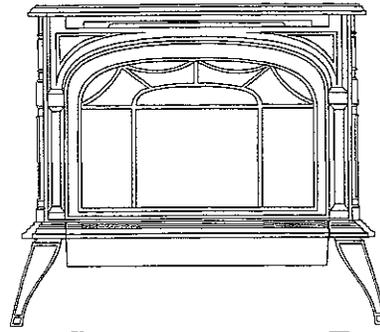


# VERMONT CASTINGS RADIANCE NATURAL VENT HEATER RNV40 OWNER'S GUIDE

INSTALLATION, OPERATION AND MAINTENANCE  
PROCEDURES FOR USE IN NORTH AMERICA  
Models #2780 and 2785



Tested and listed to ANSI  
Z21.88-1998 and CSA-2.33-M98

## WARNING

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

### FOR YOUR SAFETY:

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

- Shut off the gas supply.
- Open windows; do not touch any electrical switches.
- Do not try to light any appliance; extinguish any open flame.
- Do not use the 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, phone the fire department.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

**SAVE THIS MANUAL FOR  
FUTURE REFERENCE.**

## AVERTISSEMENT

Quiconque ne respecte pas à la lettre les instructions dans le présent manuel risque de déclencher un incendie ou une explosion entraînant des dommages matériels, des lésions corporelles ou la perte de vies humaines.

### POUR VOTRE SÉCURITÉ:

Ne pas entreposer ni utiliser d'essence ni d'autre vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

### QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

- Fermer le gaz alimentation.
- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
- Evacuez la pièce, le bâtiment ou la zone. Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

L'installation et service doit être exécuté par un qualifié installer, agence de service ou le fournisseur de gaz.

The Radiance Natural Vent Room Heater, Model #RNV40, No. 2780 and 2785, is a vented gas appliance listed to the ANSI standard Z21.88-1998 and CSA-2 33-M98 for Vented Room Heaters, and CAN/CGA 2 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 — latest edition and CAN 1-B149 1 and 2 Installation Code. Installer l'appareil selon les codes ou règlements locaux, ou, en l'absence de tels règlements, selon les Codes D'Installation CAN 1-B149 (EXCEPTION: Do not derate this appliance for altitude. Maintain the manifold pressure at 3.5 inches W.C. for Natural Gas and 11 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.

**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 Natural Vent Room Heater should be inspected before use and at least annually by a qualified service agency. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. S'assurer que le brûleur et le compartiment des commandes sont toujours propres. Voir les instructions d'installation qui accompagnent l'appareil.**

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.

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

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air. De l'air frais est requis par cet appareil pour qu'il fonctionne en toute sécurité et doit donc être installé de manière à assurer une combustion et une ventilation adéquates.

This appliance must be properly connected to a listed 4" (100mm) Type B venting system or to an approved masonry or factory-built chimney system. In Canada, a complete reline of Class A chimneys is required. This heater is equipped with a vent safety shutoff system. Une connexion appropriée de l'appareil à un système de ventilation 4" (100mm) ou à un système approuvé

de cheminée en maçonnerie ou construit en usine chez le fabricant est requis. Au Canada, une redoublure totale de cheminées de Classe A est requise. Cet appareil est équipé avec un système de sécurité de reflux.

**This appliance must be properly connected to a venting system. WARNING: Operation of this heater when not connected to a properly installed and maintained venting system or tampering with the vent safety shutoff system can result in carbon monoxide (CO) poisoning and possible death.**

**Une connexion appropriée de l'appareil à un système de ventilation est requise. AVERTISSEMENT:** L'utilisation de cet appareil, lorsque non raccordé à un système d'évacuation installé et entretenu ou avec un système de sécurité de reflux modifiée, peut provoquer un empoisonnement au monoxyde de carbone (CO) et possiblement entraîner la mort.

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. Surveiller les enfants. Garde les vêtements, le meubles, l'essence ou autres liquides à vapeur inflammables loin de l'appareil.

Any safety screen 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.

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

Verify proper operation after servicing.

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# Welcome,

Thank you for your purchase of a Vermont Castings Radiance Gas Stove. 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 appreciation for the hearth.

Your Radiance gas heater has been designed and manufactured with great care; it will provide you with many years of service.

This manual contains valuable instructions on the installation, operation, and maintenance of your stove. We urge you to read the manual before starting the installation, and to keep it for future guidance.

Sincerely,

*All of us at Vermont Castings*

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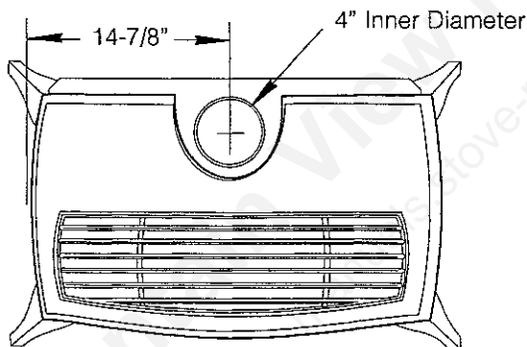
# Specifications

## Radiance RNV40 Natural Vent Gas Heater

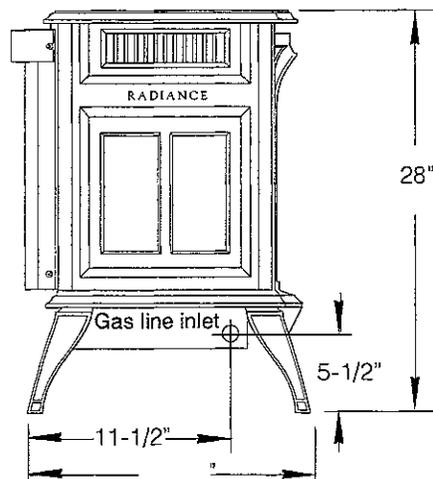
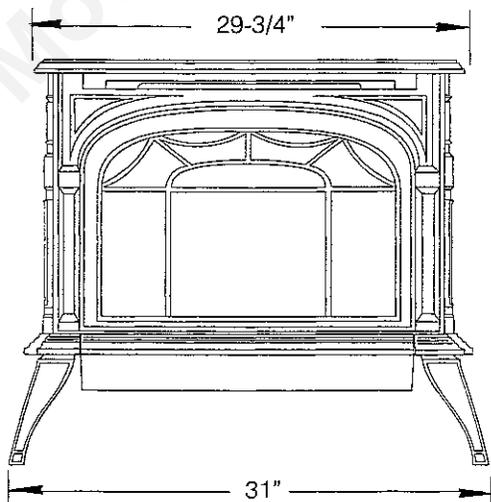
| Fuel:   | Natural Gas                        | Propane    |
|---|------------------------------------|------------|
| Manifold pressure:                                  | 3 5" W.C.                          | 11 0" W.C. |
| Minimum inlet supply pressure for input adjustment: | 5 0" W.C.                          | 11 0" W.C. |
| Maximum inlet supply pressure:                      | 11 0" W.C.                         | 13 0" W.C. |
| Input, BTU/hour:                                    | 40,000                             | 36,000     |
| Glass Panel:  | High-temperature ceramic           |            |
| Weight:   | 300 lbs.                           |            |
| Ignition:   | Standing pilot with piezo ignition |            |

**AGA Design Certified to ANSI Z21.88-1998 and CSA 2.33-M98 for Vented Gas Fireplace Heaters by International Approval Services, Inc.**

### Dimensions



Drawings not to scale.  
Check local codes for approved supply line fittings  
See Page 3 for flue collar centerline dimensions



## Installation

The installation of the Radiance Natural-Vent stove must conform to 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 for natural gas, and 11.0 inches for propane (LP))

In Canada, installation must conform to the current CAN-1-B1-149 1 and 2 Installation Codes, and/or local codes.

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

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

**WARNING: DUE TO HIGH TEMPERATURES, 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.**

## Hearth Requirements

The Radiance must be installed on rigid flooring. 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 that follow illustrate the minimum clearances for the Radiance in two typical installations. Measure the 4" minimum rear clearance from the outer steel rear skirt; measure the minimum 6" side and corner clearance from the outer edge of the cast iron top.

## Outside Air Adapter

Some installations or localities require a source of outdoor air connected to the stove. Vermont Castings Outside Air Adapter kit #5076 provides a convenient way to connect such a source directly to the back of the stove.

## Parallel Installation: Minimum Clearance and Flue Centerline

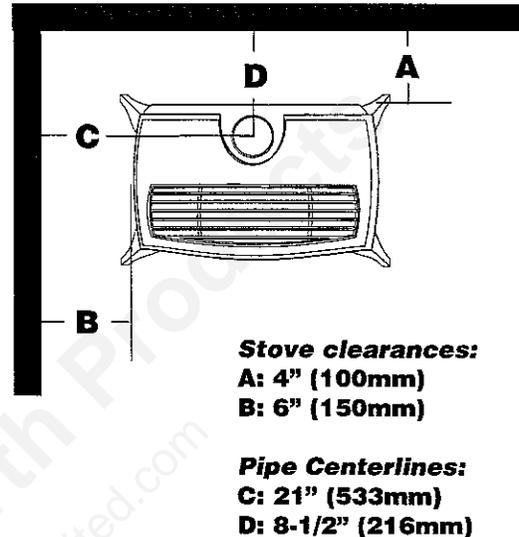


Fig. 1. Parallel installation requirements.

