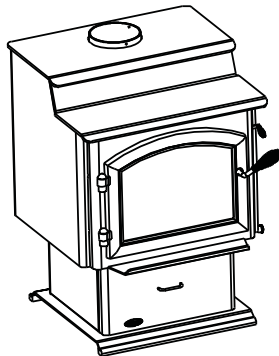


QUADRA-FIRE®

4300 WOOD STOVE SERIES Advanced Combustion Control (ACC)

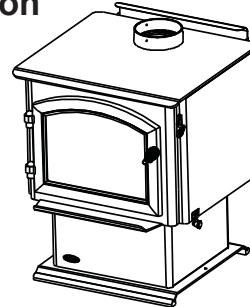
Owner's Manual Installation and Operation

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



Step Top Uni-Body Model
(Pedestal Model Shown)

Models:
43M-ACC-MBK
43ST-ACC



Millennium Model

CAUTION

DO NOT DISCARD THIS MANUAL



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



WARNING



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 overfire - If heater or chimney connector glows, you are overfiring. Overfiring 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.

WARNING



Fire Risk.

For use with solid wood fuel only.
Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends NFI certified professionals, or technicians supervised by an NFI certified professional.



Congratulations



and Welcome to the Quadra-Fire Family!

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

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

our stoves, inserts and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. Each unit is meticulously fabricated and surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection.

We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. Thank you for choosing Quadra-Fire.

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

SAMPLE OF SERIAL NUMBER / SAFETY LABEL

LOCATION: BACK OF APPLIANCE



CAUTION: HOT WHILE IN OPERATION DO NOT TOUCH, KEEP CHILDREN AND CLOTHING AWAY. CONTACT MAY CAUSE SKIN BURNS. KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIAL FAR AWAY FROM THE APPLIANCE. SEE NAMEPLATE AND INSTRUCTIONS.
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. GARDEZ LES MEUBLES ET LES MATÉRIEAUX COMBUSTIBLES LOIN DE L'ESPACE DÉSIGNÉ DE L'APPAREIL. VOIR L'ÉTIQUETTE ET LES INSTRUCTIONS.

LISTED ROOM HEATER, SOLID FUEL TYPE. ALSO FOR USE IN MOBILE HOMES. (UM) 84 HUD

PREVENT HOUSE FIRES

Install and use only in accordance with manufacturer's installation and operating instructions. Contact local building or fire officials about restrictions and installation inspections in your area. Do not obstruct the space beneath heater.

WARNING - For Mobile Homes: Do not install in a sleeping room. An outside combustion air inlet must be provided and unobstructed while unit is in use. The structural integrity of the mobile home floor, ceiling and walls must be maintained. The stove needs to be properly grounded to the frame of the mobile home. Components required for mobile home installation: Outside Air Kit, Part Number QAK-ACC.

Refer to manufacturer's instructions and local codes for precautions required for passing chimney through a combustible wall or ceiling and maximum offsets.

Inspect and clean chimney frequently. Under Certain Conditions of Use, Creosote Buildup May Occur Rapidly.

Do not connect this unit to a chimney serving another appliance.

Optional Components: Optional Blower, Part BK-ACC.

Electrical Rating: 115 VAC, 1.2 Amps, 60 Hz. Route power cord away from unit. Do not route cord under or in front of appliance.

DANGER: Risk of electrical shock. Disconnect power supply before servicing. Replace glass only with 5mm ceramic available from your dealer.

Do not use grate or elevate fire. Build wood fire directly on hearth.

Do not overfire. If heater or chimney connector glows, you are overfiring. Operate only with the fuel loading door.

QUADRA-FIRE

4300 ACC Series

TESTED TO / TESTÉ À:
UL 1482, ULC S627-00

SERIAL NO. / NUMÉRO DE SÉRIE
007003

VENT SPECIFICATIONS:

SINGLE WALL: Six inch (6 inches) (152mm) diameter, minimum 24 MBSG black or blued steel connector pipe, with a 3/4" factory-built UL103HT Class "A" chimney, suitable for use with solid fuels, or a masonry chimney, and the referenced clearances.

DOUBLE WALL: Six inch (6 inches) (152mm) diameter, listed double wall air insulated connector pipe with listed factory-built UL103HT Class "A" chimney, or a masonry chimney, and the referenced clearances.

MOBILE HOME: Use double wall pipe by Dura-Vent DVI, Selkirk Metalbestos DS or Security DL double wall connector pipe. Must be equipped with a spark arrester. Apply double wall clearances below when installing unit.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS: In Inches & (Millimeters)

NOTE: All "A", "C" and "F" Dimensions are to inside diameter of the flue collar.

SPECIFICATIONS DE LA VENTILATION:

MUR SIMPLE: De six (6 inches) (152mm) de diamètre le connecteur de conduit de minimum d'acier noir ou bleu de minimum de 24MBSG, avec une cheminée bâtit en usine UL103HT[®] de Classe "A" adéquate pour utilisation avec les combustibles solides, avec espaces libres référencés.

MUR DOUBLE: De six (6 inches) (152mm) de diamètre, le connecteur du conduit d'air isolé pour mur double avec une cheminée bâtit en usine UL103HT[®] de Classe "A", ou une cheminée de briques, avec espaces libres alloués.

MAISON MOBILE: Choisir un connecteur de mur double par Dura-Vent DVI, Selkirk Metalbestos DS ou Security DL. Doit être équipé d'un arrêt d'éclaboussure. Utiliser les espaces libres pour mur double comme mentionné ci-dessus.

ESPACES LIBRES MINIMUM DES MATÉRIEAUX COMBUSTIBLES: En Pouces & (millimètres)

NOTE: Toutes les dimensions "A", "C", et "F" sont à partir du diamètre intérieur de l'entrée du conduit.

INSTALLATION: FULL VERTICAL OR HORIZONTAL WITH MINIMUM 12" FOOT VERTICAL OFF-STOVE TOP

INSTALLATION: ENTÈREMENT VERTICALE OU HORIZONTALE AVEC 600mm VERTICAL MINIMUM DU HAUT DU POÊLE

	A	B	C	D	E	F	G	H
SINGLE WALL PIPE	18 (457)	15.5 (394)	10 (254)	17 (430)	10 (255)	18.5 (470)	52.5 (1334)	18 (457)
Flat Top Model								
Step Top Model	12 (305)	8.5 (216)	2 (51)	13 (330)	2 (51)	13 (330)	50.5 (1283)	18 (457)
DOUBLE WALL PIPE								
Flat Top Model	13 (330)	10.5 (267)	24.5 (622)	15 (381)	10 (255)	18.5 (470)	52.5 (1334)	10 (254)
Step Top Model	10 (254)	6.5 (165)	23 (584)	13 (330)	2 (51)	13 (330)	50.5 (1283)	5 (127)

INSTALLATION: 90° ELBOW OFF-STOVE TOP THROUGH BACK WALL

INSTALLATION: 90° DU COURBURE AU DERRIÈRE DU POÊLE A TRAVERS LE MUR ARRIÈRE

	A	B	C	D	E	F	G	H
DOUBLE WALL PIPE	8.5 (216)	6 (152)	24.5 (622)	15 (381)	10 (254)	18.5 (470)	52.5 (1334)	18 (457)
Flat Top Model								
Step Top Model	7 (178)	4 (102)	19 (483)	9 (229)	2 (51)	13 (330)	50.5 (1283)	18 (457)

INSTALLATION: ALCOVE - SINGLE WALL PIPE

Must be equipped with a spark arrester. Flue collar shall be no more than 48 inches (1220mm) with a minimum height of 45.5 inches (1156mm) to top of unit, and the referenced clearances. Please refer to the clearances below for minimum chimney height requirements to top of unit.

	A	B	C	D	E	F	G	H
SINGLE WALL PIPE	13 (330)	10.5 (267)	24.5 (622)	15 (381)	N/A	N/A	52.5 (1334)	N/A
Flat Top Model								
Step Top Model	10 (254)	6.5 (165)	23 (584)	13 (330)	N/A	N/A	37 (940)	N/A

ALCOVE SIDE VIEW / VUE DE CÔTE DE L'ALCÔVE

ALCOVE TOP VIEW / VUE DU HAUT DE L'ALCÔVE

UP & OUT CEILING CLEARANCE
ESPACE LIBRE DU DESSUS DE L'APPAREIL AU PLAFOND AVEC 90° DE COURBURE

STOVE TO CEILING CLEARANCE
ESPACE LIBRE DU POÊLE AU PLAFOND

FLOOR PROTECTION:

Floor protector must be a 3/8 inch min. thickness, non-combustible material or equivalent, extending beneath heater and to front/behind as indicated on the diagram below. Exception: Non-combustible floor protectors must extend beneath the flue pipe when installed with horizontal venting and extend 2 inches (51mm) beyond each side.

PROTECTION DU PLANCHER:

Le protecteur de plancher doit être d'un minimum de 3/8 inch d'épaisseur de matériel incombustible ou équivalent s'étendant du dessous de l'appareil de chauffage à l'avant, aux cotés et à l'arrière comme indiqué sur le diagramme suivant. Exception: Les protections incombustibles de plancher doivent s'étendre du dessous du conduit de cheminée lorsque installées avec ventillation horizontale et s'étendre de 2 inches (51mm) de chaque côté.

MINIMUM CLEARANCES - NOT TESTED

UP & OUT CEILING CLEARANCE
ESPACE LIBRE DU DESSUS DE L'APPAREIL AU PLAFOND AVEC 90° DE COURBURE

STOVE TO CEILING CLEARANCE
ESPACE LIBRE DU POÊLE AU PLAFOND

2010 2011 2012 Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.

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

U.S. ENVIRONMENTAL PROTECTION AGENCY - Certified to comply with July 1990 particulate emission standards.

Mfg. Date

7037-136

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

Made in U.S.A./Fait Aux États-Unis

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 fireplace or to property.

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Listing and Code Approvals

A. Appliance Certification

Model:	4300 Millennium & Step Top (ACC) Uni-Body
Laboratory:	OMNI Test Laboratories, Inc.
Report No & Date:	061-S-67-6
Type:	Listed Room Heater, Solid Fuel Type
Standard:	UL1482 and ULC S627-00 and (UM) 84-HUD, Mobile Home Approved.

The Quadra-Fire 4300 Series Wood Stove (ACC) meets the U.S. Environmental Protection Agency's 1990 particulate emission standards.

B. Mobile Home Approved

This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided. The structural integrity of the mobile home floor, ceiling, and walls must be maintained. The appliance must be properly grounded to the frame of the mobile home and use only listed double-wall connector pipe. Outside Air Kit, part OAK-ACC must be installed in a mobile home installation

C. Glass Specifications


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

NOTE: This installation must conform with local codes. In the absence of local codes you must comply with the **UL1482, (UM) 84-HUD and NPFA211** in the U.S.A. and the **ULC S627-00 and CAN/CSA-B365 Installation Codes** in Canada.

Quadra-Fire is a registered trademark of Hearth & Home Technologies.

D. BTU & Efficiency Specifications

EPA Certified:	1.1 grams per hour
EPA Certificate Number and Date:	Number: 656 Issued: 02-05-2007
Efficiency:	90.6%
BTU Output:	11,800 to 38,300 / hr.
Heating Capacity:	1,500-2,400 sq ft depending on climate zone
Vent Size:	6 inches
Firebox Size:	2.4 cubic feet
Max Wood Length:	20 inches
Fuel:	Cord Wood
Shipping Weight:	355 lbs



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 unit).
- Do NOT Overfire - If appliance or chimney connector glows, you are overfiring.

Any such action that may cause a fire hazard.

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

2

Getting Started

A. Design, Installation & Location Considerations

Consideration must be given to:

- Safety
- Convenience
- Traffic flow
- Chimney and chimney connector required

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation. If you are not using an existing chimney, place the appliance where there will be a clear passage for a factory-built listed chimney through the ceiling and roof.

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

If this appliance is in an area where children may be near it is recommended that you purchase a decorative barrier to go in front of the appliance. Remember to always keep children away while it is operating and do not let anyone operate this appliance unless they are familiar with these operating instructions.

NOTE: Service Space:

In order to replace the tube channel a clearance of 19 inches (483mm) is required on the right side of stove in order to remove the tubes with the stove in place.

If space is not available, the stove will have to be disconnected from the chimney to proceed with the tube replacement. **See page 36.**

CAUTION
<p>Check building codes prior to installation.</p> <ul style="list-style-type: none"> • Installation MUST comply with local, regional, state and national codes and regulations. • Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.




B. Fire Safety



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

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

In the event of a chimney fire:

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

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

 WARNING
<div style="display: flex; align-items: flex-start;"> <div style="margin-right: 10px;">  </div> <div> <p>Asphyxiation Risk.</p> <ul style="list-style-type: none"> • DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE. • DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM. <p>May allow flue gases to enter the house.</p> </div> </div>

C. Negative Pressure

Draft is the pressure difference needed to vent appliances successfully. Considerations for successful draft include:



- Preventing negative pressure
- Location of appliance and chimney

Negative pressure results from the imbalance of air available for the stove to operate properly. Causes for this imbalance include:

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

To minimize the affects of negative air pressure the following must be considered:

- Install the outside air kit. Install the intake on the side of the house towards prevailing winds during the heating season.
- Ensure adequate outdoor air is supplied for 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 of “sealed can” design; attic hatches weather stripped or sealed; and attic mounted duckwork and air handler joints and seams taped or sealed.

	WARNING
	<p>Asphyxiation Risk.</p> <ul style="list-style-type: none"> • Negative pressure can cause spillage of combustion fumes, soot and carbon monoxide. • Appliance needs to draft properly for safety.

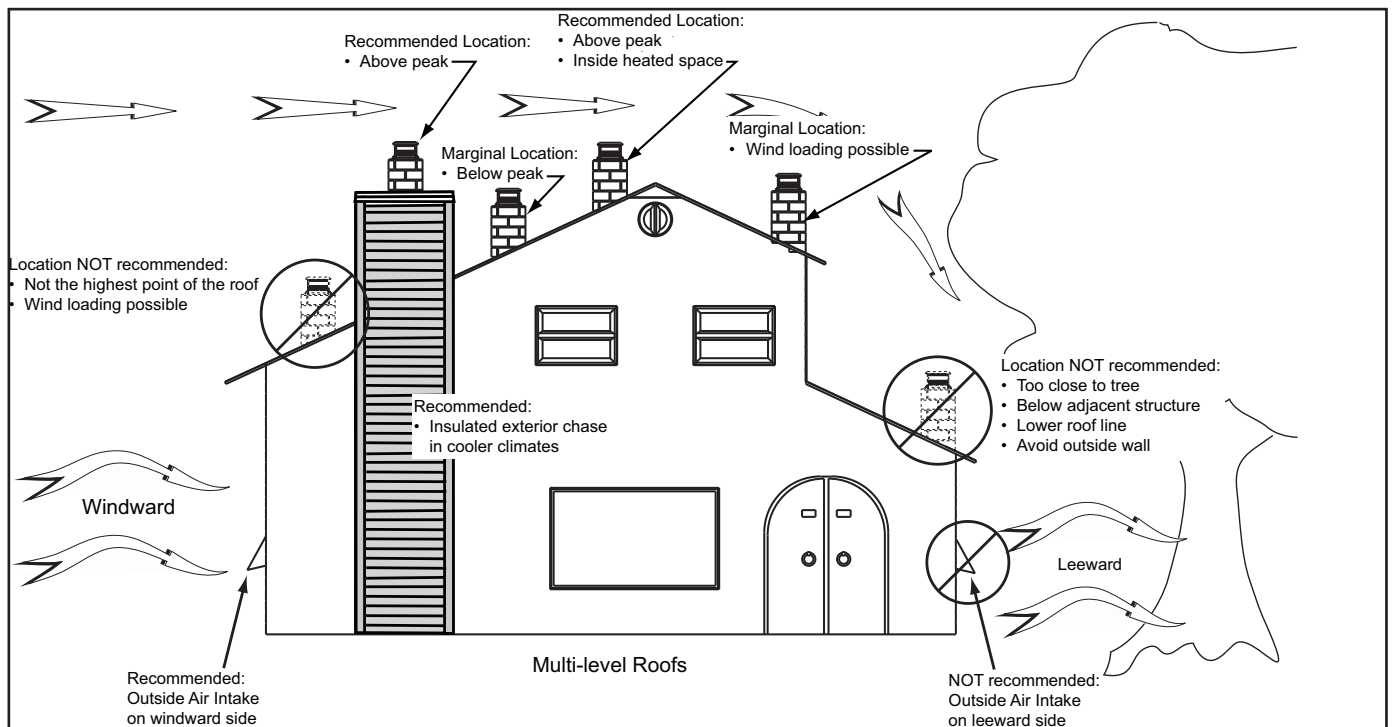


Figure 6.1

D. Flue Draft Considerations

Location of the appliance and chimney will affect performance. As shown in **Figure 6.1 on page 6** the chimney should:

- Be installed through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die down of the fire.
- Penetrate the highest part of the roof. This minimizes the affects of wind turbulence and down drafts.
- Consider the appliance location in order to avoid floor and ceiling attic joists and rafters.

Exterior conditions such as roof line, surrounding trees, prevailing winds and nearby hills can influence stove performance. Your local dealer is the expert in your geographic area and can usually make suggestions or discover solutions that will easily correct your flue problem.



To be sure that your appliance burns properly, the chimney draft (static pressure) should be approximately -.04 inch water column (W.C.) during a low burn and -.10 inch W.C. during a high burn, measured 6 inches (152mm) above the top of the appliance after one hour of operation at each burn setting.

NOTE: These are guidelines only, and may vary somewhat for individual installations.

E. Venting Systems

The venting system consists of a chimney connector (also known as stove pipe) and a chimney. These get extremely hot during use. Temperatures inside the chimney may exceed 2000°F (1100°C) in the event of a creosote fire. To protect against the possibility of a house fire, the chimney connector and chimney **must be properly installed and maintained**. An approved thimble must be used when a connection is made through a combustible wall to a chimney.

A chimney support package must be used when a connection is made through the ceiling to a prefabricated chimney. These accessories are **absolutely necessary** to provide safe clearances to combustible wall and ceiling material. Follow venting manufacturer’s clearances when installing venting system.

	WARNING
	<p>Asphyxiation Risk.</p> <ul style="list-style-type: none"> • DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE. • DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM. <p>May allow flue gases to enter the house.</p>



F. Tools And Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Reciprocating saw	Framing Material
Pliers	Hi-Temp Caulking Material
Hammer	Gloves
Phillips Head Screwdriver	Framing Square
Flat Blade Screwdriver	Electric Drill & Bits (1/4")
Plumb Line	Safety Glasses
Level	1/2 in. - 3/4 in. length, #6 or
Tape Measure	#8 self drilling screws (need 3 per pipe section connection)

G. Inspect Appliance & Components and Pre-Use Check List

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

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

H. Typical Stove Systems

Stove system with masonry chimney consists of:

- Stove
- Chimney Connector (stove pipe)
- Thimble
- Masonry Chimney
- Hearth Pad Floor Protection

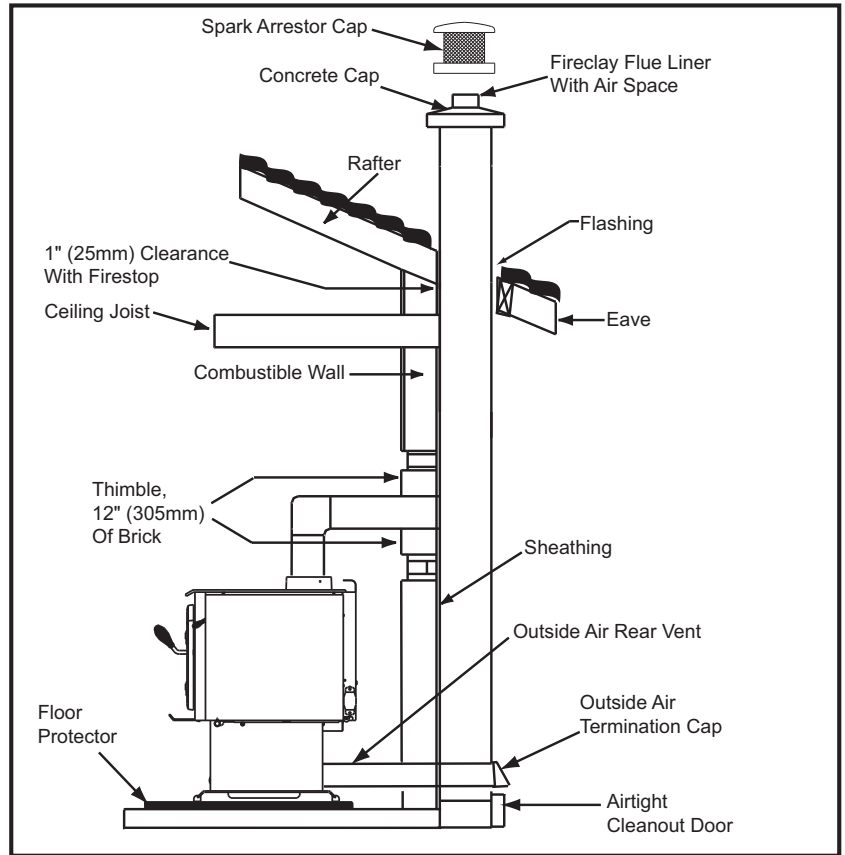


Figure 8.1 Masonry Chimney

Stove system with prefabricated metal chimney consists of:

- Stove
- Chimney Connector (stove pipe)
- Thimble (for exterior chimney)
- Firestops
- Insulations Shields
- Storm Collar and Flashing
- Termination Cap
- Hearth Pad Floor Protection

