## **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.



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

For use in the United States and Canada





## **NOTE**

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

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



## **WARNING**



If the information in these instructions is not followed exactly, a fire may 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.

Congratulations on your choice of a Vermont Castings Aspen C3 Wood Stove. At Vermont Castings we take American craftsmanship seriously. We assure you that your cast-iron Vermont Castings stove has been made with the utmost care and will provide you with many years of service.

As you become acquainted with your new stove, you will find that its appearance is matched by its functionality, due to cast iron's unique ability to absorb and radiate heat.

Also, Vermont Castings products are among the cleanestburning wood stoves available today. However, clean burning depends on both the manufacturer and the operator. Please read this manual carefully to understand how to properly operate and maintain your stove.

At Vermont Castings, we are committed to your satisfaction as a customer. That is why we maintain an exclusive network of the finest dealers in the industry. Our dealers are chosen for their expertise and dedication to customer service. Feel free to contact your Authorized Vermont Castings Dealer anytime you have a particular question about your stove or its performance.

This manual contains valuable instructions on the operation of your Vermont Castings Aspen C3 Wood Stove. It also contains useful information on maintenance. Please read the manual thoroughly and keep it as a reference.

Note: Cast iron is an artisan crafted material, which is made the same way today as nearly 2000 years ago. Due to the intrinsic primitive nature of the casting process, part to part variation is normal and adds to the character of a hand built cast iron appliance.

#### US ENVIRONMENTAL PROTECTION AGENCY

Certified to comply with 2020 US particulate emissions standard using crib wood at 1.99 g/hr., Certified to comply with 2020 particulate emission standards for single burn rate heaters. This single burn rate wood heater is not approved for use with a flue damper. It is against federal regulations to operate this wood appliance in a manner inconsistent with operating instructions in this manual.

Please read this entire manual before you install and use your new stove. Failure to follow instructions may result in property damage, bodily injury, or even death.

This Label is located on the rear of the appliance. It contains important safety test information as well as the clearances to combustible materials. The label also contains the appliance serial number. For your records, copy your serial number and purchase date here.

Date of Purchase:

Serial #:



Report #/Rapport #0135WS044S / 0135WS044E

Tested to / Testé à: ASTM E2515, ASTM E2780, UL 1482-2011 (R2015), ULC-S627-00, CSA B415.1

Install and Use Only In Accordance With Vermont Castings Installation and Operation Instructions.

Contact Local Building or Fire Officials About Restrictions and Installation Inspection In Your Area.

Install only with legs provided in accordance with installation instructions. Do not obstruct the space under the heater.

Fuel: For use with solid wood fuel ONLY . Do not burn other fuels.

Build fire directly on grate. Do not elevate fire. Keep door fully closed while operating. Do Not Overfire. If Heater or Chimney Connector Glows, You Are Overfiring. Keep combustible materials and furnishings well away from the stove.

materias and unrestrings well away from the stoke.

Chimney: Use a minimum 6' or 8' diameter, factory-built high temperature (HT) chimney which is listed to UU-103-1985 (2100°F) or 8'X6' nominal or larger approved measury chimney with the line. Do Not Connect This Lift To A Chimney Flux Serving Another Appliance. Inspect and Clean Chimney Flux Serving Another Appliance. Inspect and Clean Chimney Flux Serving Another Appliance. Inspect and Colean Chimney Flux Serving Another Appliance.

Chimney Connector: Use a minimum 6" or 8" diameter gauge chimney connector. Install chimney connector at le 24" from ceiling. Refer to local building codes and Verm Castings Owner's Guide for special precautions for passing a chimney or chimney connector through a combustible wal

Floor Protection U.S.: Use a noncombusible floor protector such as 14's non-exbestors mineral board or equivalent or 24's gauge sheet metal. The floor protector is required under the stone and must catefad 16' from the front, 8' from the sides and rearc. It must extend under the chimmey connector and 2' to either side. The floor protector may be covered with a noncombustible deconstite metal floeristed.

floor Protection Canada: When installed on a combustible floor, a noncombustible floor protector is required under the heater. The floor protector must extend 460 mm (18 in.) to the front and 200 mm (8 in.) to the sides and rear.

MINIMUM CLEARANCES TO COMBUSTIBLE CONSTRUCTION / MINIMUM DE DEGAGEMENT

Replace glass only with Viermont Castings glass, No. SRV3-49-95174.

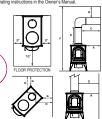
Wellez an installer votre poole et an villiser que conformement aux directives d'installation et de fonctionnement du fabricant Installer seulement avec les paties fournies, en conformies avec les instructions du fabricant. Ne pas encombre l'espace sous le posite.

Combustitée: Utiliser seulement du bois Ne brutez cas d'autres combertibles. Evis les furificantes et les riferentes et les combustitée: Utiliser seulement du bois Ne brutez

Combustative. Utiliser sedientent du bus Ne britale pas d'autres combustibles. Faire le feu directiment sur la grille. Veillez a ce que les portes soient fermees pendant le fonctionnement. Remplacer les vitres de ceramique par celles de Vermon

US ENVIRONMENTAL PROTECTION AGENC

Certified to comply with 2020 US particulate er standard using <u>crib wood</u> at 1.99 g/hr., Certified to with 2020 particulate emission standards for single heaters. This single burn rate wood heater is for use with a flue damper. It is against Federa to operate this wood heater in a manner inco ing instructions in the Owner's Ma



	Single-Wall Vent Pipe				
Α	Side Wall to Appliance	14" / 356mm			
В	Back Wall to Appliance	8" / 203mm			
С	Side Wall to Vent Pipe	18-1/2" / 470mm			
D	Back Wall to Vent Pipe	11" / 279mm			
Е	Minimum Vertical Vent	0" / 0mm			
F	Minimum Floor to Ceiling	84" / 2134mm			
G	Corner to Wall	6" / 152mm			
Н	Vent Pipe to Wall	21-3/4" / 552mm			

CAUTION: HOT WHILE IN OPERATION - DO NOT TOUCH - KEEP CHILDREN AND CLOTHING AWAY - CONTACT MAY CAUSE SKIN BURNS - SEE NAMEPLATE AND INSTRUCTIONS. KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIALS A CONSIDERABLE DISTANCE AWAY FROM THE APPLIANCE



ATTENTION: CHAUD FONCTIONNEMENT - NE TOUCHEZ PAS L'APPAREIL
- GARDEZ LES ENFANTS ET LES VÊTEMENTS
ÉLOIGNÉS - TOUT CONTACT PEUT ENTRAÎNER DES
BRÛLURES DE LA PEAU. RÉFÉREZ - VOUS À LA
PLAQUE SIGNALÉTIQUE ET AU MODE D'EMPLOI. GARDEZ LE
MOBILIER ET LES AUTRES MATÉRIAUX COMBUSTIBLES BIEN À

L'ÉCART DE L'APPAREIL.



red by / Fabriqué par: Hearth and Home Technologies 352 Mountain House Road, Halifax PA 17032



## A 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.

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→ = Contains updated information

## A. Warranty Policy

## Hearth & Home Technologies LIMITED LIFETIME WARRANTY

Hearth & Home Technologies, on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet and electric hearth appliances that are purchased from an HHT authorized dealer.

