the stove. Also, remove the two sheet metal screws near the center of the shroud next to the air intake pipe. Gently remove the shroud and set it down next to the right side of the stove.
- Detach the Switch Box by removing the sheet metal screw on the left. Gently pull enough switch wiring through the shroud to provide slack. Remove the hole plug from the Switch Box.



Remove Shroud and Switch box.

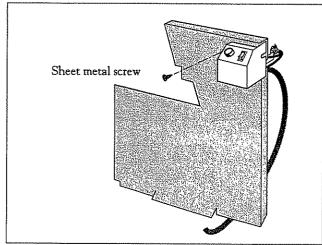
#### Step 3. Install the Rheostat Assembly.

• Insert the Rheostat control knob shaft through the hole in the top of the switch box and secure the assembly to the left side of the box with the two sheet metal screws provided. Push the control knob on to the rheostat shaft.



Mount the Rheostat in the Switch box.

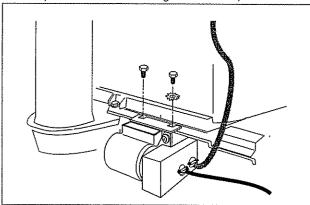
- Feed the rheostat cable through the slot in the shroud so that the entire cable will be hidden behind the shroud.
- Slide the snapstat extension through the hole in the shroud and reattach the switch box to the shroud with the single sheet metal screw. The U shaped slot on the right of the box should align with the upper hole in the side of the shroud.



Mount the Switch box to the Shroud.

Step 4. Mount the Blower Assembly.

• Start the two 1/4-20 hex head bolts provided into the tapped holes on the bottom casting. Slide the blower assembly under the bolts and tighten with a 7/16" wrench.

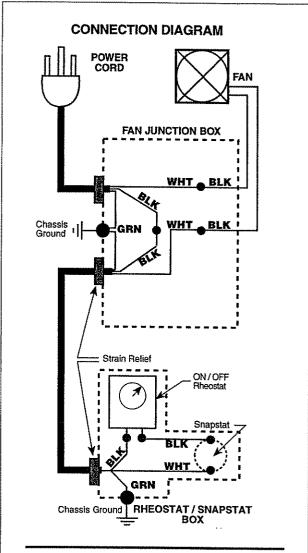


Mount the Blower assembly to the stove.

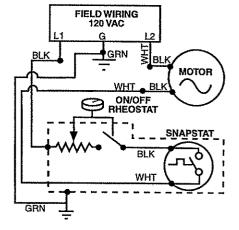
- Reattach the shroud to the stove, positioning the snapstat extension in contact with the firebox within the stove. Replace and loosely tighten the three 1/4-20 phillips screws in the right side of the shroud. Align the two sheet metal pilot holes near the center of the shroud and replace the two sheet metal screws. Tighten all screws.
- Plug the power cord into a properly grounded electrical outlet. This completes installation of the Fan Kit.

#### WARNING:

This appliance is equipped with a three-prong (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.



#### **SCHEMATIC DIAGRAM**



NOTE: IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED WITH THE APPLIANCE, MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE SF-2, 200°C WIRE OR ITS EQUIVALENT.

### Attach the Venting

The Radiance Direct Vent Gas Heater is approved for installation only with the vent components listed on Page 6. Follow the manufacturer's instructions exactly.

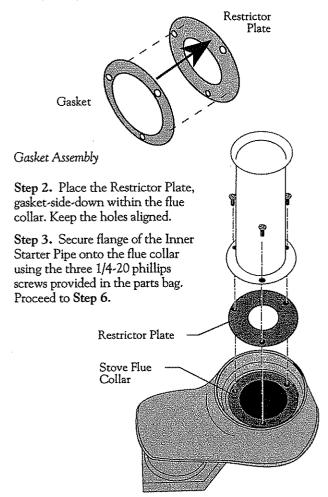
#### Paint Option - Porcelain Enamel Stoves

You may wish to use the Medium temperature paint provided to paint the vent components to match your stove before assembling the system.

#### Through the roof vent systems (Restrictor plate)

Note that a Restrictor Plate, (#140-8849) is included with the appliance in the hardware bag. This disc must be installed between the gasket and the Inner Adaptor Pipe to insure that a proper air/fuel ratio is maintained in an appliance vented through the roof. See illustrations.

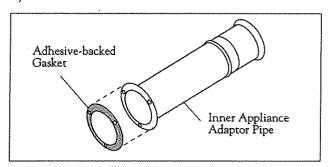
Step 1. Attach the adhesive-backed gasket to the Restrictor Plate.



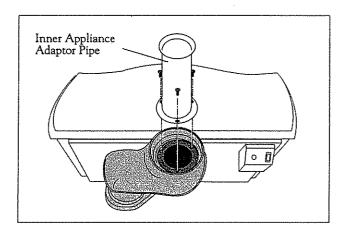
Restrictor Plate and Inner Starter Pipe Installation.

