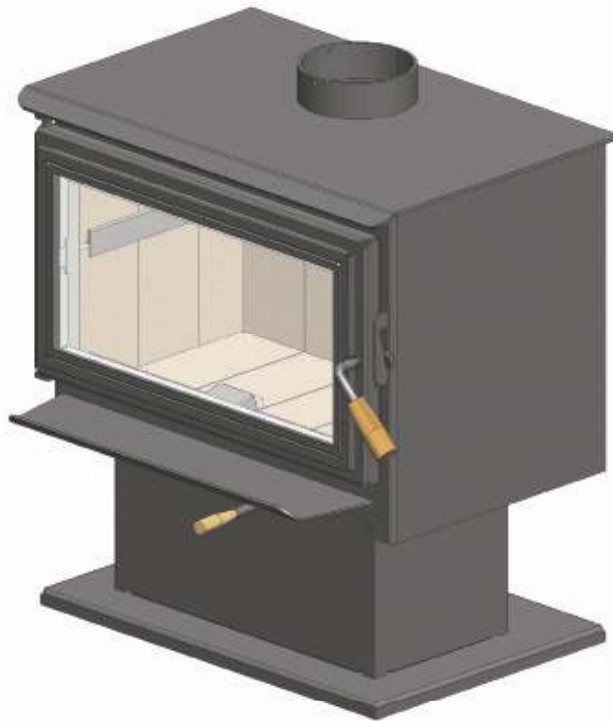


# Blaze King

## BRIARWOOD BR11/90

### SOLID FUEL STOVE



This heater meets the 2015 U.S. Environmental Protection Agency's particulate emission limits for wood heaters sold after May 15, 2015.



**Installer: Please complete the details on the back cover  
and leave this manual with the homeowner.**  
**Homeowner: Please SAVE THESE INSTRUCTIONS for future reference.**

The authority having jurisdiction (such a municipal building department, fire department, etc.) should be consulted before installation to determine the need to obtain a permit.

## OPERATION & INSTALLATION MANUAL

### Manufactured By

**Valley Comfort Systems Inc.**, 1290 Commercial Way, Penticton, BC, V2A 3H5, Canada  
Phone: 250-493-7444 ♦ Fax: 250-493-5833 ♦ [www.blazeking.com](http://www.blazeking.com) ♦ [info@blazeking.com](mailto:info@blazeking.com)

Pour la version française de nos manuels S.V.P. vous référez à notre site web: [www.blazeking.com](http://www.blazeking.com)

## TABLE OF CONTENTS

<b>INTRODUCTION</b>	4
<b>SPECIFICATIONS</b>	5
<b>EMISSIONS</b>	5
<b>PRODUCT INFORMATION</b>	6
<i>APPLIANCE DIMENSIONS—Briarwood</i>	6
<b>CERTIFICATION LABEL</b>	7
<b>SAFETY PRECAUTIONS</b>	8
<b>INSTALLATION INSTRUCTIONS</b>	11
<i>PARTS INCLUDED WITH THE BRIARWOOD</i>	11
<i>OPTIONAL EQUIPMENT</i>	11
<i>DECORATIVE OPTIONS</i>	11
<i>FLOOR PROTECTION</i>	11
<i>MINIMUM CLEARANCES for BRII/90</i>	12
<i>COMBUSTION AIR</i>	13
<i>DRAFT</i>	13
<i>ROLE OF THE CHIMNEY</i>	13
<i>VENTING SYSTEMS</i>	14
<i>MOBILE HOME (AND RESIDENTIAL ALCOVE INSTALLATIONS)</i>	17
<i>OPTIONAL ACCESSORIES</i>	18
<b>OPERATING INSTRUCTIONS</b>	20
<i>YOUR FIRST FIRE!</i>	20
<i>SELECTING WOOD</i>	20
<i>HOW TO USE MOISTURE METERS</i>	21
<i>EFFICIENCY</i>	21
<i>LIGHTING THE FIRE</i>	22
<i>RELOADING PROCEDURE</i>	22
<i>FAN OPERATION</i>	23
<i>ICE - FORMATION AND PREVENTION</i>	23
<i>WOOD BURNING IN THE SHOULDER SEASON</i>	23
<b>MAINTENANCE</b>	24
<i>RUN-AWAY OR CHIMNEY FIRE</i>	24
<i>CREOSOTE FORMATION AND REMOVAL</i>	24
<i>CHIMNEY MAINTENANCE</i>	25
<i>FIRE EXTINGUISHERS AND SMOKE DETECTORS</i>	25
<i>ASH REMOVAL</i>	25
<i>LOADING DOOR GASKET INSPECTION</i>	26
<i>LOADING DOOR GASKET REPLACEMENT</i>	26
<i>DOOR GLASS GASKET INSPECTION</i>	27
<i>DOOR GLASS GASKET REPLACEMENT</i>	27
<i>DOOR GLASS, CLEANING</i>	27
<i>LOADING DOOR TENSION ADJUSTMENT</i>	28
<i>BAFFLE REPLACEMENT</i>	29

**TABLE OF CONTENTS cont.**

<i>CHIMNEY DRAFTS</i> .....	<b>29</b>
<i>OPTIONAL FAN ASSEMBLY</i> .....	<b>29</b>
<b>TROUBLESHOOTING</b> _____	30
<b>WARRANTY</b> _____	34
<b>INSTALLER NOTES</b> _____	40

## INTRODUCTION

### WARNING

- **THIS APPLIANCE IS HOT WHEN OPERATED AND CAN CAUSE SEVERE BURNS IF CONTACTED.**
- **ANY CHANGES OR ALTERATIONS TO THIS APPLIANCE OR ITS CONTROLS CAN BE DANGEROUS AND IS PROHIBITED BY FEDERAL AND STATE LAWS.**
- Do not operate appliance before reading and understanding operating instructions. Failure to operate appliance according to operating instructions could cause fire or injury.
- Before installing this appliance, contact the local building or fire authority and follow their guidelines.
- This appliance must be installed by a qualified installer.
- Risk of burns. The appliance should be turned off and cooled before servicing.
- Do not operate without fully assembling all components.
- Do not let the appliance become hot enough for any part to glow red.
- Do not install damaged, incomplete or substitute components.
- Risk of cuts and abrasions. Wear protective gloves and safety glasses during installation. Sheet metal edges may be sharp.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to an appliance or appliance, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.
- Clothing or other flammable material should not be placed on or near the appliance. Objects placed in front of the appliance must be kept a minimum of 48" away from the front face of the appliance.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Ensure you have incorporated adequate safety measure to protect infants / toddlers from touching hot surfaces.
- Even after the appliance is out, all surfaces, including the glass and/or any attachment will remain hot for an extended period of time.
- Check with your local hearth specialty dealer for safety hearth guards to protect children from hot surfaces. These guards must be fastened to a wall and/or to the floor.
- Any safety guard removed for servicing must be replaced prior to operating the appliance.
- Under no circumstances should this appliance be modified.
- This appliance must not be connected to a chimney flue pipe servicing a separate solid fuel burning appliance.
- Do not operate the appliance with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.
- Do not strike or slam shut the appliance glass door.
- Operate only with the doors tightly closed.
- Appliance will over-fire if door is not shut and latched.
- Only certified doors / optional fronts / and surrounds for inserts with the unit are to be installed on the appliance.
- Keep the packaging material out of reach of children and dispose of the material in a safe manner. As with all plastic bags, these are not toys and should be kept away from children and infants.
- If the appliance is not properly installed, a house fire may result. Do not expose the appliance to the elements (ex. rain, etc.) and keep the appliance dry at all times.
- The chimney must be sound and free of cracks and obstructions. Clean your chimney regularly as required.
- Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while it is in use.
- Your appliance requires periodic maintenance and cleaning. Failure to maintain your appliance may lead to smoke spillage in your home.
- Higher efficiencies and lower emissions will generally result when burning air dried seasoned woods, as compared to wet, green or freshly cut wood. Burning wet unseasoned wood can cause excessive creosote accumulation. When ignited it can cause a chimney fire that may result in a serious house fire.
- The appliance is designed to burn seasoned wood only. Do not burn treated wood, coal, charcoal, colored paper, cardboard, solvents or garbage.
- Burn wood directly on the firebricks. Do not use a grate or elevate the fire.
- Do not store wood within appliance installation clearances or within the space required for re-fueling and ash removal.
- Ashes must be disposed in a metal container with a tight lid and placed on a non-combustible surface well away from the home or structure until completely cool.

# SPECIFICATIONS

Model	BRII/90 (non-catalytic)
Height	30 7/8" (785 mm)
Width	27 1/2" (699 mm) (without door handle)
Depth	22 7/8" (581 mm) (without optional fan kit)
	28 5/8" (727 mm) (with optional fan kit)
Flue collar	6" I.D.
Recommended flue draft	.05" water column (on high burn)
Fire door opening	21 13/16" x 10" (554 mm x 254 mm)
Firebox depth	12 1/2" (318 mm) brick to brick, 14 5/8" (372 mm) brick to glass
Firebox width	22 1/2" (572 mm)
Firebox height	12" (305 mm)
Fire box capacity	2.1 cu. ft.
Recommended Fuel length	22" (559 mm)
Wood capacity (approximate):	White oak - 44 lbs. (19.96 kg)
	Fir - 35 lbs. (15.88 kg)
Construction	3/16" & 1/4" firebox, brick lined 18 gauge outer shields
Shipping Weight	330 lbs. (150 kg)
Chimney recommendation	15' from stove top to chimney cap.

This unit was tested and listed UL 1482-1988 and ULC S627-M93 by Intertek testing laboratories.

This manual describes the installation and operation of the Briarwood BRII/90 wood heater.

This heater is certified to comply with the 2015 U.S. Environmental Protection Agency's particulate emission limits for wood heaters sold after May 15, 2015.

Under specific test conditions this heater has been shown to deliver heat at rates ranging from 10600 to 36000 Btu/hr.

