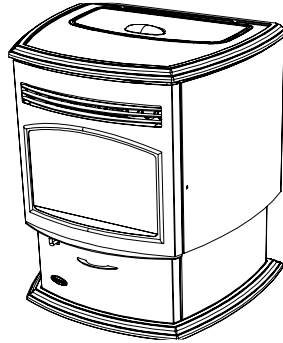


# QUADRA-FIRE®

## SANTA FE PELLET STOVE

### Owner's Manual Installation and Operation

**Model:**  
**SANTAFE-B1**



Tested and  
Listed by  Portland  
Oregon USA  
C US  
OMNI-Test Laboratories, Inc.



### CAUTION



#### DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



### ⚠ WARNING



**Please read this entire manual before installation and use of this pellet fuel-burning room heater. Failure to follow these instructions could result in property damage, bodily injury or even death.**

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire - If any external part starts to glow, you are overfiring. Reduce feed rate. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

### ⚠ WARNING



**HOT! DO NOT TOUCH. SEVERE BURNS MAY RESULT. CLOTHING IGNITION MAY RESULT.**



Glass and other surfaces are hot during operation and cool down.


- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers open or removed.
- Keep clothing, furniture, draperies and other combustibles away.

### CAUTION

Tested and approved for wood pellets and shelled field corn fuel only. Burning of any other type of fuel voids your warranty.

### CAUTION

- Check building codes prior to installation.
- Installation MUST comply with local, regional, state and national codes and regulations.
  - Consult local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

**Congratulations**   
and Welcome to the Quadra-Fire Family!


Hearth & Home Technologies welcomes you to our tradition of excellence! In choosing a Quadra-Fire appliance, you have our assurance of commitment to quality, durability, and performance.

This commitment begins with our research of the market, including 'Voice of the Customer' contacts, ensuring we make products that will satisfy your needs. Our Research and Development facility then employs the world's most advanced technology to achieve the optimum operation of

our stoves, inserts and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. Each unit is meticulously fabricated and surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection. We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. Thank you for choosing Quadra-Fire.

**SAMPLE: CLEARANCE TO COMBUSTIBLES LABEL**

**LOCATION: Back side of left side panel.**



**CAUTION: HOT WHILE IN OPERATION DO NOT TOUCH, KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS. SEE NAMEPLATE AND INSTRUCTIONS.**  
Operate this unit with fuel hopper lid closed. Failure to do so may result in emissions products' combustion from the hopper under certain conditions. Maintain hopper seal in good condition. Do not over fill the hopper

**ATTENTION: CHAUD LORS DE L'OPÉRATION. NE PAS TOUCHER. GARDEZ LES ENFANTS ET LES VÊTEMENTS LOIN DE L'ESPACE DESIGNÉ DE L'INSTALLATION. LE CONTACT PEUT CAUSER DES BRÛLURES À LA PEAU. VOIR L'ÉTIQUETTE ET LES INSTRUCTIONS.** Opérez cet appareil avec le couvercle de la trémie fermé. Le défaut de ne pas suivre les instructions peut résulter, sous certaines conditions, en une combustion des émissions des produits venant de la trémie. Ne pas remplir la trémie trop pleine.

Tested and Listed by **OTL** Portland, Oregon, USA  
OMNI-Test Laboratories, Inc.

Report / Rapporto **061-S-53-2**

**QUADRA-FIRE**

SERIAL NO. / NUMÉRO DU **007**

Listed Solid Fuel Room Heater/Pellet Type Insert. Also suitable for Mobile Home Installation. This appliance has been tested and listed for use in Manufactured Homes in accordance with OAR 814-23-9000 through 814-23-909.

Appareil de chauffage à inserté de combustible solide/de type de boulettes. Accepté dans l'installation dans les maisons mobiles. Cet appareil a été testé et enregistré pour l'usage dans les Maisons Mobiles en accord avec OAR 814-23-9000 jusqu'à 814-23-909.

**Santa Fe Pellet Stove**

Tested to: ASTM E1509, ORD-C-148, E-1199 0 Room Heating Pellet Burning Type, APFI, (UM) 84-HUD FOR USE ONLY WITH PELLETTIZED WOOD OR SHELLD FIELD CORN FUEL.  
Input Rating: 30,000 Btu's/hr  
Electrical Rating: 115 VAC, 60 Hz, Standard 1 Amps, Run 1.1 AMPS  
Route power cord away from unit. Do not route cord under or in front of appliance.  
DANGER: Risk of electrical shock. Disconnect power supply before servicing. Replace glass only with 5mm ceramic available from your dealer. To start, set thermostat above room temperature, the stove will light automatically. To shutdown, set thermostat to below room temperature. For further instruction refer to owner's manual.  
Keep viewing and ash removal doors tightly closed during operation.

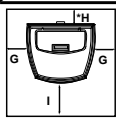
Testé à: ASTM E1509-95, ORD-C-1482-M199 0 Room Heating Pellet Burning Type, APFI, (UM) 84-HUD POUR USAGE AVEC LES PELLETTES DE BOIS OU DE COMBUSTIBLE DE MAIS ECOSSE DES CHAMPS.  
Puissance de Rendement: 30,000 Btu's/hr  
Puissance Électrique: 115 VAC, 60 Hz, Débit 1 Amps, Courant 1.1 AMPS  
Éloignez le fil électrique de l'appareil. Ne pas faire passer le fil électrique au dessus ou en dessous de l'appareil.  
DANGER: Il y a risque de décharge électrique. Déconnectez le fil électrique de la prise de contact avant le service.  
Remplacez la vitre seulement avec une vitre en céramique de 5 mm disponible chez votre fournisseur.  
Pour allumer, régler la température du thermostat au dessus de la température de la pièce, le poêle s'allumera automatiquement. Pour éteindre, régler la température du thermostat en dessous de la température de la pièce. Pour des instructions supplémentaires, référez vous au manuel du propriétaire. Gardez la porte d'ouverture et la porte des cendres fermées hermétiquement durant l'opération.

**Serial Number**

**Model Name**

**Test Lab & Report No.**

**FLOOR PROTECTION / PROTECTION DU SOL**



If Cast Base is installed (Part 811-084) use non-combustible floor protector, extending beneath heater and to the floor. Measure front distance (I) from the face of the glass door. If Cast Base is not installed, floor protector must be 1/4" (6.4mm) minimum thickness ("K" value = 0.84).

G = 2"/51mm  
H\* = 2"/51mm  
I = 6"/152mm

Installez utiliser et appuyez du poêle (Pièce 811-084) le poêle doit être placé sur une assise non combustibles'étendant tout autour de lui, comme les schémas l'indiquent. Mesurez la distance devant (I) de la surface de la porte vitrée.  
Ne pas installer l'appuyé du poêle le protecteur de plancher doit être d'un minimum de 1/4" (6.4mm) d'épaisseur ("K" value = 0.84) de matériel incombustible ou équivalent.  
\*Un protecteur incombustible de plancher doit s'étendre sous le conduit de cheminée pour une installation de ventilation horizontale ou sous un adaptateur de ventilation de dessus pour une installation verticale. ÉTATS-UNIS-RE COMMANDÉ; CANADA - REQUIREMENT.

Manufactured by: Fabriqué par: **HEARTH & HOME**  
1445 Highway North  
Colville, WA 99114  
www.quadrafire.com

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
This model is exempt from certification under 40 CFR 60.531 by definition of Wood Heater (A) "Air-to-Fuel Ratio"

**Manufactured Date**

DO NOT REMOVE THIS LABEL / NE PAS ENLEVER L'ÉTIQUETTE

Made in U.S.A./Fait Aux États-Unis

7001-143

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# 1

## Listing and Code Approvals

### A. Appliance Certification

<b>Model:</b>	Santa Fe Pellet Stove
<b>Laboratory:</b>	OMNI Test Laboratories, Inc.
<b>Report No.</b>	061-S-053-2
<b>Type:</b>	Solid Fuel Room Heater/Pellet Fuel Burning Type
<b>Standard:</b>	ASTM E1509-95 and ULC S627-00, ULC/ORD-C1482-M1990 Room Heater Pellet Fuel Burning type and (UM) 84-HUD, Mobile Home Approved.
<b>State of Colorado:</b>	Listed 09-13-05

### B. Mobile Home Approved

This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided. The structural integrity of the mobile home floor, ceiling, and walls must be maintained. The appliance must be properly grounded to the frame of the mobile home and use only listed pellet vent Class "L" or "PL" connector pipe. A Quadra-Fire Outside Air Kit must be installed in a mobile home installation.

### C. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

**NOTE:** This installation must conform with local codes. In the absence of local codes you must comply with the **ASTM E1509-95, ULC S627-00, ULC/ORD-C-1482-M1990, (UM) 84-HUD,**

### D. Electrical Rating

115 VAC, 60 Hz, Start 4.1 Amps, Run 1.1 Amps

### E. BTU & Efficiency Specifications

<b>Particulate Emissions Rating:</b>	0.7 grams/hr
<b>*BTU Output:</b>	8,000 - 30,000 / hr
<b>Heating Capacity:</b>	up to 1,500 sq. ft. depending on climate zone
<b>Hopper Capacity:</b>	52 lbs
<b>Fuel:</b>	Wood Pellets or Shelled Corn
<b>Shipping Weight:</b>	240 lbs

\*BTU output will vary, depending on the brand of fuel you use in your stove. Consult your Quadra-Fire dealer for best results.

**NOTE:** Hearth & Home Technologies, manufacturer of this appliance, reserves the right to alter its products, their specifications and/or price without notice.

# 2

## Getting Started

### A. Design, Installation & Location Considerations

#### 1. Appliance Location

Consideration must be given to safety, convenience, traffic flow, and the fact that the appliance will need a chimney and chimney connector. It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation.

If you are not using an existing chimney, place the appliance in a location to maintain a clear passage for the installation of any listed and approved pellet venting system. This appliance may be vented vertically or horizontally.

Maintain specified vent clearance to combustible requirements listed by the pellet manufacturer's venting instructions and all clearance to combustibles listed in this manual.

Check with your local building code agency before you begin your installation. Be sure local building codes do not supersede UL specifications and always obtain a building permit so that insurance protection benefits cannot be unexpectedly cancelled. If any assistance is required during installation, please contact your local dealer.

We recommend that a qualified building inspector and your insurance company representative review your plans before and after installation.

#### 2. Thermostat Location

The thermostat's location will have some effect on the appliance's operation. When the thermostat is located close to the appliance, it may require a slightly higher temperature setting to keep the rest of the house comfortable. If the thermostat location is in an adjacent room or on a different floor level, you will notice higher temperatures near the appliance.

### B. Fire Safety


Maintain the designated clearances to combustibles. Insulation must not touch the chimney. You must maintain the designated air space clearance around the chimney. This space around a chimney is necessary to allow natural heat removal from the area. Insulation in this space will cause a heat buildup, which may ignite wood framing. **NOTE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.**




To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A practiced evacuation plan, consisting of at least 2 escape routes.
4. A plan to deal with a hopper fire as follows:

In the event of a hopper fire:

- a. Evacuate the house immediately.
- b. Notify fire department.

 <b>CAUTION</b>
<ul style="list-style-type: none"> <li>• Do NOT connect this unit to a chimney flue servicing another appliance.</li> <li>• Do NOT connect to any air distribution duct or system.</li> </ul>


 <b>WARNING</b>
<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Fire Hazard.</p> <ul style="list-style-type: none"> <li>• Do not operate appliance before reading and understanding operating instructions.</li> <li>• Failure to operate appliance properly may cause a house fire.</li> </ul> </div> </div> <div style="margin-top: 10px;">  </div>


**C. Tools And Supplies Needed**

<b>Tools and building supplies normally required for installation, unless installing into an existing masonry fireplace:</b>	
Reciprocating Saw	Safety Glasses
Channel Locks	Framing Square
Hammer	Electric Drill & Bits (1/4")
Phillips Screwdriver	1/4" Self-Tapping Screws
Tape Measure	
Plumb Line	<u>May also need:</u>
Level	Vent Support Straps
Framing Material	Venting Paint
Hi-temp Caulking Material	
Gloves	

**D. Inspect Appliance & Components and Pre-Use Check List**

1.		Place the appliance in a location near the final installation area and follow the procedures below:
2.		Open the appliance and remove all the parts and articles packed inside the Component Pack. Inspect all the parts and glass for shipping damage. Contact your dealer if any irregularities are noticed.
3.		All safety warnings have been read and followed.
4.		This Owner's Manual has been read.
5.		Floor protection requirements have been met.
6.		Venting is properly installed.
7.		The proper clearances from the appliance and chimney to combustible materials have been met.
8.		The masonry chimney is inspected by a professional and is clean, or the factory built metal chimney is installed according to the manufacturer's instructions and clearances.
9.		The chimney meets the required minimum height.
10.		All labels have been removed from the glass door.
11.		Plated surfaces have been wiped clean, if applicable.
12.		Thermostat or remote has been installed.
13.		A power outlet is available nearby.

	<b>WARNING</b>
<p>Inspect appliance and components for damage. Damaged parts may impair safe operation.</p> <ul style="list-style-type: none"> <li>• Do NOT install damaged components.</li> <li>• Do NOT install incomplete components.</li> <li>• Do NOT install substitute components.</li> </ul> <p>Report damaged parts to dealer.</p>	

	<b>WARNING</b>
<p><b>Fire Risk.</b></p> <p>Hearth &amp; Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:</p> <ul style="list-style-type: none"> <li>• Installation and use of any damaged appliance.</li> <li>• Modification of the appliance.</li> <li>• Installation other than as instructed by Hearth &amp; Home Technologies.</li> <li>• Installation and/or use of any component part not approved by Hearth &amp; Home Technologies.</li> <li>• Operating appliance without fully assembling all components.</li> <li>• Operating appliance without legs attached (if supplied with unit).</li> <li>• Do NOT Overfire</li> </ul> <p><b>Or any such action that may cause a fire hazard.</b></p>	

# 3 Dimensions and Clearances

## A. Appliance Dimensions

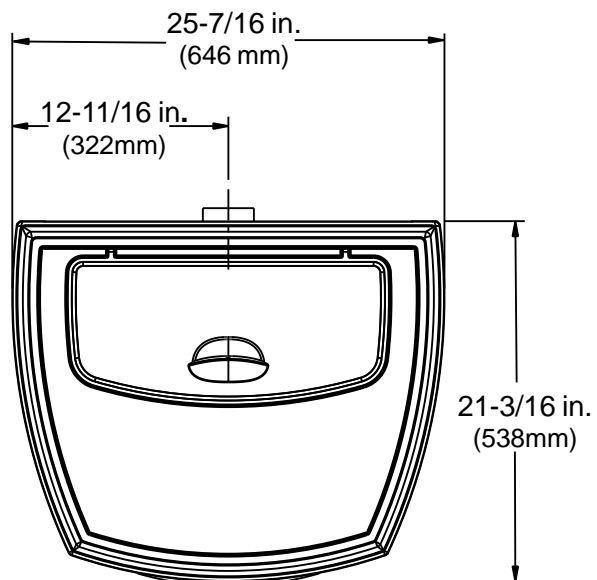


Figure 7.1 - Top View

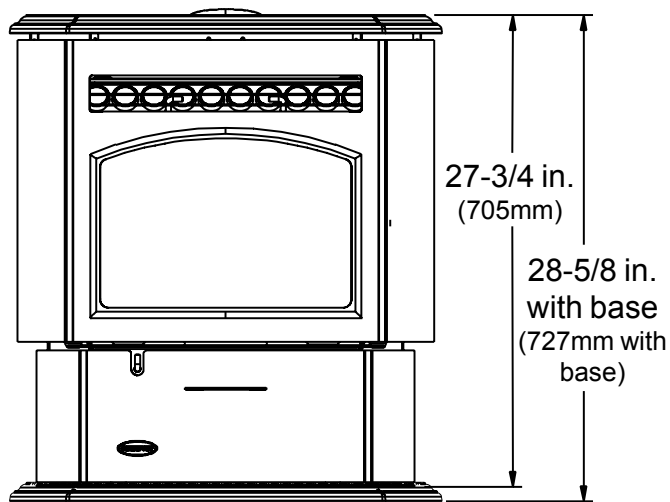


Figure 7.2- Front View

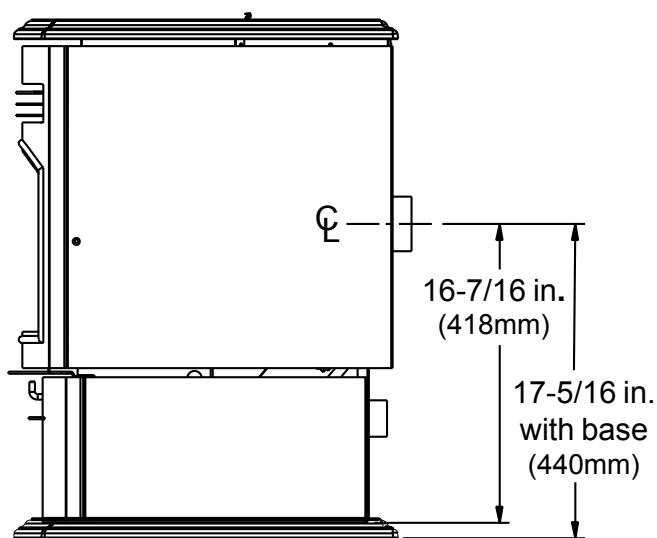


Figure 7.3 -Side View

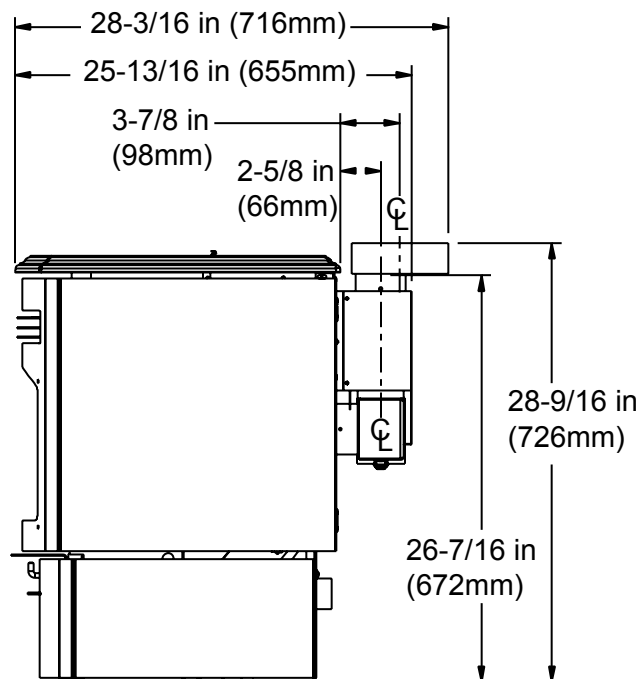
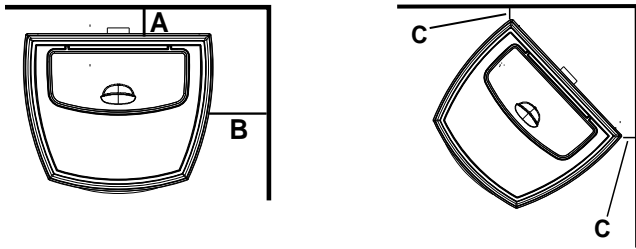


Figure 7.4 - Side View with Top Vent Adapter

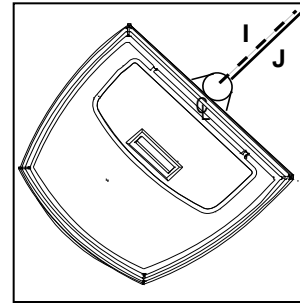
**B. Clearances to Combustibles (UL and ULC)**



Straight Back Against Wall		Inches	Millimeters
<b>A</b>	Back Wall to Appliance	2	51
<b>B</b>	Side Wall to Appliance	6	152

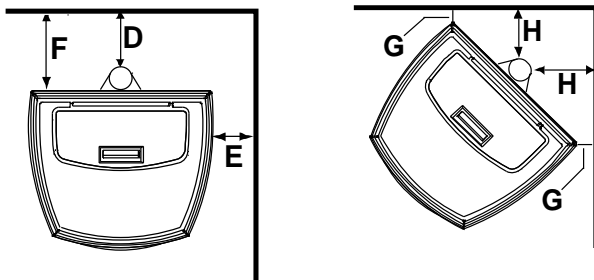
Corner Installation		Inches	Millimeters
<b>C</b>	Walls to Appliance	2	51

Alcove Installation	Inches	Millimeters
Minimum Alcove Height	43	1092
Minimum Alcove Side Wall	6	152
Minimum Alcove Width	38	965
Maximum Alcove Depth	36	914




Dimension to Corner		Inches	Millimeters
<b>I</b>	Flue Center Line	8-1/2	217
<b>J</b>	Back of Top Vent Adapter	9-1/8	232

**Installations with:  
3 to 3 inch Top Vent Adapter and  
3 to 6 inch Offset Adapter Kit**



Vertical Installation		Inches	Millimeters
<b>D</b>	Back Wall to Flue Pipe	3	76
<b>E</b>	Side Wall to Cast Top	6	152
<b>F</b>	Back Wall to Appliance	7	178

Corner Installation		Inches	Millimeters
<b>G</b>	Walls to Appliance	2	51
<b>H</b>	Side Wall to Flue Pipe	3	76

 **WARNING**

Fire Risk.  
Comply with all minimum clearances to combustibles as specified.

