

## INSTALLER / CONSUMER SAFETY INFORMATION

PLEASE READ THIS MANUAL  
BEFORE INSTALLING AND  
USING APPLIANCE.

### WARNING!

IF THE INFORMATION IN THIS  
MANUAL IS NOT FOLLOWED  
EXACTLY, A FIRE OR EXPLOSION  
MAY RESULT CAUSING  
PROPERTY DAMAGE,  
PERSONAL INJURY OR LOSS OF  
LIFE.

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

—WHAT TO DO IF YOU SMELL  
GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from your 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.

This appliance may be installed in an after market permanently located manufactured (mobile) home where not prohibited by local codes.

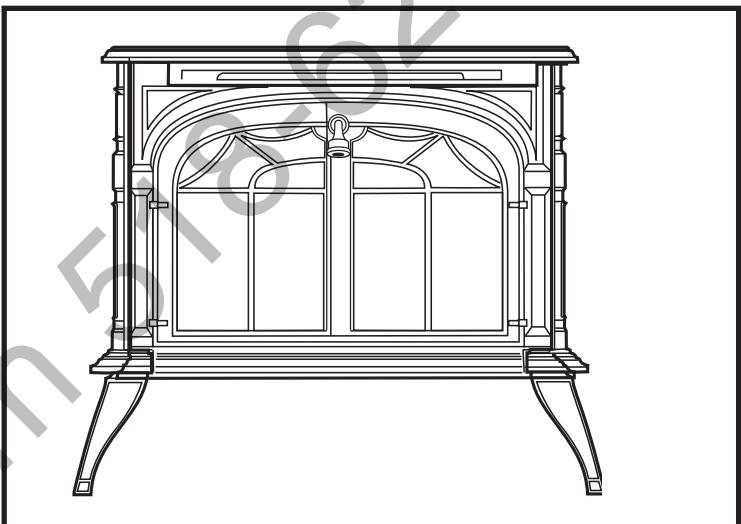
This appliance is only for use with the type of gas indicated on the rating plate.

This appliance is not convertible for use with other gases unless a certified kit is used.

VERMONT  
CASTINGS

## Radiance Natural Vent Gas Heater

Model RNVOD: 3233 thru 3236,  
3340 thru 3349, 3355, 3356



## Homeowner's Installation and Operating Manual



INSTALLER: Leave this manual with the appliance.  
CONSUMER: Retain this manual for future reference.

## Table of Contents

**PLEASE READ THE INSTALLATION & OPERATING INSTRUCTIONS BEFORE USING APPLIANCE.**

Thank you and congratulations on your purchase of a Vermont Castings stove.

**IMPORTANT:** Read all instructions and warnings carefully before starting installation. Failure to follow these instructions may result in a possible fire hazard and will void the warranty.

<b>Installation &amp; Operating Instructions</b>	3
Stove Dimensions	4
Clearance Requirements	4
Parallel Installation	4
Corner Installation	5
Ceiling Clearances	5
Alcove Minimum Dimensions	5
Mantel Clearances	5
Hearth Requirements	5
Gas Specifications	6
Gas Inlet and Manifold Pressures	6
High Elevations	6
Venting Requirements	6
Vent Layout and Height Requirements	7
Passing Through a Combustible Wall or Ceiling	7
<b>Assembly Procedures</b>	
Tools Required	8
Parts Bag Contents	8
Unpack and Assembly Legs	8
Install Optional Fan	8
Venting System Assembly	12
Connect Gas Supply Line	13
Burner Information	13
Install ON/OFF Switch	13
Thermostat Connection (Optional)	14
Install the Mesh and Grille	14
Install Rear Bracket and Log Set	14
<b>Operation</b>	
Operable Doors	16
Your First Fire	16
Pilot and Burner Information	16
Flame & Temperature Adjustment	16
Flame Characteristics	16
Lighting and Operating Instructions	16
Troubleshooting - Honeywell #8420 Gas Control System	16
Fuel Conversion Instructions	19
<b>Maintenance</b>	
Annual System Inspection	22
Logset and Burner/Cleaning and Inspection	22
Care of Cast Iron	22
Cleaning the Glass	22
Glass Replacement	22
Gasket Replacement	23
Inspect the Vent System Annually	23
Check the Gas Flame Regularly	23
Wiring Diagrams	24
<b>Replacement Parts</b>	25
<b>Optional Accessories</b>	28
<b>Warranty</b>	30
Energuide	32

## Installation & Operating Instructions

The Radiance Direct Natural Vent Room Heater, Model Nos. 3233 thru 3236, 3340 thru 3349, 3355 and 3356 are vented gas appliances listed to the ANSI standard Z21.88-2005 and CSA-2.33-2005 for Vented Room Heaters, and CSA2.17-M91, Gas-Fired Appliances For Use at High Altitudes.

The installation of the Radiance Natural Vent Room Heater must conform with local codes, or in the absence of local codes, with National Fuel Gas Code, ANSI Z223.1/NFPA 54 — latest edition and CSA B-149.1 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 at maximum input.)

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

**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, preferably NFI or WETT (Canada) certified.** 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 Natural Vent Room Heater should be inspected before use and at least annually by a qualified service agency. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean.**

The Radiance Natural Vent Room 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 Natural Vent Room Heater 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.

An accessible tap is located above the pilot/On-Off knob for checking the inlet pressure.

This appliance must be properly connected to a listed 4" (102 mm) Type B venting system or to an approved masonry or factory-built chimney system. In Canada, a complete relining of Class A chimneys is required. This heater is equipped with a vent safety shutoff system.

This appliance is approved for bedroom installations in the U.S. and Canada. Check local codes for natural vent requirements.

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

**WARNING: Operation of this heater when not connected to a properly installed and maintained venting system can result in carbon monoxide (CO) poisoning and possible death.**

The Radiance Natural Vent Room 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.

**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 the appliance.

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

Any safety screen, glass or guard removed for servicing an appliance must be replaced prior to operating the 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. The installation must include adequate accessibility and clearance for servicing and proper operation.

**WARNING: Do not operate the Room Heater 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, nor for purpose of resale, from the manufacturer.**

**Proposition 65 Warning:** Fuels used in gas, woodburning or oil fired appliances, and the products of combustion of such fuels, contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. California Health & Safety Code Sec. 25249.6

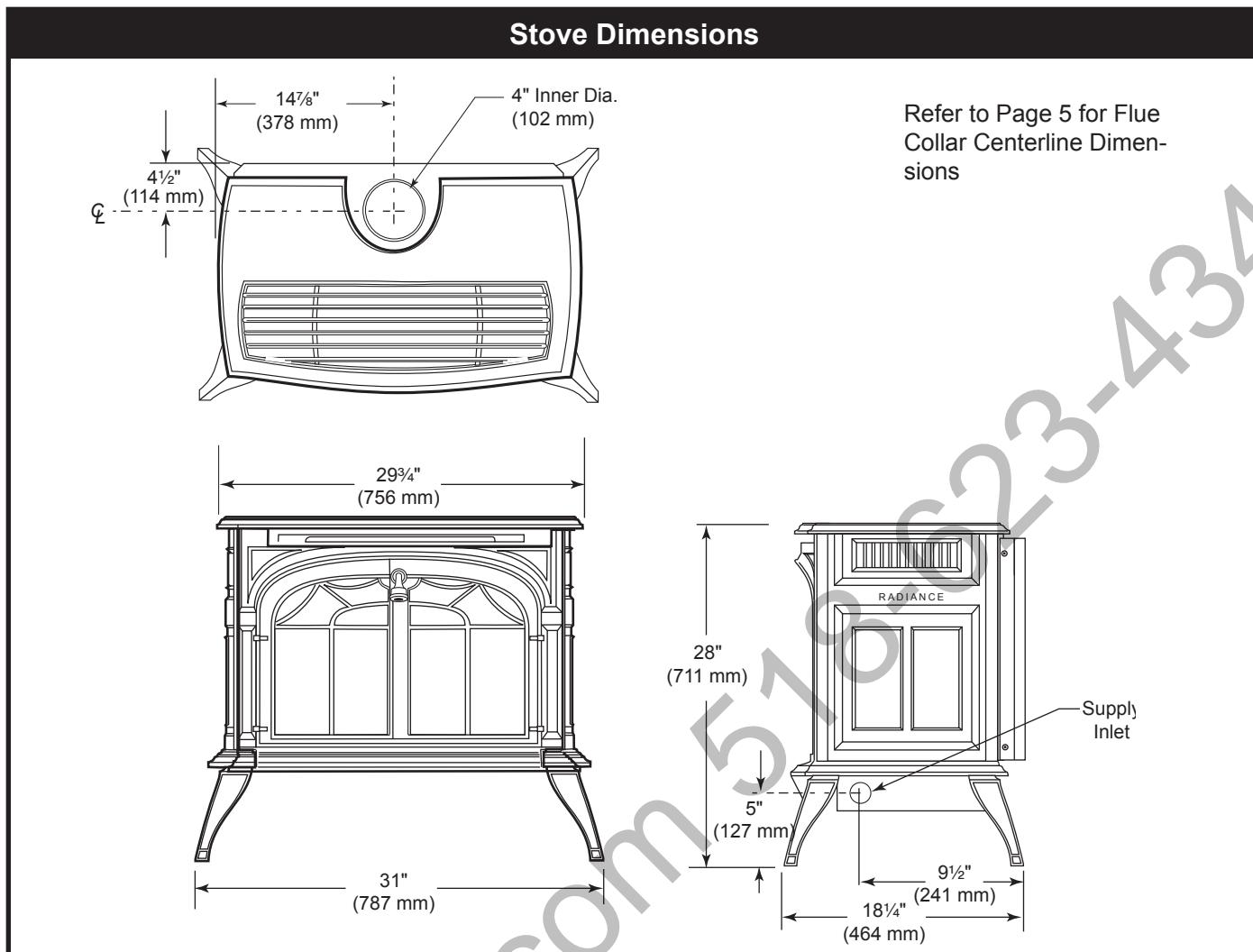


Fig. 1 Radiance dimensions.

#### Clearance Requirements

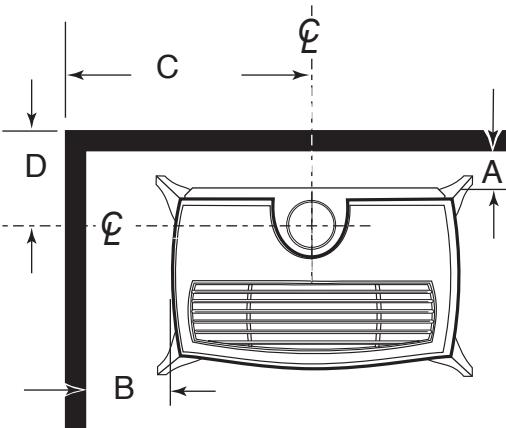
##### Minimum Clearances to Combustible Materials

Measure side clearances as shown in Figures 2 through 5 from the outer edge of the cast iron stove top. Measure rear clearances from the rear sheet metal shroud.

The Radiance heater is approved for installation into an alcove constructed of combustible materials to the dimensions and clearances shown on this page.

The same clearances apply in a standard parallel installation.

#### Parallel Installation: Minimum Clearance and Flue Centerline



Stove Clearance: A: 4" (102 mm)  
B: 6" (152 mm)

Pipe Centerline: C: 21 1/8" (556 mm)  
D: 8 1/2" (216 mm)

Fig. 2 Parallel installation, minimum back and side clearances and flue centerlines.

20004409

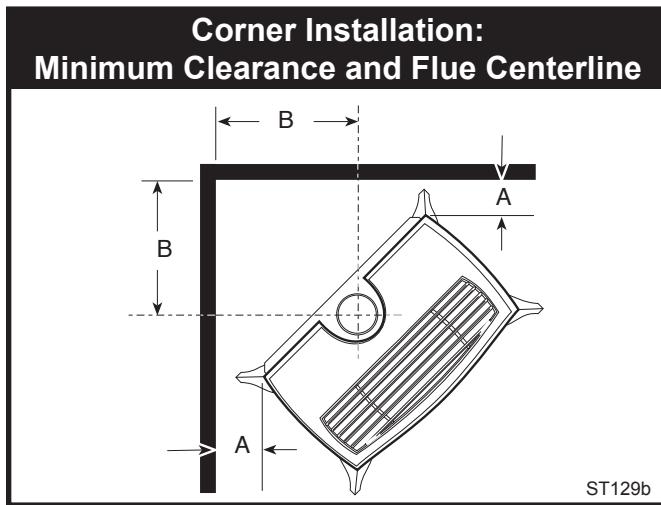


Fig. 3 Corner installation requirements.

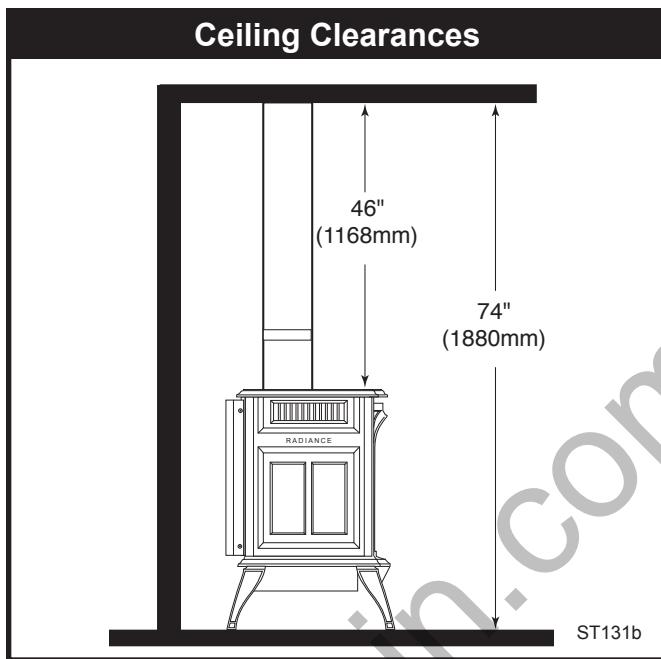


Fig. 4 Minimum ceiling clearance: minimum alcove height.

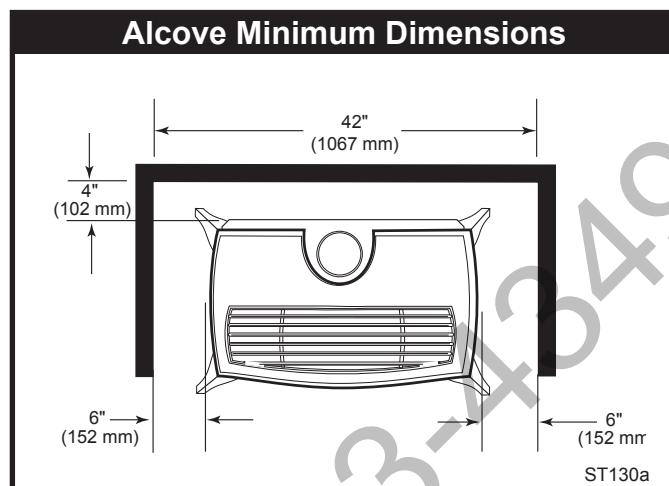
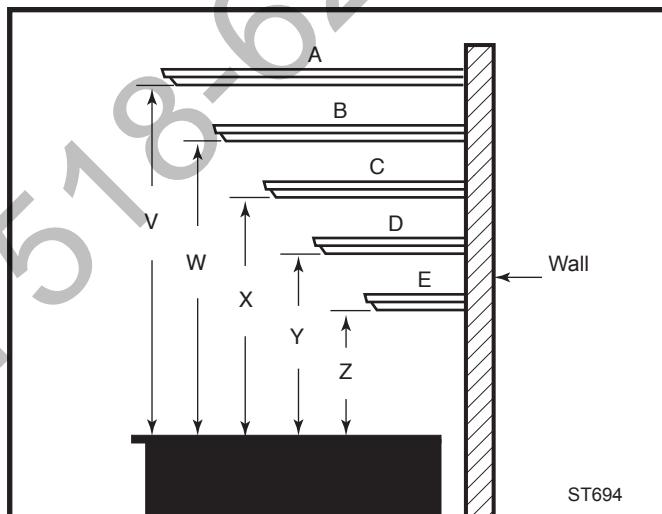


Fig. 5 The Radiance Natural Vent Stove is approved for installation into alcoves built of combustible materials.