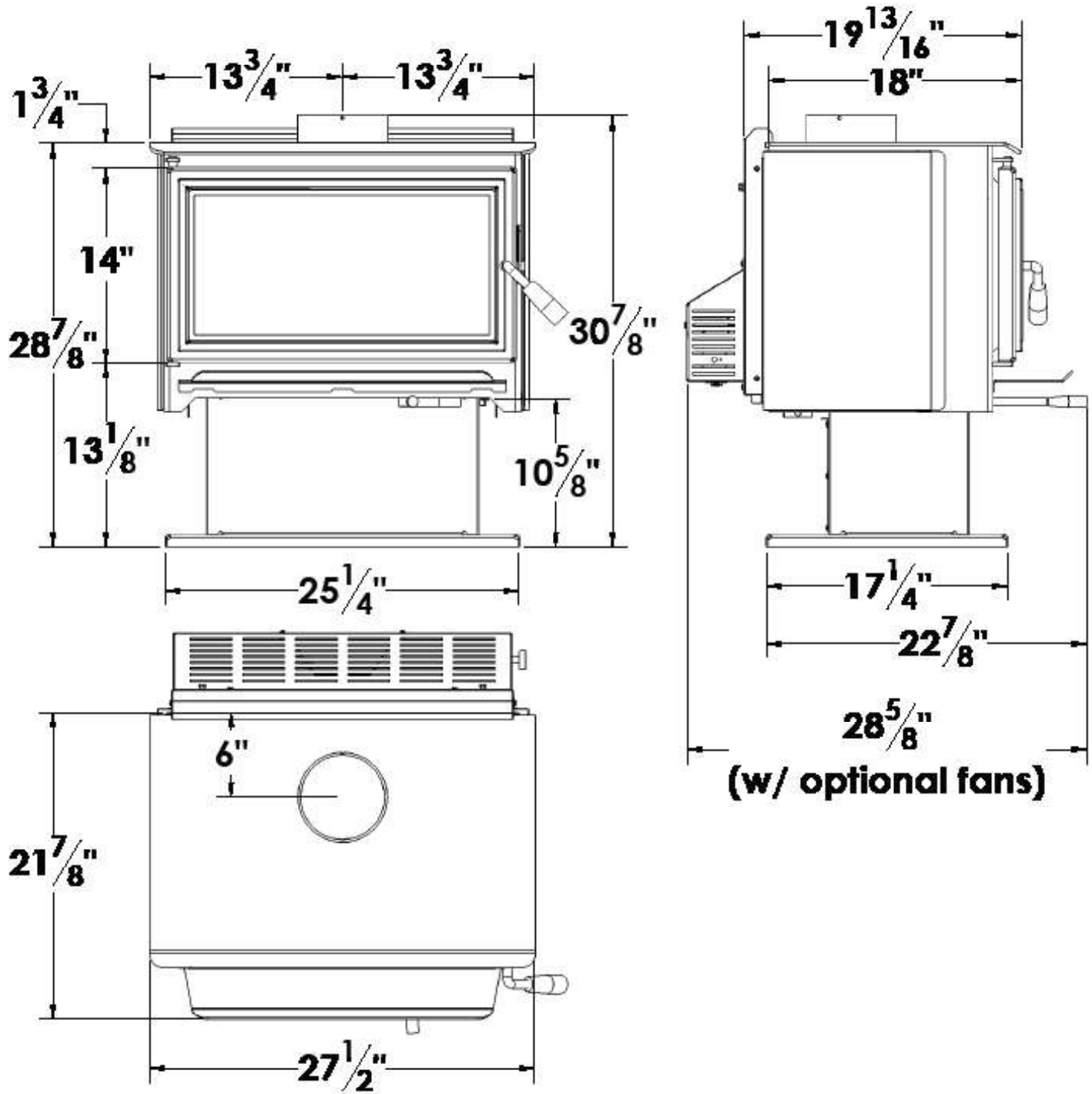
This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual.

EMISSIONS	CO Average(%)	g/hr
Low Burn	1.11	1.66
Med-low Burn	0.92	3.481
Med-high Burn	0.69	2.6
High Burn	0.33	7.682

**PRODUCT INFORMATION**

**APPLIANCE DIMENSIONS—Briarwood**



# CERTIFICATION LABEL

**Wanmock Hersey**

**BRIARWOOD II/90 STOVE**

LISTED ROOM HEATER, SOLID FUEL TYPE

Also for use in MOBILE HOMES

MODEL: BRII90 Tested to: UL1482/4993/ULG S62/MB3 CERTIFIED IN BOTH UNITED STATES AND CANADA

WH -

**PREVENT HOUSE FIRES** - Install and use only in accordance with Blaze King's installation and operation instructions. Contact local building or fire officials about restrictions and installation inspection in your area.

**CHIMNEYS:** DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE. Chimney must be a minimum of 8" listed factory built chimney suitable for use with solid fuels and conforming to, ULG629 in Canada or UL103HT in the USA. If a non-listed chimney is to be used it must comply with all local and national codes; in Canada a non-listed chimney requires a full reline with a listed solid fuel chimney liner.

Mobile Home, residential close clearance, and residential alcove installations require 8" listed double wall close clearance chimney connector, with matching listed factory built chimney suitable for use with solid fuels and conforming to, ULG629 in Canada or UL103HT in the USA.

Mobile Home installations are only allowed with a roof exit. Do not install in a sleeping room.

Alcove minimum width 31" / 787 mm, minimum height from top of stove 36" / 914 mm, maximum depth 21" / 533 mm

Passing through a wall or ceiling requires special methods: see local building codes.

**DO NOT PASS A CHIMNEY CONNECTOR THROUGH A COMBUSTIBLE WALL OR CEILING.**

Electrical rating: 120 VAC, 60 Hz, 0.99 Amps. Risk of electrical shock. Disconnect power before servicing unit. Do not route power cord in front of or beneath heater.

**MINIMUM CLEARANCES TO COMBUSTIBLES** (See owners manual for complete description of all requirements)

Residential Installations	A	B	C	D	E
Single Wall Pipe (24 MSG Black)	15" / 381 mm	15" / 381 mm	25.75" / 654 mm	18" / 457 mm	15" / 381 mm
Listed Double Wall Pipe - Close Clearances Use side shields and rear shield. (Must use for Mobile / Manufactured Home Installations, Alcove Installation and Close Clearance Installations)	14" / 356 mm	8" / 203 mm	24.75" / 629 mm	11" / 279 mm	8" / 203 mm

**\*\* Mobile Home and Alcove Installations must use double wall listed pipe, side shields and rear shield. Mobile Home Installations require Outside Combustion Air Kit #Z1526.**

Floor protection may be any non-combustible material or Listed Floor Protector, and must extend at least 18" / 406 mm in front of the loading door opening. Minimum size is 44"x36".

U.S. ENVIRONMENTAL PROTECTION AGENCY - 2015 Standard - certified to comply with 2015 particulate emission standards (EPA test methods 28 and 5H with an emission-rate of 3.5 g/hr). Not approved for sale after May 15, 2020. This wood heater needs periodic inspection and repair for proper operation. Consult the owner's manual for further information. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in the owner's manual.

**KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIALS WELL AWAY FROM HEATER. DO NOT OVER FIRE! IF HEATER OR CHIMNEY GLOWS YOU ARE OVER FIRING.**

For use with solid fuel only. Use of other fuels may cause a house fire or endanger your safety. Refer to Installation and Operations manual for installation and operation instructions.

**CAUTION:** HOT WHILE IN OPERATION. DO NOT TOUCH. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURN. READ THIS LABEL AND INSTRUCTION MANUAL BEFORE OPERATION OF STOVE.

**MANUFACTURED IN:**

USA:  
Blaze King Industries  
145A Street  
Vella Vella, WA.  
98562

Canada:  
Valley Comfort Systems  
1290 Commercial Way  
Penticon, B.C.  
V2A 3H5

**MANUFACTURE DATE**

JAN  FEB  MAR  APR  MAY  JUN

JUL  AUG  SEP  OCT  NOV  DEC

2001  2002  2003  2004  2005  2006

01 54 Rev 06/2001

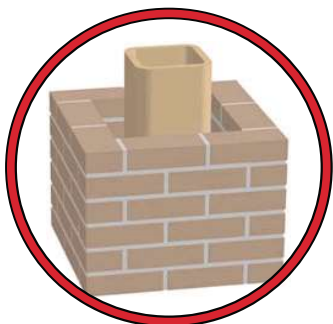
OM-BRII90 E V1.04 wo768

June 19, 2017

## SAFETY PRECAUTIONS

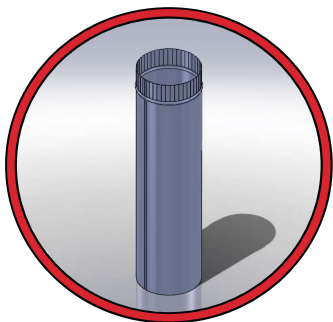
**IF THIS BLAZE KING APPLIANCE IS NOT PROPERLY INSTALLED OR OPERATED, A HOUSE FIRE MAY RESULT. TO REDUCE THE RISK OF FIRE, FOLLOW THE INSTALLATION INSTRUCTIONS. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.**

**PLEASE READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW APPLIANCE. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.**



This appliance must be connected to a listed high temperature (**ULC629 IN CANADA OR UL-103HT IN THE USA**) residential type factory built solid fuel chimney or an approved masonry chimney with a flue liner.

Chimney and chimney connector must be in good condition and kept clean. NEVER vent the stove to other rooms of the building. Must be vented to the outside **ONLY**. NEVER use a chimney or chimney connector smaller than the stove exhaust, unless approved by your local inspector. NEVER vent the stove into a "Class B" gas vent chimney. **DO NOT CONNECT IN CONJUNCTION WITH ANY AIR DISTRIBUTION DUCTWORK UNLESS SPECIFICALLY APPROVED FOR SUCH INSTALLATIONS.**



Inspect the chimney connector and chimney regularly during each burning season and clean when necessary.

**DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLIANCE.**

NEVER intentionally start a chimney fire to clean the flue.



When installed in a mobile home, this appliance must be bolted to the floor and provided with outside air.

**WARNING: DO NOT INSTALL IN A SLEEPING ROOM  
CAUTION: THE STRUCTURAL INTEGRITY OF THE MOBILE HOME  
FLOOR, WALL, AND CEILING/ROOF MUST BE MAINTAINED.**

Check with local building officials.



If the Optional Fan Kit is installed, connect this unit to a properly grounded, 110-volt electrical outlet. Do not route the power cord in front of or under the appliance.



Do not make any changes or modifications to an existing masonry fireplace or chimney to install this appliance. Do not make any changes to the appliance to increase combustion air.



**SAFETY PRECAUTIONS cont.**



Never try to repair or replace any part of this appliance unless instructions are given in this manual. All other work must be done by a trained technician.



Do not place clothing or other flammable items on or near this appliance.



Allow the appliance to cool down before carrying out any maintenance or cleaning.



**DO NOT OVER FIRE THIS HEATER.** Attempts to achieve heat output rates that exceed heater design specifications can result in permanent damage to the heater. Over firing the appliance may cause a house fire. Never burn the stove so hot that the stove or chimney connector begins to glow.



Maintain the door and glass seal and keep them in good condition. A leaking door seal will shorten burn times.



Do not use a grate or other device to elevate the fire off of the firebox floor. Burn the fire directly on the bricks.

Avoid placing wood against the glass when loading. Do not slam the door or strike the glass.



Do not throw this manual away. This manual has important operating and maintenance instructions that you will need at a later time. Always follow the instructions in this manual.



Ashes should be placed in a steel container with a tightly fitting lid and moved outdoors immediately. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Other waste shall not be placed in this container.



It is required in some jurisdictions to install smoke and carbon monoxide detectors where heaters are installed. Install at least one smoke detector on each floor of your home to ensure your safety. It should be located away from the wood appliance and close to the sleeping areas. Locating a smoke detector too close to a wood appliance can cause the smoke detector alarm to sound if a puff of smoke is emitted while the wood appliance door is open during reloading. Follow the smoke detector manufacturers placement, installation, and maintenance instructions.

# SAFETY PRECAUTIONS cont.



This appliance is designed and approved for burning cord wood only. **DO NOT** burn trash, garbage; artificial or paper logs; gift wrappings; coal; lighter fluids; chemical cleaners; chemical starters; treated or painted wood; salt water driftwood or foil-backed paper such as gum wrappers or cigarette packages; lawn clippings or yard waste; materials containing rubber (including tires), plastic, asbestos; waste petroleum products, paints or paint thinners, or asphalt products; construction or demolition debris; railroad ties or pressure-treated wood; manure or animal remains; unseasoned wood or paper products, cardboard, plywood, or particleboard. The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax and similar substances for the purpose of starting a fire in an affected wood heater. Burning these materials may result in the release of toxic fumes or render the heater ineffective and cause smoke. Burn natural wood only. It will void all warranties and safety listings.



Never burn the stove with the loading door open.

Never block free airflow through vents on this appliance.



Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while it is in use. Some fuels could generate carbon monoxide and are very dangerous.

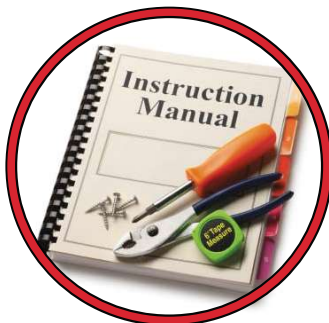


**HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.**

Do not touch the appliance when it is hot and educate all children of the danger of a high temperature appliance. Young children should be supervised when they are in the same room as the appliance.



Keep furniture, curtains, wood, paper and other combustibles a minimum of 48in (1219mm) away from the front of the appliance. **ALSO, DO NOT STORE COMBUSTIBLES UNDER THE APPLIANCE (WOOD, PAPER etc.).**



This appliance must be properly installed to prevent the possibility of a house fire. The instructions must be strictly adhered to. Do not use makeshift methods or compromise in the installation.



Contact local building officials to obtain a permit and information on any installation restriction or inspection requirements in your area. Notify your insurance company as well.

# INSTALLATION INSTRUCTIONS

## ⚠️ WARNING

- **BEFORE INSTALLING THIS APPLIANCE, CONTACT THE LOCAL BUILDING OR FIRE OR OTHER AUTHORITY HAVING JURISDICTION AND FOLLOW THEIR GUIDELINES.**
- **THIS APPLIANCE MUST BE INSTALLED BY A QUALIFIED INSTALLER. FOLLOW THE INSTALLATION DIRECTIONS. DO NOT OPERATE WITHOUT FULLY ASSEMBLING ALL COMPONENTS.**
- **IF THIS APPLIANCE IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT.**
- **THIS APPLIANCE IS HOT WHEN OPERATED AND CAN CAUSE SEVERE BURNS IF CONTACTED. CHILDREN AND PETS MUST BE KEPT FROM TOUCHING THE APPLIANCE WHEN IT IS HOT.**
- **COMBUSTIBLE MATERIAL SUCH AS FIRE WOOD, WET CLOTHING, ETC. PLACED TOO CLOSE CAN CATCH FIRE. OBJECTS PLACED IN FRONT OF THE APPLIANCE MUST BE KEPT A MINIMUM OF 48”(1219 MM) FROM THE FRONT OF THE APPLIANCE.**

**Blaze King grants no warranty, implied or stated, for the installation or maintenance of the appliance and assumes no responsibility of any consequential damage(s).**



We recommend that our products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Specialists or who are certified in Canada by Wood Energy Technical Training (WETT).



www.nficertified.org      www.wettinc.ca

<b>PARTS INCLUDED WITH THE BRIARWOOD</b>	
1. Poker	
2. Manual kit (w/ warranty cards, fire starter)	
<b>OPTIONAL EQUIPMENT</b>	
1. Fan kit (Z1514)	2. Rear shield (ZRSBR11)
3. Side shields (ZSSBR11, requires rear shield)	
<b>DECORATIVE OPTIONS</b>	
1. Door trim kit gold	2. Door trim kit satin

**FLOOR PROTECTION**

If the stove sits on a combustible floor, a non-combustible shield must be used underneath the stove and extending 16” out from the front and 8” on either side of the fuel-loading door in the USA. In Canada a non-combustible shield must be used underneath the stove and extending 8” on either side and rear and 18” out in front of the loading door.

A non-combustible shield is also required underneath the chimney connector and extending at least 2” (50.8mm) on either side of the chimney connector.

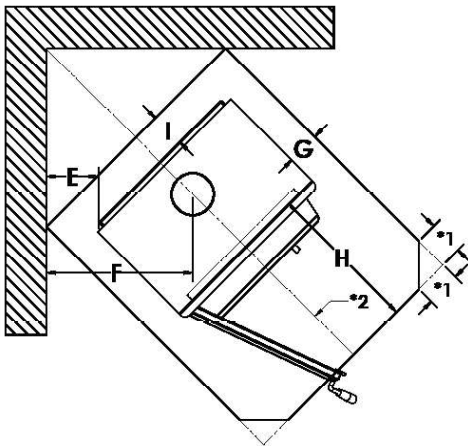
See the next page for minimum sizes depending on model. This floor protection is required to prevent sparks from falling onto the combustible floor. See CSA B365-M87). **This product does not require thermal hearth pad protection.**

# INSTALLATION INSTRUCTIONS cont.

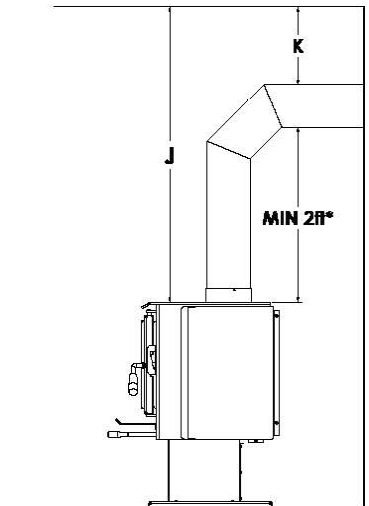
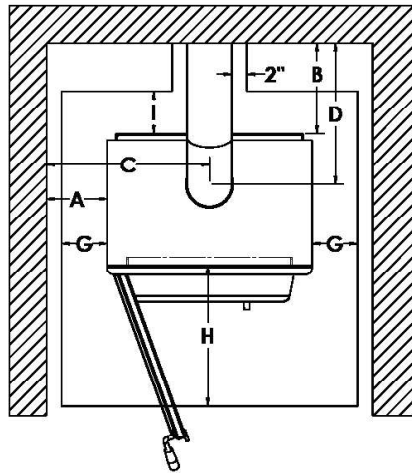
## MINIMUM CLEARANCES for BRII/90

Residential Installations	A	B	C	D	E	F
Single wall pipe (24 MSG Black).	15" 381 mm	15" 381 mm	28.75" 731 mm	22" 559 mm	15" 381 mm	28.875" 734 mm
Listed double wall pipe - close clearances. Use side shields and rear shield. (Must use for mobile / manufactured home installations. Alcove Installation and close clearance installations)	14" 356 mm	8" 204 mm	27.75" 705 mm	15" 381 mm	8" 203 mm	21.875" 556 mm

Check with local codes and pipe manufacturer for pipe clearances. In Canada, 18" clearances from single wall pipe is required. Mobile home and alcove installations must use double wall listed pipe, side shields, and rear shield. Mobile home installations also require an outside air kit #Z1526



\*1 = 3 1/2" in Canada and 2 1/8" in USA  
 \*2 = 65 5/8" in Canada and 63 5/8" in USA



\*3ft RECOMMENDED

G = 5 3/8" (137mm) in USA 8" (203mm) in Canada	H = 16" (406mm) in USA 18" (456mm) in Canada	I = 0" (0mm) in USA 8" (203mm) in Canada	K = 18" (456mm) for single wall pipe in Canada
---	---	---	--

Ember protection shield (not required to have an insulation value) is to be listed under UL 1618-2009 (type 1) and must have a minimum size of:

In USA: 38 1/4" wide x 33 3/4" deep (972 x 858 mm)  
 In Canada: 43 1/2" wide x 43 3/4" deep (1105 x 1112 mm)

Min. Alcove minimum width 55 1/2", maximum depth 32", minimum height above stove top 36"  
**This stove must be installed in compliance with all local codes and regulations.**

## INSTALLATION INSTRUCTIONS cont.

### COMBUSTION AIR

Ensure adequate combustion air allowing for all other exhausting type appliances in the dwelling (range hoods, dryers, etc.). In air tight homes and modern constructions, careful considerations must be taken into account when using a wood burning appliance. Heat recovery ventilators (HRV) systems along with constant running pan motors in air handlers must be taken into account when balancing the system. Failure to do so may result in air starvation, smoke spillage and carbon monoxide threats. Consult a HVAC specialist for proper installation. Ensure adequate combustion air allowing for all other exhausting type appliances in the dwelling (range hoods, dryers, etc.). In airtight houses it is recommended to install a fresh air inlet into the room where the appliance is located, to prevent air starvation.