#### **WARRANTY COVERAGE:**

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

#### **WARRANTY PERIOD:**

Warranty coverage for consumers begins at the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/distributor, whichever occurs earlier. However, the warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood and pellet appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period			HHT Manufactured Appliances and Venting					
Parts	Labor	Gas	Pellet	Wood	Electric	Venting	Components Covered	
1 Year		х	x	x	х	х	All parts including handles, external enamaled components and other material except as covered by Conditions, Exclusions, and Limitations listed	
	X X Igniters, Auger Motors, Electronic Com		Igniters, Auger Motors, Electronic Components, and Glass					
2 years		x					Electrical components limited to modules, remotes/wall switches, valves, pilots, blowers, junction boxes, wire harnesses, transformers and lights (excluding light bulbs)	
		Х		Х			Molded Refractory Panels, Glass Liners	
3 ye	3 years		х				Firepots, burnpots, mechanical feeders/auger assemblies	
5 years	1 year	Х					Vent Free Burners, Vent Free Logs	
o you.o	i youi		Х	Х			Castings, Medallions and Baffles	
6 years	3 years			Х			Catalyst - Limitations Listed	
7 years	3 years		х	х			Manifold tubes, HHT Chimney and Terminations	
10 years	1 year	Х					Burners, logs and refractory	
Limited Lifetime	3 years	х	х	х			Firebox and heat exchanger, FlexBurn® System (engine, inner cover,access cover and fireback)	
1 Year	None	х	х	х	х	х	All replacement parts beyond warranty period	

#### **WARRANTY CONDITIONS:**

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance 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 appliance resides.
- Contact your installing 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 product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.
- Limited Catalyst Warranty
  - o For wood burning products containing a catalyst, the catalyst will be warranted for a six-year period to the original purchaser at the site of original installation. The purchaser must provide the name, address, and telephone number of the location where the product is installed, proof of original purchase date, date of failure, and any relevant information regarding the failure of the catalyst.

#### **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 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, grates, flame guides, batteries and the discoloration of glass.
- 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 appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance 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 appliance 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 appliance.
- Non-HHT venting components, hearth connections or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided
  to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to the
  appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

#### This warranty is void if:

- The appliance 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 appliance is subjected to prolonged periods of dampness or condensation.
- 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.

## **LIMITATIONS OF LIABILITY**

• The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these 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 SPECIFICED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.



## **Product Specific and Important Safety Information**

## A. Appliance Certification

MODEL:	Aspen C3		
LABORATORY:	OMNI Test Laboratories, Inc		
REPORT NO.	0135WS044S / 0135WS044E		
TYPE:	Solid Fuel Type Room Heaters / Space Heaters for Use with Solid Fuel		
STANDARD(s):	ASTM E2515, ASTM E2780, UL 1482-2011 (2015), ULC-S627-00, CSA B415.1		

## **B. BTU & Efficiency Specifications**

<b>EPA Certification Number:</b>	196-19
EPA Certified Emissions:	1.99 g/h
*LHV Tested Efficiency:	81.4%
**HHV tested Efficiency:	75.2%
***EPA BTU Output:	17,500
****Peak BTU/Hour Output:	35,200
Other Important Information	
Vent Size:	6 Inch (152 mm)
Firebox Size:	1.25 cu. ft.
Outside Air Size:	3 Inch
Max. Wood Length:	18"
Ideal Wood Length:	16"
Fuel	Seasoned Cordwood (20% moisture) or compressed logs
1	

- \* Weighted average LHV efficiency using Douglas Fir dimensional lumber and data collected during EPA emissions test.
- \*\*Weighted average HHV efficiency using Douglas Fir dimensional lumber and data collected during EPA emissions test.
- \*\*\*Efficiencies are based on test results calculated using B415; these calculated efficiencies are then used to calculate output BTU's.
- \*\*\*\*A peak BTU out of the appliance calculated using the maximum first hour burn rate from the High EPA Test and the BTU content of cord wood (8600) times the efficiency.

Certified to comply with 2020 US particulate emissions standard using <u>crib wood</u> at 1.99 g/hr., Certified to comply with 2020 particulate emission standards for single burn rate heaters. This single burn rate wood heater is not approved for use with a flue damper.

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

The Vermont Castings Aspen C3 Wood Appliance meets the U.S. Environmental Protection Agency's crib wood emission limits for wood appliances sold after May 15, 2020.

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

## C. Mobile Home Approved (USA & Canada)

- This appliance is approved for mobile home installations in the USA & Canada 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 unit must be bolted to the floor. This can be done using an appropriate fastener for the application.
- The appliance must be properly grounded to the frame of the mobile home with #8 copper ground wire, and chimney must be listed to UL103 HT or a listed UL-1777 full length six inch (152mm) diameter liner must be used.
- Outside air must be provided in a mobile home installation.

## 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. California Safety Information



## **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 know 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 Overfire If appliance or chimney connector glows, you are overfiring.

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.

Vermont Castings is a registered trademark of Hearth & Home Technologies.



## **CAUTION**

Approved for use with wood fuel only. The use of any other fuel will void the product warranty and may cause damage to the appliance and/or your home.



## **WARNING**

"NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IN USE".

## SAFETY NOTICE

IF THIS APPLIANCE IS NOT PROPERLY INSTALLED, OPERATED AND MAINTAINED, A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW INSTALLATION DIRECTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

#### A. General Information

Before you install and operate your Aspen C3 wood stove, please read the entire contents of this manual. Pay particular attention to the explanation of draft and its effect on stove performance. By following the installation and operating guidelines, you will ensure proper draft and gain maximum efficiency and enjoyment from your stove.