## Corner Installation: Minimum Clearance and Flue Centerline

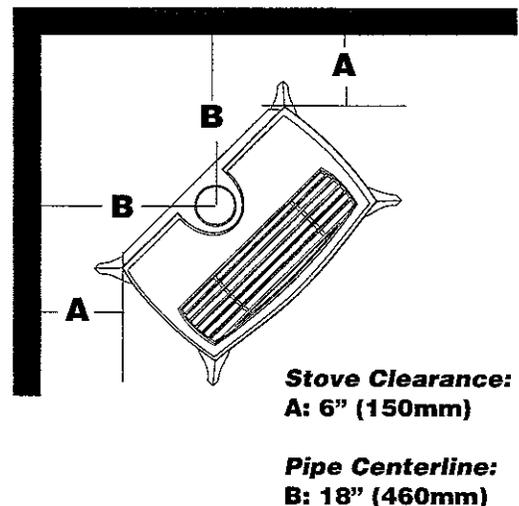


Fig. 2. Corner installation requirements.

### Ceiling Clearance

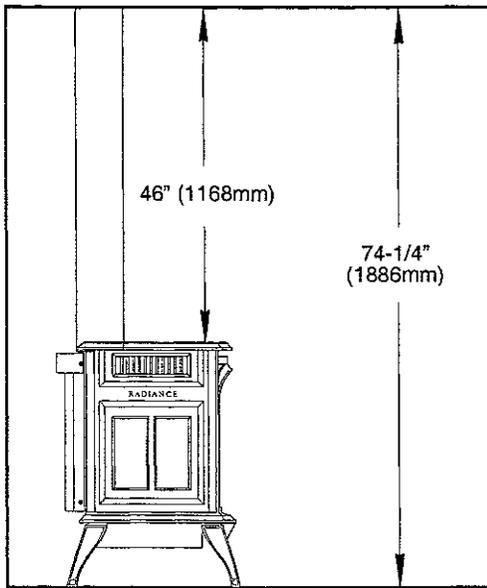


Fig. 3. Minimum ceiling clearance; minimum alcove height.

### Venting Requirements and Options

The Radiance must be properly connected to a listed 4" (100mm) 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" (150mm) stove pipe around the Type B venting system, for a better appearance.

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

If connecting to a Class A chimney system, use 4" (100mm) single wall or 4" Type B vent connector. Single wall vent connector requires a minimum 6" (150mm) 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.

### Alcove Minimum Dimensions

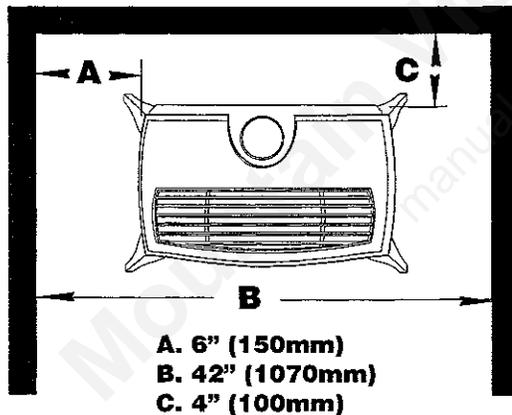


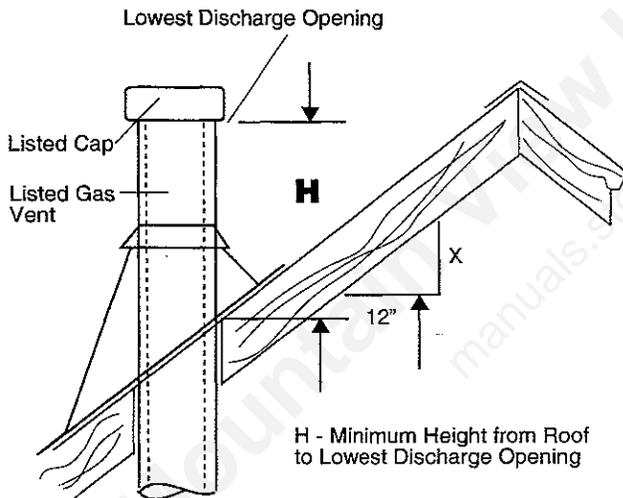
Fig. 4. The Radiance Natural Vent Stove is approved for installation into alcoves built of combustible materials.

### 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. In many installations, an insulated chase for the vent system improves performance by keeping the vent system warm. The minimum vent system height for the Radiance Natural Vent Stove is 12 feet (3.66m). To determine the minimum height the vent system must extend through or past the roof, see Fig 5 below (from the 1993 edition of the National Fuel Gas Code)

Taller vent heights allow longer horizontal runs. There can be no more than (2) 90-degree elbows (or their equivalents) in the system. Choose a vent layout with the smallest possible number of elbows and/or offsets, to encourage good performance from the vent system. Consult the most recent edition of the National Fuel Gas Code for complete venting information.

### Minimum Termination Requirements for Type B Venting Systems



| Roof Pitch          | H (Min.) Ft. |
|---------------------|--------------|
| Flat to 6/12        | 1 0          |
| 6/12 to 7/12        | 1 25         |
| Over 7/12 to 8/12   | 1 5          |
| Over 8/12 to 9/12   | 2 0          |
| Over 9/12 to 10/12  | 2 5          |
| Over 10/12 to 11/12 | 3 25         |
| Over 11/12 to 12/12 | 4 0          |
| Over 12/12 to 14/12 | 5 0          |
| Over 14/12 to 16/12 | 6 0          |
| Over 16/12 to 18/12 | 7 0          |
| Over 18/12 to 20/12 | 7 5          |
| Over 20/12 to 21/12 | 8 0          |

Fig. 5 Determine minimum vent height over the roof according to roof pitch.

### 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. See Fig 6

Complete the venting system installation according to the maker's directions

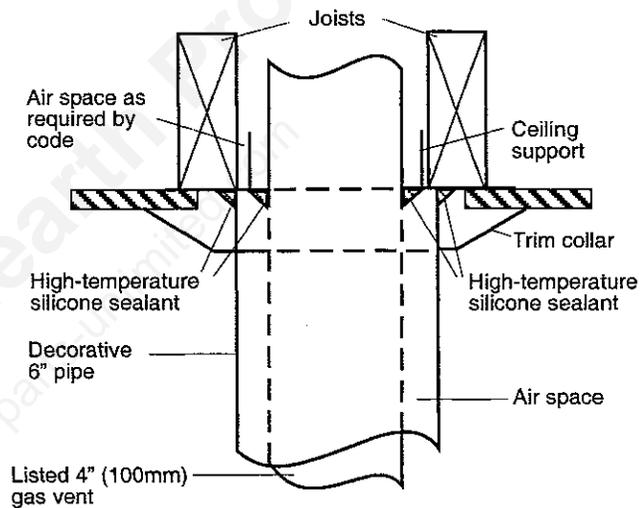


Fig. 6. A ceiling pass-through, with decorative pipe around the vent.

## Assembly

**Read these instructions thoroughly before starting the assembly. Follow procedures in the order given. Inspect the stove for damage before starting the assembly. Do not install this stove if any damage is evident. Contact your dealer immediately.**

### Tools required

- Stub-handled Phillips screwdriver
- standard Phillips screwdriver
- Standard flat-bladed screwdriver
- Tape measure and pencil
- work gloves
- knife

## Unpacking the RNV40 Stove

Caution: Enamelled castings can chip easily! Handle enamelled castings carefully to avoid damage

1. Cut any shipping straps
2. Unpack the top grate and screen from their carton, and set them aside
3. With a helper, carefully remove the stove from the pallet and move it close to its final installed position. Lift the stove by the sides. Do not lift by any part of the stove front.

### Hardware Bag Contents

- Bag of Lava Rocks
- Pipe bracket
- Door Handle & Screw

## Remove the Front, Glass, and Logs

Remove the front panel, the glass panel, and the logs and hardware bag from the firebox before positioning the stove

1. *Remove the accessory package from the top of the stove.* The manual, hardware package, and lava rocks are packed on top of the firebox. Set these aside
2. *Remove the Front Plate.* Grasp one side and the bottom, and lift the front plate as a unit (the control door attaches to the stove front) Swing the bottom edge out and away from the stove body; see Fig 7
3. *Remove the Glass and Frame Assembly* Two luggage-type latches hold the glass and frame in place. See Fig 8. Release each latch by gently pulling the handle up and forward. Use your left hand to release the right latch, while you hold the frame gently with your right hand. Use your right hand to release the left latch. Lift the glass and frame assembly up off the front of the firebox and set it aside on a flat, padded surface
4. *Remove the Log Set.* Lift out the package(s) and any packing material or debris from the burner tray and firebox. Unpack the log set and inspect each piece for damage. **DO NOT INSTALL DAMAGED LOGS.** Set the logs aside in a protected spot

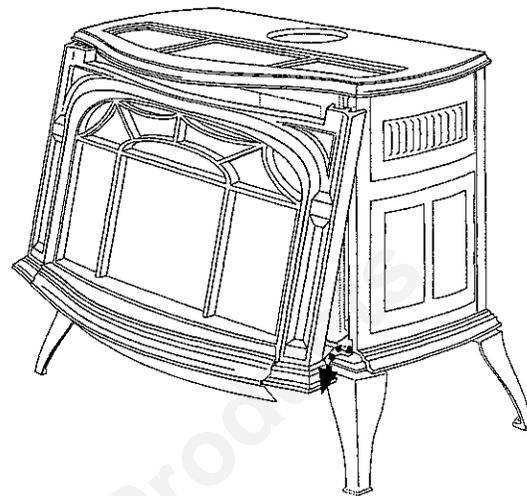


Fig. 7. Remove the front plate.