### DRAFTING PERFORMANCE

Draft is the force which moves air from the appliance up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. External forces, such as wind, barometric pressure, topography, or factors of the home (negative pressure from exhaust fans, chimneys, air infiltration, etc) may adversely affect draft.

Too much draft may cause excessive temperatures in the appliance and may damage the heater. An uncontrollable burn or excessive temperature indicates excessive draft.

Inadequate draft may cause back puffing into the room and 'plugging' of the chimney. Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints.

Blaze King cannot be responsible for external forces leading to less than optimal performance.

### ROLE OF THE CHIMNEY

Without a proper installed chimney, this appliance will not burn correctly.

The role of the chimney is to pull the proper amount of air into the firebox for the purpose of complete combustion. Incomplete combustion will lead to more smoke and pollution of the outside air. A proper operating chimney will allow the user to enjoy peak performance at all burn operating levels from low to high. Blaze King therefore recommends vertical installations with a minimum length of 15' from stove top to chimney cap. In all freestanding stove installations, use double wall stove pipe from the stove top to the ceiling support box. The use of double wall stove pipe does allow for reduced clearances, however most importantly, it helps to keep the chimney warm and improve draft.

For wall exits, the same suggestion applies. With the addition of the recommendation to use two 45 degree elbows rather than a single 90 degree elbow. The use of two 45 degree elbows will allow for both a smoother transition to the exterior chimney and will also shorten the horizontal run to the outside chimney. A minimum 36" rise is recommended prior to any elbows being used. When possible, outside chimney systems should be isolated from direct exposure to winter weather by building a chase around the chimney, observing all clearances as specified by the venting manufacturer. Doing so will help to keep the chimney warmer and improve draft.

## INSTALLATION INSTRUCTIONS cont.

### VENTING SYSTEMS

The venting system consists of a chimney connector and a chimney. These get extremely hot during use. Temperatures inside the chimney may exceed 2000 degrees 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. A listed 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 listed prefabricated chimney. These accessories are absolutely necessary to provide safe clearances to combustible wall and ceiling material.

This stove may be connected to a lined masonry chimney or a listed factory built chimney suitable for use with solid fuels and conforming to, ULC629 in Canada or UL-103HT in the USA. Do not connect it to a chimney serving another appliance. To do so will affect the safe operation of both appliances, and will void the stove warranty. You must comply with the local authority having jurisdiction and/or in Canada, CSA installation standard B365-M87.

The chimney connector must be 8" diameter, 24 MSG Black/Blue steel. Do not use aluminum or galvanized steel. They cannot properly withstand the extreme temperatures of a wood fire. The chimney connector between the stove and the chimney should be as short and direct as possible.

The chimney connector must be attached to either an approved masonry chimney or one of the listed factory built chimneys suitable for use with solid wood fuel. All joints must be tight and fastened with sheet metal screws.

### WARNING

**THE CHIMNEY CONNECTOR IS TO BE USED ONLY WITHIN THE ROOM, BETWEEN THE STOVE AND CEILING / WALL. NEVER USE A CHIMNEY CONNECTOR TO PASS THROUGH AN ATTIC OR ROOF SPACE, CLOSET OR SIMILAR CONCEALED SPACE, OR A FLOOR, OR CEILING. AN EFFECTIVE VAPOR BARRIER MUST BE MAINTAINED AT THE LOCATION WHERE THE CHIMNEY OR COMPONENT PENETRATES TO THE EXTERIOR OF THE STRUCTURE. ALWAYS MAINTAIN THE MINIMUM CLEARANCES TO COMBUSTIBLES AS REQUIRED BY THE APPLICABLE BUILDING CODES.**

# INSTALLATION INSTRUCTIONS cont.

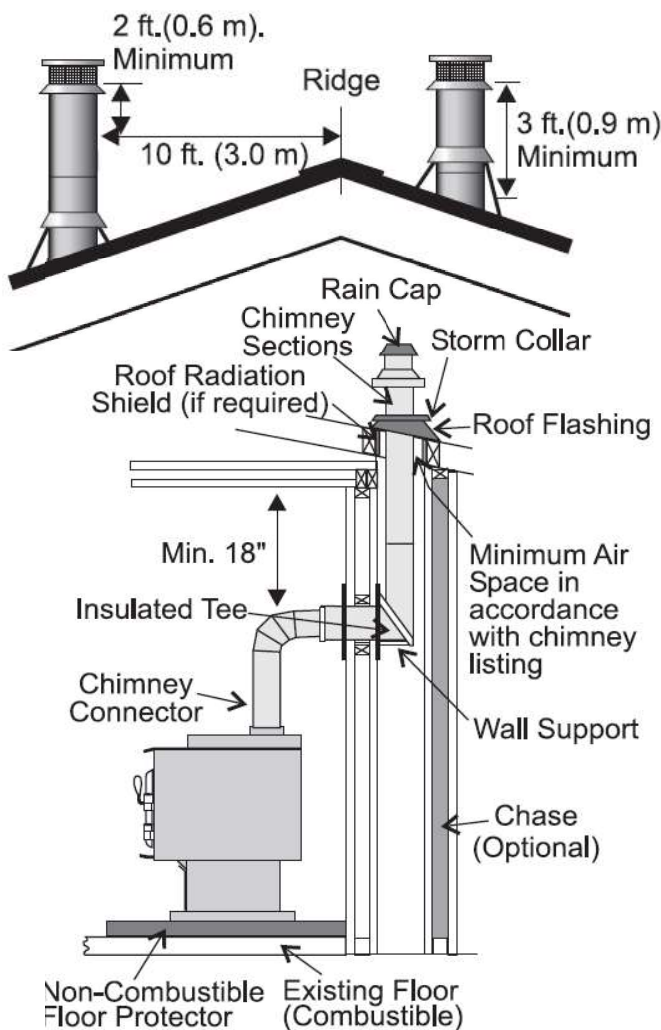
## CONNECTION TO A METAL PREFABRICATED CHIMNEY

When a metal prefabricated chimney is used, the manufacturer’s installation instructions must be followed precisely. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass through and “T” section package, fire stops (when needed), insulation shield, roof flashing, chimney cap, etc. Maintain the proper clearance to the structure as recommended by the manufacturer. This clearance is usually a minimum of 2 inches, although it may vary by manufacturer or for certain components.

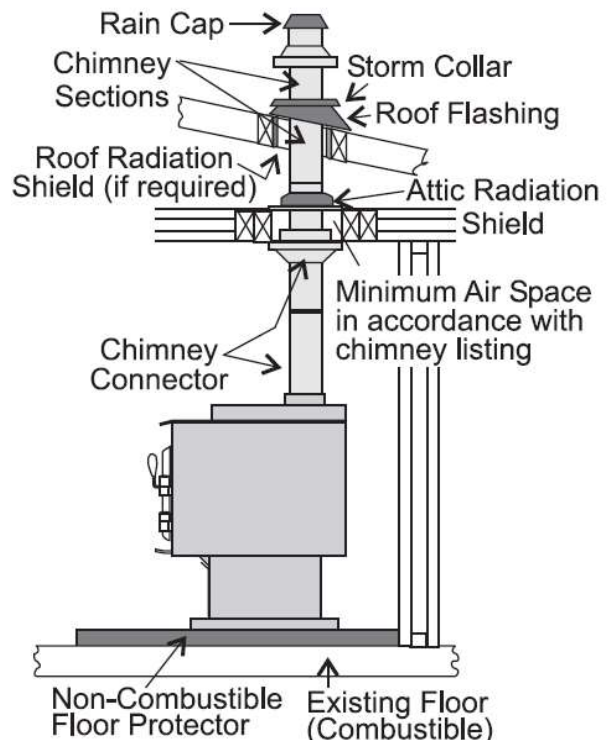
There are basically two methods of metal chimney installation. One method is to install the chimney inside the residence through the ceiling(s) and the roof. The other method is to install an exterior chimney that runs up the outside of the residence (**not recommended**). If it is necessary to run the chimney outside, build an outside chase around the chimney.

The chimney must be the required height above the roof or other obstruction for safety and for proper draft operation. The requirement is that the chimney must be at least 3 feet higher than the highest point where it passes through the roof and at least 2 feet higher than the highest part of the roof or structure that is within 10 feet of the chimney, measured horizontally (**Fig. 1**).

The height requirement is necessary in the interest of safety and does not necessarily assure proper flue draft. Use a minimum total system height of 15 feet, measured from the stove flue collar to the top of the chimney, not including the chimney cap.