Ref.	Mantel Shelf Depth	Ref.	Mantel from Stove Top
A	7½" (190 mm)	V	16" (406 mm)
B	6" (152 mm)	W	14½" (368 mm)
C	4½" (114 mm)	X	13" (330 mm)
D	3" (75 mm)	Y	11½" (292 mm)
E	1½" (38 mm)	Z	10" (254 mm)

Fig. 5a Minimum mantel clearance.

### Hearth Requirements

The Radiance Heater must be installed on rigid flooring. When the heater 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.



## 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" (25 mm) clearance to combustible materials. Maintain a 6" (150 mm) clearance when using single wall pipe.
- 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.
- Refer to the manufacturer's instructions included with the venting system for complete installation procedures.

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

## Venting Requirements and Options

The Radiance must be properly connected to a listed 4" (102 mm) Type B venting system or to an approved Class A masonry or factory-built chimney system. In Canada, a complete relining of Class A chimney systems is required.

The Radiance Natural Vent stove will accept decorative 6" (150 mm) stove pipe around the Type B venting system, for aesthetic purposes.

Complete Type B vent systems are available from a number of manufacturers, and your dealer can usually supply one. Pipe sections from different makers are not interchangeable; do not mix pipe or vent sections from different makers. Follow the vent system manufacturer's instructions exactly.

Decorative stove chimneys for B vent applications are available through vent dealers.

The vent system should conform to specifications of the National Fuel Gas Code, latest edition.

If connecting to a Class A chimney system, use 4" (102 mm) single wall or 4" Type B vent connector. Single wall vent connector requires a minimum 6" (153 mm) clearance to combustible surfaces.

Exterior chimneys may be subject to flow reversal or condensation. To lessen these conditions, enclose Type B vents in an insulated chase, or reline exterior Class A chimneys.

An approved pass-through device is always required, whether the vent system passes through a wall or a ceiling. Use a pass-through device from the same maker who supplies the venting system.

Venting terminals shall not be recessed into a wall or siding.

## Gas Specifications

Model	Fuel	Gas Control	Max. Input BTU/h	Min. Input BTU/h
RNVODRN	Nat.	Millivolt	35,000	25,000
RNVODRP	Prop.	Millivolt	35,000	27,000

## Gas Inlet and Manifold Pressures

	Natural	LP (Propane)
Inlet Minimum	5.5" w.c.	11.0" w.c.
Inlet Maximum	14.0" w.c.	14.0" w.c.
Manifold Pressure	3.5" w.c.	10.0" w.c.

## Radiance Direct Vent / Natural Vent Certified to:

### ANSI Z21.88-2005 / CSA Z2.33-2005 Vented Gas Fireplace Heaters

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54 - latest edition. (EXCEPTION: Do not derate this appliance for altitude. Maintain the manifold pressure at 3.5" w.c. for Natural Gas and 10" w.c. for Propane.)

## High Elevations

**Input ratings are shown in BTU per hour and are certified without deration for elevations up to 4,500 feet (1,370 m) above sea level.**

**For elevations above 4,500 feet (1,370 m) in USA, installations must be in accordance with the current ANSI Z223.1/NFPA 54 and/or local codes having jurisdiction.**

**In Canada, please consult provincial and/or local authorities having jurisdiction for installations at elevations above 4,500 feet (1,370 m).**

## Vent Layout and Height Requirements

Venting for a Radiance can rise vertically through the home, or can pass through an exterior wall and rise along the outside of the home. Some codes require that a Type B vent system rising on the outside of the home be enclosed in a chase. Check your local codes for requirements.

The minimum vent system height for the Radiance Natural Vent Stove is 8 feet (2.43 m), (Fig. 7) measured from the top of the stove. To determine the minimum height the vent system must extend through or past 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 maker of the vent system for the correct listed devices that are available. A listed pass-through device is required whether or not the installation includes decorative pipe around the Type B venting system. **NOTE:** It is essential to seal between the ceiling support (sometimes called a 'firestop spacer') and the decorative pipe, if installed, with a high-temperature silicone sealant. (Fig. 6)

Complete the venting system installation according to the manufacturer's instructions.

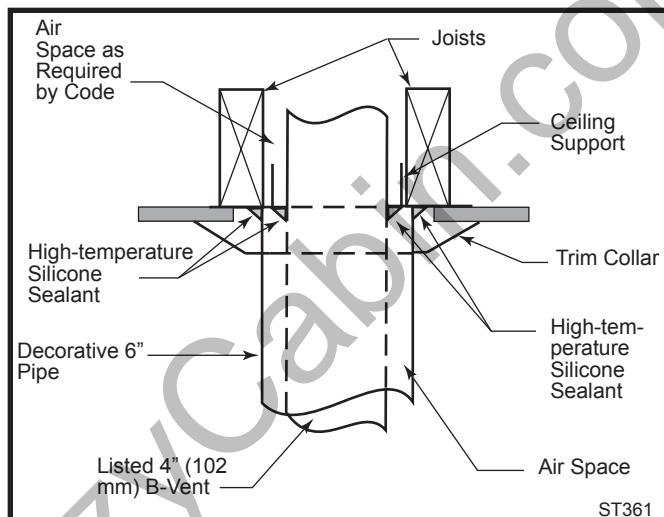
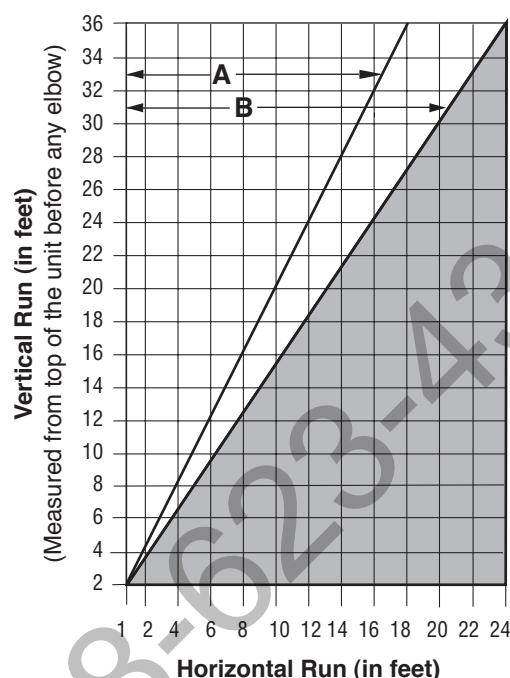


Fig. 6 A ceiling pass-through, with decorative pipe around the vent.



### Venting Runs

**NOTE:** When venting straight vertical, without an elbow, a minimum of 8 ft. vertical is required off the top of the stove.

- = Acceptable venting configuration
- = Unacceptable venting configuration

**A:** Vertical installations up to 36 feet (12m) in height. Up to a 18 ft. horizontal vent run can be installed within the vent system using a maximum of two 90-degree elbows or four 45-degree elbows.

**B:** Vertical installations up to 36 feet (12m) in height. Up to a 24 ft. horizontal vent run can be installed within the vent system using a maximum of two 45-degree elbows. (Ratio = 2/3, Hor./Vert.)

FP567b

Fig. 7 Vent termination window.

## Assembly Procedures

### Tools Required

- Phillips screwdriver (stub)
- power drill
- utility knife
- reciprocating saw
- metal drill bit: size 28 (.140"/3.5 mm)

### Unpack and Set Up the Stove

The Radiance is shipped on its back. Cut the shipping straps and set stove upright.

### Parts Bag Contents:

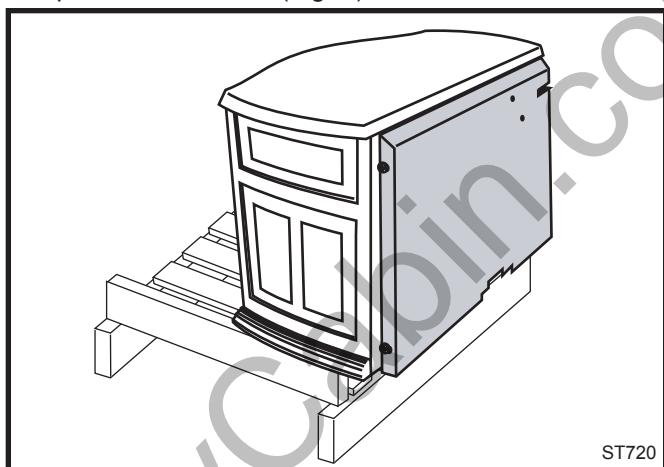
- On-Off switch, housing, and wiring harness
- 2 Bags of Lava Rock
- Pipe Support Bracket
- Door Handle (Operable)
- Owner Registration Card
- (4) CS, Hex Hd 3/8-16 x 1 GR 2-Z
- (4) Washer, FL 3/8-Z

\*Used with stove's having serials #'s starting at #1457 (RNVODRN), #1944 (RNVODRP).

### Unpack and Assemble Legs

The Radiance is shipped upright. Cut the shipping straps and set stove upright.

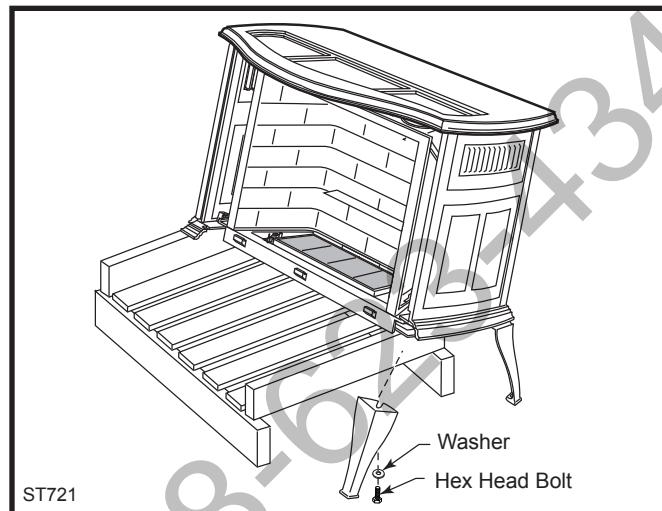
1. Slide stove to the rear of the pallet just far enough to access rear leg holes. Make sure the stove does not tip over backwards. (Fig. 8)



**Fig. 8** Slide stove back just far enough to access rear leg holes.

2. Attach the rear legs using 3/8" hex head bolts and flat washer supplied. Tighten with a 9/16" wrench or socket.
3. Carefully tip the stove onto its rear legs. Adjust the pallet to allow access to one of the front leg holes. Be sure to leave the pallet under the stove to prevent the stove from falling fully forward. (Fig. 9)

**CAUTION:** To prevent valve tubing from being crushed or damaged, make sure to rest valve on wooden pallet.



**Fig. 9** Carefully tip stove onto back legs. Leave pallet under stove to keep stove from falling fully forward.

4. Have your assistant attach one leg using the hardware described.
5. Move the pallet to allow access to the other front leg hole. Attach remaining leg.
6. Remove pallet and allow stove to gently rest on all four legs.
7. Adjust leg levelers to compensate for irregularities in the hearth.

### WARNING

This appliance is equipped with a three-prong (grounded) 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 Optional Fan

These instructions are for stoves with serial numbers up to #1456 (RNVODRN), #1943 (RNVODRP).

If you are installing the optional convection Fan Kit #2767 (FK26), continue here. It is easiest to install fan kit before connecting gas line. If you are not installing a Fan Kit, proceed to Venting System Assembly.

1. The fan kit includes a Blower Assembly and a Rheostat Assembly, connected by a cable. (Fig. 10) The Blower Assembly mounts to the bottom rear of the stove, and the Rheostat mounts to the left side of the valve. The assembly includes a 'snapstat' which automatically turns the fan 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. Unpack and inspect the Blower assembly. Confirm that the fan spins freely.

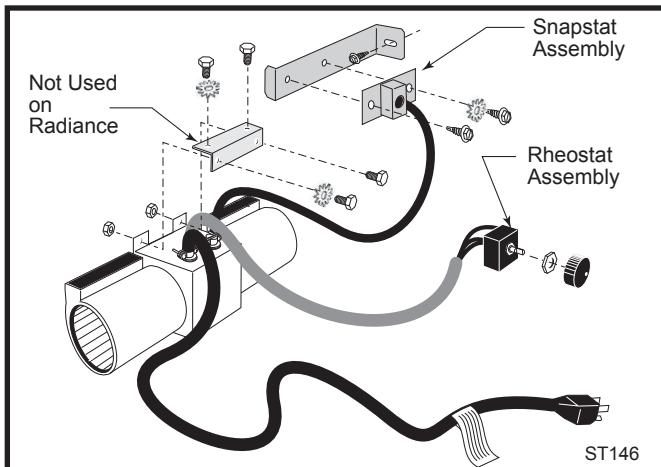


Fig. 10 Fan kit components.

2. Remove the rear shroud. (Fig. 11) Use work gloves to protect your hands. Remove the rear shroud cover plate. Remove the six sheet metal screws ('A', Fig. 9) surrounding the draft hood opening. Remove the shroud and set it aside.

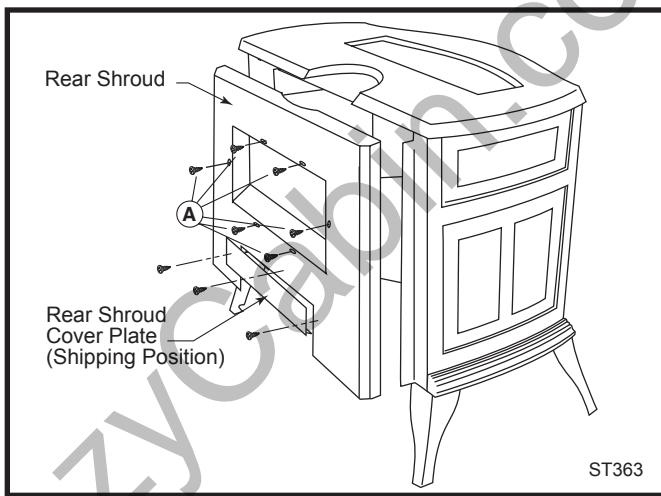


Fig. 11 Remove/replace rear shroud.

3. Position the fan behind the rear shroud. (Fig. 12) Pass the fan rheostat assembly and snapstat assembly beneath the stove toward the front.
4. The rheostat control switch attaches to the left side of the valve bracket at the front of the stove. (Fig. 14)

- Remove retaining nut from shaft of rheostat. (if preinstalled)
- Insert the rheostat through the hole in the back of the left side of the valve bracket, aligning the locator pin with the smaller hole in that bracket.
- Thread the retaining nut onto the shaft of the rheostat, tightening with a wrench. Do not overtighten.
- Attach the control knob to the rheostat shaft.
- Use the wire tie to secure the fan and rheostat wire harnesses together.

