

Owner's Manual

Operation & Care

INSTALLER: Leave this manual with party responsible for use and operation.
OWNER: Retain this manual for future reference.

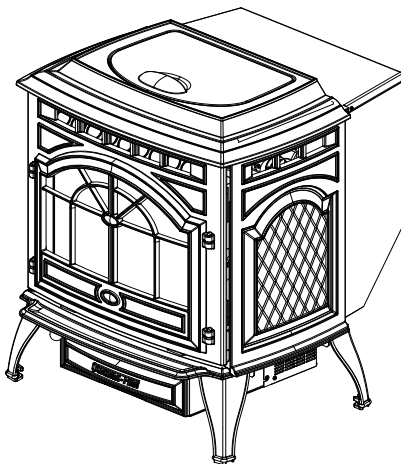
Contact your dealer with questions on installation, operation, or service.

This unit has been retired.
Service parts pages within have
been removed.
For replacement parts, please
refer to the individual service parts
list located on the brand website.

NOTICE: DO NOT DISCARD THIS MANUAL

QUADRA-FIRE®
BY FORGE & FLAME
CASTILE PELLET APPLIANCE

MODEL NUMBERS:
CASTILE-MBK-C
CASTILE-PMH-C
CASTILE-TWL-C



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.

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or NFI certified professionals.



WARNING



If the information in these instructions is not followed exactly, a fire could result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not over fire - If appliance or chimney connector glows, you are over firing. Over firing will void your warranty.
- Comply with all minimum clearances to combustibles as specified.

Failure to comply may cause house fire.



WARNING



HOT SURFACES!

Glass and other surfaces are hot during operation AND cool down. Hot glass will cause burns.

- Do not touch glass until it is cooled
- NEVER allow children to touch glass
- Keep children away
- CAREFULLY SUPERVISE children in same room as fireplace.
- Alert children and adults to hazards of high temperatures
- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, draperies and other flammable materials away.



CAUTION

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

NOTE: To obtain a French translation of this manual, please contact your dealer or visit www.forgenflame.com

REMARQUE : Pour obtenir une traduction française de ce manuel, s'il vous plaît contacter votre revendeur ou visitez www.forgenflame.com

Congratulations



and Welcome to the Quadra-Fire Family!

NOTE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction

A. Sample of Serial Number / Safety Label

LOCATION: Back of Appliance

Test Lab & Report No.	Model Name	Serial No.
 Report / Rapport 0061PS0775 0061PM077E	☐ CASTILE-MBK-C *PCASTILE-MBK-C* ☐ CASTILE-PMH-C *PCASTILE-PMH-C* ☐ CASTILE-TWL-C *PCASTILE-TWL-C*	 Serial No. / N° de série: HF
QUADRA-FIRE ESPACE LIBRE MINIMUM DES MATÉRIEAUX COMBUSTIBLES: A Back Wall to Stove / Mur Arrière du poêle 2" / 51mm B Side Wall to Cast Top / Mur De Côté du haut 6" / 152mm Corner Installation / Installation du Coin: C Side Wall / Mur De Côté 2" / 51mm Vertical 3 in. - 6 in. Adapter Kit (Part #812-3570 Installation / Unassemblage Pour Adaptateur 76mm - 152mm (Pièce 812-3570 Pour Installation verticale): D Back Wall to Flue Pipe / Mur Arrière tuyau rigide 3" / 76mm E Side Wall to Cast Top / Mur De Côté du haut 6" / 152mm Corner Installation with Vertical Adapter Kit / Installation du coin avec un assemblage d'adaptateur verticale: F Side Wall / Mur De Côté 2" / 51mm Alcove Installation / Installation de l'alcove: Min. Alcove Height / Hauteur minimum de l'alcove: 43" / 1092mm Min. Alcove Side Wall / Hauteur minimum de l'alcove: 6" / 152mm Max. Alcove Side Wall / Hauteur maximum de l'alcove: 36" / 914mm NOTES: In residential installations, use Listing Ports 811-0890, (3" - 3" Top Vent Adapter) and 812-3570 (3" - 6" Offset Adapter), 24 gauge 6" single wall flue pipe, (24 gauge 6" / 152mm). Dans les installations résidentielles, lorsque les pièces 811-0890, (dessus de l'adaptateur 76mm - 76mm) et 812-3570 (dessus de l'adaptateur 76mm - 152mm), un tuyau connecteur de 6" pour mur simple de calibre 24 peut être utilisé. NOTE 2: For manufactured home installation, when using Part 811-0890, (3" - 3" Top Vent Adapter) and (3" - 6" Offset Adapter), use listed double wall flue pipe, (24 gauge 6" / 152mm). Dans les installations pour maisons fabriquées, lorsque les pièces 811-0890, (dessus de l'adaptateur de ventilation 76mm - 76mm) et 812-3570 (le dessus de l'adaptateur 76mm - 152mm), utilisez un tuyau connecteur enregistré pour mur double. Un assemblage d'air extérieur (pièce 811-0872), doit être utilisé pour l'installation dans les maisons préfabriquées. FLOOR PROTECTION / PROTECTION DU SOL "Non-combustible floor protection must extend beneath the flue pipe when installed with horizontal venting or under the Top Vent Adapter with vertical installation. Recommended in USA; Required in Canada. Floor protection must be non-combustible material, extending beneath heater and to the front/sides/rear as indicated. Measure front distance (I) from the surface of the glass door. "La protection du sol non combustible doit se prolonger sous la conduite de fumée lorsqu'elle est installée avec une ventilation horizontale ou sous l'adaptateur de ventilation supérieure avec une installation verticale. Recommandé aux USA; Obligatoire au Canada. La protection du sol doit être incombustible, s'étendant sous le radiateur et à l'avant / aux côtés / à l'arrière comme indiqué. Mesurer la distance avant (I) à partir de la surface de la porte vitrée. Manufactured by / Fabriqué par HEARTH-G-HOME Technologies 352 Mountain House Road, Halifax, NS A1Y 1K3 www.forgentame.com U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with 2020 particulate standards at 1.10 G/HR EPA Method 28R and ASTM 2779 using premium wood pellets. THIS WOOD HEATER NEEDS PERIODIC INSPECTION AND REPAIR OR PROPER OPERATION. SEE THE OWNERS MANUAL FOR FURTHER INFORMATION AGAINST THE REGULATIONS OPERATING THIS WOOD HEATER. A MANNER CONSISTENT WITH OPERATING INSTRUCTIONS. INFORMÉ. DO NOT REMOVE THIS LABEL / NE PAS ENLEVER L'ÉTIQUETTE 7021-800F		

YEAR CODE
20 JAN FEB MAR APR MAY JUNE JULY AUG SEPT OCT NOV DEC
29 30 31 32 33 34 35 36

Date of Manufacture / Date de fabrication:

Mfg. Date



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 only with fuel hopper lid closed. Failure to do so may result in emissions of products of 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 DÉSIGNÉ DE L'INSTALLATION. LE CONTACT PEUT CAUSER DES BRÛLURES À LA PEAU. VOIR L'ÉTIQUETTE ET LES INSTRUCTIONS. Opérez cet appareil uniquement 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.

7014-197C



Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Indicates practices which may cause damage to the appliance or to property.

TABLE OF CONTENTS

A. Sample of Serial Number / Safety Label	2
B. Warranty Policy	4

1 Listing and Code Approvals

A. Appliance Safety Certification	6
B. Appliance Emissions Certification	6
C. BTU & Efficiency Specifications.	6
D. Glass Specifications.	7
E. Electrical Rating	7
F. Mobile Home Approved	7
G. Sleeping Room	7
H. California - Prop65.	7

2 Operating Instructions

A. Fire Safety	8
B. Non-Combustible Materials	8
C. Combustible Materials	8
D. Fuel Material and Fuel Storage	8
E. Before Your First Fire.	9
F. Filling the Hopper	9
G. General Operating Information	10
H. Starting Your First Fire.	10
I. Fire Characteristics	11
J. Feed Rate Adjustment Instructions.	11
K. Ignition Cycles	12
L. Restarting the Appliance	12
M. Clear Space.	12
N. Thermostat Controls	13
O. Frequently Asked Questions	14

3 Maintenance and Service

A. Proper Shutdown Procedure	15
B. Quick Reference Maintenance Chart.	15
C. General Maintenance and Cleaning	16
D. Soot or Creosote Fire Awareness	19
E. High Ash Fuel Content Maintenance	19

4 Troubleshooting Guide 20

5 Service Parts Replacement

A. Blowers	22
B. Snap Disc #2	23
C. Baffle	24
D. Brick.	24
E. Igniter.	25
F. Glass	25

6 Reference Materials

A. Component Functions	26
B. Component Locations	28
C. Service and Maintenance Log	29

➔ = Contains updated information



Register your product online to stay informed with important updates and essential product information.

<https://myhht.my.site.com/registration/forgednflame>

B. Warranty Policy

Hearth & Home Technologies LLC LIMITED WARRANTY

Hearth & Home Technologies LLC ("HHT") extends the following warranty for HHT gas, wood, pellet and electric hearth appliances (each a "Product" and collectively, the "Product(s)") and certain component parts set forth in the table below ("Component Part(s)") that are purchased from a HHT authorized dealer or distributor.

WARRANTY COVERAGE:

HHT warrants that the Products and their Component Parts will be free from defects in materials and workmanship for the applicable period of Warranty coverage set forth in the table below ("Warranty Period"). If a Product or Component Parts are found to be defective in materials or workmanship during the applicable Warranty Period, HHT will, at our discretion, repair the applicable Component Part(s), replace the applicable Component Part(s), or refund the purchase price of the applicable Product(s). The maximum amount recoverable under this Warranty is limited to the purchase price of the Product. This Warranty is transferable from the original purchaser to subsequent owners, but the Warranty Period will not be extended in duration or expanded in coverage for any such transfer. This Warranty is subject to conditions, exclusions, and limitations as described below.

WARRANTY PERIOD:

Warranty coverage begins at the date of installation. In the case of new home constructions, Warranty coverage begins six months after invoice of the final sale of the Product(s) by an independent, authorized HHT dealer or distributor. However, the Warranty coverage shall commence no later than 24 months following the date of Product shipment from HHT, regardless of the installation or purchase date.