Horizontal Installation



Standard Ceiling Installation

# INSTALLATION INSTRUCTIONS cont.

## CONNECTION TO A MASONRY CHIMNEY

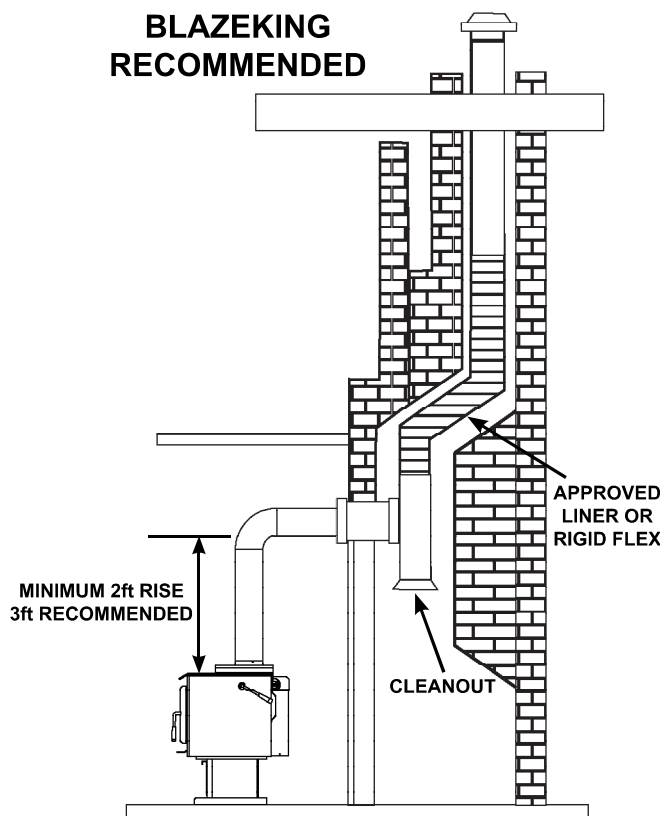
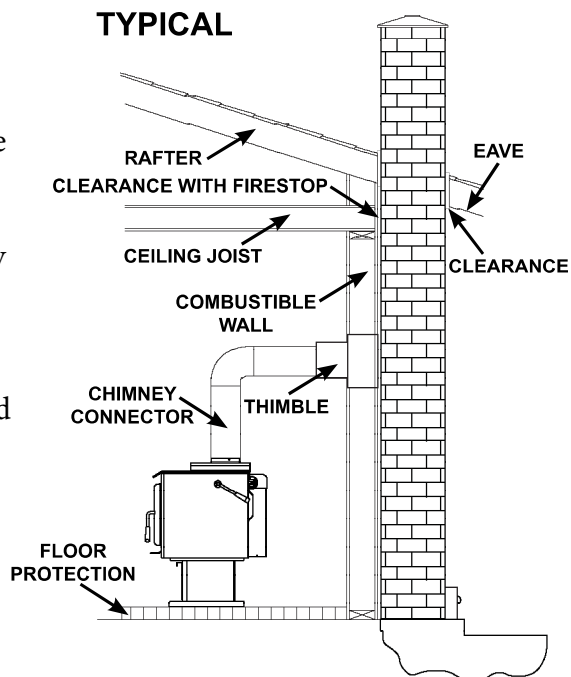
Masonry chimney\*\*\*

Ensure that a masonry chimney meets the minimum standards (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the stove is installed and operated. When connecting the stove through a combustible wall to a masonry chimney, special methods are needed.

In Canada, the wall cut away is to provide 18” clearance for the connector. The resulting space must remain empty. A flush mounted sheet metal cover may be used on one side only. If covers are to be used on both sides, each cover must be mounted on noncombustible spacers at least 1” clear of the wall.

**\*\*\*Blaze King recommends the use of a Stainless steel liner, preferably insulated, inside a masonry chimney. This to maintain proper draft and overall better operation of the unit.**

Your local dealer or local jurisdiction can provide details of approved methods of passing a chimney connector through a combustible wall in your area. In USA, the National Fire Protection Association has minimum standards to comply with. In Canada, this type of installation must conform to CAN/CSA-B365, Installation Code for Solid Fuel Burning Appliances and Equipment.





## INSTALLATION INSTRUCTIONS cont.

### MOBILE HOME (AND RESIDENTIAL ALCOVE INSTALLATIONS)

Use double wall listed pipe, side shields, and rear shield (See next page for kits and part numbers). Mobile home installations also requires an outside air kit #Z1526. They are easiest to mount before the stove is installed. See instructions packed with each kit. **NOTE: UNDER NO CIRCUMSTANCES SHOULD THE FRESH AIR TUBE EVER BE INSTALLED HIGHER THAN THE BOTTOM OF THE APPLIANCE FIREBOX FLOOR**

When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed precisely. You must also purchase (from the same manufacturer) and install the ceiling support package, fire stops (when needed), insulation shield, roof flashing, chimney cap, etc. Maintain the proper clearance to the structure as recommended by the manufacturer.

Chimney connector must be double wall close clearance type with either ULC629 or ULCS610 designation. Single wall pipe is not allowed in Mobile Homes or in Alcove Installations. Insulated chimney components must be a listed factory built chimney suitable for use with solid fuels and conforming to, ULC629 in Canada or UL-103HT in the USA. For Mobile home, the chimney needs to be removable to allow for transportation of the mobile home.

### WARNING

**DO NOT INSTALL IN SLEEPING ROOM. THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL AND CEILING / ROOF MUST BE MAINTAINED.**

In mobile home installations the stove must be securely fastened to the floor using the lag bolts provided in the outside air kit:

1. Position the stove on the floor protector so that the minimum clearances are met.
2. Remove the back pedestal cover.
3. Drill down through the holes in the base of the stove, penetrating both the floor protector and the floor of the home.
4. Place two lag screws through the holes and fasten them securely to the floor of the structure. (Make sure the stove cannot shift or move.)

ALSO, a #8 ground wire must be attached to the stove and an appropriate ground.



## INSTALLATION INSTRUCTIONS cont.

### OPTIONAL ACCESSORIES

Outside air kit, side shields, and rear shield are optional accessories, but are required for the following installations:

MOBILE HOME INSTALLATION — Requires outside air kit, side shields, and rear shield.

RESIDENTIAL ALCOVE — Requires outside air kit, side shields, and rear shield.

### REAR SHIELD KIT (ZRSBR11)

REQUIRED FOR:

MOBILE HOME, any installation

RESIDENTIAL ALCOVE

INSTALLATION : The rear shield goes across the back of the stove. Remove the four 1/4" x 1/2" hex bolts. Place the rear shield into position so that the notch on the shield wraps the lip on the stove top. Insert and tighten the four 1/4" X 2-1/2" hex bolts provided.

### FAN KIT (P/N Z1514)

Includes ZRSBR11 rear shield

NOTE: Fan kit should be installed before the stove is placed into position

INSTALLATION: See instructions included with fan kit.

### ELECTRICAL CONNECTION:

Your Blaze King fan kit is equipped with a three-prong (grounded) plug to decrease shock hazard. **THIS PLUG SHOULD BE INSERTED DIRECTLY INTO A PROPERLY-GROUNDED, THREE-HOLE RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG.** Do not route the power cord in front or under the stove.

### OUTSIDE AIR KIT (P/N Z1526)

REQUIRED FOR: MOBILE HOME (any installation)

The outside air inlet hose is a flexible tube to bring outside air for combustion into the stove from outside the residence, through the wall or up through the floor. The flexible tube will allow some adjustment over or around floor joists or plumbing. **DO NOT CHANGE THE STRUCTURAL INTEGRITY OF THE FLOOR.** This air hose must be kept open at all times to provide outside air for combustion.

INSTALLATION

See instructions included with the outside air kit. Tools needed: 1/4" or 3/8" drill motor, saber saw, saber saw wood & metal blades, 5/16" nut driver or wrench, 7/16" wrench, Small tube of hi-heat silicone.

## INSTALLATION INSTRUCTIONS cont.

### DOOR INSTALLATION AND CHANGE-OUT

To install the door upon stove installation or to change it out, follow these steps:

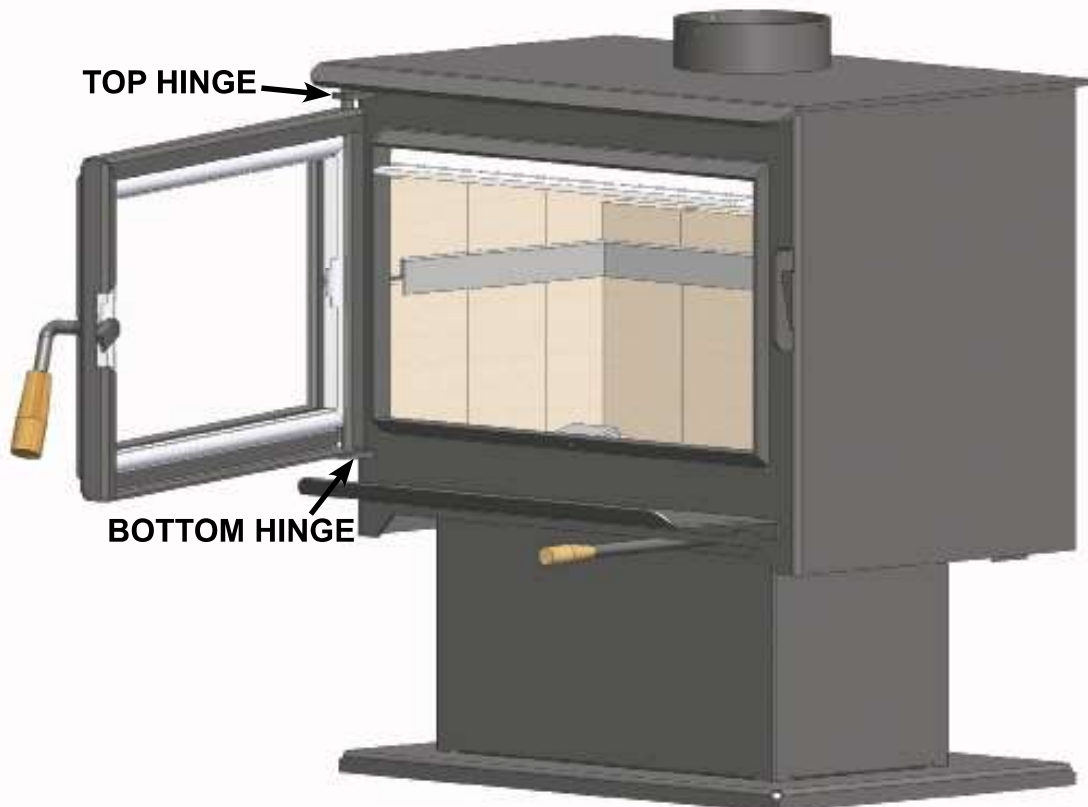
#### **⚠ WARNING**

**DOOR IS HEAVY, PLEASE HOLD FIRMLY.**

### INSTALLATION

1. Insert the top of door hinge rod into the top hinge hole on the firebox.
2. Lower door onto bottom hinge hole.

**NOTE: If your door has a gold or silver plating on it, please follow the instructions on the PLATED DOOR & TRIM CARE card found in the manual pack.**



## OPERATING INSTRUCTIONS

### YOUR FIRST FIRE!

The following pages contain information on the major components and operation of your heater. Please take time to read about them as it will give you a better understanding of how your appliance works. This understanding will help you to operate your appliance properly thus will extend the life of your appliance and allow you to get the highest efficiencies from your heater.