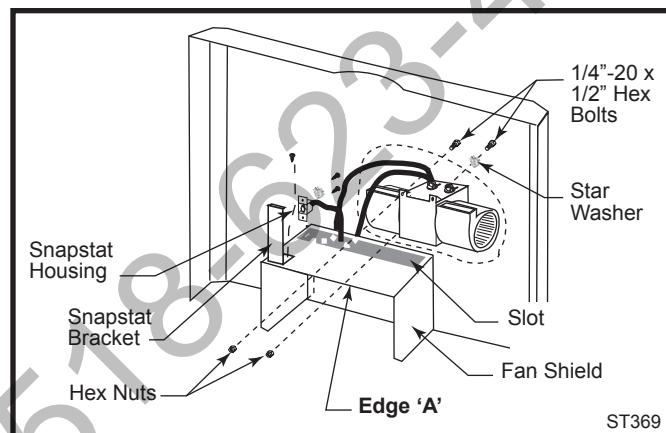


Fig. 12 Position fan behind rear shroud.

5. Attach the snapstat housing to the snapstat bracket with two sheet metal screws and one #8 star washer. (Fig. 12)
6. Attach the snapstat bracket, with the snapstat assembly attached to it, to the horizontal surface on the inside of the rear shroud. Use a sheet metal screw. There are predrilled holes at each corner of the panel for this. The vertical part of the snapstat bracket should be 3/16" back from Edge 'A'. (Fig. 12)
7. Attach the fan assembly to the rear shroud using two 1/4"-20 x 1/2" hex head bolts, two 1/4"-20 nuts and one 1/4" star washer. (Fig. 12)
8. Reattach the stove's rear shroud.
9. Reattach the rear shroud cover plate by fastening it to the rear shroud as shown in Figure 13. The top edge of the cover plate goes inside the rear shroud. Reinstall and tighten the six sheet metal screws around the draft hood opening; see 'A', Figure 13. Use two screws from the fan kit to fasten the rear shroud to the fan shield; refer to 'A', Figure 13.

Plug the fan cord into a standard grounded 110 volt household outlet.

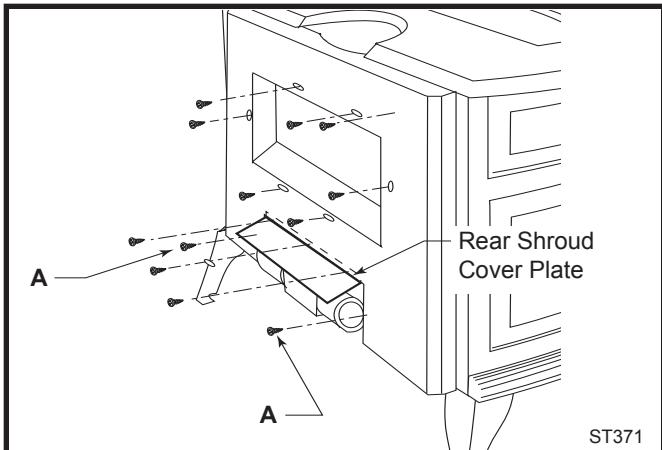


Fig. 13 Attach rear shroud cover plate to the rear shroud.

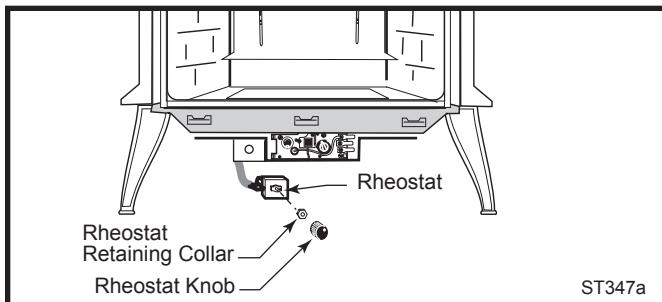


Fig. 14 Attach the fan rheostat.

### Install the Optional Fan

These instructions are for stoves with serial numbers starting at #1457 (RNVODRN), #1944 (RNVODRP).

If you are installing the optional convection Fan Kit #2767 (FK26), continue here. It is easiest to install fan kit before connecting gas line. If you are not installing a Fan Kit, proceed to Venting System Assembly.

1. The fan kit includes a Blower Assembly and a Rheostat Assembly, connected by a cable. The Blower Assembly mounts to the bottom rear of the stove, and the Rheostat mounts to the left side of the valve. The assembly includes a 'snapstat' which automatically turns the fan On (or Off) above (or below) approximately 109°. The Rheostat also provides a range of fan speed settings from Off (which overrides the snapstat function) to High. Unpack and inspect the Blower assembly. Confirm that the fan spins freely.
2. Loosen the four phillips head screws which secure the rear shroud to the stove sides. (Fig. 15)
3. Carefully pull the shroud assembly away from the rear of the stove.
4. With the rear shroud assembly in the upright position, set the bottom of the shroud on a padded surface to prevent scratching the surface. Unfasten the four phillips head screws which attach the outer shroud to the inner duct assembly.

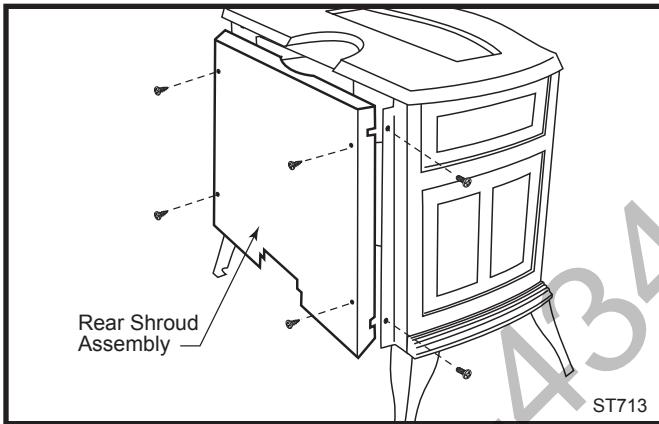


Fig. 15 Remove rear shroud.

5. Attach the fan assembly to the fan bracket provided in the finish bag. Use the #10 sheet metal screws provided with fan kit. Do not remove finger guard screws. (Fig. 16)

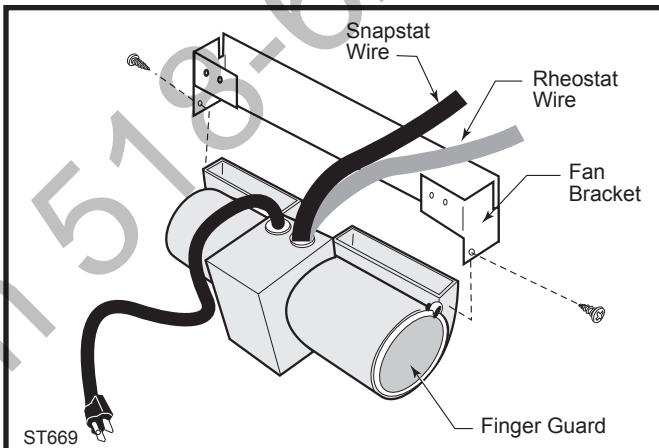


Fig. 16 Attach the fan assembly to the fan bracket.

6. Connect snapstat leads. Disconnect the snapstat module from the leads inside the snapstat bracket. (Fig. 17) Bend open the snapstat bracket. Use needle nose pliers to remove the black plastic grommet from the bracket. Discard the bracket. Insert the grommet and wires into the large hole at the bottom right corner of the inner shroud. Feed the snapstat wire leads through the grommet into the stove interior. Connect the two wires to the two snapstat extension leads attached to the inner shroud or, on some models, in between the inner and outer shroud.
7. Position the fan assembly so the ducts slide between the inner and outer shroud. The inner shroud should engage with the two slots in the ends of the bracket so that bracket and shroud are interlocked. (Fig. 18) Secure the bracket with the four sheet metal screws provided in the finish bag.

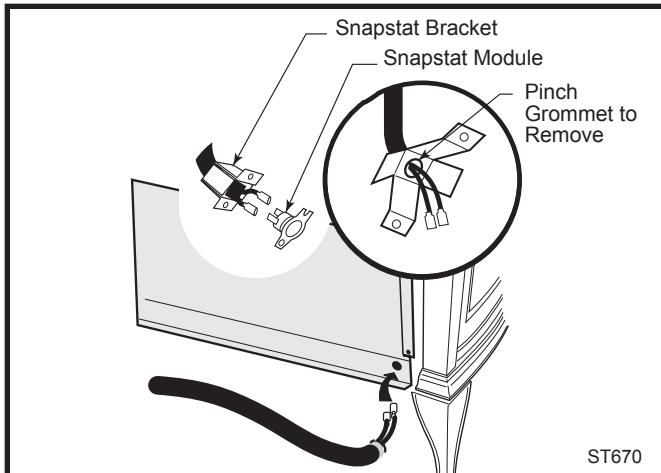


Fig. 17 Remove the snapstat and grommet from the bracket and insert the grommet into the inner shroud.

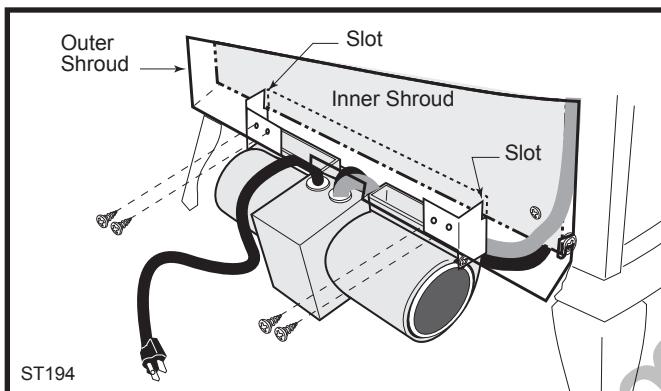


Fig. 18 Position the fan to engage the inner shroud with the fan bracket slots and secure with sheet metal screws.

- Route the rheostat wire assembly to the right between the inner and outer shroud. Run the wire through the slots at the bottom right corner of the inner shroud. Some models have the extension wire assembly attached to the inner shroud.
- Refasten the outer shroud to the inner duct assembly.
- Install the snapstat by loosening the front screw on the inner side of the duct (Fig. 19) slide the snapstat under the head of the screw and tighten. Connect the leads to the snapstat. Make sure the snapstat assembly is mounted straight front to back.

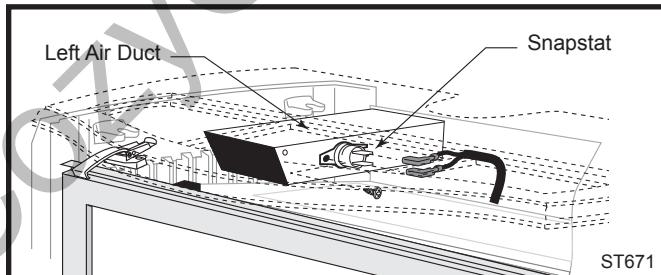


Fig. 19 Install the snapstat and connect the extension wire terminals. View is with top removed, however, access is available through the rear when installing fan before gas line connection.

11. Slide shroud assembly over the sides and fasten the four screws loosened earlier.

12. The rheostat control switch attaches to the left side of the valve bracket at the front of the stove. (Fig. 20)

- Remove retaining nut from shaft of rheostat. (if preinstalled)
- Insert the rheostat through the hole in the back of the left side of the valve bracket, aligning the locator pin with the smaller hole in that bracket.
- Thread the retaining nut onto the shaft of the rheostat, tightening with a wrench. Do not over-tighten.
- Attach the control knob to the rheostat shaft.
- Use the wire tie to secure the fan and rheostat wire harnesses together.

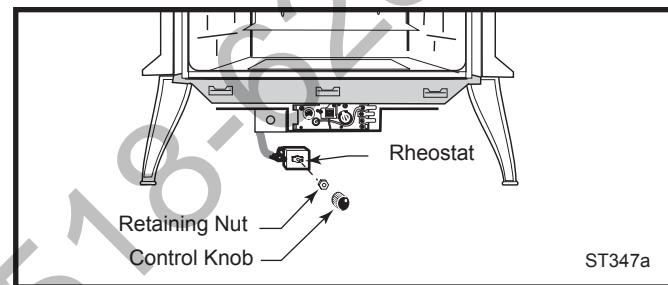


Fig. 20 Attach rheostat to left side of valve.

- Plug the power cord into a standard grounded 110 volt household outlet. If the fan control knob is not turned to the OFF position, the fan will turn on when the temperature at the snapstat reaches approximately 109°F.

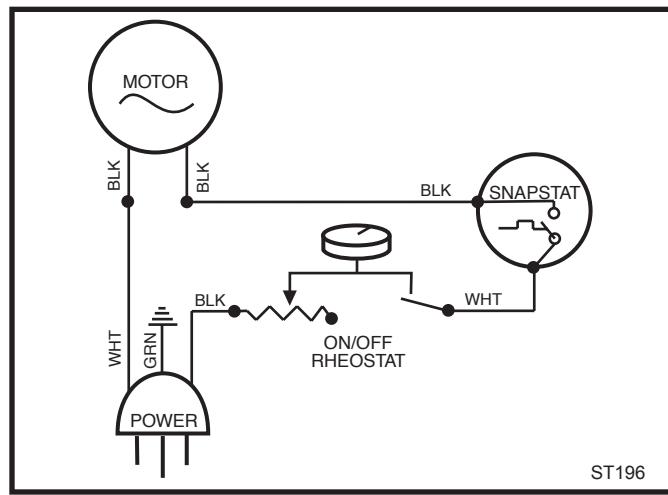


Fig. 21 #2767 / FK26 Fan wiring diagram.

## Venting System Assembly

Adjust the leg levelers as needed. They should not extend any further from the leg than necessary.

The venting collar is on the sheet metal draft hood/heat exchanger assembly, over the firebox. Use a B-vent adapter, from the same maker as the rest of the B-vent components, to join the first section of venting to the draft hood.

The RNVOD stove includes a vent safety switch. Operating this stove when not connected to a properly installed and maintained venting system, or tampering with or disconnecting the vent safety switch can result in carbon monoxide (CO) poisoning and possible death.

The stove includes a bracket for installing decorative 6 inch (150mm) round stove pipe around the B-vent, for appearance purposes only. The decorative pipe need not be concentric with the vent pipe.

If the installation includes decorative stove pipe around the venting system, make a cardboard template of the decorative pipe by tracing its circumference. Put this template in the flue recess in the stove top. Position the template to fit well against the front of the recess. (Fig. 22) Use this template to locate the bracket to hold the decorative pipe. Depending on spacing, the bracket may fit inside the decorative pipe without interfering with the vent system. Fasten the bracket to the draft hood/heat exchanger assembly with a sheet metal screw.

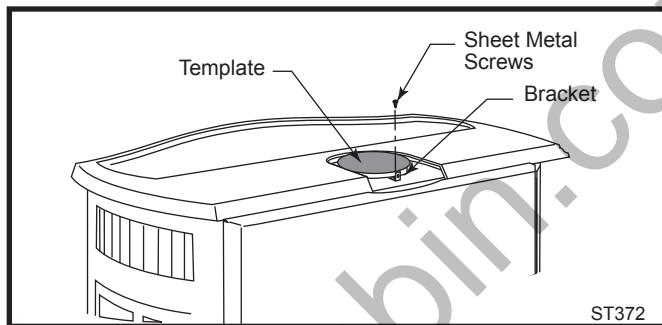


Fig. 20 Use a template to locate the bracket for decorative pipe to surround the B-vent pipe.