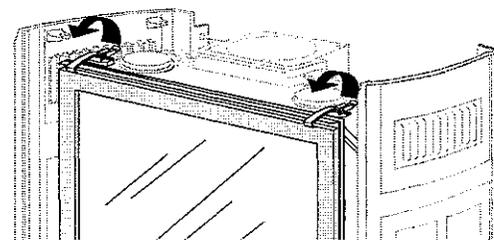
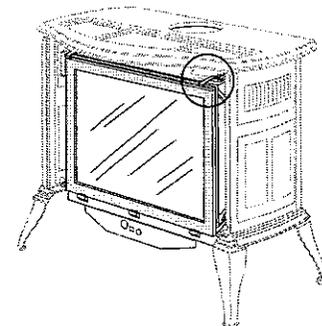


Fig. 8. Release the latches and swing the glass and frame away from the firebox.

## Install the Optional Fan, #2767 (FK26)

It is easiest to install the fan kit before the stove is connected to the gas line. If the installation does not include the fan, proceed to 'Attach the Venting', on page 8.

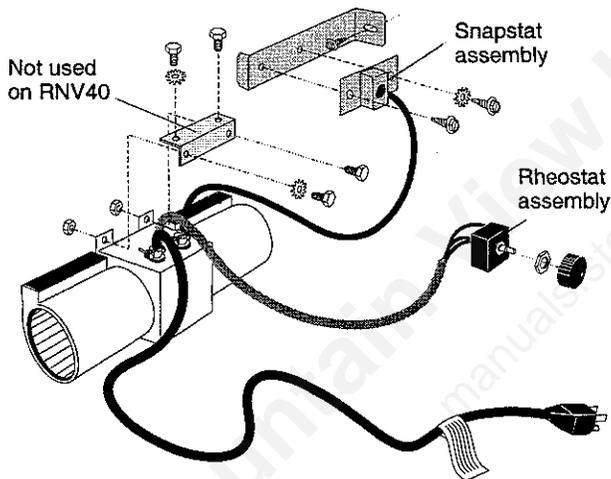
The fan consists of a blower assembly and a rheostat switch that are connected by a wire harness. The blower attaches to the steel skirt on the back of the firebox, and the rheostat installs in the stove's on/off switch housing, on the top left rear corner.

The fan kit includes a 'snapstat', a temperature-sensing switch installed in the stove's heat exchange chamber. The snapstat automatically turns the fan on or off at about 109°F.

The rheostat provides a range of fan speed settings from OFF (which overrides the snapstat function) to HIGH.

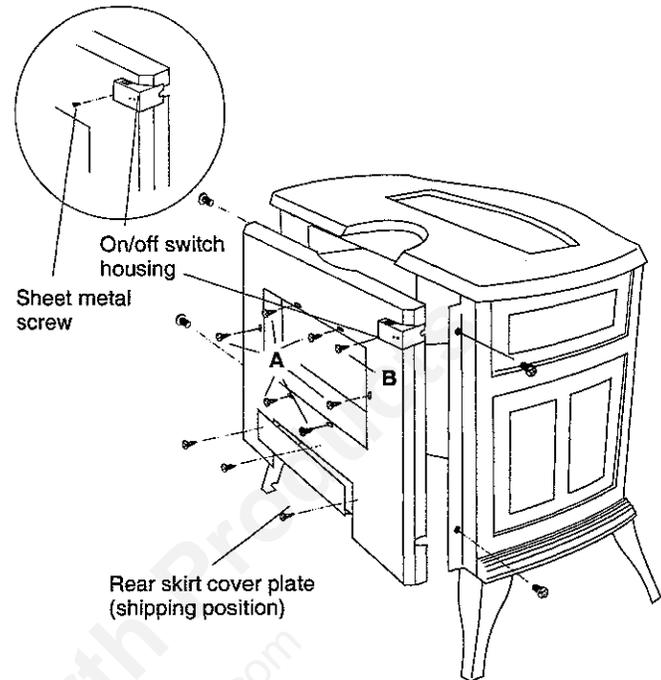
**Contents:** See Fig. 9

- Fan assembly with rheostat and snapstat
- 1/4-20 x 1/2" hex-head bolts (use 2)
- 1/4-20 hex nuts (use 2)
- (2) #10 x 1/2" sheet metal screws
- 1/4" star washers (use 2)
- #8 star washer
- wire tie
- control knob
- retaining collar



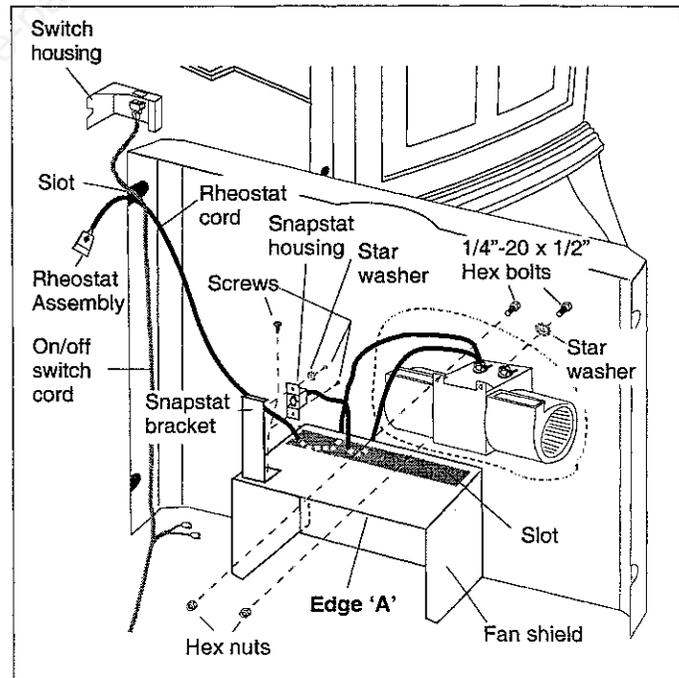
**Fig. 9. Optional Fan Kit #2767. The kit includes some parts for other applications.**

1. **Remove the rear skirt** Fig. 10 Use work gloves to protect your hands. Remove the rear skirt cover plate. Remove the six sheet metal screws ('A' in Figure 10) surrounding the draft hood opening. Remove one sheet metal screw ('B' in Figure 10) holding the on/off switch housing to the rear skirt. Loosen the Phillips-head bolts on each side of the rear skirt. Remove the skirt, and set it aside. Let the on/off switch and housing hang loosely.



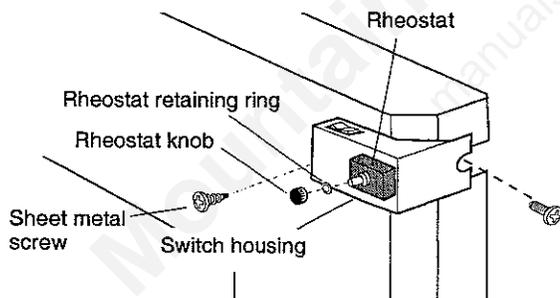
**Fig. 10. Removing/replacing the rear skirt.**

2. **Position the fan assembly.** Position the fan behind the rear skirt as shown in Fig. 11. Pass the fan rheostat assembly and snapstat assembly up through the slot in the horizontal surface on the inside of the rear skirt.

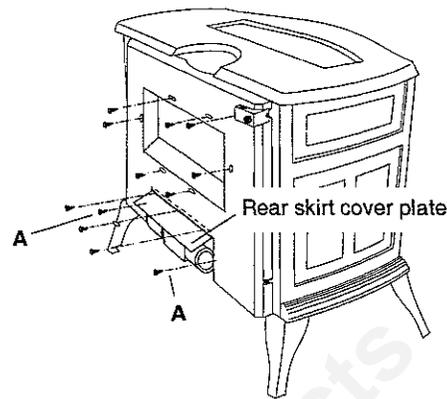


**Fig. 11. Pass the rheostat and snapstat assemblies through the slot in the skirt's inside horizontal surface. Attach the snapstat housing to the snapstat bracket. Attach the snapstat bracket to the horizontal surface on the inside of the rear skirt. Attach the fan to the rear skirt with bolts and nuts.**

3. Attach the snapstat housing to the snapstat bracket with two sheet metal screws and one #8 star washer Fig. 11.
4. Attach the snapstat bracket, with the snapstat assembly attached to it, to the horizontal surface on the inside of the rear skirt. Use a sheet metal screw. There are pre-drilled holes at each corner of the panel for this. The vertical part of the snapstat bracket should be 3/16" back from Edge 'A' as shown in Fig. 11.
5. Attach the fan assembly to the rear skirt using two 1/4"-20 x 1/2" hex-head bolts, two 1/4"-20 nuts, and one 1/4" star washer. See Fig. 11.
6. Bring the rheostat cord to the side of the stove. Re-attach the stove's rear skirt, with the fan rheostat cord and the on/off switch wires passing through the slot on the side at the switch housing location. Leave only the bolt for the switch housing loose. Pop out the round plug in the switch housing. Remove the rheostat knob and retaining collar from the stem; pass the stem through the larger hole in the switch housing. Align the locator pin with the smaller hole. Install the retaining collar from the outside of the housing, and snug it up to the housing. Slide the rheostat knob onto the control shaft. Fig. 12.
7. Tighten the bolt and sheet metal screw holding the switch housing to the rear skirt and the stove. Fig. 12.
8. Re-attach the rear skirt cover plate by fastening it to the rear skirt as shown in Fig. 13. The top edge of the cover plate goes inside the rear skirt. Re-install and tighten the six sheet metal screws around the draft hood opening; see 'A', Figure 10. Use two screws from the fan kit to fasten the rear skirt to the fan shield; see 'A', Fig. 13.
9. Plug the fan cord into a standard grounded 110-volt household outlet.