### SELECTING WOOD

#### WARNING

- **THIS APPLIANCE IS DESIGNED TO BURN NATURAL WOOD ONLY. DO NOT BURN TREATED WOOD, COAL, CHARCOAL, COLORED PAPER, CARDBOARD, SOLVENTS OR GARBAGE.**
- **HIGHER EFFICIENCIES AND LOWER EMISSIONS WILL GENERALLY RESULT WHEN BURNING AIR DRIED SEASONED WOODS, AS COMPARED TO WET, GREEN OR FRESHLY CUT WOODS.**
- **BURNING WET UNSEASONED WOOD CAN CAUSE EXCESSIVE CREOSOTE ACCUMULATION. WHEN IGNITED IT CAN CAUSE A CHIMNEY FIRE THAT MAY RESULT IN A SERIOUS HOUSE FIRE.**

Use dry seasoned wood, split and stacked and protected from rain for at least 24 months with a moisture content of 20% or lower. It takes a great deal of energy to evaporate the moisture contained in green wood and that energy will not be heating your house. Also, green or wet wood will greatly increase creosote problems. The only accurate method to determine moisture content in wood is to use a moisture meter.

Never burn salt-water driftwood. It is very corrosive and will damage the firebox. Burning salty wood also voids the warranty.

This controlled combustion firebox has been designed for high efficiency and long burn times. The proper time to add more wood is when the last charge has been reduced to a glowing charcoal bed. There will be very little smoke at this stage in the burn cycle.

Both hardwood and softwood burn equally well in this appliance but hardwood, which is more dense, will weigh more per cord and burn a little slower and longer.

Firewood should be split and stacked in a manner that air can get to all parts of it and covered in early spring to be ready for burning that fall.

**The only accurate way to determine wood moisture is to purchase a moisture meter.**

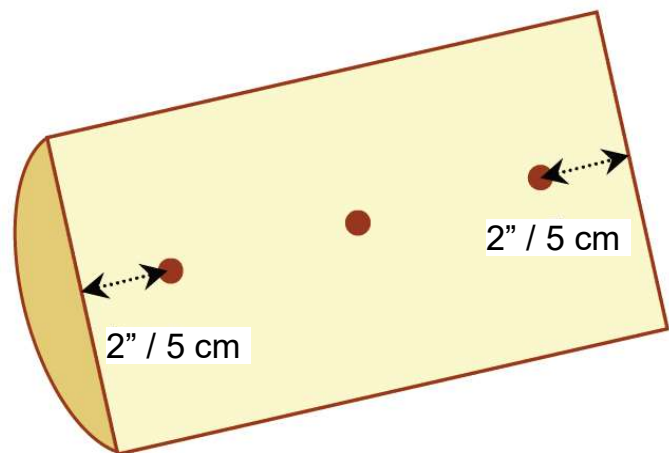
#### WARNING

- **NEVER START A FIRE UNLESS ALL BRICKS ARE CORRECTLY PLACED INSIDE THE FIREBOX. CHECK THE INSTALLATION INSTRUCTIONS CAREFULLY.**

## OPERATING INSTRUCTIONS cont.

### HOW TO USE MOISTURE METERS

1. Take a random selection of around 3-4 logs per cubic yard or cubic meter.
2. Split each log down the middle.
3. In the center of log push pins of meter along grain - three measurements are taken on the freshly split surface: 2" or 5 cm in from each end of the log and in the middle of the split surface with sufficient contact (see figure).
4. Do this to all the logs and take an average of the readings (this will be only an approximate indication but a good guide).



### EFFICIENCY

Efficiency was determined using the method outlined in B415.1-10 test method. It is represented by the Higher Heating Value (HHV) as the fuel used during testing contains between 19% - 25% water moisture included in the total calculated fuel weight. (Other test methods such as LHV or Low Heating Value, does not take the water moisture into account).

Annual Fuel Utilization Efficiency (AFUE) attempts to represent the actual, season long, average efficiency of an appliance. HHV is the actual, calculated average efficiency obtained under test conditions. Using correctly seasoned wood is important when trying to gain efficiency. The more seasoned (dry) the wood, the higher the efficiency (less energy wasted on eliminating moisture during combustion). Operating your Blaze King at lower settings will result in higher efficiencies as the fuel will undergo a more complete combustion. For maximum efficiency, the appliance should be installed in a location that provides adequate intake/combustion air as well as a location that will allow for the straightest run of optimal chimney length to establish necessary draft.

## OPERATING INSTRUCTIONS cont.

### LIGHTING THE FIRE

NOTE: As you heat up the stove for the first time, the paint will go through a curing process and will give off an odor. To minimize the inconvenience, burn the stove on low for several hours. It is advisable to open a door or window until the odor dissipates. You may also notice a change in color as the paint cures, this is normal and will appear uniform after subsequent firings.



1. **DO NOT USE A GRATE. BUILD THE FIRE DIRECTLY ON THE BRICK IN THE BOTTOM OF THE STOVE.**
2. Set the draft control to **HIGH** (maximum) position and turn the fan **OFF** (if applicable).
3. Open the loading door.
4. Place 10 balls of non-glossy paper towards the front of the bottom of the firebox, or use a Blaze King fire starter puck, then stack 20 pieces of kindling on top of the paper in a crisscross fashion (leaving air gaps in between sticks).
5. Light the fire and allow it to get a good start while leaving the loading door cracked open (approximately 3 to 5 minutes). **DO NOT LEAVE THE STOVE UNATTENDED.**
6. Once the kindling is fully on fire, place two or three medium size logs onto the fire. Keeping the loading door unlatched, allow the logs to catch fire (approximately 5 minutes). **DO NOT LEAVE THE STOVE UNATTENDED. KEEP COALS AWAY FROM THE FRONT OF THE STARTER MANIFOLD (small air intake beneath the loading door)**
7. Once the logs are burning, latch the loading door shut.
8. When nearly all of the wood in the firebox is fully burning, finish loading the stove. Lay the wood as far back in the stove as possible.
9. Let the fire burn with the draft control on **HIGH** for 20-30 minutes, or until the fire is well established. At that point set the draft control to the desired setting. It is good burning practice to burn the stove on **HIGH** for 20 to 30 minutes after every refuelling, this will help to condition the wood load for optimum combustion. During the start-up of a cold stove, a **HIGH** fire must be maintained for at least 20-30 minutes. This ensures that the stove and fuel are all stabilized at proper operating temperatures. If the fire is allowed to die down immediately (draft control set to **LOW** too soon), it may go out.
10. The fan (if applicable) can be turned on when the stove is hot or after the initial warm up period of 20-30 minutes.

Probably the least understood requirement in maintaining a good fire is that of establishing a good base of coals. A good bed of hot coals will maintain a more even temperature as well as getting the new load of wood started easily.

### RELOADING PROCEDURE

1. Have your next load of wood ready before beginning. Turn the draft control to **HIGH** and the fan **OFF**(if applicable). Wait 2 minutes for the air flow to stabilize.
2. Unlatch the loading door and open just a crack to allow the ambient room air to be introduced to the firebox, this may take a few seconds to stabilize.
3. Slowly open the loading door and proceed to reload the firebox. If you experience excessive smoke spillage, slightly close the loading door to re-establish a draft through the chimney.
4. Once loaded, latch the loading door shut. Let the fire burn on the **HIGH** draft control setting for 20 to 30 minutes **OR** until the fire is well established. At that point, slide the draft control to the desired setting.
5. Should you burn the stove on a very **LOW** setting for extended periods of time, you will begin to see creosote deposits forming on the glass door. To remove these deposits, run the stove on **HIGH** for approximately 30 minutes. The **HIGH** setting will burn off most of the deposits.

As every pile of wood is different you will learn, over time, which settings are necessary to achieve the optimal fire. This will be based on the type of wood, installation, weather conditions and the desired room temperature.

## OPERATING INSTRUCTIONS cont.

### FAN OPERATION

If you have the fan system installed, the fan should be off for 20 - 30 minutes until the stove reaches normal operating temperatures. The fan speed adjustment should match the draft control setting, i.e. if your stove is set at medium then your fan should also be set at medium, low—low, high—high etc.. We recommend the use of an optional fan system on all our wood stoves. The fan system recirculates the room air over the hot surfaces of your stove and helps spread this super heated air around your home.

### WOOD BURNING IN THE SHOULDER SEASON

There are things to consider if you decide to light a fire in the spring and fall or when the outside temperature is milder, perhaps 55°F to 70°F (13°C to 21°C).

As you light the fire, with the loading door open, you may notice spillage, this is when a small amount of smoke comes back into the living space. When your fire begins to warm the chimney and the draft improves, spillage is greatly reduced. After a short period of time you can slide the draft control to a **LOW** setting and maintain a comfortable temperature in your home.