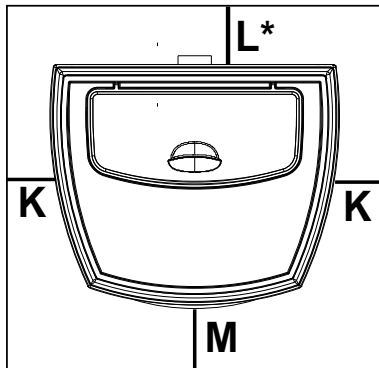
Failure to comply may cause house fire.

**NOTE:**

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

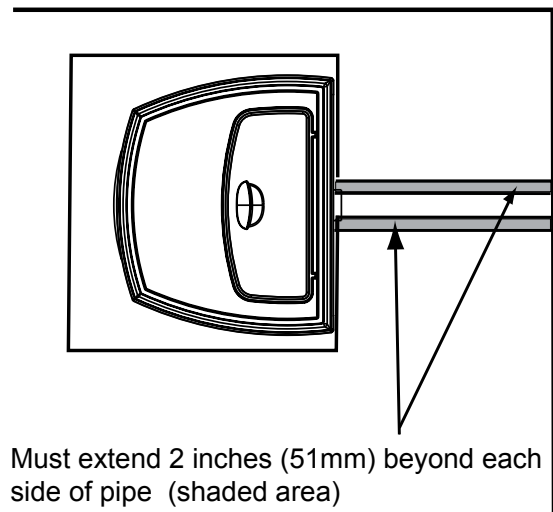
**C. Hearth Pad Requirements (UL and ULC)**

Use a non-combustible floor protector, extending beneath appliance and to the front, sides and rear as indicated. Measure front distance “M” from the surface of the glass door.



**Figure 9.1**

Hearth Pad Requirements		Inches	Millimeters
<b>K</b>	Sides	2	51
<b>L*</b>	Back	2	51
<b>M</b>	Front	6	152



Must extend 2 inches (51mm) beyond each side of pipe (shaded area)

**Figure 9.2**

**\*L Exception for Horizontal Installations:**

**USA INSTALLATIONS:** If optional Cast Base is installed use a non-combustible floor protector extending under unit and to the sides, front and back of unit as shown in Floor Protection Diagram. Measure front distance (M) from the surface of the glass door.

If Cast Base is not installed, the non-combustible floor protector must be 1/4 inch (6mm) minimum thickness (“k” value = 0.84).

A non-combustible floor protection extending beneath the flue pipe is recommended with horizontal venting or under the top vent adapter with vertical installation. **Figure 9.2.**

**CANADA INSTALLATIONS:** A non-combustible floor protection extending beneath the flue pipe is **required** with horizontal venting or under the top vent adapter with vertical installation.



# 4 Vent Information



## A. Chimney and Exhaust Connection

1. **Chimney & Connector:** Use 3 or 4 inch (76-102mm) diameter type "L" or "PL" venting system. It can be vented vertically or horizontally.
2. **Mobile Home:** Approved for all Listed pellet vent. If using the 3 inch (76mm) vertical Top Vent Adapter Kit or the 3 to 6 inch (76-152mm) Top Vent Offset Adapter, use Listed double wall flue connector. A Quadra-Fire Outside Air Kit must be used with manufactured home installations.
3. **Residential:** The 3 inch (76mm) vertical Top Vent Adapter Kit and the 3 to 6 inch (76-152mm) Top Vent Offset Adapter are tested to use 24 gauge single wall flue connector or Listed double wall flue connector to Class A Listed metal chimneys, or masonry chimneys meeting International Conference of Building Officials (ICBO) standards for solid fuel appliances.
4. **INSTALL VENT AT CLEARANCES SPECIFIED BY THE VENT MANUFACTURER.**
5. Secure exhaust venting system to the appliance with at least 3 screws. Also secure all connector pipe joints with at least 3 screws through each joint.

**NOTE: All pipe must be welded seam pipe whenever possible. Seal pipe joints with high temperature silicone (500°F [260°C] minimum rated only).**

**NOTE: If burning shelled field corn, you must use approved venting specifically designed for corn. Follow the instructions from the venting manufacturer.**

	<b>WARNING</b>
	<p>Fire Hazard.</p> <ul style="list-style-type: none"> <li>• Only LISTED venting components may be used.</li> <li>• NO OTHER vent components may be used. Substitute or damaged vent components may impair safe operation.</li> </ul>

	<b>WARNING</b>
	<p>Vent surfaces get HOT, can cause burns if touched. Noncombustible shielding or guards may be required.</p>

## B. Venting Termination Requirements

<b>CAUTION</b>
<p><b>Do not terminate vent</b> in any enclosed or semi-enclosed area such as a carport, garage, attic, crawl space, under a sun deck or porch, narrow walkway or closely fenced area, or any location that can build up a concentration of fumes such as a stairwell, covered breezeway, etc.</p>

1. Termination must exhaust above air inlet elevation. It is recommended that at least 60 inches (1524mm) of vertical pipe be installed when appliance is vented directly through a wall. This will create a natural draft, which will help prevent the possibility of smoke or odor venting into the home during a power outage. It will also keep exhaust from causing a nuisance or hazard by exposing people or shrubs to high temperatures. The safest and preferred venting method is to extend the vent vertically through the roof.
2. Distance from doors and opening windows, or gravity or ventilation air inlets into building:
  - a. Not less than 48 inches (1219mm) below;
  - b. Not less than 48 inches (1219mm) horizontally from;
  - c. Not less than 12 inches (305mm) above.
3. Distance from permanently closed windows;
  - a. Not less than 12 inches (305mm) below; horizontally from or above.
4. Distance between bottom of termination and grade should be 12 inches (305mm) minimum. This is conditional upon plants in the area, and nature of grade surface. The grade surface must be a non-combustible material (i.e., rock, dirt). The grade surface must not be lawn. Distance between bottom of termination and public walkway should be 84 inches (2134mm) minimum.
5. Distance to combustible materials must be 24 inches (610mm) minimum. This includes adjacent buildings, fences, protruding parts of the structure, roof overhang, plants and shrubs, etc.
6. Termination Cap Location (Home Electrical Service)
  - Side-to-side clearance is to be the same as minimum clearance to vinyl inside corners.
  - Clearance of a termination cap below electrical service shall be the same as minimum clearance to vinyl soffits.
  - Clearance of a termination cap above electrical service will be 12 inches minimum.
  - Location of the vent termination must not obstruct or interfere with access to the electrical service.

### C. Equivalent Feet of Pipe

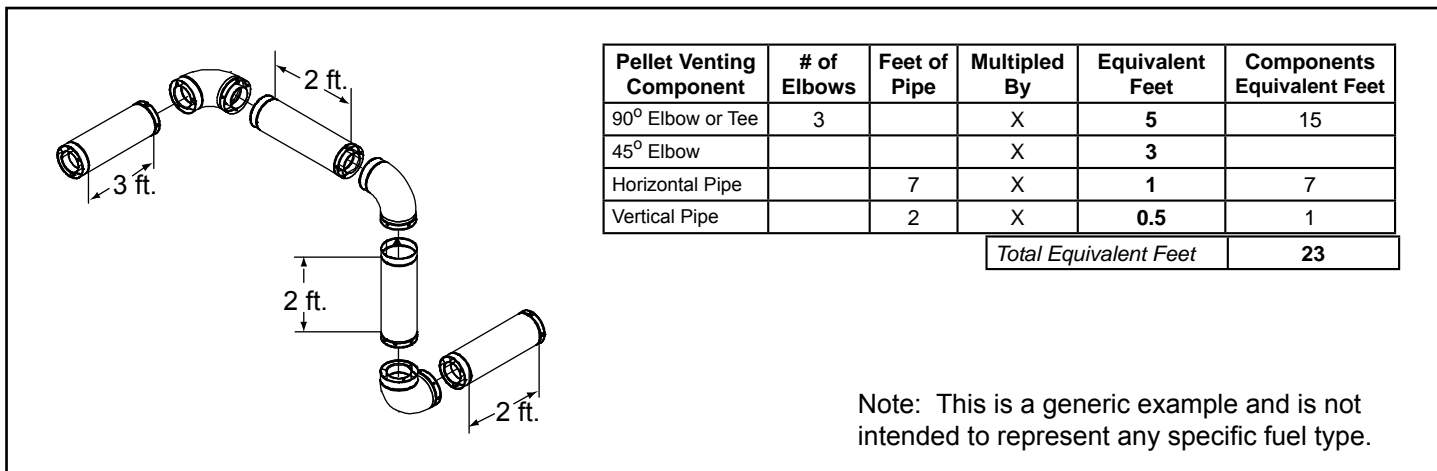
The table below can help you calculate the equivalent feet of pipe which is a method used to determine pellet vent size.

**Figure 11.1.**

### WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or your dealer.

### Example of 3 Elbow-Rear Vent Termination Calculaton



Note: This is a generic example and is not intended to represent any specific fuel type.

**Figure 11.1**

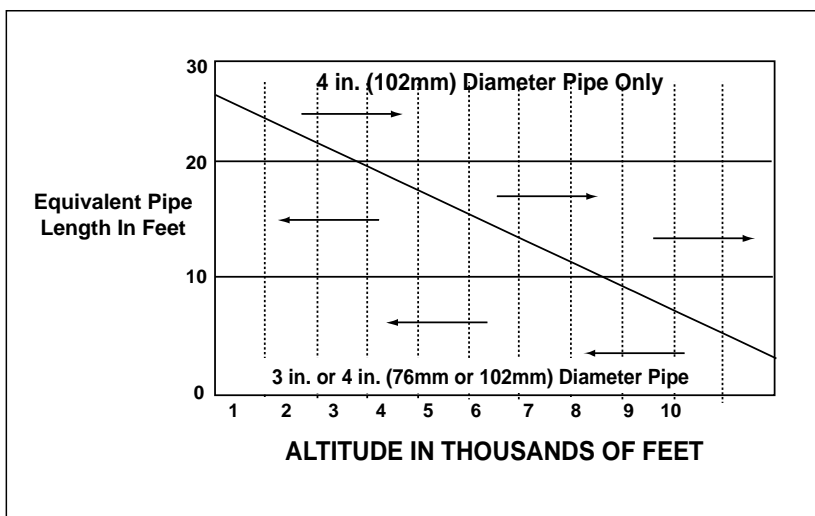
### D. Pipe Selection Chart

The chart will help you in determining proper venting size according to the equivalent feet of pipe calculated above and the altitude above sea level of this installation. **Figure 11.2.**

Locate the calculated equivalent feet of pipe on the vertical left side of the chart. Move to the right horizontally on the chart until you reach your altitude above sea level.

If you fall below the diagonal line, 3 or 4 inch (76 to 102mm) pipe may be used. If it is anywhere above the diagonal line, a 4 inch (102mm) diameter pipe is required.

The chart reveals that a 90° elbow is 5 times as restrictive to the flow of exhaust gases under positive pressure as 1 foot of horizontal pipe, and a foot of horizontal pipe is twice as restrictive as a foot of vertical pipe.



**Figure 11.2**

# 5 Venting Systems

## A. Alcove

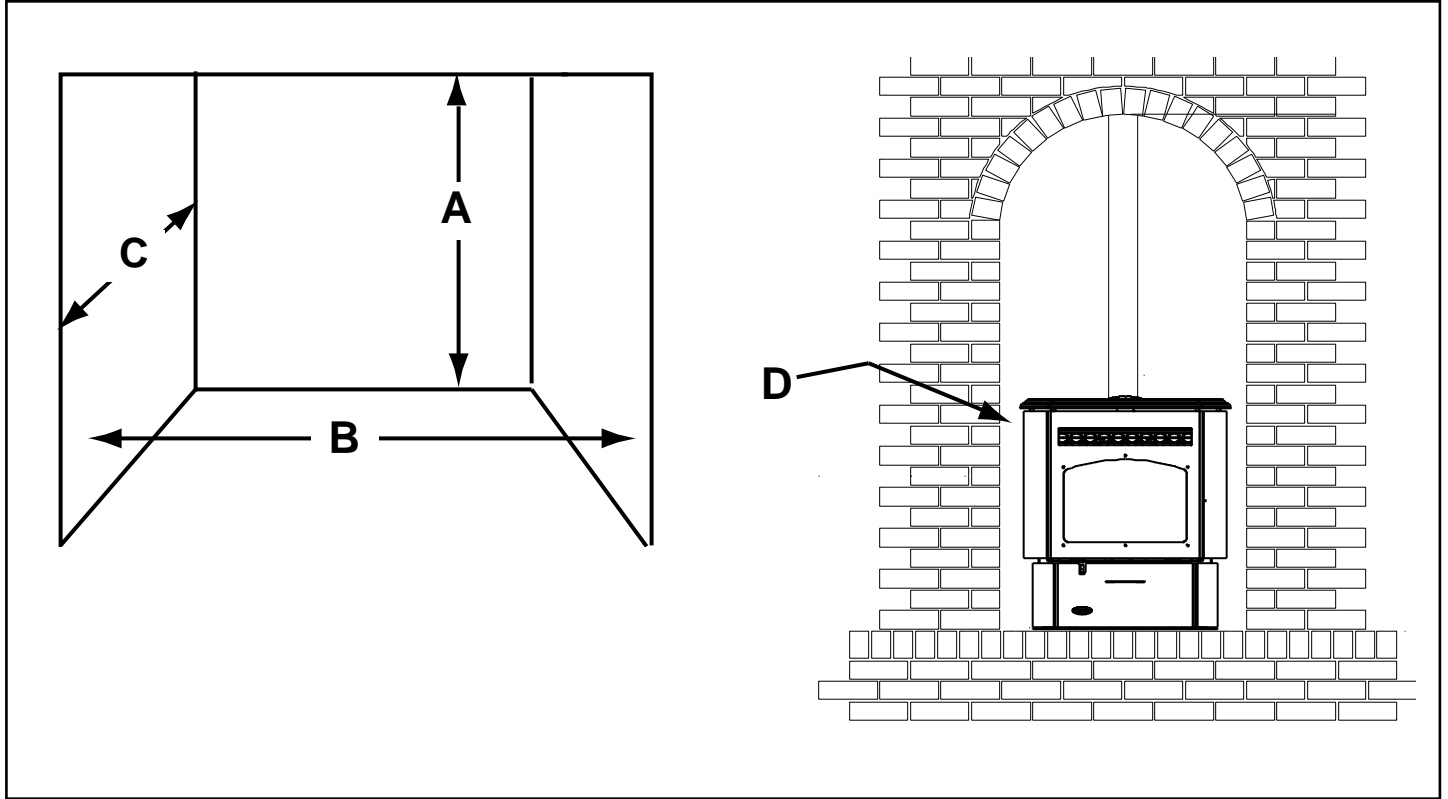


Figure 12.1

		Minimum		Maximum	
		Inches	Millimeters	Inches	Millimeters
<b>A</b>	Height	43	1092	n/a	n/a
<b>B</b>	Width	38	965	n/a	n/a
<b>C</b>	Depth	n/a	n/a	36	914
<b>D</b>	To Side Wall	6	152	n/a	n/a

All minimums listed are to a combustible surface.

**NOTE:**

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.

**B. Through The Wall**

Horizontal termination cap must be a minimum of 12 inches. (305mm) from the wall. Approved for mobile home installations. Must use 3 or 4 inch (76-102mm) "L" or "PL" listed pellet venting or listed double wall pipe and a Quadra-Fire Outside Air Kit in mobile homes.

**NOTE:**  
In Canada, where passage through a wall or partition of combustible construction is desired, the installation shall conform to CAN/CSA-B365