**Fig. 12.** Attach the rheostat to the switch housing, the retaining ring and knob to the rheostat, and the switch housing to the stove.



**Fig. 13.** Attach the rear skirt cover plate to the rear skirt.

### **WARNING**

**THE OPTIONAL FAN KIT 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 OUTLET. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG.**

### **Attach the Venting**

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

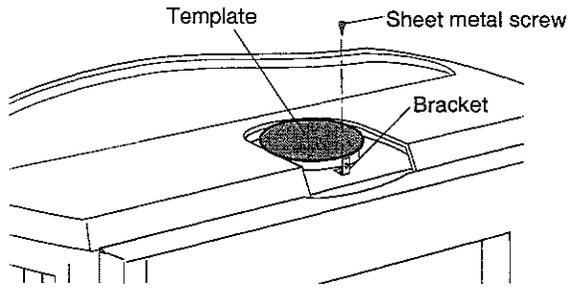
The venting collar is on the sheet-metal draft hood/heat exchanger assembly, over the firebox. Use a B-vent adapter, from the same maker as the rest of the B-vent components, to join the first section of venting to the draft hood.

The RNV40 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.

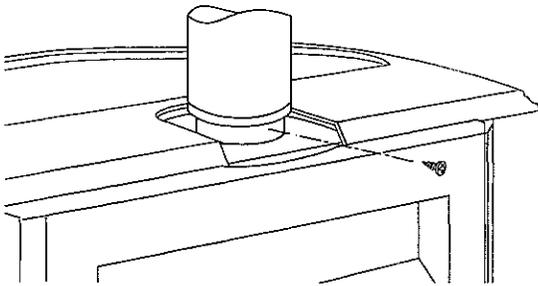
The stove includes a bracket for installing decorative 6-inch (150mm) round stove pipe around the B-vent, *for appearance purposes only*. The decorative pipe need not be concentric with the vent pipe.

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. See Fig. 14. 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.

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. 15.

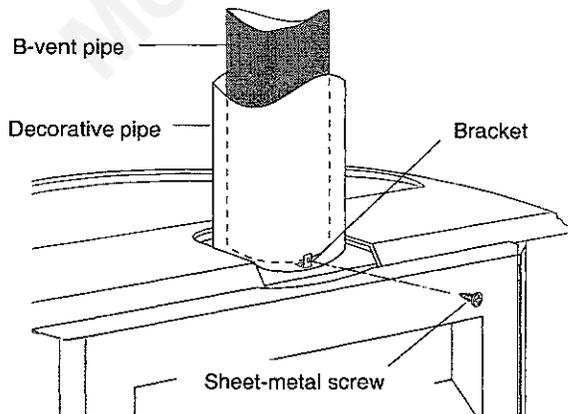


**Fig. 14.** Use a template to locate the bracket for decorative pipe to surround the B-vent pipe.



**Fig. 15.** Attach the B-vent adapter to the flue collar.

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. See Fig. 6, page 5, for details on joining the decorative pipe at the ceiling.



**Fig. 16.** Install decorative pipe over the B-vent pipe.

## Connect the gas line

1. **Remove the Control Valve Coverplate.** Loosen, but do not remove, the two Phillips-head retainer screws behind the coverplate, under the firebox. Slip the coverplate toward yourself to remove it from the stove. See Fig. 17.
2. **Connect the main gas supply line** to the inlet on the left side of the control valve. See Fig. 18.

The gas line connection can be made with properly tinned 3/8" copper tubing, 3/8" rigid pipe, or an approved flexible connector. When using copper or flexible connectors, use only approved fittings. Always provide a union so the gas line can be easily disconnected for burner service.

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

**In Canada:** Consult the local authority and CAN/CGA-B149 (1 or 2) installation code.

3. **Test for leaks** at all joints with a 50/50 soap and water solution before operating the stove. NEVER test for leaks with an open flame.
4. **Reinstall the coverplate** over the control valve by engaging the slots on the back of the plate, with the retainer screws. Retighten the screws.
5. **Light the pilot** according to the directions on page 13 before completing the assembly. It may take several minutes to fully bleed the gas line of any air.

When you have confirmed that the pilot lights properly, shut it off and complete the installation.

### CAUTION

- **The gas line should be connected only by a qualified gas technician. Test to confirm manifold pressures as given below.**

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

**With natural gas,** use a 3/8" or 1/2" natural gas supply line with an input of 40,000 BTUs at a manifold pressure of 3.5" W.C. 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 36,000 BTUs at a manifold pressure of 11.0" W.C. and minimum inlet supply for adjustment of 11.0" W.C.

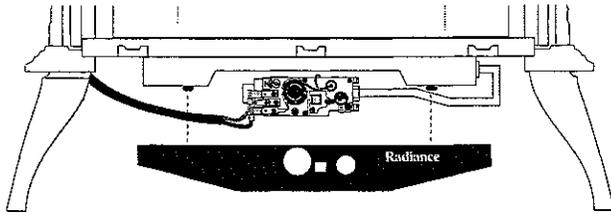


Fig. 17. Remove the valve cover plate.

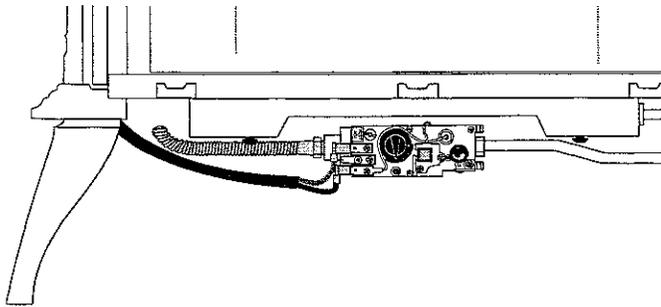


Fig. 18. Flexible gas line connection.

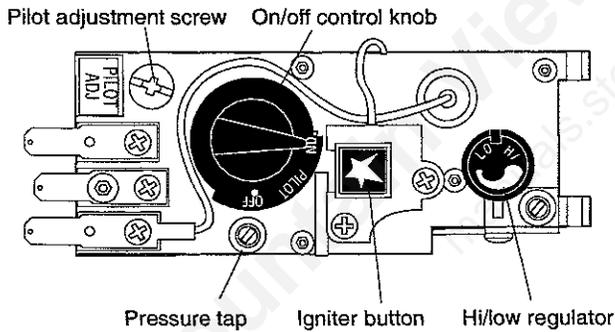


Fig. 19. The gas control valve includes a captured screw-type pressure test point. A pressure test point upstream from the control valve is not required.

## Install the Logs.

1. Install the logs in sequence as shown below. The log set includes six sections: the rear log, left and right middle logs, left and right ember logs, and an upper log. There is also a bag of lava rocks to simulate charcoal and embers

- Install the rear log (#1, Fig. 20) by engaging holes on its bottom surface with pins on the sheet-metal shelf at the back of the firebox
- Install the left and right middle logs (#2 and 3, Fig. 20) by engaging holes on their bottom surfaces with pins on the burner brackets Fig. 20

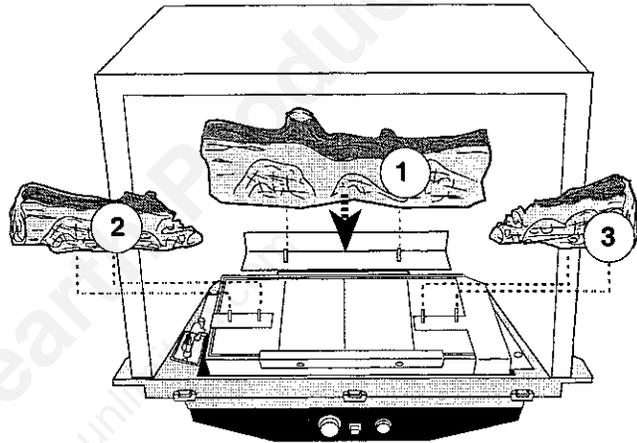


Fig. 20. Install the back, left, and right logs.