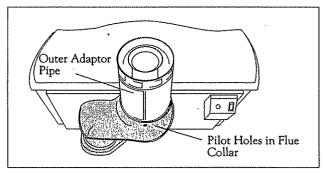
#### Through the wall vent systems

Step 4. Attach the adhesive-backed gasket, (located in the parts bag), to the flat flange of the Inner Adaptor Pipe. Do not use the restrictor plate in through the wall vent systems.



Step 5. Attach the Inner Adaptor Pipe to the stove with three 1/4-20 phillips screws, (parts bag).





Step 6. Bottom the Outer Adaptor Pipe into the flue collar.

Step 7. Orient the pipe so that its seam is facing back and the next elbow, when attached, will be pointing in the appropriate direction. Drill .140 dia. pilot holes through the existing flue collar holes into the pipe. Take care to not drill through the Inner Adaptor Pipe.

Step 8. Attach the pipe to the flue collar using three #10 sheet metal screws (parts bag).

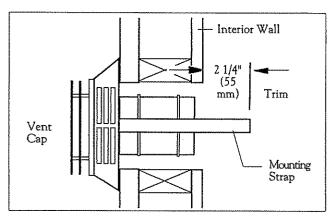
### Complete the Vent System

Install the rest of the vent system according to the manufacturer's instructions included with the components.

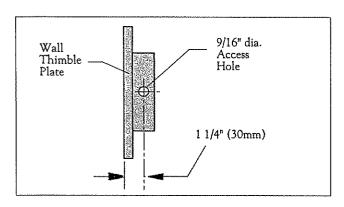
NOTE: If the stove will be installed parallel to the wall with minimum rear clearance (2") use the following procedure in conjunction with the vent manufacturer's instructions, to complete the vent connection. Be sure to follow the venting guidelines in the Installation section and Appendix A of this manual as well as those specified by the vent manufacturer.

#### Standard Parallel Installation (min. rear clearance)

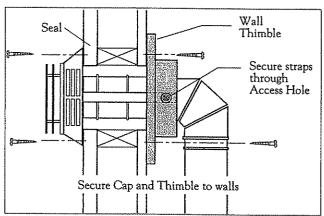
- 1. Cut the opening. Determine the location, cut and frame an  $8^{u} \times 8^{u}$  square hole in the wall. Be sure that the exterior and interior cutouts are level with each other.
- 2. Trim the Straps. Install the Vinyl Siding Standoff if applicable. Position the Horizontal Vent Cap within the opening on the outside wall and temporarily secure it in place with one of the woodscrews provided. Mark and trim each of the mounting straps to extend no more than 2 1/4" (55mm) beyond the interior wall. Remove the Vent Cap from the outside wall.



3. Drill Wall Thimble. With the stove installed at minimum clearance, insufficient room exists to back the wall thimble away from the cutout to allow access for attaching the vent cap mounting straps. Before assembly, drill a 9/16" dia. access hole through the side of the thimble near the seam to allow attachment of the straps.



- 4. Locate the Stove. Position the stove with vent assembly (including appliance adaptor, elbow, straight section and wall thimble) in the final location. Be sure to center the straight pipe section within the wall cutout.
- 5. Install the Vent Cap. Run a bead of nonhardening mastic around the outside edge of the Horizontal Vent Cap. The arrow on the vent cap should point UP. Position the cap in the center of the hole on the outside wall, making certain that the cap and pipe mate properly. Also, be sure that the mounting straps are visible through the wall thimble access hole. Secure the Vent Cap to the wall with the wood screws provided.
- 6. Secure the Straps. Rotate the Wall Thimble around the elbow to provide access to secure the two mounting straps to the straight vent pipe. Attach the straps with the sheet metal screws supplied with the Vent Cap.
- 7. Secure the Wall Thimble. Rotate the thimble to hide the access hole. Secure the thimble plate to the interior wall using the four screws provided.



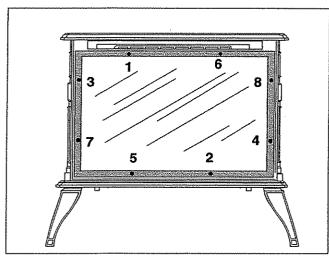
## Install the Log Set

The Log Set has been packed inside the stove in a protective box for shipping. The Front Panel casting and glass panel must be removed to install the log set into the stove. Follow the procedure outlined on the following pages. If you have previously removed the Front, begin at Step 3.

#### Remove the Front and Glass

Step 1. If you have not already done so, remove the Front Plate as shown on Page 7, Figs. 1 and 2.

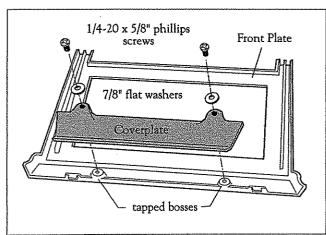
Step 2. Use a Phillips screwdriver to first alternately loosen and then remove the eight screws that hold the frame to the stove. Follow the pattern shown below.