Building a fire too close to the glass may cause damage to the glass, creating a serious risk of fire and property damage.



## **WARNING**

DO NOT BURN GARBAGE OR FLAMMABLE LIQUIDS SUCH AS GASOLINE, NAPTHA, OR ENGINE OIL.



## WARNING

DO NOT OPERATE THE STOVE WITH THE LOAD DOOR OPEN. OPERATION WITH THE LOAD DOOR OPEN CAN CAUSE AN OVER-FIRING CONDITION TO OCCUR. OVER-FIRING THE STOVE IS DANGEROUS AND CAN RESULT IN PROPERTY DAMAGE, INJURY OR LOSS OF LIFE.

## **NOTICE**

Due to ash buildup, it is strongly recommended to have your stove professionally cleaned and serviced annually. This includes all parts of the stove, and the venting system.

Installation and repair of this stove should be done by a qualified service person. We recommend that the stove be inspected before use and at least annually by a qualified service person. Periodic cleaning is required throughout the heating season and at the end of each winter for the stove to work efficiently.

## Safety Tips:

Conveniently locate a "Class A" fire extinguisher to contend with small fires. Be sure the fire extinguisher works and is clearly visible. All occupants of the house should know where it is, and how it operates. Have heavy stove gloves available near the stove. Have special safety accessories (e.g., Child Guard Screen) available for use if small children will be in the home.

In the event of a stove pipe or chimney fire....

- · Evacuate the house immediately
- Notify the fire department
- If the fire isn't too threatening, closing down the stove tight, (primary air, all doors) will help to smother the fire.
- Inspect your stove, vent pipe and chimney for any damage caused by the fire and correct any damage before using your stove again.

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE. DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPTHA, OR ENGINE OIL. Also, never use gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or "freshen up" a fire. Keep all such liquids well away from the Aspen C3 while it is in use.

Caution: the Aspen C3 will be hot while in operation. Keep children, clothing and furniture away. Contact may cause skin burns.

DO NOT OVERFIRE THIS HEATER. Overfiring may cause a house fire, or can result in permanent damage to the stove. If any part of the stove glows, you are overfiring.



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

## **B. Draft Management:**

Your stove is only one part of a system that includes the chimney, the operator, the fuel and the home. The other parts of the system will affect how well the stove works. When there is a good match between all the parts, the stove works well.

Wood stove operation depends on natural (unforced) draft. Natural draft occurs when exhaust gas is hotter (and therefore lighter) than the outdoor air at the top of the chimney. The greater the temperature difference, the stronger the draft. As the hot exhaust gas rises out of the chimney it generates suction that draws air into the stove for combustion. A slow, lazy fire indicates a weak draft. A brisk fire, supported only by air entering the stove through the normal inlets, indicates a good draft. The inlets are passive; they regulate how much air can enter the stove, but they do not move air into it.

The efficiency of a modern woodburning appliance, (in which the amount of air available for combustion is regulated), depends on the chimney to keep exhaust gases warm all the way outdoors. The characteristics of your chimney - whether it is steel or masonry, interior or exterior, matched or mismatched to the stove collar - determine how quickly it will warm up and how well it will sustain the optimum temperatures necessary to maintain strong draft and efficient combustion. Here follows a description of various flue system characteristics and related effects on stove performance.

### **Masonry Chimney:**

Although masonry is the traditional material used for chimney construction, it can have distinct performance disadvantages when used to vent a controlled-combustion woodstove. Masonry forms an effective 'heat sink' - that is, it absorbs and holds heat for long periods of time. The large mass, however, may take a long time to become hot enough to sustain a strong draft. The larger the chimney (in total mass), the longer it will take to warm up. Cold masonry will actually cool exhaust gases enough to diminish draft strength. This problem is compounded if the chimney is located outside the home or if the chimney flue has a cross-sectional size larger than the stove outlet.

## **Steel Chimney:**

Most factory-made 'Class A' steel chimneys have a layer of insulation around the inner flue. This insulation keeps the smoke warm and protects the surrounding structure from the high flue temperatures. Because the insulation is less dense than masonry, the inner steel liner warms up more quickly than a masonry chimney. Although steel chimneys are not as attractive as their masonry counterparts, they are very durable and generally outperform masonry.

#### Inside/Outside Location:

Because the chimney's function is to keep the smoke warm, it is best to locate it inside the house. This location uses the house as insulation for the flue and allows some radiant heat release from the flue into the home. Since an interior chimney does not continuously lose its heat to the outdoors, it takes less heat from the stove to get it warm and keep it warm.

### Flue Sizing:

The flue size for a controlled-combustion appliance should be based on the cross-sectional volume of the stove flue outlet. In this case, more is definitely not better. Hot gases lose heat through expansion; if a stove with a six-inch flue collar (28 square inch area) is vented into a 10" x 10" flue, the gases will expand to over three times their original volume. As gases cool with expansion, draft strength decreases. If an oversized flue is also outside the house, the heat it absorbs will be conducted to the outdoor air and the flue will remain relatively cool.

It is common for a masonry flue to be oversized for the stove. Such a chimney can take quite a while to warm up and the stove performance will likely be disappointing. The best solution to an oversize flue problem is the installation of an insulated steel chimney liner of the same diameter as the appliance flue outlet. The liner keeps the exhaust gas warm and the result is a stronger draft. An uninsulated liner is a second choice - although the liner will keep the exhaust restricted to its original volume, the air around the liner will require time and heat energy to warm up.

Check your local codes. You may be required to install a flue liner in any oversize or masonry flue.

## Pipe & Chimney Layout:

Every bend in the flue will act as a brake on the exhaust as it flows from the firebox to the chimney cap. The ideal pipe and chimney layout is straight up from the stove through a completely straight chimney. Use this layout if at all possible as it will promote optimum stove performance and simplify maintenance.

If the stovepipe must elbow to enter a chimney, locate the elbow about midway between the stove top and the chimney thimble. This configuration lets the smoke speed up before it must turn, keeps some pipe in the room for heat transfer, and allows long-term flexibility for installing a different appliance without relocating the thimble.

There should be no more than eight feet of single-wall stove pipe between the stove and a chimney. Longer runs can cool the smoke enough to cause draft and creosote problems. Use double-wall stove pipe for longer runs.