- Press the burner assembly fully to the rear. There should be a gap of about 13/16" between the front of the burner and the inside log front wall of the firebox. Place the two front ember log sections (#4 and 5, Fig. 21) in the slot at the front of the firebox, just in front of the burner, as shown in Fig. 21

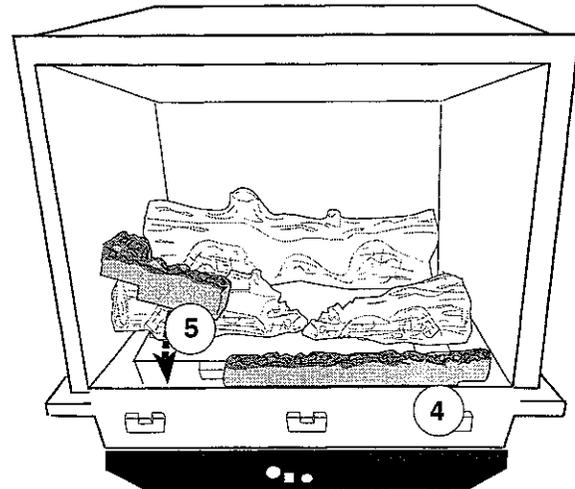
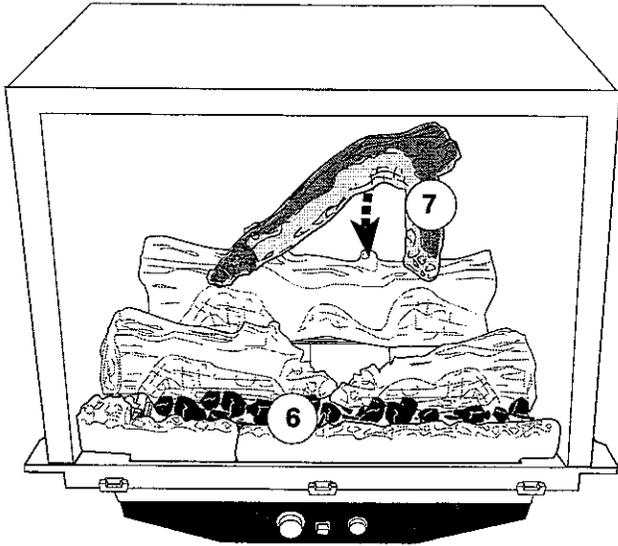


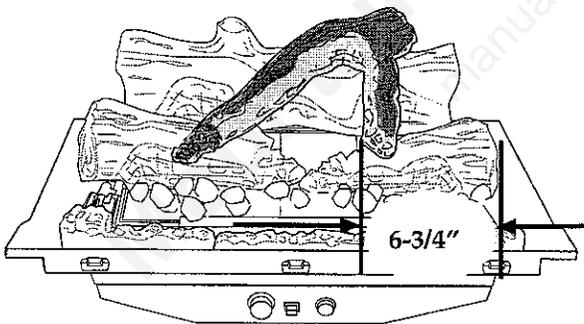
Fig. 21. Install the front ember logs.

- Loosely sprinkle the lava rocks directly on top of the burner, between the front and middle logs. Do not place any ember or lava material behind the middle logs. Fig. 22



**Fig. 22.** Install the top log; engage prongs on the back and left logs with sockets on the underside of the top

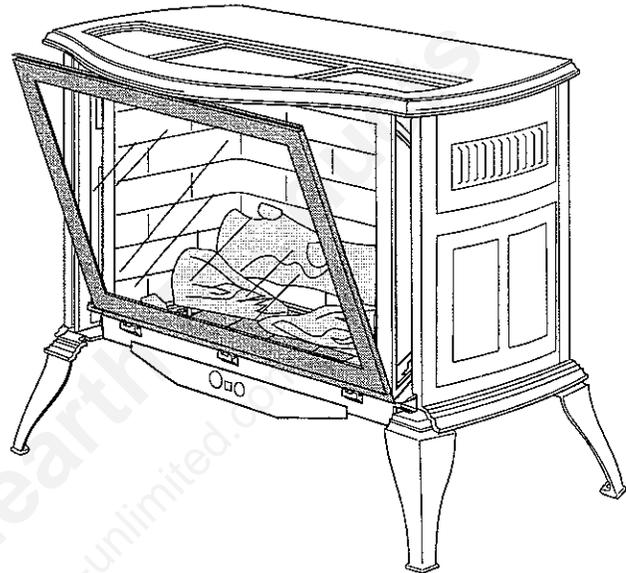
- Engage the upper log with the rear log and the left middle log as shown in Fig. 22. Engage the socket on the underside of the upper log with the mating anchor nub on the back log. Ensure that the top log is positioned properly relative to the right middle log, as shown in Fig. 23



**Fig. 23.** Confirm that the top log is in place properly by measuring from the right edge of the right middle log to the inside edge of the right branch of the top log.

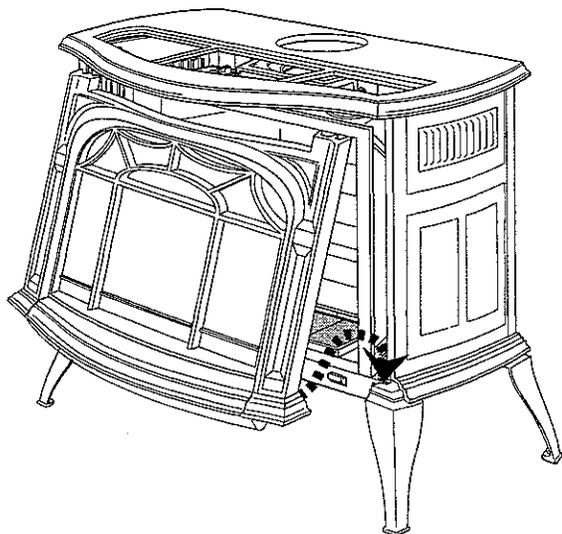
## Complete the Installation

- Replace the glass and frame assembly by resting the bottom edge of the frame on support brackets below the front opening of the firebox. Swing the top edge of the assembly toward the firebox, and center it. Fasten it by closing the latches over the top left and right edges of the frame. Fig. 24

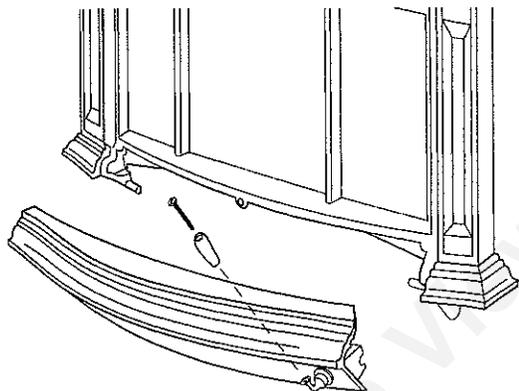


**Fig. 24.** Replace the glass and frame assembly.

- Replace the stove front by grasping it by the left and right edges. Lift it so that tabs on the back side of the top corners engage notches at the top forward corners of the stove sides. Then gently swing the bottom of the front panel to a vertical position, and lower it till prongs on its bottom left and right corners engage with notches cast into the tops of the forward legs. See Fig. 25. Test that the front is installed securely by grasping two of panel's vertical bars, and pulling the panel toward yourself. When the panel is in place properly you should not be able to pull the bottom of the front toward yourself without also lifting it



**Fig. 25. Replace the front panel.**



**Fig. 26. Attach the handle to the control door.**

- 3. Attach the wooden handle to the control door using the #8-32 x 2" screw from the parts bag. Fig 26.**
- 4. Set the steel screen and the cast-iron grate into the heat outlet recess in the stove top.**

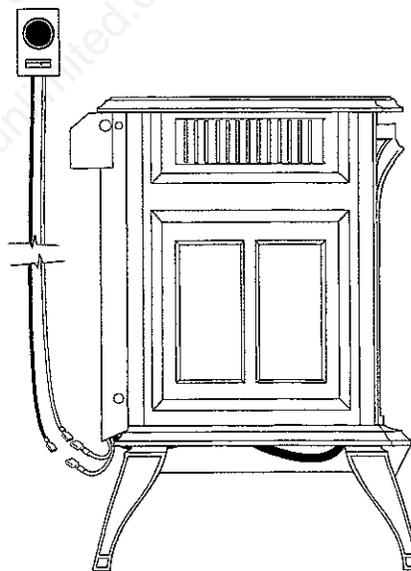
This completes the installation and assembly of the stove

### Thermostat Connection (optional)

**Use only a millivolt rated thermostat.** Check the table below for the appropriate gauge thermostat wire to use for the length of lead required in your installation

- 1.** Install the wall thermostat in the desired location and run the wires to the stove location. Terminate these leads with 1/4" spade connectors
- 2.** The two leads with 1/4" female connectors extend from the wire harness, accessible from under the left rear side of the stove. Either thermostat wire may be connected to either terminal. Fig 27

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



**Fig. 27. Attach leads for an optional thermostat to the connectors at the lower left rear corner of the stove.**

# Operation

## Lighting the Fire

The burner is equipped with a variable regulator that lets you adjust the gas input rate. To gain access to the gas control valve, use the small handle to swing open the valve control Access Door below the firebox opening. Once the pilot is lit, the rocker switch at the top left rear corner of the stove controls the burner. Fig. 29

1. Turn the wall thermostat, if any, to its lowest setting
2. If the pilot is already lit, proceed to "Relighting the Fire" below

Remove the stove front and the glass panel as shown on page 6. Wait fifteen (15) minutes to clear out any residual gas before attempting to light the pilot. 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 rocker switch, located at the left rear of the appliance, in the OFF position.