Warranty Period		HHT Manufactured Appliances and Venting				
Component Parts	Labor	Gas	Pellet	Wood	Electric	Component Parts Covered by this Warranty
1 Year		X	X	X		All parts including handles, external enameled components and other material except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
2 Years					X	All parts except as covered by Warranty Conditions, Warranty Exclusions, and Warranty Limitations listed
			X	X		Glass, Electrical components limited to heating element/igniters, Top feed auger assembly, Blowers, Junction Box, Remotes/Wall switches, linear actuator, power cord, vacuum switch, snap disc, wire harnesses and thermocouple
		X				Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)
		X		X		Cement Refractory Panels, Glass Liner Panels
3 years			X			Firepots, burnpots, Harman mechanical feeders
5 years		X		X		Catalysts, Vented and Vent Free burners and logs
10 years	1 year	X				Burners, logs and metal/fiber refractory components of HHT manufactured fireplaces or stoves, venting due to poor workmanship
10 years	3 years		X	X		Castings, Medallions & Baffles, FlexBurn® System (engine, inner cover, access cover and fireback), Firebox and heat exchanger, HHT Chimney & Terminations, Manifolds
20 years	3 years	X				Firebox and heat exchanger
All purchased replacement parts and optional accessories						
1 Year	None	X	X	X	X	All purchased replacement parts and optional accessories

WARRANTY CONDITIONS:

- Because HHT cannot control the quality of any Products sold by unauthorized sellers, this Warranty only covers Products that are purchased through an HHT authorized dealer or distributor unless otherwise prohibited by law; a list of HHT authorized dealers is available on the HHT branded websites.
- This Warranty is only valid while the applicable Product remains at the site of original installation.
- This Warranty is only valid in the country in which the HHT authorized dealer or distributor that sold the applicable Product is authorized to sell applicable Product.
- Contact your installing distributor or dealer for Warranty service. If the installing dealer or distributor is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking Warranty service from a dealer other than the dealer from whom you originally purchased the applicable Product.
- No HHT consumer should bear cost of warranty service or costs incurred while servicing warranty claims (i.e., travel, gas, or mileage) when the service is performed within the terms of this Warranty. Check with your dealer or distributor in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this Warranty.

WARRANTY EXCLUSIONS:

This Warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under the Warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the Warranty Period are not covered. These parts include: paint, wood and pellet gaskets, firebricks, wood grates, flame guides, batteries and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this Warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the applicable Product in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the applicable Product; (2) failure to install the applicable Product in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operation instructions; (7) installation or use of components not supplied with the applicable Product or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the applicable Product.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the applicable Product.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas applicable Product is installed.
- HHT's obligation under this Warranty does not extend to the Product's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper Product for the application. Consideration must be given to the Product location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The applicable Product has been over-fired, operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, deformation/warping of interior cast iron structure or components, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The applicable Product is subjected to prolonged periods of dampness or condensation.
- There is any damage to the applicable Product due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF REMEDIES AND LIABILITY:

- **EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. The owner's exclusive remedy and HHT's sole obligation under this Warranty or in contract, tort or otherwise, shall be limited to, at HHT's sole option, replacement of the Component Part(s), repair of the Component Part(s), or refund of the original purchase price of the applicable Product(s). In no event will HHT be liable for any incidental or consequential damages caused by defects in the applicable Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from State to State. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE FOR THE APPLICABLE PRODUCT. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.**

1 Listing and Code Approvals

A. Appliance Safety Certification

Model Number:	CASTILE-MBK-C, CASTILE-PMH-C, & CASTILE-TWL-C
Laboratory:	OMNI Test Laboratories, Inc.
Report Number:	061-S-77d-6.2
Type:	Solid Fuel Room Appliance/Pellet Fuel Burning Type
Standard	ASTM E1509-04 and ULC S627-00 Room Appliance Pellet Fuel Burning type and (UM) 84-HUD, Mobile Home Approved.

B. Appliance Emissions Certification

Model Number:	CASTILE-MBK-C, CASTILE-PMH-C, & CASTILE-TWL-C
Laboratory	OMNI Test Laboratories, Inc.
Report Number:	0061PM077E
Standard:	EPA method 28R, ASTM 2779 and ASTM E1509-04
Can be found at: www.forgenflame.com/pages/epa-certification	

The Castile is Certified to comply with 2020 particulate emission standards.



NOTICE: This installation must conform with local codes. In the absence of local codes you must comply with the **ASTM E1509-04, ULC S627-00, and (UM) 84-HUD.**

This pellet appliance needs periodic inspection and repair for proper operation. It is against federal regulations to operate this pellet appliance in a manner inconsistent with operating instructions in this manual.

C. BTU & Efficiency Specifications

EPA Certification Number:	Number: 175-19
EPA Certified Emissions:	1.1 grams per hour
*LHV Tested Efficiency:	70.4%
**HHV Tested Efficiency:	66.1%
***EPA BTU Output:	5,800 to 22,400 / hr.
****BTU Input:	9,300 to 30,600 / hr.
Vent Size:	3, 4 "L" or "PL"
Hopper Capacity:	45 lbs.
Fuel	Premium Wood Pellets
* Weighted average LHV (Low Heating Value) efficiency using data collected during EPA emissions tests in accordance with the requirements of CSA B415.1.	
** Weighted average HHV (High Heating Value) efficiency using data collected during EPA emissions tests in accordance with the requirements of CSA B415.1.	
*** A range of BTU outputs calculated using HHV efficiency and the burn rates from the EPA tests.	
**** Based on the maximum feed rate per hour multiplied by approximately 8600 BTU's which is the average BTU's from a pound of pellets.	

D. Glass Specifications

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

E. Electrical Rating

115 VAC, 60 Hz, Start 5 Amps, Run 1.25 Amps

F. 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.
- Outside Air Kit, part OAK-ACC must be installed in a mobile home installation.

G. Sleeping Room

When installed in a sleeping room it is recommended that 3ft of vertical be installed prior to horizontally exiting the room and a smoke/CO alarm be installed in the bedroom. The size of the room must be at least 50ft³ per 1,000 Btu/hr stove input, if the stove exceeds the room size, outside air must be installed.

H. California - Prop65



WARNING

This product and the fuels used to operate this product (wood), and the products of combustion of such fuels, can expose you to chemicals including carbon black, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to: WWW.P65Warnings.ca.gov



WARNING



Fire Risk.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
 - Modification of the appliance.
 - Installation other than as instructed by Hearth & Home Technologies.
 - Installation and/or use of any component part not approved by Hearth & Home Technologies.
 - Operating appliance without fully assembling all components.
 - Operating appliance without legs attached (if supplied with appliance).
 - Do NOT Over fire - If appliance or chimney connector glows, you are over firing.
- Any such action that may cause a fire hazard.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.

For assistance or additional information, consult a qualified installer, service agency or your dealer.

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

2 Operating Instructions



WARNING



Fire Risk.

- Do not operate appliance before reading and understanding operating instructions.
- Failure to operate appliance properly may cause a house fire.

Visit www.forgenflame.com/pages/quadra-fire-use-and-care-videos to view product and use & care videos.

A. Fire Safety

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

- Install at least one smoke detector on each floor of your home.
- Install at least one carbon monoxide detector on each floor of your home.
- Locate smoke detector away from the heating appliance and close to the sleeping areas.
- Follow the smoke detector manufacturer's placement and installation instructions and maintain regularly.
- Follow the carbon monoxide manufacturer's placement and installation instructions and maintain regularly.
- Conveniently locate a Class A fire extinguisher to contend with small fires.
- In the event of a hopper fire:
 - Evacuate the house immediately.
 - Notify fire department.

B. Non-Combustible Materials

Material which will not ignite and burn, composed of any combination of the following:

- Steel
- Plaster
- Brick
- Iron
- Concrete
- Tile
- Glass
- Slate

Materials reported as passing **ASTM E 136, Standard Test Method for Behavior of Metals, in a Vertical Tube Furnace of 750° C.**

C. Combustible Materials

Material made of/or surfaced with any of the following materials:

- Wood
- Compressed Paper
- Plant Fibers
- Plastic
- Plywood/OSB
- Sheet Rock (drywall)

Any material that can ignite and burn: flame proofed or not, plastered or non-plastered.

D. Fuel Material and Fuel Storage

Pellet fuel quality can greatly fluctuate. This appliance has been designed to burn a wide variety of fuels, giving you the choice to use the fuel that is most economical in your region.

Hearth & Home Technologies strongly recommends only using Pellet Fuel Institute (PFI) certified fuel.

Fuel Material

- Made from sawdust or wood by-products
- Depending on the source material it may have a high or low ash content.

Higher Ash Content Material

- Hardwoods with a high mineral content
- Fuel that contains bark
- Standard grade pellets, high ash pellets

Lower Ash Content Material

- Most softwoods
- Fuels with low mineral content
- Most premium grade pellets



CAUTION

Do not burn fuel that contains an additive; (such as soybean oil).

- May cause hopper fires
- Damage to product may result

Read the ingredients list on the package.

Clinkers

Minerals and other non-combustible materials such as sand will turn into a hard, glass-like substance called a clinker when heated in the fire pot.

Trees from different areas will vary in mineral content. That is why some fuels produce more clinkers than others.

Moisture

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.

Size

- Pellets are either 1/4 inch or 5/16 inch (6-8mm) in diameter
- Length should be no more than 1-1/2 inches (38mm)
- Pellet lengths can vary from lot to lot from the same manufacturer
- Due to length variations, the flame height (feed rate) may need adjusting occasionally, see **Feed Rate Adjustment Instructions** on [page 11](#).

Performance

- Higher ash content requires the ash drawer to be emptied more frequently
- Hardwoods require more air to burn properly
- Premium wood pellets produce the highest heat output.
- Burning pellets longer than 1-1/2 inches (38mm) can cause an inconsistent fuel feed rate and/or missed ignitions or feed jams.

Changing to Different Fuel Type

- Empty the hopper of the previous fuel
- Thoroughly vacuum hopper before filling with the new fuel

The burn rate, BTU content and heat output will all vary depending on the fuel selected.

Storage

- Wood pellets should be left in their original sealed bag until using to prevent moisture absorption.
- Do not store any pellet fuel within the clearance requirements or in an area that would hinder routine cleaning and maintenance.

E. 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 fire pot, and make sure that it protrudes approximately 3/4 inch (19mm) into the fire pot.
4. Close the front door.

IMPORTANT DETAIL:

The tip of the thermocouple must be in contact with the inside end of the thermocouple cover or missed ignitions can occur.

F. Filling the Hopper

Open the hopper lid by lifting the handle. Fill the hopper with fuel. Close the hopper lid. The unit will not feed with the hopper lid open and the fire will go out.

G. 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 10.1).

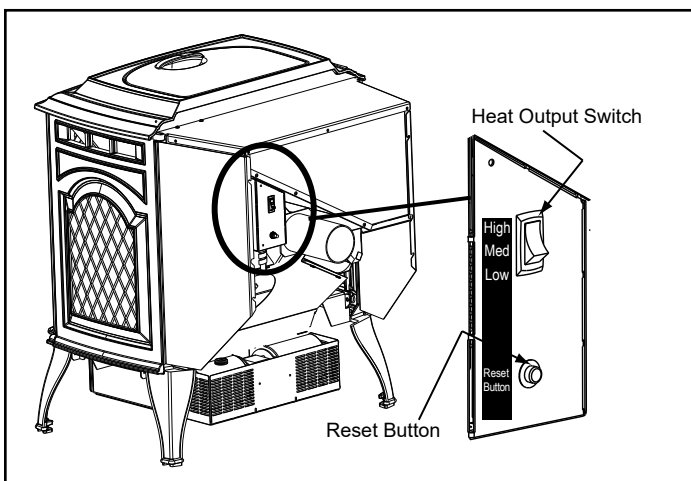


Figure 10.1



WARNING



Fire Hazard.

Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the appliance's vicinity.
- NEVER use gasoline, GASOLINE-TYPE lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire in this appliance. Keep all such liquids well away from the appliance while it is in use.
- DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.
- DO NOT USE CHEMICALS OF FLUIDS TO START THE FIRE.
- Combustible materials may ignite.