### **Single Venting:**

Your stove requires a dedicated flue. Do not connect the stove to a flue used by any other appliance. Chimney draft is a natural form of energy and follows the path of least resistance. If the stove is vented to a flue that also serves an open fireplace or another appliance, the draft will also pull air in through those avenues. The additional air flow will lower flue temperatures, reduce draft strength and promote creosote development; overall stove performance will suffer. The effect is similar to that of a vacuum cleaner with a hole in the hose. In some extreme instances, the other appliance can even impose a negative draft and result in a dangerous draft reversal.

## C. Fuel Specifications

Select only dry, seasoned wood. Wood for burning should never be exposed to rain or extremely damp conditions. Hardwoods are favored because they are heavier and contain more heating capacity (BTU's) per load than do softwoods. Fuel wood should be split and stored under cover for "seasoning" - at least a year is recommended. Your stove is not an incinerator - do not burn garbage, painted or treated wood, plastic, or other debris.

Keep the area around the stove free from clutter. Keep all combustibles, including fuel, beyond the code-required clearance distance (48" or 1215mm in the U.S., 1525mm or 60" in Canada). Never store fuel in front of the stove where it could interfere with door operation, safe loading, and ash removal.



## **WARNING**

BURNING COLORED PAPER, CARDBOARD, SOLVENTS, TRASH AND GARBAGE OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND **FOLLOW ONLY THESE OPERATION GUIDELINES.** 



## CAUTION

ALWAYS WEAR FIRE RETARDANT GLOVES WHEN OPERATING THE STOVE.

#### Fuel:

Even the best stove installation will not perform well if poor fuel is used. If available, always use hardwood that has been air-dried ('seasoned') 12-18 months. Softwood burns more rapidly than hardwood and has a high resin content conducive to creosote production. Decayed wood of any type has little heat value and should not be used.

All unseasoned ('green') wood has a high moisture content. Much of its heat value will be used to evaporate moisture before the wood can burn. This significantly reduces not only the amount of energy available to warm your home, but also the intensity of the fire and temperature of the exhaust gas. Incomplete combustion and cool flue temperatures promote creosote formation and weak draft.

You can judge the moisture content of wood by its appearance and weight or use a commercially available moisture meter for an exact measurement. Unseasoned wood will be a third heavier than dry wood. Also, look for cracks ('checking') in the ends of the log that result from contraction as the wood dries. The longer and wider the cracks, the dryer the wood is. Purchase your fuel from a reputable dealer.

#### Creosote:

Creosote is a by-product of low-temperature stove operations, weak draft or both. It is a tar that results when unburned gases condense inside the flue system at temperatures below 290°F. Creosote is volatile and can generate chimney fire. All of the installation characteristics that adversely affect chimney draft also promote creosote condensation. Consequently, you can minimize creosote accumulation with an effective chimney design and the use of operational techniques that encourage good draft and complete combustion.

#### Backpuffing:

Backpuffing is a condition that results when the draft is too weak to pull flue gases out of the chimney system as fast as the fire is generating more. Volatile gases build up within the firebox until reaching a density and temperature at which they ignite. With this ignition, you may hear a muffled popping sound and see a bit of smoke forced out of the air inlets.

This condition is most likely to occur in the spring or fall when moderate outdoor temperatures and low intensity fires combine to inhibit draft strength. Avoid large loads of firewood at one time. You should always see lively, dancing flames in the firebox; a lazy, smoky fire is inefficient and will promote draft problems.

#### **D. Combustion Process**

## How the Aspen C3 Works:

Combustion control is achieved in the Aspen C3 through two separate air delivery systems.

The Aspen C3 features Continuous Combustion Control™ (C3) technology, a heat activated technology that automatically adjusts and delivers just the right amount of air to optimize efficiency and heat output. In short, it keeps the fire in the "sweet spot". As the fuel burns, an automatic thermostat reacts to the heat radiating from the stove and, consequently, adjusts the air shutter attached to it.

As the fire intensity (and heat output) builds, the thermostat slowly closes the air shutter, thereby restricting incoming combustion air. As the fire intensity then wanes (and heat output lessens), the thermostat responds and gradually opens the air shutter which allows more combustion air to again enliven the fire. This ebb and flow action functions continuously to prolong the burn cycle until the fuel bed is exhausted.

Another separate supply of oxygen is delivered to the upper area of the firebox to support combustion of gases released from the main fuel bed. This **Secondary Air** enters the stove and is heated while passing through separate channels before being delivered at the top of the firebox.

### **Burn Only High-Quality Wood**

## THE ASPEN C3 IS DESIGNED TO BURN NATURAL WOOD ONLY; DO NOT BURN ANY OTHER FUELS.

You will enjoy the best results when burning wood that has been adequately air-dried. Avoid burning "green" wood that has not been properly seasoned. The wood should be no longer than 18" (410 mm) in length, however, you will find that thiner cuts ease refueling and promote the most efficient combustion.

The best hardwood fuels include oak, maple, beech, ash, and hickory that has been split, stacked, and air-dried outside under cover for at least one year.

For areas that do not have a supply of hardwood, commonly burned softwoods include tamarack, yellow pine, white pine, Eastern red cedar, fir, and redwood. These too should be properly dried.

Keep wood a safe distance from the heater and keep it out of the areas around the heater used for refueling and ash removal.

## E. Building & Maintaining a Fire



## **WARNING**

OPERATETHIS STOVE ONLY WITH THE DOOR FULLY CLOSED.

# BURN SOLID WOOD FUEL ONLY, AND BURN IT DIRECTLY ON THE GRATE. DO NOT ELEVATE THE FUEL. DO NOT BURN COAL OR OTHER FUELS.

Cast iron is extremely strong, but it can be broken with a sharp blow from a hammer or from the thermal shock of rapid and extreme temperature change.

The cast plates expand and contract with changes in temperature. When you first begin using your Aspen C3, minimize thermal stress by allowing the plates to adjust gradually during three or four initial break-in fires following Steps.

- Place several sheets of crumpled newspaper in the stove. Avoid using glossy or colored paper, as these burn poorly. At the front of the firebox, place on the paper six or eight pieces of dry kindling split to a finger-width size, and on the kindling lay two or three larger sticks of split dry wood approximately 1-2" (25-51 mm) in diameter.
- Light the newspaper and close the door. Gradually build up the fire by adding a few 3-5" (80-120 mm) diameter splits. If this is one of the first few "break-in" fires, let the fire burn brightly, and then let it die out.
- Some odor from the stove's hot metal, the paint, and the cement is normal for the first few fires.