3. Turn the Regulator Control Knob to HI

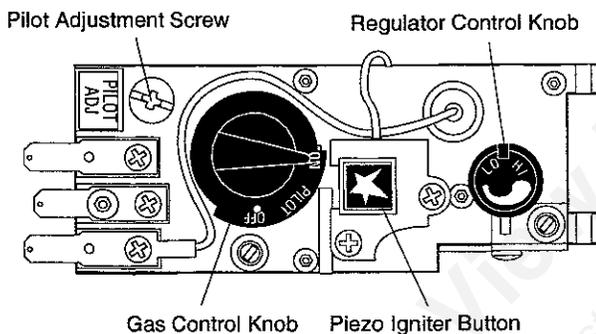


Fig. 28. Valve Controls (Coverplate removed).

4. Smell for gas. Inspect the unit for any obvious sign of damage or deterioration. If damaged, do not attempt to light.
5. Locate the pilot under the front log in the lower forward left hand corner of the firebox. When lit, the pilot will produce a small steady flame.
6. Turn the knob on the gas control counterclockwise to "PILOT."
7. Light the pilot by pushing the control knob all the way in and holding it there. Immediately push the 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. Replace the glass and the front panel.
8. Turn the gas control knob counterclockwise to "ON."
9. Place the ON/OFF rocker switch in the ON position and continue to watch the fire until the entire unit is lit. The flames will initially be blue, and will gradually turn to yellow after 15-20 minutes. Adjust the Regulator Control Knob to maintain the desired level flame intensity.

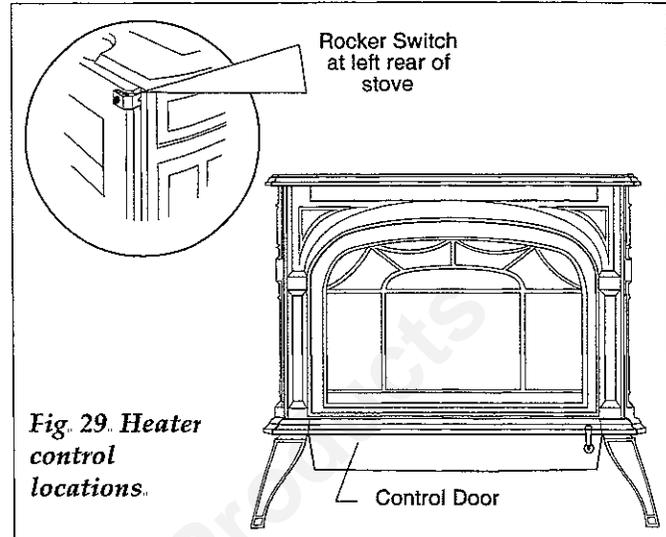


Fig. 29. Heater control locations.

### CAUTION

If the entire fire is not lit within five (5) seconds of turning the rocker switch ON, immediately push the rocker switch to OFF. Allow fifteen (15) minutes for the gas to clear from the firebox. Repeat from Step 2.

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

1. Simply push the rocker switch to OFF. Fig. 29. The pilot will remain on. You can leave the pilot running.

**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

1. Check to see if the pilot is on.
2. Turn on the rocker switch and watch to be sure the entire burner lights.

## The First Fire

We recommend that you burn the Radiance RNV40 for at least 2 hours at a high firing rate the first time you use it. Normally, the stove will give off some odor during this time as the initial fire causes the paint and any manufacturing residues to cure. Open windows as needed to provide plenty of ventilation during this 'break-in' period.

It is also common to hear ticking sounds during each heating and cooling cycle, as the steel and cast iron parts expand and contract. This is similar to car engines ticking as they cool.

## Normal Operation

The three-way rocker switch at the top left rear corner of the stove is the most convenient way to control the stove during normal operation. When the main control valve is ON, this switch enables thermostatic or manual operation. Fig. 30.

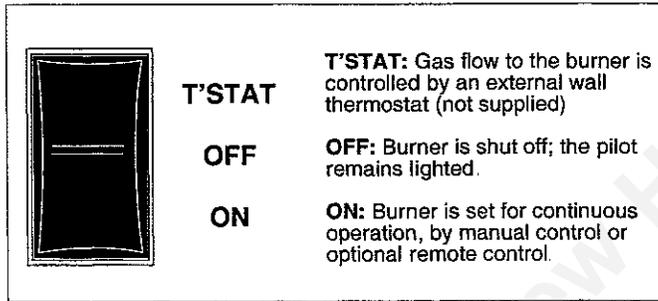


Fig. 30. Remote switch functions.

## Checking the Pilot Flame

The pilot assembly, in the forward left lower corner of the firebox, will produce a small, steady flame. The forward flame should completely engulf the top of the thermopile, and the rear flame should engulf the top of the thermocouple, about 3/8" down from the top. Fig. 31. The control valve includes a pilot adjustment screw at its top left corner. See Fig. 28.

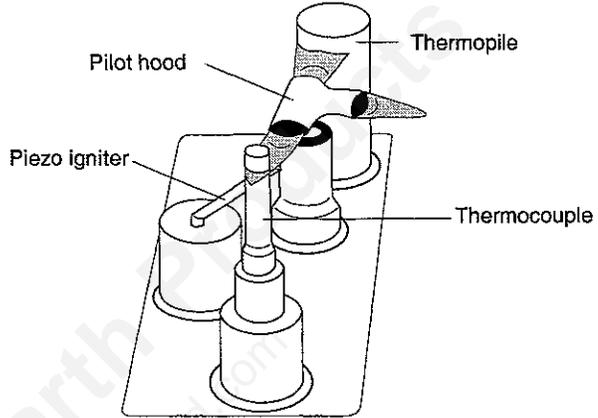


Fig. 31. Correct pilot flame. The pilot assembly is in the lower left forward corner of the firebox.

## Checking the Main Burner Flame

Periodically check the main burner flame. It should match Fig. 32.

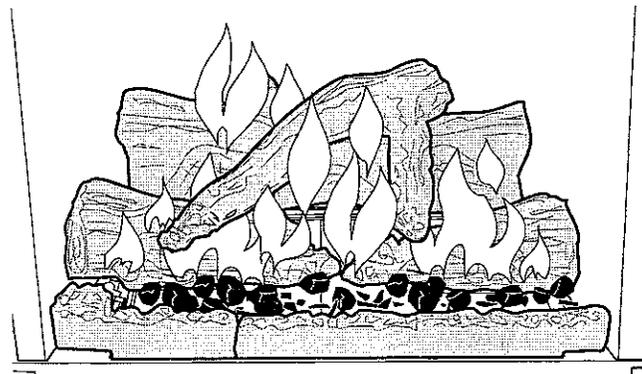


Fig. 32. Correct flame pattern.

### WARNING

**DO NOT OPERATE THIS APPLIANCE WITH THE GLASS PANEL REMOVED, CRACKED, OR DAMAGED. REPLACE THE GLASS PANEL ONLY WITH VERMONT CASTINGS PART NO. 160-1290.**

## 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

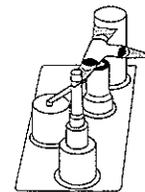
- Shut off the gas supply.
  - Do not try to light any gas appliance.
  - Do not touch any electric switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the 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 page.
2. Turn off all electric power to the appliance.
3. Turn the thermostat to the lowest setting, (if applicable).
4. Place the OFF/ON switch in the OFF position.
5. Remove the stove front and the glass panel according to the directions on page 6.
6. 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.
7. Wait fifteen (15) 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.
  8. Turn knob on gas control counterclockwise  to "PILOT."
  9. Push in control knob all the way and hold in. Immediately light the pilot by pushing the 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 6 through 8.
    - If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
    - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
  10. Replace the glass panel and the stove front.
  11. Turn gas control knob counterclockwise  to "ON."
  12. Place the OFF/ON switch in the ON position.
  13. 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.