Insert the B-vent adapter into the flue collar and drill 1/8" (3mm) pilot holes through both the stove's collar and the adapter. Attach the adapter to the flue collar with sheet metal screws. (Fig. 21)

Attach the first section of venting to the B-vent adapter. Depending on the length of the individual venting sections and the lengths of the decorative pipe, you may need to slip the decorative pipe over the venting sections before attaching upper sections to lower ones. The sections of decorative pipe should be oriented with their seams (if any) toward the wall; sections usually do not need to be fastened at each joint, other than slip sections. The decorative pipe need not be fastened to the locating bracket on the stove. If the layout includes a slip section, this should be the last section of pipe visible in the room at the ceiling. Refer to Page 7, Figure 6, for details on joining the decorative pipe at the ceiling.

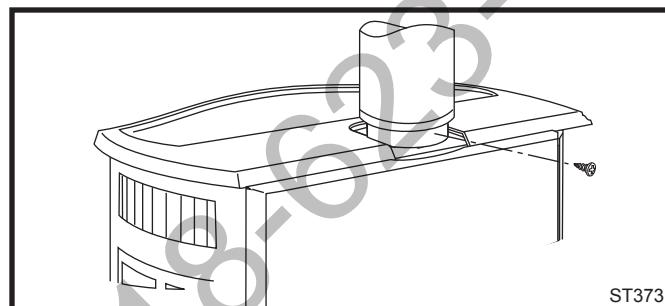


Fig. 23 Attach the B-vent adapter to the flue.

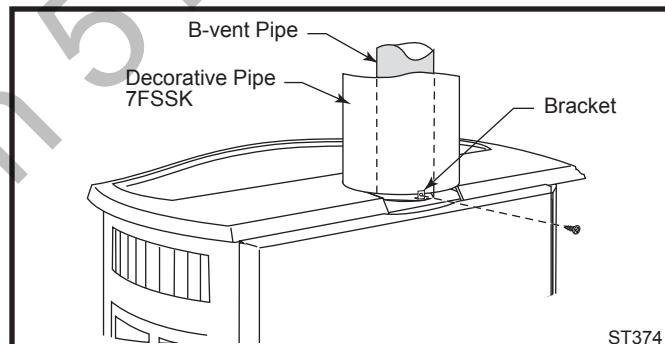


Fig. 24 Install decorative pipe over the B-vent pipe.

## Connect the Gas Supply Line

Check the Rating Plate attached by a steel cable to the firebox, to confirm that you have the appropriate firebox for the type of fuel to be used. The Radiance may be converted from one gas to another using the appropriate Fuel Conversion Kit listed on Page 26.

### CAUTION



**This appliance should only be connected by a qualified gas technician. Test to confirm manifold pressures as specified below.**

**The Radiance Heater and its individual shutoff 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 Heater 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 pressure equal to or less than 1/2 psig.**

**There must be a gas shutoff between the stove and the supply.**

**In order to connect Natural Gas, use a fitting with a 3/8" NPT nipple on the valve side and 1/2" natural gas supply line with an input of 35,000 BTUs at a manifold pressure of 3.5" and a minimum inlet supply pressure of 5.5" w.c.**

**In order to connect Propane, use a fitting with 1/2" NPT on the valve side and 1/2" propane gas supply line with an input of 35,000 BTUs at a manifold pressure of 10.0" and a minimum inlet supply pressure of 11.0" w.c.**

**In the U.S.:** Gas connection should be made in accordance with current National Fuel Gas Code, ANSI Z223.1/NFPA 54. Since some municipalities have additional local codes, be sure to consult your local authority.

**In Canada:** consult the local authority and CSA-B149.1 installation code.

Connect the gas supply and test for leaks. Use a 50/50 solution of liquid soap and water to test for leaks at gas fittings and joints. Apply water/soap solution with brush only - *do not over apply*. **NEVER test with an open flame.** Light the pilot according to the directions on page 16, before going to the next step.

## Burner Information

The appliance must only use the gas specified on the rating plate, unless converted using a Fuel Conversion Kit. To convert from LP to Natural Gas use Kit #000-5009. To convert from Natural Gas to LP use Kit #000-5010.

Conversion instructions are provided with each kit and beginning on Page 19 in this manual.

**THIS APPLIANCE SHOULD BE CONNECTED TO THE GAS SUPPLY ONLY BY A QUALIFIED GAS SERVICE TECHNICIAN. FOLLOW ALL LOCAL CODES.**

**THERE MUST BE A GAS SHUT-OFF BETWEEN THE STOVE AND THE SUPPLY.**

**In order to connect Natural Gas**, use a fitting with a 3/8" NPT nipple on the valve side and 1/2" natural gas supply line with an input of 35,000 BTUs at a manifold pressure of 3.5" and minimum inlet supply pressure of 5.5" w.c.

**In order to connect Propane**, use a fitting with a 3/8" NPT nipple on the valve side and 1/2" propane gas supply line with an input of 35,000 BTUs at a manifold pressure of 10.0" and minimum inlet supply pressure of 11.0" w.c.

## Install ON/OFF Switch

The switch assembly parts are found in the parts bag.

1. Attach switch assembly to left rear side of stove shroud (when facing shroud) using two screws and existing holes in shroud. (Fig. 25)
2. Run wires down back of stove, under bottom of rear shroud to valve.
3. Attach wires to valve terminals. (Fig. 26)

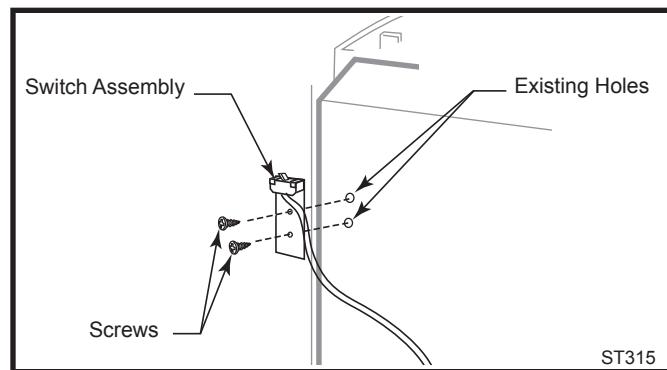


Fig. 25 Attach switch assembly to rear shroud.

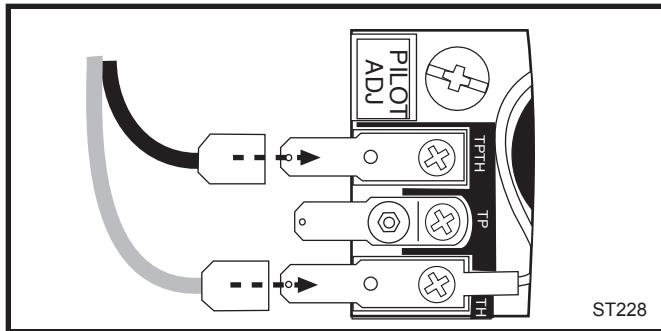


Fig. 26 Attach switch wires to valve.

### Thermostat Connection (optional)

Use only a thermostat rated for 500 - 750 millivolts. Check the table below for the appropriate gauge thermostat wire to use for the length of lead required in your installation.

Thermostat Wire / Gauge	Maximum Run
18	40 feet
20	25 feet
22	16 feet

1. Install the wall thermostat in the desired location and run the wires to the stove location. Terminate these leads with 1/4" female connectors.
2. Connect the thermostat wires to the valve. (Fig. 26)

### Install the Mesh and Grille

Place the mesh and grille on the top of the Radiance stove to complete assembly.

### Install Rear Bracket and Log Set

1. Remove the logs from their packaging, and inspect each piece for damage. **DO NOT INSTALL DAMAGED LOGS.**

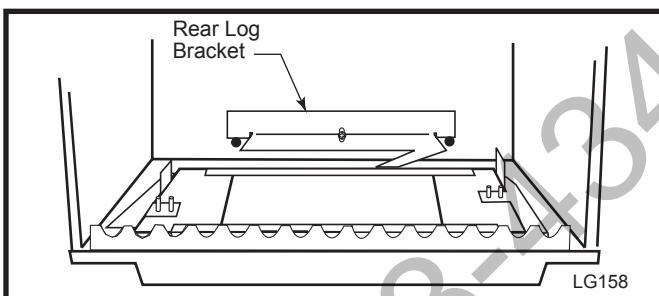


Fig. 27 Radiance firebox and rear log bracket.

2. Install the left rear log by placing it on the rear log bracket at the back of the firebox. (Fig. 28) The left rear log should touch the back wall of the firebox. Slide the left rear log to the left until the left side lines up with the left bracket. (Fig. 28) When the left rear log is in place the front left corner of the log should rest on the decorative grate.
3. Install the right rear log by placing it on the rear log bracket at the back toward the right. Make sure the right side of the right rear log lines up with the right bracket. (Fig. 29) **NOTE:** When the right and left rear logs are in place, they should touch the back of the firebox and each other.
4. Install the right log by engaging hole on the bottom left of the right log with pin on the front left of the right rear log. (Fig. 29) Set the bottom right of the right log on the bracket and bring the bottom right forward to come in contact with decorative grate on the right.
5. Loosely sprinkle the lava rocks directly on top of the burner just behind decorative grate. Use the lava rock to cover brackets on the burner. Do not place lava rocks toward back of burner. The lava rock is shipped inside the finish bag assembly. (Figs. 29, 30)

Figure 28

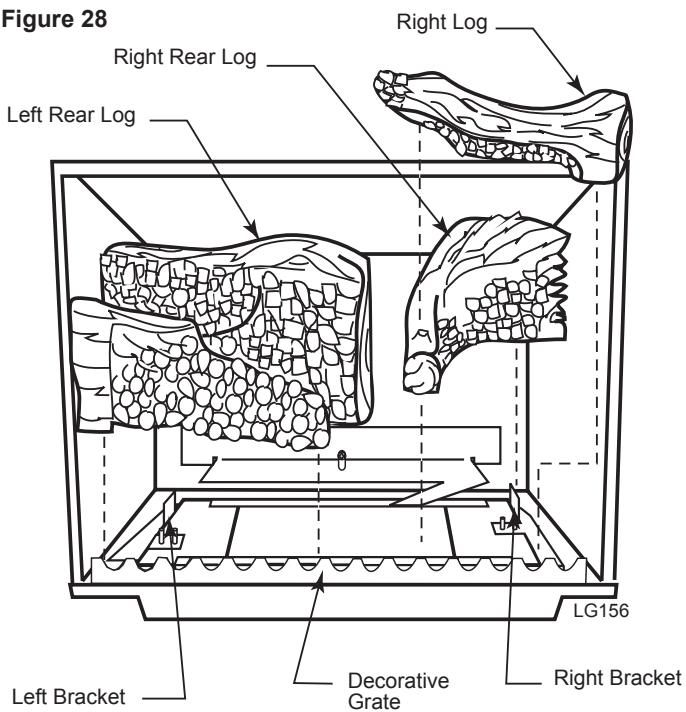


Figure 29

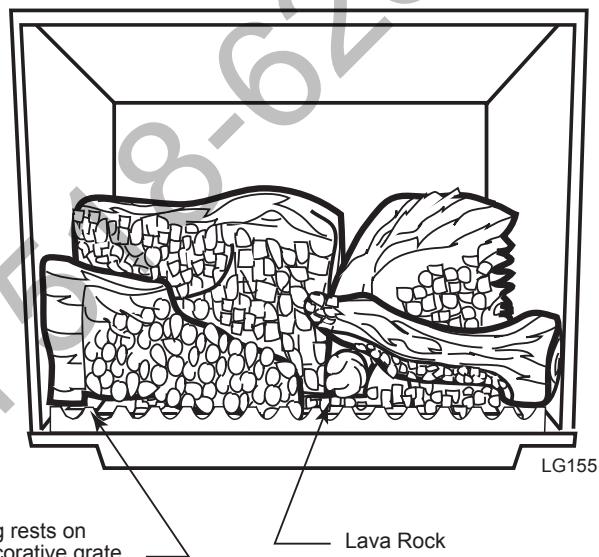
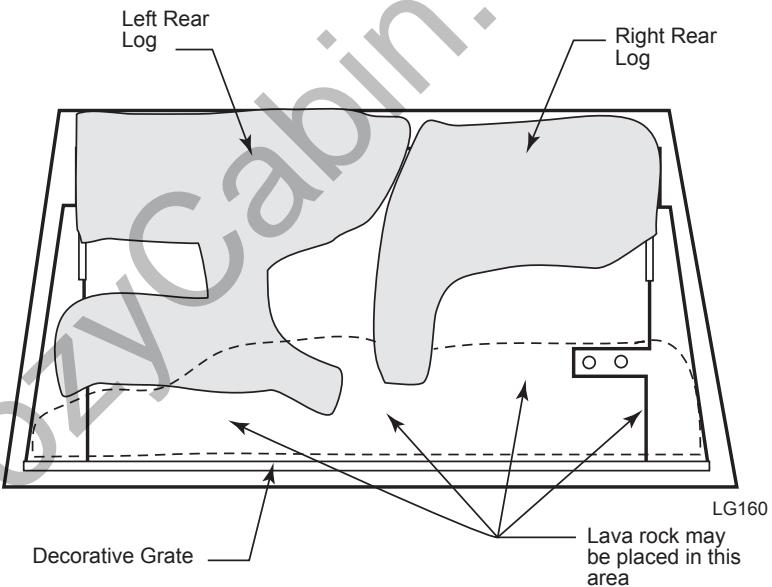


Figure 30



# Operation

## Operable Doors

The Radiance is shipped with the operable door front. The stove may be operated with the doors either open or closed. To open the front doors, insert the handle into the door latch stub and turn it to the right and up. (Fig. 31) When not in use, the handle may be stored in the handle holder on the right side of the rear shroud. (Fig. 32)

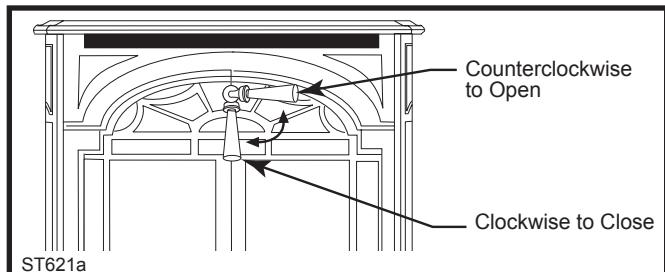


Fig. 31 To open the front doors, turn handle counterclockwise.

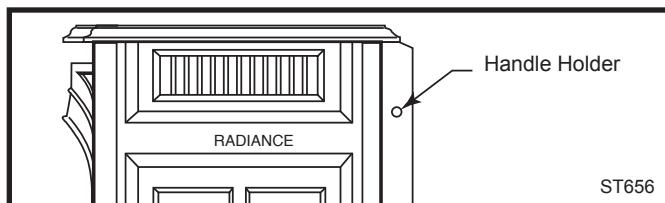


Fig. 30 When not in use, store handle in the handle holder.

## Your First Fire

Read these instructions carefully and familiarize yourself with the burner controls shown on Page 16. Locate the pilot assembly, Figure 33. Follow the lighting instructions on Page 17 exactly.