**NOTE:** Some chimneys need to be "primed," or warmed up, before they will draw sufficiently to sustain a fire. To correct this situation, roll up a couple pieces of newspaper, place them on top of the kindling and toward the back of the stove, light them, and close the door. This should heat the chimney enough to initiate strong draft.

Once the draft is established, open the front door and light the rest of the fuel bed at the bottom. Do not light the main bed of fuel until the chimney begins drawing.

Option 1: Standard firestarting method above with all steps.

**Option 2:** "Top-down" method to start a fire. Smoke emissions when starting a fire can be difficult to control because the stove is not yet heated to its optimum temperature. One method of reducing emissions during a cold start-up is the use of a "top-down" kindling procedure. In this, place larger pieces of kindling on the bottom of the kindling pile followed by smaller and smaller pieces as the pile is added to. Very finely split pieces should be on the top.

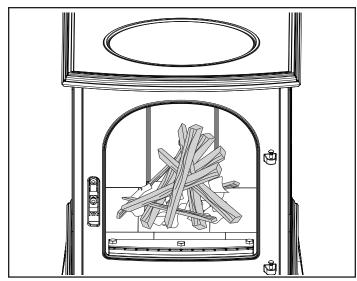


Figure 2.1 - Start a fire with small, dry kindling.

Light the kindling pile with a match at the top and allow the kindling to burn downward into the larger pieces. This reduces smoke by slowly increasing the fire size without creating an air-starved condition.

3. After the stove has been broken-in using Steps 1-2, continue to build the fire gradually. Add larger wood with a diameter of 3-4" (75-102 mm).

#### Refuel While the Embers Are Still Hot:

Reload the Aspen C3 while it is still hot and there are plenty of glowing embers to re-kindle the fire. Include some smaller pieces of wood in the new load of fuel to help the stove return to its operating temperature quickly. Wear stove gloves, and follow this procedure when you reload your stove:

- Use a fireplace tool to break up the charcoal. Pull the charcoal from the back to the front. This will encourage efficient combustion as the fuel burns from front to rear. Take care, however, not to block the primary air box with coals or ash, Figure 2.2.
- 2. Load wood smaller, split pieces first. Close the door.

### **Ash Disposal:**

Remove ash before it reaches the top of the primary air box, Figure 2.2. Check the level at least once a day, and before each re-fueling.

Dispose of ashes into a metal container with a tight-fitting lid kept outdoors. Put the closed container of ash on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ash is disposed of by burial in soil or otherwise locally dispersed, keep it in the closed container until all cinders have thoroughly cooled. You can use wood ash as a garden fertilizer.

Empty the ashes regularly, typically every one to three days. The frequency will vary depending on how you operate your Aspen C3.



## CAUTION

Never use your household or shop vacuum cleaner to remove ash from the stove; always remove and dispose of the ash properly.

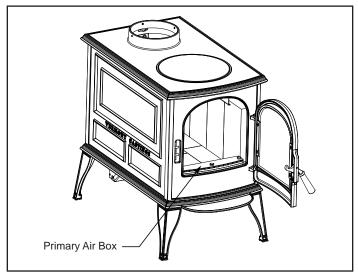


Figure 2.2

### **Tips & Tricks for Managing Heat Output**

While the Aspen C3 has no manual air controls, there are several tricks to managing heat output and burn times.

**a.** Log size: Smaller splits will burn faster and with more heat output than larger splits.

Larger split logs or unsplit rounds will burn longer with lower heat output.

Firebox loading also has a significant effect on heat output and burn times.

For overnight burns, a full firebox of larger splits or logs is best.

For burning in the shoulder seasons a hot fire of small splits burned down to coals can be most effective at not overheating the living space.

Lastly, heat output can effectively be regulated by loading 1-2 logs as needed throughout the day rather than continuously filling the firebox.

b. Coaling: When running the stove continuously at high rates of fire, coals may accumulate in the rear of the firebox. In order to burn these coals down to allow space for the loading of fresh fuel, rake the coals from the rear of the firebox to the front. Place several splits of kindling on the coals and allow them to burn down. Once the coals have burned down, they can be leveled and fresh fuel can be added.

## F. Opacity (Visible Smoke)

This is the measure of how cleanly your appliance is burning. Opacity is measured in percent; 100% opacity is when an object is totally obscured by the smoke column from a chimney, and 0% opacity means that no smoke column can be seen. As you become familiar with your appliance, you should periodically check the opacity. This will allow you to know how to burn as nearly smoke-free as possible (goal of 0% opacity).



## WARNING



### Fire Risk

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

- Combustible materials may ignite.
- 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.
- Keep all such liquids well away from the appliance while it is in use.



## **CAUTION**

When burning your first fire, you will experience smoke and odor from the appliance resulting from the curing of paint and burning off of any oils remaining from manufacturing.

## OPENWINDOWSDURINGINITIALBURNTODISSIPATE SMOKE AND ODORS!

- Odors may be irritating to sensitive individuals.
- Smoke detectors may activate.

#### **Smoke and CO Detectors**

The use of smoke and carbon monoxide (CO) detectors throughout the home is strongly advised, even if not required by building codes or insurance regulations. It is a good idea to install a smoke detector in the living areas and each bedroom. Follow the smoke/CO detector manufactures placement and installation instructions and maintain regularly.

You may not, however, wish to install a detector in the immediate vicinity of the stove. Depending on the sensitivity of the unit, the alarm can be set off while you are tending the fire or emptying the ashes. If you install a detector in the same room, locate it as far away from the stove as possible.

## **G. Negative Pressure**



## **WARNING**



## **Asphyxiation Risk**

- Negative pressure can cause spillage of combustion fumes, soot and carbon monoxide.
- · Appliance needs to draft properly for safety.

Negative pressure results from the imbalance of air available for the appliance to operate properly. It can be strongest in lower levels of the house.

#### Causes include:

- Exhaust fans (kitchen, bath, etc.)
- Range hoods
- Combustion air requirements for furnaces, water appliances and other combustion appliances
- Clothes dryers
- · Location of return-air vents to furnace or air conditioning
- Imbalances of the HVAC air handling system
- Upper level air leaks such as:
  - Recessed lighting
  - Attic hatch
  - Duct leaks

To minimize the effects of negative air pressure:

- Install outside air to the stove with the intake facing prevailing winds during the heating season
- Ensure adequate outdoor air for <u>all</u> combustion appliances and exhaust equipment
- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the appliance
- Avoid installing the appliance near doors, walkways or small isolated spaces
- · Recessed lighting should be a "sealed can" design
- Attic hatches weather stripped or sealed
- Attic mounted duct work and air handler joints and seams taped or sealed.