H. Starting Your First Fire

1. A thermostat is required for proper operation of this appliance. 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 (**Figure 10.2**). Turn it to the "high" setting by pushing the top of the control switch in and then adjust the thermostat to its highest setting. Remove the right side panel and the red call light located to the left of the control box will be on (**Figure 10.2**). 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.



WARNING



Fire Risk

Do NOT operate appliance:

- With appliance door open.
- Fire pot floor open.
- Cleaning slide plates open.

Do NOT store fuel:

- Closer than required clearances to combustibles to appliance
- Within space required for loading or ash removal.

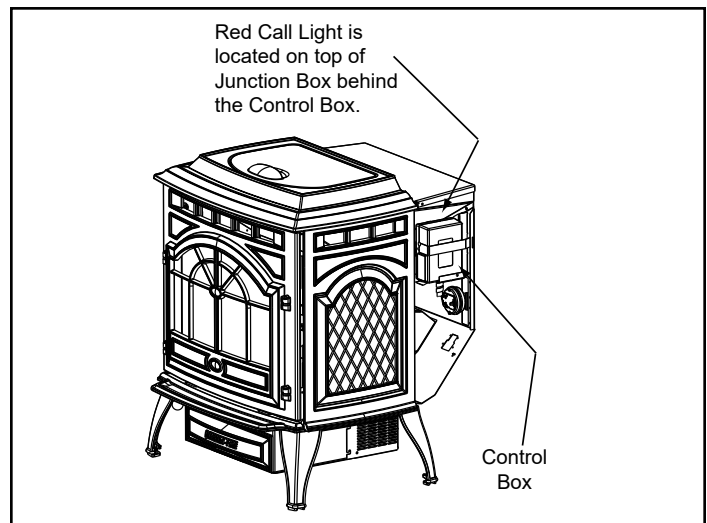


Figure 10.2

I. 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 fire pot 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.

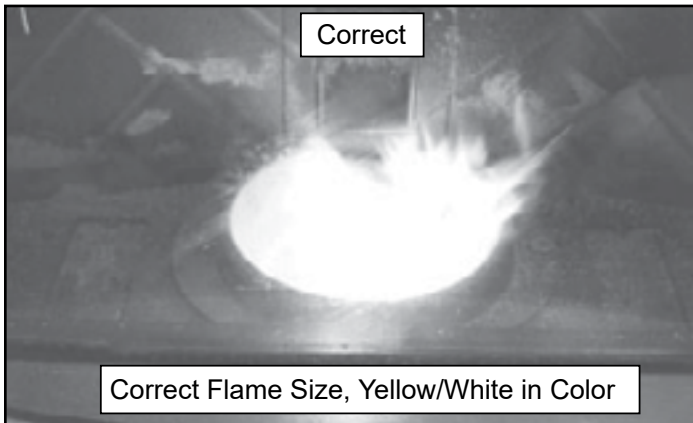


Figure 11.1

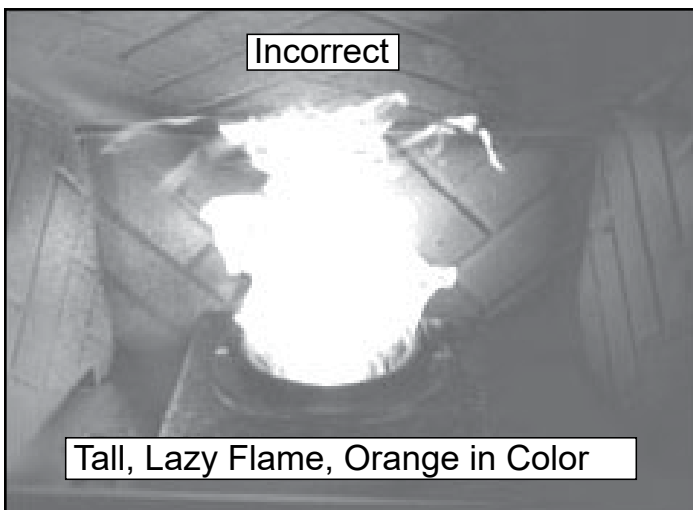


Figure 11.2

J. 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 (**Figure 11.3**). Loosen the wing nut.
2. 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.
3. Re-tighten the wing nut.

 WARNING	
	Fire Risk.
	• High ask fuels, or lack of maintenance, can cause the fire pot to fill with ash and clinker. If the fire pot fills to the top, immediately shut down the appliance and clean. • Failure to do so could result in smoking, sooting and possible hopper fires.

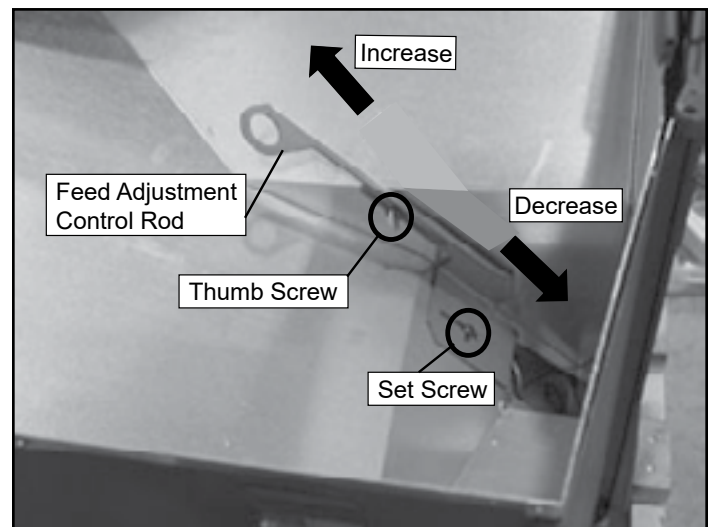


Figure 11.3

K. Ignition Cycles

1. At the beginning of 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 (**Figure 10.2 on page 10**). To restart it, fill the hopper and press the reset button (**Figure 10.1, page 10**). 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 **Starting Your First Fire** on [page 10](#).

 WARNING	
	Fire Risk Do NOT operate appliance: • With appliance door open. • Fire pot floor open. • Cleaning slide plates open.
	Do NOT store fuel: • Closer than required clearances to combustibles to appliance • Within space required for loading or ash removal.

 CAUTION	
HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.	

L. Restarting the Appliance

Restart Process

1. When the unit has run out of fuel, add pellet fuel to the hopper.
2. Dump the ashes and clinkers built up in the fire pot by pulling the ash dump removal handle out several times. Make sure clinkers have dropped into the ash pan then return the handle to fully closed position.
3. Press the reset button; the appliance will then begin its startup sequence.

Restarting After a Power Failure

1. For an electrical disruption, the appliance will start on its own - providing the control system is asking for heat.

M. Clear Space

NOTICE: Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.

Mantel:

Avoid placing candles and other heat-sensitive objects on mantel or hearth. Heat may damage these objects.

 WARNING	
	Fire Risk. Do NOT place combustible objects in front of the appliance. High temperatures may ignite clothing, furniture or draperies. Maintain a minimum clearance of 3 feet (914mm) in front of appliance.

 WARNING	
	Fire Risk. Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance. • Do NOT store flammable materials in the appliance's vicinity. • DO NOT USE GASOLINE, LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS APPLIANCE. • DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL. • DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE. • Keep all such liquids well away from the appliance while it is in use. • Combustible materials may ignite.

N. Thermostat Controls

1. Follow the instructions included with thermostat to configure, program, and operate the thermostat.

STATIC NOTICE

Thermostat is protected against normal static electric discharges, however to minimize the risk of damaging the thermostat in extremely dry weather, please touch a grounded metal object before touching the thermostat.

CONNECT THERMOSTAT WIRES TO APPLIANCE:

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 13.1**).

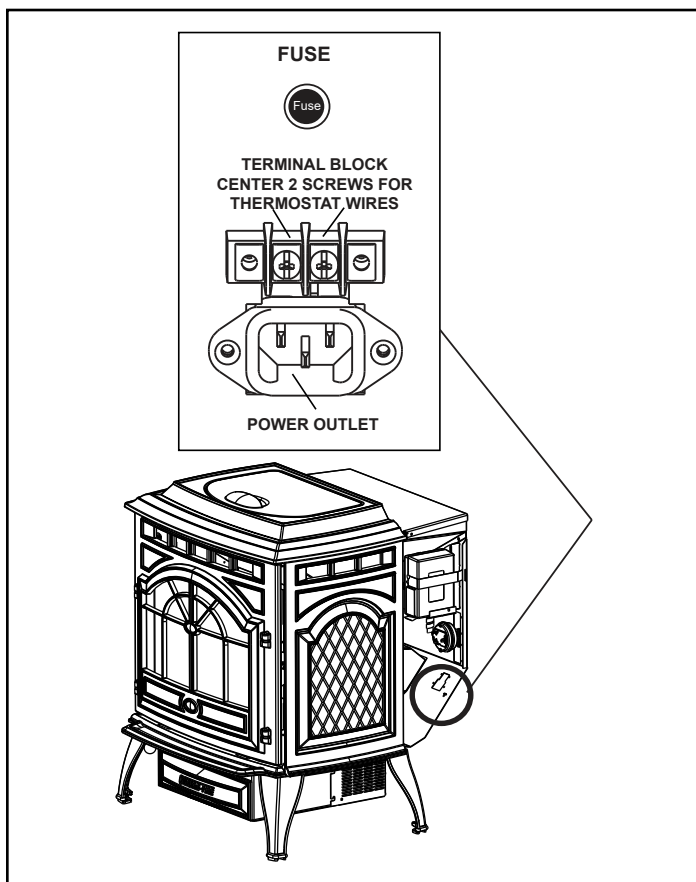


Figure 13.1



CAUTION

Shock hazard.

- Do NOT remove grounding prong from plug.
- Plug directly into properly grounded 3 prong receptacle.
- Route cord away from appliance.
- Do NOT route cord under or in front of appliance.



O. Frequently Asked Questions

What causes my glass to become dirty?

If the glass has white ash build up it is normal and the glass should be cleaned. If it is a black soot build up airflow through the unit may be restricted. The most often cause is overdue maintenance and cleaning. See **Maintaining and Servicing** on [page 15](#) and/or make adjustments to the trim control.

How can I get more heat out of the appliance?

The most often cause of diminished heat output is overdue maintenance and cleaning. See **Maintaining and Servicing** on [page 15](#).

What should I do if I smell smoke or there is ash/soot coming from the appliance?

While there will always be some smoke smell from wood burning appliances (including pellet) you should investigate all venting to make sure it is sealed properly. Follow venting manufacturers recommendations for sealing pipe joints.

In addition most homes are built very tight today and with exhaust systems can create negative pressure in the home. See **Negative Pressure** on [page 15](#) of the [installation manual](#). For ash or soot check the above and the exhaust blower housing and seals.

Why would my appliance run fine last winter but not start this fall?

It is possible that the stove was not properly prepared for the Non-burn season; see **Troubleshooting Guide** starting on [page 20](#).

Is there a place to lubricate the blowers to quiet them down?

No. The most often cause of noisy blowers is from the impellers becoming dirty over time. See maintenance and service section for maintaining and servicing.

What is the metal object with the bend in it that came inside the plastic bag?

It is a clean-out tool used to help clean the fire pot and remove any jams in the rare event they occur in the feed tube.