During the first fire, it is not unusual to smell some odor associated with new logs, paint and metal being heated. Odors should dissipate within an hour or so, however, you can open a window to provide fresh air to alleviate the condition.

## Pilot and Burner Inspection

Each time you light your heater check that the pilot flame and burner flame patterns are as shown in Figures 35 and 36. If flame patterns are incorrect, turn the heater off. Contact your dealer or a qualified gas technician for assistance. Do not operate the heater until the pilot flame is correct.

## Flame & Temperature Adjustment

For units equipped with HI/LO valves, the flame adjustment is accomplished by rotating the HI/LO knob located near the center of the gas control valve. (Fig. 34)

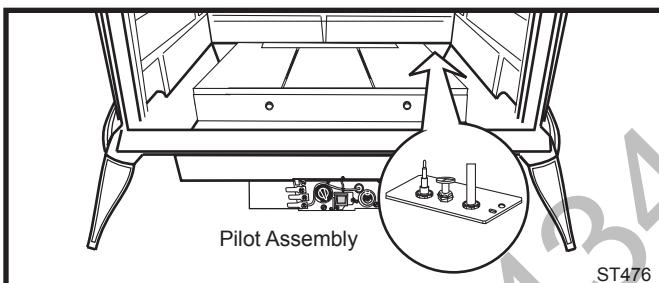


Fig. 33 Pilot assembly location.



Fig. 34 Flame adjustment knob for Honeywell valve.

## Flame Characteristics

It is important to periodically perform a visual check of the pilot and burner flames. Compare them to Figures 35 and 36. If the flame patterns appear abnormal contact a qualified service provider for service and adjustment.

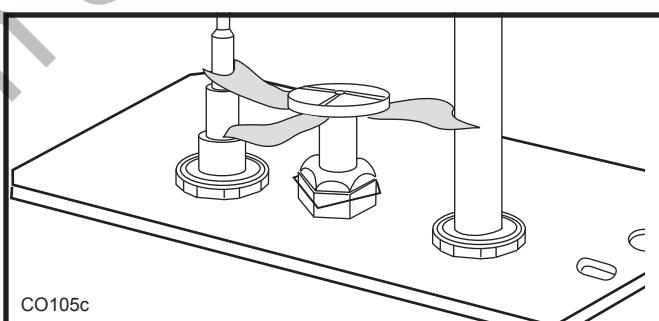


Fig. 35 Correct pilot flame pattern. SIT pilot.

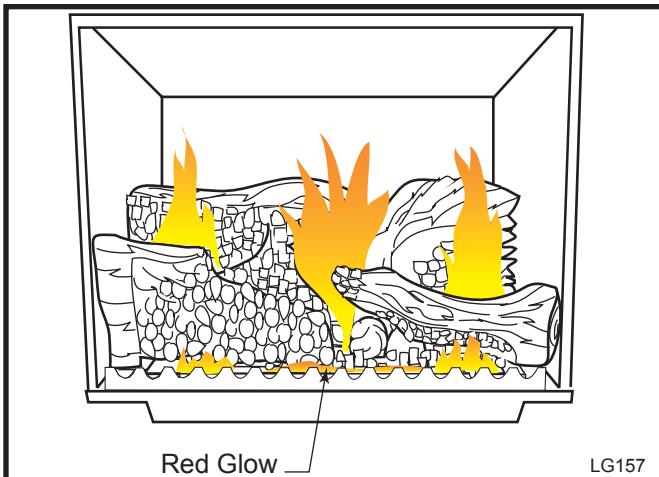


Fig. 36 Correct burner flame pattern.

# Lighting and Operating Instructions

## FOR YOUR SAFETY READ BEFORE LIGHTING

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

- A. This heater has a pilot which must be lit manually. When lighting the pilot follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the heater 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 fireplace
- 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 push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Applying force or any attempted repair may result in a fire or explosion.
- D. Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.

## Lighting Instructions

1. **STOP!** Read the safety information above.
2. Turn off all electrical power to the fireplace.
3. For MN/MP/TN/TP appliances ONLY, go on to Step 4. For RN/RP appliances turn the On/Off switch to "OFF" position or set thermostat to lowest level.
4. Open control access panel.
5. Push in gas control knob slightly and turn clockwise  to "OFF".



Euro SIT

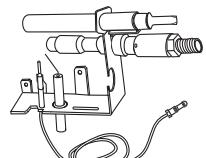
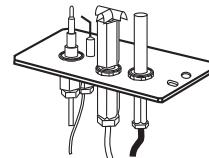
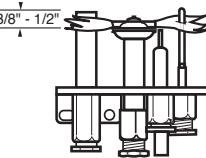


SIT NOVA



Honeywell

6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, **STOP!** Follow "B" in the safety information above. If you do not smell gas, go to the next step.
7. Remove glass door before lighting pilot. (See Glass Frame Removal section).
8. Visibly locate pilot by the main burner.
9. Turn knob on gas control counterclockwise  to "PILOT".



10. Push the control knob all the way in and hold. Immediately light the pilot by repeatedly depressing the piezo spark ignitor until a flame appears. 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 8.
- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
- If after several tries, the pilot will not stay lit, turn the gas control knob to "OFF" and call your service technician or gas supplier.
11. Replace glass door.
12. Turn gas control knob to "ON" position.
13. For RN/RP appliances turn the On/Off switch to "ON" position or set thermostat to desired setting.
14. Turn on all electrical power to the fireplace.

## To Turn Off Gas To Heater

1. Turn the On/Off switch to Off position or set the thermostat to lowest setting.
2. Turn off all electric power to the fireplace if service is to be performed.

3. Open control access panel.
4. Push in gas control knob slightly and turn clockwise  to "OFF". Do not force.
5. Close control access panel.

## Troubleshooting / Honeywell #8420 Gas Control System

NOTE: Before troubleshooting the gas control system, be sure the external gas shutoff is in the "ON" position.

**WARNING: REMOVE THE GLASS PANEL BEFORE PERFORMING ANY GAS CONTROL SERVICE WORK.**

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION
1. Spark ignitor will not light	A. Defective or misaligned electrode at the pilot  B. Defective ignitor (push button)	Using a match, light pilot. If pilot lights, turn off pilot and push the ignitor button again. If pilot will not light, check gap at electrode and pilot - it should be 1/8" to have a strong spark.  Push piezo ignitor button. Check for spark at electrode and pilot. If there is no spark at the pilot, and electrode wire is properly connected, replace ignitor.
2. Pilot will not stay lit after carefully following the lighting instructions	A. Defective pilot generator (thermocouple)  B. Defective automatic valve operator	Check pilot flame. It must impinge on the thermocouple or thermopile. NOTE: This pilot burner assembly uses both a thermocouple and a thermopile. The thermocouple operates the pilot flame. Tighten the thermocouple. The thermopile operates the main valve (ON and OFF). Clean and/or adjust pilot for maximum flame impingement on thermocouple and thermopile.  Turn valve knob to 'Pilot'. Maintain flow to pilot; millivolt meter should read greater than 10mV. If the reading is okay and the pilot does not stay on, replace the gas valve. NOTE: An interrupter block (not supplied) must be used to conduct this test.
3. Pilot lights, no gas to burner, valve knob ON, remote switch (rocker switch) ON	A. Remote switch or wires defective  B. Thermopile may not generate sufficient voltage  C. Plugged burner orifice  D. Defective automatic valve operator	Check rocker switch and wires for proper connection. Use jumper wires across terminals at rocker switch. If burner lights, replace rocker switch. If okay, use jumper wires across rocker switch wires at the valve; if burner lights, wires are faulty or connections are bad.  1. Be sure wire connections from thermopile at gas valve terminals are tight and thermopile is fully inserted into pilot bracket.  2. One of the rocker switch wires may be grounded. Remove rocker switch wires from valve terminals. If burner now stays lit, trace rocker switch wiring from ground. It may be grounded to the appliance or the gas supply line.  3. Check the thermopile with a millivolt meter. Take reading at thermopile ("TP" and "TP/TH") terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in PILOT position and with rocker switch OFF. Replace faulty thermopile if reading is below specified minimum.  Check burner orifices for debris, and remove.  Turn knob to ON, place rocker switch to ON, millivolt meter should read greater than 10 mV. If the reading is okay and the burner does not light, replace the valve.
4. Frequent pilot outage	A. Pilot flame may be too low or high, (blowing or lifting), causing the pilot to drop out  B. Possible blockage of the vent terminal	Clean and/or adjust pilot flame for maximum flame impingement on thermocouple and thermopile.  Check the vent terminal for blockage.

## Fuel Conversion Instructions

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

**CAUTION:** The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the conversion.

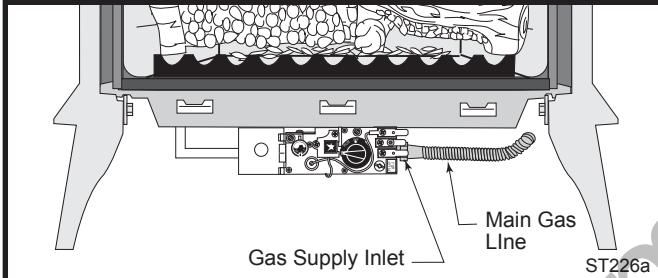


Fig. 37 Attach the gas line to the left side of the valve.

### Conversion Precautions

This conversion must only be completed by qualified personnel. Before proceeding, turn control knob on valve to OFF and turn gas supply OFF. Turn OFF any electricity that may be going to the appliance.

**CAUTION:** Allow stove to cool completely before beginning conversion.

### Conversion Procedure

1. Remove stove front. Lift stove front up and then swing bottom out and away to disengage from the stove body. (Page 22, Fig. 44)
2. Undo the right and left latches at the top of the glass frame. (Page 22, Fig. 45)
3. Pull the top edge of the glass and frame assembly away from the firebox face. Place the assembly out of the way on a flat, padded surface such as a counter protected by a towel.
4. Remove the logset from the firebox.
5. Remove the rear log bracket by unfastening the screw and pulling the bracket away. (Fig. 38)

6. Remove the right and left log bracket assembly by unfastening the two screws which hold the burner in place. (Fig. 38)

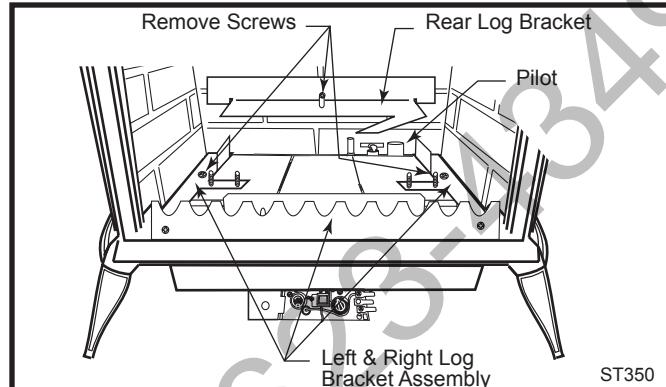


Fig. 38 Attach the gas line to the left side of the valve.

### Burner Orifice Conversion

1. Hold the burner at the right hand side and lift to clear the right burner leg. Then pull to the right to clear the injectors on the left hand side.
2. Remove injector orifices from left burner leg using 1/2" wrench. (Fig. 39)
3. Install conversion orifices. (Refer to Table 1)

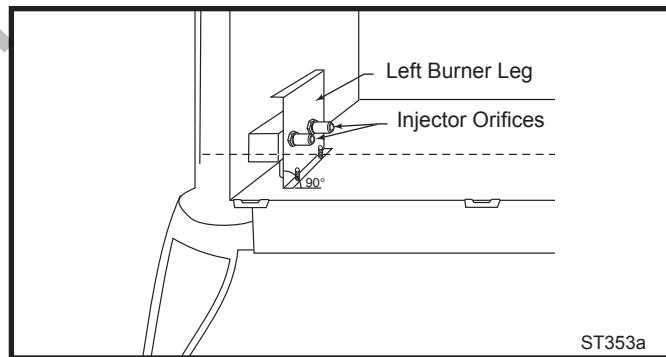


Fig. 39 Remove and replace injector orifices.

### Valve Conversion

#### Honeywell Valve

1. Remove cap from Hi-Lo knob. This can be accomplished by lifting the plastic cap off the screw. (Fig. 40)

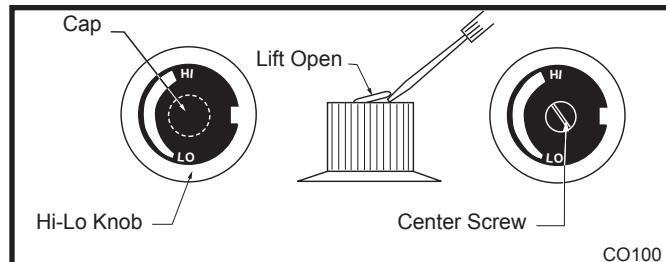


Fig. 40 Remove center screw from HI/LO knob.

2. Remove the screw from center of Hi-Lo knob with small screwdriver turning counterclockwise. (Fig. 40)
3. Insert blue painted screw when converting to natural gas and red painted screw when converting to LP.
4. Tighten screw (do not over tighten), replace cap.

## SIT 820 Valve

1. Using TORX T20 bit, remove and discard the three (3) pressure regulator mounting screws (A), pressure regulator tower (B) and the spring and diaphragm assembly (C). (Fig. 41)
2. Insure the rubber gasket (D) is properly positioned and install the new HI/LO pressure regulator assembly to the valve using the new screws (E) supplied with the kit. Tighten the screws securely. (Ref. torque = 25 in/lb) (Fig. 42)
3. Install the enclosed conversion label (F) to the valve body where it can easily be seen. (Fig. 42)

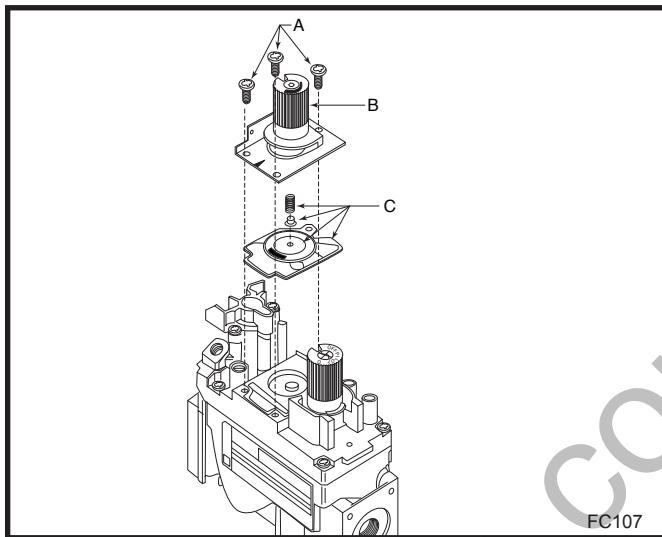


Fig. 41 Remove mounting screws, pressure regulator tower and spring and diaphragm assembly.