Loosen the screws that secure the frame.

Step 3. Carefully remove the glass and frame assembly and place it on a flat, padded surface such as a counter protected by a towel. Remove the Coverplate, Touch-up Paint, and Log Set from the Firebox.

Step 4. Attach the cast iron Coverplate to the tapped bosses on the inside bottom lip of the Front Plate using two  $1/4-20 \times 5/8$ " phillips screws and two 7/8" flat washers found in the hardware bag.

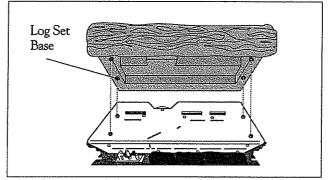


Attach the Coverplate to the Front Plate.

#### Position the Log Set in the Firebox

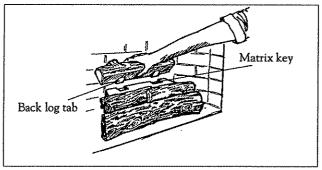
The matrix, front log and top log are pre-assembled and are installed as a unit.

Step 1. Place the matrix assembly on the burner, aligning the dimples in the underside with the screw heads that protrude from the burner plate. Push the assembly as far to the rear as possible.



Align the matrix with the screws on the burner plate.

Step 2. Place the back log on the matrix, mating its tabs on the underside with the keys in the matrix. Push the back log to the rear so that it rests against the fireback.



The tabs on the back log fit into keys on the matrix.

#### Replace the Glass and Front

Step 1. Position the glass and frame against the firebox and hold it in place with one hand against the top center of the frame. The bottom of the frame will be supported by the iron ledge. Adjust the glass as needed so that it contacts the gasket evenly all around and install the screws to fingertightness.

Step 2. To avoid uneven pressure on the glass when tightening the screws, tighten them alternately, one half turn at a time, until they are all snug.

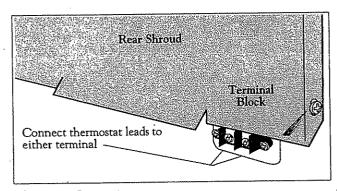
Step 3. Replace the front, holding its bottom edge slightly away from the stove while you seat the top into position. Then position the bottom against the stove and secure it with the compression latches.

### Thermostat Connection (optional)

Facing the rear of the stove, connect the millivolt wall thermostat leads to the double terminal block located under the shroud in the lower right area. Either wire may be connected to either terminal. Note in the table below the appropriate gauge thermostat wire to use for the length of lead required in your installation.

Wire Gauge	Maximum	Run
18	40'	
20	25'	
22	16"	

Use only a thermostat rated for 500 millivolts.



Thermostat Connection

#### Burner Conversion

A label on the front of the Radiance Direct Vent Stove indicates whether it is configured to burn Natural Gas or Propane Gas.

To convert a Natural Gas Radiance to burn propane, use only LP Conversion Kit #5093.

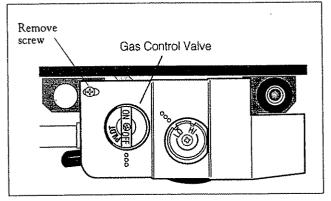
To convert a Propane Gas Radiance to burn Natural Gas, use only Natural Gas Conversion Kit #5092.

#### WARNING

The 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 the 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 performing this work assumes responsibility for the proper conversion of this appliance with the kit.

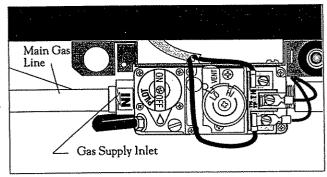
### Connect the Gas Supply

Step 1. Remove the Control Valve Coverplate.



Remove Control Valve

Step 2. Connect the main Gas Supply to the control valve inlet. A 1/8 inch N.P.T. plugged tapping, accessible for test gauge connection, should be installed on the inlet gas connection.



The gas supply line connects to the inlet to the left of the control valve.

#### CAUTION

- The gas line should be connected only by qualified gas technician.
- There must be a gas shutoff between the stove and the supply.

With natural gas, use a 3/8" or 1/2" natural gas supply line with an input of 30,000 BTUs at a manifold pressure of 3.5" and minimum inlet supply for adjustment of 5.0"W.C.

With propane, use a 3/8" or 1/2" propane gas supply line with an input of 30,000 BTUs at a manifold pressure of 10.0" and minimum inlet supply for adjustment of 11.0" W.C.

- Step 3. Test for leaks at all joints before operating.
- Step 4. Reinstall the Coverplate over the Control Valve.

This completes assembly procedures for the Radiance Direct Vent Gas Heater.

## Operation

### Lighting the Fire

Step 1. Turn the thermostat, if any, to its lowest setting.