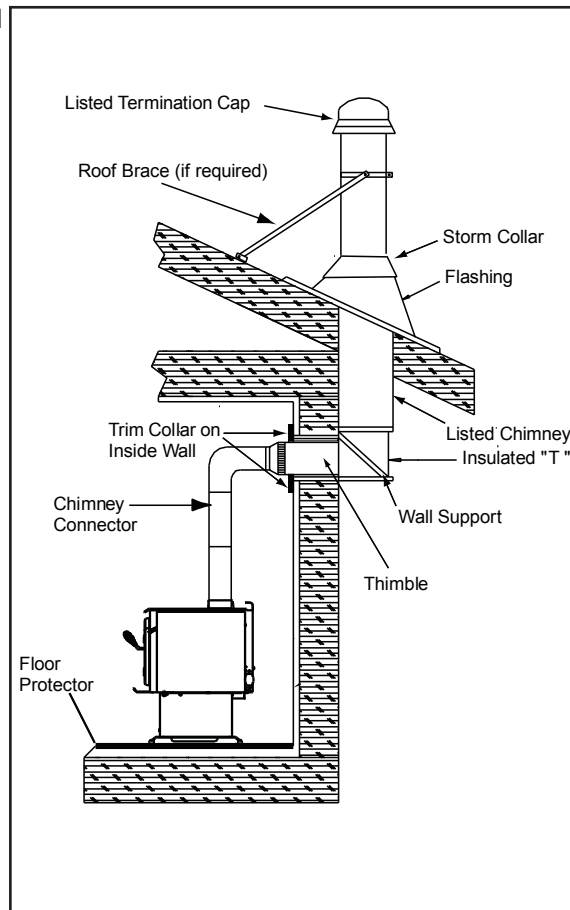


Figure 8.2 Exterior Prefabricated Chimney

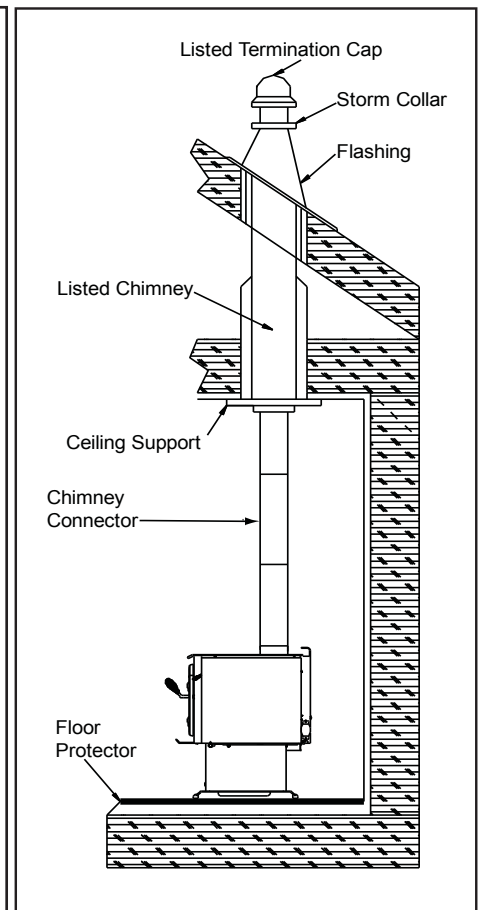


Figure 8.3 Interior Prefabricated Chimney

3 Dimensions and Clearances

A. Appliance Dimensions

NOTE: Flue Collar size is 6 inch (152mm) diameter (ID)

Millennium Model

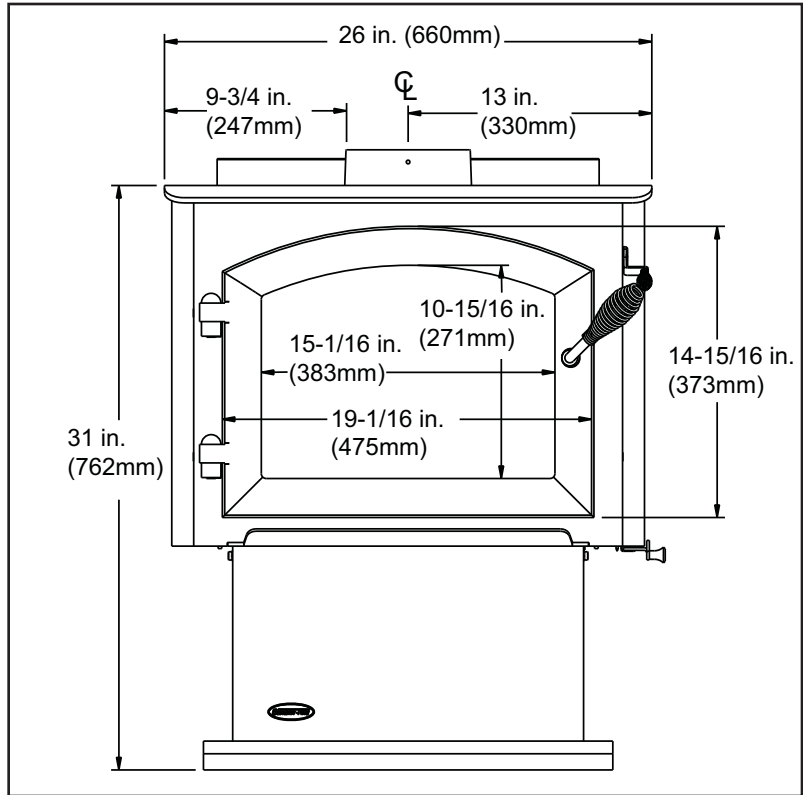


Figure 9.1 Front View

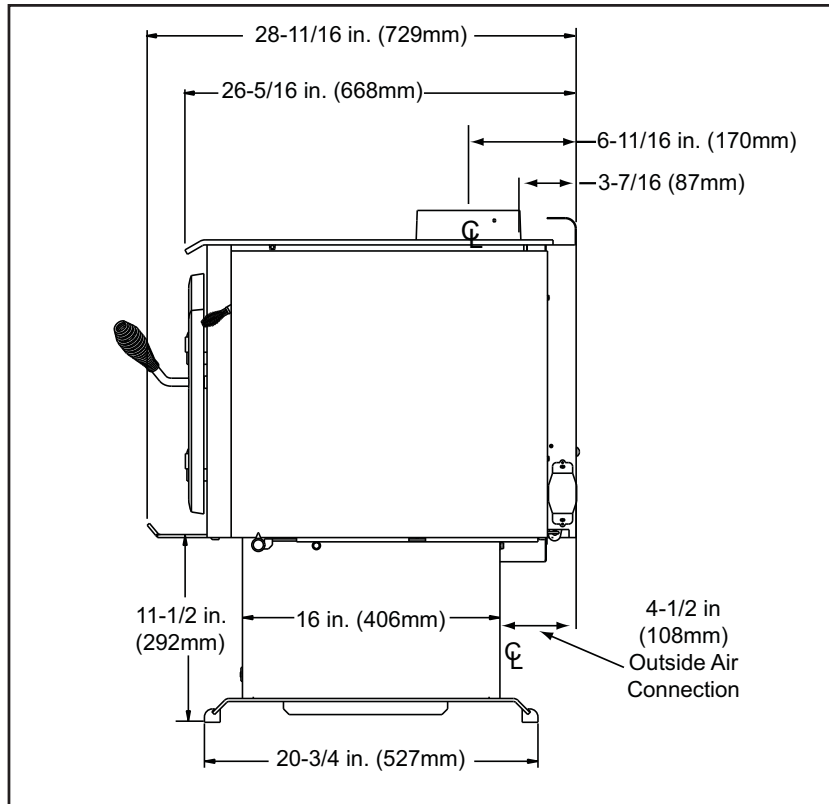


Figure 9.2 Side View

Appliance Dimensions (Cont'd)

4300 Step Top Pedestal Model

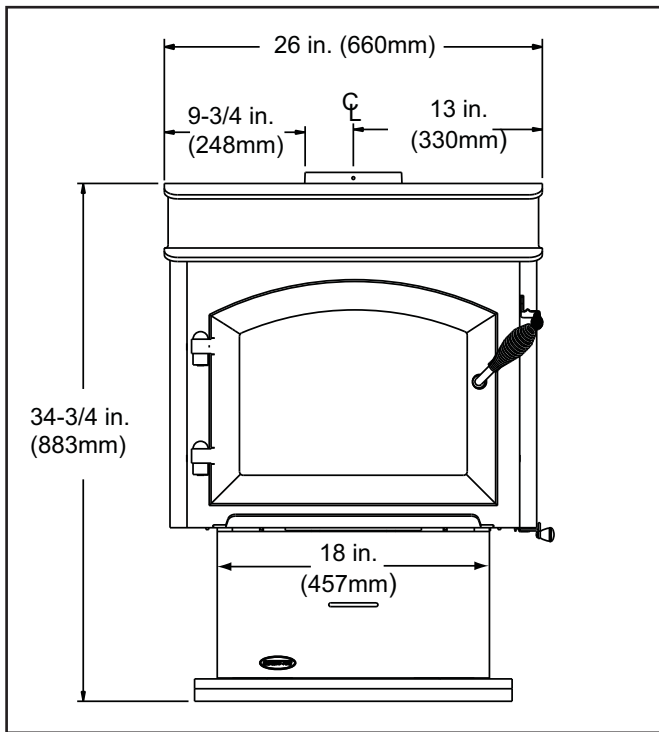


Figure 10.1

4300 Step Top Leg Model

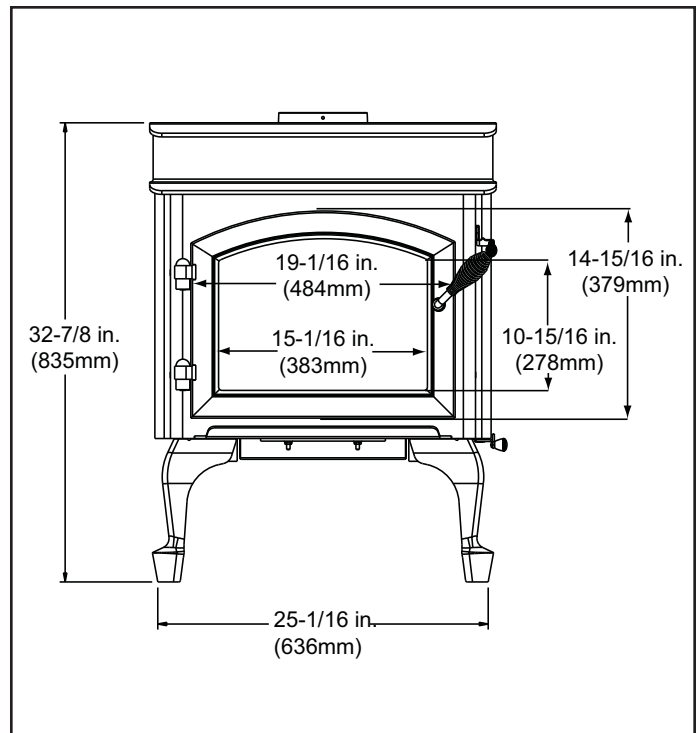


Figure 10.3

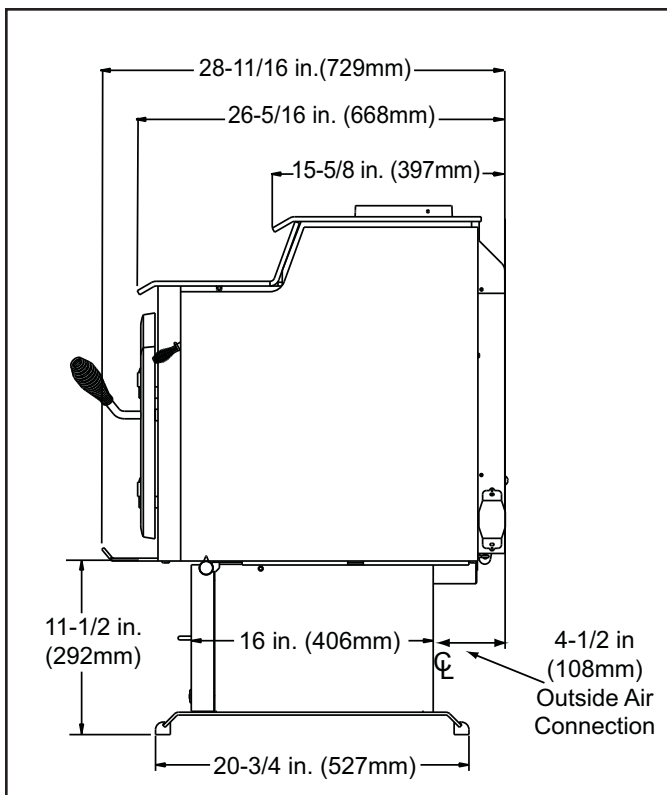


Figure 10.2

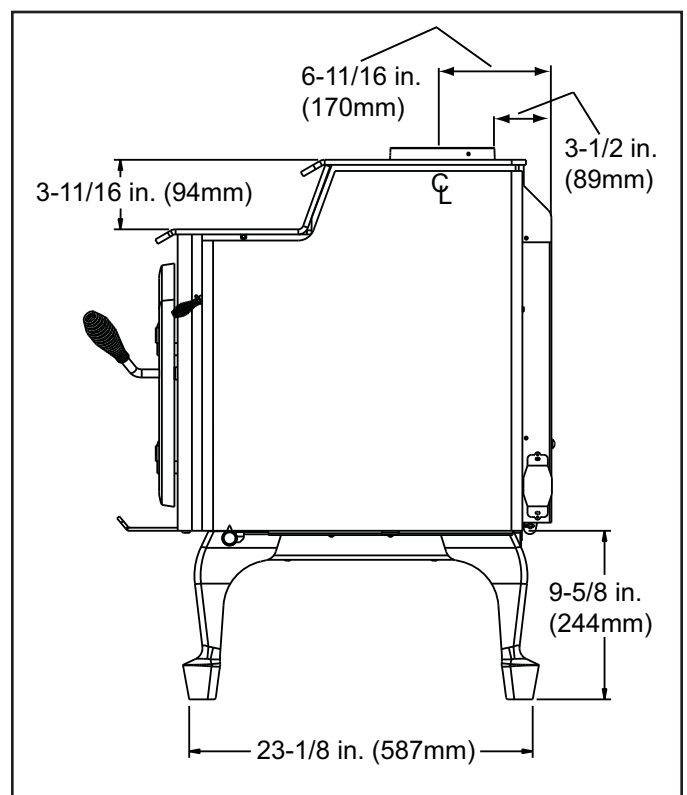
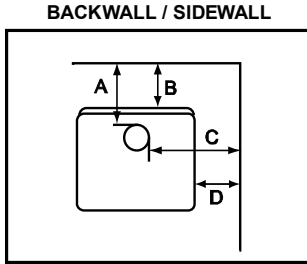
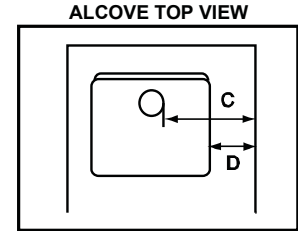
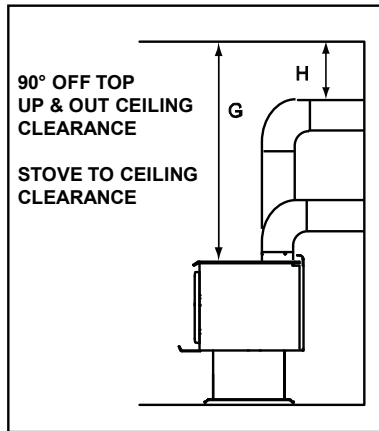
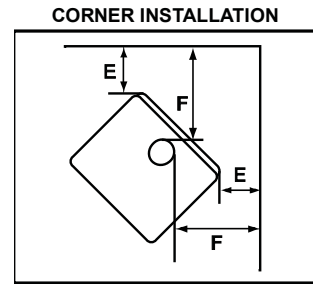
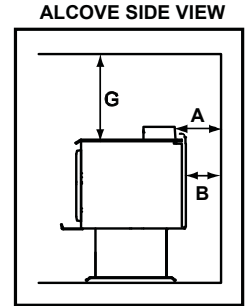


Figure 10.4

B. Clearances to Combustibles (UL and ULC)



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



MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS In Inches & (Millimeters)
NOTE: All "A", "C" and "F" Dimensions are to the inside diameter of the flue collar.

	A	B	C	D	E	F	G	H
INSTALLATION: Full Vertical OR Horizontal with Minimum 2 FT Vertical Off Stove Top								
SINGLE WALL PIPE								
Flat Top Model	15.5 (394)	11.75 (298)	24.5 (622)	14.5 (368)	10 (254)	17.5 (445)	53.5 (1359)	12 (305)
Step-Top Model	15.5 (394)	11.75 (298)	24.5 (622)	14.5 (368)	2 (51)	12 (305)	49.5 (1283)	12 (305)
DOUBLE WALL PIPE								
Flat Top Model	9 (229)	5.25 (133)	24.5 (622)	14.5 (368)	10 (254)	17.5 (445)	53.5 (1359)	12 (305)
Step-Top Model	7.5 (191)	3.75 (95)	22 (559)	11.75 (298)	2 (51)	12 (305)	49.5 (1283)	5 (127)
INSTALLATION: 90° Elbow Off Top of Stove Through Backwall								
DOUBLE WALL PIPE								
Flat Top Model	8.5 (216)	6 (152)	24.5 (622)	15 (381)	10 (254)	17.5 (445)	53.5 (1359)	N/A
Step-Top Model	7.5 (191)	4 (102)	19 (229)	9 (229)	2 (51)	12 (305)	49.5 (1283)	N/A
INSTALLATION: ALCOVE Six inch (6") (152mm) diameter listed Double Wall air insulated connector pipe with UL103 HT* listed factory-built Class "A" chimney, or a masonry chimney. (Mobile Home must be equipped with a spark arrester). Maximum depth of Alcove shall be no more than 48 inches (1220mm) with a minimum height of 49.5 inches (1283mm) to top of unit, and the referenced clearances. *In Canada must comply with CAN/ULC-S269 M87 for the 650°C Factory-built chimney.								
DOUBLE WALL PIPE								
Flat Top Model	13 (330)	10 (254)	24 (610)	14.5 (368)	N/A	N/A	53.5 (1359)	12 (305)
Step-Top Model	7.5 (191)	3.75 (95)	22 (584)	11.75 (298)	N/A	N/A	49.5 (1257)	5 (127)

WARNING

Fire Risk.

- Comply with all minimum clearances to combustibles as specified.
- Failure to comply may cause house fire.

NOTE: Service Space

In order to replace the tube channel assembly a clearance of 19 inches (483mm) is required on the right side of stove in order to remove the tubes with the stove in place.

If space is not available, the stove will have to be disconnected from the chimney to proceed with the tube replacement. **See Figure 36 on page 36.**

4 Installation

A. Hearth Protection Requirements

FLOOR PROTECTION: Floor protector must be non-combustible material, extending beneath heater and to the front, sides and rear as indicated. The floor must be non-combustible or otherwise adequately protected from radiant heat given off by the unit and from sparks and falling embers. A layer of thin brick or ceramic tile over a combustible floor is not sufficient.