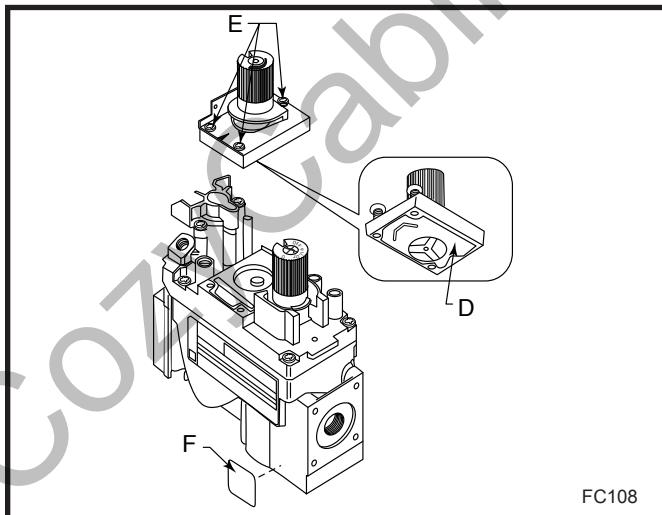


Fig. 42 Replace regulator.

## Pilot Orifice Conversion

1. Locate pilot. (Fig. 38)
2. Replace pilot orifice.

- Remove pilot hood by lifting up. (Fig. 43) **NOTE:** It is not necessary to remove the pilot tube for conversion.
- Remove pilot orifice with allen wrench. (Fig. 44)
- Install the conversion orifice.
- Reinstall pilot hood. Be sure to align hood with index tab.

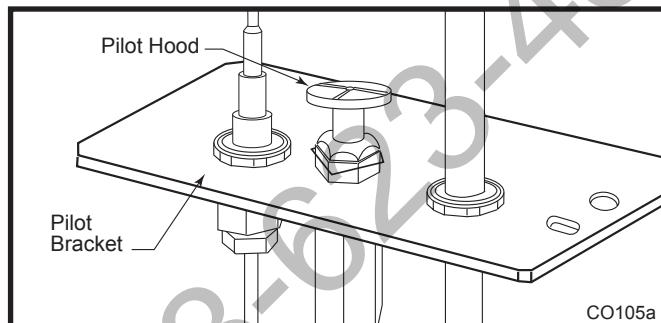


Fig. 43 Remove pilot hood.

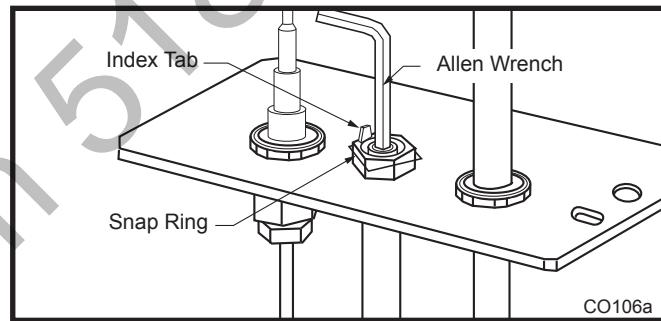


Fig. 44 Remove pilot orifice.

3. Air shutter adjustment. The unit is shipped from the factory with the air shutter open 1". For LP units only, the air shutter could be closed further. Refer to Table 3 for minimum air shutter opening. The air shutter is located on the bottom of the burner to the left. (Fig. 45)

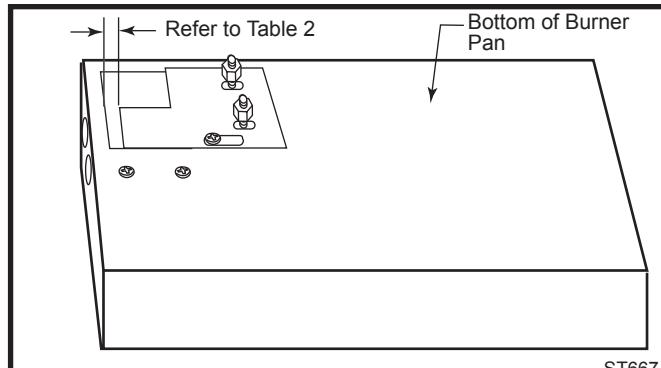


Fig. 45 Adjust air shutter on bottom of heater. Refer to Table 2 for correct position.

4. Replace burner. Slide the burner in at an angle with left side lower than the right side. Slide the left side onto the injectors, making sure the burner leg remains at a 90° angle to the base. Lower the right hand side down in to place. Make sure the burner is as far left as possible and the injector shoulders are inside the burner.

**NOTE:** It is very critical to keep the left burner leg, which holds the injectors, at a 90° angle to the base. (Fig. 39) This keeps the orifices aligned with the tubes inside burner. Failure to do so could affect the flame appearance and performance of the unit.

5. Place conversion label on valve.
6. Reinstall the right and left log bracket assembly.
7. Reinstall the rear log bracket.
8. Replace logs.
9. Replace glass and stove front.

Conversion is complete.

**Table 2 Injector Orifice Size Matrix**

Conversion to Natural Gas					Input (BTU/h)	
Kit #	Front	Part #	Rear	Part #	Minimum	Maximum
000-5009	#51 / .067"	30000449	#40 / .098"	20004263	25,000	35,000
Conversion to LP						
Kit #	Front	Part #	Rear	Part #	Minimum	Maximum
000-5010	#57 / .043"	20004587	#54 / .055"	20000130	27,500	35,000

**Table 3 Air Shutter Adjustment**

Model	Natural Gas	LP
RNVOD	1½"	Fully closed

## Maintenance

Your Radiance Gas Heater will provide years of service with minimal upkeep. The following procedures will help ensure that your stove continues to function properly.

### Annual System Inspection

Have the entire heater and venting system inspected annually by a qualified gas technician. Replace any worn or broken parts.

### Logset and Burner Cleaning and Inspection

Cleanliness is critical to the proper function of the heater. The logset and burner must all be kept free of dust and unobstructed by debris. Inspect these areas before each use and clean as necessary.

1. Turn the burner OFF and let the heater cool completely before cleaning.
2. Lift the Stove Front up and then swing the bottom out to disengage it from the heater shell. (Fig. 46)
3. Carefully remove the glass and frame assembly and place it out of the way on a flat, padded surface such as a counter protected by a towel.
4. Carefully inspect the Logs for damage. Contact your local dealer if any damage is evident.
5. Use a soft bristled brush to sweep dust or debris from the Logs, Pilot and Burner. Use care as the logs are fragile and susceptible to damage.
6. Replace the glass panel and frame assembly.
7. Replace the Stove Front.

### Care of Cast Iron

An occasional dusting with a dry rag will help keep the painted surfaces looking new. Use high-temperature stove paints, available through your local dealer, to touch-up areas as needed. Clean areas to be painted with a wire brush and be sure to cover the logs, burner and valve assembly, glass and frame assembly. Apply the paint sparingly; two light coats of paint will give better results than a single heavy coat.

Clean porcelain enamel surfaces with a soft, damp cloth. Do not use abrasive cleaning agents. If necessary, use only a cleaning agent formulated especially for use on porcelain enamel surfaces.

### CAUTION

**TURN THE PILOT OFF BEFORE PAINTING.  
ALLOW THE HEATER TO COOL COMPLETELY  
BEFORE PAINTING**

### Cleaning the Glass

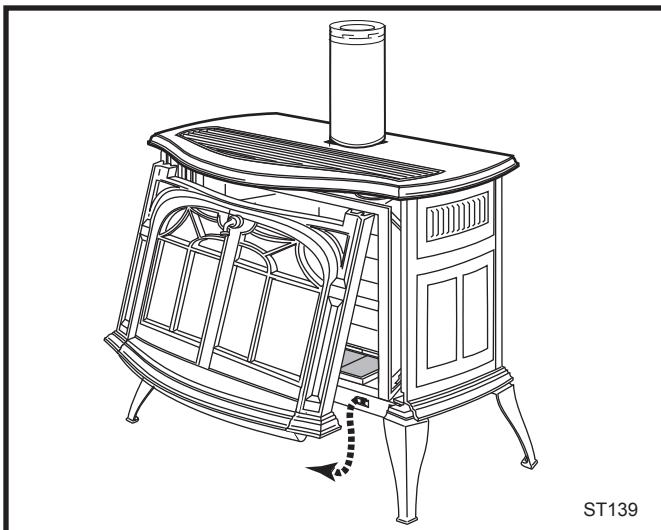
**WARNING: Let the glass cool completely before attempting to clean.**

It will be necessary to clean the glass periodically. During start-up, condensation, which is normal, forms on the inside of the glass and causes lint, dust and other airborne particles cling to the glass surface. Also initial paint curing may deposit a slight film on the glass. It is therefore recommended that the glass be cleaned two or three times with a non-ammonia household cleaner and warm water (we recommend gas fireplace glass cleaner). After that the glass should be cleaned two or three times during each heating season depending on the circumstances present.

**Clean glass after first two weeks of operation.**

### Glass Replacement

Replace glass only with CFM Corporation approved parts. Refer to Page 25 for Replacement Parts. Refer to Figure 47 for removal of the damaged glass frame.



ST139

**Fig. 46 Remove stove front.**

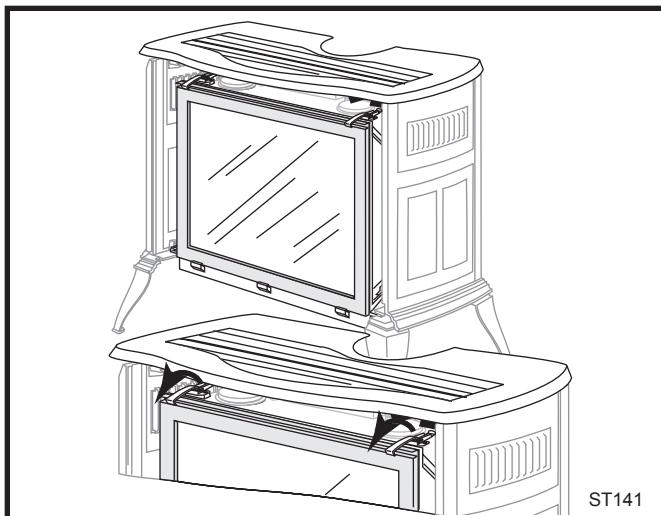


Fig. 47 Release the latches to remove the glass frame.

### Gasket Replacement

The Radiance Gas Heater uses a 'tadpole' type gasket to seal between the glass panel and the frame. In time, this gasket can become brittle and compressed and should be replaced. New gasket is available from your dealer.

Shut off the gas supply and allow the stove to cool. Wear safety goggles and a dust mask.

1. Remove the Front, Glass Frame and Glass Panel. (Figs. 46 & 47) Remove the old gasket. Use a razor blade, with rounded corners, to separate the glass and gasket from the frame, and to clean the glass of any remaining cement or bits of gasket.
2. Determine the correct length of gasket by laying it out around the edge of the glass. Allow an extra 1 - 2" (25-50mm). Mark the spot to be cut. Use a utility knife.
3. Starting on a long edge, remove about 6" of the protective paper strip and apply the flat adhesive face of the gasket around the outside-facing edge of the panel. Continue around the panel, applying about 6" at a time being careful not to stretch the material. Do not overlap the gasket ends. (Fig. 48)
4. Apply a thin bead of high temperature silicone rubber sealant along the inside corner of the glass frame, all around the perimeter. Place the flat gasketed side of the glass panel back into the steel frame. Pinch the rounded inside-facing gasket material to bulk it up.
5. Replace the glass frame and front panel as previously described.

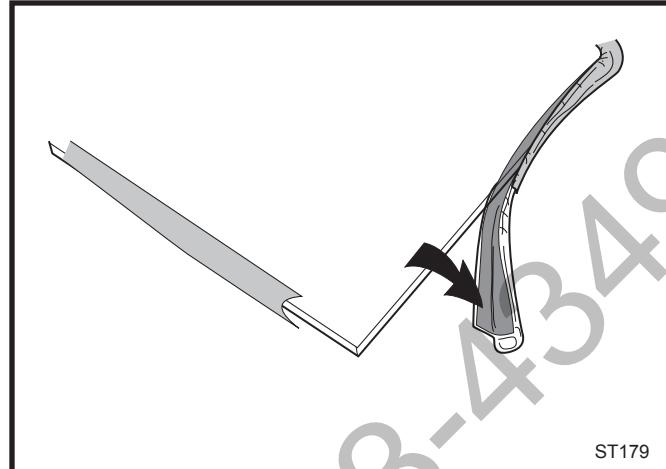


Fig. 48 Wrap the gasket material around the outside edge of the glass.

### Inspect the Vent System Annually

Have the vent system inspected annually by a qualified technician. Shut off the main gas supply before inspecting the system. Both the inner exhaust pipe and the outer combustion supply pipe must be checked to confirm that they are unblocked and in good condition.

### Check the Gas Flame Regularly

To ensure that the stove is operating properly, check the flames periodically to confirm that they match Figure 49. The flames will be blue during the first 15-20 minutes of operation, and will gradually turn to yellow after that. Do not use your stove if the flame pattern differs from that shown here. Contact your Vermont Castings dealer or a qualified technician for help.

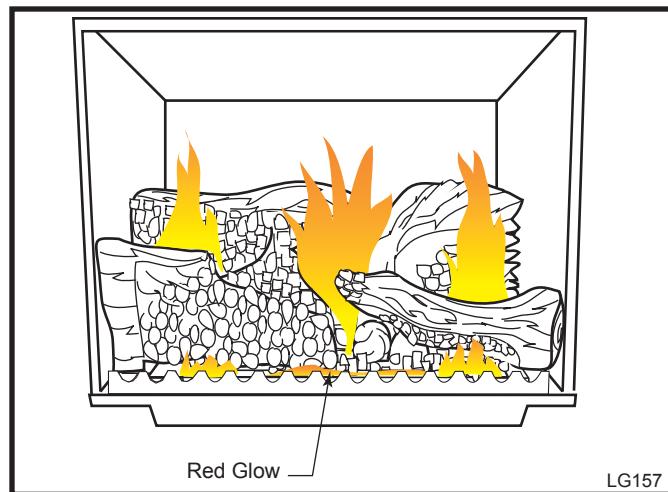


Fig. 49 Correct flame pattern.

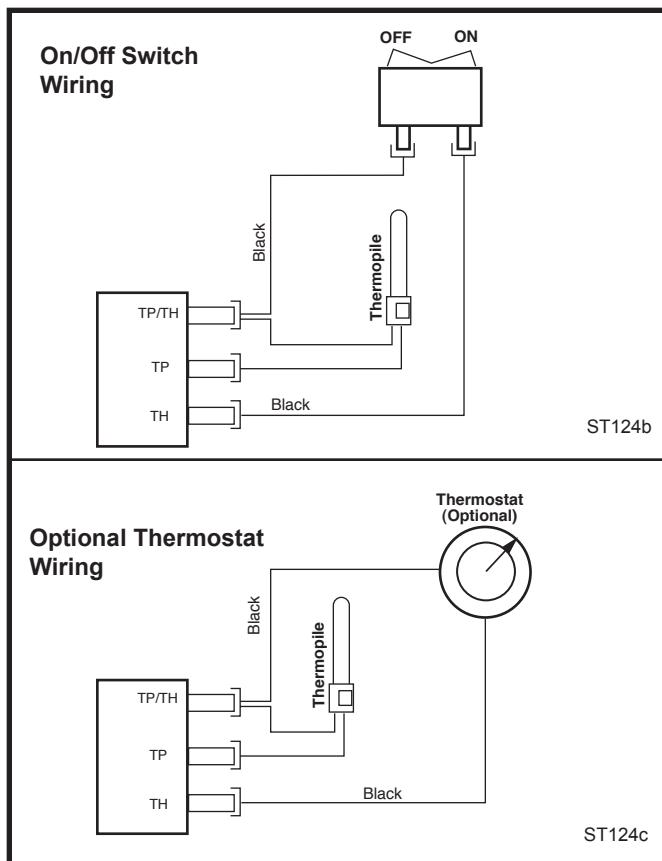


Fig. 50 On/Off switch and optional thermostat circuit.