Why is there a black residue building up on the outside of my home?

Wind can cause this to happen. If the appliance is operating correctly very little soot should ever exit the termination cap. Check to be sure the venting is installed per the owner's manual and local codes.

Do I need an outside air kit?

Outside air is required for mobile home installs and in some jurisdictions. Refer to **Listing & Code Approvals** on [page 6](#), **Mobile Home Installation** on [page 24](#) of the [installation manual](#) and **Appliance Set-up** on [page 20](#) of the [installation manual](#). Also refer to local building codes.

I am seeing sparks coming out of my pipe (termination cap) outside is this safe?

This is normal. As long as clearances to combustibles were followed this is safe.

I have no power to anything. Does this unit have a circuit breaker or fuse or a reset button?

This appliance has one fuse on the control board and a resettable snap disc mounted to the feed tube. If the appliance overheats then the snap disc can be reset; if the fuse is blown the control board must be replaced.

Where is the serial # located on my unit?

The serial number is located on the back of the stove.

No pellets are dropping in my fire pot.

See **Troubleshooting Guide** starting on [page 20](#).

Contact your dealer for additional information regarding operation and troubleshooting.
Visit www.forgenflame.com to locate a dealer.

3 Maintenance and Service

When properly maintained, your fireplace will give you many years of trouble-free service. Contact your dealer to answer question regarding proper operation, troubleshooting and service for your appliance. Visit www.forgenflame.com/pages/quadra-fire-owner-resources to view basic troubleshooting, FAQs, use & care videos. We recommend annual service by a qualified service technician.

A. Proper Shutdown Procedure

Turn off the thermostat.

This pellet insert has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this pellet insert in a manner inconsistent with operating instructions in this manual.

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

B. Quick Reference Maintenance Chart

Cleaning or Inspection	Frequency		Daily	Weekly	Every 2 Weeks	Monthly	Yearly
Ash Pan - Burning Wood Pellets	Every 5 bags of fuel	OR		X			
Ash Pan - Burning Alternate Fuels	Every 1 bag of fuel	OR	X				
Ash Removal from Firebox	More frequently depending on the fuel type or ash build-up	OR		X			
Blower, Combustion (Exhaust)	More frequently depending on the fuel type	OR					X
Blower, Convection	More frequently depending on the operating environment	OR					X
Door Latch Inspection	Prior to heating season	OR				X	
Firebox - Prepare for Non-Burn Season	At end of heating season	OR					X
Fire pot - Burning Softwood Pellets	Every 5 bags	OR		X			
Fire pot - Burning Hardwood Pellets	Every 3 bags	OR		X			
Fire pot - Burning Alternate Fuels	Every 1 bag	OR	X				
Glass	When clear view of fire pot becomes obscured	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	
Venting System	More frequently depending on the fuel type	OR					X

NOTICE: These are recommendations. Clean more frequently if you encounter heavy build-up of ash at the recommended interval or you see soot coming from the vent. Not properly cleaning your appliance on a regular basis will void your warranty.



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.

C. General Maintenance and Cleaning

1. **Types of Fuel:** The type of fuel you are burning will dictate how often you have to clean your fire pot.

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

Dirty fuel will cause clinkers to form in the fire pot (**Figure 16.1**). A clinker is formed when dirt, ash or a non-burnable substance is heated to 2000°F (1093°C) and becomes glass-like. **High Ash Content Maintenance** on [page 19](#) in this section for more details on fuels with high ash content.

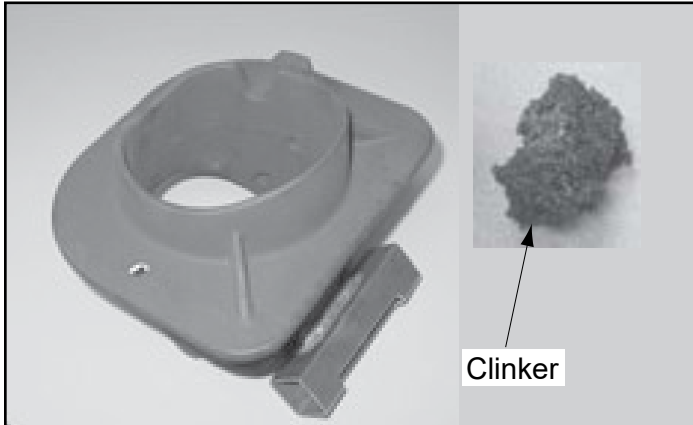


Figure 16.1

2. Cleaning Fire pot with Cleaning Rod & Fire pot 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.

NOTE: If you are just cleaning the fire pot, there is no need to unplug the appliance.

- b. Pull fire pot 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 fire pot clean-out tool to chip away material that has built up on the bottom plate of the fire pot and to push out any clinkers. Larger clinkers may have to be removed from the top of the fire pot.
- c. The fire pot floor plate must be fully closed when finished (**Figure 16.2**).

 WARNING	
	Fire Risk
	• NEVER pull fire pot cleaning rod or cleaning slide plates out when appliance is operating.
	• The cleaning slide plates must be fully CLOSED when appliance is operating.
	• Hot pellets may fall into ash pan and start a fire or mis-starts due to lack of vacuum.

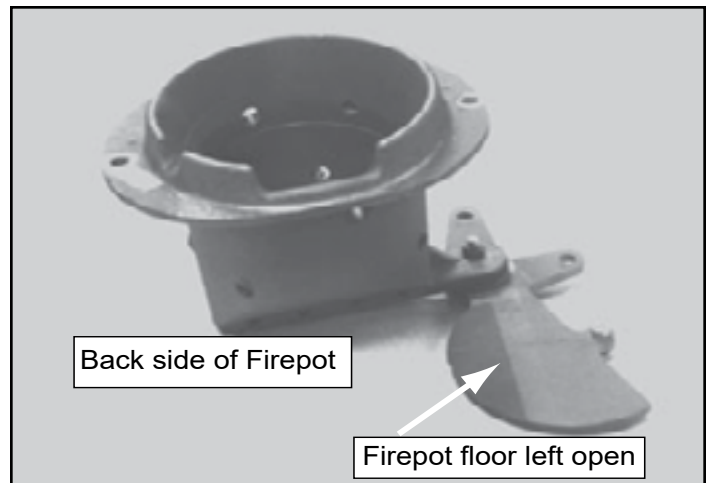


Figure 16.2

3. Ash Removal from Firebox

- **Frequency:** Every 5 bags or weekly or more frequently depending on ash build-up.
- **By:** Homeowner
 - a. There must not be any hot ashes in the firebox during cleaning so allow the appliance to completely cool. Frequent cleaning of the ash in the firebox will help slow down the build-up of ash in the exhaust blower and vent system.
 - b. Plug in your appliance, if unplugged, and turn the thermostat on and immediately shut it off to start the exhaust blower on its cycle time. It will pull fly ash out the exhaust instead of into the room.
 - c. Open door. There are 2 cleaning slide plates to the left and right of the fire pot with finger holes. Pull both slide plates out and sweep the remaining ash from the firebox into the 2 open holes. A paint brush works well for this. Close slide plates.
 - d. This ash is deposited in the same ash drawer as the fire pot debris. The ash drawer should be emptied every time you clean the firebox. Remember to place the ash and debris into a metal or non-combustible container.
 - e. The 2 cleaning slide plates must be fully closed when cleaning is complete.

4. Cleaning Ash Pan

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

Locate the ash pan underneath the fire pot. Open the bottom ash door and slide the ash pan straight out. Empty into a non-combustible container and re-install ash pan (**Disposal of Ashes** on [page 17](#)).

 WARNING	
	Fire Risk
	• The cleaning slide plates must be fully CLOSED when appliance is operating. Hot pellets may fall into ash pan and start a fire.

5. Disposal of Ashes

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

Ashes should be placed in a steel container with a tight-fitting lid. The container of ashes should be moved outdoors immediately and 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 thoroughly cooled. Other waste shall not be placed in this container.

**WARNING**



Disposal of Ashes

- Ashes should be placed in metal container with tight fitting lid.
- Ashes should be retained in closed container until all cinders have thoroughly cooled.

6. Cleaning Heat Exchanger Chambers & Drop Tube

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

The amount of ash buildup in the fire pot 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.
- Locate the 2 exposed rods directly underneath the heat exchanger tubes (**Figure 17.1**).
- To clean, pull the rods straight out until it stops, approximately 8 inches (203mm). Slide the rods OUT and IN a couple of times.

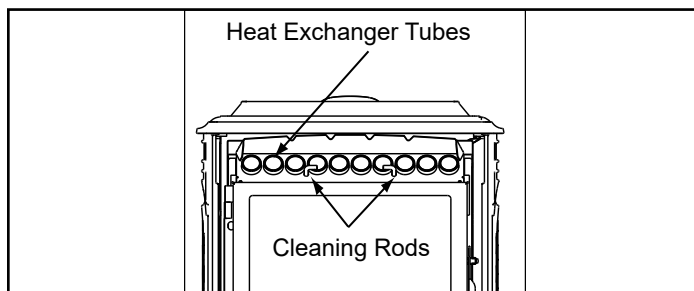


Figure 17.1

**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.

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.
 - The ash will be resting on the back of the baffle. This will require removing the baffle. Refer to **Baffle** on [page 24](#).

NOTE: Hearth & Home Technologies recommends to use a heavy duty vacuum cleaners specifically designed for solid fuel appliance cleaning.

8. Cleaning the Exhaust Path

- **Frequency:** Every 25 bags or monthly or more frequently depending on ash build-up.
- **By:** Homeowner
 - Appliance must be completely cool.
 - Open cast hinge face. Remove baffle and right brick and thoroughly vacuum the area and continue throughout the rest of the firebox.
 - Replace right brick and baffle and close cast hinge face.

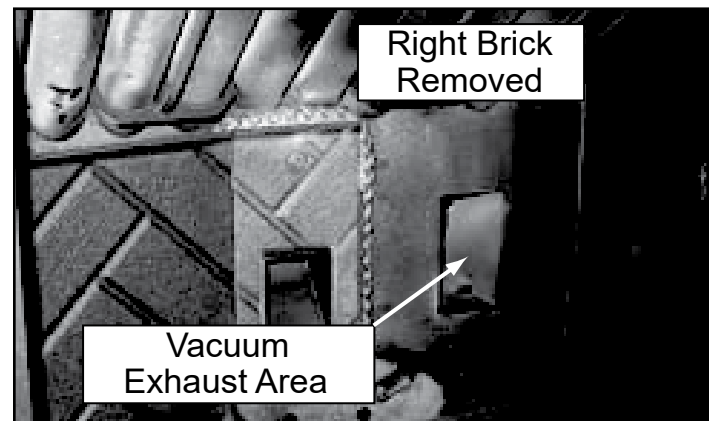


Figure 17.2

9. Cleaning the Hopper

- **Frequency:** Monthly or after burning 50 bags of fuel or when changing fuel type
- **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 fire pot. 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.

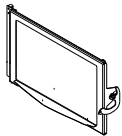
The venting (chimney) system may need to be cleaned at least once a year or more often depending upon the quality of your fuel or if there is a lot of horizontal pipe sections. Ash will build up more quickly in the horizontal sections.