For US installations, it is necessary to install a floor protector of a minimum of 3/8 inch (9.5mm) thick metal clad millboard or equivalent a minimum of 16 inches (406mm) in front of glass and 8 inches (203mm) to both sides of the fuel loading door. Open the door and measure 8 inches (203mm) from the side edge of the opening in the face of the appliance. ***See exception.**

In Canada, similar floor protection must be provided 18 inches (457mm) in front and 8 inches (203mm) from the sides and rear of the stove. ***See exception.**

***EXCEPTION:** Non-combustible floor protections must extend beneath the flue pipe when installed with horizontal venting and extend 2 inches (51mm) beyond each side. **See Figure 12.4.**

	WARNING
	<p>Fire Risk.</p> <ul style="list-style-type: none"> Hearth pads must be installed exactly as specified. <p>High temperatures or hot embers may ignite concealed combustibles.</p>

Millennium Model

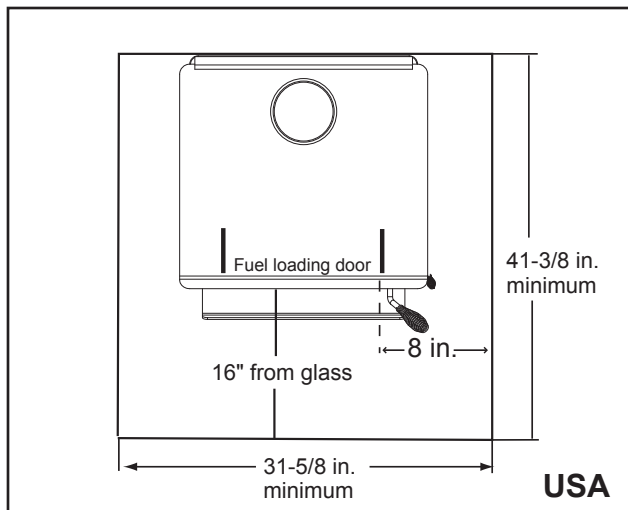


Figure 12.1

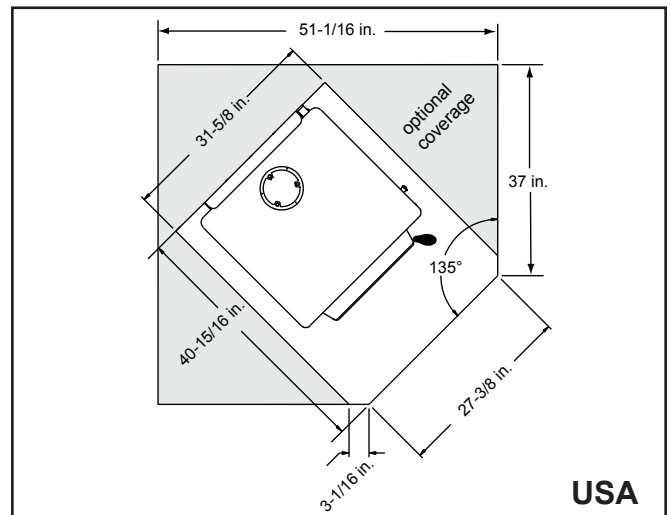


Figure 12.3

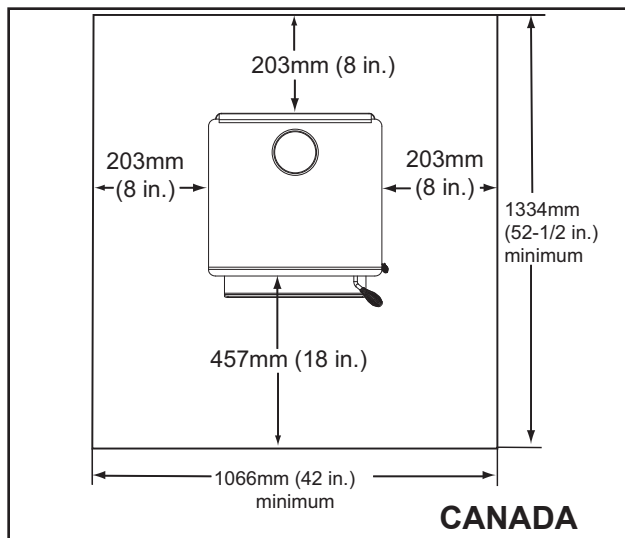


Figure 12.2

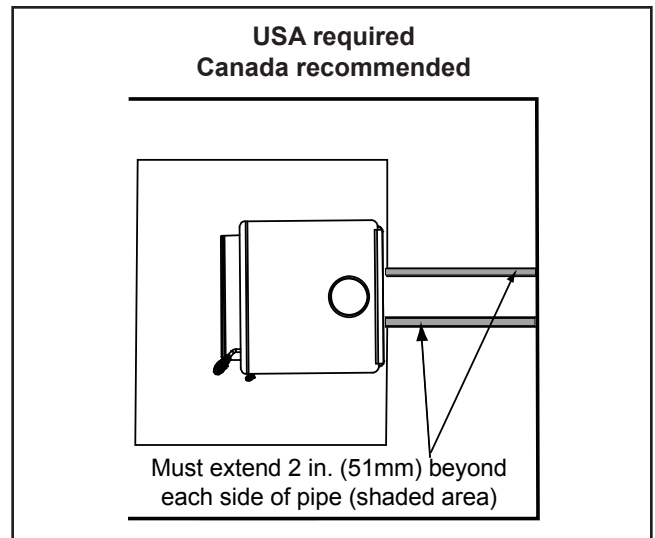


Figure 12.4

A. Hearth Protection Requirements (Cont'd)

Step-Top Uni-Body Model

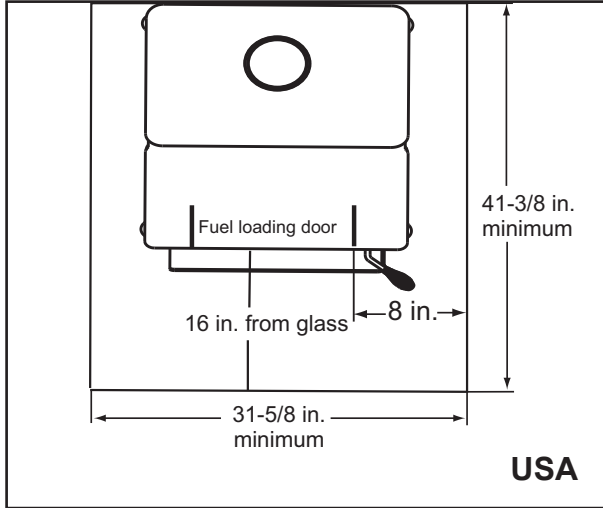


Figure 13.1

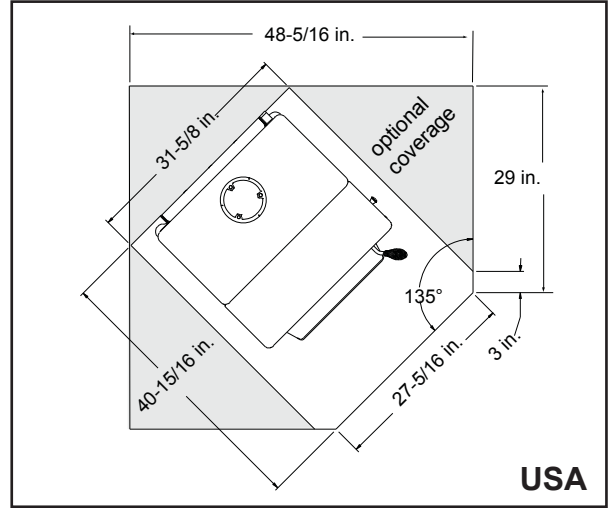


Figure 13.3

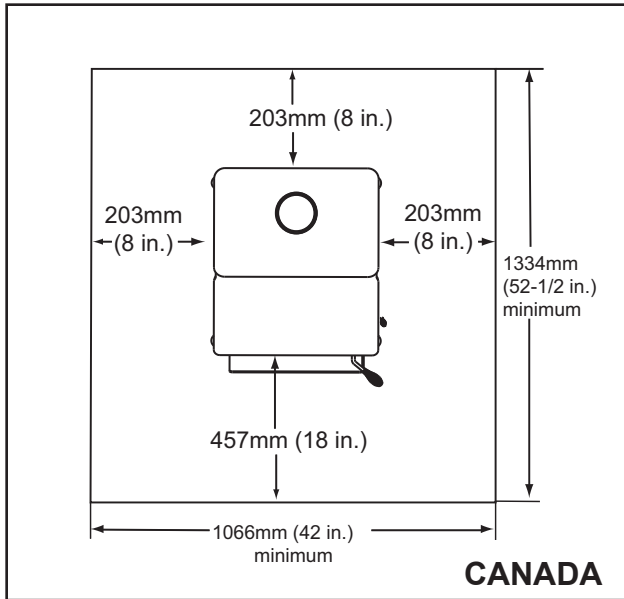


Figure 13.2

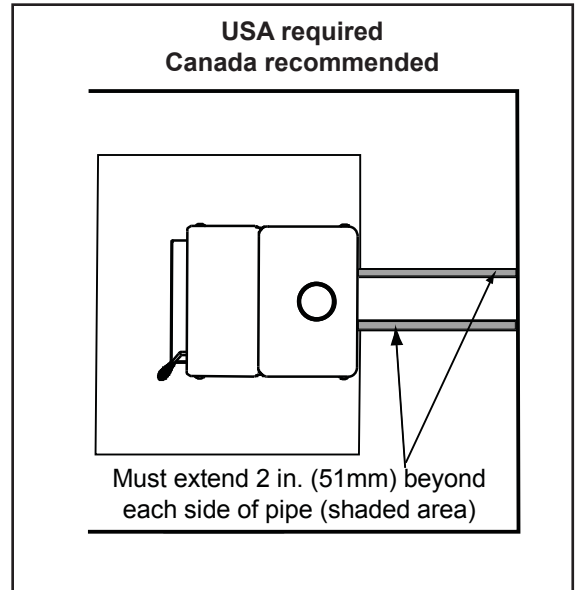


Figure 13.4

NOTE:

- Illustrations and photos reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference
- Hearth & Home Technologies reserves the right to alter its products.

B. Outside Air Kit Installation

A source of air (oxygen) is necessary in order for combustion to take place. Whatever combustion air is consumed by the fire must be replaced. Air is replaced via air leakage around windows and under doors. In homes that have tightly sealed doors and windows, an outside air source is needed. An optional Outside Air Kit is available.

Included in OAK-ACC: Termination cap, (2) wire ties, flex adapter, and fasteners

Included in SRV7033-041: Cover plate and sealing rope (see Floor Installation Alternative below, **Figure 14.2**)

Items Needed for Installation (not supplied)

- 4 inch flex aluminum pipe, or if using alternate material, then it shall be made from durable, non-combustible, heat resistant material up to 350°F. Cut the pipe to the required length for your installation.
- Phillips head screw driver
- Silicone sealant
- Drills and saws necessary for cutting holes through the wall or flooring in your home.

1. Remove all materials from packing box.
2. Using a #2 Phillips screw driver attach the flex adapter to the stove using 4 screws. **Figure 14.1.**
3. For floor installations remove circular "knock-out" in the base of the pedestal.
4. **Floor & Rear Installation:** Cut a 4 inch (102mm) hole in outside wall or floor to accommodate outside air piping. Use 4 inch (102mm) aluminum metal flex or rigid piping to directly connect outside air to appliance intake. Use the supplied termination cap with a rodent screen. Seal between the wall (or floor) and the pipe with silicone to prevent moisture penetration.

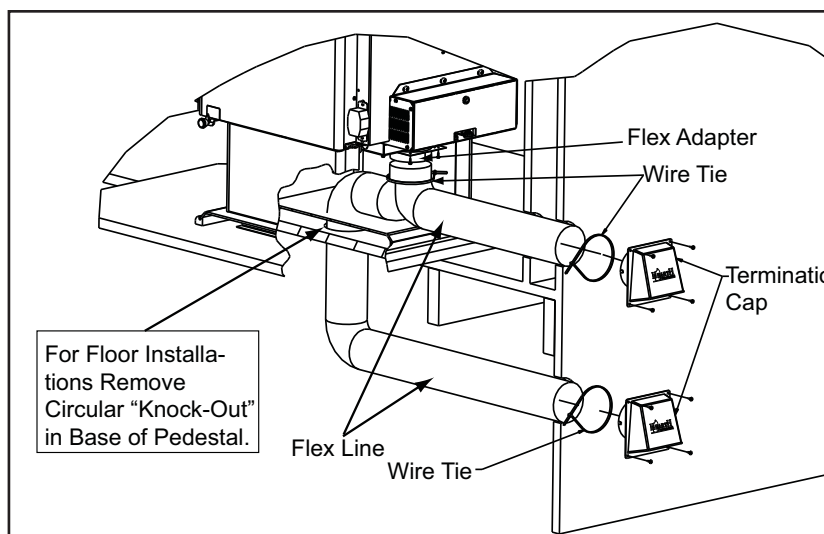


Figure 14.1 - Floor & Rear Installation

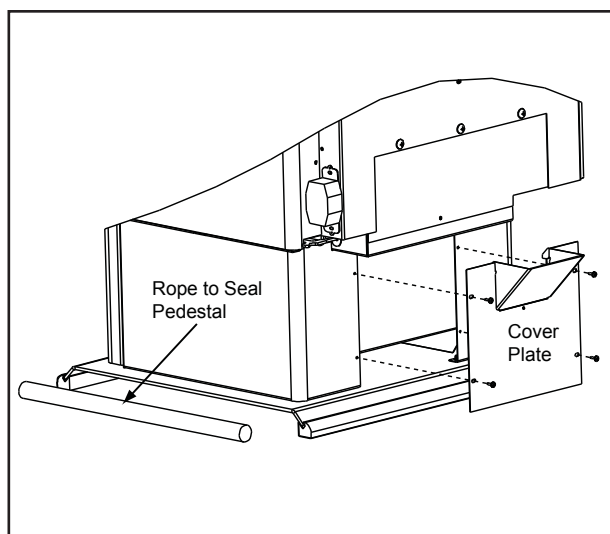


Figure 14.2 - Floor Installation Alternative

! WARNING

Fire Risk.
Asphyxiation Risk.
 Do not draw outside combustion air from:

- Wall, floor or ceiling cavity
- Enclosed space such as an attic or garage
- Close proximity to exhaust vents or chimneys

Fumes or odor may result

! WARNING

Asphyxiation Risk.
 Outside air inlet must be located to prevent blockage from:

- Leaves
- Snow or ice
- Other debris

Block may cause combustion air starvation
 Smoke spillage may set off alarms or irritate sensitive individuals.

! WARNING

Asphyxiation Risk.
 Length of outside air supply duct shall NOT exceed the length of the vertical height of the exhaust flue.

- Fire will not burn properly
- Smoke spillage occurs when door is opened due to air starvation.

5. **Floor Installation Alternative:** In some instances you may not be able to install the flex pipe as show in **Figure 14.1.** If that is the case, you will need to order SRV7033-041 which includes a cover plate and sealing rope as shown in **Figure 14.2.** The goal is to seal the pedestal so no room air can leak into the pedestal or cold air infiltration.

C. Blower (Optional)

1. Remove the 3 bolts (1/4"-20 Phillips head) on the outer skin at the bottom rear of appliance.
 2. Align holes in mounting flange of blower with bolt holes in appliance. Blower should be positioned at bottom of rear outer skin as shown in **Figure 15.1**.
 3. Re-insert and tighten bolts, securing blower onto outer wall of appliance.
 4. Place the bracket containing the snap disc and magnet under the bottom left rear corner as shown in **Figure 15.1**.
- See **page 30** for detailed operating instructions for the blower and snap disc.

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.

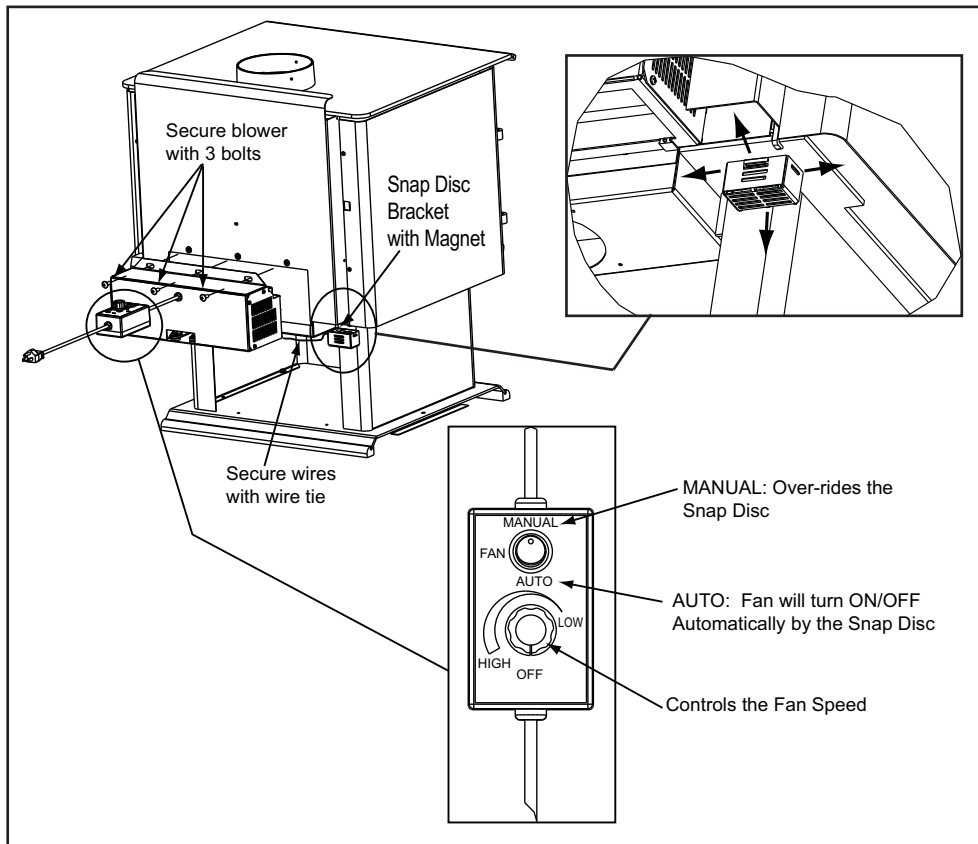


Figure 15.1

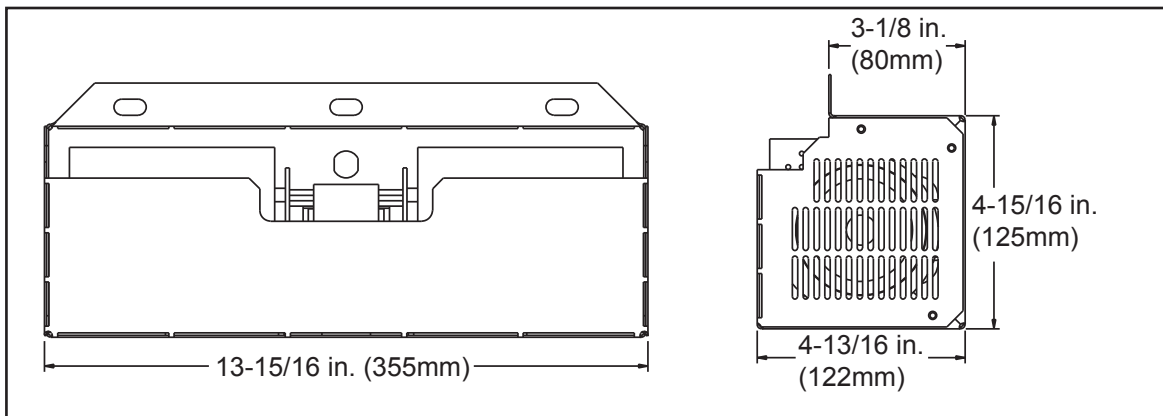


Figure 15.2

5 Chimney Requirements

A. Venting Components

Chimney Connector:

It is also known as flue pipe or stove pipe. The chimney connector joins the stove to the chimney. It must be a 6 inch (152mm) minimum diameter 24 gauge mild steel black or 26 gauge blued steel, or an approved air-insulated double wall venting pipe.

Thimble:

A manufactured or site-constructed device installed in combustible walls through which the chimney connector passes to the chimney. It is intended to keep the walls from igniting. Site constructed thimbles must meet NFPA 211 Standards. Prefabricated must be suitable for use with selected chimney and meet UL103 Type HT Standards. Follow instructions provided by the manufacturer for manufactured thimbles for masonry chimney and prefabricated chimneys.

Chimney:

The chimney can be new or existing, masonry or prefabricated and must meet the following minimum requirements specified in Section 5B.

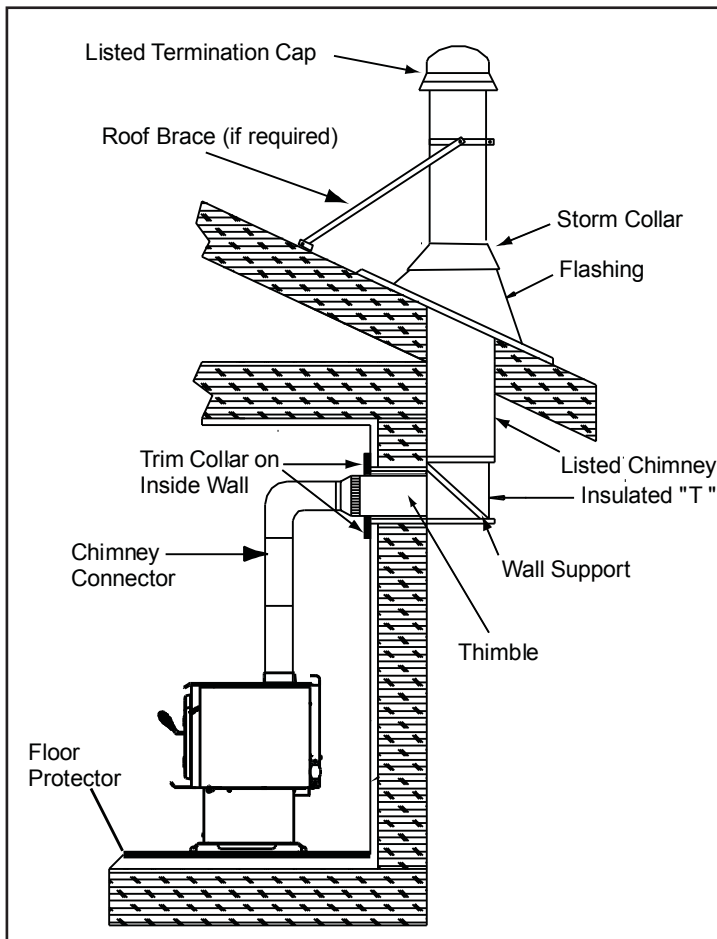


Figure 16.1 Prefabricated Exterior Chimney

B. Chimney Systems

Prefabricated Metal Chimney

- Must be minimum 6 inch (152mm) diameter (ID) high temperature chimney listed to UL 103 HT (2100°F) or ULC S629M.
- Must use components required by the manufacturer for installation.
- Must maintain clearances required by the manufacturer for installation.
- Refer to manufacturers instructions for installation.