**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.

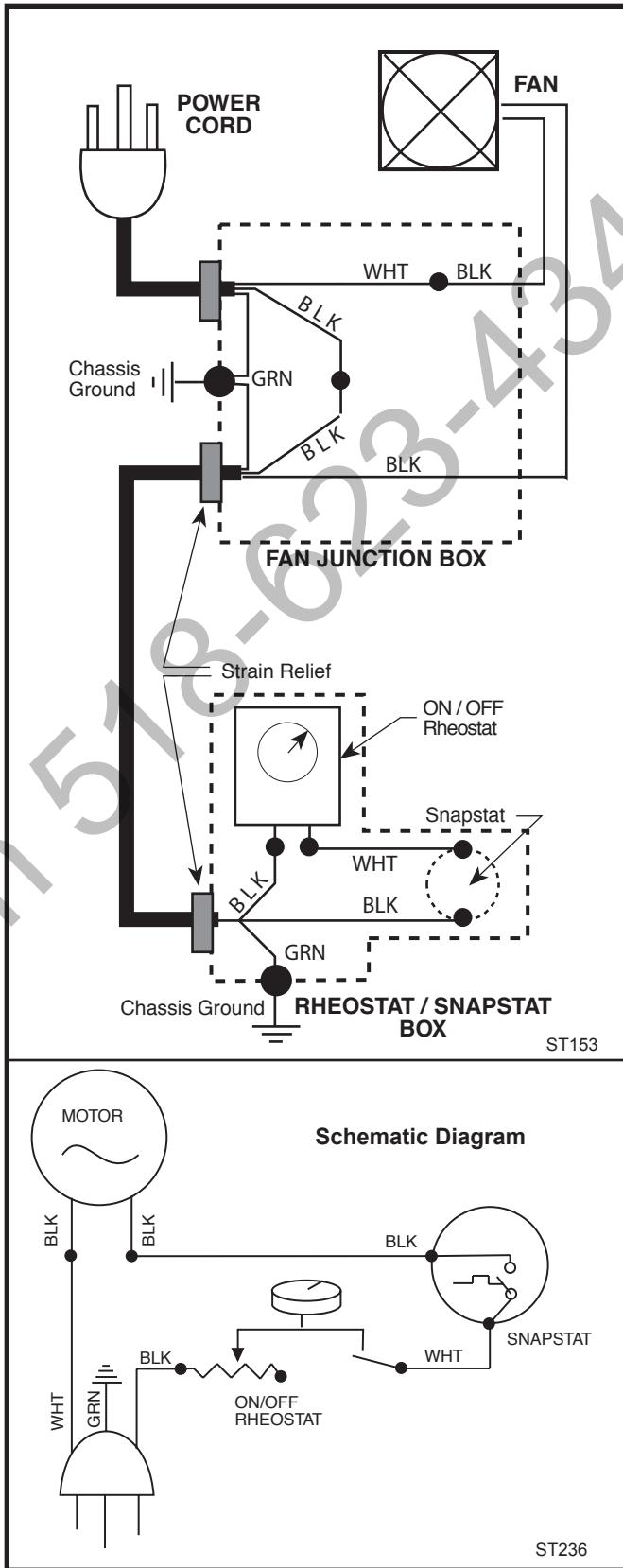
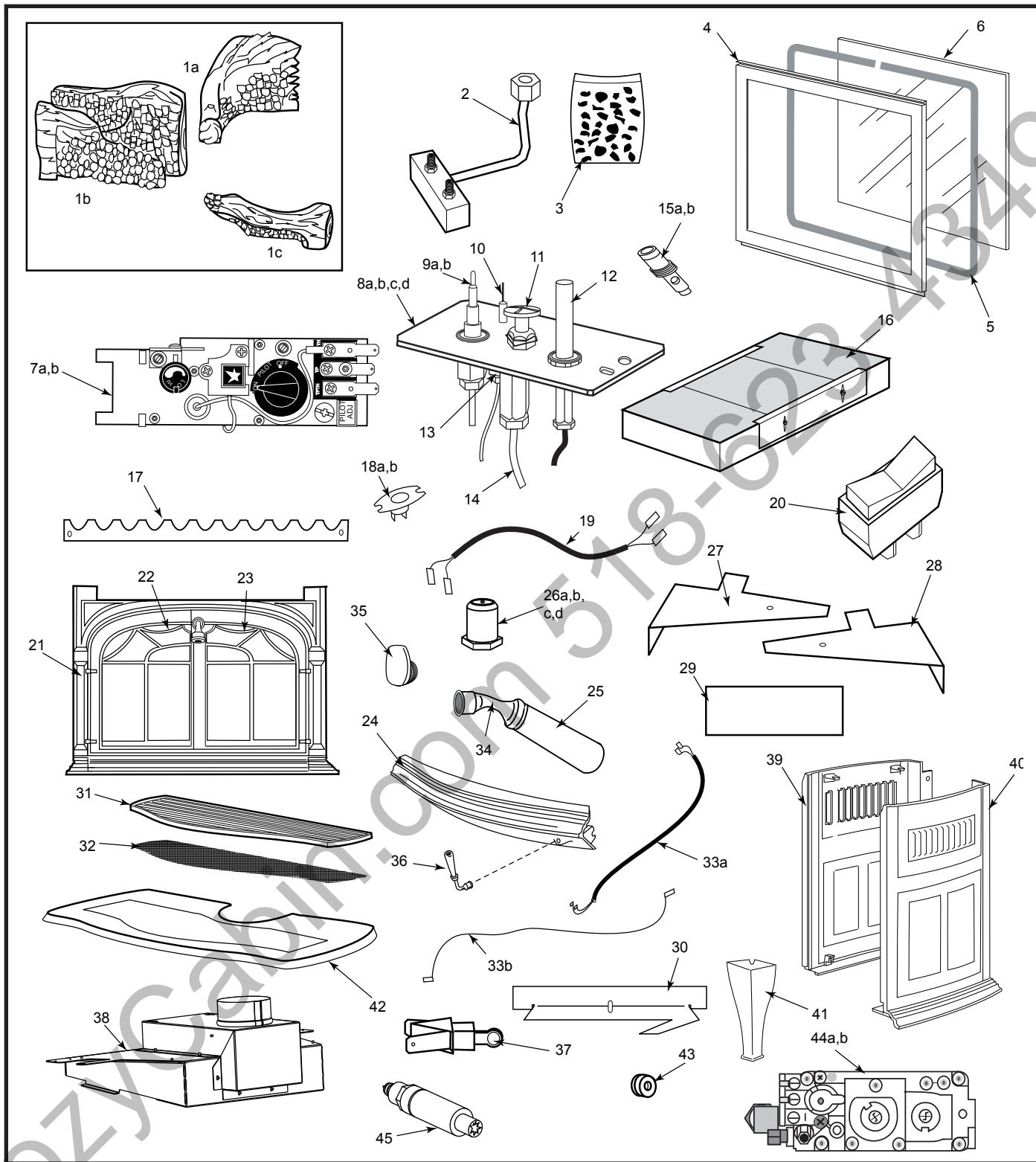


Fig. 51 Safety Limit Switch wiring.



CFM Corporation reserves the right to make changes in design, materials, specifications, prices and discontinue colors and products at any time, without notice.

## Radiance Natural Vent Gas Heater (RNVOD)

Models: 3233 thru 3236, 3340 thru 3349, 3355, 3356

**Radiance Natural Vent Gas Heater (RNVOD)**

Models: 3233 thru 3236, 3340 thru 3349, 3355, 3356 (continued)

Ref.	Description	RNVOD
1.	Log Set -RDVOD/RNVOD	20004184
1a.	Right Rear Log RDNOD/RNVOD	20004185
1b.	Left Rear Log RDVOD/RNVOD	20004186
1c.	Right Log RDVOD/RNVOD	20004187
2.	Manifold Assembly	20003739
3.	Lava Rock - Burner	57897
4.	Frame, Glass RDV40	1409112
5.	Glass, Gasket Med. Knit - RDV40	1203702
6.	Glass, GFP Firebox	1601290
7a.	Valve RN Honeywell VS8420E 2038 (Serial #'s up to 2512)*	10001782
7b.	Valve RP Honeywell VS8420E 2020 (Serial #'s up to 2512)**	10001759
8a.	Pilot Assembly 3/BVent RN 0.199.705	10002389
8b.	Pilot Assembly 3/BVent RP 0.199.704	10002390
8c.	Pilot Assembly 3Way N/DV RN 0.199.706 Serial #'s starting at #1457 (RNVODRN)	10002264
8d.	Pilot Assembly 3Way N/DV RP 0.199.703 Serial #'s starting at #1944 (RNVODRP)	10002265
9a.	Thermocouple Serial #'s up to #1456 (RNVODRN), #1943 (RNVODRP)	54912
9b.	Thermocouple 24" Serial #'s starting at #1457 (RNVODRN), 1944 (RNVODRP)	53373 7531137
10.	Electrode Ignitor w/cable SIT 24	10001297
11.	Pilot Top Convertible	10002266
12.	Thermopile 18" RS	51827 7533113
13.	Nut Electrode SIT #0.974.144	57886
14.	Tubing Pilot w/ Fitting 1/8 x 24"	10001296
15a.	Orifice Pilot #62 NG Top Convertible	10002268
15b.	Orifice Pilot #35 - LP Top Convertible	10002269
16.	Burner Housing Assembly	20003526
17.	Burner Decorative Grate	20003536
18a.	Switch, Vent Safety Serial #'s up to #1456 (RNVODRN), #1943 (RNVODRP)	51866
18b.	Switch, Spill - RNVOD Serial #'s starting at #1457 (RNVODRN) #1944 (RNVODRP)	20005039
19.	Wiring Harness - FSDV32RN/JDV	10002582
20.	Switch, ON/OFF JDV	30000874
21.	Front II RDVOD	Refer to Enamel Parts Chart Page 27
22.	Door, Left, RDVOD	Refer to Enamel Parts Chart Page 27
23.	Door, Right, RDVOD	Refer to Enamel Parts Chart Page 27
24.	Control Door, RDVOD	Refer to Enamel Parts Chart Page 27
25.	Handle Package, Ceramic w/SCR	0004345
26a.	Orifice Hood, #57 Front - LP	20004587
26b.	Orifice Hood, #51 Front - NG	30000449
26c.	Orifice Hood, #54 Rear - LP	20000130
26d.	Orifice Hood, #40 Rear - NG	20004263
27.	Bracket, Right Log	20005259
28.	Bracket, Left Log	20005258
29.	Base Pan Inner Gasket	20004286

**Radiance Natural Vent Gas Heater (RNVOD)**

Models: 3233 thru 3236, 3340 thru 3349, 3355, 3356 (continued)

Ref.	Description	RNVOD
30.	Bracket, Back Log - RDVOD	20003577
31.	Grille, RVF	1301192
32.	Screen, RVF	1601933
33a.	Vent Switch Wire Assembly - RNV40 Serial #'s up to #1456 (RNVODRN), #1943 (RNVODRP)	30000108
33b.	Spill Switch Wire Assembly - RNVOD Serial #'s starting at #1457 (RNVODRN), #1944 (RNVODRP)	30000108
34.	Damper Steel Handle/Screw	30002720
35.	Latch, Front DR - RDV	30001249
36.	Control Door Handle Assy	30002730
37.	Interrupter Block Serial #'s starting at #1457 (RNVODRN), #1944 (RNVODRP)	30000069
38.	Draft Hood Final Assembly Serial #'s starting at #1457 (RNVODRN), #1944 (RNVODRP)	20005118
39.	Left End	Refer to Enamel Parts Chart Page 27
40.	Right End	Refer to Enamel Parts Chart Page 27
41.	Leg	Refer to Enamel Parts Chart Page 27
42.	Top	Refer to Enamel Parts Chart Page 27
43.	Inner Shroud Grommet	20005860
44a.	Valve Nova SIT820.662 RN (Serial #'s starting with 2513)	20010563
44b.	Valve Nova SIT820.653 RP (Serial #'s starting with 2513)	20010645
45.	Ignitor Piezo w/Nut SIT	52464
46.	Bracket Piezo Ignitor (not shown)	20010876

\*When converting to SIT valve, must order RP275

\*\*When converting to SIT valve, must order RP269

**Fuel Conversion Kits**

Conversion Kit, NG to LP - RDVOD/RNVOD NG

Kit #000-5010

Conversion Kit, LP to NG - RDVOD/RNVODRP

Kit #000-5009

Shell Enamel Part Numbers									
Model Number	Color	Top	Left End	Right End	Front	Left Door	Right Door	Control Door	Leg (4)
3340, 3345	Classic	1301235	30001751	30001752	30001376	30001378	30001377	30001413	30001753
3233	Biscuit	30003274	30003239	30003238	30003240	30003242	30003241	30003243	30003245
3341, 3346	Bordeaux	2321235	30001771	30001770	30001416	30001418	30001417	30001419	30001772
3234	Chestnut Brown	30003275	30003248	30003247	30003249	30003251	30003250	30003252	30003254
3235	Ebony	30003276	30003257	30003256	30003258	30003260	30003259	30003261	30003263
3344, 3349	Forest Green	2311235	30001780	30001779	30001428	30001430	30001429	30001431	30001781
3343, 3348	Midnight Blue	2371235	30001777	30001776	30001424	30001426	30001425	30001427	30001778
3342, 3347	Sand	1321235	30001774	30001773	30001420	30001422	30001421	30001423	30001775
3355, 3356	Suede Brown	30002513	30002512	30002511	30002514	30002516	30002515	30002517	30002518
3236	Vermont Cl. Green	30003277	30003266	30003265	30003267	30003269	30003268	30003270	30003272

## Optional Accessories

### Fan Kits

#### FK26 Fan

The FK26 fan kit helps distribute heated air from within the firebox out into the room. The fan is controlled by a snapstat that turns power on and off as the firebox temperature rises above and falls below a preset temperature. A rheostat provides for variable fan speeds.

#### Specifications

115 Volt / 60Hz / .75 amps

#### Maintenance

The fan itself does not require regular maintenance, however, periodic cleaning of the fan and the surrounding area is required.

#### Installation

Refer to Page 8 for installation instructions.

### Remote Controls

The remote control allows you to turn the heater on or off from anywhere in the room. Refer to Page 23 for wiring diagrams.

Model	Functions Controlled
RC1	ON/OFF
RC2	ON/OFF and Temperature
IMTFK	Wall mounted thermostat control

### Screen Kit

An optional screen, R40SK, is available for use with the operable doors to allow the doors to be left in the open position.

### Warming Shelf

Warming shelves add versatility to your stove; they can be used to keep foods warm at mealtime.

Model	Color
1560	Classic Black
1555	Biscuit
1556	Chestnut Brown
1557	Ebony
1558	Vt. Classic Green
1565	Bordeaux
1562	Sand
1566	Forest Green
1567	Midnight Blue
1568	Suede Brown

The shelf installation is accomplished in three stages. First attach the shelf loosely to the stove, leaving the screws loose enough to allow final adjustments. Then, position the shelf and adjust the brackets so the shelf fits correctly. Finally, tighten the screws.

