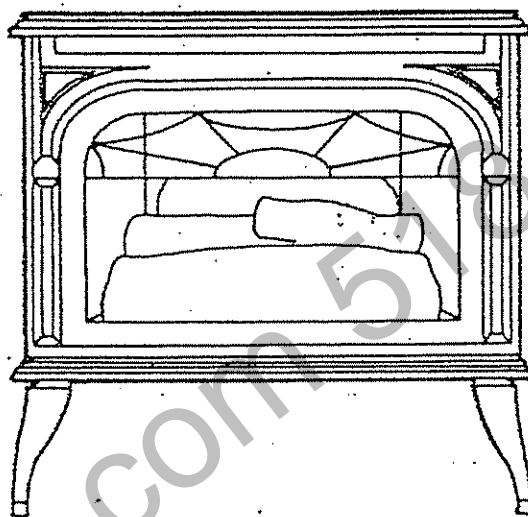


# Radiance™

Model 2240

Gas Stove

Owner's Guide  
For use in North America



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

## FOR YOUR SAFETY WHAT TO DO IF YOU SMELL GAS

- Extinguish any open flame.
  - 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.

## FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

VERMONT CASTINGS, INC.

The Radiance Gas Stove, model #2240, is a vented gas appliance listed to the ANSI standard Z21.50b-1990 and CAN/CGA-2.22-M86 for Vented Decorative Appliances.

The installation of the Radiance Gas Stove 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 Gas Stove 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 be kept clean.

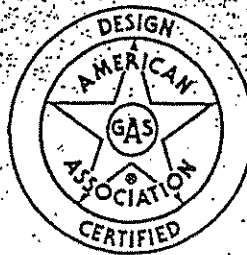
The Radiance Gas Stove and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig.

The Radiance Gas Stove must be isolated from the gas supply piping system by closing its individual manual shutoff 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 draft hood must be in the same atmospheric pressure zone as the combustion air inlet. This is achieved when the unit is installed according to the installation instructions.

The Radiance Gas Stove, 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.



Due to high temperatures the Radiance Gas Stove should be located out of traffic and away from furniture and draperies.

**WARNING:** The Radiance Gas Stove 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.

Clothing or other flammable materials should not be placed on or near the Radiance Gas Stove.

Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the Radiance Gas Stove.

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 the Radiance Gas Stove 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.

# Welcome

Congratulations on your choice of a Vermont Castings Radiance. 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.

At Vermont Castings, 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 anytime you have a particular question about your Radiance or its performance.

Be assured that your cast iron Vermont Castings 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. 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 and to keep this manual as a reference.

Sincerely,

*All of us at Vermont Castings*

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# Operation

**NEW YORK STATE AND CALIFORNIA RESIDENTS NOTE:** Gas appliances must be installed and operated in conformance with specific requirements and procedures in New York State and California. The operation procedures for residents of these states are explained below. The specific installation procedures for New York State and new construction in California are explained in Installation, Step 3B on Page 10.

To gain access to the gas control valve, pivot open the valve control access door below the firebox opening.

## Lighting the Fire

(Except New York State and new construction in California)

Step 1. 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 toggle switch, located at the right rear of the appliance, in the OFF position.

Step 2. Smell for gas. Inspect the unit for any obvious sign of damage or deterioration. If damaged, do not attempt to light.

Step 3. 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. If the pilot is lit already, proceed to "Relighting the Fire" below.

Step 4. Turn the knob on the gas control counterclockwise to "PILOT."

Step 5. 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 6. Turn the gas control knob counterclockwise to "ON."

Step 7. Switch on the remote switch and continue to watch the fire until the entire unit is lit.

### CAUTION

If the entire fire is not lit within five (5) seconds of turning the control switch on, immediately switch off the toggle switch. Allow five (5) minutes for the gas to clear from the firebox. Repeat step 2.

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

### 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.

## Turning Off the Fire

Step 1. Simply turn off the remote switch. 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.

**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 switch and watch to be sure the entire burner lights.

## Lighting the Fire

(New York State and new construction in California)

In conformance with state energy codes, decorative gas appliances installed in New York and in new construction in California cannot have a standing pilot. When installed to conform to these state codes, the Radiance will completely shut off each time you turn off the unit. The pilot will have to be re-lit each time the appliance is used. Follow the directions below:

Step 1. Before lighting, 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 remote switch in the OFF position.

Step 2. Smell for gas. Inspect the unit for any obvious sign of damage or deterioration.

Step 3. 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 4. Place the remote switch in the "ON" position.

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.

Step 7. Turn the gas control knob counterclockwise to "ON." The entire burner will ignite. See CAUTION and WARNING notes on this page.

## Turning Off the Fire

Step 1. Simply turn off the remote switch.

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.

**NOTE:** If the unit will not be used for a few days, turn on the gas control to "OFF." If the insert won't be used for an extended period of time, it is a good idea to turn the gas supply manual valve to OFF as well.

**Installer:** See the Installation Section for specific information for New York State and new construction in California.

# Operation

## 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

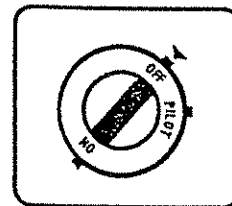
- Do not try to light any gas appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- C. Use only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




4. 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.

Turn knob on gas control counterclockwise  to "PILOT."

5. 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 3 through 5.


- 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.

6. Turn gas control knob counterclockwise  to "ON."

7. 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.

See page 2 for further operating instructions

# Maintenance

## Cleaning a Painted Cast Iron Surface

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 any controls or trim with masking tape.

Then, touch up the cast iron with Vermont Castings' high temperature stove paint. Apply the paint sparingly: Two light coats of paint will give better results than a single heavy coat.