NOTE: In Canada when using a factory-built chimney it must be safety listed, **Type UL103 HT (2100°F) CLASS "A"** or conforming to **CAN/ULC-S629M, STANDARD FOR 650°C FACTORY-BUILT CHIMNEYS.**

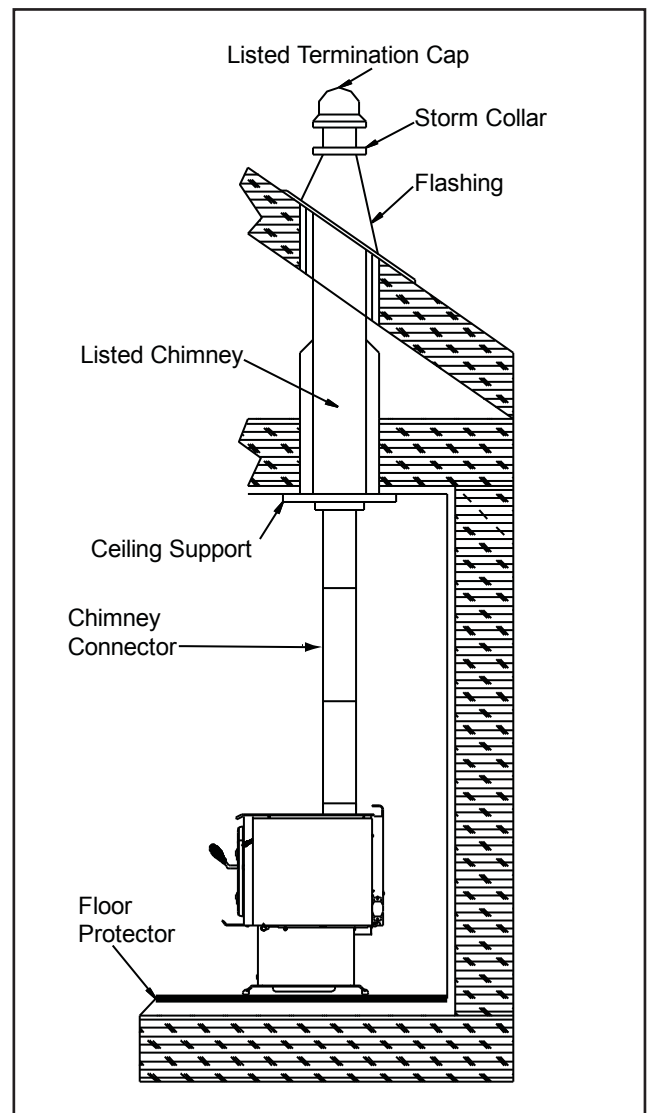


Figure 16.2 - Prefabricated Interior Chimney

Thimble

Site constructed for masonry chimney installation:

Components

- A minimum length of 12 inches [305mm] (longer for thicker walls) of solid insulated factory-built chimney length constructed to UL 103 Type HT 6 inch (152mm) inside diameter. Chimney needs to extend a minimum of 2 inches (51mm) from the interior wall and a minimum of 1 inch (25mm) from the exterior wall.
- Wall spacer, trim collar and wall band to fit solid pack chimney selected.
- Minimum 8 inch (203mm) diameter clay liner section (if not already present in chimney) and refractory mortar.

Air Clearances

- Masonry chimney clearance must meet NFPA 211 minimum requirement of 2 inches (51mm) to sheet metal supports and combustibles.
- Minimum of 1 inch (25mm) clearance around the chimney connector.
- Top of wall opening is a minimum of 13-1/2 inches (343mm) from ceiling or 4-1/2 inches (114mm) below minimum clearance specified by chimney connector manufacturer. NFPA 211 minimum vertical clearance of 18 inches (457mm) from chimney connector and ceiling or minimum recommended by chimney connector manufacturer. **Figure 17.1.**

Instructions:

1. Open inside wall at proper height for the chimney connector to enter the masonry chimney. **Figure 17.1.**
2. Entry hole to masonry chimney must be lined with an 8 inch (203mm) minimum diameter clay liner, or equivalent, secured with refractory mortar.
3. Construct a 17 inch x 17 inch (432mm x 432mm) outside dimension frame from 2 x 2 framing lumber to fit into wall opening. Inside opening of frame should be no less than 14 inch x 14 inch (356mm x 356mm). **Figure 17.1.**
4. Attach the wall spacer to the chimney side of the frame.
5. Nail the frame into the wall opening. The spacer should be on the chimney side.
6. Insert the section of the solid insulated chimney into the outer wall of the masonry chimney.
7. Tightly secure the length of the solid insulated chimney with the wall band to the masonry chimney.
8. Insert a section of chimney connector into the chimney. Make sure it does not protrude past the edge of the clay chimney liner inside the chimney.
9. Seal the end of the chimney connector to the clay liner with refractory mortar.
10. Install trim collar around the sold pack chimney section.

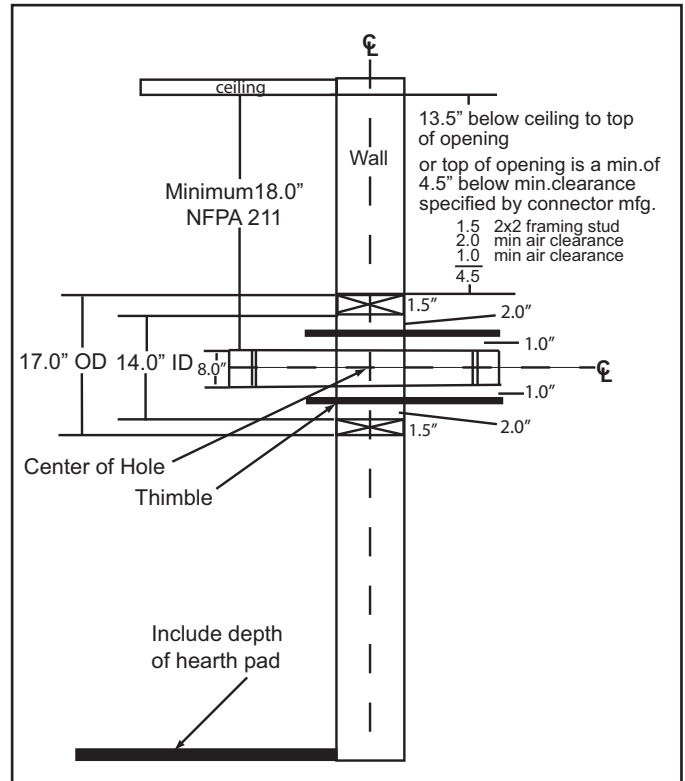


Figure 17.1

Solid Pack Chimney with Metal Supports as a Thimble

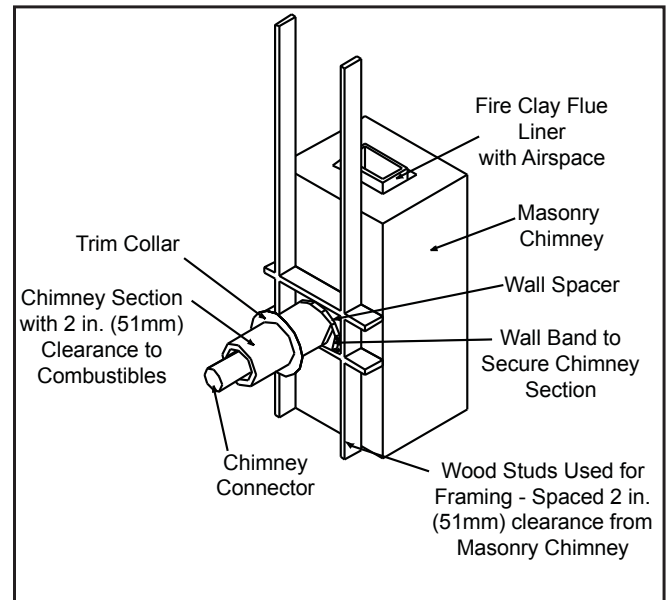


Figure 17.2

WARNING

Fire Risk.
Do NOT pack insulation or other combustibles between spacers.

- ALWAYS maintain specified clearances around venting and spacers.
- Install spacers as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.

Solid Pack Chimney with Metal Supports as a Thimble (Cont'd)

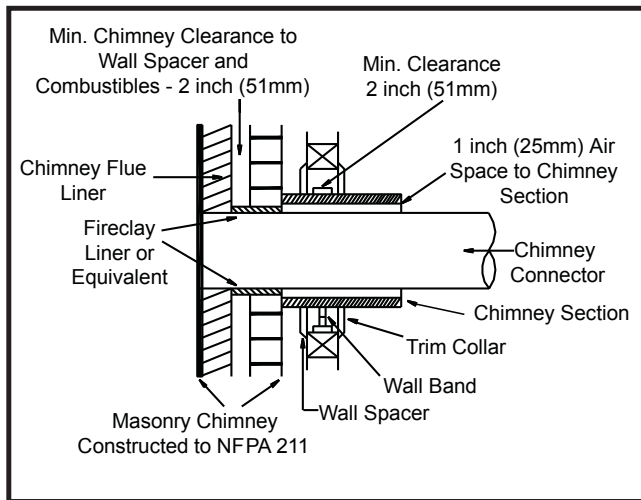


Figure 18.1

Chimney Height / Rise and Run

This product was designed for and tested on a 6 inch (152mm) chimney, 14 to 16 feet (420-480cm) high, (includes stove height) measured from the base of the appliance. The further your stack height or diameter varies from this configuration, the possibility of performance problems exists.

Chimney height may need to be increased by 2 - 3% per each 1000 feet above sea level. It is not recommended to use offsets or elbows at altitudes above 4000 feet above sea level or when there are other factors that affect flue draft.

C. Installing Chimney Components

Chimney Connector

Single wall connector or stove pipe.

This must be at least 24 gauge mild steel or 26 gauge blue steel. The sections must be attached to the appliance and to each other with the crimped (male) end pointing toward the stove. All joints, including the connection at the flue collar, should be secured with 3 sheet metal screws. Make sure to follow the minimum clearances to combustibles. Where passage through the wall, or partition of combustible construction is desired in Canada, the installation shall conform to CAN/CSA-B365.

Factory-built listed chimney connector (vented).

A listed connector (vented) must be used when installing this unit in a mobile home. The listed connectors must conform to each other to ensure a proper fit and seal.

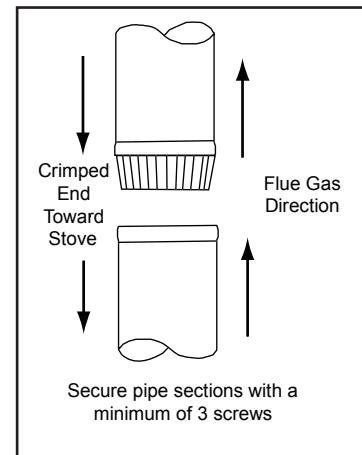


Figure 18.2 Chimney Connector (Stove Pipe)

	WARNING
	<p>Fire Risk. Inspection of Chimney:</p> <ul style="list-style-type: none"> • Chimney must be in good condition. • Meets minimum standard of NFPA 211 • Factory-built chimney must be 6 inch (152mm) UL103 HT.

	WARNING
	<p>Fire Risk. Follow Chimney Connector Manufacturer's Instructions for Proper Installation.</p> <p>ONLY use connector:</p> <ul style="list-style-type: none"> • Within the room, between appliance and ceiling or wall. <p>Connector shall NOT pass through:</p> <ul style="list-style-type: none"> • Attic or roof space • Closet or similar concealed space • Floor or ceiling <p>Maintain minimum clearances to combustibles</p>

	WARNING
	<p>Asphyxiation Risk.</p> <ul style="list-style-type: none"> • DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVICING ANOTHER APPLIANCE. • DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM. <p>May allow flue gases to enter the house.</p>

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

D. Chimney Termination Requirements

Follow manufacturers instructions for clearance, securing, flashing and terminating the chimney.

- Must have an approved and listed cap
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 3 feet (91cm) above the roof **and** at least 2 feet (61cm) above any portion of the roof within 10 feet (305cm)
- Must be located away from trees or other structures

NOTE:

- Chimney performance may vary.
- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.

E. 2-10-3 Rule

These are safety requirements and are not meant to assure proper flue draft.

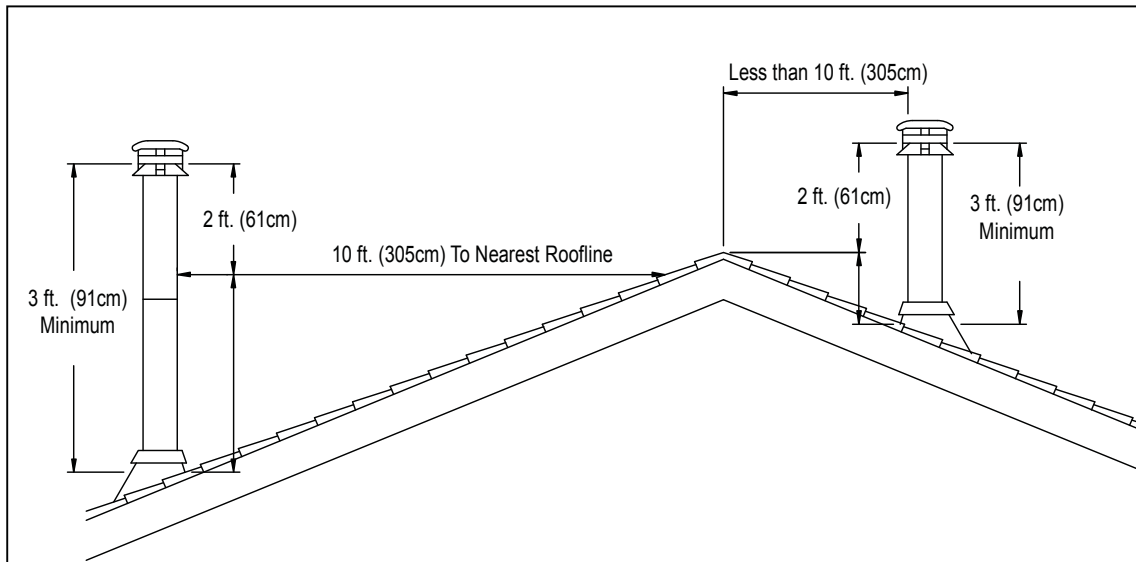


Figure 19.1

Pitched Roof

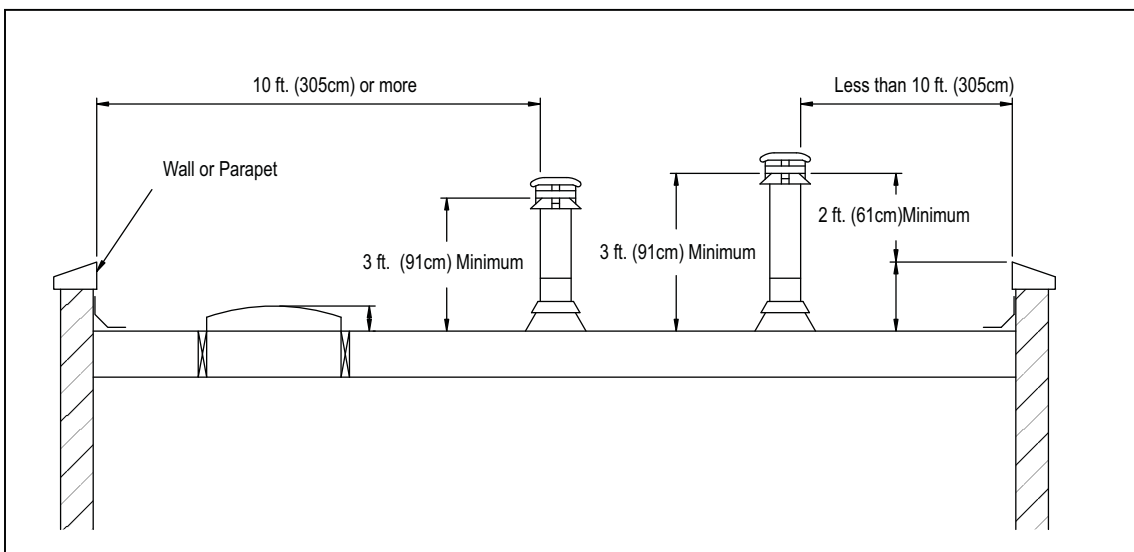


Figure 19.2

Flat Roof

6 Mobile Home Installation

You must use a Quadra-Fire Outside Air Kit Part OAK-ACC and (depending on floor installation) Part SRV7033-041 for installation in a mobile home.

1. An outside air inlet must be provided for combustion. See page 14 for installation information.
2. Appliance must be secured to the mobile home structure by bolting the pedestal through hearth pad and into floor.
3. Appliance must be grounded with #8 solid copper grounding wire or equivalent and terminated at each end with N.E.C. approved grounding device.
4. Appliance must be installed with an approved UL103 HT ventilated chimney connector, UL103 HT chimney, and terminal cap with spark arrester. Never use a single wall connector (stove pipe) in a mobile home installation. Use only double-wall connector pipe, Dura-Vent DVL, Selkirk metalbestos DS or Security DL double-wall connector or any listed double-wall connector pipe.
5. In Canada, this appliance must be connected to a 6 inch (152mm) factory-built chimney conforming to CAN/ULC-629M, STANDARD FOR FACTORY BUILT CHIMNEYS.
6. Follow the chimney and chimney connector manufacturer's instructions when installing the flue system for use in a mobile home.
7. Maintain clearance to combustibles.
8. Floor protection requirements must be followed precisely.
9. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.

NOTE: Offsets from the vertical, not exceeding 45°, are allowed per Section 905(a) of the Uniform Mechanical Code (UMC). Offsets greater than 45° are considered horizontal and are also allowed, providing the horizontal run does not exceed 75% of the vertical height of the vent. Construction, clearance and termination must be in compliance with the UMC Table 9C. This installation must also comply with NFPA 211.

NOTE: Top sections of chimney must be removable to allow maximum clearance of 13.5 feet (411cm) from ground level for transportation purposes.

10. Burn wood only. Other types of fuels may generate poisonous gases (e.g., carbon monoxide).
11. If unit burns poorly while an exhaust blower is on in home, (i.e., range hood), increase combustion air.
12. Installation shall be in accordance with the Manufacturers Home & Safety Standard (HUD) CFR 3280, Part 24.

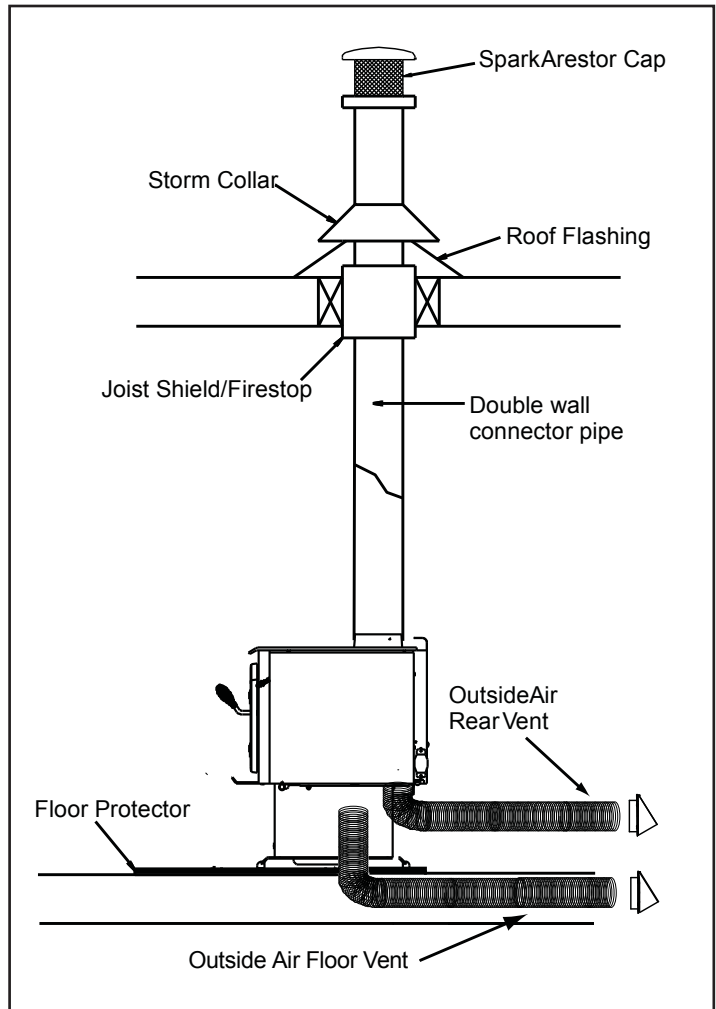


Figure 20.1

CAUTION

THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING/ROOF MUST BE MAINTAINED

Do NOT cut through:

- Floor joist, wall, studs or ceiling trusses.
- Any supporting material that would affect the structural integrity.



WARNING



Asphyxiation Risk.

NEVER INSTALL IN A SLEEPING ROOM.
Consumes oxygen in the room.

7 Appliance Set Up

A. Pedestal Assembly and Ash Removal System (ARS) Installation for Step Top Uni-body

NOTE: The Ash Removal System, must be installed first before installing the pedestal.

Included in Kit: Door assembly, door handle & magnet, ash drawer, fastener package. A cover plate that is required for a floor outside air installation on a pedestal model is also included, If not needed, discard.

Tools Required: Phillips head screwdriver, 7/16 socket wrench, 3/32 and 5/36 Allen wrench.

Begin installing the ARS System.

1. Remove 2 front bricks as shown in **Figure 21.1**.
2. Lay body of stove on its back on a protective pad or pallet.
3. Remove the 2 nuts and 2 bolts holding the channel in place and set the channel aside. Discard the 2 nuts. Install the gasket over the 8 protruding screws.

The glossy side of the gasket needs to go against the firebox bottom.

It is important the gasket is not put on upside down as it could compromise its sealing capabilities. Figure 21.2.

4. Install ash door assembly by sliding the rod at an angle into the slot on the left side. As the rod starts passing through the slot, slide the handle over the rod and then finish pushing the rod through the slot.