## Troubleshooting / Honeywell #8420 Gas Control System

NOTE: Before troubleshooting the gas control system, be sure the external gas shut-off 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   | 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.   |
|   | B Defective ignitor (push button)  | 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)   | Check pilot flame. It must impinge on 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. See Fig. 28, page 13 |
|   | B Defective automatic valve operator   | 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, rocker switch ON              | A Remote switch or wires defective   | 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   |
|   | B Thermopile may not generate sufficient voltage   | 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.  |
| C Plugged burner orifice.   | Check burner orifices for debris, and remove.  |  |
| D Defective automatic valve operator  | Turn knob to ON, place rocker switch to ON, millivolt meter should read greater than 100 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.   | Clean an/or adjust pilot flame for maximum flame impingement on thermocouple and thermopile  |
|   | B Possible blockage of the vent terminal   | Check the vent terminal for blockage   |

## Maintenance

### Care of Painted Cast Iron Surfaces

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

The paint can be touched up as needed with Vermont Castings high-temperature stove paint

- Shut off the pilot; let the stove cool thoroughly
- Clean the areas to be painted with a wire brush
- Mask control panels, the glass panel, and the handle, as needed. Protect the surrounding walls and furniture from overspray
- Always wear a dust mask when using spray paint; always ensure good ventilation when painting. Use the paint sparingly; two light coats give better results than a single heavy coat
- Let the paint dry thoroughly before using the stove. Remove any masking materials. When you first use the stove after painting, ensure good ventilation. Burn the stove for at least an hour, to 'cure' the new paint

### Cleaning Porcelain Enamel

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

### Cleaning the Glass

The condensation from normal burner start-up will cause lint, dust, and other airborne particulates to cling to the inside surface of the glass. A film may also develop as the paint cures during the first two weeks of operation. Clean the glass after the first two weeks of operation and then two or three times per heating season. Use a non-ammonia based household cleaner with warm water, as needed. We recommend fireplace cleaner for this application

### Removing or Replacing the Glass

The front cast iron panel and the glass panel must come off the stove for inspection and cleaning of the logs and burner. If the glass must be replaced, **REPLACEMENT SHOULD BE DONE BY A LICENSED OR QUALIFIED SERVICE PERSON. USE ONLY VERMONT CASTINGS GLASS PANEL NO. 160-1290, AVAILABLE FROM AN AUTHORIZED VERMONT CASTINGS DEALER. USE OF SUBSTITUTE GLASS WILL VOID ALL PRODUCT WARRANTIES.**

UNDER NO CIRCUMSTANCES SHOULD THIS APPLIANCE BE OPERATED WITHOUT THE GLASS PANEL, OR WITH A BROKEN OR DAMAGED PANEL

To remove the glass, first remove the front panel. Follow the instructions on page 6

1. Remove the glass and frame assembly as a unit, by releasing the luggage-style latches at the top left and right corners of the glass frame. Fig. 33. Swing the top of the assembly away from the firebox, then lift it off its support brackets and set it down carefully on a flat, padded surface

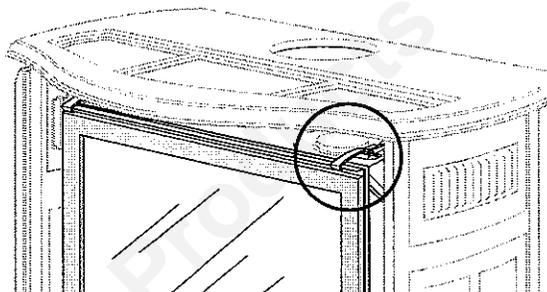


Fig. 33. Release the latches to release the glass and frame assembly from the stove

2. There is a bead of silicone sealant between the frame and the glass and gasket. To replace old gasket material, use a knife or razor blade to cut through the silicone. Lift the glass panel and gasket out of the frame and remove the old gasket from around the edge

### Replacing the Glass Gasket

Use only Vermont Castings glass gasket no. 120-3702. Note that the gasket material has two distinct halves; the flat self-adhesive portion goes around the outer edge of the glass panel so that the thick, round half overlays the inside edge. Do not stretch the gasket. See Fig. 34

1. Set the glass panel on a towel on a table or counter
2. Remove about 6" of the protective paper strip from the gasket, and, starting on a long side of the glass, apply the flat adhesive face of the gasket around the outside-facing edge of the panel. Continue around the panel, applying about 6' of gasket at a time, and being careful to not stretch the material. See Fig. 34

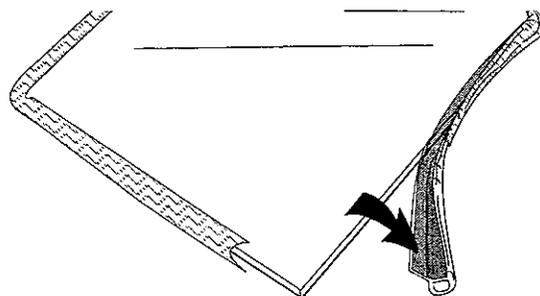


Fig. 34. Wrap the self-adhesive gasket material around the outside edge of the glass

3. Apply a bead of silicone sealant in the inside corners of the glass frame, all around the perimeter
4. Set 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 and frame assembly on the stove. Set the bottom of the frame on the support brackets on the front of the firebox, swing the assembly upright, and fasten it with the two latches at the front corners of the firebox. Fig. 33.
6. Replace the stove front by grasping the left and right edges of the panel. Hold the bottom edge slightly away from the firebox, while engaging the steel tabs at the top with notches cast into the top forward corners of the stove sides. Swing the bottom edge of the panel toward the firebox, resting it on brackets cut into the tops of the legs.
7. Confirm that the front panel is securely in place by pulling the two vertical bars, near the bottom. The panel is in place properly when you cannot pull it toward yourself without also lifting it.

### Cleaning the Logs and Burner

Inspect the logs and burner each time you use the stove. Clean these parts at least annually. Before you begin, shut off the gas supply according to the directions on page 13 and let the stove cool completely.

The logs are fragile; handle them carefully, and support them evenly. Protect your work surface with newspapers.

1. Remove the front and the glass panel as described on the previous page.
2. Remove each log and clean gently with a soft brush.
3. Remove the lava rocks and place them in a cup for reuse.
4. Use a vacuum with a soft brush attachment to clean the entire burner base area.
5. Replace the logs according to the directions in the Assembly chapter.
6. Replace the lava rocks.

7. Replace the glass and front as described previously.

### Inspect the Vent System Annually

Have the venting system inspected annually by a qualified technician. Shut off the main gas supply before inspecting the vent system. The vent system must be unobstructed and in good condition. Check for dust buildup, corrosion, or any sign of deterioration or deposits that could block the flow of exhaust. Clean the system if needed. Refer to the vent maker's instructions for specific guidance on inspection, cleaning, and repairs.

### Check the Gas Flame Regularly

To be sure that the stove is operating properly, check the flames periodically to confirm that they match the illustration in Fig. 35 below. The flame pattern should be evenly distributed throughout the log set. The flames will be blue during the first few minutes of operation, but should gradually change to yellow after about 15-20 minutes.

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

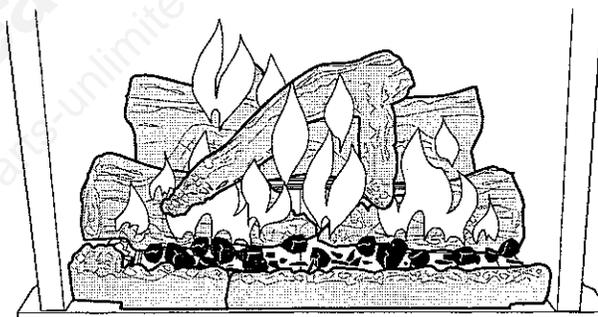
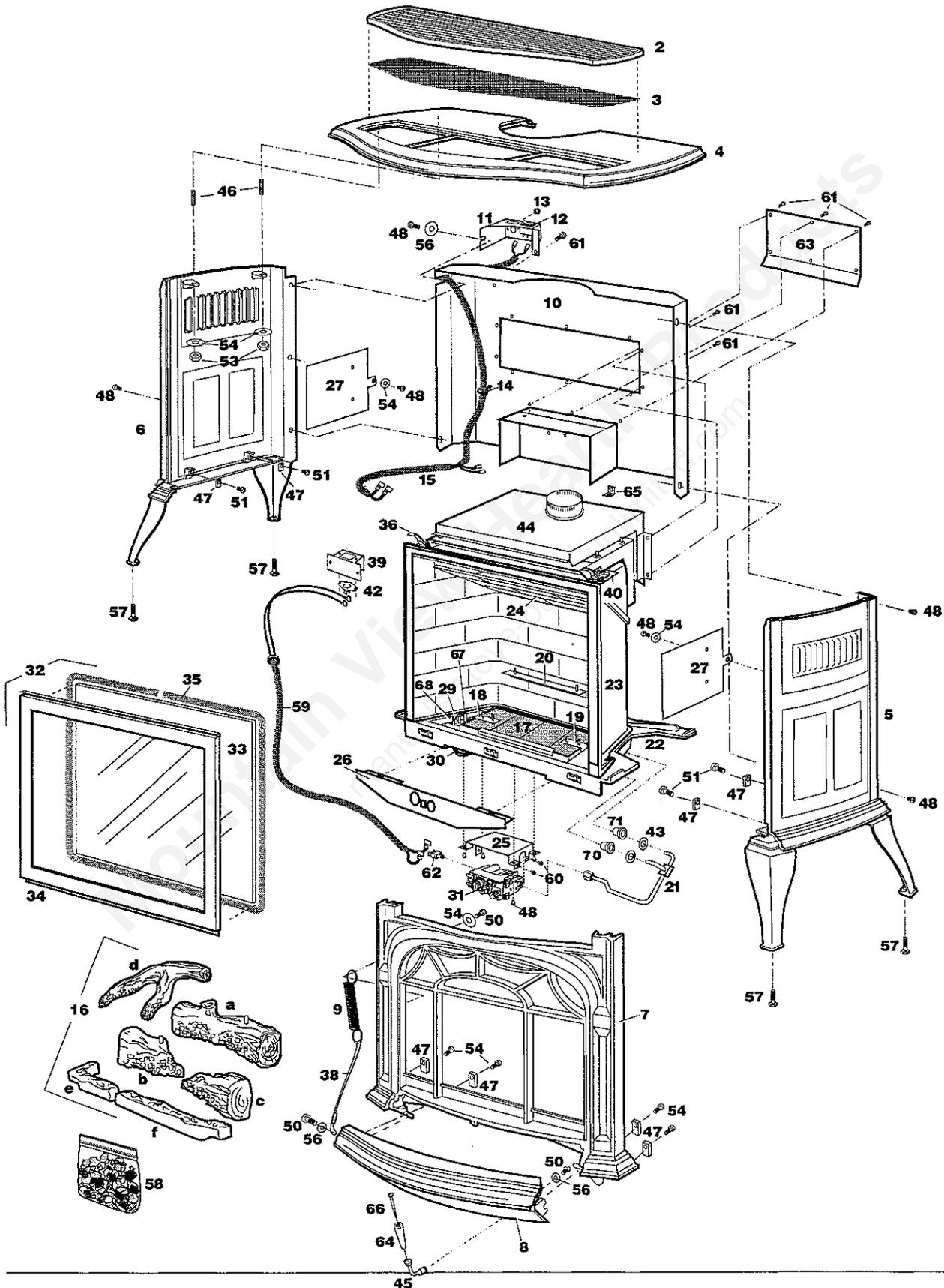


Fig. 35 Proper flame pattern.