## Cleaning a Porcelain Enamel Surface

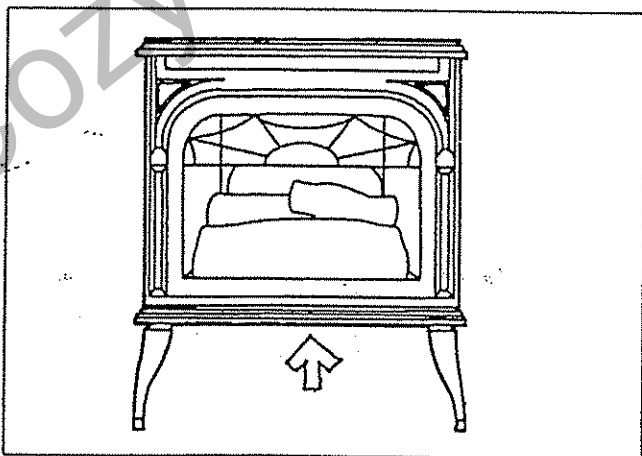
Use a dry or slightly damp rag or soft brush to clean a porcelain enamel surface. For difficult jobs that require a cleaning agent, use only a kitchen appliance cleaner or polish recommended for use on enamel surfaces.

## How to Remove the Glass and Front

Glass removal and re-installation is necessary to install the logs, or to gain access to them for inspection and cleaning. 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 no. 160-1290, available from a Vermont Castings dealer.

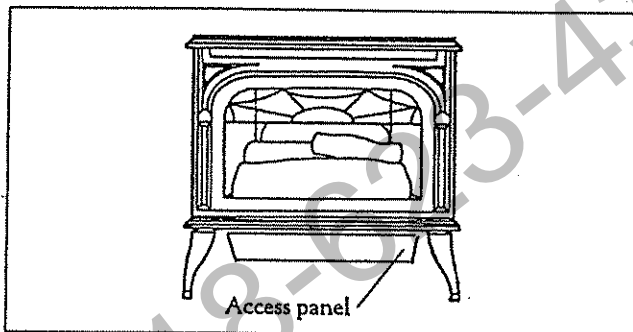
In order to remove the glass, it is first necessary to remove the front. The front is held in place by a system of interlocking joints and a single 1/4-20 nut. Follow this procedure:

Step 1. A 1/4-20 screw and nut hold the front in place. They are located behind the molding detail on the front center of the bottom plate.



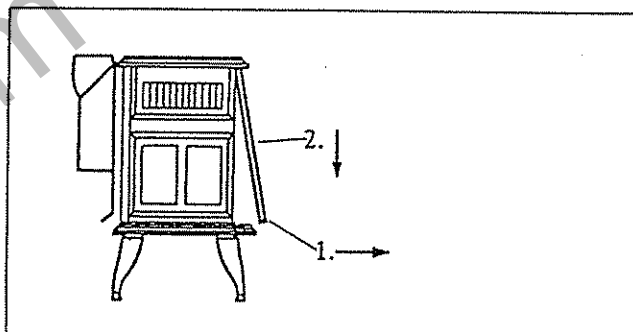
The screw that holds the front is located here, behind the molding on the bottom plate.

Step 2. Pull out the valve control access panel for better access to the nut. Using a 7/16" wrench, remove the nut.



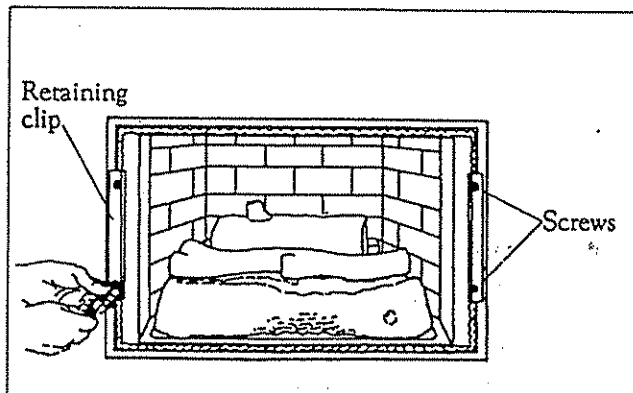
Open the access panel to get at the nut.

Step 3. Pull the bottom of the front plate toward you to disengage it, and once it is free lower it downward to disengage the front.



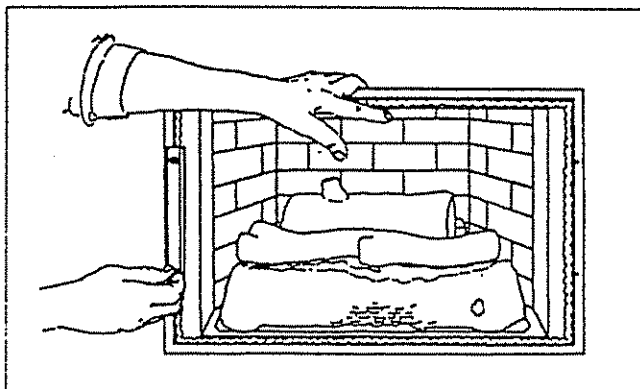
Pull the bottom forward, and then lower the front.

Step 4. Use a Phillips screwdriver to loosen the four screws that hold the retaining clips on the left and right sides.



Loosen the four screws that secure the retaining clips.

Step 5. Hold the glass panel in place by applying pressure on the top center of the glass with one hand, and remove the clips.



*Hold the panel to keep it from falling out while removing the screws.*

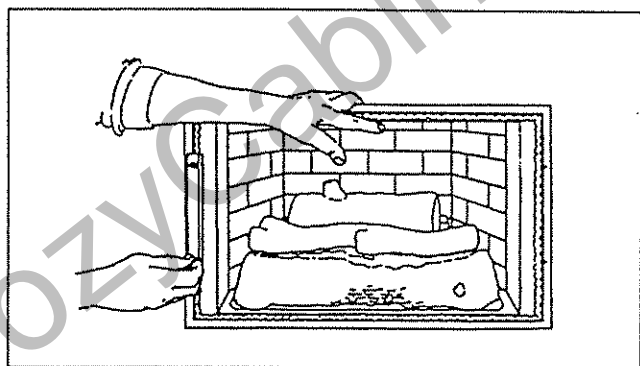
Step 6. Remove the glass by lifting it over the iron tabs that hold its bottom edge.