Step 2. If the pilot is lit already, proceed to "Relighting the Fire" below.

Before lighting the pilot, make sure that the valve is in the OFF position by pushing in the gas control knob slightly and turning it clockwise to "OFF." Also, put the ON/OFF/TSTAT remote switch, located at the upper left rear of the stove, in the OFF position.

Step 3. Smell for gas. Inspect the unit for any obvious sign of damage or deterioration. If damaged, do not attempt to light.

Step 4. Locate the pilot under the front log in the lower left hand corner of the firebox. When lit, the pilot will produce a small but steady flame.

Step 5. Turn the knob on the gas control counterclockwise to "PILOT."

Step 6. Light the pilot by pushing the control knob all the way in and holding it there. Immediately push the red ignitor button; push it more than once if required to light the pilot. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Then, release the knob and it will pop back up. The pilot should remain lit.

NOTE: Once the pilot has been lit, it will remain lit continuously.

Step 7. Turn the gas control knob counterclockwise to "ON."

Step 8. Place the ON/OFF/T'STAT switch in the ON position and continue to watch the fire until the entire unit is lit. For thermostatic control, set your thermostat and then place the remote switch in the T'STAT position.

#### CAUTION

If the entire fire is not lit within five (5) seconds of turning the remote OFF/ON switch ON, immediately push the switch to OFF. Allow five (5) minutes for the gas to clear from the firebox. Repeat from Step 2.

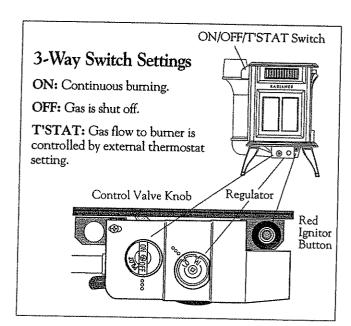
If unsuccessful again, completely turn off all gas to the Radiance. Call your local Vermont Castings Authorized Dealer.

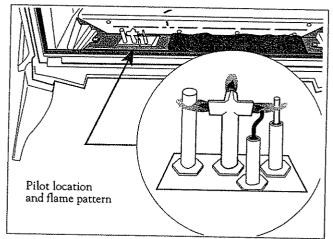
### Turning Off the Fire

Step 1. Simply push the remote rocker switch to OFF. The pilot will remain on. You can leave the pilot running. (It costs less than 1 cent an hour to run.)

You may hear a popping noise from within the firebox a few seconds after shutting the Radiance off. This is normal and does not indicate a problem.

\* RESET PIN - MUST BE





#### WARNING

Do not attempt to decrease the gas flow to the Radiance by closing the manual gas supply valve. A hazardous condition may result when operating or attempting to operate the Radiance if this valve is in a position other than **fully open**.

NOTE: If you do not intend to operate the unit for an extended period of time, it is a good idea to turn the gas control knob to OFF and to turn the manual gas valve on the supply line to OFF as well.

## Re-lighting the Fire

Step 1. Check to see if the pilot is on.

Step 2. Turn on the remote rocker switch and watch to be sure the entire burner lights.

INPLACE TO FIERE UP

DELAYED IGNITION - MAY REALRE NEW CERRY OF EL

### 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. When lighting the pilot, follow these instructions exactly.
- B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any gas appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to turn the gas control knob. Never use tools. If the knob will not 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 that has been under water.

### LIGHTING INSTRUCTIONS

- 1. STOP! Read the safety information above on this label.
- 2. Turn off all electric power to the appliance.
- 3. Turn the thermostat to the lowest setting, (if applicable).
- 4. Place the OFF/ON/T'STAT switch in the OFF position.
- 5. Push in gas control knob slightly and turn clockwise ( to "OFF."

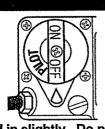
NOTE: Knob cannot be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.

- 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, go to the next step.
- 7. Turn knob on gas control counterclockwise to "PILOT."
- 8. Find pilot. The pilot is located below the logset in the forward lower left area of the firebox.
- 9. Push in control knob all the way and hold in. Immediately light the pilot by pushing the red ignitor button. Continue to hold the control knob in for about one (1) minute after the pilot is lit. Release knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 5 through 9.
- •If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- •If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- 10. Turn gas control knob counterclockwise to "ON."
- 11. Place the OFF/ON/ T'STAT switch in the ON or T'STAT position.
- 12. Turn on all electric power to the appliance.

## TO TURN OFF GAS TO APPLIANCE

- 1. Turn off all electric power to the appliance if service is to be performed.
- 2. Push in 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 force.



Control Knob

Pilot

Assembly

## Maintenance

## Cleaning Painted Cast Iron Surfaces

An occasional dusting with a dry rag will keep the painted surface of a Classic Black Radiance looking new.

The paint can be touched up as needed. Clean the areas to be painted with a wire brush. Cover controls or trim with masking tape.