Refer to the instructions included with each warming shelf for complete installation procedures.

### Decorative Rings

7" brass or charcoal gray rings are available to add a decorative touch to the exposed stove pipe.

Model	Description
4FSDRP/4	4" Polished Brass Rings (4)
4FSDRB/4	4" Black Rings (4)

### Outside Air Adapter

An outside air adapter, #5076, may be added to the stove to bring fresh air directly from outside the building into the stove.

CozyCabin.com 518-623-4349

# LIMITED LIFETIME WARRANTY

## PRODUCT COVERED BY THIS WARRANTY

All Vermont Castings gas stoves, gas inserts, and gas fireplaces, and all Majestic brand gas fireplaces equipped with an Insta-Flame Ceramic Burner, or standard steel tube burner.

## BASIC WARRANTY

CFM Corporation (hereinafter referred to collectively as the Company) warrants that your new Vermont Castings or Majestic Gas Fireplace/Stove is free from manufacturing and material defects for a period of one year from the date of purchase, subject to the following conditions and limitations.

## EXTENDED LIFETIME WARRANTY

The heat exchanger, where applicable, and combustion chamber of every Vermont Castings or Majestic gas product is warranted for life against through wall perforation. All appliances equipped with an Insta-Flame Ceramic Burner have limited lifetime coverage on the ceramic burner plaque. Warrantees are made to the original owner subject to proof of purchase and the conditions and limitations listed on this Warranty Document

## COMPONENT WARRANTY

**CAST IRON:** All external and internal cast iron parts are warranted for a period of three years.

**Note:** On porcelain enamel finished external parts and accessories The Company offers no Warranty on chipping of enamel surfaces. Inspect all product prior to accepting it for any damage to the enamel.

The salt air environment of coastal areas or a high humidity environment can be corrosive to the porcelain enamel finish. These conditions can cause rusting of the cast iron beneath the porcelain enamel finish, which will cause the finish to flake off.

Dye lot variations with replacement parts and/or accessories can occur and are not covered by warranty.

**GLASS DOORS:** Glass doors are covered for a period of one year. Glass doors are not warranted for breakage due to misuse or accident. Glass doors are not covered for discoloration or burned in stains due to environmental issues, or improper cleaning and maintenance.

**BRASS PLATED PARTS AND ACCESSORIES:** Brass parts should be cleaned with Lemon oil only. Brass cleaners cannot be used. Mortar mix and masonry cleaners may corrode the brass finish. The Company will not be responsible for, nor will it warrant any brass parts which are damaged by external chemicals or down draft conditions.

**GAS VALVES:** Gas valves are covered for a period of one year

**ELECTRONIC AND MECHANICAL COMPONENTS:** Electronic and mechanical components of the burner assembly are covered for one year. All steel tube burners are warranted for one year.

**ACCESSORIES:** Unless otherwise noted all components and CFM Corporation company supplied accessories are covered for a period of one year.

## CONDITIONS AND LIMITATIONS

- This new Vermont Castings or Majestic product must be installed or serviced by a qualified installer, preferably NFI or WETT (Canada) certified, as prescribed by the local jurisdiction. It must be installed and operated at all times in accordance with the Installation and Operating instructions furnished with the product. Any alteration, willful abuse, accident, or misuse of the product shall nullify this warranty.
- This warranty is non-transferable, and is made to the original owner, provided that the purchase was made through an authorized supplier of the Company.
- The customer must pay for any Authorized Dealer in-home travel fees or service charges for in-home repair work. It is the dealers 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 parts and/or labor.

- Any part and/or component replaced under the provisions of this warranty is covered for six months or the remainder of the original warranty, whichever is longest.
- This warranty is limited to the repair of or replacement of part(s) found to be defective in material or workmanship, provided that such part(s) have been subjected to normal conditions of use and service, after said defect is confirmed by the Company's inspection.
- The company may, at its discretion, fully discharge all obligations with respect to this warranty by refunding the wholesale price of the defective part(s)
- Any installation, labor, construction, transportation, or other related costs/expenses arising from defective part(s), repair, replacement, or otherwise of same, will not be covered by this warranty, nor shall the Company assume responsibility for same. Further, the Company will not be responsible for any incidental, indirect, or consequential damages except as provided by law.
- SOME STATES DO NOT ALLOW FOR THE EXCLUSION OR LIMITATIONS OF INCIDENTAL AND CONSEQUENTIAL DAMAGES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOUR CIRCUMSTANCES. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.**
- All other warranties-expressed or implied- with respect to the product, its components and accessories, or any obligations/liabilities on the part of the Company are hereby expressly excluded.
- The Company neither assumes, nor authorizes any third party to assume on its behalf, any other liabilities with respect to the sale of this Vermont Castings or Majestic product
- The warranties as outlined within this document do not apply to chimney components or other non CFM Corporation accessories used in conjunction with the installation of this product..
- Damage to the unit while in transit is not covered by this warranty but is subject to claim against the common carrier. Contact the dealer from whom you purchased your fireplace/stove (do not operate the appliance as this might negate the ability to process the claim with the carrier).
- The Company will not be responsible for:
  - Down drafts or spillage caused by environmental conditions such as near-by trees, buildings, roof tops, hills, or mountains.
  - Inadequate ventilation or negative air pressure caused by mechanical systems such as furnaces, fans, clothes dryers, etc.
- This warranty is void if:
  - The fireplace has been operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals.
  - The fireplace has been subjected to prolonged periods of dampness or condensation
  - Any damages to the fireplace, combustion chamber, heat exchanger or other components due to water, or weather damage, which is the result of but not limited to, improper chimney/venting installation.
  - Any alteration, willful abuse, accident, or misuse of the product has occurred.

## IF WARRANTY SERVICE IS NEEDED...

- Contact your supplier. Make sure you have your warranty, your sales receipt, and the model/serial number of your CFM Corporation product.
- DO NOT ATTEMPT TO DO ANY SERVICE WORK YOURSELF.**

# GARANTIE À VIE LIMITÉE

## PRODUIT COUVERT PAR LA PRÉSENTE GARANTIE

L'ensemble des cuisinières à gaz, des poèles encastrables et des foyers à gaz Vermont Castings, ainsi que l'ensemble des foyers à gaz de marque Majestic équipés d'un brûleur en céramique Insta-Flame ou d'un brûleur en acier standard.

### GARANTIE DE BASE

La société CFM Corporation (ci-après la « Société ») garantit votre nouveau poêle/foyer au gaz Vermont Castings ou Majestic contre tous défauts de fabrication et de matières premières pour une période d'un an à compter de la date d'achat, sous réserve des conditions et limitations suivantes.

### GARANTIE À VIE PROLONGÉE

L'échangeur de chaleur, s'il y a lieu, ainsi que la chambre à combustion de tout produit à gaz de la société Vermont Castings ou Majestic sont garantis pour la vie contre la perforation des parois. Tous les produits équipés d'un brûleur en céramique Insta-Flame comprennent une garantie à vie limitée de la plaque du brûleur en céramique. Les garanties sont accordées à l'acheteur d'origine, le tout sujet à une preuve d'achat et aux conditions et limitations suivantes :

### GARANTIE DES COMPOSANTS

**FONTE** : Toutes les pièces en fonte externes et internes sont garanties pour une période de trois ans.

**Nota** : Dans le cas des pièces et accessoires externes au fini en émail de porcelaine, la Société n'offre aucune garantie quant à l'écaillage des surfaces en émail. Avant d'accepter un produit, inspectez-le afin de vous assurer que les surfaces en émail ne sont pas endommagées. L'atmosphère saline des zones côtières ou les environnements à forte humidité peuvent provoquer la corrosion du fini en émail de porcelaine. Ces conditions peuvent également faire rouiller la fonte sous le fini en émail de porcelaine, provoquant ainsi l'écaillage de la couche de fini.

Dans le cas des pièces et (ou) des accessoires de remplacement, les variations de lots de teinture sont possibles, mais elles ne sont pas couvertes par la garantie.

**PORTES EN VERRE** : Les portes en verre sont couvertes pour une période d'un an. Les portes en verre ne sont pas garanties contre le bris causé par un mauvais usage ou un accident. Les portes en verre ne sont pas couvertes contre la décoloration ni contre les taches imprégnées attribuables à des conditions environnementales ou à un nettoyage et un entretien inadéquats.

**PIÈCES ET ACCESSOIRES PLAQUÉS EN LAITON** : Les pièces en laiton ne doivent être nettoyées qu'avec de l'essence de citron. Les nettoyants pour le laiton ne doivent pas être utilisés, et les agents nettoyants pour le mortier et la maçonnerie peuvent provoquer la corrosion du fini laiton. La Société ne pourra être tenue responsable des dommages à toute pièce en laiton occasionnés par des conditions chimiques externes ou le refoulement, et elle n'offre aucune garantie à cet égard.

**SOUPAPES À GAZ** : Les soupapes à gaz sont couvertes pour une période d'un an.

**COMPOSANTS ÉLECTRONIQUES ET MÉCANIQUES** : Les composants électroniques et mécaniques du brûleur sont couverts pendant un an. Tous les brûleurs en acier sont garantis pendant un an.

**ACCESSOIRES** : À moins d'indication contraire, tous les composants et accessoires fournis par CFM Corporation sont couverts pendant une période d'un an.

### CONDITIONS ET LIMITATIONS

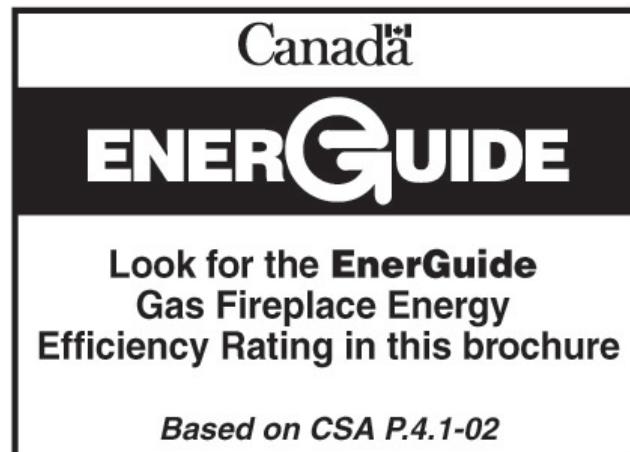
- Ce nouveau produit Vermont Castings ou Majestic doit être installé par un entrepreneur de service autorisé et compétent. L'installation/le service doivent être assurés par un technicien breveté, conformément à la juridiction locale. Le produit doit être installé et utilisé en tout temps selon les instructions d'installation et de fonctionnement fournies avec le produit. Toute altération ou tout abus volontaire, accident ou mauvais usage du produit annulera cette garantie.
- Cette garantie n'est pas transférable et est offerte à l'acheteur d'origine, à condition que l'achat ait été effectué par l'entremise d'un détaillant autorisé de la Société.
- Le client doit assumer les frais de déplacement à domicile de tout détaillant autorisé ou les frais de service relatifs à toute réparation effectuée à domicile. Le détaillant peut à son choix effectuer les réparations chez le client ou à son atelier.
- Si, lors de l'inspection, on constate que les dommages sont la faute du fabricant, les réparations, les pièces et la main-d'œuvre seront

autorisées sans frais pour le client.

- Toute pièce et (ou) tout composant remplacé en vertu des dispositions de la présente garantie est couvert pour une période de six mois ou jusqu'à l'expiration de la garantie originale, selon la dernière des éventualités à survenir.
- Cette garantie est limitée à la réparation ou au remplacement de toute pièce trouvée défectueuse en matières premières ou main-d'œuvre, à condition que ladite pièce ait été sujette aux conditions normales d'usage et de service, après que ledit défaut a été confirmé par une inspection par la Société.
- La Société peut, à sa discréction, se décharger entièrement de toutes obligations se rapportant à cette garantie en remboursant le prix de gros de toute pièce défectueuse.
- Tous les frais/dépenses d'installation, de main-d'œuvre, de construction, de transport ou autres causés par toute pièce défectueuse, une réparation, un remplacement ou autre, ne seront pas couverts en vertu de la présente garantie, et la Société n'assume aucune responsabilité pour ceux-ci. De plus, la Société ne pourra être tenue responsable de tous dommages fortuits ou indirects, sauf là où prévu par la loi.
- CERTAINS PROVINCES NE PERMETTENT PAS L'EXCLUSION OU LES LIMITATIONS RELATIVES AUX DOMMAGES CONSÉCUTIFS OU INDIRECTS QUANT À LA DURÉE DE TOUTE GARANTIE IMPLICITE, SI BIEN QU'IL EST POSSIBLE QUE LES LIMITATIONS CI-DESSUS NE S'APPLIQUENT PAS DANS VOTRE CAS. LA PRÉSENTE GARANTIE VOUS DONNE DES DROITS SPÉCIFIQUES, ET IL EST POSSIBLE QUE VOUS AYEZ D'AUTRES DROITS QUI PEUVENT VARIER D'UN ÉTAT À L'AUTRE.
- Toute autre garantie, expresse ou implicite, en ce qui a trait au produit et ses composants et accessoires, ou toute obligation/responsabilité de la part de la Société sont expressément exclues en vertu des présentes.
- La Société n'assume et n'autorise personne à assumer, en son nom, toute responsabilité en ce qui a trait à la vente de ce produit Vermont Castings ou Majestic.
- Les garanties, telles qu'elles sont décrites dans le présent document, ne s'appliquent pas aux composants de cheminée ni à d'autres accessoires CFM Corporation utilisés conjointement avec l'installation de ce produit.
- Les dommages causés à l'unité tandis qu'elle est en transit ne sont pas couverts par la présente garantie, mais pourront être l'objet d'une réclamation contre le transporteur général. Communiquez avec le détaillant chez qui vous avez acheté votre foyer/poêle (n'utilisez pas l'appareil étant donné que cela pourrait annuler toute réclamation contre le transporteur).
- La Société n'engagera aucune responsabilité quant :
  - au refoulement de cheminée ou débordement causé par les conditions environnementales (arbres, édifices, toits, coteaux ou montagnes adjacents);
  - à une ventilation inadéquate ou une pression d'air négative causée par des systèmes mécaniques comme les fournaises, les ventilateurs, les sécheuses, etc.
- Cette garantie est nulle si :
  - le foyer a été utilisé dans une atmosphère contaminée par du chlore, du fluor ou tout autre produit chimique;
  - le foyer est assujetti à de longues périodes d'humidité ou de condensation;
  - des dommages sont causés au foyer, à la chambre de combustion, à l'échangeur de chaleur ou aux autres composants par de l'eau ou par la température qui est le résultat mais sans y être limité, d'une mauvaise installation de cheminée/ventilation;
  - toute altération ainsi que tout abus volontaire, accident ou mauvais usage du produit annule la présente garantie.

### SI UN SERVICE SOUS GARANTIE EST REQUIS...

- 1) Communiquez avec votre détaillant. Assurez-vous que vous avez votre garantie, votre reçu de caisse ainsi que le numéro de modèle/série de votre produit CFM Corporation.
- 2) NE TENTEZ PAS D'EFFECTUER DES RÉPARATIONS VOUS-MÊME.



### Efficiency Ratings

Model	EnerGuide Ratings Fireplace Efficiency (%)
RNVODRN	55.9
RNVODRP	55.9



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists.

### CFM Corporation

2695 Meadowvale Blvd. • Mississauga, Ontario, Canada L5N 8A3  
800-668-5323 • [www.cfmcorp.com](http://www.cfmcorp.com)