Step 7. Place the glass panel 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 against the firebox and hold it in place with one hand against the top center of the panel. The bottom of the glass will be supported by the iron ledge. Adjust the glass as needed so that it contacts the gasket evenly all around. The angled edge of the clip will hold the glass. Have the other clip nearby on the right side where it can be reached easily.

Step 2. While holding the glass in the top center with one hand (an assistant is helpful), mount the retaining clips and install the screws that hold them finger-tight, or securely enough to hold the glass in place.



*Hold the glass in place when replacing the screws, just as you did when removing them.*

Step 3. Tighten the screws that hold the clips. To avoid uneven pressure on the glass, tighten the screws alternately, a half-turn at a time, until they are snug.

Step 5. Replace the front, holding the bottom slightly away from the stove while you seat the top properly. Then, push the bottom of the front against the stove until the screw passes through the clevis.

Step 5. Thread the nut onto the screw, and then tighten with a wrench.

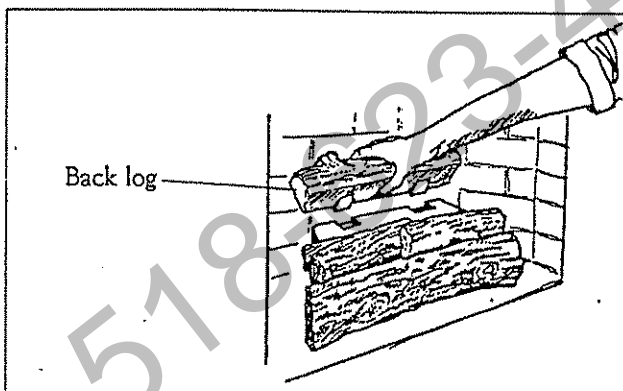
## Clean the Log Assembly Annually

Before you begin, shut off the gas supply according to the directions on page 3 and allow the stove to cool. Spread newspapers or a drop cloth in front of the stove, and use a soft-bristled brush, such as a paint brush.

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

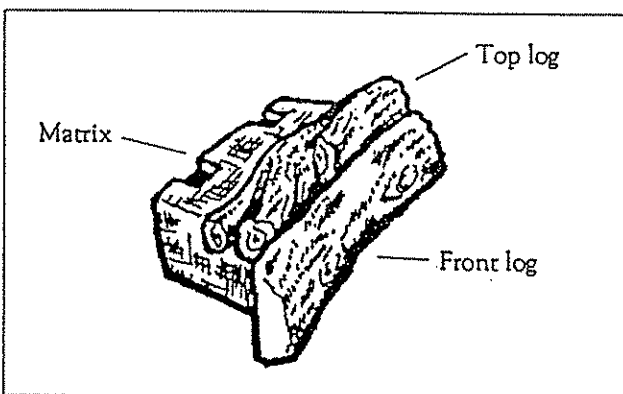
Step 1. Remove the front and the glass as described on page 4.

Step 2. Reach into the firebox and carefully remove the back log. Clean it gently with the brush attachment on the vacuum, and place the piece to the side.



*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, taking care not to damage the burner holes.

Step 5. Replace the assembly on the burner. Center it on the burner, and slide it to the rear as far as possible.

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 on this page.

## Replace the Gaskets as Needed

The Radiance uses 5/16" rope-type fiberglass gaskets to make a tight seal between the glass panel and the firebox. In time, this gasket can become brittle and compressed and will need replacement.

Should you need to change the gasket, first obtain an appropriate replacement gasket and some Vermont Castings' gasket cement from your Vermont Castings' Authorized Dealer.

Before you begin, shut off the gas supply according to the directions on page 3 and allow the stove to cool. Follow the standard safety procedure for working with dusty materials: Wear safety goggles and a dust mask.

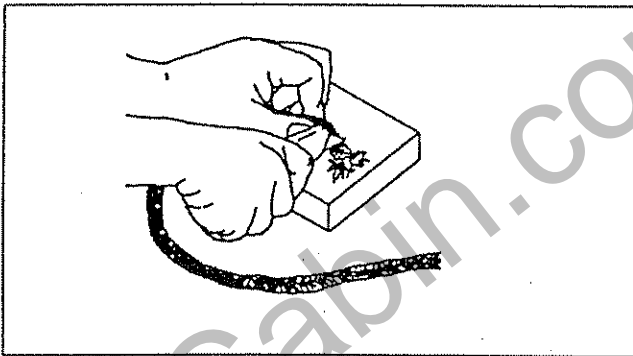
Step 1. Remove the existing gasket by grasping an end and pulling firmly.

Step 2. Use a wire brush or the tip of a screwdriver to clean the channel of any remaining cement or bits of gasket. Remove stubborn deposits of cement with a cold chisel if necessary.

Step 3. Determine the correct length of the appropriate-sized gasket by laying it out in the channel. Allow an extra 1-2" (25-50 mm), and mark the spot to be cut.

Step 4. Remove the gasket from the channel, place it on a wood cutting surface, and cut it at the marked spot with a utility knife.

Twist the ends slightly to discourage the gasket from unraveling.



Step 5. Lay an unbroken 1/8" (3 mm) bead of Vermont Castings' gasket cement in the newly-cleaned channel.

Step 6. Starting at one end, press the gasket into the channel.

Ensure a good joint where the gasket meets before trimming any excess. Do not overlap the gasket ends or leave ends with ragged edges.

Step 7. Press the gasketed part firmly against its normal mating surface to seat the gasket evenly in its channel.

Step 8. Clean any excess cement from around the channel, then let the cement that holds the new gasket dry thoroughly for at least 24 hours.