Slide the ash door over the 8 screws protruding from the bottom of the stove. Secure with nuts and washers provided. **Figure 21.2.**

5. Re-install handle using a 3/32 Allen wrench to tighten the set screw in the door handle. The set screw needs to be snug. **Figure 21.3.**
6. Install magnet using a Phillips head screwdriver. This magnet will hold the door handle in an open position which in turn holds the ash door open so ashes can be brushed into the ash drawer. **Figure 21.2.**

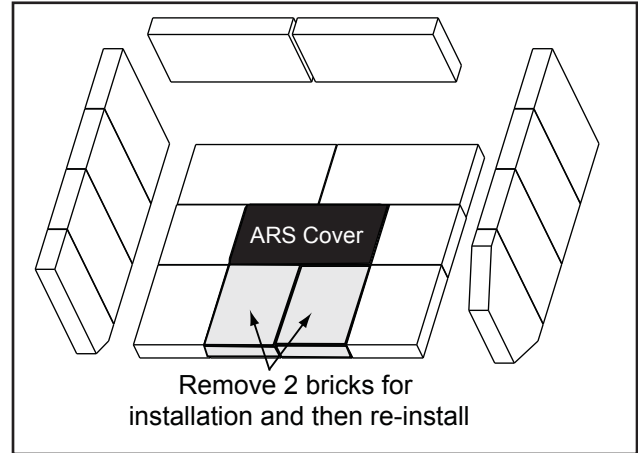


Figure 21.1

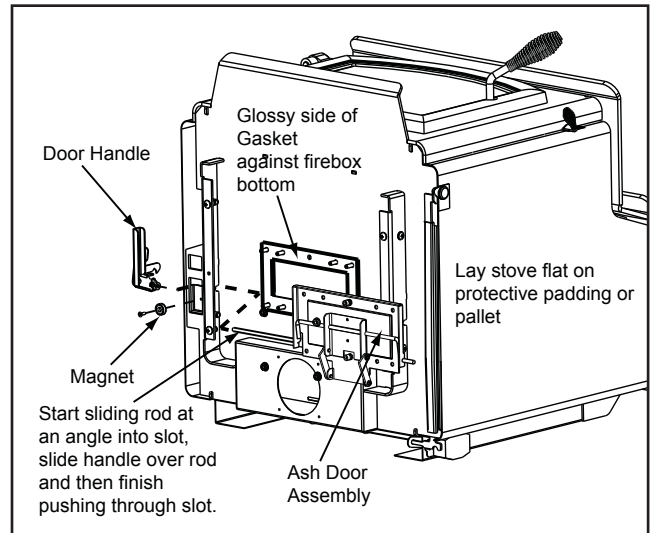


Figure 21.2

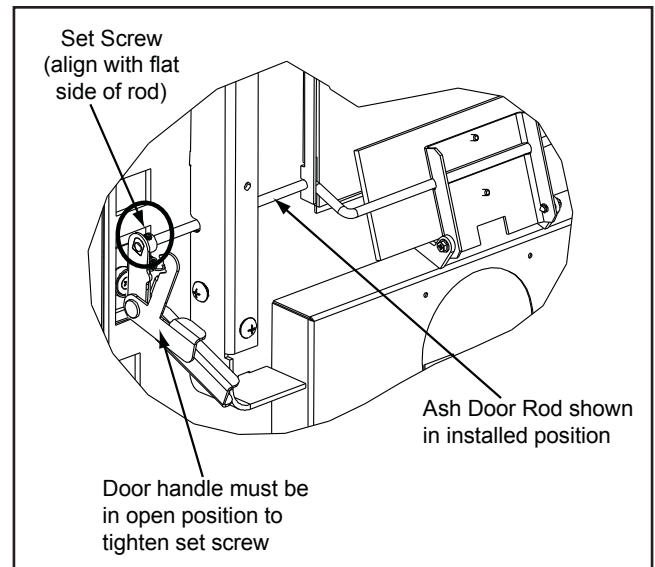


Figure 21.3

WARNING

Do **NOT** operate before fully assembling components. Burning your stove without a pedestal or leg kit attached:

- Will void your warranty.
- May result in property damage or personal injury.

Pedestal and Ash Removal System (Cont'd)

Installing Pedestal Assembly

1. Remove screws on adapter and slide pedestal over adapter on bottom of stove. **Figure 22.1.**
2. Line up holes in sides of pedestal with holes in adapter.
3. Securely tighten pedestal into place.
4. Carefully stand stove up and place in desired location.
5. Slip wooden decorative strips onto pedestal edges.

Finishing the ARS Installation

1. Re-install the ARS channel that was removed in Step 3 on page one and secure with 2 bolts previously removed. Set the cover into the ARS channel. Replace the 2 front cut bricks. **Figure 22.2.**
2. Install the ash drawer.
3. Check to make sure baffle boards and ceramic blanket are in their proper locations. (see page 29).

NOTE: If installing a floor installation of an outside air kit on a Step Top model with a pedestal assembly you must attach the enclosed cover plate to the back of the stove. Other wise you may discard this piece. **Figure 22.3.**

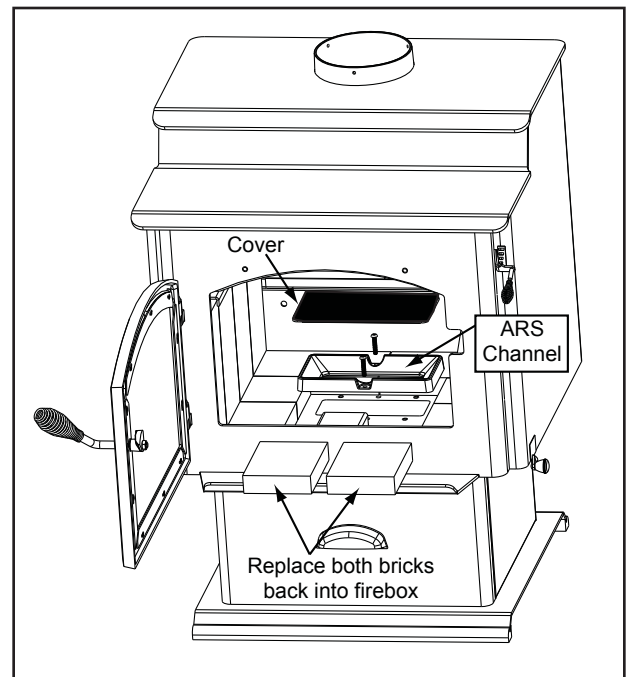


Figure 22.2

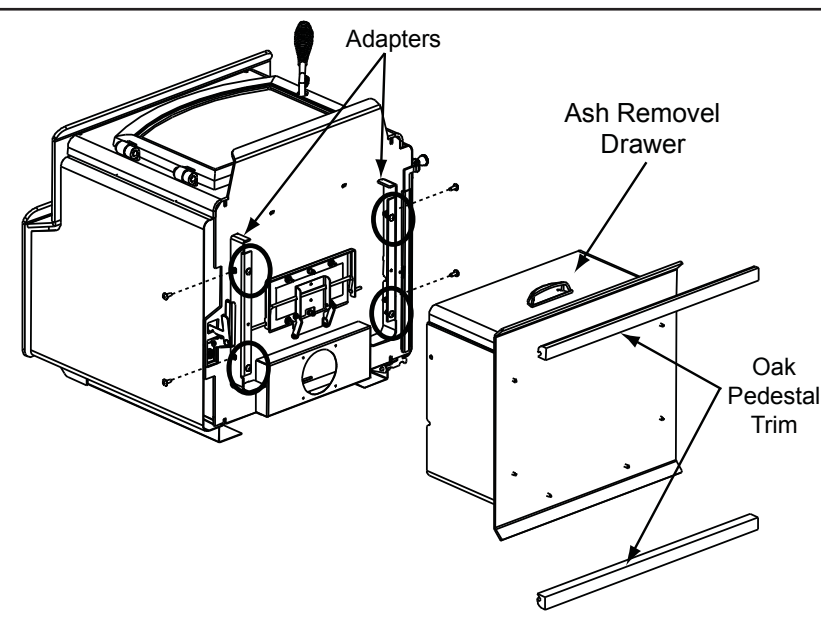


Figure 22.1

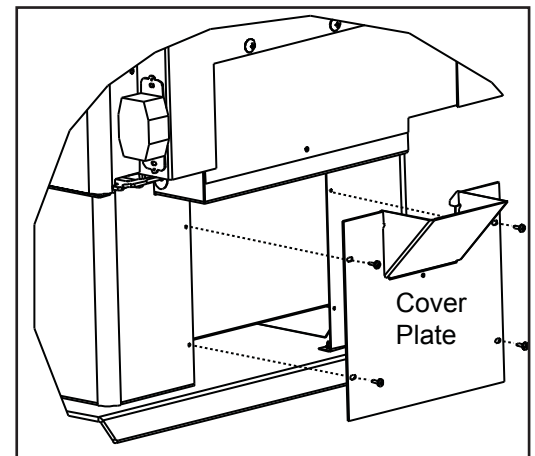


Figure 22.3

B. Leg Kit and Ash Removal Installation (ARS) for Step Top Uni-Body

NOTE: The Ash Removal System, must be installed first before installing the legs.

Begin installing the ARS System.

1. Follow steps 1 through 6 on **page 21**. See also **Figures 21.2 and 21.3**.

Installing Leg Kit

1. Remove leg mounting brackets packaged inside firebox.
2. Attach the 2 bottom screws of the mounting brackets to the bottom of the stove with 1/4"-20 Phillips head screws. These screws are located in the component pack .

Leave the bottom 2 screws loose so you can slide the ash pan assembly bottom slots over the screw heads. This allows the weight of the ash pan to rest on the screws while you are attaching the top 2 screws. Once the ash pan is attached, tighten all screws. **Figure 23.2**.

3. Loosely assemble bolts into the corner of the mounting brackets for leg attachment. **Figure 23.1**.
4. Slide legs onto mounting brackets making sure the legs are up against the bracket and secure with the bolts supplied. There are leveling bolts in 2 legs. These leveling bolts should be in opposite corners. **Figure 23.1**.
5. Carefully stand stove up and place in desired location. Do NOT tilt up on the cast iron legs, it could damage the legs.
6. Use leveling bolts on legs to stabilize and level stove.

Finishing the ARS Installation

1. Follow steps 1 through 3 on **page 22**. See also **Figure 22.2**.

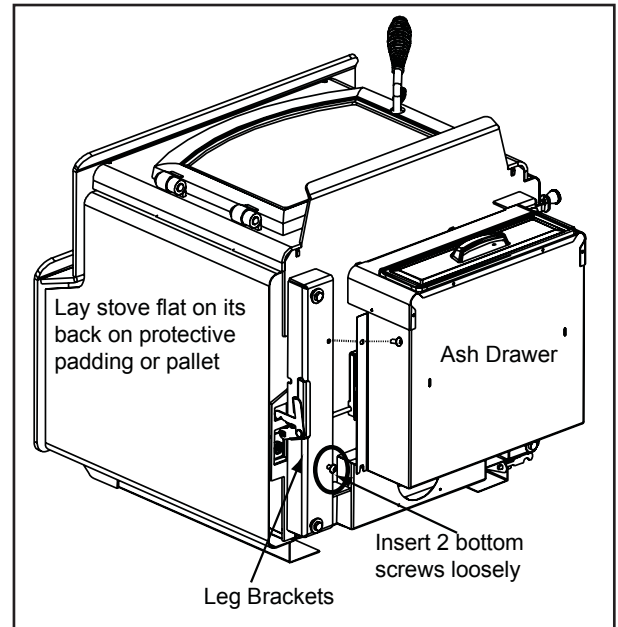


Figure 23.2

CAUTION

Do **NOT** tilt the unit on the cast iron legs.

- Tilting could lead to property damage.
- Lift the unit upright and place it into position on the floor protector.

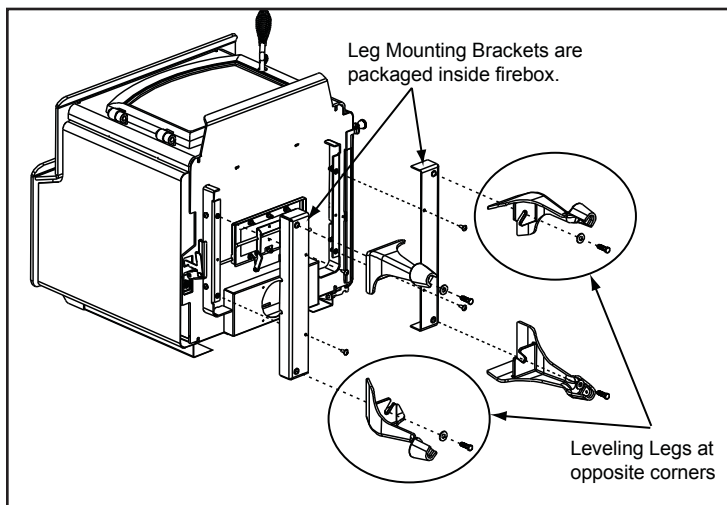


Figure 23.1

C. Door Handle Assembly

1. Install washer on door handle shaft.
2. Slide door handle through door.
3. Install second washer(s) as shown.
4. Install key in groove.
5. Align groove in latch cam with key; slide latch cam over shaft
6. Install locknut but do not overtighten, it must move smoothly.
7. Install spring handle turning in a counter-clockwise motion to desired location on door handle rod.

CAUTION

- Do NOT overtighten lock nut.
- Door handle needs to move smoothly.

D. Adjusting The Blower Speed Control

The blower speed control for this unit is adjusted at the factory, and normally does not require further adjustment.

NOTE: When the speed control is turned clockwise, it will click on to high speed. Continue to turn the speed control clockwise to decrease the speed. At full clockwise, the blower should blow gently, but should not stop.

1. With the appliance plugged in, turn the speed control knob to slow (full clockwise).
2. With a small screwdriver, adjust the blower speed by turning the adjustment mechanism through the hole on the side of the speed control.
3. Adjust the speed so the blower runs slowly, but does not stop. Turn clockwise to slow the blower and counterclockwise to increase the speed.

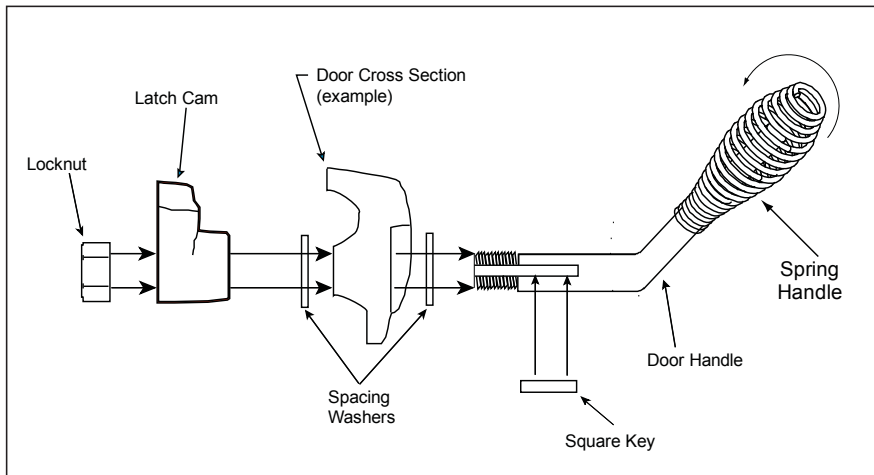




Figure 24.1

8 Operating Instructions

A. Over-Firing Your Appliance

 <h3 style="margin: 0;">WARNING</h3>
 <p>Fire Risk Do not over-fire. Over-firing may ignite creosote or will damage the stove and chimney. To prevent over-firing your stove, DO NOT:</p> <ul style="list-style-type: none"> • Use flammable liquids • Overload with wood • Burn trash or large amounts of scrap lumber • Permit too much air to the fire

1. Symptoms of Over-Firing

Symptoms of over-firing may include one or more of the following:

- Chimney connector or appliance glowing
- Roaring, rumbling noises
- Loud cracking or banging sounds
- Metal warping
- Chimney fire

2. What To Do if Your Stove is Over-Firing

- Immediately close the door and air controls to reduce air supply to the fire.
- If you suspect a chimney fire, call the fire department and evacuate your house.
- Contact your local chimney professional and have your stove and stove pipe inspected for any damage.
- Do not use your stove until the chimney professional informs you it is safe to do so.

Hearth & Home Technologies WILL NOT warranty stoves that exhibit evidence of over-firing. Evidence of over-firing includes, but is not limited to:

- Warped air tube
- Deteriorated refractory brick retainers
- Deteriorated baffle and other interior components

B. Wood Selection & Storage

Burn only dry seasoned wood. Store wood under cover, out of the rain and snow. Dry and well-seasoned wood will not only minimize the chance of creosote formation, but will give you the most efficient fire. Even dry wood contains at least 15% moisture by weight, and should be burned hot enough to keep the chimney hot for as long as it takes to dry the

B. Wood Selection & Storage (Cont'd)

wood out - about one hour. It is a waste of energy to burn unseasoned wood of any kind.

Dead wood lying on the forest floor should be considered wet, and requires full seasoning time. Standing dead wood can be considered to be about 2/3 seasoned. To tell if wood is dry enough to burn, check the ends of the logs. If there are cracks radiating in all directions from the center, it is dry. If your wood sizzles in the fire, even though the surface is dry, it may not be fully cured.

Splitting wood before it is stored reduces drying time. Wood should be stacked so that both ends of each piece are exposed to air, since more drying occurs through the cut ends than the sides. This is true even with wood that has been split. Store wood under cover, such as in a shed, or covered with a tarp, plastic, tar paper, sheets of scrap plywood, etc., as uncovered wood can absorb water from rain or snow, delaying the seasoning process.

C. Burning Process

In recent years there has been an increasing concern about air quality. Much of the blame for poor air quality has been placed on the burning of wood for home heating. In order to improve the situation, we at Quadra-Fire have developed cleaner-burning woodstoves that surpass the requirements for emissions established by our governing agencies. These woodstoves, like any other appliances, must be properly operated in order to insure that they perform the way they are designed to perform. Improper operation can turn most any wood stove into a smoldering environmental hazard.

1. Kindling or First Stage

It helps to know a little about the actual process of burning in order to understand what goes on inside a stove. The first stage of burning is called the kindling stage. In this stage, the wood is heated to a temperature high enough to evaporate the moisture which is present in all wood. The wood will reach the boiling point of water (212°F) and will not get any hotter until the water is evaporated. This process takes heat from the coals and tends to cool the appliance.

Fire requires three things to burn - fuel, air and heat. So, if heat is robbed from the appliance during the drying stage, the new load of wood has reduced the chances for a good clean burn. For this reason, it is always best to burn dry, seasoned firewood. When the wood isn't dry, you must open the air controls and burn at a high burn setting for a longer time to start it burning. The heat generated from the fire should be warming your home and establishing the flue draft, not evaporating the moisture out of wet, unseasoned wood, resulting in wasted heat.

2. Second Stage

The next stage of burning, the secondary stage, is the period when the wood gives off flammable gases which burn above the fuel with bright flames. During this stage of burning it is very important that the flames be maintained and not allowed to go out. This will ensure the cleanest possible fire. If the flames tend to go out, it is set too low for your burning conditions. The air control located at the upper right hand corner is used to adjust for burn rates. This is called the Burn Rate Air Control. **Figure 26.1.**

3. Final Stage

The final stage of burning is the charcoal stage. This occurs when the flammable gases have been mostly burned and only charcoal remains. This is a naturally clean portion of the burn. The coals burn with hot blue flames.

It is very important to reload your appliance while enough lively hot coals remain in order to provide the amount of heat needed to dry and rekindle the next load of wood. It is best to open the Burn Rate Air and Start-Up Air Controls **before reloading**. This livens up the coalbed and reduces excessive emissions (opacity/smoke). Open door slowly so that ash or smoke does not exit appliance through opening. You should also break up any large chunks and distribute the coals so that the new wood is laid on hot coals.

Air quality is important to all of us, and if we choose to use wood to heat our homes we should do so responsibly. To do this we need to learn to burn our stoves in the cleanest way possible. Doing this will allow us to continue using our wood stoves for many years to come.

D. Automatic Combustion Control (ACC)

Typically, when you build a fire, you open the air controls fully and monitor the fire to prevent it from going into an overfire situation and/or burning your wood up too quickly before you shut down the air controls to the desired burn rate. With the Automatic Combustion Control (ACC) system, you do not have to continually monitor the fire. Once you set the ACC system it will control the fire for you. Follow the instructions below to learn how to operate your stove with ease.