8390-950c

# **3** Maintenance

### Keep Your Stove Looking New and Working Its Best

Let the fire in the stove go out and allow the stove to cool completely before beginning any maintenance procedure.

#### Care of the Cast Iron Surface

An occasional dusting with a dry rag will keep the painted cast iron of your Aspen C3 looking new.

The stove's paint can be touched up as needed. First, mask the areas, such as glass or handles, around the spot to be painted. Clean the spot with a wire brush. Remove the optional cook plate if installed and set it aside.

Then, touch up the stove with high temperature stove paint. Apply the paint sparingly; two light coats of paint are better than a single heavy one. Approved touch-up paint can be purchased at any approved Vermont Castings dealer.

## A. Cleaning & Replacement of the Glass

Most of the carbon deposits on the glass will burn off during hot fires.

However, the ash residue that accumulates on the glass surface should be removed regularly to prevent etching. To clean the glass, follow this procedure:

- Be sure the glass is completely cool. DO NOT clean glass while hot.
- Clean the glass with water or a cleaner made especially for this purpose. Do not use abrasive cleaners. Use cleaning agents sparingly and be sure to keep them off the outer surfaces of the stove.
- · Rinse the glass thoroughly.
- · Dry the glass completely.

#### Replace Broken Glass Immediately

Do not operate your stove if the glass in the door is damaged.

If you need to replace the glass, use only the high temperature 5 mm ceramic glass supplied by Vermont Castings part no. SRV3-40-950144. Do not use substitutes.

To reduce the risk of breaking the glass, avoid striking the glass or slamming the doors.

#### Removing the Glass

- Remove the door by raising the door until the lower and upper hinge pin clears its holes. Place the door face down on a padded work surface.
- 2. Remove the screws that hold the glass retainer clips in place, and remove the clips.
- 3. Carefully lift the broken glass panel from the door.

## Installing the Glass

Check the gasket around the window; it should be soft and resilient so that the glass will seal properly against the door. Replace the gasket if it has hardened or if it is compressed.

- 1. Center the glass on the gasket.
- 2. Secure the glass with the retainer clips. Tighten all screws, Figure 3.1.
- 3. Replace the door on the stove.
- 4. Open and close the door to check that it fits and works properly.

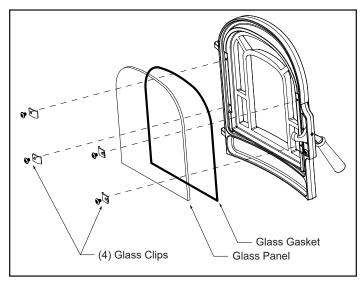


Figure 3.1 - Door glass installation.

## B. Gasket Replacement (as Needed)

Your Aspen C3 uses fiberglass rope gaskets to make a tight seal between some parts. With use, particularly on moving parts, gaskets can become brittle and compressed and can begin to lose their effectiveness. These will need periodic replacement.

The sizes of replaceable gasket are listed below, along with their applications.

Gasket Diameter...

3/8" Round

3/16" Round w/PSA

Gasket for glass (36" Needed)

5/16" Round w/PSA

If you need to change a gasket, first obtain an appropriate replacement from your Vermont Castings' Authorized Dealer.

Wait until the fire is out and the stove has cooled. Be sure to follow the standard safety procedure for working with dusty materials: wear safety goggles and a dust mask.

The procedure for replacing gaskets is the same, regardless of the gasket location. Follow these steps:

- 1. Remove the existing gasket by grasping an end and pulling firmly. (Figure 3.4)
- 2. Remove old cement using a wire brush.
- 3. Apply fresh furnace cement to the gasket channel. A 1/4" wide bead is sufficient.
- 4. Install new gasket being careful not to stretch.

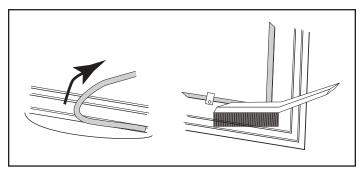


Figure 3.4 - Remove gasket then clean channel with wire brush.

## C. Door Latch Adjustment

The front door of the stove should close securely to prevent accidental opening and should close tightly to prevent air from leaking into the fire chamber.

Over a period of time, the gasket around the door will compress and the latch may need adjustment. To adjust the handle, follow this procedure:

- 1. Slightly loosen the 1/4-20 hex head bolt located at the rear of the latch assembly inside the firebox, Figure 3.2.
- 2. Tighten the top 1/4-20 phillips-head screw, Figure 3.3.

Adjust as needed until a snug fit is achieved.

Test the door seal. Close the door on a dollar bill and attempt to pull it free. If the bill is freed with little resistance, the gasket isn't snug enough at that spot. Continue to make small adjustments until the setting is right.

If proper resistance can't be achieved the gasket need to be replaced.

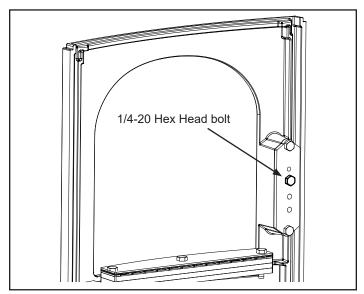


Figure 3.2 - Loosen 1/4-20 Hex head Bolt

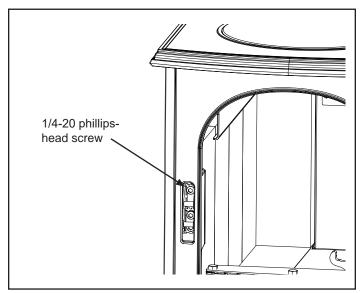


Figure 3.3 - Tighten 1/4-20 phillips-head screw

## D. The Chimney System

Your Aspen C3 is designed to reduce creosote build-up significantly. However, regular chimney inspection and maintenance must still be performed. For safety, good stove performance, and to protect your chimney and chimney connector, inspect your chimney and chimney connector on a regular schedule. Clean the system if necessary. Failure to keep the chimney and connector system clean can result in a serious chimney fire.



## WARNING

Inspect and Clean Chimney Frequently – Under certain conditions of use, creosote buildup may occur rapidly.

When wood is burned slowly, it produces tar, organic vapors and moisture that combine to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote makes an extremely hot fire within the flue system that can damage the chimney and overheat adjacent combustible material. If a significant layer of creosote has accumulated —1/8" (3 mm) or more — it should be removed to reduce the risk of a chimney fire.