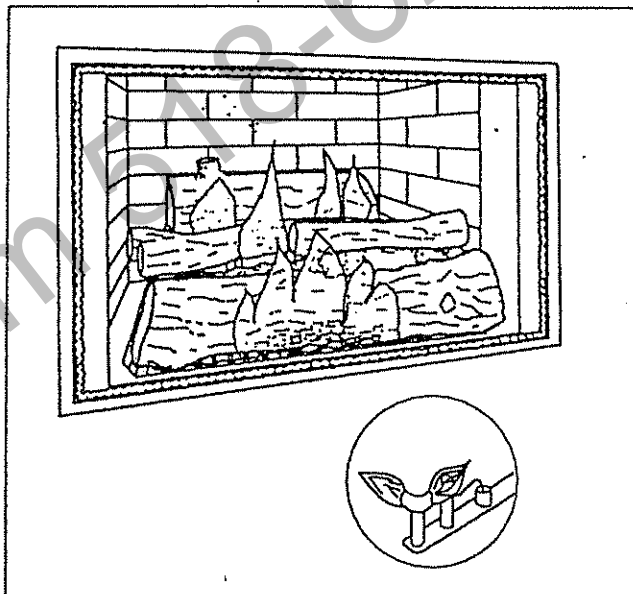
## Inspection of Venting System

The vent system must be inspected annually by a qualified technician to confirm that it is unobstructed and in good condition.

## Check the Gas Flame Regularly

To ensure that your Radiance Gas Stove is operating properly, check the flames periodically to confirm that they are consistent with the description provided in the illustration below. The flames will be blue during the first few minutes, but will gradually change to yellow after about 15 minutes.

If the flame is other than that described here, do not operate your Radiance. Contact your Vermont Castings' Dealer or a qualified gas technician for assistance.



*When it is operating properly, the Radiance's flame pattern will resemble that shown above.*



# 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.)

In Canada, installation must be in accordance with the current CAN/CGA B149.1 and B149.2 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, THE VERMONT CASTINGS' RADIANCE SHOULD BE LOCATED OUT OF TRAFFIC AND AWAY FROM FURNITURE AND DRAPERIES.**

THE SURFACE OF THE RADIANCE 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 RADIANCE, AND OBSERVE THE RECOMMENDED CLEARANCES THAT FOLLOW.

## Install the Legs and Leg Levellers

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.

The legs, washers and levellers are packed in the firebox of the stove. The leg bolts have been installed in the mounting holes in the stove bottom.

If assistance is available, carefully tilt the stove forward onto its front, remove the leg bolts, and then install a leg at each corner using a bolt and washer. Thread each bolt finger-tight and tighten firmly with a wrench.

Use the leg levellers if the stove will be standing on an uneven surface. Screw a leveller into the bottom of each leg and adjust as necessary.

Return the stove to the upright position.

If no assistance is available, you can install the legs while the stove is on the shipping pallet using the separate instruction sheet provided.

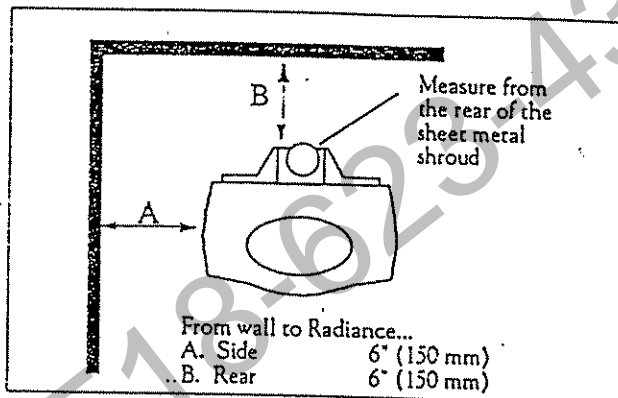
## Hearth Requirements

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 extending the full width and depth of the unit must be used as the hearth. There are no other hearth requirements.

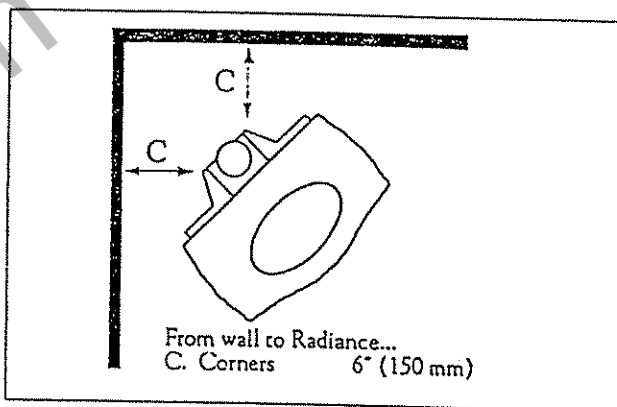
## Keep the Stove a Safe Distance from Surrounding Materials

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 below illustrate the minimum clearances for the Radiance in two typical installations.

### Parallel Installation Clearance

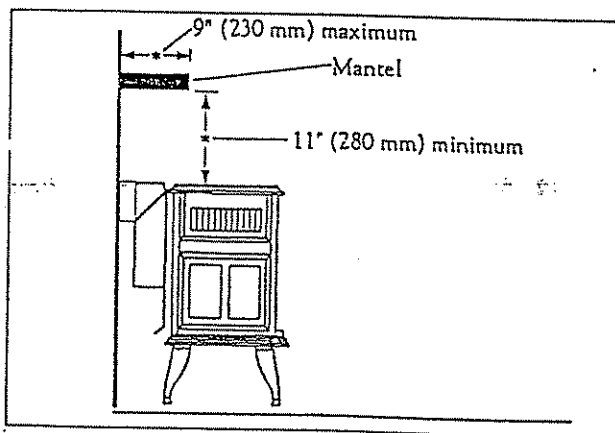


### Corner Installation Clearance

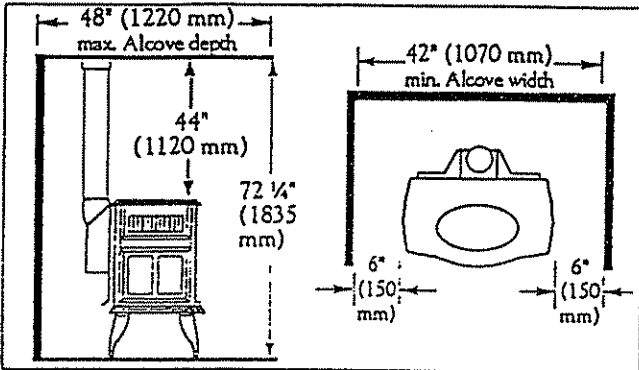


### Mantel Clearance

The mantel clearance for the Radiance is 11" (280 mm). The mantel must be 9" (230 mm) or less in depth.