E. Air Controls

1. Start-Up Air Control

The Start-Up Air Control has two primary functions. The first function is to activate the Automatic Combustion Control system (ACC). This function is performed by sliding the control all the way back until it stops at the "HI" indicator on the label and then pulling forward to the front of the stove until it stops. This activates the ACC system and opens the front air channel and allows air to enter the front of the stove for approximately 25 minutes. The front air channel gradually shuts down until it is completely closed at the end of the 25 minutes. The fire is now controlled by the air supplied by the Burn Rate Air Control. This function should be performed each time you reload the stove. **Figure 26.1.**

The second function of the Start-Up Air Control is operation of the rear air system. The rear air is used primarily during a High Burn Rate. However, in some instances rear air is desired during normal operation to help with combustion of fuel towards the back of the firebox particularly when burning hardwoods. The rear air is controlled independently from the ACC system. Slide the Start-Up Air Control between the first and third marker as indicated on the label to allow rear air to enter the firebox. **Figure 26.1.**

2. Manual Timer Over-Ride

If you need to shut the ACC system off before it shuts itself off after 25 minutes (i.e. overfire situation), reach down to the bottom right rear corner and pull the lever toward you. **Figure 26.2.**

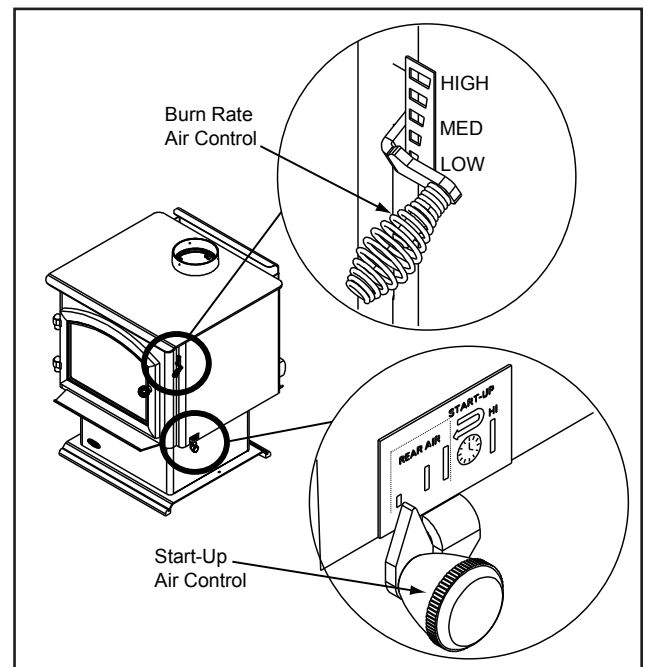


Figure 26.1

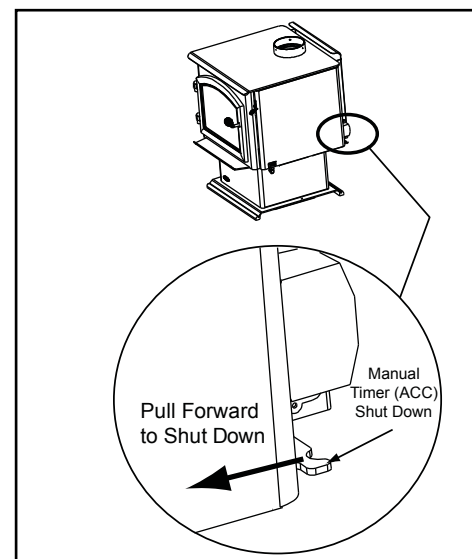


Figure 26.2

2. Burn Rate Air Control

This air supply enters at the upper front of the firebox, near the top of the glass door. This preheated air supplies the necessary fresh oxygen to mix with the unburned gases, helping to create second, third and fourth combustions. This air is regulated by the Burn Rate Air Control. There are four settings High, Medium-High, Medium-Low and Low. When the control is raised all the way up it is on the High setting and when pushed all the way down it is on the Low setting. **Figure 27.1.**

F. Burn Rates and Operating Efficiency

For maximum operating efficiency

1. This appliance has a timer system (ACC) that operates the stove at its maximum efficiency removing any guess work for the homeowner. Follow the instructions below for each burn rate for the Start-Up Air Control and Burn Rate Air Control. **Figure 27.1.**
2. Burn dry, well-seasoned wood.

Burn Rates


1. Starting a Fire and Reloading

Open both controls fully by raising the Burn Rate Air Control all the way up until it stops and slide the Start-Up Air Control back until it stops. After loading the stove with wood and starting the fire, set both controls to the desired setting by following the burn rate instructions below.

NOTE: These are approximate settings, and will vary with type of wood or chimney draft. Due to altitude and other environmental circumstances, this operational information is a guideline only.

2. High Burn Rate - Maximum Heat

Raise the Burn Rate Air Control all the way up until it stops (top marker) to a fully open position. Slide the Start-Up Air Control all the way back until it stops (HI marker) and leave it there. This setting over-rides the timer system (ACC) so you must monitor the fire closely while in this setting.



WARNING

Risk of Fire.

When set on High Burn Rate and over-riding the Automatic Combustion Control system an overfire situation can occur and may result in a chimney fire.

Overfiring will void the stove warranty.

3. Medium-High Burn Rate - 15,000 to 30,000 BTU/hr

Raise the Burn Rate Air Control all the way up until it stops (top marker) to a fully open position. Slide the Start-Up Air Control all the way back until it stops (HI marker) and then pull forward until it stops. This activates the timer system (ACC).

4. Medium-Low Burn Rate - 10,000 to 15,000 BTU/hr

Raise the Burn Rate Air Control up to the bottom of the middle marker and stop. Slide the Start-Up Air Control all the way back until it stops (HI marker) and then pull forward until it stops. This activates the timer system (ACC).

5. Low Burn Rate - Below 10,000 BTU/hr

Leave the Burn Rate Air Control at the bottom marker. Slide the Start-Up Air Control all the way back until it stops (HI marker) and then pull forward until it stops. This activates the timer system (ACC).

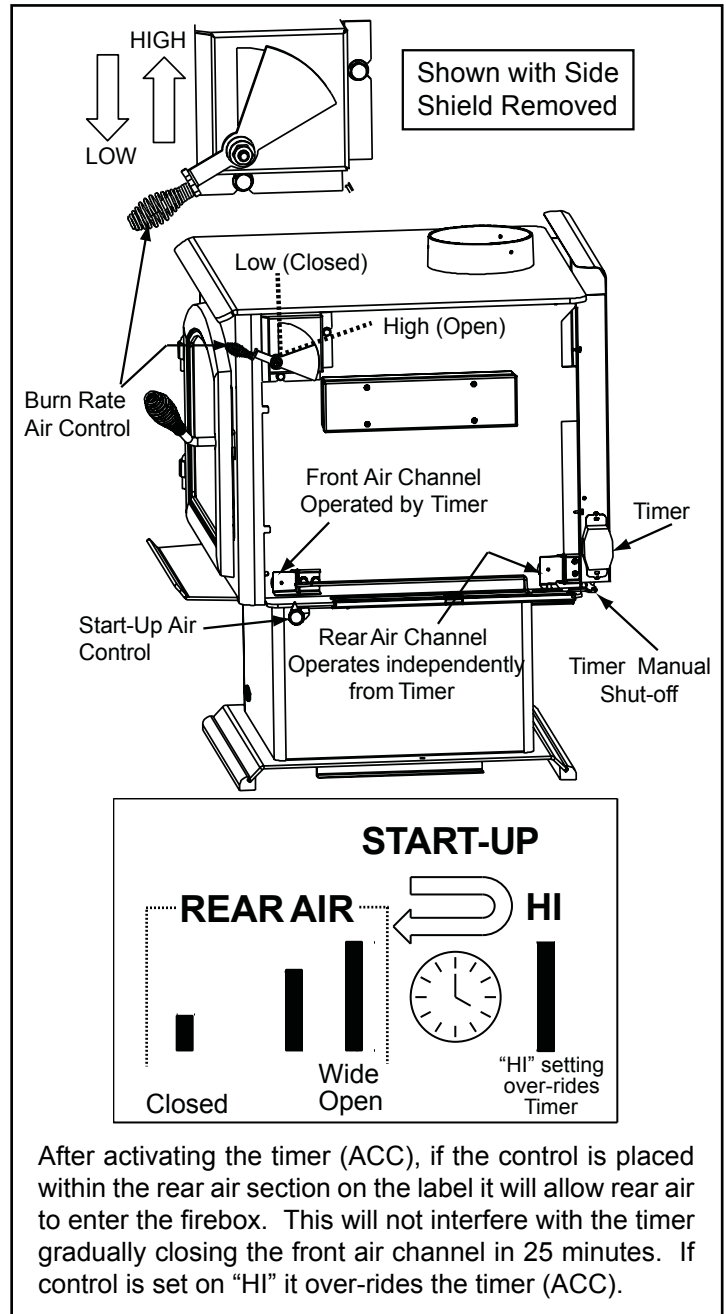


Figure 27.1

NOTE: Operate appliance on High Burn 15 minutes a day to help keep flue/chimney clean.

G. Building A Fire

Before lighting your first fire in the stove:

1. Confirm the baffle is correctly positioned. It should be even with the front tube and resting on all tubes. **Figure 28.1.**
2. Follow instructions on **page 32** for cleaning plated surfaces, if applicable.
3. Remove all labels from glass.

There are many ways to build a fire. The basic principle is to light easily-ignitable tinder or paper, which ignites the fast burning kindling, which in turn ignites the slow-burning firewood. Here is one method that works well:

1. Open the Burn Rate Air and Start-Up Air Controls fully.
2. Place several wads of crushed paper on the firebox floor. Heating the flue with slightly crumpled newspaper before adding kindling keeps smoke to a minimum.
3. Lay small dry sticks of kindling on top of the paper.
4. Make sure that no matches or other combustibles are in the immediate area of the appliance. Be sure the room is adequately ventilated and the flue unobstructed.
5. Light the paper in the appliance. **NEVER** light or rekindle fire with kerosene, gasoline, or charcoal lighter fluid; the results can be fatal.
6. Once the kindling is burning quickly, add several full-length logs 3 inches (76mm) or 4 inches (102mm) in diameter. Be careful not to smother the fire. Stack the pieces of wood carefully; near enough to keep each other hot, but far enough away from each other to allow adequate air flow between them.
7. Set the Burn Rate Air Control and activate the timer system (ACC).
8. When ready to reload, It is best to fully open both the Burn Rate Air and Start-up Air Controls **before reloading**. This livens up the coalbed and reduces excessive emissions (opacity/smoke). Open door slowly so that ash or smoke does not exit appliance through opening. Large logs burn slowly, holding a fire longer. Small logs burn fast and hot, giving quick heat.
9. As long as there are hot coals, repeating steps 6 through 8 will maintain a continuous fire throughout the season.

NOTE:

- Build fire on brick firebox floor.
- Do NOT use grates, andirons or other methods to support fuel.

It will adversely affect emissions.

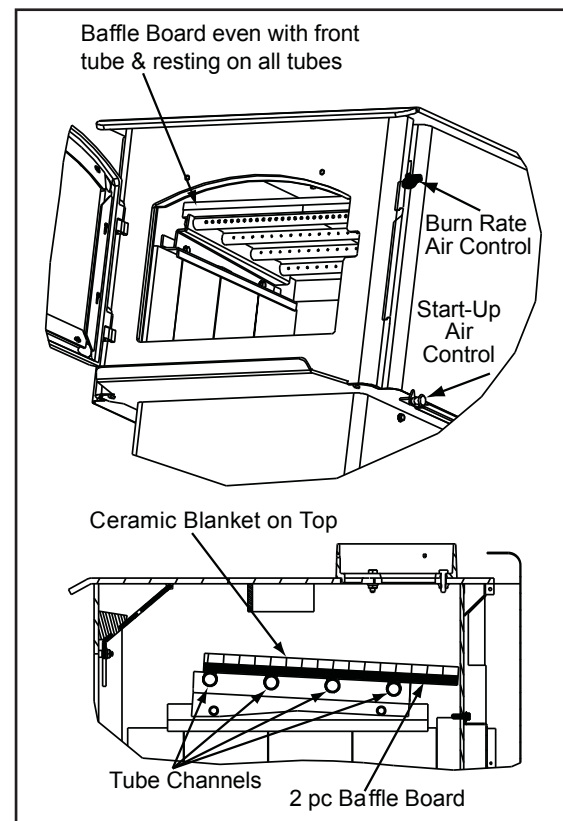


Figure 28.1

WARNING



Fire Risk

Do NOT store wood:

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

Do NOT operate appliance:

- With appliance door open.
- With ash removal system door open.


WARNING




Fire Risk.

- Do NOT burn wet or green wood.
 - Store wood in dry location.
 - Stack wood so both ends are exposed to air.
- Wet, unseasoned wood can cause accumulation of creosote.

H. Correct Baffle & Ceramic Blanket Placement

 **WARNING**

 **Fire Risk**
 Firebox damage due to improper baffle placement is not covered by warranty. Operate the wood burning appliance with the baffle in the correct position only.
 Not doing so could result in:

- Reduced efficiency
- Overheating the chimney
- Overheating the rear of the firebox
- Poor performance

Ensure correct baffle placement and replace baffle components if damaged or missing.

CAUTION

The baffle boards are FRAGILE. Use extreme caution when loading firewood to prevent:

- Cracking, breaking or damaging the baffle boards

DO NOT operate the stove without baffle boards

CORRECT POSITION

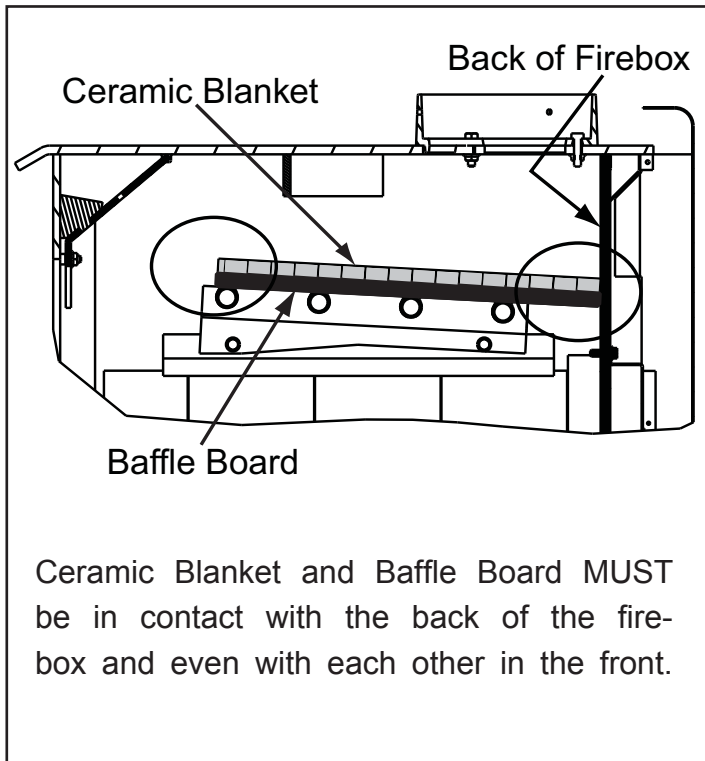
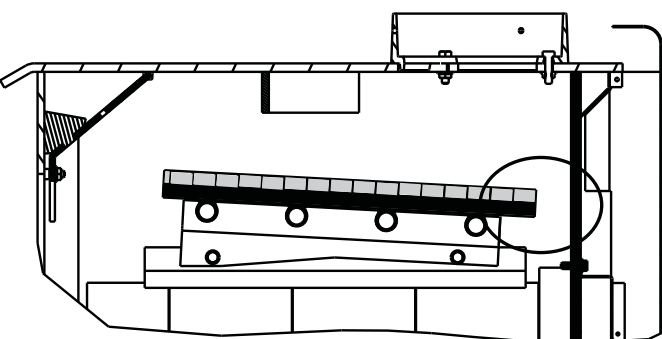
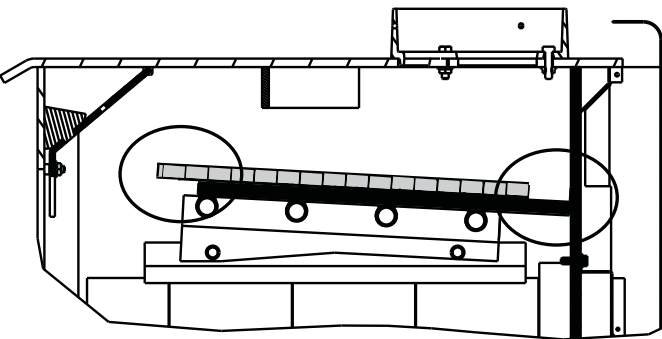


Figure 29.1

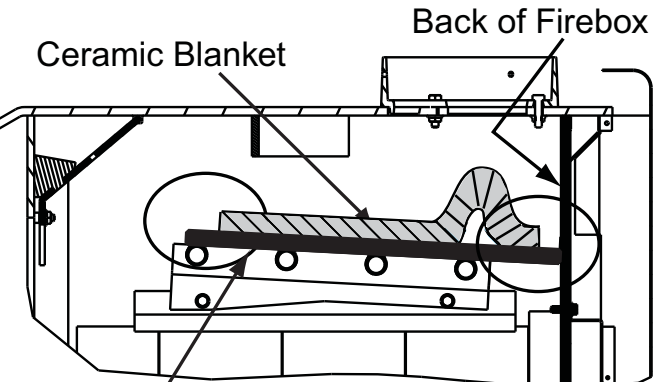
INCORRECT POSITIONS



Ceramic Blanket and Baffle Board are **NOT** in contact with the back of the firebox.



Ceramic Blanket is **NOT** in contact with the back of the firebox and **NOT** even with the Baffle Board in the front.



Ceramic Blanket is bunched up at the back of the firebox and **NOT** even with the Baffle Board in the front.

Figure 29.2

I. Blower Operating Instructions

NOTE: If your Quadra-Fire wood stove is equipped with an optional blower, you should follow these guidelines:

1. Initial (cold) start-up and all Burn Settings

The blower can be plugged in and turned on right away. The blower fan is turned on and off by a snap disc. When your stove has reached a certain temperature the blower will turn on and when your stove has cooled down to a certain temperature it will turn off.

NOTE: The blower can still be left on at all burn rates even if you have deactivated the snap disc with the manual over-ride knob. **See page 15.**

2. The blower is equipped with a speed control. Adjust the fan speed by turning the speed control clockwise to “Low” or counterclockwise to “High”.

3. Snap Disc Location

If you find the blower coming on and off at undesirable temperatures, relocate the snap disc to another location in the designated zone on the back of the appliance. **Figure 29.1.** There is a manual over-ride switch to deactivate the snap disc, if necessary. **See page 15.**

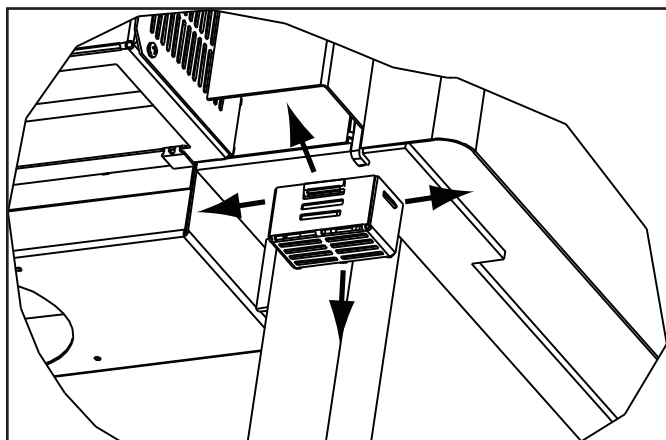


Figure 30.1

J. Opacity (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.

- DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA OR ENGINE OIL.
- Do NOT burn treated wood or wood with salt (driftwood).
- May generate carbon monoxide if burn material other than wood.

May result in illness or possible death.

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

CAUTION

Odors and vapors released during initial operation.

- Curing of high temperature paint.
- Open windows for air circulation.

Odors may be irritating to sensitive individuals.

K. Frequently Asked Questions

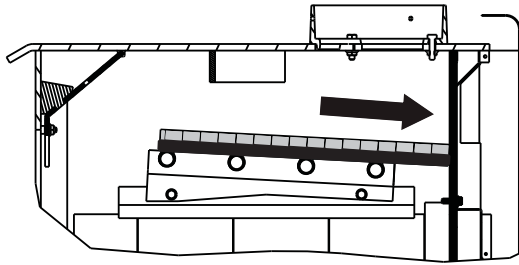
ISSUES	SOLUTIONS
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Whirring sound	If the optional blower has been installed, the blower produces a whirring sound which increases in volume as the speed is increased.

9

Maintaining & Servicing Your Appliance

A. Quick Reference Maintenance Guide

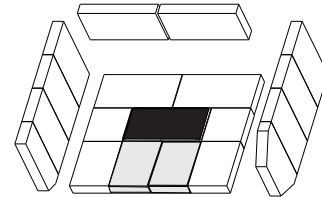
BAFFLE & BLANKET PLACEMENT



Baffle and blanket placement is critical to heat output, efficiency and overall life of the unit. Make sure the baffle is pushed all of the way to the back of the firebox and the blanket is laying flat.

INSPECT FIREBRICKS & ASH COVER

(AFTER EACH CLEANING)



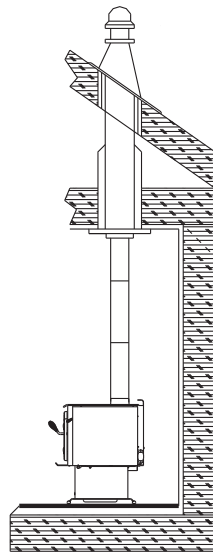
Step Top Models Only

Firebrick is designed to protect your firebox. Replace firebricks that are crumbling, cracked or broken. If you have an optional ash door, check to make sure the door is closing properly.

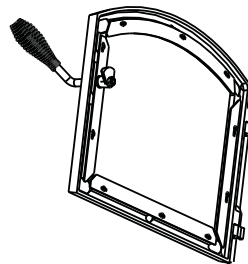
CHIMNEY & CAP INSPECTION

The chimney and chimney cap must be inspected for soot and creosote during the burn season. This will prevent pipe blockage, poor draft, and chimney fires.

Always burn dry wood to help prevent cap blockage and creosote build-up.

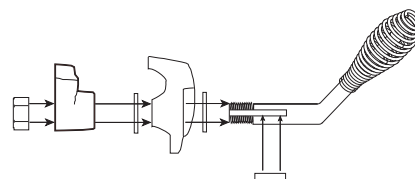


DOOR & LATCH CHECK



Keeping the door and glass gasket in good shape will maintain good burn times on a low burn setting.