Touch up the cast iron with Vermont Castings Hightemperature Stove Paint. Apply the paint sparingly; two light coats will give better results than a single heavy coat.

## Cleaning Porcelain Enamel

Use a dry or slightly damp rag or soft brush to clean porcelain enamel surfaces. Use only a kitchen appliance cleaner or polish recommended for use on enamel surfaces.

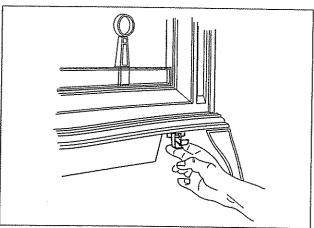
### How to Remove the Glass and Front

The Front cast iron panel and the glass panel must be removed for inspection and cleaning of the logs and burner. In the event that the glass panel needs to be replaced, REPLACEMENT OF THE GLASS PANEL SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON. Use only the correct Radiance glass panel, Vermont Castings Part #160-1290, available from a Vermont Castings Authorized Dealer.

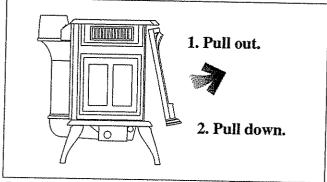
In order to remove the glass, it is first necessary to remove the front. The front is held in place by two compression latches located on the underside of the stove. Follow this procedure:

Step 1. Disengage the latches by pulling each lever down and forward.

Step 2. Grasp the sides of the front plate. Lift it up and forward to disengage, then down and away from the stove body. Handle the plate with care to avoid chipping enamelled surfaces!

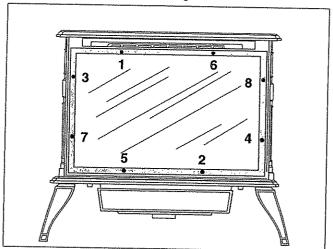


Pull the latch down and forward to disengage the front plate from the stove.



Remove the Front.

Step 3. Use a Phillips screwdriver to gradually loosen the eight screws that secure the glass and frame assembly to the stove. Loosen in an alternating pattern as shown below to evenly distribute pressure on the glass.



Loosen the screws that secure the frame.

Step 4. Remove the glass and frame assembly as a unit and place it on a flat, padded surface such as a counter protected by a towel.

### How to Replace the Glass and Front

Step 1. Position the glass and frame against the firebox and install the screws finger-tight.

Step 2. Alternately tighten the screws, one half-turn each to avoid uneven pressure on the glass, until they are snug. Follow the pattern as described in the removal procedure.

Step 3. Replace the Front, holding the bottom slightly away from the stove while you seat the top properly. Then, seat the bottom in position against the sides of the stove and secure the two compression latches.

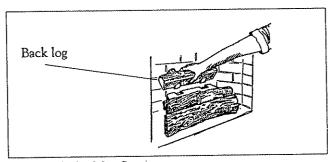
### Clean the Log Assembly Annually

Before you begin, shut off the gas supply according to the directions on Page 14 and allow the stove to cool. Spread newspapers or a drop cloth in front of the stove.

The logs and the matrix are extremely fragile and must be handled carefully and brushed gently. Support them evenly while handling. Use only a soft-bristled brush to clean them. Do not use a vacuum cleaner.

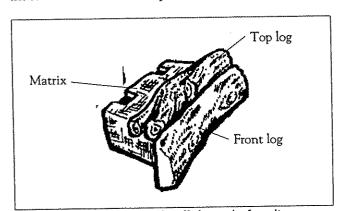
Step 1. Remove the front and the glass as described on Page 14.

Step 2. Reach into the firebox and carefully remove the back log. Clean it gently with a soft brush.



Remove the back log first.

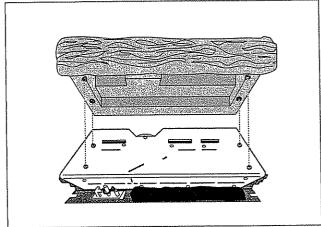
Step 3. The matrix, front log, and top log are assembled and installed as a unit. Remove this unit and gently brush the surfaces of the three components.



These three components are handled as a single unit.

Step 4. Clean the burner by gently brushing the top surface.

Step 5. Replace the assembly on the burner, aligning the dimples on the underside of the matrix with the screw heads on the burner plate. Place it as far to the rear as possible.



Align the underside of the matrix with the screw heads on the burner.

Step 6. Replace the back log on the matrix so that the tabs on the bottom fit into the keys in the matrix. Push the back log as far back as possible. It should rest against the fireback.

Step 7. Replace the glass and the front as described previously.

## Inspect the Vent System Annually

The vent system must be inspected annually by a qualified technician. Both the inner exhaust pipe and the outer combustion supply pipe must be checked to confirm that they are unobstructed and in good condition. Inspect for dust build-up, corrosion, or any sign of deterioration or deposits. Refer to the vent manufacturer's instructions. Re-assemble and re-seal venting components as required.