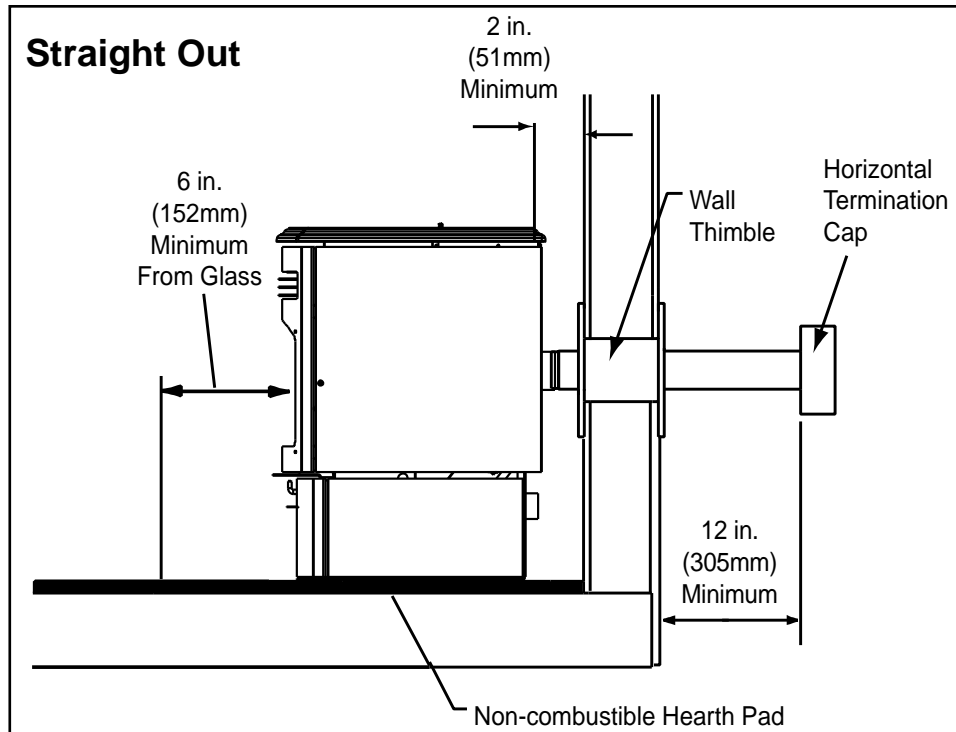


Figure 13.1

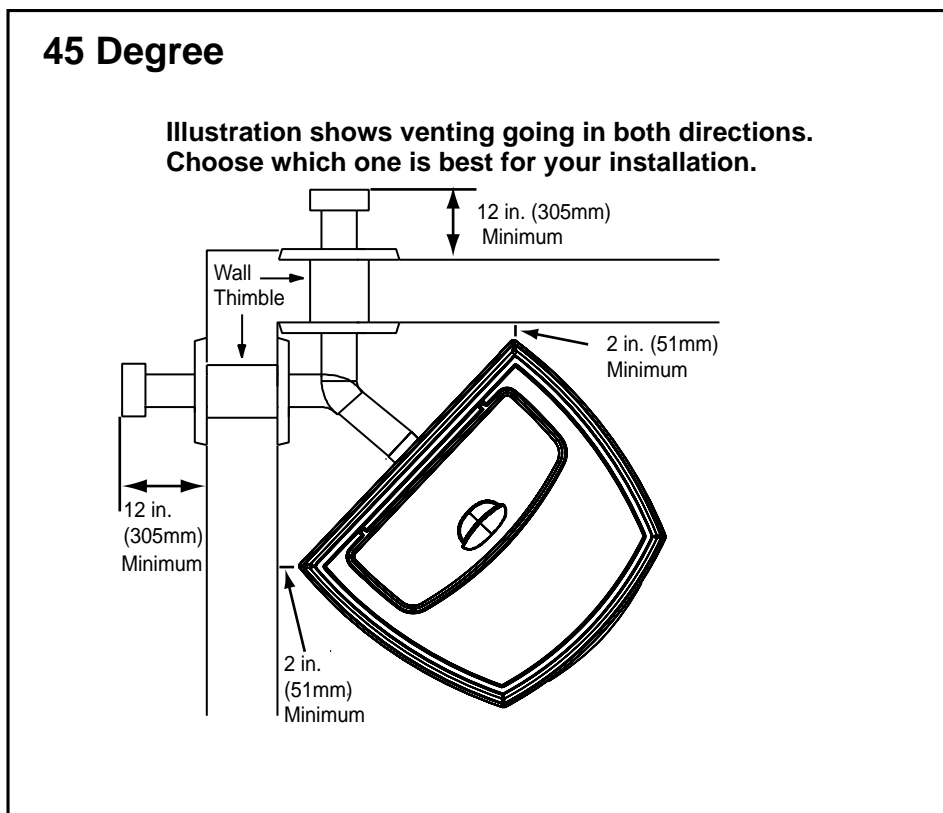
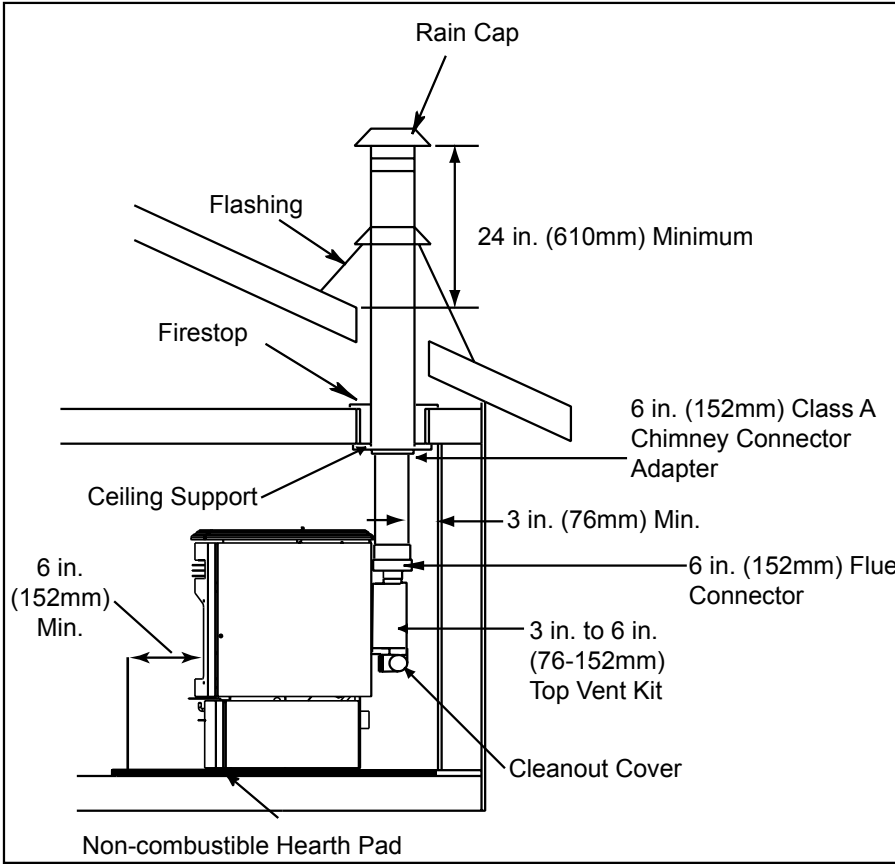


Figure 13.2

**C. Vertical**

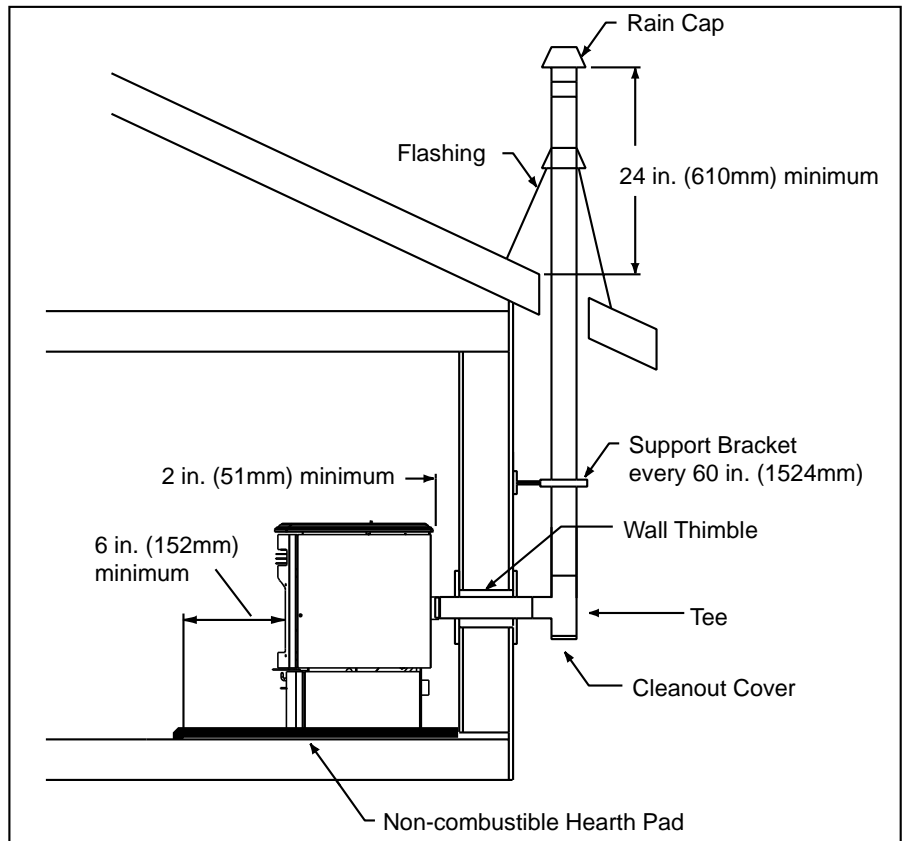


We recommend a minimum of 60 in. (1524mm) vertical, however above the eave is preferred.


Both installations are approved for mobile home installations. Must use 3 or 4 inch (76 to 102mm) "L" or "PL" Listed pellet venting or Listed double wall pipe and Quadra-Fire Outside Air Kit in mobile homes. Single wall pipe is approved for residential installations only.

**Figure 14.1**


**D. Through The Wall & Vertical**



**Figure 14.2**



**WARNING**

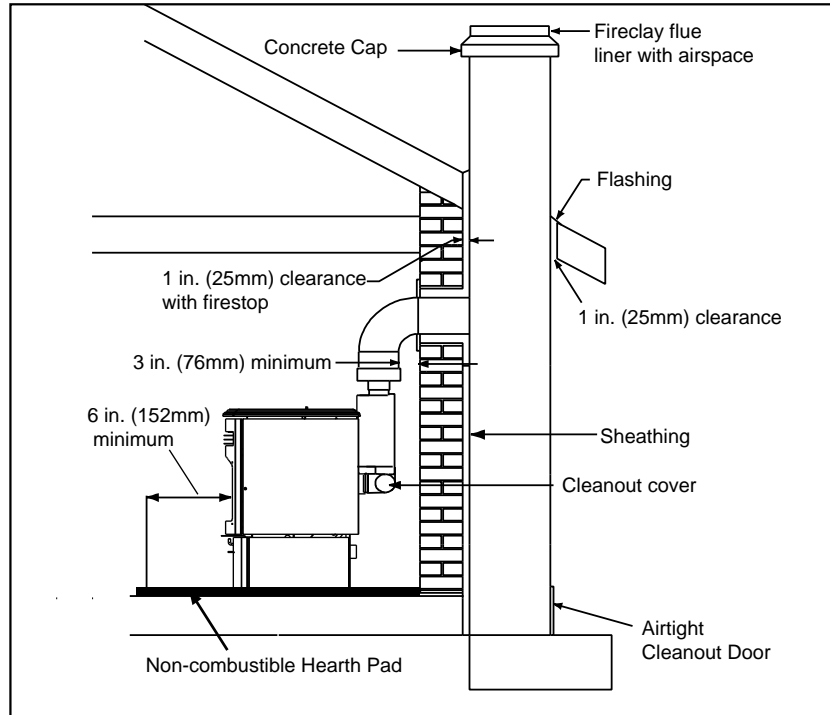


**Fire Risk**

Inspection of Chimney:

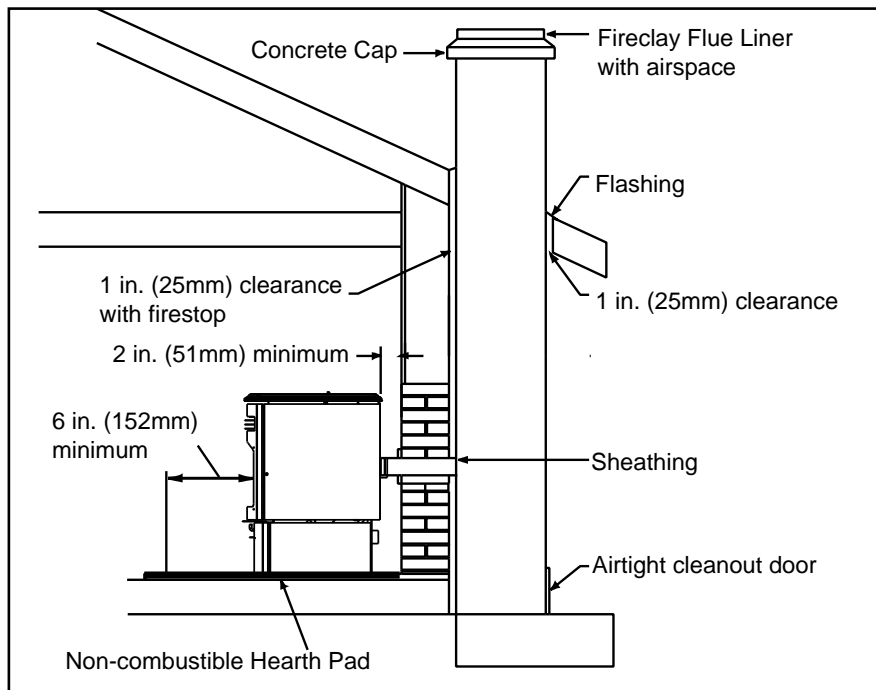
- Masonry chimney must be in good condition.
- Meets minimum standard of NFPA 211
- Factory-built chimney must be 6 inch (152mm) UL103 HT.

**E. Masonry**



**Figure 15.1**

**F. Alternate Masonry**



**Figure 15.2**

# 6 Mobile Home


## A. Mobile Home Installation


**You must use a Quadra-Fire Outside Air Kit for installation in a mobile home.**

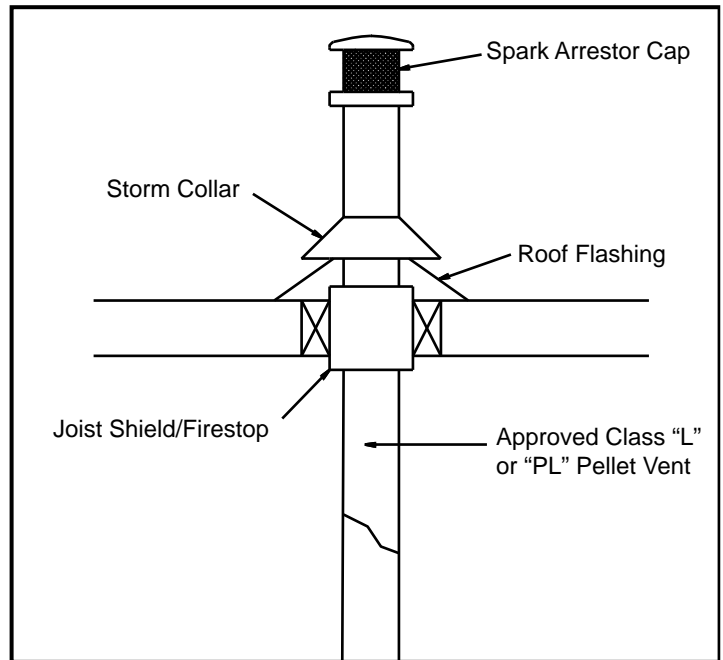
1. An outside air inlet must be provided for the combustion air and must remain clear of leaves, debris, ice and/or snow. It must be unrestricted while the appliance is in use to prevent room air starvation which causes smoke spillage. Smoke spillage can also set off smoke alarms.
2. The combustion air duct system must be made of metal. It must permit zero clearance to combustible construction and prevent material from dropping into the inlet or into the area beneath the dwelling and contain a rodent screen.
3. The appliance must be secured to the mobile home structure by bolting it to the floor (using lag bolts). Use the same holes that secured the appliance to the shipping pallet.
4. The appliance must be grounded with #8 solid copper grounding wire or equivalent, terminated at each end with an NEC approved grounding device.
5. Refer to Clearances to Combustibles and floor protection requirements on **pages 8 & 9** for listings to combustibles and appropriate chimney systems.
6. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
7. Follow the chimney manufacturer's instructions when installing the vent system for use in a mobile home.
8. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

<b>CAUTION</b>
Maintain structural integrity of mobile home: <ul style="list-style-type: none"> <li>• Floor, wall, ceiling and/or roof.</li> </ul> Do NOT cut through: <ul style="list-style-type: none"> <li>• Floor joist, wall, studs or ceiling trusses.</li> <li>• Any supporting material that would affect the structural integrity.</li> </ul>

<b>CAUTION</b>
Never draw outside combustion air from: <ul style="list-style-type: none"> <li>• Wall, floor or ceiling cavity</li> <li>• Enclosed space such as an attic or garage</li> </ul>

 <b>WARNING</b>
Installation must comply with Manufactured Home and Safety Standard (HUD), CFR 3280, Part 24.

 <b>WARNING</b>
Never install in a sleeping room.



**Figure 16.1**

# 7 Appliance Set-Up

## A. Outside Air Kit Instructions

**Parts Included in Kit:** 1 piece of 2 inch x 3 foot flex hose, 2 hose clamps, 1 collar assembly, 1 termination cap assembly, 1 trim ring, 12 screws. (Discard collar assembly and air channel, collar assembly already on appliance).

**Tools Needed:** Phillips head screwdriver; wire cutters; hole saw or jig saw.

1. Measure distance from floor to air vent opening in stove and mark location on wall.  
Use saw to cut opening in wall. Cut a 2-1/2 to 3 inch (64-76mm) opening on inside wall and a 3 to 3-1/2 inch (76-89mm) opening on outside of house.
2. Use hose clamp to secure flex pipe to collar assembly.
3. Slide trim ring over flex pipe and run pipe through wall.
4. Attach hose to outside termination cap with second hose clamp.
5. Secure termination cap to outside surface.
6. Secure trim ring to interior wall.

### CAUTION

- Never draw outside combustion air from:
- Wall, floor or ceiling cavity
  - Enclosed space such as an attic or garage

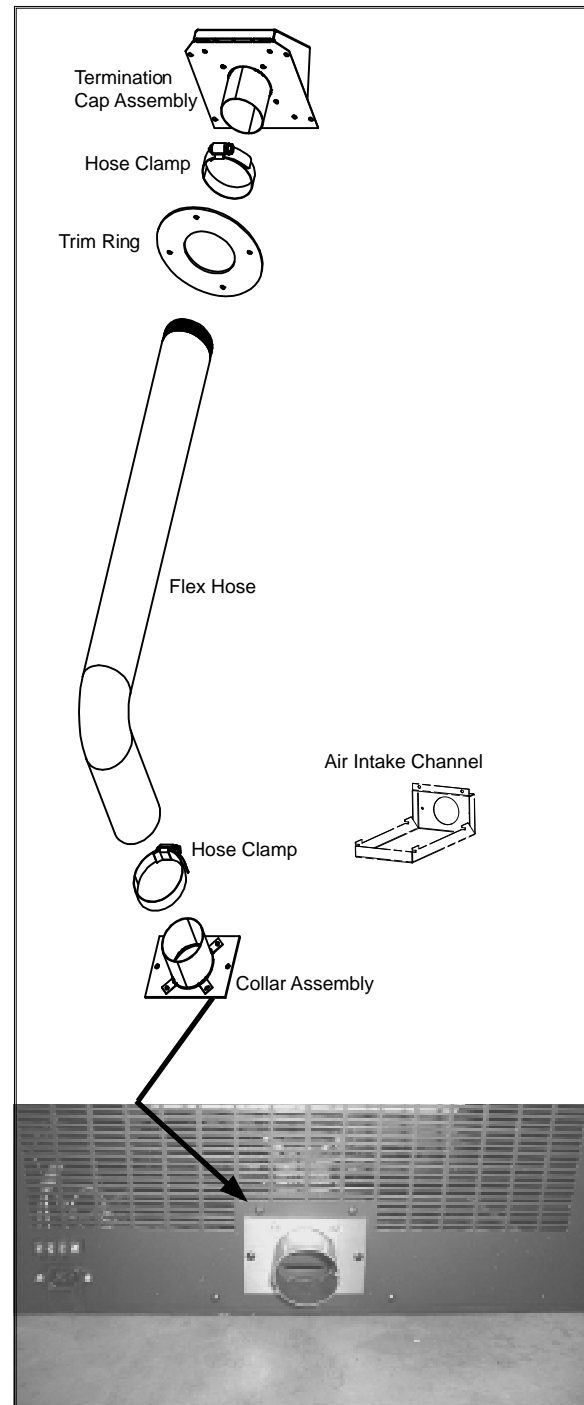


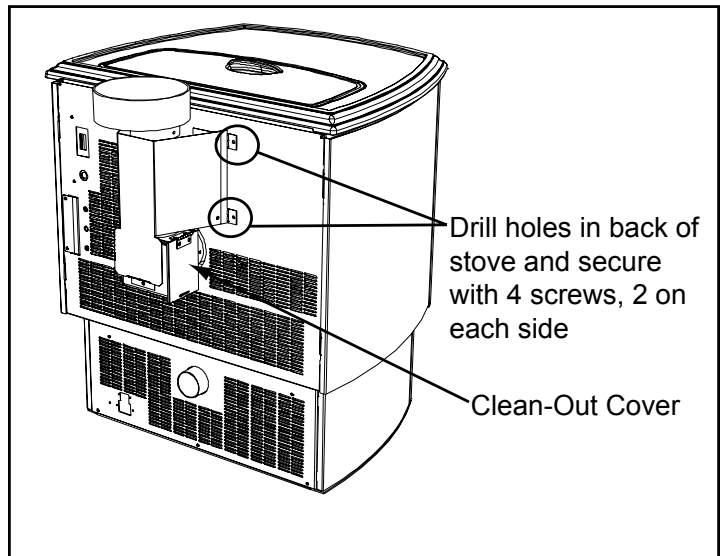
Figure 17.4

**B. Top Vent Adapter Installation**

- 3 to 3 inch Top Vent Adapter**
- 3 to 6 inch Top Vent Offset Adapter**

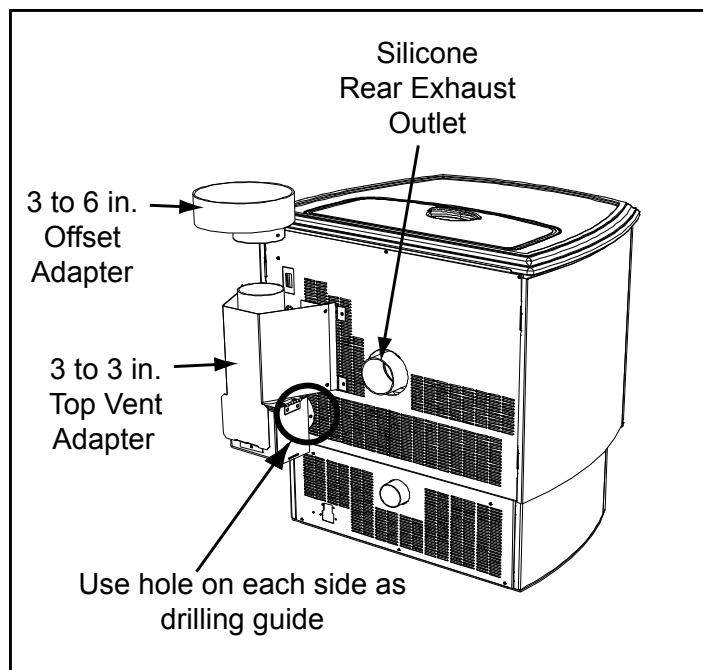
**Installing the Top Vent Adapter**

1. Put a layer of high temperature silicone on the 3 inch (76mm) exhaust outlet. **Figure 18.1**
2. Slide the top vent adapter onto the rear exhaust outlet and adjust the assembly to a vertical position. **Figure 18.1**
3. Drill 4 holes with #26 drill bit (provided) into the back of the appliance using the outer shield as a pattern (make sure the assembly is vertical). **Figure 18.2**
4. Install the 4 mounting screws.
5. Drill 2 holes with #26 drill bit through the rear exhaust outlet using the 2 holes already in the short horizontal pipe in the top vent adapter as a guide. Install the 2 screws. **Figure 18.1**
6. Install the vent pipe into the top vent adapter (be sure to silicone all joints).
7. To clean the top vent adapter open the clean-out cover. **Figure 18.2.**