### Parts Diagram for the Radiance Natural Vent Stove



## Parts List for the Radiance Natural Vent Stove.

|                                    |           |                                      |           |
|------------------------------------|-----------|--------------------------------------|-----------|
| RNV40 Stove ('Classic') / NG       | 000-2780  | 40. Glass Latch Bracket              | 3000-0081 |
| RNV40 Stove ( 'Classic') / LP      | 000-2785  | 41 Gasket, Fiberfrax / Pilot         | 120-3685  |
| 2 Grille                           | 130-1192  | 42 Vent Safety Switch                | 51866     |
| 3 Screen, Grille                   | 160-1933  | 43 Gasket, Fibre Seal (injectors)    | 120-3697  |
| 4 Top Plate                        | 130-1235  | 44 Heat Exchange/Draft Hood Assembly | 3000-0043 |
| 5 End, Right                       | 130-1233  | 45 Stub, Control Door                | 160-1981  |
| 6 End, Left                        | 130-1234  | 46 Stud, 1/4-20 x 1"                 | 120-4219  |
| 7. Front Plate                     | 130-1229  | 47 Damper Tab                        | 160-1488  |
| 8 Control Door                     | 130-1220  | 48 1/4-20 x 3/8" Phillips Screw      | 120-0993  |
| 9 Spring, Control Door             | 120-1842  | 49. #10-24 x 3/8" Phillips Screw     | 120-0985  |
| 10 Rear Shroud                     | 3000-0044 | 50 1/4-20 x 1/2" Hex Head Screw      | 120-1338  |
| 11 Switch Box                      | 3000-0149 | 51 1/4-20 x 1/2" Hex Head Screw      | 120-1338  |
| 12. Switch, ON/OFF/T'STAT          | 160-1597  | 52 7/16" Push Nut / Injector tube    | 120-3366  |
| 13 Rheostat Plug                   | 160-0561  | 53 1/4-20 x Hex Hd Flex Nut          | 120-3213  |
| 14 Wire Tie, wire harness          | 120-1504  | 54 Flat Washer, 1/4"x 7/8" o d       | 120-2470  |
| 15 Wire Harness, Burner/Thermostat | 160-1913  | 55 Flat Washer, 1/4"x 3/4" o d       | 120-2469  |
| 16. Gas Log Set (6 pieces)         | 500-3076  | 56 Flat Washer, 1/4" black           | 120-2473  |
| 16a Rear                           | 3000-0032 | 57 1/4-20 x 1" Leg Levelling bolt    | 120-1745  |
| 16b Right                          | 3000-0035 | 58 Lava Rocks, (1 bag)               | 57897     |
| 16c Left                           | 3000-0036 | 59 Vent Safety Switch Wire Harness   | 3000-0108 |
| 16d Top                            | 3000-0037 | 60 10-24 x 1/4" Phillips, Pan Hd     | 120-0980  |
| 16e Left Ember Strip               | 3000-0038 | 61 10-24 x 3/8" Phillips, Pan Hd     | 120-0983  |
| 16f Right Ember Strip              | 3000-0039 | 62 ECO Connector                     | 3000-0069 |
| 17. Burner Assembly                | 2000-0652 | 63 Rear Skirt Cover Plate            | 3000-0156 |
| 18. Log Bracket, Left              | 3000-0109 | 67 5/16" Adhesive-backed gasket      | 120-3591  |
| 19 Log Bracket, Right              | 140-9173  | 68 Air inlet                         | 3000-0056 |
| 20 Log Bracket, Rear               | 3000-0090 |                                      |           |
| 21 Manifold Tube Assembly          | 2000-0663 |                                      |           |
| 22. Base - Burner                  | 130-1143  |                                      |           |
| 23. Firebox                        | 130-1236  |                                      |           |
| 24 Firebox Baffle                  | 130-1237  |                                      |           |
| 25. Valve Bracket                  | 140-9110  |                                      |           |
| 26 Control Panel                   | 140-9136  |                                      |           |
| 27. Heat Shield, Side (2)          | 140-9130  |                                      |           |
| 29 Pilot Assembly (NG)             | 160-1979  |                                      |           |
| Pilot Assembly (LP)                | 160-1980  |                                      |           |
| 30. Electrode wire                 | 160-1661  |                                      |           |
| 31. Control Valve, Honeywell NG    | 2000-0541 |                                      |           |
| Control Valve, Honeywell LP        | 2000-0572 |                                      |           |
| 32 Glass and Frame Assembly        | 500-3075  |                                      |           |
| 33 Glass Panel                     | 160-1290  |                                      |           |
| 34 Glass Frame                     | 140-9112  |                                      |           |
| 35 Glass Gasket, Med Knit          | 120-3702  |                                      |           |
| 36. Glass Frame Latch              | 160-1972  |                                      |           |
| 37. Cable, Cntrl 1/32 S S          | 120-4867  |                                      |           |
| 38. Cable, Control Door            | 160-1924  |                                      |           |
| 39. Vent Safety Switch Bracket     | 3000-0150 |                                      |           |

### Hardware Bag:

|                                      |           |
|--------------------------------------|-----------|
| 64 Control Door Handle               | 160-0660  |
| 65 Decorative Pipe Bracket           | 3000-0151 |
| 66 #8-32 x 2" Slotted Screw (Handle) | 120-1243  |

### Replacement Burner Assembly Parts

|   |           |
|---|-----------|
| 67. PSE-018A Thermopile                 | 3000-0312 |
| 68. PSE-019A Thermocouple               | 3000-0313 |
| 69 Piezo Ignitor Replacement Kit        | 3000-0062 |
| 70 Orifice Hood, Front - LP #59 ( 0410) | 2000-0664 |
| Orifice Hood, Front - NG #52 ( 0635)    | 3000-0331 |
| 71 Orifice Hood, Rear - LP #55 ( 052)   | 2000-0665 |
| Orifice Hood, Rear - NG #42 ( 0935)     | 3000-0332 |

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

**The Majestic Products Company**  
**1000 East Market Street**  
**Huntington, IN 46750-2579**  
**219-356-8000**

# Warranty

## Limited Three Year Warranty

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

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

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

## Exclusions and Limitations

1. This warranty is transferable; however, proof of original purchase is required.
2. Vermont Castings offers no warranty on chipping of enamel surfaces. Inspect your Radiance Room Heater prior to accepting it for any damage to the enamel.
3. This warranty does not cover misuse of the Radiance Natural Vent Room Heater as described in the Owner's Guide, nor does it cover a Radiance Natural Vent Room Heater 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 Room Heater. (Do not operate the Radiance Room Heater as this may negate the ability to process the claim with the carrier.)
6. Claims are not valid where the installation does not conform to local building and fire codes or, in their absence, to the recommendations in the Owner's Guide.

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

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

Some states do not allow 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 you. This warranty gives you specific rights and you may have other rights which vary from state to state.

8. 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 porcelain enamel finish to flake off.

## How To Obtain Service

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

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

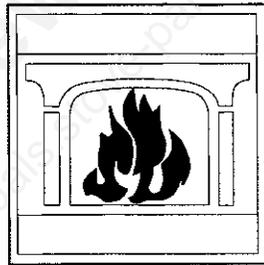
A warranty claim process will then begin. Vermont Castings reserves the right to withhold final approval of a warranty claim pending a visual inspection of the defect by authorized representatives.

### Please record the following information for future reference.

Serial No \_\_\_\_\_  
Fuel Type: NG \_\_\_\_ LP \_\_\_\_  
Manifold Pressure: \_\_\_\_ Inlet Supply Pressure: \_\_\_\_  
Dealer \_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_  
Date Purchased \_\_\_\_\_  
Installer \_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_  
Date Installed \_\_\_\_\_

**INSTALLER:  
PLEASE KEEP THIS MANUAL  
WITH THE HEATER  
AFTER INSTALLATION.**

**IT CONTAINS IMPORTANT  
OPERATION, MAINTENANCE,  
AND  
WARRANTY INFORMATION.**



VERMONT  
CASTINGS

THE  
**MAJESTIC**  
PRODUCTS COMPANY

475 Admiral Blvd. • Mississauga, Ontario, Canada L5T 2N1 • 905-670-7885  
1000 East Market St. • Huntington, IN 46750-2579 • 219-356-8000  
<http://www.majesticproducts.com>