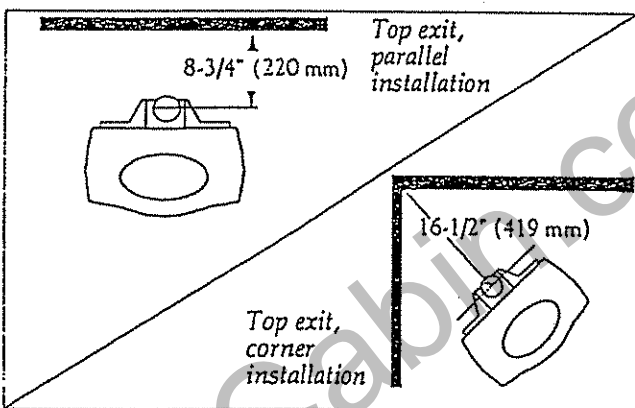
## Ceiling / Alcove Clearance



The Radiance Gas Stove is approved for installation into alcove construction composed of combustible materials.

## Distance of the Flue Collar Centerline from the Wall for Top-Exiting Stoves

If preparations for the installation are done prior to the unit being delivered, you'll need to know the minimum distance of the flue collar centerline from the wall in order to meet the minimum clearance requirement. For the Radiance, this distance is 8-3/4" (775 mm) for parallel installations and 16-1/2" (419 mm) for corners.



Distance of flue collar centerline from wall in parallel and corner installations.

## Venting Requirements and Options

The Radiance must be properly connected to a 4" (100 mm) listed and approved Class B venting system or to an approved Class A masonry or factory-built chimney system.

Complete B-vent systems are available from a number of manufacturers, and usually can be supplied by your dealer. Be careful, similar pipe pieces from different suppliers are not always interchangeable. Follow the installation instructions of the manufacturer exactly as you install the venting. Do not connect it to a flue serving a separate solid-fuel burning appliance.

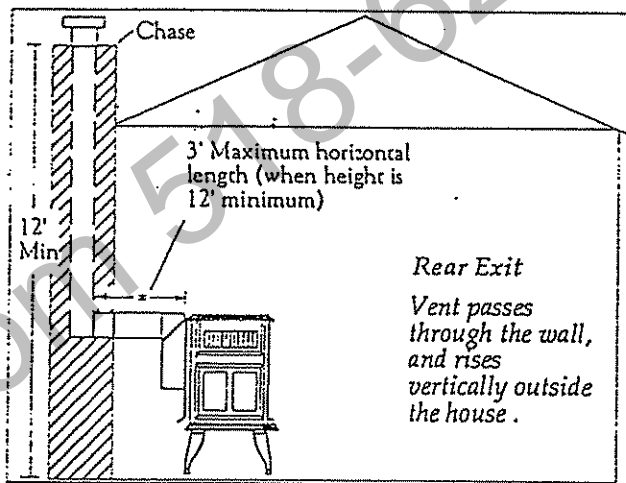
If connecting to a Class A chimney, 4" (100 mm) single wall or 4" (100 mm) B-vent connector must be used. If using single wall vent connector, it must be at least 6" (150 mm) from combustible walls.

Exterior chimneys may be subject to flue reversal or condensation. To lessen these conditions, enclose B-vents in a chase or reline class A chimneys. In Canada, a complete reline of class A chimneys is required.

## Two Approaches to Venting

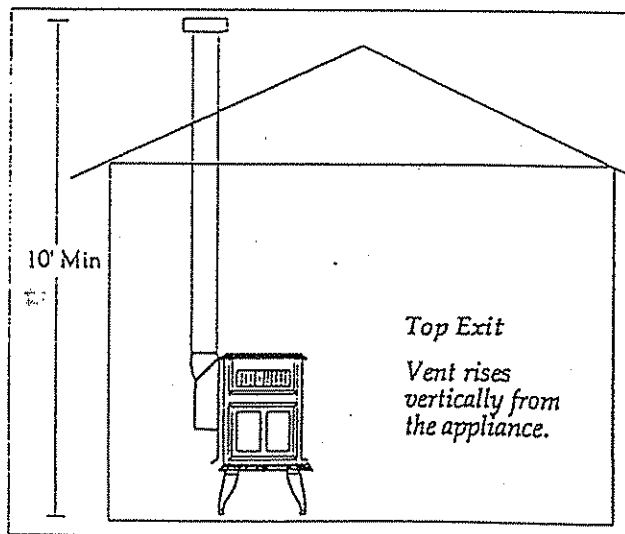
Venting for a Radiance may rise vertically through the interior of the house, or may pass through an exterior wall and rise vertically along the outside of the house. Some codes require that a B-vent system rising vertically on the outside of the house be enclosed in a chase. Check your local codes for chase requirements. In many installations, keeping the vent warm by enclosing it in a chase, especially an insulated chase, improves performance.

In rear exit installations, the minimum vent height is 12 feet (3.658 m), measured from the finished hearth. For installations with the 12 foot minimum, the horizontal run must not exceed 3 feet (900 mm). Higher vents allow longer horizontal runs. For each 2 foot increase in height, the horizontal run may increase 1 foot. There may be no more than two 90 degree elbows (or their equivalent) in the system. Refer to the most recent edition of the National Fuel Gas Code for complete information.



In top exit installations, the minimum vent height is 10 feet, (3.05 m).