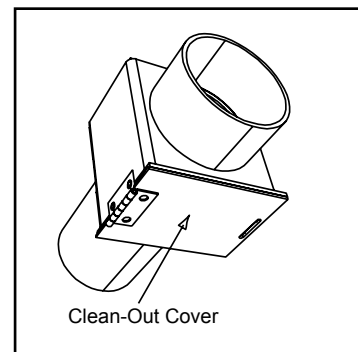


**Figure 18.2**

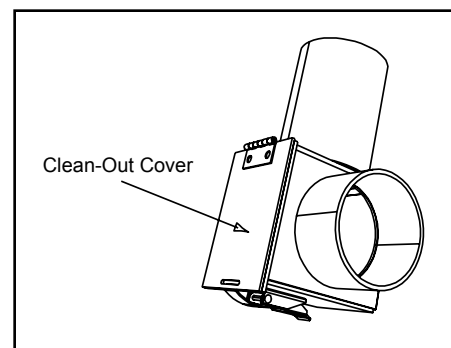
**C. Rear Vent and Rear Vent to Top Vent Adapter Installation**



**Figure 18.1**



**Figure 18.3 - Rear Vent Adapter**



**Figure 18.4 - Rear to Top Vent Adapter - 90°**

1. Put a layer of high temperature silicone on the 3 inch (76mm) exhaust outlet. **Figure 18.1.**
2. Slide the adapter onto the rear exhaust outlet and adjust the assembly to the appropriate position.
3. Install the vent pipe into the adapter (be sure to silicone all joints)

**D. Optional Log Set Placement Instructions**

**CAUTION**

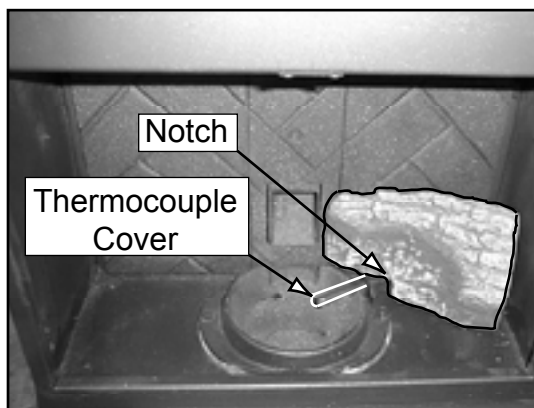
Logs are FRAGILE. Use extreme care when handling or cleaning logs.

**NOTE:**

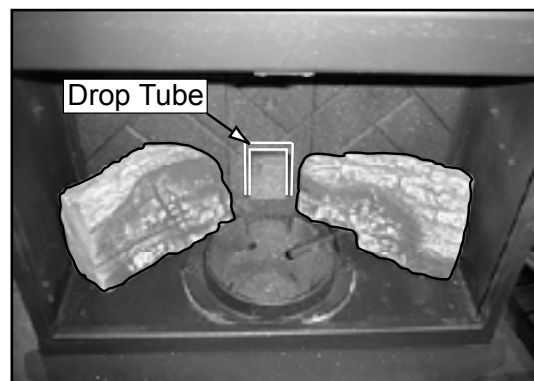
Due to the abrasive nature of a pellet appliance fire, the logs are not covered under warranty. Any placement variation other than shown here can cause excessive heat and shall void the appliance warranty.

**4 PIECE LOG SET INSTALLATION**

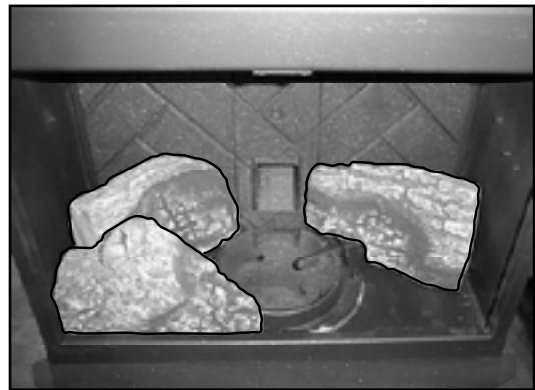
1. Place the right rear log as shown. There is a notch in the bottom of the log for clearance for the thermocouple and thermocouple cover (ceramic protection tube). **Figure 19.1.**
2. Continue placing the last 3 logs around the firepot as show in **Figures 19.2, 19.3 and 19.4.** Be careful not to block the drop tube in the back of the firebox where pellets feed into the firepot.



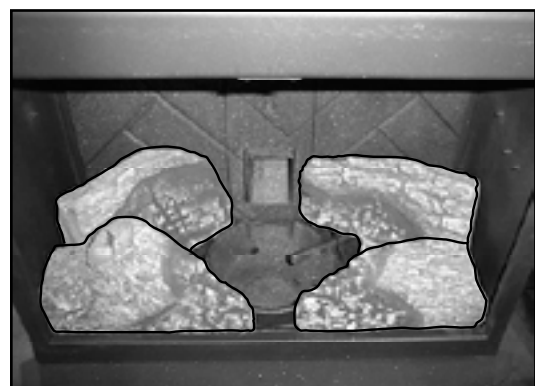
**Figure 19.1**



**Figure 19.2**



**Figure 19.3**

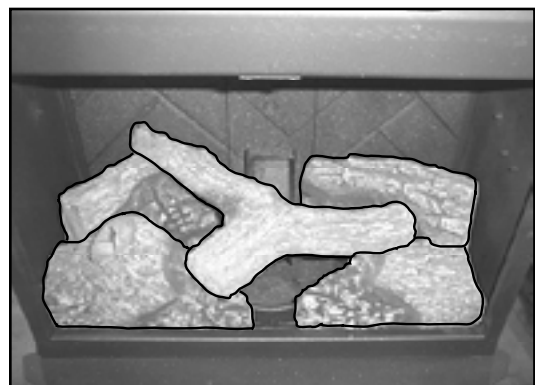


**Figure 19.4**

**OPTIONAL TOP LOG**

Place the top log over the firepot. It will be about 2-1/2 inches (64mm) above the firepot when in place. Notice the position of the top log as it rests on the 3 logs in a stable position to prevent it from falling into the firepot.

The charred area on the back of the top log faces the back, not the front. **Figure 19.5.**



**Figure 19.5**

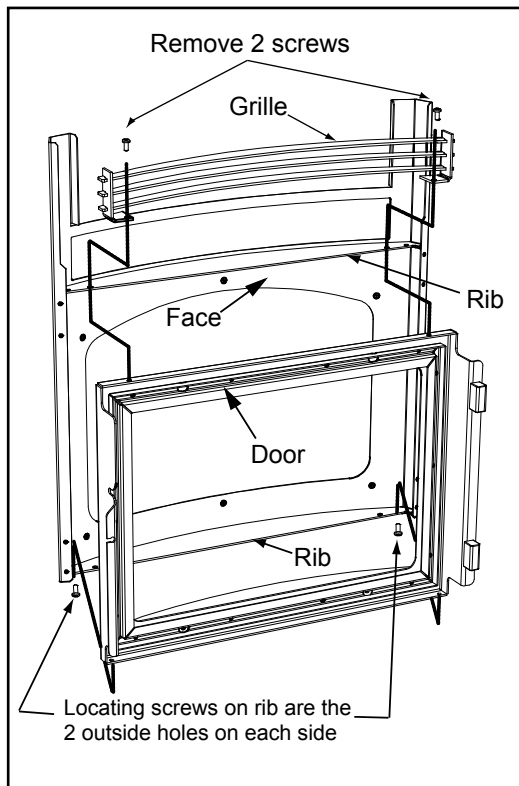
**E. Optional Gold or Nickel Grille & Trim Ring**

**1. Installing the Grille**

**Included in Kit:** (1) Grille

**Tools Required:** Phillips head screwdriver

1. While holding door to face, remove 2 screws from grille and remove existing grille. **Figure 20.1.**
2. Install new grille using screws removed in step 1. Ensure that screws are inserted through the grille, rib and door.



**Figure 20.1**

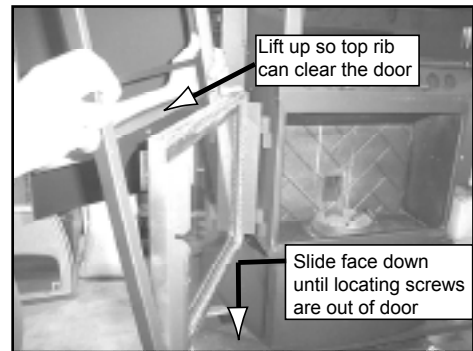
**2. Installing the Trim Ring**

**Included in Kit:** (1) Trim Ring, (6) 8-32 nuts

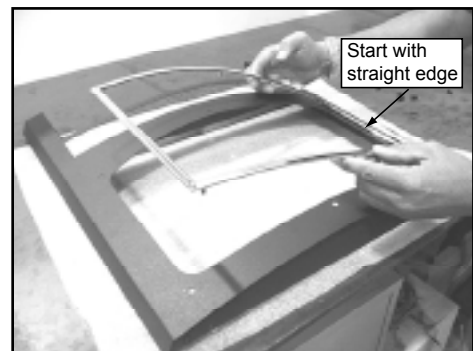
**Tools Required:** Phillips head screwdriver, 11/32" wrench or nut driver

1. Face can be removed with the door on or off the appliance. Remove the grille before removing face to prevent it from falling forward and potentially causing damage.
2. Tilt the top of the face forward until the top rib clears the door, then slide the face down until the locating screws on the bottom rib are completely out of the door. **Figure 20.2.**

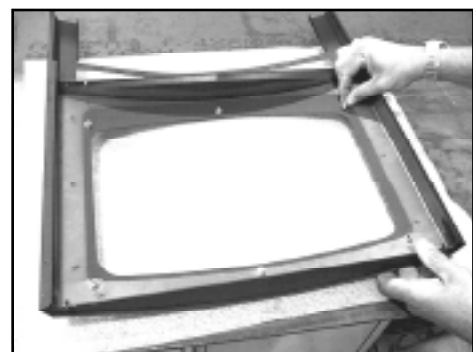
3. Lay the face, face-down on a protective coating to avoid scratching.
4. Remove the 6 nuts from the back side of the face and discard the stud and nuts.
5. Turn the face over so it is front side up. Locate studs on the trim ring. Starting with one straight side of trim ring, insert the studs into the holes in the face. After the first 2 studs have dropped into their holes, carefully lay the trim ring down until all of the studs are in place. **Figure 20.3.**
6. Hold the trim ring in place and turn the face over to expose the back side. **Figure 20.4.**
7. Place 8-32 nuts, included in the kit, on all 6 studs and gently tighten them.
8. Reverse steps 1 and 2 to re-install face and the grille.



**Figure 20.2**



**Figure 20.3**



**Figure 20.4**

## F. Thermostat Installation

1. A 12 volt AC thermostat is required to operate this pellet appliance. You may use the included wall mount thermostat or purchase an optional programmable thermostat or remote control. It is equipped with an adjustable heat anticipator. The current rating is .05 amps. The anticipator needs to be adjusted to the lowest setting available.
2. When mounting a thermostat on a wall, be sure to follow your thermostat installation instructions carefully.

**NOTE: Thermostat must be mounted level for accurate readings. The thermostat should be mounted on an inside wall and not in direct line with the appliance convection air.**

**NOTE: If the thermostat is located too close to the appliance, you may need to set the temperature setting slightly higher to maintain the desired temperature in your home.**

3. There is a 4 screw terminal block located on the back lower left corner of the stove directly above the power cord inlet. The center 2 screws are for the thermostat wires.

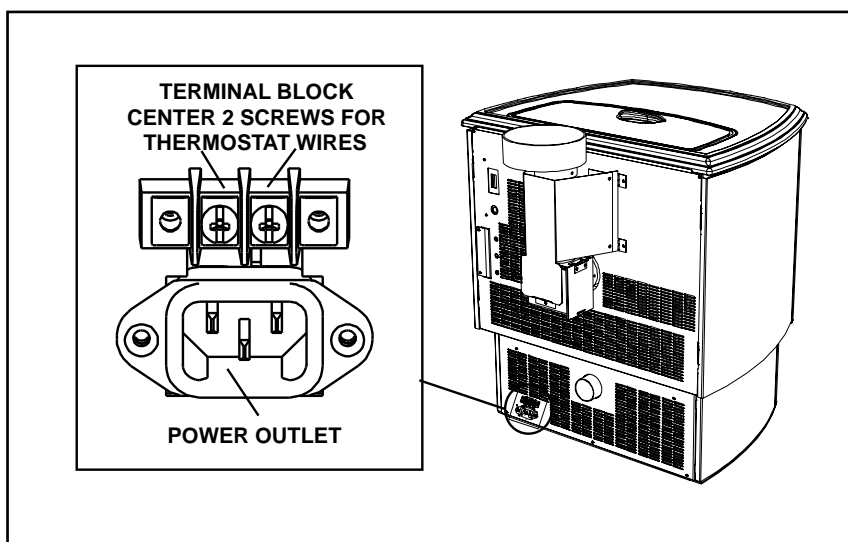
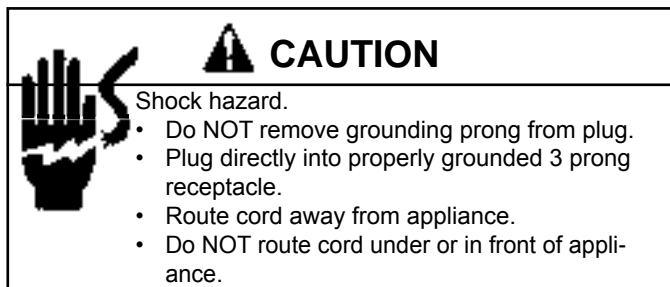


Figure 21.1

# 8 Operating Instructions

## A. Fuel Size And Material



### 1. Wood Pellets

Fuel pellets are made from sawdust or wood by-products. If the source material is hardwood, they can have a higher mineral content, creating more ash. Fuels containing bark will also have higher ash content. Minerals and other noncombustible materials such as sand will turn into a hard, glass-like substance called a clinker when heated to the extreme temperatures our firepot reaches. This is what forms clinkers in the bottom of the firepot. Trees from different areas will vary in mineral content. That is why some fuels produce more clinkers than others. Pellets are manufactured in either 1/4 inch or 5/16 inch (6-8mm) diameter and should be **no more than 1-1/2 inches (38mm) in length**. Pellet lengths may even vary by lot from the same manufacturer which is why the feed rate may need to be adjusted occasionally. **If you burn pellets longer than 1-1/2 inches (38mm) you may have an inconsistent fuel feed rate and/or missed ignitions.**

Pellet fuel quality can greatly fluctuate. We recommend using premium grade fuel with ash content less than 1%. Even in some fuel labeled "premium" ash content can vary from bag to bag and possibly exceed 1%. High ash fuel, or lack of maintenance, can cause the firepot to fill up and thus create a potential for smoking, sooting and possible hopper fires.

Always burn dry fuel. Burning fuel with high moisture content takes heat from the fuel and tends to cool the appliance, robbing heat from your home. Damp pellet fuel can clog the feed system.

We recommend that you buy fuel in multi-ton lots whenever possible. Buying large quantities of fuel at once will greatly reduce the number of times the feed adjustments will need to be made. However, we do recommend trying various brands before purchasing multi-ton lots to ensure your satisfaction.

	 <b>WARNING</b>
	<p>Fire Risk.</p> <ul style="list-style-type: none"> <li>• High ash fuels, or lack of maintenance, can cause the firepot to fill with ash and clinker. If the firepot fills to the top, immediately shut down the unit and clean.</li> <li>• Failure to do so could result in smoking, sooting and possible hopper fires.</li> </ul>

### 2. Shelled Field Corn

Extensive factory and field testing has demonstrated shelled field corn to be an efficient and very economical fuel. We recommend the use of a 50-50 blend of corn and wood pellets. The only change in operation is that the feed rate may require a slight adjustment. The BTU output of the appliance varies slightly compared to pellets, depending on the quality of the corn used. In cases where it is acceptable for the appliance to run full time, 100% corn will work after the fire has been started using wood pellets.

## B. General Operating Information

### 1. Thermostat Calls For Heat

The appliance is like most modern furnaces; when the thermostat calls for heat, your appliance will automatically light and deliver heat. When the room is up to temperature and the thermostat is satisfied, the red call light will go off and the appliance will shut down.

### 2. Heat Output Controls

This appliance is equipped with a heat output control switch that has three settings or burn rates; low, medium and high. The appliance will turn on and off as the thermostat demands. When the thermostat calls for heat, the appliance will start up at the burn rate for which it is set. If the appliance is set at one of the lower settings, it will run quieter but take longer to heat up an area than if it were set at a higher burn rate. Regardless of the burn rate, when the area is warm enough to satisfy the thermostat, the appliance will shut off.