11. Cleaning the Glass

- **Frequency:** When clear view of the fire pot becomes obscure
- **By:** Homeowner
 - a. Appliance must be completely cool before cleaning glass.
 - b. Vacuum fly ash from glass and door rope.
 - c. Use a damp paper towel or any non-abrasive glass cleaner. Wipe off with dry towel.



CAUTION



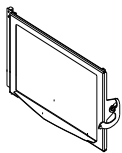
Handle glass assembly with care.

When cleaning glass:

- Avoid striking, scratching or slamming glass.
- Do NOT clean glass when hot.
- Do NOT use abrasive cleaners.
- Refer to maintenance instructions.



WARNING



Handle glass with care.

- Inspect the gasket to ensure it is undamaged.
- Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass assembly removed.
- Do NOT operate with glass cracked, broken or scratched.

12. Door Latch Inspection

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

The door latch is non-adjustable but the gasket 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 (**Figure 18.1**).
- c. Sweep out any ash build-up.

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

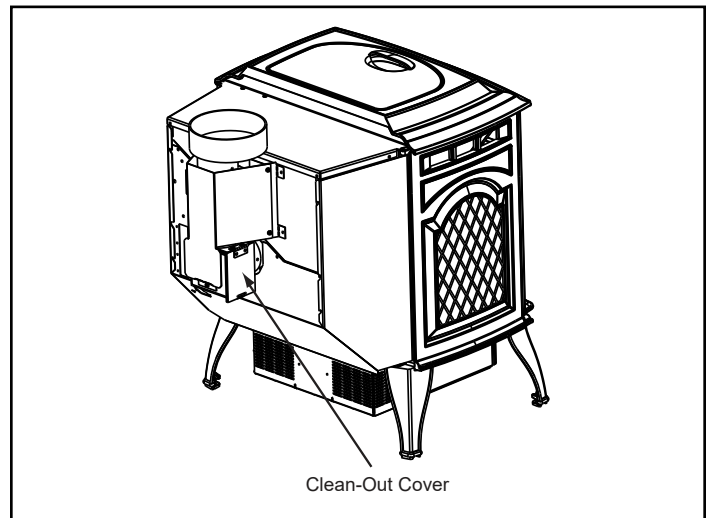


Figure 18.1

16. Preparing Firebox for Non-Burn Season

- **Frequency:** Yearly at the end of the heating season
- **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.

D. Soot or Creosote Fire Awareness

The chimney should be inspected periodically during the heating season to determine if a creosote build-up has occurred. If a significant layer of creosote has accumulated (1/8 inch [3mm] or more) it should be removed to reduce the risk of chimney fire.

Check daily for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire the less creosote is deposited, and weekly cleaning may be necessary in the mild weather even though monthly cleaning may be enough in the coldest months. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire.

In the event of a soot or creosote fire, close the firebox door, exit the building immediately and contact the proper fire authorities.

DO NOT under any circumstances re-enter the building.

E. High Ash Fuel Content Maintenance

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

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

This condition makes the appliance susceptible to overfilling the fire pot with pellets which may result in smoking, sooting and possible hopper fires. **Figure 19.1** shows an example where the fire pot 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 19.2**. The correct flame size when good quality, premium pellet fuel is burned is shown in **Figure 19.3**.

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

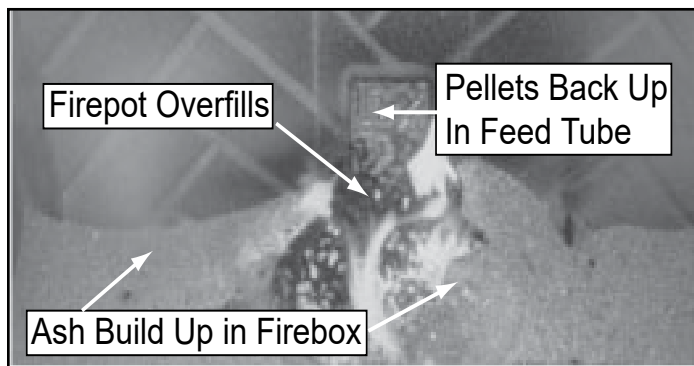


Figure 19.1

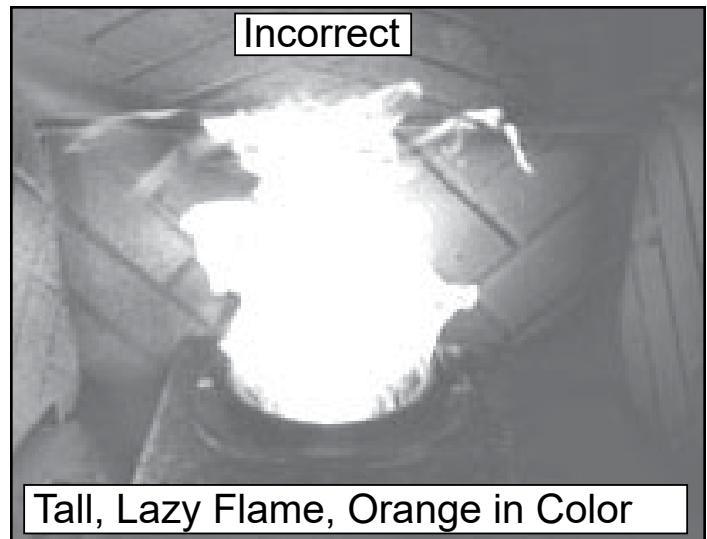


Figure 19.2

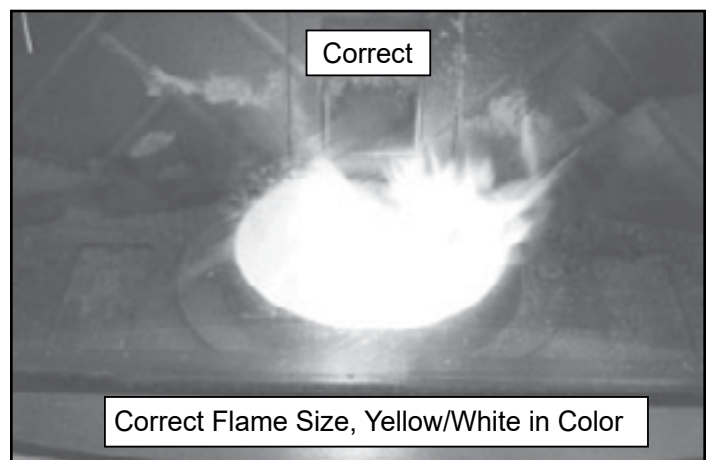


Figure 19.3

4 Troubleshooting Guide

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.	Check circuit breaker at service panel.
	7 amp fuse defective.	Replace fuse.
	#3 snap disc tripped or defective.	Reset or replace snap disc.
	Control box defective.	Replace control box.
Call light on. No fire. No fuel in fire pot.	Out of fuel.	Check hopper. Fill with fuel.
	#2 snap disc may be defective.	Replace snap disc.
	Vacuum switch not closing, no vacuum.	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.
	Control box defective.	Replace control box.
Call light on. No fire. Partially burned fuel in fire pot.	Fire pot clean-out plate not closed.	Check that fire pot clean-out plate is fully closed. Clean fire pot. Make sure there is no clinker in the fire pot. See Cleaning Fire Pot with Cleaning Rod & Fire Pot Scraper on page 19 .
	Fire pot is dirty (missed ignition).	Clinkers may have to be broken up with fire pot clean-out tool or other means.
Call light on. No fire. Unburned pellets in fire pot.	Fire pot clean-out plate not closed.	Check that fire pot clean-out plate is fully closed.
	Fire pot is dirty. The ignition hole between the igniter bracket and fire pot is blocked.	Clean fire pot. Make sure there is not a clinker in the fire pot. Clinkers may have to be pushed out of fire pot with fire pot clean-out tool or other means. Scrape with solid piece of wire.
	Igniter not working.	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 (6mm) male /female spade connectors.
	Control box defective.	Replace control box.
Slow or smoky start-up.	Fire pot clean-out plate not closed. Fire pot is dirty.	Check that fire pot clean-out is fully closed. Clean fire pot. Make sure there is not a clinker in the fire pot. Clinkers may have to be pushed out of fire pot with fire pot clean-out tool or other means.
	Excessive amount of fuel at start-up.	Reduce feed rate using feed rate adjustment control rod located inside hopper.
	Dirty exhaust and/or venting system.	Check for ash build up in appliance, including behind rear panels, firebox, heat exchanger, exhaust blower and venting.
No call light. Appliance does not begin start sequence.	Thermostat not set to a high enough temperature.	Adjust thermostat above room temperature.
	Snap Disc #3 tripped.	Reset snap disc.
	No power.	Connect to power.
	Fuse blown.	Replace fuse.
	Connections at thermostat and/or appliance not making proper contact.	Check connections at thermostat and appliance.
	Defective thermostat or thermostat wiring.	Replace thermostat or wiring. NOTE: To test thermostat and wiring, use a jumper wire at the thermostat block on the appliance to bypass thermostat and wiring.
	Control box defective.	Replace control box.

Table 20.1

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Feed system fails to start.	Out of fuel.	Check hopper, fill with fuel.
	#2 snap disc may be defective.	Replace snap disc. Firebox door must be closed securely.
	Vacuum switch not closing. No vacuum.	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. NOTE: High winds blowing into the venting system can pressurize the firebox causing loss of vacuum.
	Feed system jammed or blocked.	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.
	Feed spring not turning with feed motor.	Check that set screw is tight on feed spring shaft at end of feed motor.
	Feed motor defective or not plugged in.	Check connections on feed motor, replace if defective.
Appliance fails to shut off.	Call light on.	Turn thermostat off. If call light does not go out, disconnect thermostat wires from appliance. If call light does go out, thermostat or wires are defective.
Convection blower fails to start	#1 snap disc defective.	Replace snap disc.
	Blower not plugged in.	Check that blower is plugged into wire harness.
	Blower is defective.	Replace blower.
	Control box is defective.	Replace control box.
Exhaust blower fails to start or does not shut off.	Blower not plugged in.	Check that blower is plugged into wire harness.
	Blower is clogged with ash.	Clean exhaust system.
	Blower is defective.	Replace blower.
	Control box is defective.	Replace control box
Large, lazy flame, orange color. Black ash on glass.	Dirty appliance. Poor fuel quality, high ash content.	Clean appliance, including fire pot, 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.
	Fire pot clean-out plate not completely closed.	Check that fire pot clean-out plate is fully closed.
	Excessive amount of fuel.	Reduce feed rate using feed rate adjustment control rod located inside hopper.
Nuisance shutdowns.	Low flame.	Increase feed by opening feed rate adjustment control rod located inside hopper.
	Sawdust buildup in hopper.	Clean hopper, see page 20 .
	Feed motor is reversing.	Check for good connections between feed motor and wire harness.
	Defective thermocouple.	Replace thermocouple.
	Defective control box.	Replace control box.
	Fire pot more than 1/2 full.	See High Ash Fuel Content Management on page 22
Appliance calls for heat. Call light illuminates. Exhaust blower starts. No feed or igniter.	Thermocouple is defective or not properly plugged in.	Check connections on thermocouple or replace if defective. A flashing yellow light on the control box indicates a problem with the thermocouple.
	Defective control box	Replace control box.
Hopper lid not closed all the way	Switch or magnet is out of adjustment (auger will not function)	Close the lid. If that doesn't work, adjust or replace the switch or magnet

Table 21.1

5 Service Parts Replacement

A. Blowers

1. Convection Blower

PART NUMBER: 812-4900

NOTE: The convection blower must be removed before the exhaust blower can be removed.