You can never be too safe. Contact your local fire authority for information on what to do in the event of a chimney fire, and have a clearly understood plan on how to handle one.

If you do experience a chimney fire, act promptly to:

- · Close the damper and air control lever.
- Get everyone out of the house.
- · Call the Fire Department.

Inspect the system every two weeks during the heating season as part of a regular maintenance schedule. To inspect the chimney, let the stove cool completely. Then, using a mirror and a strong light, sight up through the flue collar into the chimney flue. If you cannot inspect the flue system in this fashion, the stove must be disconnected to provide better viewing access.

Clean the chimney using a brush the same size and shape as the flue liner. Flexible fiberglass rods are used to run the brush up and down the liner, causing any deposits to fall to the bottom of the chimney where they can be removed through the clean-out door.

Clean the chimney connector by disconnecting the sections, taking them outside, and removing any deposits with a stiff wire brush. Reinstall the connector sections after cleaning, being sure to secure the joints between individual sections with sheet metal screws.

If you cannot inspect or clean the chimney yourself, contact a professional chimney sweep or your local Vermont Castings dealer.

## **Unit Maintenance Schedule - The Stove**

### Daily:

- Ashes should be removed before they reach the bottom of door. Check accumulation at least once a day.
- Keep the area around the stove clear of any combustible materials such as wood, furniture or clothing.

#### Two Months:

- Check door handle to be sure it is working properly.
   Gasketing becomes compressed after a period of time.
   Adjust handle tightness if necessary.
- · Check leg bolts; tighten if necessary.

### **Annual Spring Cleaning:**

- Check gasketing for wear, and replace if necessary.
- Remove ashes from the firebox replace with a moisture absorbing material (such as kitty litter) to keep the interior of the stove dry.
- · Touch up the black paint.

## **Chimney Connector**

#### **Two Weeks**

Inspect the chimney connector and chimney. Clean if necessary.

#### Two Months:

 Inspect the chimney and chimney connector. Pay particular attention to the horizontal runs of chimney connector, and the elbows. Clean the system if necessary.

#### **Annual Spring Cleaning:**

- Disassemble the chimney connector and take it outdoors for inspection and cleaning. Replace weak sections of connector.
- Inspect the chimney for signs of deterioration. Repairs to a masonry chimney should be made by a professional mason. Replace damaged sections of prefabricated chimney. Your local Vermont Castings dealer or a chimney sweep can help determine when replacement is necessary.
- · Thoroughly clean the chimney.



## **CAUTION**

BURN UNTREATED WOOD ONLY. OTHER MATERIALS SUCH AS WOOD PRESERVATIVES, METALS, FOILS, COAL, PLASTIC, GARBAGE, SULPHUR, OR OIL, MAY DAMAGE THE CATALYST.



## **Troubleshooting Guide**

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

Start Fire Problems	Possible Cause	Solution		
	Not enough kindling/paper or no kindling/paper	Use dry kindling, more paper. Arrange kindling & wood for air movement.		
		Check for restricted termination cap		
		Check for blockage of outside air (if installed).		
		Check for flue blockage.		
	Not enough air for fire to ignite	Pre-warm flue before starting fire (refer to Building a Fire Section).		
<ul><li>Can not get fire started</li><li>Excessive smoke spillage</li></ul>		Check for adequate vent height (refer to Chimney Height Section).		
Burns too slowly		Refer to Negative Pressure section		
Not enough heat output	Wood condition is too wet, too large	Use dry, seasoned wood (refer to Seasoned Wood Section).		
	Bed of coals not established before adding wood	Start with paper & kindling to establish bed of coals (refer to Building a Fire Section).		
	Flue blockage such as birds' nests or leaves in termination cap	Have chimney inspected for creosote and cleaned by a certified chimney sweep.		
	Down draft or negative pressure Competition with exhaust devices	Do not use exhaust fans during start-up (refer to Negative Pressure Section).		
		Mix in hardwood.		
	Extremely dry or soft wood	Mix in larger pieces of wood after fire is established.		
Fire burns too fast		Check for correct vent height; too much vertical height creates overdrafting.		
	Overdrafting	Check location of vent termination (refer to Chimney Termination Requirement Section).		

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



## Reference Materials

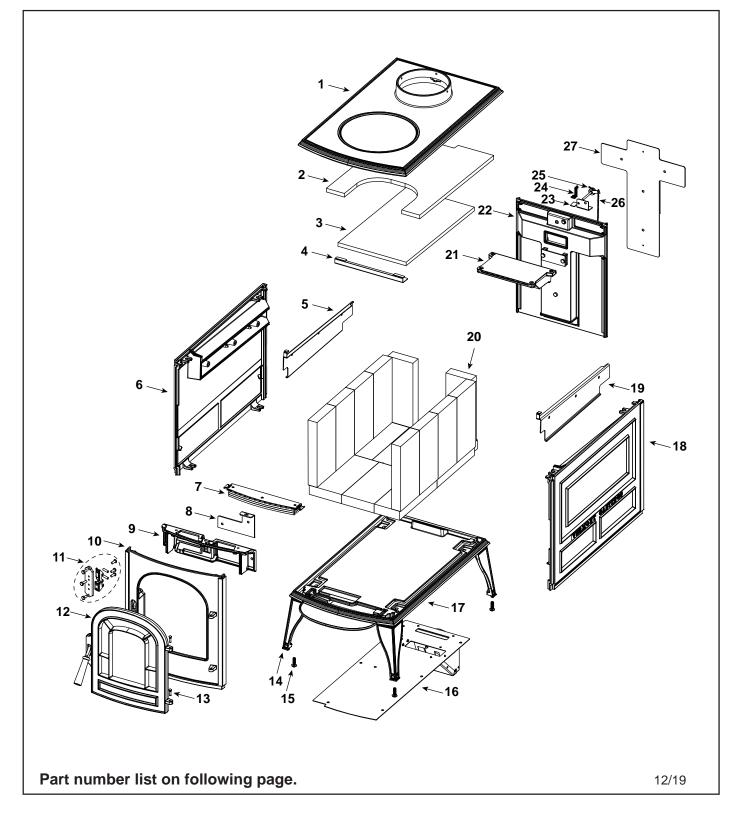
## A. Service & Maintenance Log

Date of Service	Performed By	Description of Service
	<u>l</u>	

Aspen C3

**Wood Stove** 0002505

Beginning Manufacturing Date: July 2019 Ending Manufacturing Date: Active



Beginning Manufacturing Date: July 2019 Ending Manufacturing Date: Active

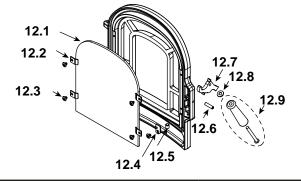
IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers**. Provide model number and serial number when requesting service parts from your dealer or distributor.