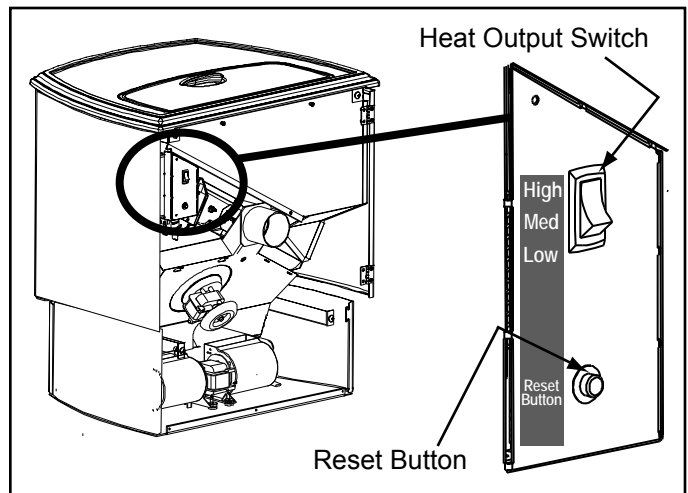




Figure 22.1

	 <b>WARNING</b>
	<p>Fire Hazard.</p> <p>Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.</p> <ul style="list-style-type: none"> <li>• Do NOT store flammable materials in the appliance's vicinity.</li> <li>• Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or "freshen up" a fire in this heater.</li> <li>• Keep all such liquids well away from the heater while it is in use.</li> <li>• Combustible materials may ignite.</li> </ul>

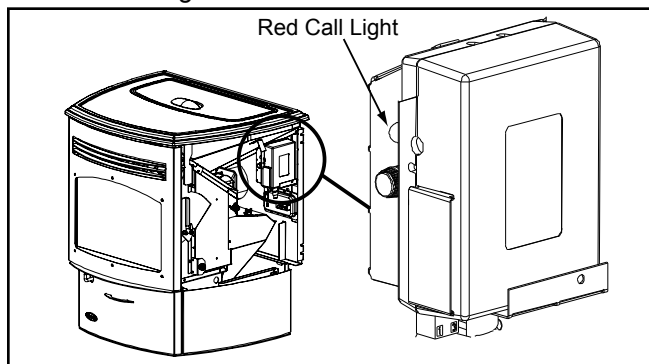
**C. Before Your First Fire**

1. First, make sure your appliance has been properly installed and that all safety requirements have been met. Pay particular attention to the fire protection, venting and thermostat installation instructions.
2. Double check that the ash drawer and firebox are empty!
3. Check the position of the thermocouple, located above the firepot, and make sure that it protrudes approximately 3/4 inch (19mm) into the firepot.
4. Close the front door.

**IMPORTANT DETAIL: The tip of the thermocouple must be in contact with the inside end of the thermocouple cover.**

**D. Starting Your First Fire**

1. A thermostat is required for proper operation of this appliance, except for corn. At this time, fill the hopper with pellets, set the thermostat to its lowest setting. Plug the power cord into nearby outlet.
2. The exhaust blower will stay on for approximately 18 minutes even though the thermostat is not calling for heat. This is normal.
3. Locate the heat output control switch mounted on the back of the appliance in the upper right corner. **See Figure 22.1 on page 22.** Turn it to the "high" setting by pushing the top of the control switch in and then adjust the thermostat to its highest setting. Open the right side panel and the red call light located to the left of the control box will be on. **Figure 23.1.** This indicates the thermostat is calling for heat.
4. The fuel feed system and the igniter should now be on.
5. For your first fire it will be necessary to press the reset button once approximately 2 minutes after start up and again in 5 minutes. This will fill the feed system and allow the appliance to begin dropping pellets. The appliance will continue to run as long as the thermostat is calling for heat.
6. Once the appliance has ignited, let it burn for approximately 15 minutes, then set the thermostat to the desired room temperature. Adjust the heat output control switch to the desired setting.



**Figure 23.1**

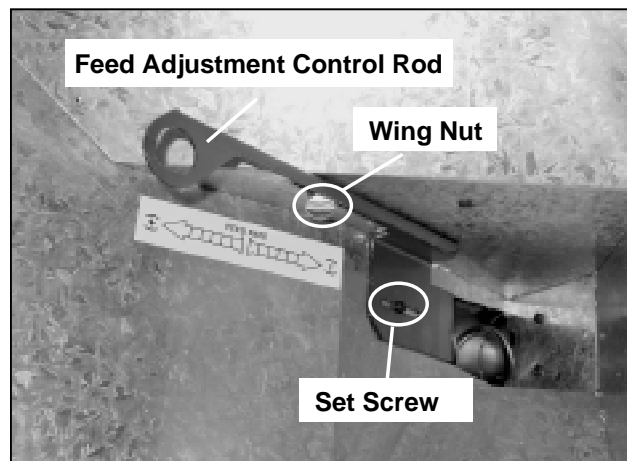
**E. Fire Characteristics**

A properly adjusted fire with the heat output control switch set on "high" has a short active flame pattern that extends out of the firepot approximately 4 inches (102mm). If the fire has tall flames with black tails and seems somewhat lazy, the feed rate will need to be reduced. This is done by sliding the fuel adjustment control rod down, which will reduce the feed. If the fire is not 4 inches (102mm) tall, slide the fuel adjustment control rod up to increase the feed. A medium and low setting will give a shorter flame. The flame will rise and fall somewhat. This is normal.

**F. Feed Rate Adjustment Instructions**

The feed adjustment control rod is factory set, and should be adequate for most fuels. However, if the flame height is too high or too low, you will need to adjust the feed rate. Wait until the appliance has been burning for 15 minutes before making your adjustments and allow 15 minutes for feed adjustment to take effect.

1. Loosen the set screw 1/4 to 1/2 turn during set-up of appliance. This will allow movement of the feed adjustment control rod. Do not re-tighten set screw.
2. Loosen the wing nut.
3. Adjust the feed adjustment control rod upward towards the "+" symbol to increase the feed rate and flame height or down towards the "-" symbol, to decrease the feed rate and flame height.
4. Re-tighten the wing nut.





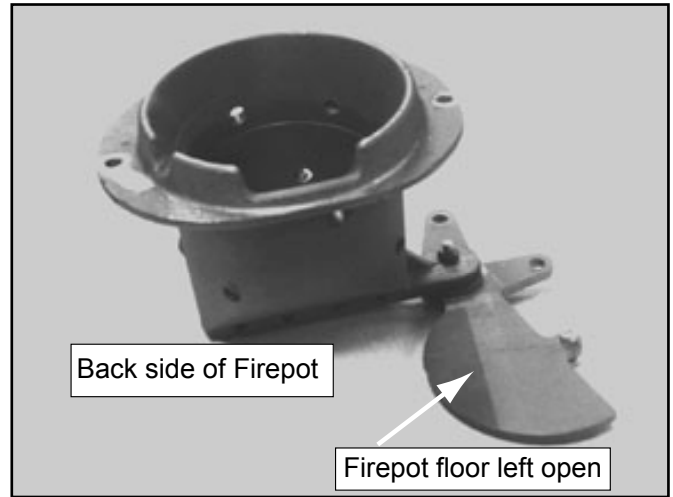
**Figure 23.2**

**G. Ignition Cycles**

1. During each ignition cycle, it is normal to see some smoke in the firebox. The smoke will stop once the fire starts.
2. The convection blower will automatically turn on after your appliance has been burning for approximately 10 minutes. This blower transfers heat from your appliance into the room, and will continue to run after the thermostat has stopped calling for heat until the appliance has cooled down.
3. Occasionally the appliance may run out of fuel and shut itself down. When this happens, the red call light will be on. **See Figure 23.1, page 23.** To restart it, fill the hopper and press the reset button. **See Figure 22.1, page 22.** When you press the reset button the red call light will go out. Release the button and the light will come back on. You should see a fire shortly. If not, follow the instructions on **page 23**, of "Starting Your First Fire".

<b>CAUTION</b>
<p>Odors and vapors released during initial operation.</p> <ul style="list-style-type: none"> <li>• Curing of high temperature paint.</li> <li>• Open windows for air circulation.</li> </ul> <p>Odors may be irritating to sensitive individuals.</p>

 <b>WARNING</b>
<div style="display: flex; align-items: center;">  <div> <p><b>Fire Risk</b> Do NOT operate appliance:</p> <ul style="list-style-type: none"> <li>• With appliance door open.</li> <li>• Firepot floor open.</li> <li>• Cleaning slide plates open.</li> </ul> <p>Do NOT store fuel:</p> <ul style="list-style-type: none"> <li>• Closer than required clearances to combustibles to appliance</li> <li>• Within space required for loading or ash removal.</li> </ul> </div> </div>



**Figure 24.1 - DO NOT LEAVE FIREPOT FLOOR OPEN**

**H. Frequently Asked Questions**

ISSUES	SOLUTIONS
1. Metallic noise.	1. Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of your insert.
2. Ash buildup on glass.	2. This is normal. Clean the glass.
3. Glass has turned dirty.	3. Excessive build up of ash. The lower burn settings will produce more ash, the higher burn settings produce less. The more it burns on low the more frequent cleaning of the glass is required.
4. Fire has tall flames with black tails and is lazy.	4. The feed rate needs to be reduced or the firepot needs cleaning. Heat exchanger or exhaust blower needs cleaning.
5. Smokey start-up or puffs of smoke from the airwash.	5. Either the firepot is dirty or there is too much fuel at start-up and not enough air. Close down feed rate 1/4 inch at a time until this no longer happens.
6. Large flame at start-up.	6. This is normal. Flame will settle down once the fire is established.

# 9 Troubleshooting

With proper installation, operation, and maintenance your appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician.


Symptom	Possible Cause	Corrective Action
Plug in appliance - No response.	No current to outlet. .7 amp fuse defective. #3 snap disc tripped or defective. Control box defective.	Check circuit breaker at service panel. Replace fuse. Reset or replace snap disc. Replace control box.
Call light on. No fire. No fuel in firepot.	Out of fuel. #2 snap disc may be defective. Vacuum switch not closing, no vacuum.  Control box defective.	Check hopper. Fill with fuel. Replace snap disc. Check exhaust blower is plugged in and operating. Check vacuum switch is plugged in. Check vacuum hose is in good condition, clear and connected at both ends. Check thermocouple is in good condition and plugged in properly. Make sure venting system is clean. Make sure front door is closed. Replace control box.
Call light on. No fire. Partially burned fuel in firepot.	Firepot clean-out plate not closed.  Firepot is dirty (missed ignition).	Check that firepot clean-out plate is fully closed.  Clean firepot. Make sure there is no clinker in the firepot.  Clinkers may have to be broken up with firepot scraper tool or other means.
Call light on. No fire. Unburned pellets in firepot.	Firepot clean-out plate not closed.  Firepot is dirty.  Ignition hole blocked.  Igniter not working.  Control box defective.	Check that firepot clean-out plate is fully closed.  Clean firepot. Make sure there is not a clinker in the firepot. Clinkers may have to be pushed out of firepot with firepot scraper tool or other means.  Scrape with solid piece of wire.  Remove ash drawer to see if igniter is glowing red on start-up. Check igniter wires for good connection. Replace igniter using 1/4 inch male /female spade connectors.  Replace control box.
Slow or smoky start-up.	Firepot clean-out plate not closed.  Firepot is dirty.  Excessive amount of fuel at start-up.	Check that firepot clean-out is fully closed.  Clean firepot. Make sure there is not a clinker in the firepot. Clinkers may have to be pushed out of firepot with firepot scraper tool or other means.  Reduce feed rate using feed rate adjustment control rod located inside hopper.

Symptom	Possible Cause	Corrective Action
Slow or smoky start-up (Cont'd)	Dirty exhaust and/or venting system.	Check for ash build up in unit, including behind rear panels, firebox, heat exchanger, exhaust blower and venting.
Feed system fails to start.	<p>Out of fuel. #2 snap disc may be defective.</p> <p>Vacuum switch not closing. No vacuum.</p> <p>Feed system jammed or blocked.</p> <p>Feed spring not turning with feed motor.</p> <p>Feed motor defective or not plugged in.</p>	<p>Check hopper, fill with fuel. Replace snap disc. Firebox door must be closed securely.</p> <p>Check exhaust blower is plugged in and operating. Check vacuum switch is plugged in. Check vacuum hose is in good condition, clear and connected at both ends. Check thermocouple is in good condition and plugged in properly. Make sure venting system is clean. <b>NOTE:</b> High winds blowing into the venting system can pressurize the firebox causing loss of vacuum.</p> <p>Empty hopper of fuel. Use a wet/dry vacuum cleaner to remove remaining fuel, from hopper, including feed tube. Check feed chute for obstructions. Loosen 2 screws and jiggle feed assembly.</p> <p>Check that set screw is tight on feed spring shaft at end of feed motor.</p> <p>Check connections on feed motor, replace if defective.</p>
No call light. Unit does not begin start sequence.	<p>Thermostat not set to a high enough temperature.</p> <p>Snap Disc #3 tripped.</p> <p>No power.</p> <p>Fuse blown.</p> <p>Connections at thermostat and/or appliance not making proper contact.</p> <p>Defective thermostat or thermostat wiring.</p> <p>Control box defective.</p>	<p>Adjust thermostat above room temperature.</p> <p>Reset snap disc.</p> <p>Connect to power.</p> <p>Replace fuse.</p> <p>Check connections at thermostat and appliance.</p> <p>Replace thermostat or wiring. NOTE: To test thermostat and wiring, use a jumper wire at the thermostat block on the unit to by-pass thermostat and wiring.</p> <p>Replace control box.</p>
Unit fails to shut off.	Call light on.	<p>Turn thermostat off. If call light does not go out, disconnect thermostat wires from unit. If call light does go out, thermostat or wires are defective.</p>

Symptoms	Possible Cause	Corrective Action
Convection blower fails to start.	#1 snap disc defective. Blower not plugged in. Blower is defective. Control box is defective.	Replace snap disc. Check that blower is plugged into wire harness. Replace blower. Replace control box.
Exhaust blower fails to start or does not shut off.	Blower not plugged in. Blower is clogged with ash. Blower is defective. Control box is defective.	Check that blower is plugged into wire harness. Clean exhaust system. Replace blower. Replace control box.
Large, lazy flame, orange color. Black ash on glass.	Dirty appliance. Poor fuel quality, high ash content. Firepot clean-out plate not completely closed. Excessive amount of fuel.	Clean unit, including firepot, heat exchangers and venting system. Remove stainless steel baffle from firebox to clean ash from on top of baffle. Clean behind rear brick panels. Change fuel brand to premium. Check that firepot clean-out plate is fully closed. Reduce feed rate using feed rate adjustment control rod located inside hopper.
Nuisance shutdowns.	Low flame. Sawdust buildup in hopper. Feed motor is reversing. Defective thermocouple. Defective control box. Firepot more than 1/2 full.	Increase feed by opening feed rate adjustment control rod located inside hopper. Clean hopper, see <b>page 30</b> . Check for good connections between feed motor and wire harness. Replace thermocouple. Replace control box. See <b>page 32</b> for detailed instructions for "High Ash Fuel Content Management"
Appliance calls for heat. Call light illuminates. Exhaust blower starts. No feed or igniter.	Thermocouple is defective or not properly plugged in. Defective control box	Check connections on thermocouple or replace if defective. A flashing yellow light on the control box indicates a problem with the thermocouple. Replace control box.

# 10 Maintaining & Servicing Your Appliance

## A. Proper Shutdown Procedure



**CAUTION**

**Shock and Smoke Hazard**

- Turn down thermostat, let appliance completely cool and exhaust blower must be off. Now you can unplug appliance before servicing.
- Smoke spillage into room can occur if appliance is not cool before unplugging.
- Risk of shock if appliance not unplugged before servicing appliance.

**Follow the detailed instructions found in this section for each step listed as referenced in the chart below.**

## C. General Maintenance

### 1. Types of Fuel

Depending on the type of fuel you are burning will dictate how often you have to clean your firepot.

If the fuel you are burning has a high dirt or ash content or you are burning shelled field corn, it may be necessary to clean the firepot more than once a day.

Dirty fuel will cause clinkers to form in the firepot. A clinker is formed when dirt, ash or a non-burnable substance is heated to 2000°F (1093°C) and becomes glass-like. See “C” page 32 in this section for more details on fuels with high ash content.

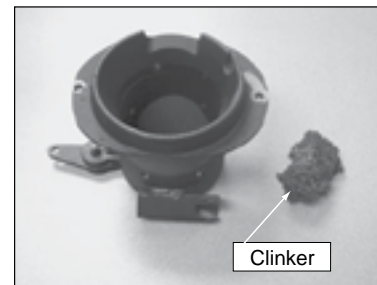


Figure 28.1 - Clinker


## B. Quick Reference Maintenance Chart

Cleaning or Inspection	Frequency		Daily	Weekly	Monthly	Yearly
Ash Pan	Every 5 bags of fuel	OR		X		
Ash Removal from Firebox	More frequently depending on the fuel type or ash build-up	OR		X		
Beneath Heat Exchanger	Every 1 ton of fuel	OR			X	
Blower, Combustion (Exhaust)	More frequently depending on the fuel type	OR				X
Blower, Convection	More frequently depending on the fuel type	OR				X
Door Latch Inspection	Prior to heating season	OR			X	
Exhaust Path	More frequently depending on ash build-up	OR				X
Firebox - Prepare for Non-Burn Season	At end of heating season	OR				X
Firepot - Burning pellets	Every 3 bags	OR	X			
Firepot - Burning Corn	Every 1 bag	OR	X			
Glass	When clear view of firepot becomes obscure	OR		X		
Heat Exchanger & Drop Tube	Every 1 ton of fuel	OR			X	
Hopper	Every 1 ton of fuel or when changing fuel types	OR			X	
Top Vent Adapter	More frequently depending on the fuel type or ash build-up	OR				X
Venting System	More frequently depending on the fuel type	OR				X

**2. Cleaning Firepot with Cleaning Rod & Firepot Scraper**

- **Frequency:** Daily or more often as needed
  - **By:** Homeowner
- a. The appliance must be in complete shutdown and cool and the exhaust blower off. If you are just cleaning the firepot, there is no need to unplug the appliance.
  - b. Pull firepot cleaning rod OUT a couple of times to help shake debris loose. If rod is hard to pull, it may be necessary to use your firepot clean-out tool to chip away material that has built up on the bottom plate of the firepot and to push out any clinkers. Larger clinkers may have to be removed from the top of the firepot. Corn clinkers can be especially difficult to break up.
  - c. The firepot floor plate must be fully closed when finished. **Figure 24.1 on page 24.**

- d. This ash is deposited in the same ash pan as the firepot debris. The ash pan should be emptied every time you clean the firebox. Remember to place the ash and debris into a metal or non-combustible container. **See Disposal of Ashes.**

	<b>WARNING</b>
	<p>Fire Risk</p> <ul style="list-style-type: none"> <li>• NEVER pull firepot cleaning rod or cleaning slide plates out when appliance is operating.</li> <li>• The cleaning slide plates must be fully CLOSED when appliance is operating.</li> <li>• Hot pellets may fall into ashpan and start a fire or mis-starts due to lack of vacuum.</li> </ul>

	<b>WARNING</b>
	<p>Fire Hazard.</p> <ul style="list-style-type: none"> <li>• The cleaning slide plates must be fully CLOSED when appliance is operating. Hot pellets may fall into ashpan and start a fire.</li> </ul>

**3. Ash Removal from Firebox**

- **Frequency:** Weekly or more frequently depending on ash build-up.
  - **By:** Homeowner
- a. Allow the appliance to completely cool down. There must not be any hot ashes in the firebox during cleaning. Turn the thermostat on and then immediately off to start the exhaust blower on its cycle time. It will pull fly ash out the exhaust instead of into the room.
  - b. Frequent cleaning of the ash in the firebox will help slow down the build-up of ash in the exhaust blower and vent system.
  - c. Open cast hinged face. Directly underneath the firebox door and to the left and right of the firepot are 2 cleaning slide plates. Pull both slide plates out and then open the glass door. Sweep the remaining ash from the firebox into the 2 open holes. A paint brush works well for this. Close slide plates.
  - c. Directly underneath the firebox door and to the left and right of the firepot are 2 cleaning slide plates. Pull both slide plates out and then open the glass door. Sweep the remaining ash from the firebox into the 2 open holes. A paint brush works well for this. Close slide plates.

**4. Cleaning Ash Pan**

- **Frequency:** Weekly or every 5 bags of fuel
- **By:** Homeowner


Locate the ash pan underneath the firepot. Open the bottom ash door and slide the ash pan straight out. Empty into a non-combustible container and re-install ash pan. **See Disposal of Ashes.**

**5. Disposal of Ashes**

- **Frequency:** As needed
- **By:** Homeowner

Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal.