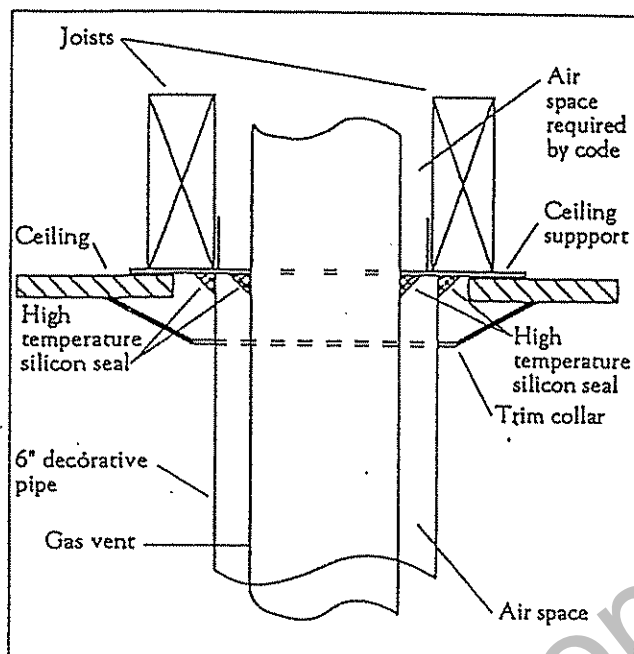
To determine the minimum height the vent must extend above the roof, refer to the 1993 edition of the National Fuel Gas Code.



### Passing Through a Combustible Wall or Ceiling

An approved pass-through device is always required when a vent passes through a combustible wall or ceiling. Check with the manufacturer of the vent system for the correct, listed, devices that are available.

In some installations it may be desirable to encase the 4" gas vent with a decorative 6" pipe as illustrated below. Remember, a listed pass-through device is required whether or not the decorative 6" pipe is installed.

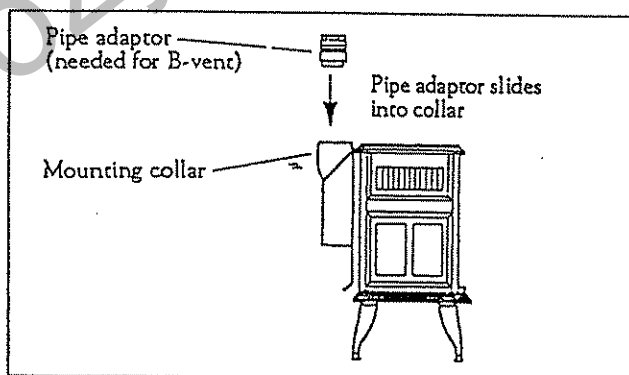


**NOTE:** It is essential to seal between the ceiling support and the chimney connector with high temperature silicon seal.

### Attaching the Venting to the Radiance

The venting attachment collar that is mounted on the top rear of the Radiance is sized so that 4" (100 mm) single-wall pipe fits neatly into it.

When installing B-vent, an adaptor, secured from the manufacturer of the pipe, should be used. Secure the adaptor to the collar with three sheet metal screws. Drill the flange with a 1/8" (3 mm) drill bit.

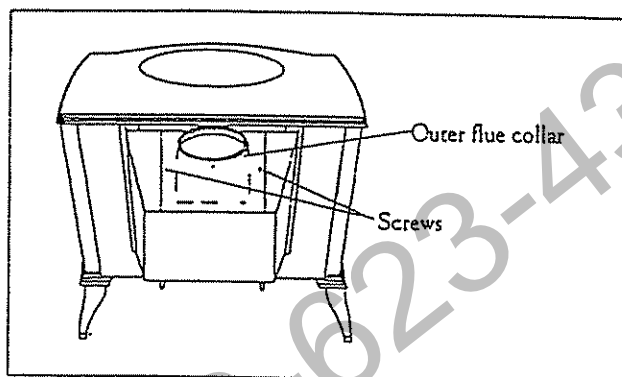


The B-vent pipe adaptor slides over the mounting collar and is secured with three sheet metal screws.

### Reversing the Flue Collar

The Radiance flue collar may be changed from the top exiting position to rear exiting for installations that require this configuration.

To reverse it, remove the two Phillips screws that secure the outer flue collar, remove the collar, and set it aside. Unbolt the inner flue collar/pipe adaptor, rotate it so it points to the rear, and re-attach it with the two bolts.



The bolts that secure the inner flue collar are positioned similarly to the screws that attach the outer flue collar.

Orient the outer flue collar to point to the rear, re-install it, and secure it with the two screws removed previously.

### Installing the Burner and Connecting the Gas Supply Line

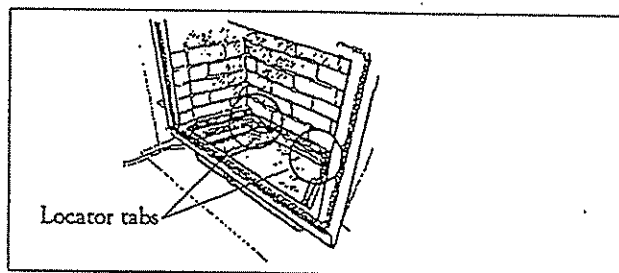
The Radiance burns either natural gas or propane, depending on which burner is purchased.

Installation of both burners is the same. Each bolts into place on the bottom front of the stove.

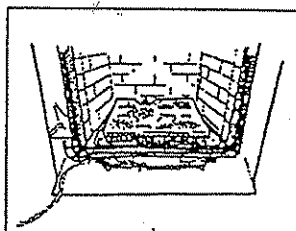
Before you begin, remove the front and the glass as described on pages 4 and 5.

#### Step 1. Install the Burner Tray and Burner.

The burner and burner tray will be inserted as one piece. Insert the valve control assembly on the front of the burner tray through the opening in the bottom of the front frame. Seat the tray in front of the locator tabs in the base.



The burner tray and burner fit in front of the locator tabs in the base.

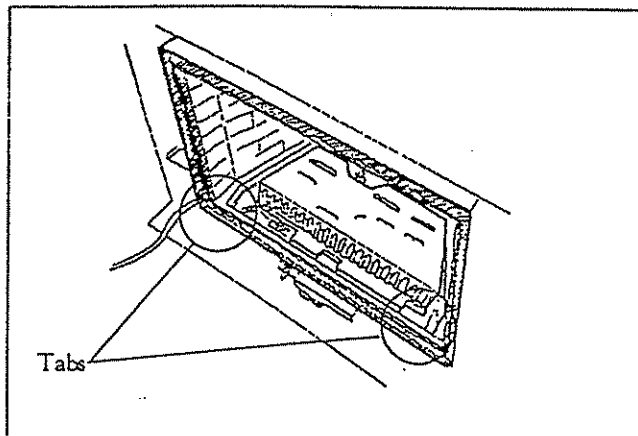


The burner in position.