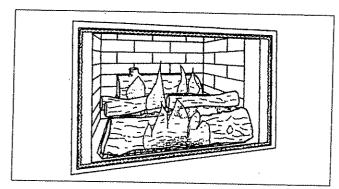
## The Safety Switch

The Radiance Direct Vent Gas Heater is equipped with a safety switch which will render the appliance inoperable should a firebox over-pressure condition occur. The switch is not an owner-serviceable component.

If your Radiance will not operate, call your Vermont Castings Authorized Dealer.

## Check the Gas Flame Regularly

To ensure that your Direct Vent Gas Heater is operating properly, check the flames periodically to confirm that they are consistent the illustration below. The flame pattern should be evenly distributed throughout the log set. The flames will be blue during the first few minutes, but should gradually change to yellow after about 15 minutes.

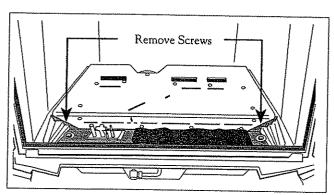


Do not operate your stove if the flame pattern differs from that shown here. Contact your Vermont Castings authorized Dealer or a qualified gas technician for assistance.

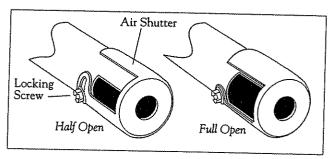
#### Burner Adjustment

An air shutter, located on the burner, has been set at the factory for either Propane or Natural gas and should not require further adjustment. Installation characteristics vary, however, and adjustment may be necessary to improve flame picture or eliminate sooting. Generally, the shutter should be set fully open for Propane and half-open for Natural gas. Closing the shutter, (less air), produces a yellow flame, (more prone to sooting). Opening the shutter, (more air), produces a bluer flame. After adjusting the shutter, the stove should be burned for at least one hour to see the effect of the setting change. If soot appears on the glass, the air shutter must be opened to eliminate the condition. Adjustment should be made only by a qualified gas technician.

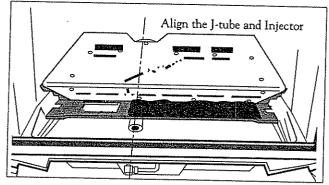
Step 1. Shut off the gas supply to the stove. Turn off all power to the stove. Remove the Front Panel, Glass, and Log Set as described on Pages 16-17.



Step 2. Remove the two Burner retainer screws. Lifting the back of the Burner, slide it to the rear and lift it out of the firebox to access the air shutter on the end of the J-tube.



Step 3. Loosen the shutter locking screw enough to adjust the setting as needed and re-tighten.



Step 4. Set the burner back into the firebox taking care to ensure that the end of the J-tube fully engages and aligns with the injector.

Step 5. Replace the retainer screws, log set, glass, and Front Panel.

## Gasket Replacement

The Radiance uses 5/16" rope-type fiberglass gaskets to seal between the glass panel and the firebox. In time, this gasket can become brittle and compressed and should be replaced. New gasket is available from your Vermont Castings Authorized Dealer.

Shut off the gas supply according to the directions on Page 14 and allow the stove to cool. Wear safety goggles and a dust mask.

Step 1. Remove the old gasket. Use a wire brush to clean the channel of any remaining cement or bits of gasket. Use a cold chisel if necessary.

Step 2. Determine the correct length of gasket by laying it out in the channel. Allow an extra 1-2" (25-50 mm), and mark the spot to be cut. Use a utility knife. Twist the ends slightly to prevent unraveling.

Step 3. Lay an unbroken 1/8" (3 mm) bead of Vermont Castings gasket cement in the channel. Starting at one end, press the gasket into the channel. Ensure a good joint where the gasket ends meet before trimming excess. Do not overlap the gasket ends or leave ends with ragged edges.

Step 4. Press the glass frame firmly against the gasket to seat it evenly in its channel.

Step 5. Clean excess cement from around the channel. Allow the cement to dry for at least 24 hours before using your stove.

## Specifications

Radiance Direct Vent Gas Heater Model 2560 by Vermont Castings, Inc.

#### Fuel Natural gas, or, Propane after conversion. 3.5" Manifold pressure, NG ..... 10.0" Manifold pressure, LP ..... Minimum inlet supply pressure for the purpose 5.0" of input adjustment, NG ..... 11.0" Maximum inlet supply pressure: NG..... 11.0" 13.0" Maximum inlet supply pressure: LP . ..... Input, Btu/hr., NG..... 30,000 30,000 Input, Btu/hr., LP ..... Output, Btu/hr., NG ..... 24,000 Output, Btu/hr., LP 24,000 AFUE\*.... 71.3% Glass Panel ......Hi-temp ceramic Weight...... 350 lbs./Shp. 375lbs. Standing pilot with Piezo ignition Ignition .....