# Stocked at Depot

	· · · · · · · · · · · · · · · · · · ·				
ITEM	DESCRIPTION	COMMENTS	PART NUMBER		
1	Тор		SRV4-00-950054		
	Gasket, Fiberglass 3/8 Adhesive	15 Ft	1-00-30002422	Υ	
2	Blanket, Superwool		SRV3-44-950122		
3	Refractory Baffle		SRV3-40-859031		
4	Front Refractory Holder		SRV2-00-859112		
5	Side Cover, Left		SRV2-00-950148		
6	Left Side		SRV4-00-950119		
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ	
	Gasket, Fiberglass 3/8 Adhesive	15 Ft	1-00-30002422		
7	Dog Box Combustion Assembly		SRV1-10-950011		
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ	
8	Front Lower Primary Air Channel Cover		SRV2-00-950057		
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ	
9	Front Lower Primary Air Channel		SRV4-00-950056		
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Y	
10	Front		SRV4-00-950052		
	Gasket, Fiberglass 3/8 Adhesive	15 Ft	1-00-30002422		
11	Front Latch Kit		SRV1-00-950101		

## **#12 Load Door Assembly**



12	Load Door Assembly		SRV1-10-950100	
12.1	Glass		SRV3-40-950144	Υ
12.2	Glass Clip	Pkg of 4	SRV2-00-586207	Υ
	Gasket, Door	15 Ft	1-00-1203589	Υ
	Gasket, Glass	10 Ft	1-00-1186258229	Υ
12.3	Pan Head Phillips 10-24 x 1/4 (5 req)	Pkg of 10	1200980-10	
12.4	Detent Plate		SRV2-00-950141	Υ
12.5	Ball Spring Plunger		3-31-73765	
12.6	SSS CP 1/4-20 x 1	Pkg of 10	1200436-10	
12.7	Door Latch		SRV2-00-950104	
12.8	Washer, Flat 1/4	Pkg of 10	1202473-10	
12.9	Wood Handle w/Bolt		1-00-00247	Υ

Additional service part numbers appear on following page.

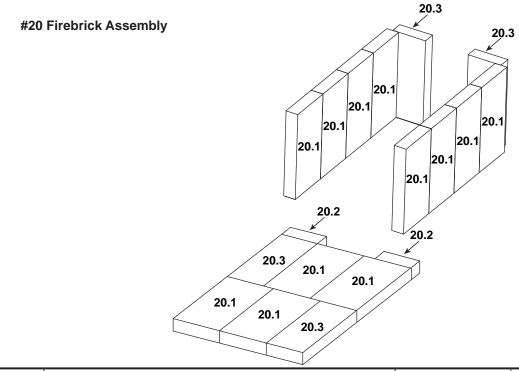
Beginning Manufacturing Date: July 2019 Ending Manufacturing Date: Active

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Stocked at Depot

ITEM	DESCRIPTION	COMMENTS	PART NUMBER	
13	Door Pin 3/16 x 3/4		1600535	
14	Leg	Qty 4 req	SRV4-00-950090	
15	Leg Leveler	Pkg of 10	1201745-10	
16	Air Control Assembly		SRV1-10-950110	
17	Bottom		SRV4-00-950051	
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ
	Fiberglass 3/8 low	15 Ft	1-00-1203589	
	5/16 Adhesive Backed	15 Ft	1-00-1203591	Υ
18	Right Side		SRV4-00-950120	
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ
	Gasket, Fiberglass 3/8 Adhesive	15 Ft	1-00-30002422	
19	Side Cover, Right		SRV2-00-950058	



20	Firebrick Complete Assembly		SRV1-10-9500023	Υ
20.4	Firebriol 0" v 4 4/0" v 4 4/4"	Qty 12 req	832-0550	
20.1	Firebrick, 9" x 4 1/2" x 1 1/4"	Pkg of 6	832-3040	
20.2	Firebrick, 3 1/2" x 1 1/2 x 1 1/4"	Qty 2 req	SRV4-40-950018	
20.3	Firebrick, 9" x 3 1/2" x 1 1/4"	Qty 4 req	SRV4-40-950019	
21	Rear Secondary Manifold Assembly		SRV1-10-950139	
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ

Additional service part numbers appear on following page.

Beginning Manufacturing Date: July 2019 Ending Manufacturing Date: Active

IMPORTANT: THIS IS DATED INFORMATION. Parts must be ordered from a dealer or distributor. **Hearth and Home Technologies does not sell directly to consumers**. Provide model number and serial number when requesting service parts from your dealer or distributor.



Stocked at Depot

and serial number when requesting service parts from your dealer or distributor.					
ITEM	DESCRIPTION	COMMENTS	PART NUMBER		
#22 Rear Vertical Shield  22.1  22.2  22.4					
22.1	Back		SRV4-00-950050		
	Gasket, PSA 3/16	10 Ft	1-00-1186258229	Υ	
22.2	Outer, Rear Vertical Shield		SRV2-00-950146		
22.3	Outer Cover, Rear Vertical Shield		SRV2-00-950154		
22.4	Inner, Rear Vertical Shield		SRV2-00-950145		
23	Blocker Plate		SRV2-00-950155		
24	Ball Chain Bracket		SRV2-00-950137		
25	Probe Assembly Secondary		1601489A	Υ	
26	Ball Chain	17 Inches	30007431A	Υ	
27	Back Cover		SRV2-00-950119		
	Touch-Up Paint	Classic Black	3-42-19905		
	Finish Bag		SRV8000-003		
	Mobile Home Brackets	Pkg of 2	SRV950152		

Additional service part numbers appear on following page.



#### **CONTACT INFORMATION**

Hearth & Home Technologies 352 Mountain House Road Halifax, PA 17032

Please contact your Vermont Castings dealer with any questions or concerns. For the number of your nearest Vermont Castings dealer log onto www.vermontcastings.com

## **CAUTION**



## DO NOT DISCARD THIS MANUAL

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

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

Date purchased/installed:	<u> </u>		
Serial Number:	Location on appliance:		
Dealership purchased from:	Dealer phone:		
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.