- Turn down thermostat, let appliance completely cool and then unplug appliance before servicing.
- Remove both side curtains by loosening 2 screws (do not remove) and pull side panels away.
- Remove 4 screws from the back screen and pivot the top of the screen toward you leaving the bottom attached to appliance (**Figure 22.1**).
- Remove 2 screws to remove the thermostat block and disconnect the 2 yellow wires.
- Remove the 2 screws from the power inlet and rotate it through the hole and out of the screen, leaving the wires attached.
- Disconnect the vacuum hose and both wires (orange and red) from the vacuum switch attached to the rear screen.
- Remove both wires from exhaust blower (blue and double white).
- Remove 6 screws using a flathead screwdriver or a 1/4" nut-driver. Retain screws for use on replacement blower (**Figure 22.2**).
- Remove exhaust blower and gasket.
- Install new gasket and blower. Discard blower housing if not needed.
- Re-install in reverse order.

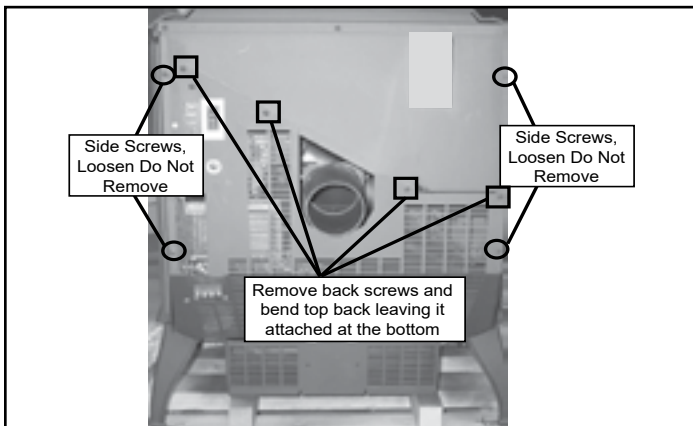


Figure 22.1

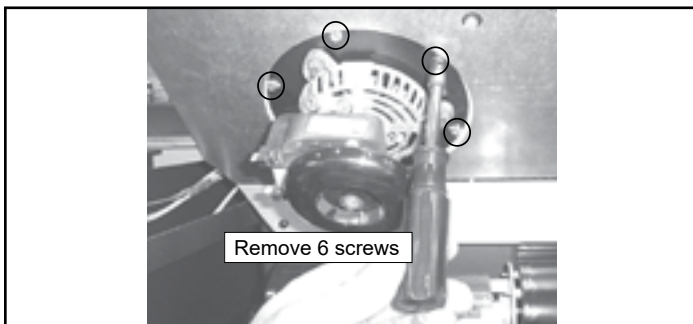


Figure 22.2

2. Combustion Blower

PART NUMBER: 812-4400

- Turn down thermostat, let appliance completely cool and then unplug appliance before servicing.
- The convection blower is located at the bottom rear of the appliance and is housed inside a screen box. Remove the 2 screws facing forward in the center of the blower chamber at the very back of the appliance.
- If an outside air kit is installed on the appliance, these screws attach the intake air channel piece of the outside air kit to the appliance. Remove the 2 screws and pull backwards on the channel and it will slide down and away from the appliance. The air channel, collar and outside air hose will be removed as one piece.
- There are 2 screws on each side of the housing. Loosen all 4 screws, but do not remove them. Lift the blower housing up slightly and slide towards you (**Figure 22.3**).
- Remove the left side panel by loosening 2 screws (do not remove) and pull side panel away. Unplug the 2 black blower wires by disconnecting the spade connectors.
- To remove blower from the housing, remove 2 screws in the front of the housing and very carefully bend the 2 housing sides out and bend the back of the housing away from the blower. This allows for room to access the back 2 screws and nuts (4 total) that is securing the blower to the housing.
- Remove blower and replace with new blower.
- Re-install in reverse order.

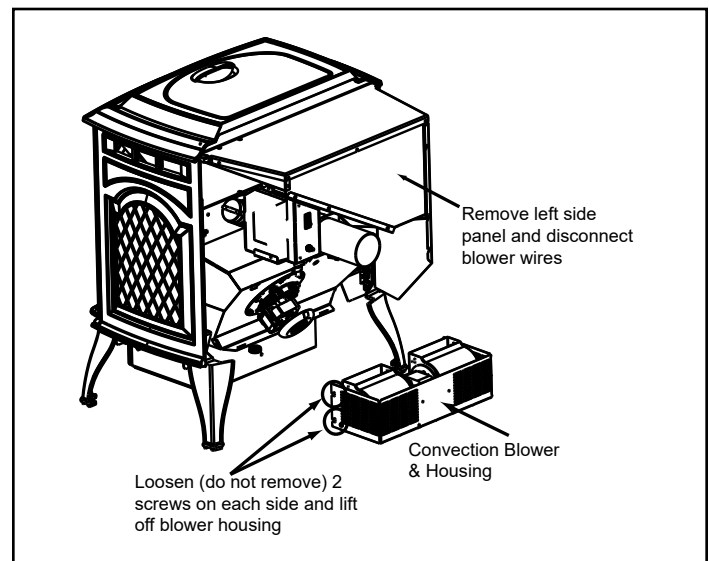


Figure 22.3

B. Snap Disc #2

PART NUMBER: SRV7000-268

NOTE: Combustion Blower Gasket is also required. Sold separately under Part Number SRV240-0812.

1. Turn down thermostat, let appliance cool completely if running. Then unplug appliance before servicing. Disconnect appliance from venting at the rear of appliance.
2. Remove both upper and lower side curtains by removing the six 7/16" nuts on the rear of the appliance.
3. Disconnect the vacuum hose and wires from the vacuum switch. Disconnect the blue and white wires from the combustion blower. Remove control box retainer clip. Remove two screws that hold the junction box. Set aside carefully. Disconnect hopper switch.
4. Remove cast top from appliance. Two fasteners are located outside the hopper on each side. The other two are located in the hopper along the back (**Figure 23.1**). Remove the rear screen of the appliance (be sure the vent is disconnected) by removing the seven screws. Lift slightly upwards as to not damage the hopper switch and set aside.
5. Remove lower screw by removing five screws. Lay flat on ground.
6. Remove convection cover by removing the two screws at the bottom (one each side) and slide to the left, then set aside.
7. Remove the five 7/16" bolts holding the combustion blower housing to the exhaust plenum. Discard gasket. (Clean blower impeller and plenum if needed).
8. Disconnect wires from snap disc #2 (**Figure 23.3**).
9. 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 23.4**).

10. When bracket is loose enough, rotate the bracket counterclockwise and away from feed tube (**Figure 23.5**).
11. 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.
12. Re-install in reverse order. Be sure to use new gasket when installing combustion blower housing.

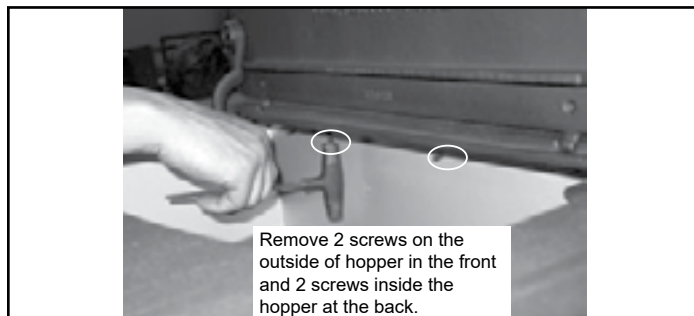


Figure 23.1

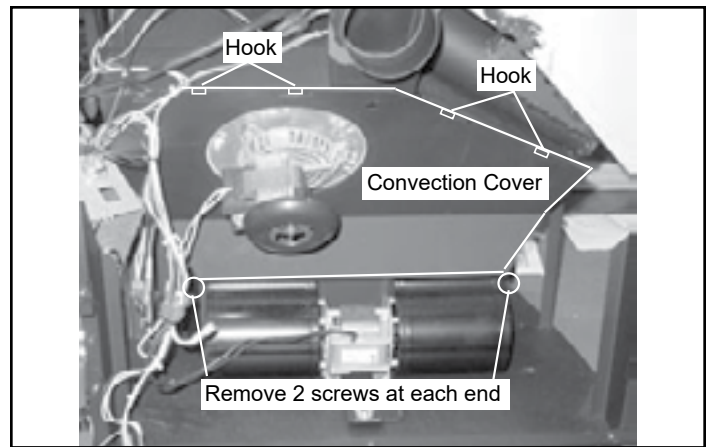


Figure 23.2

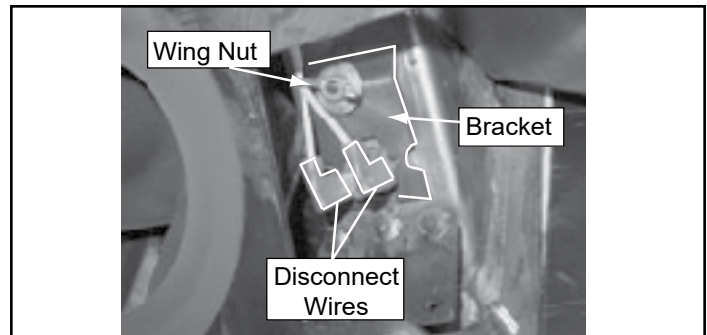


Figure 23.3

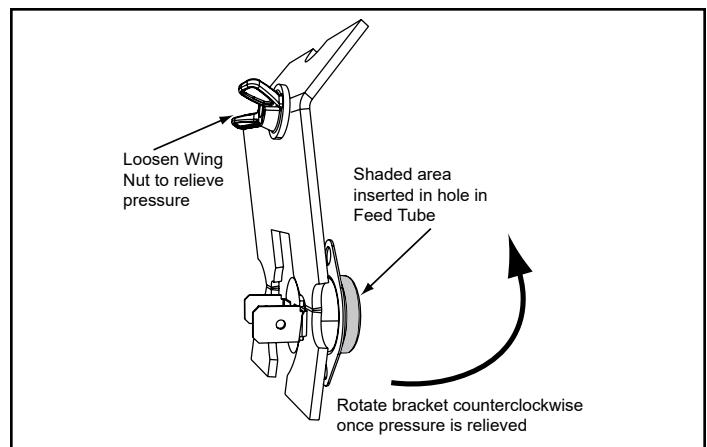


Figure 23.4

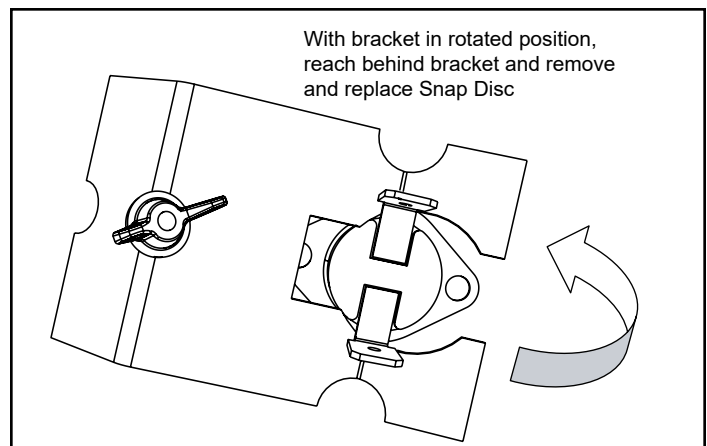


Figure 23.5

C. Baffle

PART NUMBER: 7001-034

1. Follow **Proper Shutdown Procedures** on [page 15](#).
2. The top baffle has a hook on the bottom left side that rests on the top lip of the cast brick. There is a tab on the bottom right side that hooks into the side bracket. Remove the top baffle by first pulling the baffle forward until back edge drops down. Then slide baffle back until the front edge clears the shelf that it had been resting on (**Figure 24.1**, **Figure 24.2** and **Figure 24.3**).
3. Reinstall new baffle.