## 10 Installation

### Step 2. Install the Tabs.

Unpack the base tabs that were packed in the parts bag in the firebox. Use 1/4-20 X 3/8" Phillips head screws to install the tabs in the left and right front corners of the base. The tabs should be above the bottom of the tray, and should hold the tray to the base.



The tabs in the front corners of the base hold the burner tray in place.

### Step 3A. (Not for New York State and new construction in California\*)

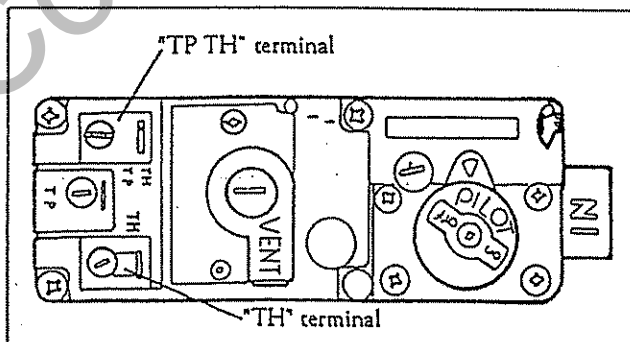
Connect the wires from the ON/OFF switch to the burner valve.

- One wire connects to the terminal marked "TH."
- The other wire connects to the terminal marked "TP TH." The "TP TH" terminal already has a wire connected to it. This wire must remain connected.
- Loosen the terminal screw, connect the other wire from the ON/OFF switch, and tighten the screw.

### Step 3B. (New York State and new construction in California\*)

Connect the wires from the ON/OFF switch to the burner valve.

- Disconnect the wire from the "TP TH" terminal and connect it to the "TH" terminal.
- Connect one of the two wires from the ON/OFF switch to the "TH" terminal. Two wires will now be connected to this terminal.
- Connect the other wire from the ON/OFF switch to the "TP TH" terminal.



*\*California only: This special procedure is required for units installed in new construction. The special procedure is not required for units installed in existing buildings.*

NOTE: For special New York state and California operating instructions, see page 2.

### Step 4. Connect the gas supply line to the Radiance

#### CAUTION

- The gas line should be connected only by qualified gas technician.
- There must be a gas shut-off between the fireplace and the supply.

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

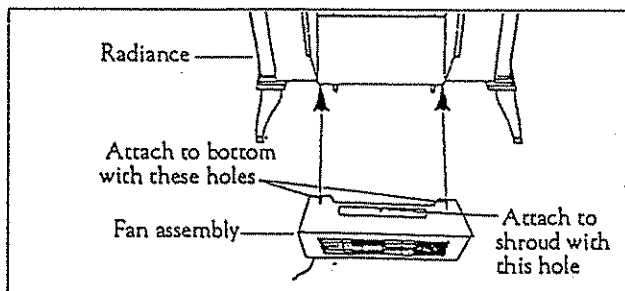
With propane, use a 3/8" or 1/2" propane gas supply line with an input of 30,000 BTU's at a manifold pressure of 10.0" and minimum inlet supply for adjustment of 11.0" W.C.

#### Install the Optional Fan.

If you are using a flexible gas line routed underneath the burner, be sure the gas supply line is connected before installing the optional fan.

The optional fan mounts on the back bottom of the Radiance and is equipped with its own electrical cord with a 3-prong plug that needs only to be plugged into an existing 110 v. outlet. The fan is attached to the stove bottom with two bolts.

- Line up the two holes in the top of the fan casing with the corresponding holes in the rear of the Radiance bottom plate.
- Attach the fan assembly loosely with the two 1/4-20 X 1/2" Phillips screws provided.
- Tighten the screws with a screwdriver.
- Use a #10 X 1/2" sheet metal screw to attach the rear shroud to the flange on the fan casing. When attached properly, the shroud will be on the outside of the flange.
- Plug in the fan.

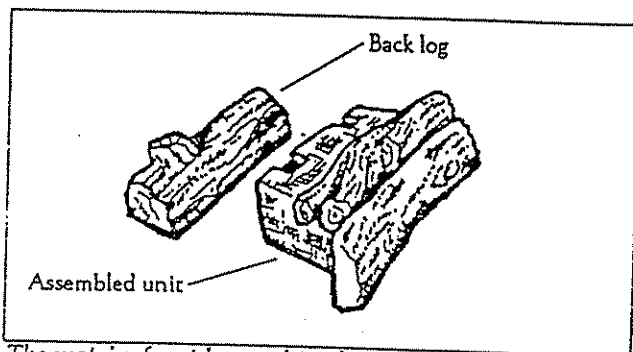


#### WARNING:

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.

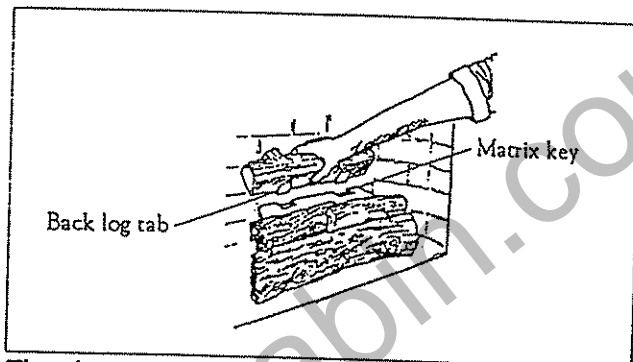
## Install the Log Set

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



*The matrix, front log, and top log are installed as a single unit.*

- Remove the front and glass as described in the Maintenance Section.
- Place the assembly on the burner. Center the assembly on the burner and slide it to the rear as far as possible.
- Place the back log on the matrix with the tabs on the bottom of the top log fitting in the keys in the matrix. Push the back log as far back as possible. It should rest against the fireback.



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

- Replace the glass and front as described in the Maintenance Section.

# Specifications

Radiance Gas Stove  
by Vermont Castings, Inc.