If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have been thoroughly cooled.

	<b>WARNING</b>
	<p>Disposal of Ashes</p> <ul style="list-style-type: none"> <li>• Ashes should be placed in metal container with tight fitting lid.</li> <li>• Ashes should be retained in closed container until all cinders have thoroughly cooled.</li> </ul>

**6. Cleaning Heat Exchanger Chambers & Drop Tube**

- **Frequency:** Monthly or every 1 ton of fuel
- **By:** Homeowner

**WARNING**

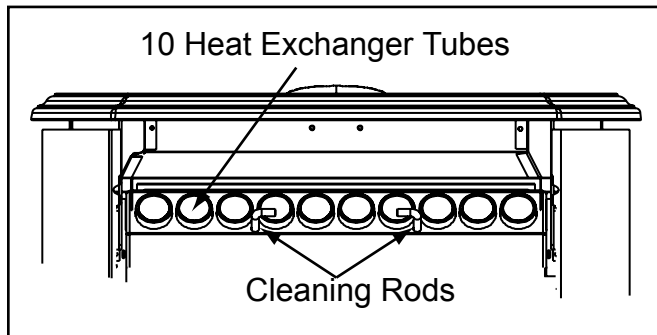
Heat exchanger cleaning rods may be warm to the touch. For safety purposes wear gloves.

Do not pull heat exchanger cleaning rods while appliance is operating.

Push cleaning rods IN when done, DO NOT leave cleaning rods OUT. Injury can occur.

The amount of ash buildup in the firepot will be a good guide to determine how often you should clean the heat exchangers.

- Allow the appliance to completely cool down before pulling the cleaning rods. Turn the thermostat on and then immediately off to start the exhaust blower on its cycle time. It will pull fly ash out the exhaust instead of into the room. Open the cast hinged face to access the 2 cleaning rods. **Figure 30.1.**
- Locate the 2 rods directly underneath the heat exchanger tubes. Rods are bent at a 90° angle for easy handling.
- To clean, pull the rods straight out until it stops, approximately 5-1/2 inches (140mm). Slide the rods OUT and IN a couple of times.



**Figure 30.1**

**7. Cleaning Beneath Heat Exchanger**

- **Frequency:** Monthly or after burning 1 ton of fuel
- **By:** Homeowner

- Be sure the appliance is allowed to cool, has been unplugged and the exhaust blower is off
- A more thorough cleaning is needed to remove the excess ash that is left behind from the use of the cleaning rods for the heat exchanger tubes.

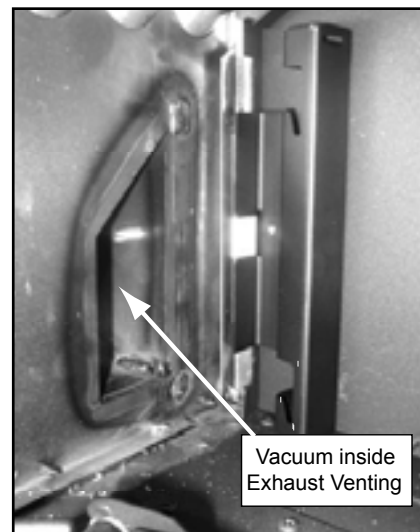
**7. Cleaning Beneath Heat Exchanger (Cont'd)**

- The ash will be resting on the back of the baffle. This will require removing the cast baffle. Please refer to **page 35** for a detailed explanation of removing the baffle.

**NOTE: There are heavy duty vacuum cleaners specifically designed for solid fuel appliance cleaning.**

**8. Cleaning the Exhaust Path**

- **Frequency:** Yearly or more frequently depending on ash build-up.
- **By:** Homeowner
  - Appliance must be completely cool.
  - Open cast hinge face. Remove right brick and thoroughly vacuum the area and continue throughout the rest of the firebox.
  - Replace right brick and close cast hinge face.



**Figure 30.2**

**9. Cleaning the Hopper**

- **Frequency:** Monthly or after burning 1 ton of fuel
- **By:** Homeowner

After burning approximately 1 ton of fuel you will need to clean the hopper to prevent sawdust build-up.

A combination of sawdust and pellets on the auger reduces the amount of fuel supply to the firepot. This can result in nuisance shutdowns and mis-starts.

- The appliance must be in complete shutdown. Allow the appliance to completely cool down.
- Empty the hopper of any remaining pellets.
- Vacuum the hopper and feed tube.

**10. Soot and Fly Ash: Formation & Need for Removal in Exhaust Venting System.**

- **Frequency:** Yearly or more frequently depending on ash build-up.
- **By:** Qualified Service Technician/Homeowner

Be sure the appliance is allowed to cool, has been unplugged and the exhaust blower is off.


The products of combustion will contain small particles of fly ash. The fly ash will collect in the exhaust venting system and restrict the flow of the flue gases.


At start-up if there is incomplete combustion, or if there is a shutdown or incorrect operation of the appliance it will lead to some soot formation. This will collect in the exhaust venting system.

The venting system may need to be cleaned at least once a year or more often depending upon the quality of your fuel or if there is a lot of horizontal pipe sections. Ash will build up more quickly in the horizontal sections.

**11. Cleaning the Glass**

- **Frequency:** When clear view of the firepot becomes obscure
- **By:** Homeowner
  - a. Appliance must be completely cool before cleaning glass.
  - b. Use a damp paper towel or any non-abrasive glass cleaner. Wipe off with dry towel.

	<b>CAUTION</b>
	<p>Handle glass assembly with care.</p> <p><b>When cleaning glass:</b></p> <ul style="list-style-type: none"> <li>• Avoid striking, scratching or slamming glass.</li> <li>• Do NOT clean glass when hot.</li> </ul> <ul style="list-style-type: none"> <li>• Do NOT use abrasive cleaners.</li> <li>• Use a hard water deposit glass cleaner on white film.</li> <li>• Refer to maintenance instructions.</li> </ul>

	<b>WARNING</b>
	<p>Handle glass with care.</p> <ul style="list-style-type: none"> <li>• Inspect the gasket to ensure it is undamaged.</li> <li>• Do NOT strike, slam or scratch glass.</li> <li>• Do NOT operate appliance with glass assembly removed.</li> </ul> <ul style="list-style-type: none"> <li>• Do NOT operate with glass cracked, broken or scratched.</li> </ul>

**12. Door Latch Inspection**

- **Frequency:** Prior to heating season
- **By:** Homeowner

The door latch is non-adjustable but the gasketing between the glass and firebox should be inspected periodically to make sure there is a good seal.

**13. Cleaning Exhaust Blower - Requires No Lubrication**

- **Frequency:** Yearly or as needed
- **By:** Qualified Service Technician
- **Task:** Contact your local dealer

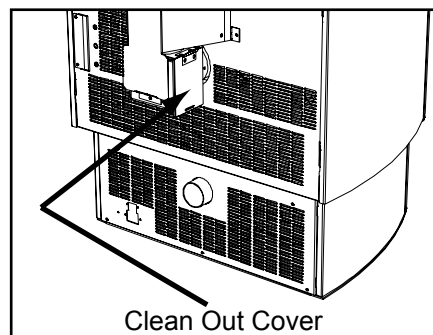
**14. Cleaning Convection Blower - Requires No Lubrication**

- **Frequency:** Yearly or as needed
- **By:** Qualified Service Technician
- **Task:** Contact your local dealer.

**15. Cleaning the Top Vent Adapter**

- a. The appliance must be in complete shutdown and the exhaust blower should be off. Allow the appliance to completely cool down.
- b. Open the clean out cover. **See Figure 31.1.**
- c. Sweep out any ash build-up.

**NOTE:** There are heavy duty vacuum cleaners specifically designed for solid fuel appliance cleaning.



**Figure 31.1**

**16. Preparing Firebox for Non-Burn Season**

- **Frequency:** Yearly
- **By:** Homeowner
  - a. Be sure the appliance is allowed to cool, has been unplugged and the exhaust blower is off.
  - b. Remove all ash from the firebox and vacuum thoroughly.
  - c. Paint all exposed steel, including cast-iron.
    - Use the Touch-Up paint supplied with the appliance; or;
    - Purchase paint from your local dealer.
    - Must use a high-temperature paint made specifically for heating appliances.

**B. High Ash Fuel Content Maintenance**

- **Frequency:** As needed
- **By:** Homeowner

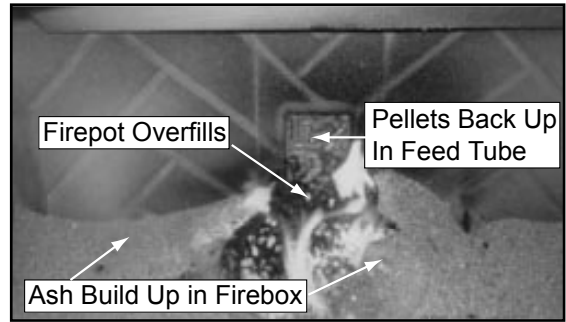
Poor quality pellet fuel, or lack of maintenance, can create conditions that make the firepot fill quickly with ashes and clinkers.

This condition makes the appliance susceptible to overflowing the firepot with pellets which may result in smoking, sooting and possible hopper fires. **Figure 32.1** shows an example where the firepot overfills, pellets back up into the feed tube and ash has accumulated in the firebox.

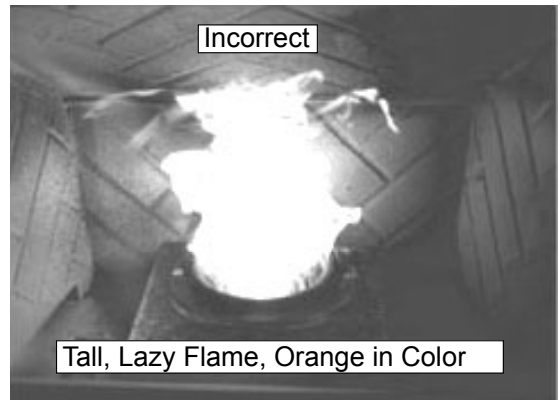
An inefficient and non-economical method of burning of fuel caused by poor quality pellet fuel is shown in **Figure 32.2**.

The correct flame size when good quality, premium pellet fuel is burned is shown in **Figure 32.3**.

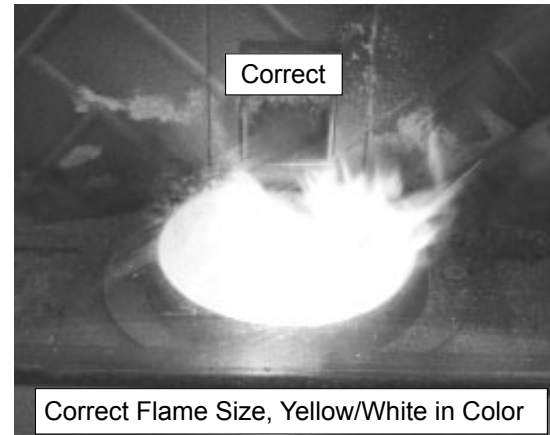
If the ash buildup exceeds the half way point in the firepot **IMMEDIATE ATTENTION AND CLEANING IS REQUIRED.**





**Figure 32.1**



**Figure 32.2**



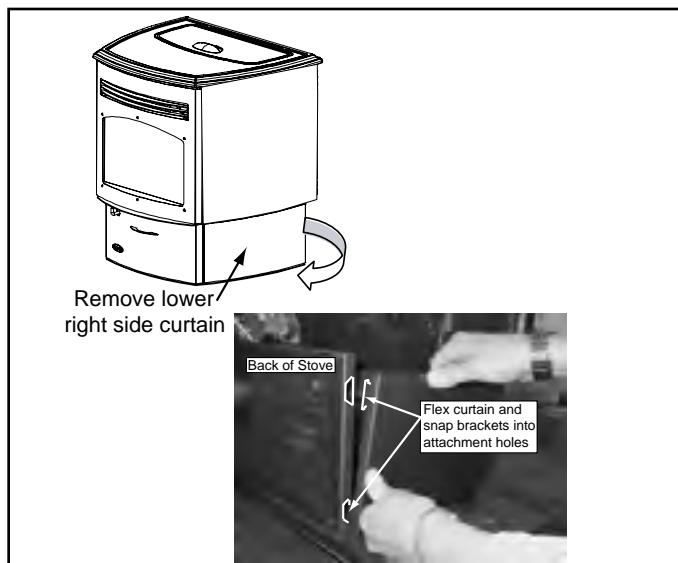
**Figure 32.3**

	<p><b>WARNING</b></p>
	<p>Fire Risk.</p> <ul style="list-style-type: none"> <li>• High ash fuels, or lack of maintenance, can cause the firepot to fill with ash and clinker. If the firepot fills to the top, immediately shut down the unit and clean.</li> <li>• Failure to do so could result in smoking, sooting and possible hopper fires.</li> </ul>

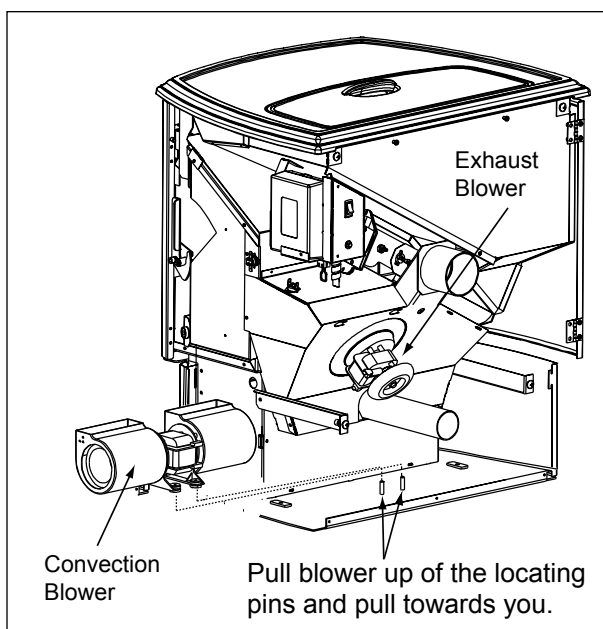
## C. Blower Replacement

### 1. Convection Blower Replacement

- Turn down the thermostat, let appliance completely cool and then unplug appliance before servicing.
- The Convection Blower is located on the floor at the rear of the appliance.
- Remove the right lower side curtain by releasing bracket from attachment holes in the back and then swing it to the front and lift off of the appliance. When re-installing flex curtain to re-attach. **Figure 33.1.**
- Cut the tie wire holding the wires together and then disconnect the yellow and purple wires.
- Re-install in reverse order.
- Attach new tie wire to hold wires together.



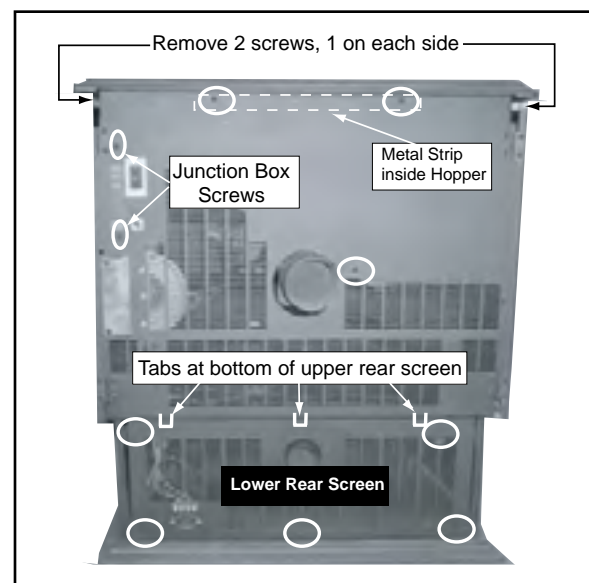
**Figure 33.1**



**Figure 33.2**

### 2. Exhaust Blower Replacement

- Turn down the thermostat, let appliance completely cool and then unplug appliance before servicing.
- Remove both lower side curtains. **Figure 33.1.**
- Remove the lower rear screen and lay flat, leaving all wires still attached.
- Remove the upper rear screen from the appliance by removing 2 screws at the top, 1 in the center and 2 screws on the sides at the top. Leave both upper side curtains still hinged in place to the rear screen. **Figure 33.3.**
- Remove the 2 screws holding the vacuum switch in place. Disconnect vacuum hose and blue and white wires from the vacuum switch.
- Remove the 2 screws holding the junction box in place.
- Disconnect the white and blue wires from the exhaust blower.
- There is a removable plate on the exhaust blower. Using a 1/4" nutdriver loosen the 6 screws in the keyhole shaped holes and rotate the plate. **Figure 33.4**
- Remove the exhaust blower and gasket.
- Re-install in reverse order.



**Figure 33.3**



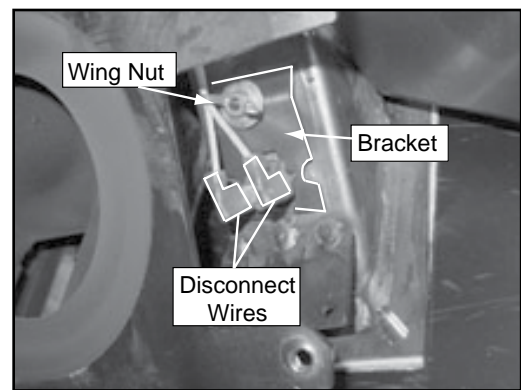
**Figure 33.4**

**3. Snap Disc #2 Replacement**

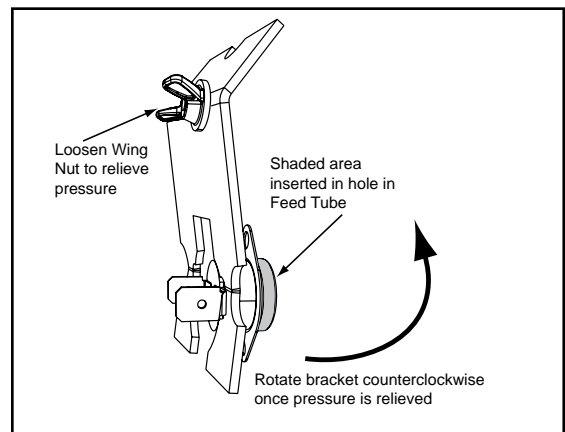
**NOTE:** Combustion Blower Gasket is also required. Sold separately under Part Number 240-0812.

- a. Turn down the thermostat, let appliance completely cool and then unplug appliance before servicing.
- b. Remove the 2 side curtains by removing the 8 screws in the top and bottom hinges on both sides. Note that the right side curtain has a caution label on the inside, the left side curtain does not.
- c. Disconnect vacuum hose and red and orange wires from the vacuum switch. Disconnect the white and blue wires from the exhaust blower.
- d. Remove the upper rear screen from the appliance by removing 2 screws at the top, 1 in the center and 2 screws on the sides at the top. Inside the hopper is a metal strip that the top 2 screws penetrate. Be careful not to drop the metal strip into the hopper. **See Figure 33.3 on page 33.**
- e. Remove the right lower side curtain by releasing bracket from attachment holes in the back and then swing it to the front and lift off of the appliance. **See Figure 33.1 on page 33.**
- f. Remove the lower rear screen and lay flat, leaving all wires still attached.
- g. Remove 2 screws at each end of the the convection cover and then slide the hooks to the left and remove with the exhaust blower still attached. **Figure 34.1.**
- h. Remove the combustion blower gasket and discard.
- i. Disconnect wires from snap disc #2. **Figure 34.2.**
- j. Loosen wing nut to relieve the pressure on snap disc from the bracket. The shaded area of the snap disc is inserted into a hole in the feed tube. **NOTE:** You may need pliers to start the wing nut. **Figure 34.3.**
- k. When bracket is loose enough, rotate the bracket counterclockwise and away from feed tube. **Figure 34.4.**

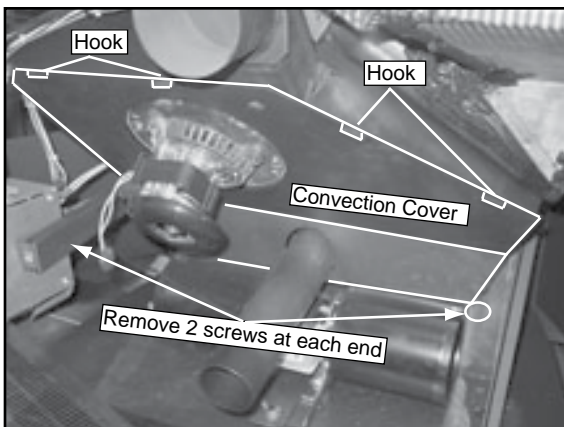
- l. Reach behind bracket and remove old snap disc. Install new snap disc and rotate back to original position ensuring the snap disc is inserted in the hole in the feed tube. Tighten the wing nut and re-attach the wires to the new snap disc.
- m. Install new combustion blower gasket and blower. Align hooks on the convection cover with slots and slide to the right to snap in place. Re-connect the white & blue wires to the exhaust blower.
- n. Install the lower rear screen and then the upper rear screen. Re-connect the vacuum switch wires and vacuum hose.
- o. Re-install the lower side curtains by placing them on the front studs first, flex the curtain and snap brackets into attachment holes in the back.