In reducing the draft control setting you have also reduced the flue temperatures and your chimney begins to cool down. At this time the amount of draft is also decreasing and spillage may occur. The differences between the flue temperature and the outdoor air temperatures causes your chimney to draw and vent the flue gasses to the outside. This air movement, sometimes referred to as Stack Effect, is also influenced by air density and moisture differences. Small temperature differences produce less draw in your chimney system than large temperature differences.

General Rules for burning in the shoulder season:

- Run your stove on high for 30 minutes after start up and reloading.
- Slowly slide the air control down to the desired heat setting.
- If your stove is producing too much heat, start to build smaller hotter fires.

## MAINTENANCE

### RUN-AWAY OR CHIMNEY FIRE

#### **WARNING**

**A CHIMNEY FIRE CAN PERMANENTLY DAMAGE YOUR CHIMNEY SYSTEM. THIS DAMAGE CAN ONLY BE REPAIRED BY REPLACING THE DAMAGED COMPONENT PARTS. CHIMNEY FIRE DAMAGE IS NOT COVERED BY THE LIMITED WARRANTY.**

#### **CAUSES:**

1. Using incorrect fuel, or small fuel pieces which would normally be used as kindling.
2. Leaving the door ajar too long and creating extreme temperatures as the air rushes in the open door.
3. Improperly installed or worn gaskets.
4. Creosote build up in the chimney.

#### **SOLUTIONS:**

1. Do not burn treated or processed wood, coal, charcoal, colored paper or cardboard.
2. Be careful not to over fire the appliance by leaving the door open too long after the initial start-up.
3. Replace worn, dried out (inflexible) gaskets.
4. Have your chimney cleaned regularly.

#### **WHAT TO DO IF A RUN-AWAY OR CHIMNEY FIRE STARTS:**

1. Slide the draft control to **LOW** (lowest position), and make sure firebox is closed tightly.
2. Call the local fire department.
3. Examine the chimney, attic and roof of the house, to see if any part has become hot enough to catch fire. If necessary spray with a fire extinguisher or water from a garden hose.
4. Do not operate the appliance again until you are certain the chimney has not been damaged.

### **CREOSOTE FORMATION AND REMOVAL**

When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. These vapors condense in the relatively cooler chimney flue of a slow burning fire and when ignited, make an extremely hot fire. Check your chimney for creosote and soot build-up daily, until a safe frequency for cleaning is established. The chimney connector and chimney should be inspected regularly during the heating season to determine if a creosote build up has occurred. Be aware that the hotter the fire, the less creosote is deposited, and weekly cleaning might be necessary in mild weather, even though substantially longer period without cleaning may be sufficient in colder months.

If accumulation is excessive, clean the chimney. You may want to call a professional chimney sweep to clean it. Both the chimney and the appliance have to be cleaned at least once a year or as often as necessary. Have a clearly understood plan to handle a chimney fire.



## MAINTENANCE cont.

### CHIMNEY MAINTENANCE

The most efficient method to sweep the chimney is using a hard brush. Brush downwards so soot and creosote residues will come off the inner surface and fall to the bottom of the chimney where they can be removed easily. The chimney must be checked regularly and if creosote has accumulated, it must be removed without delay. Cleaning on a regular basis should be sufficient during the coldest months.

Smoke Flue Inspection:

1. The chimney should be inspected regularly during the heating season.
2. If possible, the chimney should be dismantled and cleaned.
3. The chimney should be inspected for possible damage.
4. If it is in good condition, put the chimney back in place; otherwise, it must be replaced.

### FIRE EXTINGUISHERS AND SMOKE DETECTORS

All homes with a solid fuel burning appliance should have at least one fire extinguisher in a central location, known to all, and at least one smoke detector in the room containing the appliance. If it sounds an alarm, correct the cause but do not de-activate or relocate the smoke detector.

### ASH REMOVAL

This appliance is required to be cleaned frequently because soot, creosote and ash may accumulate. Wait until the appliance is fully cooled off before the removal of ashes. **ALWAYS REMOVE THE ASH BUCKET IMMEDIATELY AFTER FILLING.** Ashes should be removed any time they come within one inch of the door opening. It is not necessary or advisable to completely remove all of the ashes when cleaning this appliance. Wood burns best in a bed of ashes 1/2" thick. Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground (outside), well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Other waste shall not be placed in this container.

### WARNING

**NEVER STORE HOT ASHES IN A GARAGE OR BASEMENT. HOT ASHES WILL GENERATE CARBON MONOXIDE AND / OR FLAMMABLE GASES. THESE GASES MAY CAUSE SUFFOCATION AND POSSIBLE DEATH.**

## MAINTENANCE cont.

### LOADING DOOR GASKET INSPECTION

Inspect the door gasket for physical deterioration, missing sections or obvious leakage. The appliance front should make a groove in the gasket material - one side of the groove (toward the inside) will often be dark or black, and the other side (toward the outside) should be light or white. Dark smudges on the outside of the groove may indicate an air leak. If the groove is very shallow or missing, or if there is a heavy ash or creosote deposit along the bottom edge of the gasket, it may need to be replaced. Frayed or broken gasket material, or a gasket that is hard and unyielding, will also indicate need for replacement. Any time a piece of gasket is missing or is broken anywhere, the entire gasket must be replaced.

To check the gasket further, wait until the appliance is cooled and insert a piece of paper (a dollar bill will work) into the door opening and close and latch the door. Obvious resistance should be felt when pulling the paper out. Repeat this check several times around the perimeter of the door.

### LOADING DOOR GASKET REPLACEMENT

#### **BLAZE KING RECOMMENDS YOUR DEALER PERFORM THIS TASK**

1. If the door gasket is to be replaced, be sure you have Blaze King 7/8" fiber glass gasket ready to re-install, as well as high temperature adhesive. See your Blaze King dealer.
2. Be sure the fire is out and the stove has cooled down. The door should be removed by lifting up and out, off of the hinge pins. Then lay the door flat.
3. With a pair of pliers, pull the old door gasket out of the channel and dispose of it.
4. Thoroughly clean out the channel so the new silicone adhesive will adhere and the gasket will fit smoothly.
5. Dry fit the new gasket first to ensure proper fit. Do not stretch or cut the gasket. Distribute the gasket evenly around the frame.
6. Run a small bead of a high temperature silicone adhesive along the center of the channel. **DO NOT USE HOUSEHOLD SILICONE CAULKING.** High temperature silicone may be obtained from wood stove dealer.
7. Start the new gasket in the lower right corner. Do not stretch or cut the gasket. Distribute the gasket evenly around the frame.
8. Allow the adhesive to dry before closing the loading door. The loading door tension may need to be adjusted, see "LOADING DOOR TENSION ADJUSTMENT" on page 41.
9. Check the fit of the door gasket. Insert a narrow strip of paper into the door opening and close and latch the door. Obvious resistance should be felt when pulling the paper out. Repeat this check several times around the perimeter of the door. If no resistance is felt, adjust door latch catch, see "LOADING DOOR TENSION ADJUSTMENT" on page 28.
10. A tight sealing door extends the burn times.

## MAINTENANCE cont.

### DOOR GLASS GASKET INSPECTION

When the stove is cold, hold the glass by placing the palm of each hand on either side of the glass. Press firmly and try to move the glass. If the glass moves the door glass gasket may need to be replaced. Inspect the door glass gasket. If the gasket is frayed or missing sections replace the gasket.

### DOOR GLASS GASKET REPLACEMENT

#### **BLAZE KING RECOMMENDS YOUR DEALER PERFORM THIS TASK**

1. You will require Blaze King glass gasket and Blaze King door gasket. Please see your Blaze King dealer.
2. Remove the old glass gasket.
3. Starting at the top right corner, carefully wrap the gasket around the edges, pressing firmly onto the sides of the glass with the gasket centered on the edge. Finish the wrapping with a 1/2" overlap. Ensure the thickness of the gasket remains consistent and uniform.
4. Install the glass frame with original fasteners. Ensure the glass is parallel to the frame and tighten the fasteners evenly.
5. Follow steps on page 26, "**LOADING DOOR GASKET REPLACEMENT**".



### DOOR GLASS, CLEANING

The best way to keep the glass clean is to leave the stove on high burn for a period of time after each reloading. The moisture which is driven from a new load of wood contributes much of the creosote on the inside of the glass. Removing that moisture at the beginning of the burn cycle helps to keep the glass clean. Leaving the air control on a higher setting for 30 minutes to an hour before turning to low for an overnight burn will also help. Heavier deposits may require hand cleaning. Manual glass cleaning should be done when the stove and glass are cool. **DO NOT CLEAN THE GLASS WHILE IT IS HOT. WARNING: Do not use abrasive cleaners to clean the glass.** Use a soft cloth. After using any cleaner, thoroughly rinse the glass with water to remove any deposits left by the cleaner. Failure to remove all traces of glass cleaner will result in the glass cleaner residue baking on. This residue may be very difficult to remove.

## MAINTENANCE cont.

### LOADING DOOR TENSION ADJUSTMENT

To tighten the door seal:

1. Open the loading door.
2. Rotate the handle counter-clockwise one rotation (**Fig. A**).
3. Repeat paper test. (see “LOADING DOOR GASKET INSPECTION” on page 37)
4. Repeat steps 1-3 if necessary.

To loosen the door seal:

1. Open the loading door.
2. Rotate the handle clockwise one rotation (**Fig. B**).
3. Repeat paper test. (see “LOADING DOOR GASKET INSPECTION” on page 37)
4. Repeat steps 1-3 if necessary.