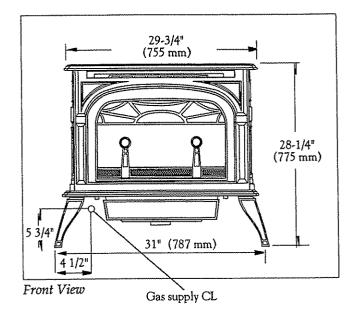
AGA Design Certified to ANSI Z21.44 -1995 and CGA approved to CAN/CGA 2.19-M86 for Direct Vent Gas Fireplaces.

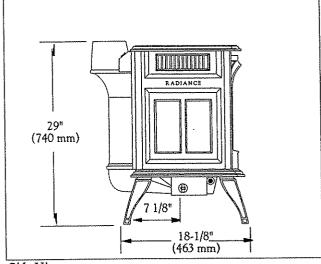
#### Clearances

Side	6 inches	(150 mm)
Rear	2 inche	s (50 mm)
Corner	6 inches	(150 mm)

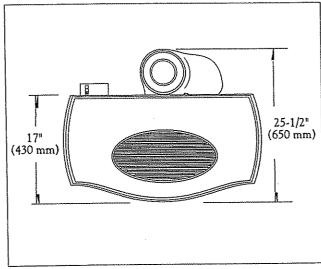
Hearth Requirements

The Radiance must be installed on rigid flooring. Any carpeting under the unit must be removed. When the Radiance is installed directly on any combustible surface other than wood flooring, a metal or wood panel the full width and depth of the unit must be used as a hearth. There are no other hearth requirements.





Side View



Top View

<sup>\*</sup>Seasonal efficiency (NG - min. vent, no fan)

## Parts List

### Radiance Direct Vent Gas Heater

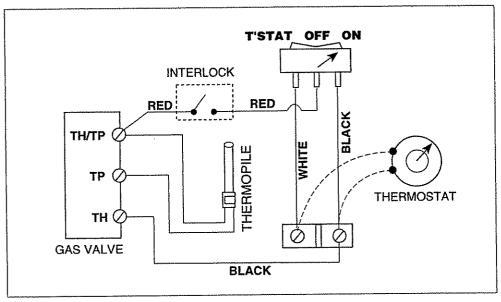
Part	Part No.
Тор	130-1075
Left End	130-1061
Right End	130-1062
Front	130-1063
Bottom	130-1065
Front Fettle	130-1005
Front Lattice	130-1007
Grill	130-1056
Flue Collar	130-1069
Front Latch	160-1509
Air Tube, 4"	140-8780
Left Rear Shroud	140-8782
Right Rear Shroud	140-8783
Switch Box	140-8791
Gas Valve Cover Plate	140-8792
Front Cover Plate	130-1070
Bottom Air Cover	130-1066
Heat Exchanger Top	130-1067
Heat Exchanger Outlet	130-1068
Heat Exchanger Doors	130-1071
Heat Exchanger Door Gaskets	120-3787
Convection Hood	130-1055
Control Door	130-1013
Leg	130-3225
Firebox	130-1057
Firebox Extension	130-1064
Glass	160-1290
Glass Frame	140-8788
5/16" Gasket/Glass-to-Stove (5 feet)	120-3588
3/4" Gasket/Glass-to-Frame (5 feet)	700-0909
Flue Pipe Gasket	120-3686
Gas Log Set	500-2933
Re-set Switch/Wiring Assby.	500-2999
On/Off Switch	160-1597
Gas Valve Bracket	140-8779
Pilot Assembly	160-1587
Pilot Gasket	120-3685
Gas Valve, NG	160-1752
Piezo Ignitor	160-1304
Thermopile	160-1311

Injector, NG 160-1313

For replacement parts, or for information about parts or service, contact your local Vermont Castings Authorized Dealer. For the name of the Vermont Castings dealer nearest you, call or write:

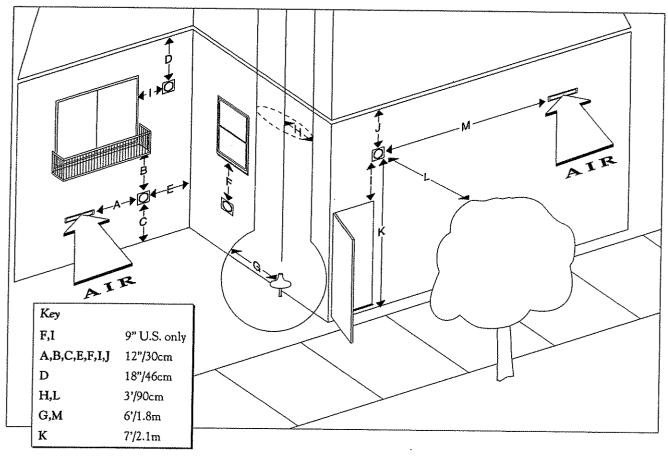
Vermont Castings, Inc. Route 107 • P.O. Box 501 Bethel, Vermont 05032 1-800-227-8683