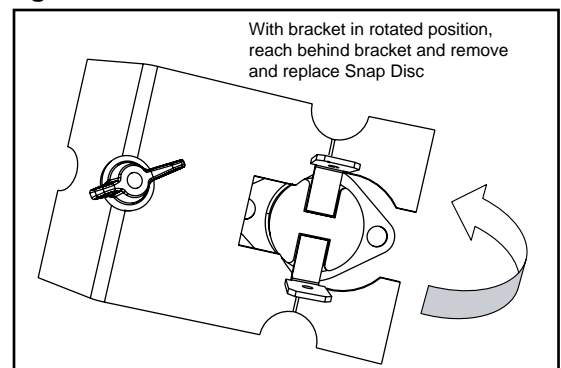
**Figure 34.2**



**Figure 34.3**

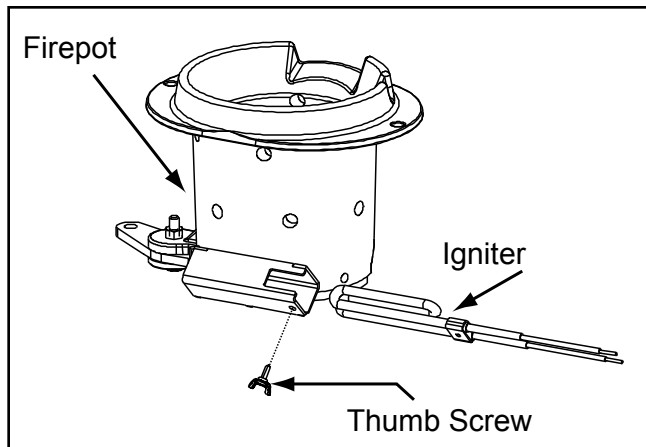


**Figure 34.1**



**Figure 34.4**

### D. Igniter Replacement

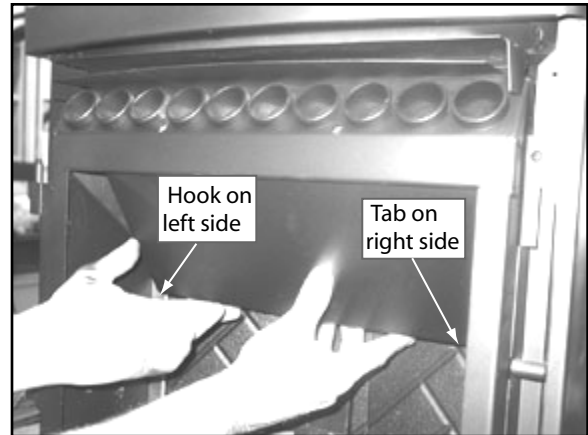


**Figure 35.1**

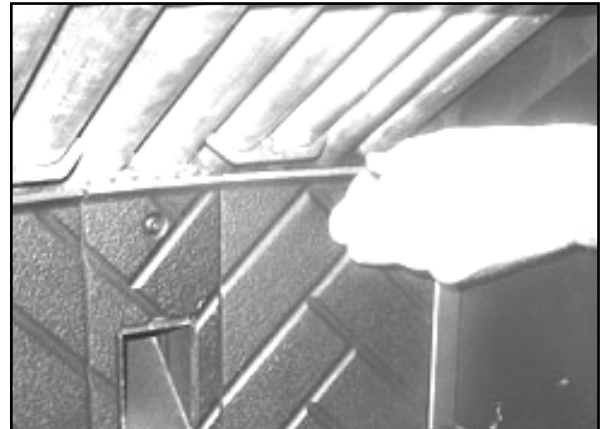
1. Shut down the appliance by turning down the thermostat and let the appliance completely cool down. After the appliance has cooled down, unplug it and remove the ash drawer.
2. The wire leads to the igniter are connected to the wire harness with 1/4 inch male / female spade connectors. Disconnect the spade connections and remove the igniter from the chamber. Loosen thumb screw and slide igniter out.
3. Install new igniter into the chamber and tighten thumb screw. Re-connect the wires to the 2 leads with the spade connectors.
4. Double check that the igniter wires are clear of any movement, i.e. ash drawer, firepot cleaning rod, cleaning slide plates, etc.
5. Re-install the ash drawer and side panel and re-connect the power.

### E. Baffle & Brick Removal

1. Appliance must be completely cool.
2. Open door and locate the baffle at top of inside of firebox.
3. The baffle is secured to the right bracket. A tab on the baffle is inserted into a notch on the right bracket. Lift the baffle up, out of the notch and towards you. **Figure 35.2.** The left side of the baffle has a hook that rests on the top edge of the brick. This side will just lift off.
4. Remove right brick by pulling up and then towards you to expose the exhaust venting for cleaning. **Figure 35.3.**



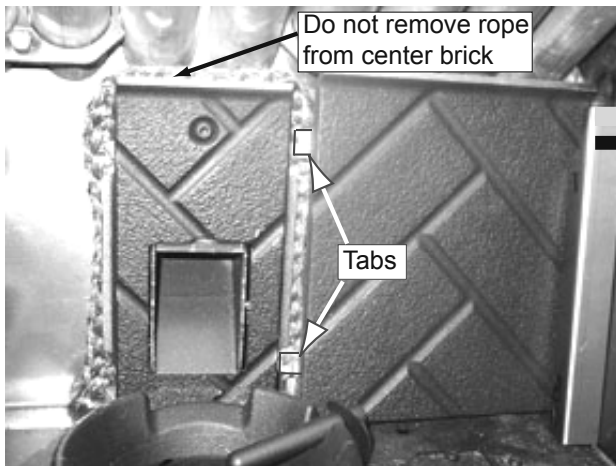
**Figure 35.2**



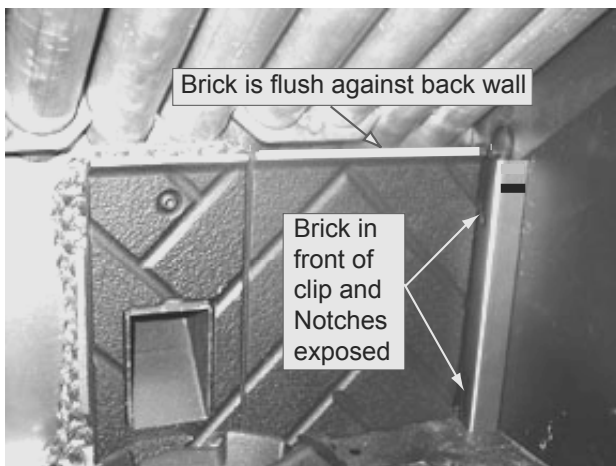
**Figure 35.3**

**F. Baffle & Brick Replacement**

1. Place right brick in behind the right bracket and then slide to the left so the tabs are behind the center brick. **Figure 36.1.**
2. The brick will be flush against the back wall and the bracket's notches will be exposed. **Figure 36.2.**
3. Pull the right edge of the brick forward and slide the brick into the notches both top and bottom of right bracket. **Figure 36.3.**
4. Repeat for left brick.
5. Insert baffle into top front of firebox and then raise up the bottom end and insert baffle tab into notch on the right bracket to lock into place. **Figure 36.5.** Place the left side hook of the bottom baffle over the top of brick for stability.
6. The baffle does not completely cover the top of the firebox. There is an opening as shown in **Figure 36.6.**



**Figure 36.1**



**Figure 36.2**



**Figure 36.3**



**Figure 36.4**



**Figure 36.5**



**Figure 36.6**

## G. Glass Replacement

### WARNING



- Glass is 5mm thick high temperature heat-resistant ceramic glass.
- DO NOT REPLACE with any other material.
- Alternate material may shatter and cause injury.

1. Open the face and remove door from the appliance by lifting door off of hinge pin and lay on a flat surface face down.
2. Using a screwdriver, tap the bottom of the rope retainer rod to push it up out of the hole. The top end of the rod will slide up. Swing the rod toward you from the bottom and remove the rod. Repeat for other side.
3. Remove old glass and replace with new glass.
4. Slide the retainer rod into the top hole first, and then line up the bottom crimped end with the hole in the door. The crimped end must be parallel with the glass in order to insert it into place. **Figure 35.1.**

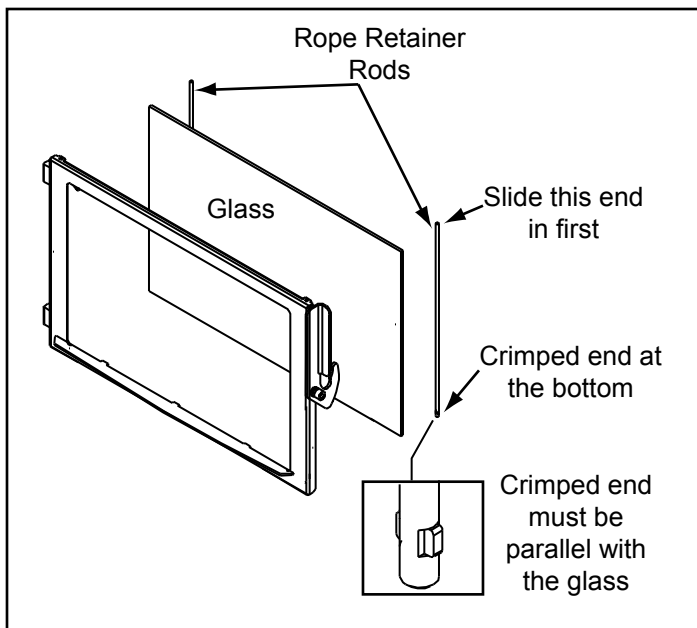


Figure 37.1

# 11

## Reference Materials

### A. Component Function



**When describing the location of a component, it is always AS YOU FACE THE FRONT OF THE APPLIANCE.**

#### 1. Control Box

- a. The control box is located on upper right side of appliance, behind the right side panel and above the vacuum switch.
- b. There is a light located inside of the control box. The internal light will turn green when the appliance has reached a temperature of 200°F (93°C) in the firepot. and will turn red when it reaches 600°F (315°C).
- c. There is also an internal blue light located in the upper left corner of the control box. When you plug in the appliance the blue light will automatically start blinking 6 times in a row for 60 seconds and then will stop.

**NOTE:**

Do **NOT** open the control box. This will void the warranty. If you need to plug in or remove the control box you must first **unplug the appliance.**

#### 2. Convection Blower

The convection blower is mounted at the bottom rear of the appliance. There are 2 impellers, one on each side of the motor. The convection blower pushes heated air through the heat exchange system into the room.

#### 3. Exhaust Blower

The exhaust blower is mounted on the right side of the appliance. The exhaust blower is designed to pull the exhaust from the appliance and push it out through the venting system.

#### 4. Feed System

The feed system is located on the right side of the appliance and can be removed as an entire assembly. The assembly includes the feed motor, mounting bracket, bearing and feed spring (auger). The hollow feed spring (auger) pulls pellets up the feed tube from the hopper area and drops them down the feed chute into the firepot.

#### 5. Firepot

The firepot is made of high quality ductile iron and has a cleaning pull-out rod. The floor of the firepot opens for cleaning when you pull out the rod. Be sure that the floor returns to a completely closed position or your appliance will not operate properly.

#### 6. Fuse

The fuse is located on the front of the junction box next to the red call light. The fuse will blow should a short occur and shut off power to the appliance.

#### 7. Heat Exchangers

The heat exchangers transfer hot air from the exhaust system into convection air. Remove the stainless steel top baffle to access the heat exchangers. There are 2 clean out rods located under the heat exchangers.

#### 8. Heat Output Switch

The heat output switch is located on the upper right rear panel. The function of the heat output switch is to regulate the burn rates; low, medium and high settings.

#### 9. Igniter

The igniter is mounted on the base of the firepot. Combustion air travels over the red hot igniter creating super heated air that ignites the pellets.

#### 10. Junction Box And Wiring Harness

The junction box is located on the right side of the appliance, behind the right side panel. The junction box and wiring harness are replaced as one component.

#### 11. Power Supply

The power outlet is located behind the control box on the back of the appliance, lower left corner. Check the wall receptacle for 120 volt, 60 Hz (standard current). Make sure the outlet is grounded and has the correct polarity. A good surge protector is recommended.

#### 12. Red Call Light

The red call light is on the side of the junction box, next to the fuse. The function of the red call light is to indicate that the thermostat is calling for heat.

#### 13. Reset Button

The reset button is located on the back of the appliance in the upper right corner below the heat output control switch. The function of the button is to momentarily open the thermostat circuit, which restarts the system.

#### 14. Thermocouple

The thermocouple is located on top of the firepot inside the thermocouple cover (ceramic protection tube). The thermocouple sends a millivolt signal to the control box indicating the preset temperatures of the green and red lights have been obtained.

#### 15. Thermostat

The appliance is designed to run on a 12 volt AC thermostat. The heat anticipator should be set on the lowest setting available.

**16. Snap Disc #1 (Convection Blower) 110°F**

Snap disc #1 is located on the right side of the appliance on the bottom of the heat exchanger box. There are 2 purple wires connected to it. This snap disc turns the convection blower on and off as needed. Power is always present at snap disc #1.

**17. Snap Disc #2 (Fuel Delivery Interrupt) 250°F**

Snap disc #2 is also located on the back side of the feed drop tube. There are 2 orange wires connected to it. This snap disc will turn off the feed system which will turn off the appliance if an overfire condition should occur or if the convection blower should fail to operate. If this occurs the snap disc will automatically reset itself.

**18. Snap Disc #3 (Back Burn Protector) 250°F**

Snap disc #3 is mounted on the back of the auger tube in the center of the appliance and has a red reset button. To access it remove the right side panel. If the fire tries to burn back

into the feed system or push exhaust up the feed tube, this snap disc will shut the entire system off. This disc must be manually reset.

**19. Vacuum Switch**

The vacuum switch is located on the lower right side of the appliance behind right side panel. This switch turns the feed system on when vacuum is present in the firebox. The vacuum switch is a safety device to shut off the feed motor if the exhaust or the heat exchanger system is dirty or plugged or if the firebox door is open.

**20. Wiring Harness**

See Figure 39.1 below.

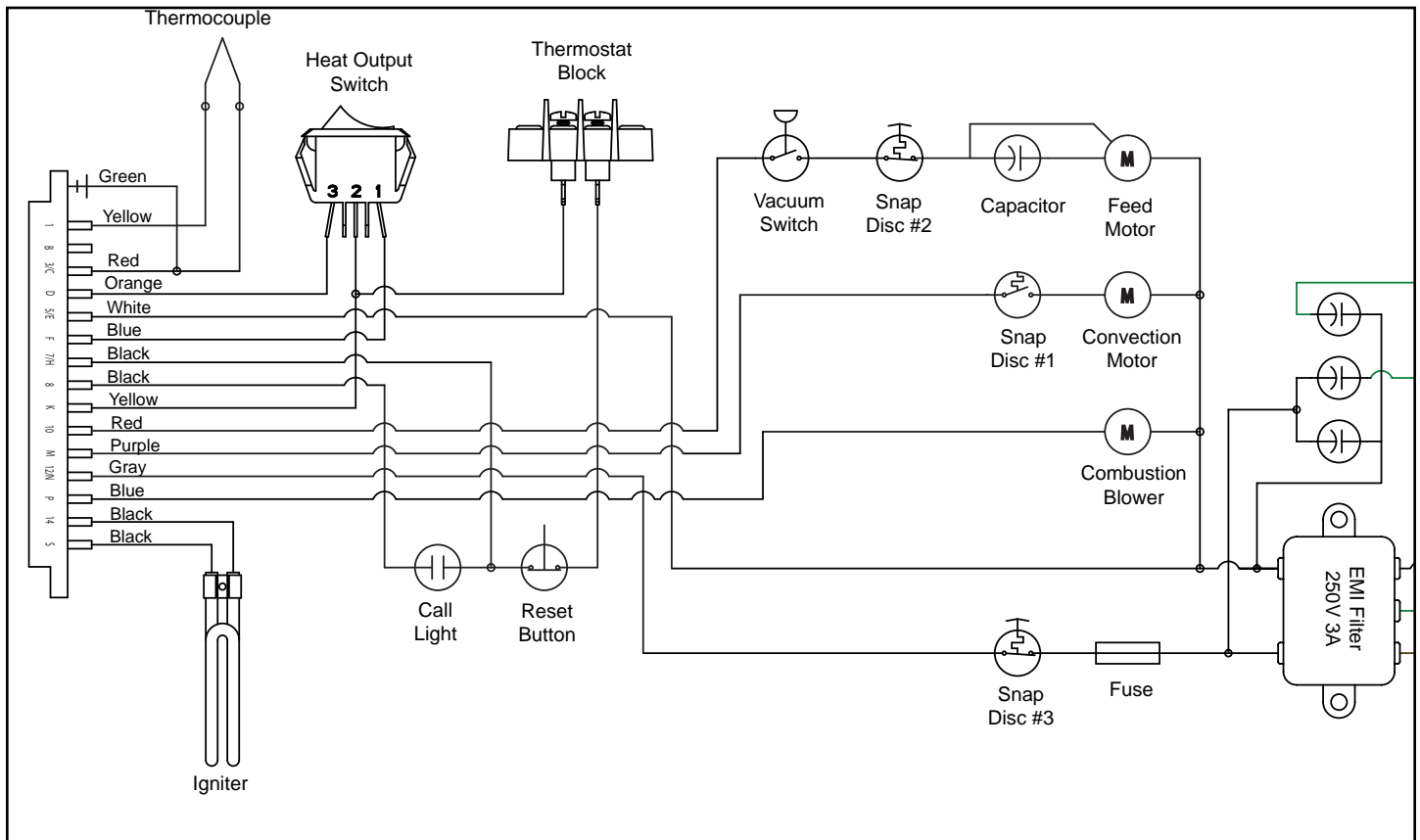
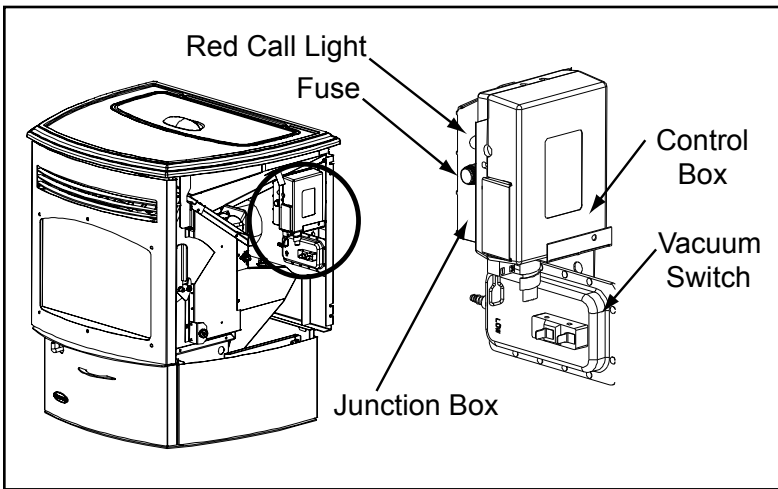
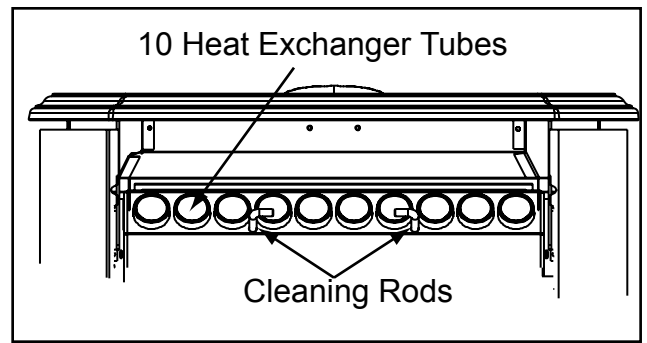