## Fuel

Natural gas, with burner NG 30 (U.S.A.)  
Natural gas with burner NGC 30 (Canada)  
Propane, with burner LP 30 (U.S.A.)  
Propane, with burner LPC 30 (Canada)

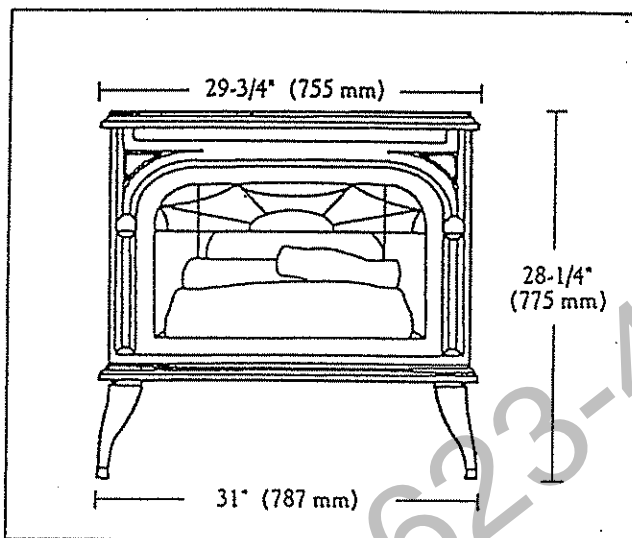
Manifold pressure, NG .....	3.5"
Manifold pressure, LP .....	10.0"
Minimum inlet supply pressure for the purpose of input adjustment, NG .....	5.0"
Minimum inlet supply pressure for the purpose of input adjustment, LP .....	11.0"
Maximum inlet supply pressure: NG .....	11.0"
Maximum inlet supply pressure: LP .....	13.0"
Maximum Btu/hr., NG .....	30,000
Maximum Btu/hr., LP .....	30,000
Glass panel .....	Hi-temp ceramic
Weight .....	400 lbs. (181 kg)
Ignition .....	Standing pilot with Piezo ignition

## Clearances

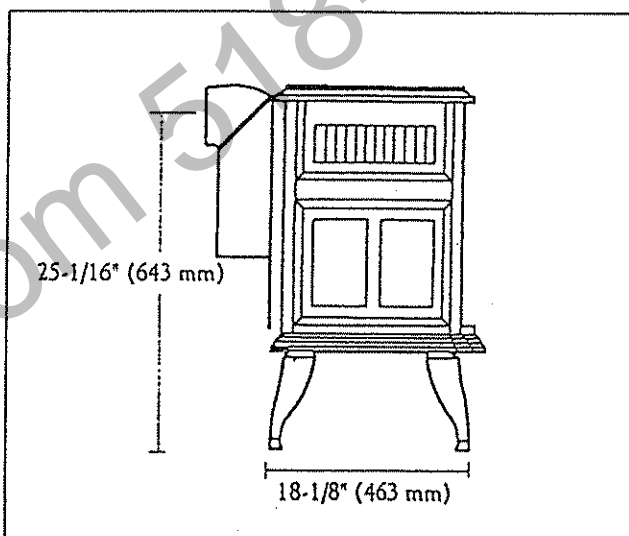
Side .....	6 inches (150 mm)
Rear .....	6 inches (150 mm)
Corner .....	6 inches (150 mm)

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.

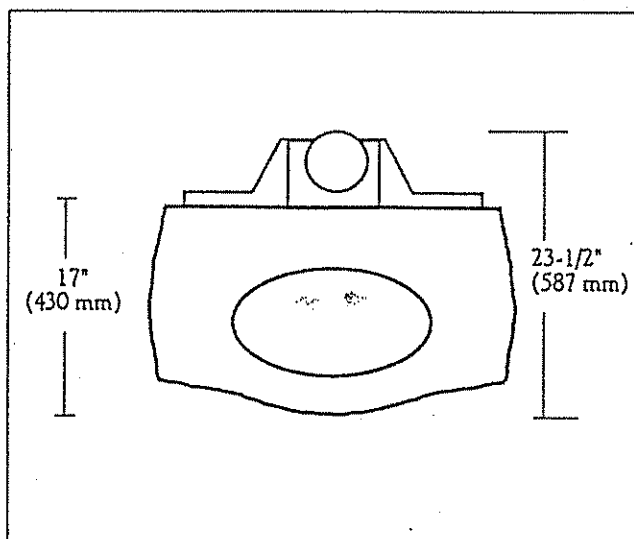
AGA Design Certified to ANSI Z21.50b-1990 for  
Vented Decorative Appliances.  
CGA approved to CAN/CGA 2.22 M86



Front View



Rear Exit



Top Exit

# Parts List

Part    Part No.

## Radiance Gas Stove

Top	130-1000
Front	130-1001
Left End	130-1002
Right End	130-1003
Bottom	130-1004
Front Fettle	130-1005
Griddle	130-1006
Front Lattice	130-1007
Flue Collar	700-0969
Inner Flue Collar	130-1009
Inner Flue Collar Pipe Adaptor	130-1010
Draft Hood Curtain Wall	130-1011
Convection Hood	130-1012
Control Door	130-1013
Leg	130-3224
Firebox	130-7374
Firebox Extension	130-7373
Top Heatshield	140-8679
Glass	160-1290
Glass Retainer	140-8637
5/16" Gasket for Glass (5 feet)	120-3588
Rear Shroud	140-8678
Gas Log Set	500-2855
Wiring Harness	500-2857

## Burner Assemblies

NG 30 - U.S.	000-5062
NGC 30 - Canada	000-5059
LP 30 U.S.	000-5063
LPC 30 - Canada	000-5042

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

# Vermont Castings Warranty

## Limited Three Year Warranty

Vermont Castings warrants that this Radiance 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 pay for any Authorized Dealer in-home travel fees or service charges. 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 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 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 door 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 prior to accepting it for any damage to the enamel.
3. This warranty does not cover misuse of the Radiance as described in the Owners' Guide, nor does it cover a Radiance 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. (Do not operate the Radiance 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.

## 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, ie., 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.

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

VCW International Ltd.  
1, Smythe Road  
Bristol BS3 2BX  
England