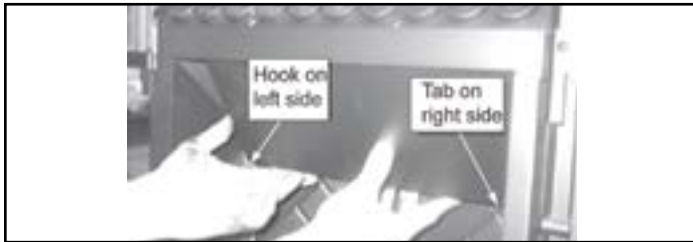


Figure 24.1



Figure 24.2

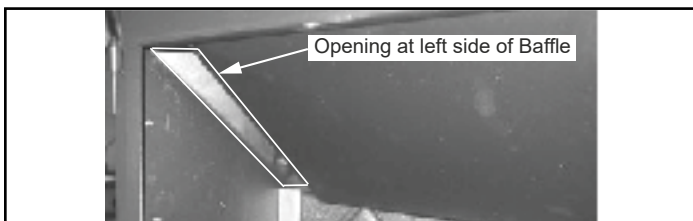


Figure 24.3

D. Brick

PART NUMBERS:

LEFT OR RIGHT BRICK: SRV414-0270

CENTER: SRV414-0260

The baffle must be removed before any brick removal.

Removal of left or right side brick:

1. Remove the right brick by holding top lip of the brick and lifting up.
2. Repeat for left brick.
3. Reinstall bricks in reverse order ensuring that the bricks are flush against the back wall of the firebox (**Figure 24.4** and **Figure 24.5**).

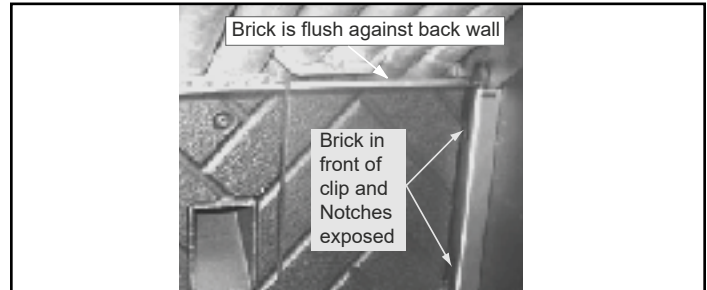


Figure 24.4

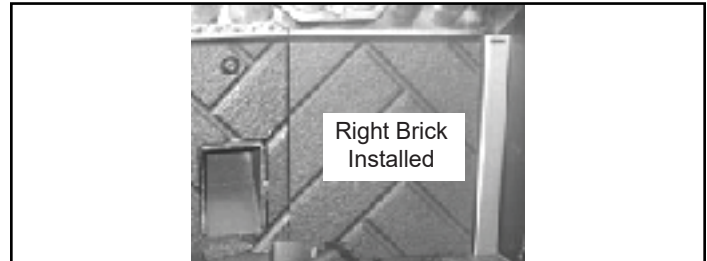


Figure 24.5

Removal of center brick:

1. Follow **Steps 1 & 2** from **Removal of left or right side brick** to remove left and right brick.
2. Use an 5/32 Allen wrench to remove bolt out of center brick and set aside; remove and discard brick.
3. Validate rope is still in place; rope is wrapped around drop tube and ends are secure with rope tape.
4. Add new center brick and taking care not to cross thread the bolt; reinstall brick (**Figure 24.6**).
5. Repeat **Step 4** from **Removal of left or right side brick**.
6. Reinstall baffle (**Baffle on [page 24](#)**).

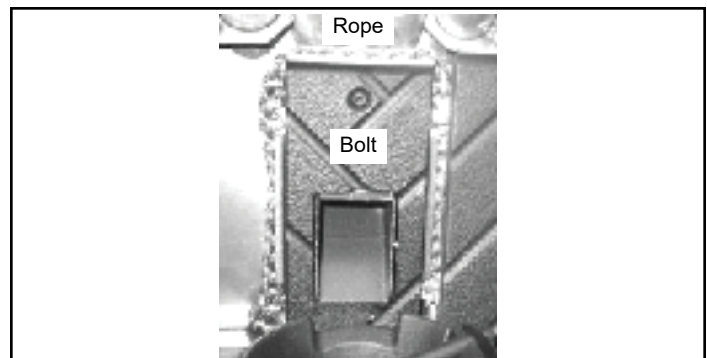


Figure 24.6

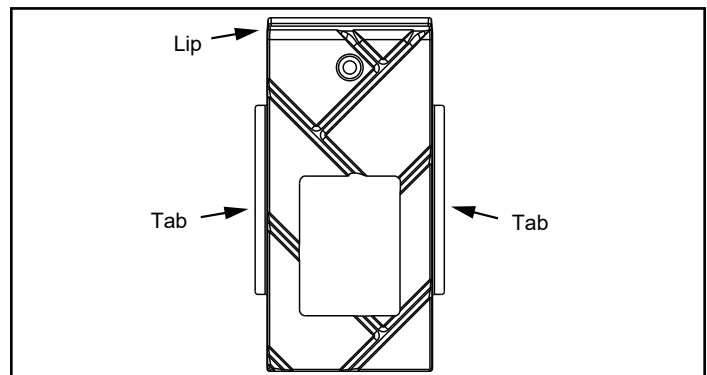


Figure 24.7

E. Igniter

PART NUMBER: SRV7000-462

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, fire pot cleaning rod, cleaning slide plates, etc.
5. Re-install the ash drawer and side panel and re-connect the power.

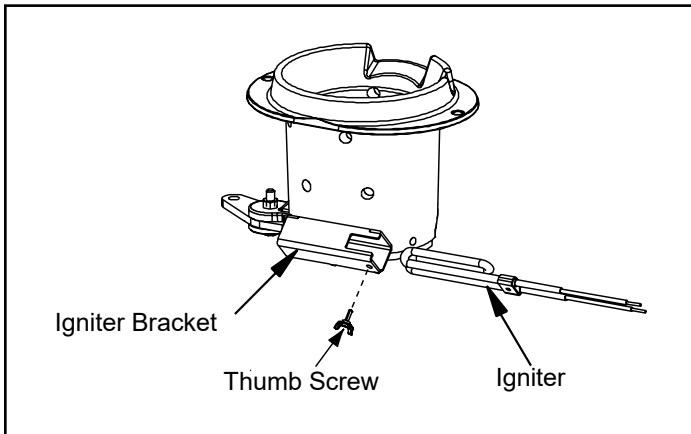


Figure 25.1



CAUTION

Shock Risk.



- Do NOT remove grounding prong from plug.
- Plug directly into properly grounded 3 prong receptacle.
- Route cord away from appliance.
- Do NOT route cord under or in front of appliance.

F. Glass

PART NUMBER: SRV7021-032

1. Open the face and remove door from the appliance by lifting door off of hinge points and lay on a flat surface face down.
2. Using a flat head screwdriver pry out rope from door and clean any silicone around the screw heads.
3. Using a Phillips head screwdriver remove the seven screws and set aside.
4. Remove glass retainers and set aside.
5. Remove old glass assembly and discard.
6. Lay new glass assembly in place.
7. Add glass retainers.
8. Using a Phillips head screwdriver fasten glass retainers to door assembly ensure glass assembly is centered within the frames.
9. Add rope into crevice as shown below in **Figure 25.2**.
10. Re-install door and close face to appliance.

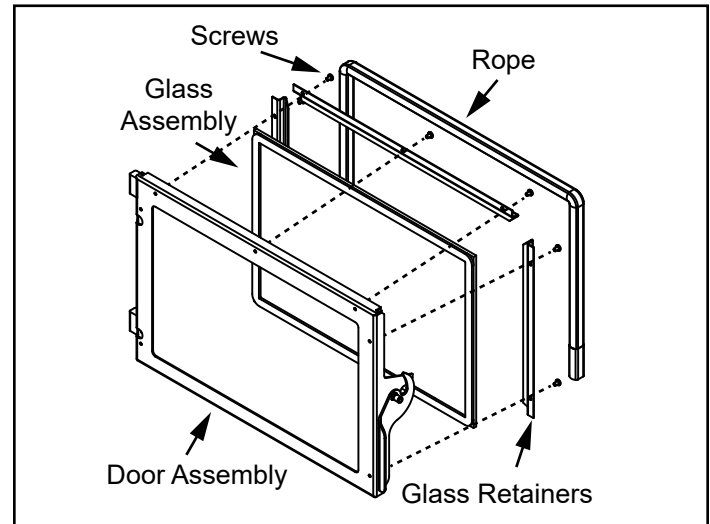


Figure 25.2



WARNING

Handle glass with Care.



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

6 Reference Materials

A. Component Functions

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 fire pot 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 fire pot.
5. **Fire pot:** The fire pot is made of high quality ductile iron and has a cleaning pull-out rod. The floor of the fire pot 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.



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

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. **Hopper Switch:** The hopper switch is located in the upper right hand corner of the hopper. This switch is designed to shut down the feed motor whenever the hopper lid is opened.
10. **Igniter:** The igniter is mounted on the base of the fire pot. Combustion air travels over the red hot igniter creating super heated air that ignites the pellets.
11. **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.
12. **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.
13. **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.
14. **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.
15. **Thermocouple:** The thermocouple is located on top of the fire pot 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.
16. **Thermostat:** The appliance is designed to run on a 12 volt AC thermostat. The heat anticipator should be set on the lowest setting available.

17. **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.
18. **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 over fire condition should occur or if the convection blower should fail to operate. If this occurs the snap disc will automatically reset itself.
19. **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 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.
20. **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.
21. **Wiring Harness:** See **Figure 27.1** below.