Check the glass frame for loose screws to prevent air leakage.



Check the door latch for proper adjustment. This is very important especially after the door rope has formed to the stove face.

Start the first inspection of your unit after the first 2 months of use, or if performance changes, and adjust your schedule accordingly.

Maintenance is required for safe operation and must be performed to maintain your warranty.

These are generic drawings and may not represent your model.

A. General Maintenance

1. Creosote (Chimney) Cleaning

- **Frequency:** Every 2 months during heating season or as recommended by a certified chimney sweep; more frequently if chimney exceeds or is under 14-16 ft. (measured from bottom of appliance)
- **By:** Certified Chimney Sweep

Remove all ash from the firebox and extinguish all hot embers before disposal. Allow the appliance to cool completely. Disconnect flue pipe or remove baffle and ceramic blanket from appliance before cleaning chimney. Otherwise residue can pile up on top of the baffle and ceramic blanket and the appliance will not work properly. (See Baffle Removal on **page 36**). Close the door tightly. The creosote or soot should be removed with a brush specifically designed for the type of chimney in use. Clean out fallen ashes from the firebox.



It is also recommended that before each heating season the entire system be professionally inspected, cleaned and repaired if necessary.



Inspection: Inspect the system at the appliance connection and at the chimney top. Cooler surfaces tend to build creosote deposits quicker, so it is important to check the chimney from the top as well as from the bottom.

Formation and Need For Removal: When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote.

The creosote vapors condense in the relatively cool chimney flue of a newly-started or a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote creates an extremely hot fire which may damage the chimney or even destroy the house.


The chimney connector and chimney should be inspected once every 2 months during the heating season to determine if a creosote or soot buildup has occurred. If creosote or soot has accumulated, it should be removed to reduce the risk of a chimney fire.

	WARNING
	<p>Fire Risk. Prevent creosote buildup.</p> <ul style="list-style-type: none"> • Inspect chimney connector and chimney once every two months during heating season. • Remove creosote to reduce risk of chimney fire. • Ignited creosote is extremely HOT.

	WARNING
	<p>Fire Risk.</p> <ul style="list-style-type: none"> • Do not use chimney cleaners or flame colorants in your appliance. <p>Will corrode pipe.</p>

3. Ash Removal System (ARS) Operating and Cleaning

- **Frequency:** As necessary
- **By:** Homeowner



		CAUTION
<p>Injury Risk.</p> <ul style="list-style-type: none"> • Gloves recommended • May have sharp edges 		

- The stove and ashes must be completely cooled down before using the Ash Removal System. Reach down and locate the ash removal door handle under the left side of the stove in the center. Squeeze the handle and push all the way back. A magnet will hold the handle in place which in turn holds the ash door open.
- Clean ash down through the ash removal system grate into the drawer below. If there are large pieces in the ashes, you can remove the grate before brushing the ash into the drawer.

Make sure all ash is removed from the top of ARS door. Lift up the grate and inspect the top of the door to ensure all ash has been removed. You can rapidly move the ARS latch handle up and down to help remove any ash from the door. Use a small brush to clean off the top of the door if any ash remains.

Be sure to replace the grate before operating the stove. Remember to leave 1/4 to 1/2 inch (6-13mm) of ash on the firebox floor to act as a natural grate, allowing air to flow freely underneath wood.

- Close the door handle, you will hear a “click” when it closes. The ash drawer will not pull out if the door handle is left in the open position. **Wear gloves to remove the drawer.** Dispose of the ashes following the directions below.


	WARNING
	<p>Fire Risk Injury Risk</p> <p>Make sure Ash Removal System door is sealed tight against the gasket.</p> <p>Air leakage may cause:</p> <ul style="list-style-type: none"> • Over-fire condition. • Flame and/or smoke spillage. • Wood to burn too fast.

3. Disposal of Ashes

- **Frequency:** When ash is within 1-3/4 in. (44mm) of firebox lip
- **By:** Homeowner

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

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

	<p>WARNING</p>
<p>Fire Risk. Disposal of Ashes</p> <ul style="list-style-type: none"> • Ashes should be placed in metal container with tight fitting lid. • Do not place metal container on combustible surface. • Ashes should be retained in closed container until all cinders have thoroughly cooled. 	

4. Cleaning Plated Surfaces

- **Frequency:** Prior to first burn and then as desired
- **By:** Homeowner

Clean all the fingerprints and oils from plated surfaces **BEFORE** firing the appliance for the first time. If not cleaned properly before lighting your first fire, the oils can cause permanent markings on the plating.

After the plating is cured, the oils will not affect the finish and little maintenance is required. Wipe clean as needed.

<p>CAUTION</p>
<ul style="list-style-type: none"> • Do not use polishes with abrasives. <p>It will scratch plated surfaces.</p>

5. Glass Cleaning

- **Frequency:** As desired
- **By:** Homeowner

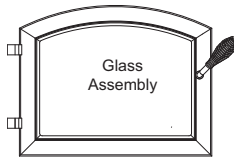
Clean glass with a non-abrasive glass cleaner. Abrasive cleaners may scratch and cause glass to crack. If the deposits on the glass are not very heavy, normal glass cleaners work well. Heavier deposits may be removed by using a damp cloth dipped in wood ashes or by using a commercially available oven cleaner.

After using an oven cleaner, it is advisable to remove any residue with a glass cleaner or soap and water. Oven cleaner left on during the next firing can permanently stain the glass and damage the finish on plated metal surfaces.

A portion of the combustion air entering the firebox is deflected down over the inside of the door glass. This air flow “washes” the glass, helping to keep smoke from adhering to its surface.

When operated at a low burn rate, less air will be flowing over the glass and the smokey, relatively cool condition of a low fire will cause the glass to become coated.

Operating the appliance with the Burn Rate Air Control and Start-Up Air Control all the way open for 15-20 minutes should remove the built up coating.

<p>CAUTION</p>	
	<p>Handle glass assembly with care.</p> <p>When cleaning glass:</p> <ul style="list-style-type: none"> • Avoid striking, scratching or slamming glass. • Do NOT clean glass when hot.
<ul style="list-style-type: none"> • Do NOT use abrasive cleaners. • Use a hard water deposit glass cleaner on white film. • Use commercial oven cleaner on heavier deposits. • Remove all residue of oven cleaner or will permanently stain glass on next firing. • Refer to maintenance instructions. 	

B. Glass Replacement

1. Ensure that the fire is out and the appliance is cool to the touch.
2. Protect a table or counter top with padding or towels. Protect your hands and wear gloves to prevent injury.
3. Remove the door with the broken glass by lifting the door up and off of the hinges.
4. Lay door face down on a table or counter making sure the handle hangs over the edge so the door lays flat, on a soft surface.
5. Remove the screws from each glass retainer and remove the glass. (If screws are difficult to remove, soak with penetrating oil first).
6. Center the glass with edges evenly overlapping the opening in the door, (i.e. same space top and bottom, left and right sides).
7. Replace the glass retainers. Be careful not to cross thread the screws.
8. Tighten each retainer just a few turns until each is secured. Check again for centering of glass in door frame. Continue to tighten each retainer alternately, a few turns at a time, until the glass is secure. **DO NOT OVERTIGHTEN.**
9. Replace the door on the appliance.

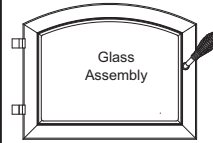
Quadra-Fire stoves are equipped with ceramic super heat-resistant glass, which can only be broken by impact or misuse.

Do not slam stove door or impact the glass. When closing door, make sure that logs do not protrude against the glass. Inspect glass regularly.

If you find a crack or break, immediately put the fire out and return the door to your dealer for replacement of glass before further use.

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 & door assembly removed.
- Do NOT operate with glass cracked, broken or scratched.

WARNING



Fire Risk.



Injury Risk.

- Use only glass specified in manual.
- **DO NOT REPLACE** with any other material. Glass breakage will occur.

C. Firebrick Replacement

Replace the firebrick if they become crumbly and/or if there is a 1/4 inch (6.35mm) gap between the bricks.

Inspect the firebrick after each ash removal.

The firebox is lined with high quality firebrick, which has exceptional insulating properties. There is no need to use a grate; simply build a fire on the firebox floor. Do not operate appliance without firebrick.

1. After the coals have completely cooled, remove all old brick and ash from unit and vacuum firebox.
2. Remove new brick set from box and lay out to diagram shown.
3. Lay bottom bricks in unit.
4. Install rear bricks on the top of the bottom bricks. Slide top of bricks under clip on back of firebox wall and push bottom of brick back.
5. Install side bricks. Slide top of brick under clips on side of firebox and push the bottom of the brick until it is flush with the side of the appliance.

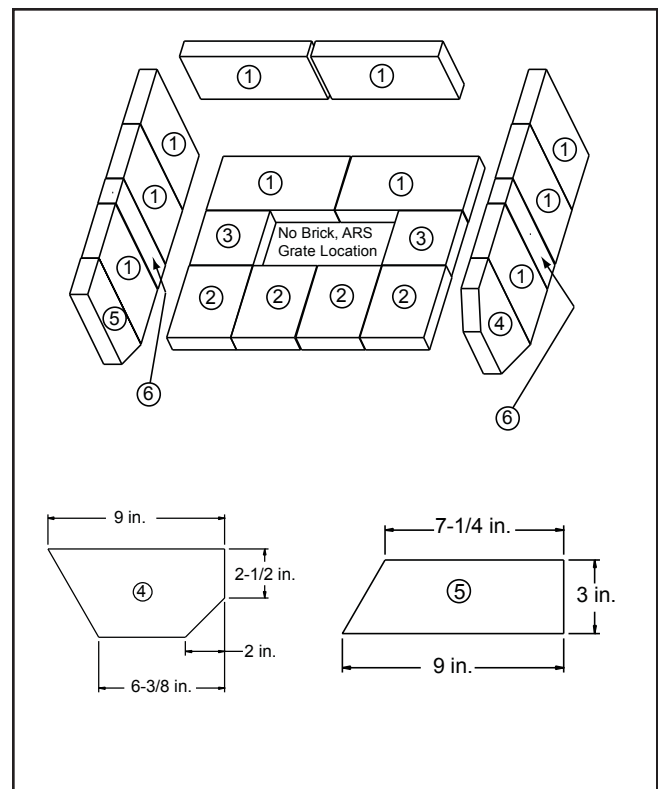
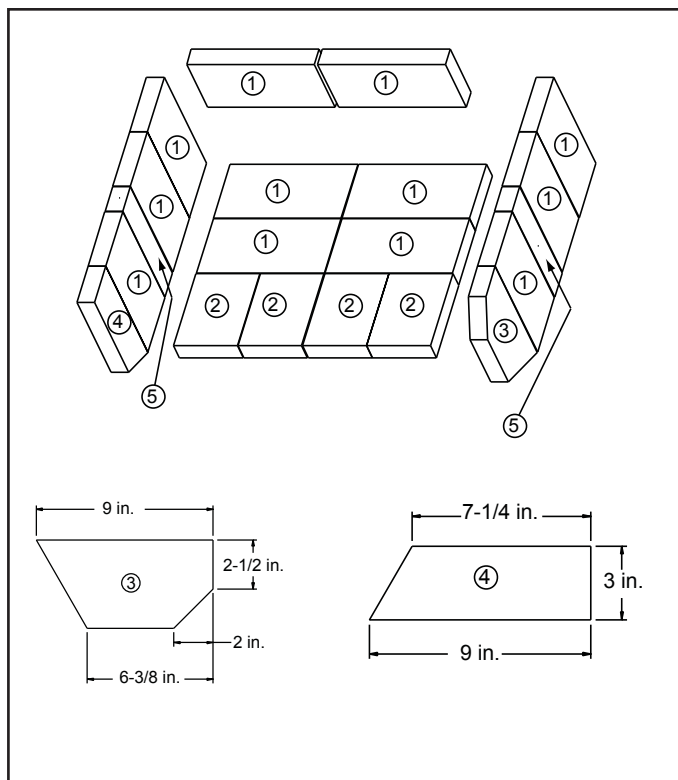


Figure 35.2 - 4300 Step Top Brick Assembly

No.	Brick Size	Qty
1	9 x 4-1/2 x 1-1/4	10
2	6 x 4-1/2	4
3	4-1/2 x 4-1/2 x 1-1/4	2
4	9 x 4-1/2 with angles	1
5	9 x 3 with angle	1
6	9 x 2 x 1-1/4	2

Use Part 832-0550 when ordering individual brick. Provide brick dimension or copy this page, mark the desired brick and take it to your authorized dealer.

NOTE: The Ash Removal System is only available for the Step Top Model and not for the Millennium Model.

Figure 35.1 - 4300 Millennium Top Brick Assembly

No.	Brick Size	Qty
1	9 x 4-1/2 x 1-1/4	12
2	6 x 4-1/2	4
3	9 x 4-1/2 with angles	1
4	9 x 3 with angle	1
5	9 x 2 x 1-1/4	2

D. Baffle Removal

1. Remove all ash from the firebox, and extinguish all hot embers before disposal into a metal container.
2. The baffle board has 2 pieces. With the ceramic blanket still in place, slide one baffle piece over the top of other one and pull out top piece through the door opening and then remove bottom baffle piece. **Figure 36.1.**
3. Remove the ceramic blanket.
4. Re-install the baffle pieces one piece at a time. Be sure the baffle boards are even with the front manifold tube and is resting on all tubes. **Figure 29.1 on page 29.**
5. To re-install the ceramic blanket, it is easier to fold it in half first. Place on top of baffle board, open up and flatten and smooth out the blanket. Re-check the baffle board for correct positioning. **Figure 36.2.**



Figure 36.1 - Baffle



Figure 36.2 - Ceramic Blanket

E. Snap Disc Replacement

1. Locate the snap disc bracket assembly at the bottom left rear corner of the stove. **Figure 36.3.**
2. A magnet holds the bracket to the stove. Pull the bracket down away from the stove to expose the snap disc.
3. Pull the snap disc and spade connectors up and out of bracket as shown in **Figure 36.4.**
4. Using a Phillips head screw driver, remove the 2 screws from the snap disc and then remove the snap disc from the spade connectors. Replace with new snap disc and re-connect to spade connectors.
5. Push the snap disc and spade connectors back inside bracket and re-attach the bracket to the stove.

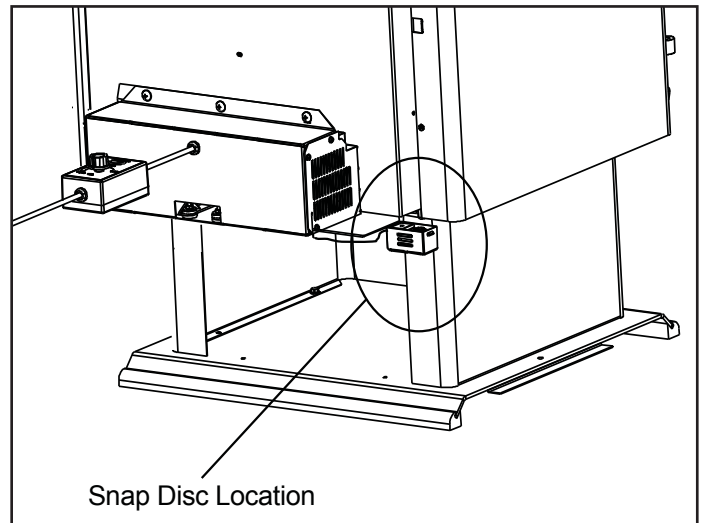


Figure 36.3

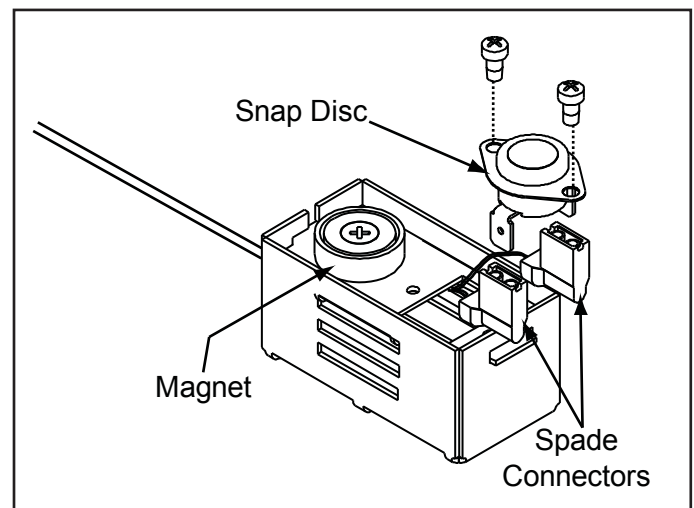


Figure 36.4

F. Tube Channel Assembly Replacement

Removing Tube Channel Assembly

1. Remove the right side shield by removing 2 screws in the back using a Phillips head screw driver.
2. Remove 4 screws from channel access cover and remove cover.
3. Locate 2 channel nuts inside of chamber and remove using a 7/16 socket wrench. Slide out tube channel assembly.

NOTE: Soak the bolts with penetrating oil for at least 15 minutes before trying to remove them.

Replacing Tube Channel Assembly

1. Slide one gasket on each tube first.
2. Slide the tube channel assembly into side of firebox and insert each tube into the corresponding hole in the tube channel rack starting with the back hole first.
3. Make sure tube channel assembly is flush against the side of the stove and secure with channel nuts.
4. Re-install channel cover and side shield.

NOTE: Service Space
 In order to replace the tube channel assembly a clearance of 19 inches (483mm) is required on the right side of stove in order to remove the tubes with the stove in place.
 If space is not available, the stove will have to be disconnected from the chimney to proceed with the tube replacement.

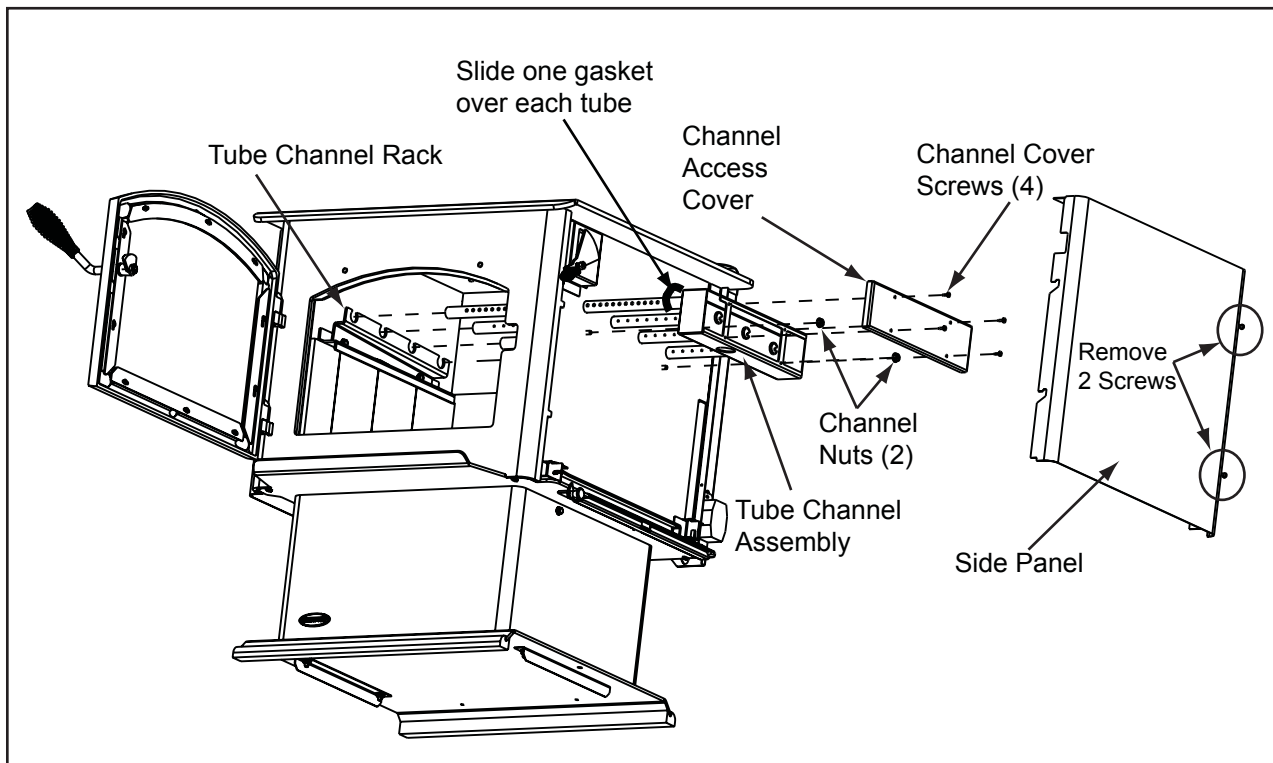


Figure 37.1

10

Troubleshooting

With proper installation, operation, and maintenance your woodstove 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.

Start Fire Problems	Possible Cause	Solution
Can't get fire started Excessive smoke or spillage Burns too slowly Smolders, sizzles	Not enough kindling/paper or no kindling/paper	Use dry kindling, more paper. Arrange kindling & wood for air movement.
	Not enough air for fire to ignite	Check for restricted cap/shroud
		Open outside air kit (if installed).
		Check for flue blockage.
		Pre-warm flue before starting fire (refer to starting fire section).
		Check for adequate vent height (refer to chimney assembly section).
	Open window below the appliance towards the wind.	
	Wood condition is too wet, too large	Use dry, seasoned wood (refer to wood fuel section).
	Bed of coals not established before adding wood	Start with paper & kindling to establish bed of coals (refer to starting 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).	
	Open window below the appliance towards the wind.	
Fire burns too fast	Extremely dry or soft wood	Mix in hardwood.
		Mix in less seasoned wood after fire is established (refer to wood fuel section).
	Overdrafting	Check for correct vent height; too much vertical height creates overdrafting.
		Check location of vent termination (refer to chimney requirements section).
	ARS door may not be closed completely	Handle set screw rotated on ash door rod - Follow installation instructions
Ash left on ARS door	No seal is created. Clean off top of ARS door for complete seal.	