Figure 39.1

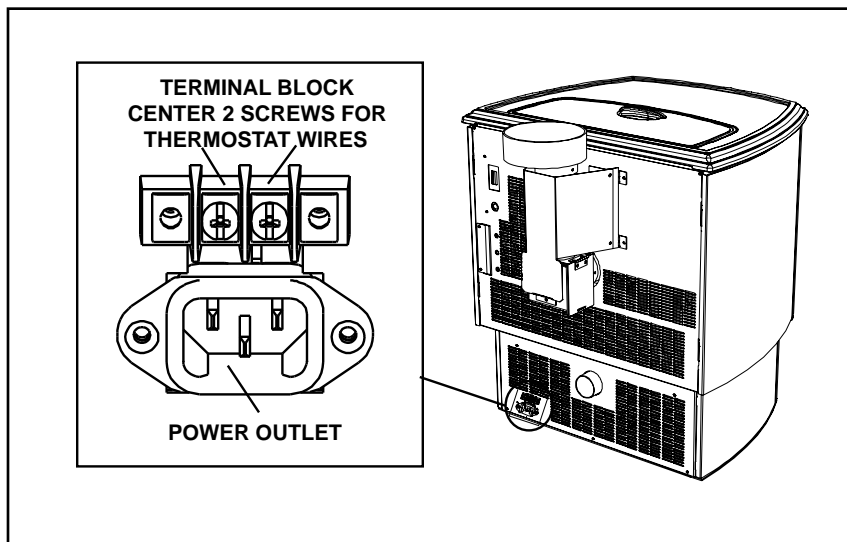
**B. Component Locations**



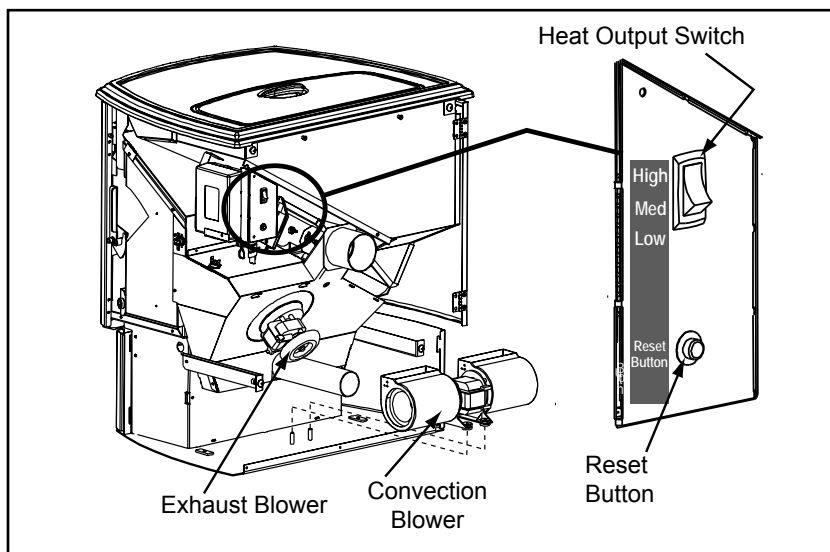
**Figure 40.1**



**Figure 40.2**

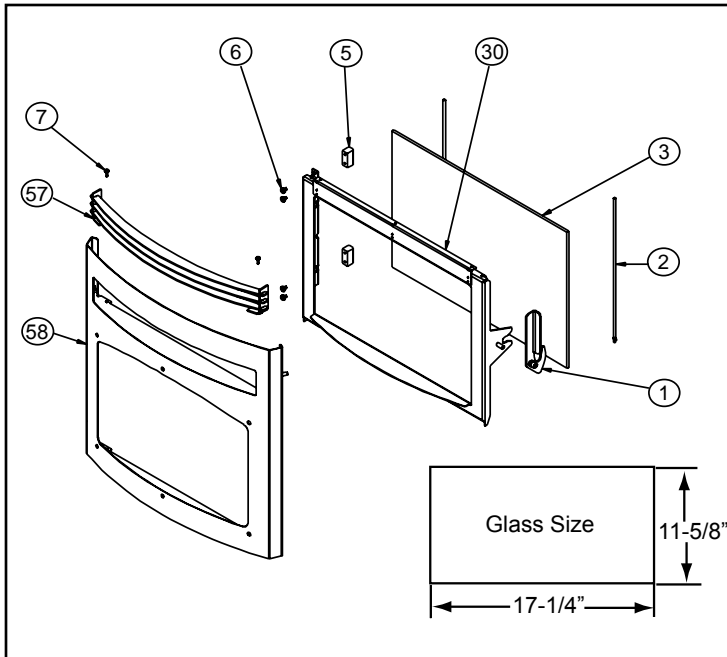


**Figure 40.3**



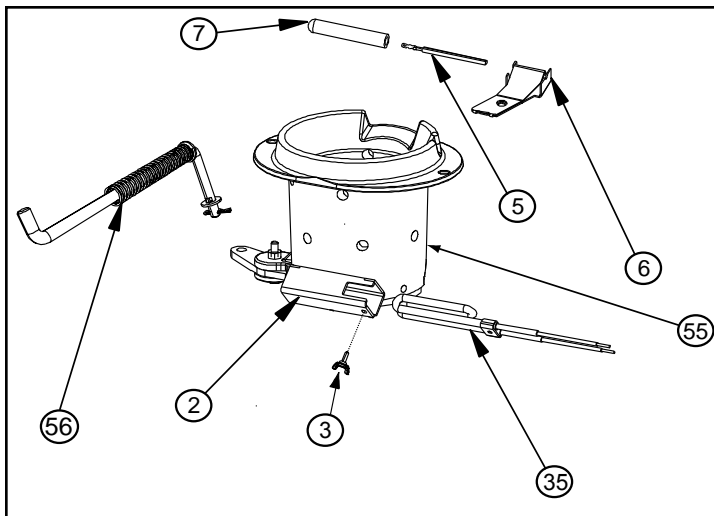
**Figure 40.4**

**C. Exploded Views**



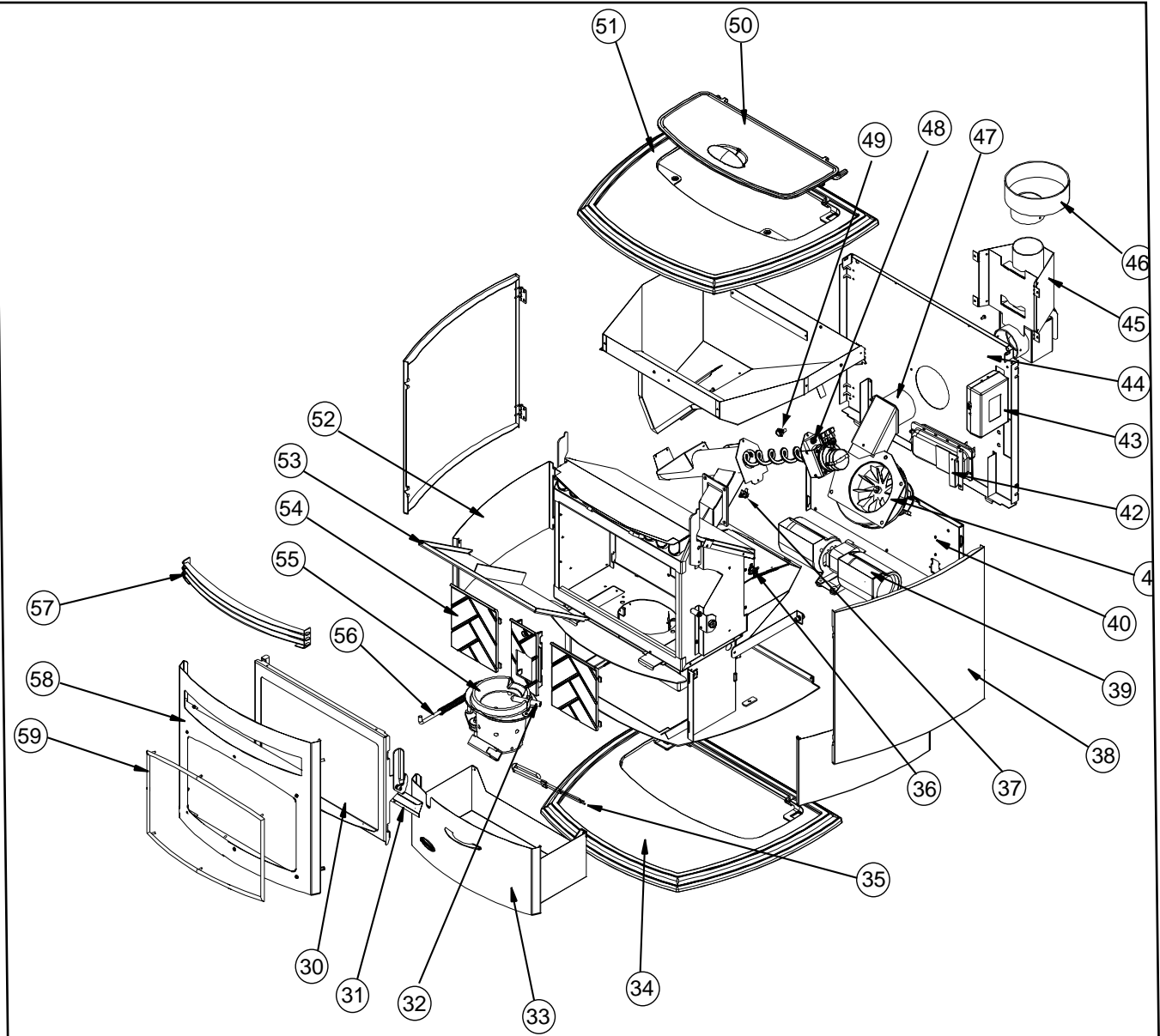
Item	Description	Part Number
1	Door Latch Assembly	7001-042
2	Rope Retainer Rod	7001-192
3	Glass Assembly	7001-038
5	Hinge, Female	450-2910
6	Screw, 10-32 x 1/4 PH PHL MS ZC	7021-006
7	Screw, #8 x 1/2 SMS-S-Grip	12460
30	Door Assembly	7001-035
57	Grille Assembly	not sellable
58	Face	7001-026

**Figure 41.1 - Door, Face, Glass & Door Latch Assembly**



Item	Description	Part Number
32	Thermocouple Cover	812-1322
35	Igniter	SRV7000-462
55	Firepot	SRV414-5200
56	Firepot Cleaning Pull Rod	7001-010
60	Igniter Bracket	not sellable
61	Thumb Screw	7000-223/24
62	Thermocouple Clamp	7001-203
63	Thermocouple, 14"	812-4470

**Figure 41.2 - Firepot Assembly**



**Figure 42.1**

Item Nbr	Description	Item Nbr	Description	Item Nbr	Description
30	Door Assembly	40	Pedestal Back (not sellable)	50	Hopper Lid
31	Ash Clean-Out Plate	41	Blower, Exhaust	51	Top, Cast
32	Thermocouple Cover	42	Vacuum Switch	52	Curtain, Pedestal, Side
33	Ash Drawer Assembly	43	Control Box	53	Baffle Assembly
34	Base, Cast	44	Back (not sellable)	54	Brick (pieces sold sep.)
35	Igniter	45	Top Vent Kit 3 to 3 inches (optional accessory item)	55	Firepot
36	Snap Disc #1, 110 degree	46	Top Vent Offset Adapter 3 to 6 in (optional accessory item)	56	Firepot Cleaning Pull Rod
37	Snap Disc #2, 250 degree	47	Exhaust Transition	57	Grille Assy (Accessory Item Gold or Nickel)
38	Curtain, Side	48	Feed Motor Assembly	58	Face Assembly
39	Blower, Convection	49	Snap Disc #3, 250 degree	59	Trim Ring (Gold or Nickel)

**D. Service Parts and Accessories**

**IMPORTANT: THIS IS DATED INFORMATION.** When requesting a part for your appliance please provide model name/number and serial number to ensure correct part. All parts listed may be ordered from an authorized dealer.

Item #	Service Parts Description	Part Nbr
	Ash Catcher	7001-116
33	Ash Drawer Assembly	7001-004
53	Baffle Assembly	UK-30KPEL
39	Blower, Convection	812-4900
41	Blower, Exhaust with housing	812-4400
	Brick, Center	414-0260
	Brick, Left & Right, (interchangeable)	414-0270
	Component Pack	7001-012
43	Control Box	SRV7000-205
	Curtain, Pedestal	7001-169
38	Curtain, Side, Assembly with magnet	7001-023
30	Door Assembly	7001-035
	Door Latch Assembly, Bottom Air Wash	7001-042
58	Face Assembly, No Grille	7001-026
48	Feed Motor & Spring Assembly	812-4760
	Feed Motor Only w/capacitor	812-4421
	Feed Spring	SRV7001-046
56	Firepot Pull Rod Assembly	7001-010
	Firepot, EZ Clean	SRV414-5200
	Gasket, Tadpole, 10 feet	842-5130
	Glass Assembly	7001-038
	Heat Output Switch (Rocker Switch)	812-3500
50	Hopper Lid	7001-129
	Hopper Lid Assembly	7001-007
	Hopper Lid Hinge, Cast	7001-131
35	Igniter, Loop	SRV7000-462
	Junction Box & Wiring Harness	SRV7001-194
	Power Cord	812-1180
36	Snap Disc #1, 110 degrees	230-1220
37	Snap Disc #2, Auto Reset, 250 degrees	SRV7000-268
49	Snap Disc #3, Manual Reset, 175 degrees	230-1960
	Thermocouple Cover	812-1322
	Thermocouple Cover 10 pack	812-4920
	Thermocouple, 14 inches	812-4470
51	Top Assembly	7001-016
42	Vacuum Switch	7000-166

**IMPORTANT: THIS IS DATED INFORMATION.** When requesting a part for your appliance please provide model name/number and serial number to ensure correct part. All parts listed may be ordered from an authorized dealer.

<b>Accessory Description</b>	<b>Part Number</b>
Grille, Louver, Gold	LVGRL-SF-GD
Grille, Louver, Nickel	LVGRL-SF-NL
Log Set, 4 pieces	811-0852
Log, Top, 1 piece (to cover firepot)	811-0900
Outside Air Kit	811-0872
Pedestal Base, Cast Iron	811-0840
Rear Vent Adapter	811-0620
Rear to Top Vent Adapter	811-0610
Top Vent Adapter, 3 to 3 inch	811-0890
Top Vent Offset Collar 3 to 6 inch	812-3570
Thermostat, Mechanical	812-3760
Thermostat, Programmable	811-0520
Trim Ring, Door, Gold	DT-SF-GD
Trim, Ring, Door, Nickel	DT-SF-NL



**F. Warranty Policy**

**Hearth & Home Technologies LIMITED WARRANTY**

Hearth & Home Technologies (“HHT”) and its respective brands extends the following warranty for HHT gas, wood, pellet and electric appliances purchased from an authorized HHT dealer and installed in the United States of America or Canada. Warranty starts with date of purchase by the original owner (End User) except as noted for replacement parts.

Warranty Period		HHT Manufactured Appliances and Venting						Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Electric	Venting	
1 Year		X	X	X	X	X	X	All Parts and Material Except as covered by Conditions, Exclusion, and Limitations listed
2 years				X	X			Igniters, Electronic Components, and Glass
		X	X	X	X			Blowers
			X					Molded Refractory Panels
3 years				X				Firepots
5 years	3 years			X	X			Castings & Baffles
7 years	3 years		X	X	X			Firebox, HHT Chimney, Termination & Heat Exchanger
10 years	1 year	X						Burners, Logs & Refractory
Limited Lifetime	1 year	X						Firebox & Heat Exchanger
90 Days		X	X	X	X	X	X	All Replacement Parts
See Conditions, Exclusions, and limitations.							9-01-08	

**CONDITIONS, EXCLUSIONS & LIMITATION OF LIABILITY**

- This warranty applies to the original owner and is transferable up to two years from date of purchase to the new homeowner, provided the purchase was made through an authorized dealer or distributor of HHT, and the appliance remains in its original place of installation.
- The maximum amount recoverable under this warranty is limited to the purchase price of the product.
- In no event shall HHT be liable for any incidental or consequential damages caused by defects in the product.
- Adjustments, regular maintenance, cleaning and temporary repairs, or the failure to duplicate the problem in the home is not covered under this warranty.
- This limited warranty does not extend to or include surface finish on the appliance or terminations, door gasketing, glass gasketing, glass discoloration, firebrick, pellet logs, kaowool or other ceramic insulating materials. Rust and/or corrosion on any of the metal surfaces, cast iron components, baffles, firepots, doors, or firebox area are not covered by this warranty.

**Hearth & Home Technologies LIMITED WARRANTY (Cont'd)**

- Noise resulting from minor expansion, contraction, or movement of certain parts is normal and complaints related to this noise are not covered by this warranty.
- HHT's obligation under this warranty does not extend to damages resulting from: (1) installation, operation or maintenance of the appliance not in accordance with the installation instructions; operating instructions and the listing agent identification label furnished with the appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure or handling devices such as exhaust fans or forced air furnaces or other such causes; (5) use of fuels other than those specified in the operating instructions; (6) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the appliance not expressly authorized and approved by HHT in writing.
- This warranty does not apply to non-HHT venting components, hearth components or other accessories used in conjunction with the installation of this product.
- This warranty is void if the appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals the appliance is subject to prolonged periods of dampness or condensation, or there is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.
- HHT's liability under this warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) at HHT's discretion. Shipping costs are not covered under this warranty.
- Some states do not allow exclusions or limitation of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state.
- EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.

*This Limited Warranty is effective on all HHT appliances sold after September 01, 2008 and supersedes any and all warranties currently in existence.*

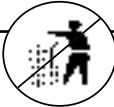

If warranty service is needed, you should contact your installing dealer. If the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HHT dealer or supplier.

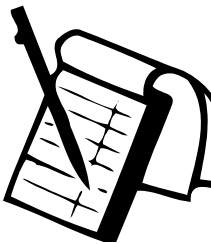
# QUADRA-FIRE®

## CONTACT INFORMATION:

Hearth & Home Technologies  
1445 North Highway  
Colville, WA 99114  
Division of HNI INDUSTRIES

Please contact your Quadra-Fire dealer with any questions or concerns.  
For the number of your nearest Quadra-Fire dealer  
logo onto [www.quadrafire.com](http://www.quadrafire.com)

	<b>CAUTION</b>
	Do NOT discard this manual. <ul style="list-style-type: none"><li>• Important operating and maintenance instructions included.</li><li>• Read, understand and follow these instructions for safe installation and operation.</li><li>• Leave this manual with party responsible for use and operation.</li></ul>



## Your Records for Model: SANTA FE PELLET STOVE

SERIAL NUMBER: \_\_\_\_\_

DATE PURCHASED: \_\_\_\_\_

DATE INSTALLED: \_\_\_\_\_

WHERE PURCHASED: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