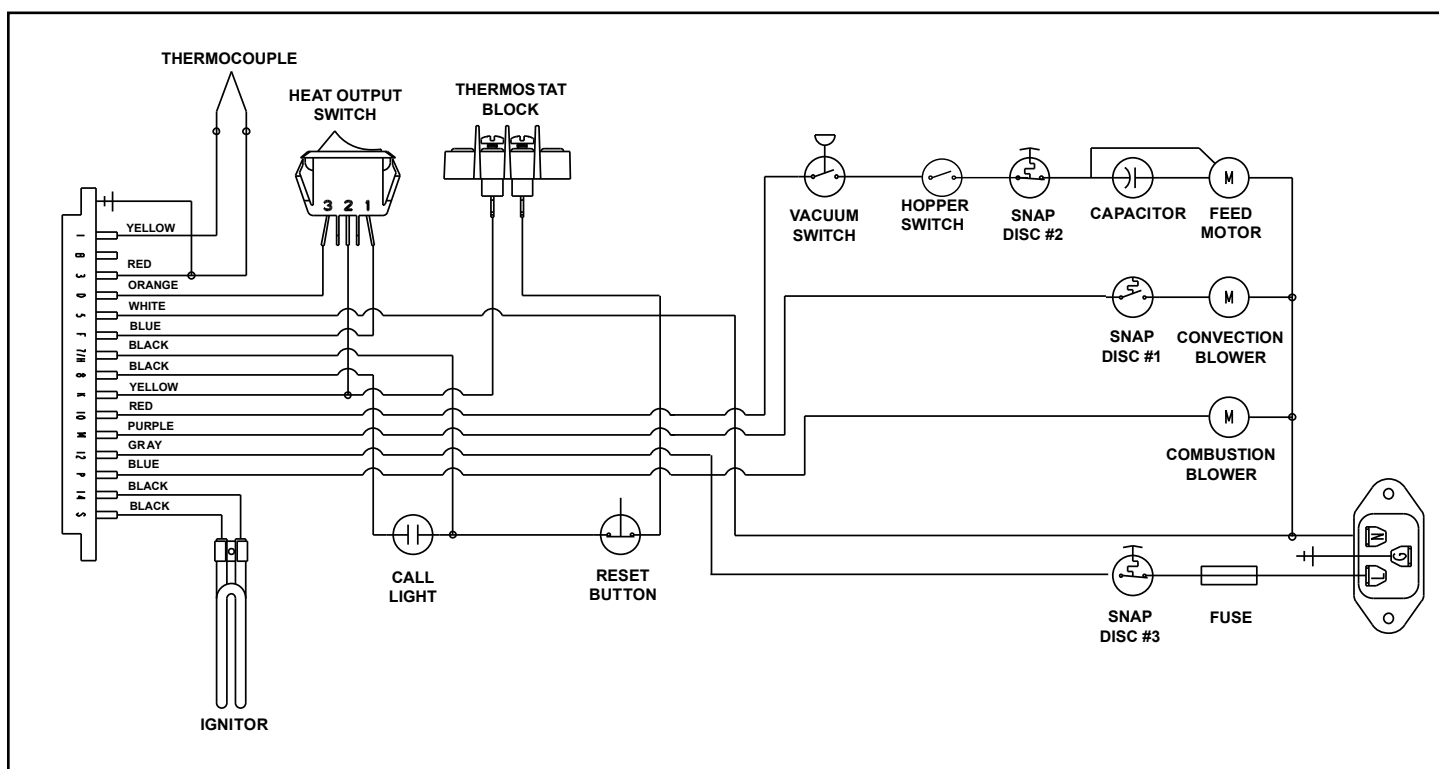


Figure 27.1

B. Component Locations

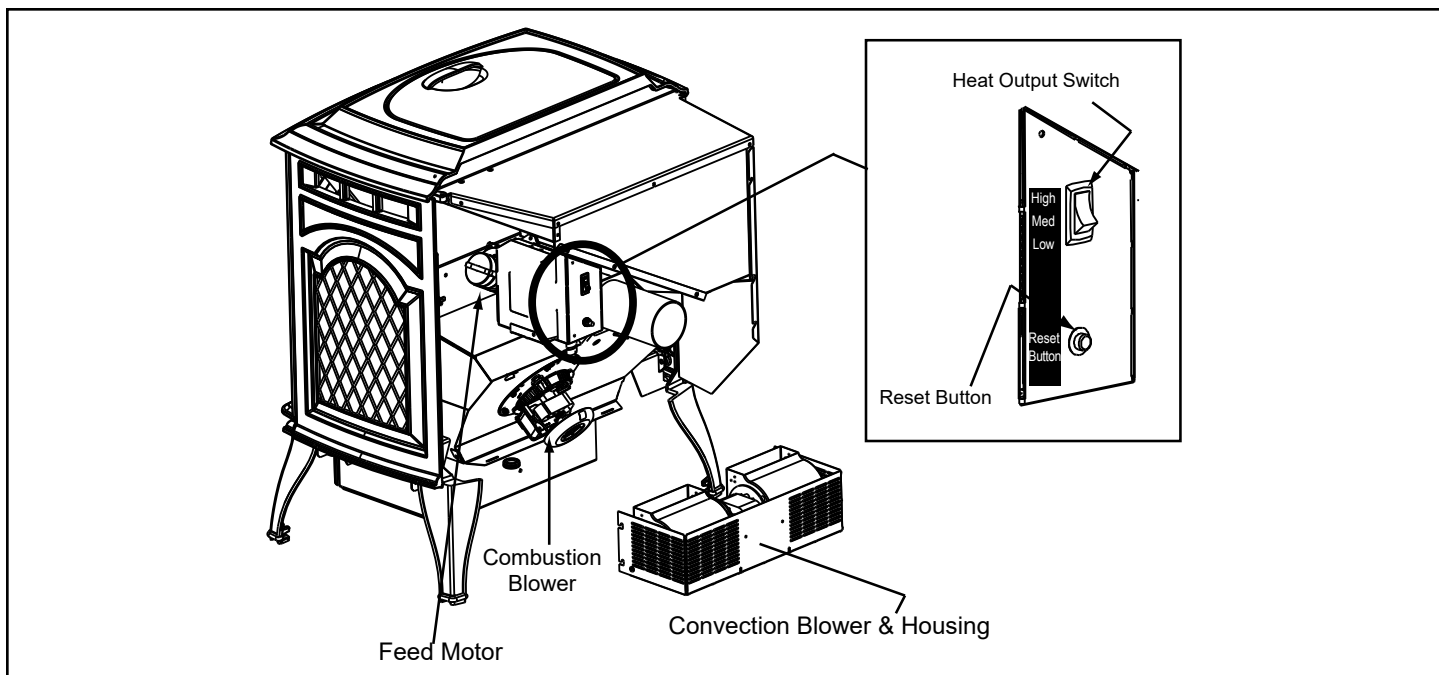


Figure 28.1

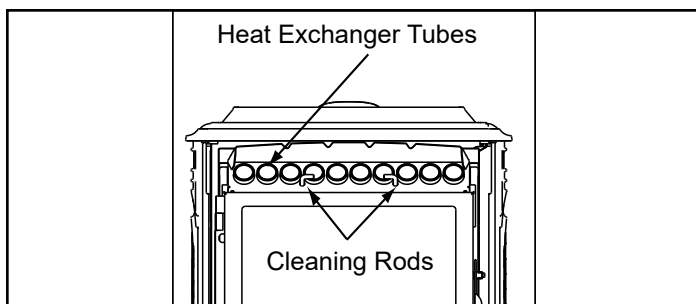


Figure 28.2

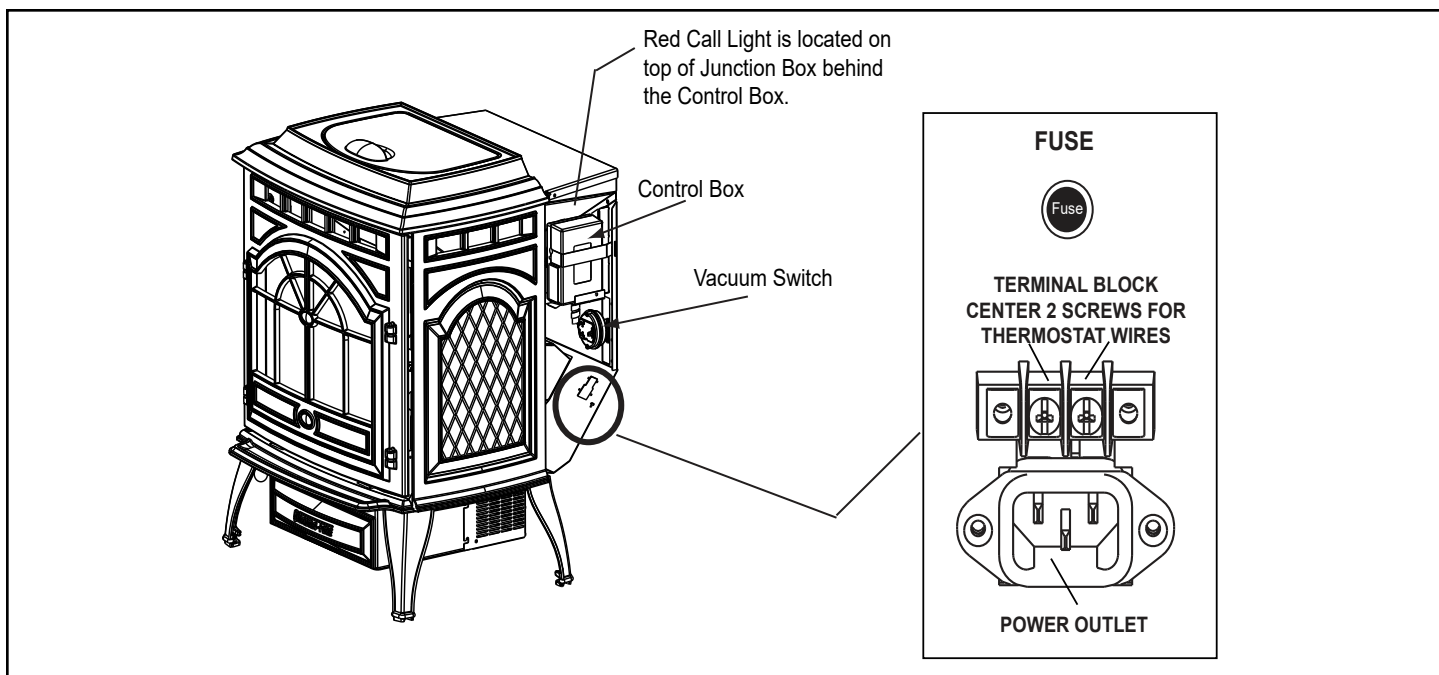


Figure 28.3

C. Service and Maintenance Log

[illegible]

QUADRA-FIRE®

BY FORGE & FLAME

CONTACT INFORMATION

Hearth & Home Technologies
352 Mountain House Road
Halifax, PA 17032
Division of HNI INDUSTRIES

**Please contact your Quadra-Fire dealer with any questions or concerns.
For the number of your nearest Quadra-Fire dealer
log onto www.forgenflame.com**



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 of this appliance.



We recommend that you record the following pertinent information for your heating appliance.

Date purchased/installed: _____

Serial Number: _____

Location on appliance: _____

Dealership purchased from: _____

Dealer Phone: 1() - _____

Notes: _____

This product may be covered by one or more of the following patents: (United States) 5341794, 5263471, 6688302, 7216645, 7047962 or other U.S. and foreign patents pending.