## Wiring Diagram



Radiance Direct Vent Wiring

## Appendix A



- A. Clearance to a non-mechanical air supply inlet or combustion air inlet of any other appliance.
- B. Clearance under a deck, porch, veranda or balcony. Must be fully open on a minimum of two sides beneath the floor.
- C. Clearance above grade, deck, porch, veranda or balcony.
- D. Clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center line of the terminal.
- E. Clearance to an adjacent wall (inside corner).
- F. Clearance to a permanently closed window.
- G. Clearance around a service regulator vent outlet.
- H. Clearance around a center line above service regulator.
- I. Clearance to a door or window that may be opened.
- J. Clearance to a non-ventilated soffit.
- K. Clearance above a paved sidewalk or driveway on public property. May not terminate above a sidewalk or driveway which is between two single-family dwellings and serves both dwellings.
- L Clearance to vegetation.
- M. Clearance to a mechanical air supply.
- Note: All clearances as specified in the National Fuel Gas Code, 1992 and CAN 1 B1-149 Installation Codes. Local codes or regulations may require more stringent clearances.

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## Warranty

#### **Limited Three Year Warranty**

Vermont Castings, Inc. warrants that this Radiance Direct Vent Gas Stove will be free of defects in material and workmanship for a period of three years from the date you receive it, except that the glass door panel, ceramic logs, and gasketing shall be warranted for one year as described below.

Vermont Castings, Inc. will repair or replace, at its option, any part found to be defective upon inspection by a Vermont Castings Authorized Dealer. The customer must return the defective part or the stove, with shipping prepaid, to the Authorized Dealer or pay for any Authorized Dealer in-home travel fees or service charges for in-home repair work. It is the dealer's option whether the repair work will be done in the customer's home or in the dealer's shop. If, upon inspection, the damage is found to be the fault of the manufacturer, repairs will be authorized at no charge to the customer for parts and/or labor.

Any Radiance Direct Vent Gas Stove or part thereof that is repaired or replaced during the limited warranty period will be warranted for a period not to exceed the remaining term of the original limited warranty or six (6) months, whichever is longer.

#### **Limited One Year Warranty**

The following parts of the Radiance Direct Vent Gas Stove are warranted to be free of defects in material and workmanship for a period of one year from the date you receive it. These parts are the glass panel, ceramic logs, and gasketing. Any of these items found to be defective will be repaired or replaced at no charge, upon the return of said part to a Vermont Castings Authorized Dealer with postage prepaid.

#### **Exclusions and Limitations**

- 1. This warranty is transferable; however, proof of original purchase is required.
- 2. Vermont Castings offers no warranty on chipping of enamel surfaces. Inspect your Radiance Direct Vent Gas Stove prior to accepting it for any damage to the enamel.
- 3. This warranty does not cover misuse of the Radiance Direct Vent Gas Stove as described in the Owner's Guide, nor does it cover a Radiance Direct Vent Gas Stove that has been modified unless authorized by a Vermont Castings representative in writing.
- 4. This warranty does not cover a stove repaired by someone other than either a Vermont Castings Authorized Dealer or an authorized, qualified gas agency.
- 5. Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the Vermont Castings Authorized Dealer from whom you purchased your Radiance Direct Vent Gas Stove. (Do not operate the Radiance Direct Vent Gas Stove as this may negate the ability to process the claim with the carrier.)
- 6. Claims are not valid where the installation does not conform to local building and fire codes or, in their absence, to the recommendations in the Owner's Guide.

7. Vermont Castings shall have no obligation to enhance or update any unit once manufactured,

IN NO EVENT SHALL VERMONT CASTINGS BE LIABLE FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES. ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, ARE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. THIS WARRANTY SUPERCEDES ALL OTHER ORAL OR WRITTEN WARRANTIES.

Some states do not allow the exclusion or limitations of incidential and consequential damages or limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific rights and you may have other rights which vary from state to state.

#### **How To Obtain Service**

If a defect is noted within the warranty period, the customer should contact a Vermont Castings Authorized Dealer with the following information:

- 1. Name, address, and telephone number of the purchaser.
- 2. Date of purchase.
- 3. Serial number from the label on the back of the stove.
- 4. Nature of the defect or damage.
- 5. Any relevant information or circumstances, i.e., installation, mode of operation when defect was noted.

A warranty claim will then start in process. Vermont Castings reserves the right to withhold final approval of a warranty claim pending a visual inspection of the defect by authorized representatives.

## Please record the following information for future reference.

Serial No Fuel Type: NG LP	
Manifold Pressure: Inlet	Supply Pressure:
Dealer	
	······································
Phone	
Date Purchased	
Installer	
Phone	
Date Installed	
Burner Conversion	



Vermont Castings, Inc.
Route 107 • P.O. Box 501
Bethel, Vermont 05032