11

Reference Materials

A. Exploded Drawings

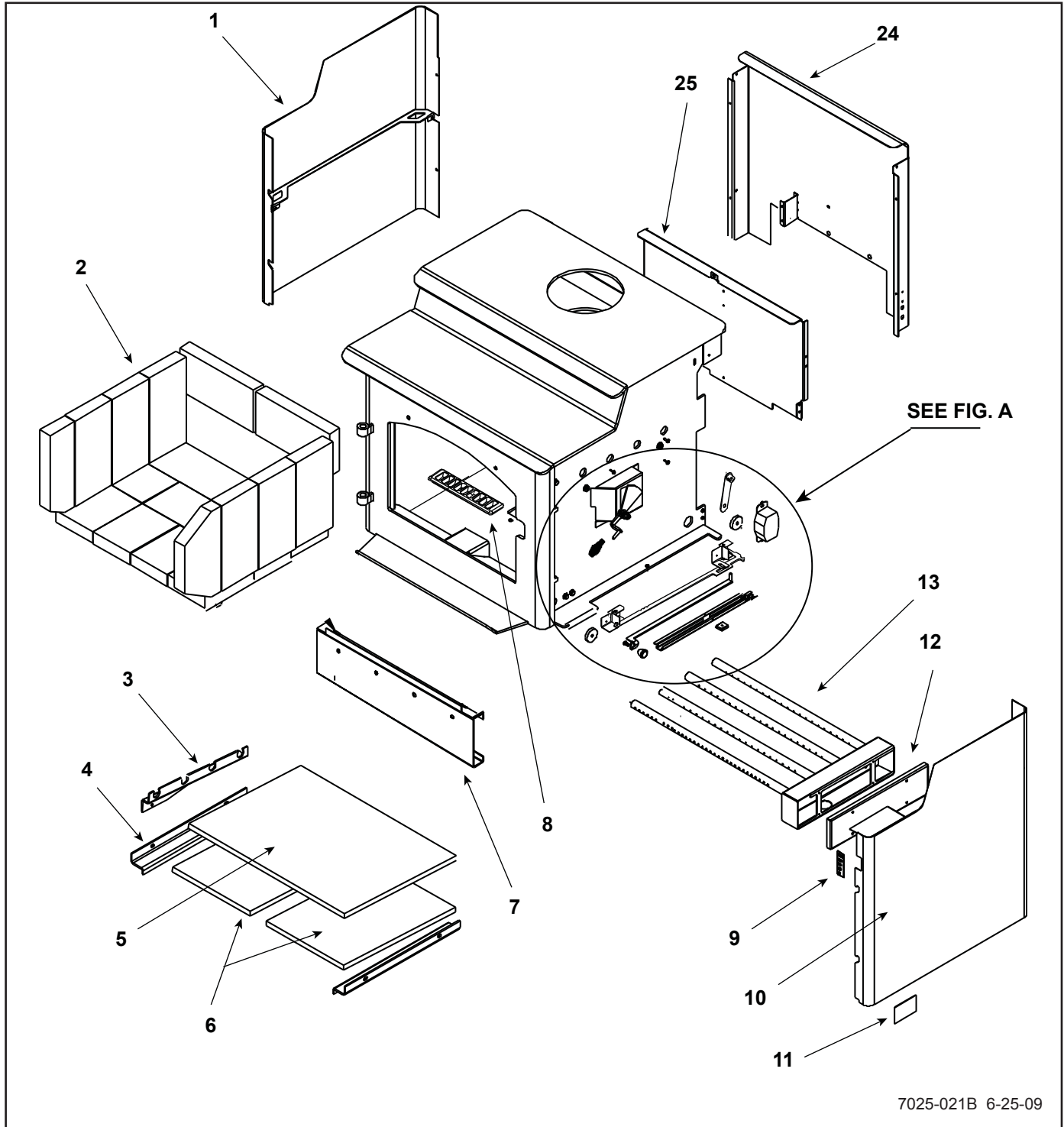


Figure 39.1

A. Exploded Drawings (Cont'd)

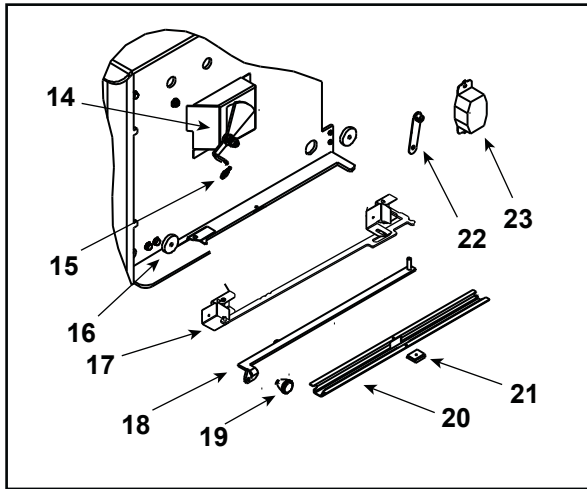


FIGURE A

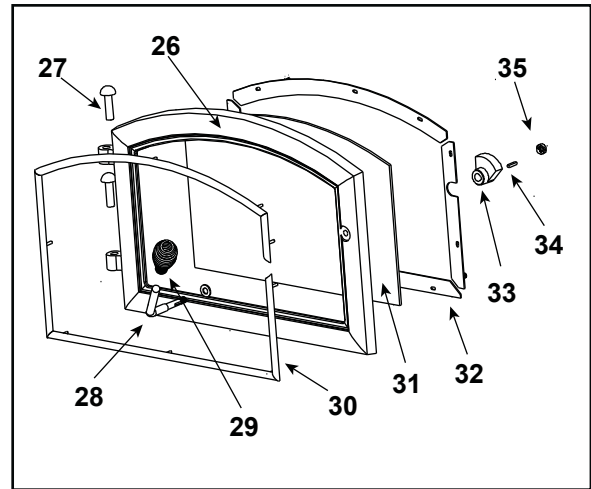


FIGURE B

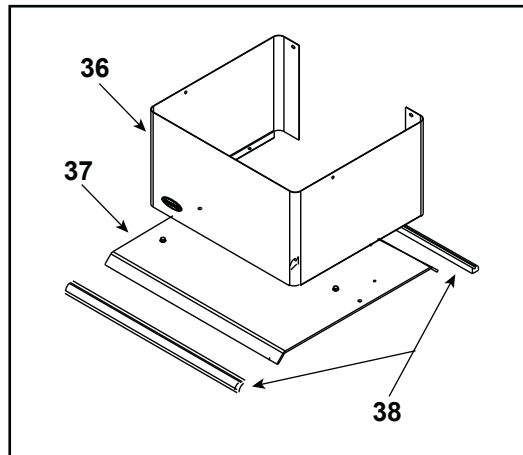


FIGURE C

MILLENNIUM

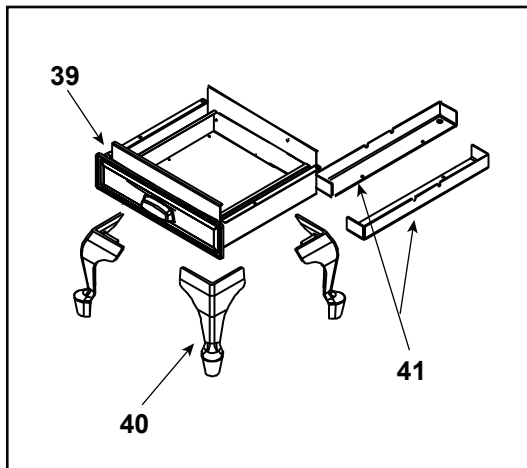


FIGURE D

STEP TOP UNIBODY

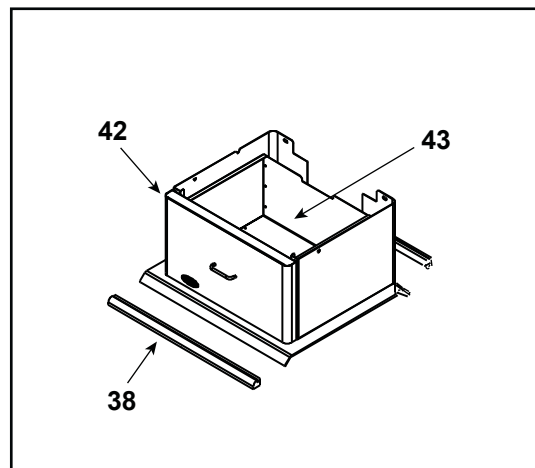


FIGURE E

STEP TOP UNIBODY

IMPORTANT: THIS IS DATED INFORMATION

When requesting service or replacement parts for your appliance please provide model number and serial number. All parts listed may be orderd from an authorized dealer.

HOW TO ORDER

To order the entire assembly, order the top line part number only.
To order an individual part from an assembly, order the part(s) listed in the indented portion.



Item	Description	Comments	Part Number	Stocked at Depot
1	Panel Assembly, Side, Left	Millennium	7037-007	
		Step-Top	7037-011	
2	Brick Assembly	Millennium	SRV7037-003	
		Step-Top	SRV7037-012	
	Brick, Single	Qty: 1	832-0550	Y
	Brick, Uncut, Set Of 6	Qty: 6	832-3040	Y
3	Tube Support Rack		7033-148	
4	Brick Retainer		7033-149	
5	Ceramic Fiber Blanket, 1/2 " Thick		832-3390	Y
6	Baffle Board	Qty: 2, 9-1/2" W x 15-3/4" H	SRV7037-112	Y
7	Rear Channel Assembly		7033-002	Y
8	Ars Grate	Step-Top	7033-173	
9	Label, Burn Rate		7033-160	
10	Panel Assembly, Side, Right	Millennium	7037-006	
		Step-Top	7037-010	
11	Label, Start-Up, Acc		7033-166	
12	Tube Channel Top	Tube Channel Access Cover	SRV7033-237	
13	Tube, Channel Assembly	Manifold Tubes	SRV7033-023	Y
14	Burn Rate Control Assembly		7037-004	Y
15	Spring Handle, 1/4"	Gold	832-0630	Y
		Nickel	250-8340	Y
16	Door Gasket	Front & Rear Air Timer Doors	7033-282	Y
17	Timer Air Control Assembly		SRV7037-018	Y
	Door Gasket	Front & Rear Air Timer Doors	7033-282	Y
	Rear Air Door Assembly		7037-013	Y
18	Rear Air Control Arm Assembly		7037-005	Y
19	Knob	Start-Up Control Knob	7000-343	
20	Air Control Rod Guide		7033-210	
21	Latch, Magnet	For Air Control	229-0631	
22	Timer Arm Assembly		7033-034	Y
23	Timer (Only) Replacement Assembly		SRV480-1940	Y
24	Air Channel, Convection W/Bracket	Retain Original Serial Number Label	SRV7033-144	
25	Air Supply Back		SRV7033-134	
26	Door Assembly	Black	832-1092	
		Gold Trim	832-1912	
		Nickel Trim	DR-31/43NL	
27	Hinge Pins, 1/2"	Qty: 2 Gold	832-0250	
		Qty: 2 Nickel	430-5320	

HOW TO ORDER

To order the entire assembly, order the top line part number only.

To order an individual part from an assembly, order the part(s) listed in the indented portion.



Item	Description	Comments	Part Number	Stocked at Depot
28	Door Handle Only		430-1131	
29	Spring Handle, 1/2"	Gold	832-0620	Y
		Nickel	250-8330	Y
30	Trim, Ring, Door	Gold Trim	430-2682	
		Nickel Trim	430-5340	
31	Door Glass Assembly	15.63 W x 11.50 H	7000-012	Y
32	Glass Frame Set	Qty: 4 Pc	832-0350	
33	Cam Latch		430-1141	
34	Key, Cam Latch		430-1151	
35	Nut, Locking Door Handle	Qty: 24	226-0100/24	Y
	Gasket, Glass Tape, 3/4 "	Qty: 5 Ft, Field cut to Size	832-0460	Y
	Rope, Door, 3/4" X 84"	Qty: 7 Ft, Field Cut to Size	832-1680	Y
	Screw, Flat Head Philips 8-32X1/2	Qty: 10	832-0860	
	Washer, Sae, 3/8 (3 Ea)	Qty: 3	832-0990	
36	Pedestal Riser	Millennium	7033-207	
37	Pedestal Base	Millennium	7033-163	
38	Strip, Oak Trim	Qty: 2	832-0560	
39	Ash Pan, Front Assembly Leg	Step-Top	7033-008	
40	Legs, Queen Anne	Black	831-1240	
		Gold	831-1250	
		Nickel	LEGS-QANL	
41	Leg Mount Kit	Step-Top	SRV7037-132	
42	Pedestal Assembly	Step-Top	7033-013	
43	Ashpan Assembly	Step-Top	7033-010	
	Ash Pan Leg Ars	Step-Top	7033-050	
	Ars, Door Assembly	Step-Top	SRV7033-015	Y
	Ash Pan Door Handle	Step-Top	7033-274	
	Blower Control Box W/Switch		SRV7000-194	Y
	Blower, Convection	Replacement Blower	812-4900	Y
	Channel, Ash Removal	Step-Top	7033-172	
	Component Pack (Includes Gold Spring Handles (1) 1/2 Inch & (2) 1/4 Inch, (2) Gold Hinge Pins, Quadra-Fire Logo	For Black and Gold Door Assemblies	436-5350	
	Hinge Pins, 1/2"	Qty: 2, Gold	832-0250	
	Logo, Quadra-Fire	Gold	200-3180	
	Spring Handle, 1/2"	Qty: 1 Gold	832-0620	Y
	Spring Handle, 1/4"	Qty: 2 Gold	832-0630	Y

HOW TO ORDER

To order the entire assembly, order the top line part number only.

To order an individual part from an assembly, order the part(s) listed in the indented portion.



Item	Description	Comments	Part Number	Stocked at Depot
	Component Pack (Includes Nickel Spring Handles (1) 1/2 Inch & (2) 1/4 Inch, (2) Nickel Hinge Pins, Quadra-Fire Logo)	For Nickel Door Assembly	436-5360	
	Hinge Pins, 1/2"	Qty: 2 Nickel	430-5320	
	Logo, Quadra-Fire	Nickel	200-3240	
	Spring Handle, 1/2"	Qty: 1 Nickel	250-8330	Y
	Spring Handle, 1/4"	Qty: 1 Nickel	250-8340	Y
	Component Pack (Includes Touch-Up Paint, Gold Spring Handles (1) 1/2 Inch & (2) 1/4 Inch, Trimount Plug, Owners Manual, Warranty Card)	Millennium, Black & Gold Trim Model	7037-014	
	Paint Touch-Up		7000-304	
	Plug, Trimount, .250"	Qty: 24	229-0880/24	Y
	Spring Handle, 1/2"		832-0620	Y
	Spring Handle, 1/4"		832-0630	Y
	Component Pack (Includes Touch-Up Paint, Nickel Spring Handles (1) 1/2 Inch & (2) 1/4 Inch, Trimount Plug, Owners Manual, Warranty Card)	Millennium, Nickel Trim Model	7037-015	
	Paint Touch-Up		7000-304	
	Plug, Trimount, .250"	Qty: 24	229-0880/24	Y
	Spring Handle, 1/2"	Qty: 1 Nickel	250-8330	Y
	Spring Handle, 1/4"	Qty: 1 Nickel	250-8340	Y
	Component Pack (Includes Touch-Up Paint, Owners Manual, Warranty Card)	Step-Top Model, Spring Handles Included in Door Assembly	7037-017	
	Paint Touch-Up		7000-304	
	Door Handle Assembly		832-0540	Y
	Flue Collar	Millennium	SRV7000-302	
	Gasket, Ars	Step-Top	SRV7033-296	Y
	Latch, Handle Assembly, Ash Removal	Step-Top	SRV7033-047	Y
	Logo, Quadra-Fire	Gold	200-3180	
		Nickel	200-3240	
	Magnet Round		SRV7000-140	Y
	Outside Air Collar Assembly		7033-039	
	Outside Air Cover Plate Assembly		SRV7033-041	Y
	Outside Air Shield		33271	Y
	Snap Disc Bracket Assembly		7033-036	
	Snap Disc, # 1, Convection Blower		SRV230-0470	Y
	Upgrade, Door, Nickel	Nickel Spring Handles, Hinge Pins & Logo	UK-DRNL	
	Wire Harness (Blower)		7033-262	

HOW TO ORDER

To order the entire assembly, order the top line part number only.

To order an individual part from an assembly, order the part(s) listed in the indented portion.



Stocked
at Depot

Item	Description	Comments	Part Number	Stocked at Depot
ACCESSORIES				
	Blower Assembly		BK-ACC	
	Blower Control Box W/Switch		SRV7000-194	Y
	Component Pack		SRV7033-051	
	Snap Disc Bracket Assembly		7033-036	
	Snap Disc, # 1, Convection Blower		SRV230-0470	Y
	Wire Harness (Blower)		7033-262	
	Leg Kit & Ash Removal System	Black	LEG-3143-BK	
		Gold	LEG-3143-GD	
		Nickel	LEG-3143-NL	
	Ars, Door Assembly	Step-Top	SRV7033-015	Y
	Ash Pan Leg Ars	Step-Top	7033-050	
	Ash Pan, Front Assembly Leg	Step-Top	7033-008	
	Component Pack, Leg Step Top (Includes Gasket For Ash Removal, Magnet & Fasteners)	For Leg Step-Top	7033-048	
	Gasket, Ars	Step-Top	SRV7033-296	Y
	Latch, Handle Assembly, Ash Removal		SRV7033-047	Y
	Magnet Round		SRV7000-140	Y
	Legs, Queen Anne	Black	831-1240	
		Gold	831-1250	
		Nickel	LEGS-QANL	
	Outside Air Kit, Floor & Rear		OAK-ACC	
	Outside Air Collar Assembly		7033-039	
	Outside Air Shield		33271	Y
	Pedestal	Step-Top	PED-3143	
	Ars, Door Assembly	Step-Top	SRV7033-015	Y
	Ash Pan Door Handle	Step-Top	7033-274	
	Ashpan Assembly	Step-Top	7033-010	
	Component Pack, Pedestal, Step-Top (Includes Gasket For Ash Removal, Magnet & Fasteners)	Pedestal, Step-Top	7033-045	
	Gasket, Ars	Step-Top	SRV7033-296	Y
	Latch, Handle Assembly, Ash Removal	Step-Top	SRV7033-047	Y
	Magnet Round		SRV7000-140	Y
	Outside Air Cover Plate Assembly		SRV7033-041	Y
	Pedestal Assembly	Step-Top	7033-013	
	Strip, Oak Trim		832-0560	

HOW TO ORDER

To order the entire assembly, order the top line part number only.

To order an individual part from an assembly, order the part(s) listed in the indented portion.

**Stocked
at Depot**

Item	Description	Comments	Part Number	Stocked at Depot
FASTENERS				
	Avk Rivnut Repair Kit	1/4-20 & 3/8-16 Rivnut Tools	RIVNUT-REPAIR	Y
	Bolt, Hex Head, 1/4-20 X 1	Qty: 10	25221A/10	Y
	Button Head 1/4-20 X .5	Qty: 20	32328/20	Y
	Nut, Keps Lock, 10-32	Qty: 40	226-0050/40	Y
	Nut, Keps Lock, 8-32	Qty: 40	226-0060/40	Y
	Nut, Locking Door Handle	Qty: 24	226-0100/24	Y
	Nut, Ser Flange Small 1/4-20	Qty: 24	226-0130/24	Y
	Nut, Ser Flange Small 1/4-20	Qty: 24	226-0130/24	Y
	Plug, Trimount, .250"	Qty: 24	229-0880/24	Y
	Screw, Flat Head Philips 8-32X1/2	Qty: 10	832-0860	
	Screw, Sheet Metal #8 X 1/2 S-Grip	Qty: 40	12460/40	Y
	Washer, 1/4 Sae	Qty: 24	28758/24	Y
	Washer, Sae, 3/8 (3 Ea)	Qty: 3	832-0990	

Hearth & Home Technologies Inc.
LIMITED LIFETIME WARRANTY

C. Warranty Policy

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal 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 begins on 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. 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, pellet, and coal 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							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
				X					Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

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.
- Contact your installing dealer for warranty service. If the installing dealer 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.

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. These parts include: paint, wood, pellet and coal gaskets; firebricks; grates; flame guides; 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 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 operating 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 components 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 appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired or 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, 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 SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE EXPRESSED WARRANTY SPECIFIED ABOVE.

QUADRA-FIRE®

CONTACT INFORMATION:

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

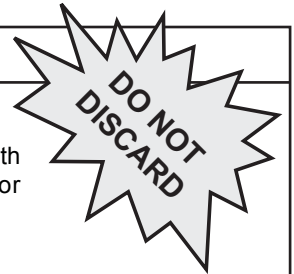
Please contact your Quadra-Fire dealer with any questions or concerns.
For the number of your nearest Quadra-Fire dealer,
log onto www.quadrafire.com

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.



We recommend that you record the following pertinent information for your 4300 WOOD STOVE (ACC)

Date purchased/installed: _____

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.