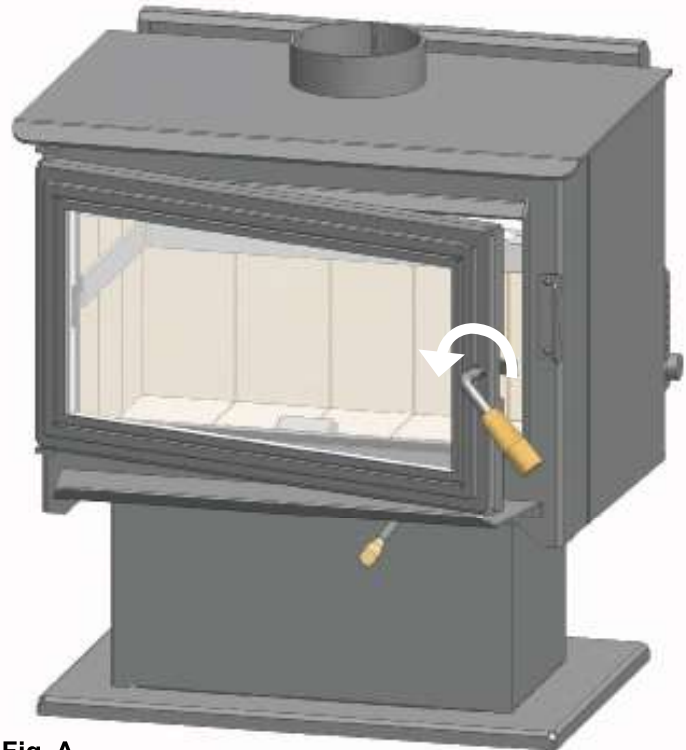


Fig. A

### **⚠ WARNING**

**DO NOT OPERATE THIS WOOD STOVE IF THE DOOR GASKET IS MISSING OR DAMAGED. DANGEROUS OVER FIRING CAN OCCUR WHICH CAN DAMAGE THE APPLIANCE OR IGNITE CREOSOTE IN THE CHIMNEY, POSSIBLY CAUSING A HOUSE FIRE. IF ANY PART OF THE WOODSTOVE OR FLUE SYSTEM IS GLOWING THE STOVE IS BEING OVER FIRED.**

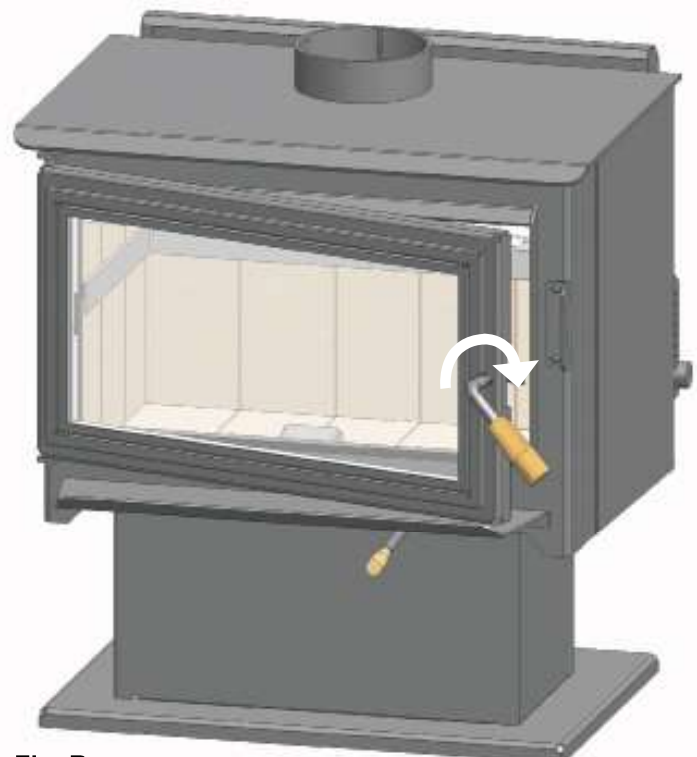


Fig. B

## MAINTENANCE cont.

### BAFFLE REPLACEMENT

The baffle is the part of the stove that receives the most heat. For this reason, as well as for chimney cleaning ease, it was designed for easy removal. Remove the two allen head cap screws and washers from each side of baffle support plates (**Fig. A**) to allow the baffle to slide forward and out (**Fig. B**). The baffle may be damaged by over firing and burning improper fuels, incorrect baffle damage will not covered by warranty. To order replacement baffles please call your dealer with the model and serial number of your stove.

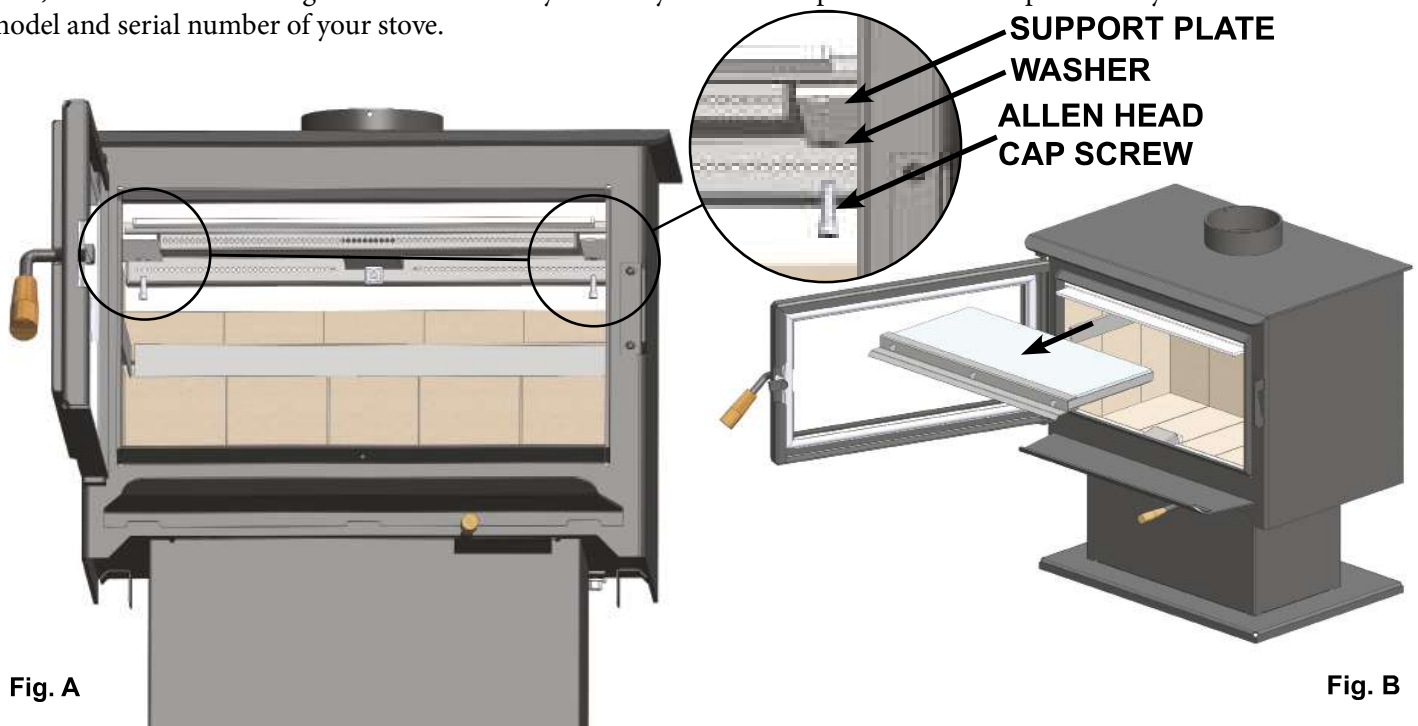


Fig. A

Fig. B

### CHIMNEY DRAFTS

Draft is the force which moves air into the appliance and up through the chimney. The amount of draft in your chimney depends on the length of the chimney, local geography, nearby obstructions and other factors. Too much draft may cause excessive temperatures in the appliance. Inadequate draft may cause back puffing into the room and 'plugging' of the chimney.

Inadequate draft will cause the appliance to leak smoke into the room through appliance and chimney connector joints. An uncontrollable burn or excessive temperature indicates excessive draft.

If you suspect a draft problem in an existing chimney, determine the draft by using a water manometer (or digital draft gauge). The draft should be measured with the stove at **medium burn and high burn**. After the measurement is completed, fill any holes that were made in the chimney connector by using a sheet metal screw of proper size. Recommended draft is **.02 -.03 in. w.c. at medium fire and .05 in. on high burn**. Too little draft results in a sluggish fire and smoke spillage when the stove door is opened. Too much draft (over 0.06 in. w.c. on high burn) makes it unsafe to operate the stove and will void manufacturers warranty.

### OPTIONAL FAN ASSEMBLY

Routine maintenance of the OPTIONAL Fan Assembly on the back of the stove is not required. However, should it become necessary to replace an individual fan or rheostat, contact your local dealer.

## TROUBLESHOOTING

Your Blaze King is designed to allow a wide selection of heat output levels. If you begin to lose control of the amount of heat the stove is emitting, determine the cause early so that major problems may be avoided.

The five major needs of a well-controlled fire are:

1. Knowledgeable operator.
2. Adequate air supply.
3. Firewood of good quality and proper size.
4. Clean chimney, properly sized and installed.
5. Door gasket tight and firm.

Considering all of the above, number one is the most important for safe and efficient operation of any woodstove. Please study the operation instructions carefully. Consult your BLAZE KING dealer or call the Customer Service Department at Blaze King in the U.S.A. at 509-522-2730 or in Canada at 250-493-7444 if you have any questions not answered in this manual.

All of the five above mentioned needs are interrelated. A deficiency in any one will affect all of the others. If you encounter a problem, determine the source of the problem and then follow-up by checking the other needs as possible contributing factors.

<b>PROBLEM: Chimney Fire</b>	
<b>CAUSE</b> Act immediately regardless of cause	<b>SOLUTION</b> Slide the draft control to <b>LOW</b> , check loading door to be sure it is tightly closed. <b>Call Fire Department.</b>
After the fire is out, have your chimney and flue connector inspected by a certified chimney sweep. A damaged masonry chimney should be repaired or rebuilt. A prefabricated chimney (factory built) that is damaged should be replaced. Any damage to the flue connector should be corrected before the system is used again.	
Possible causes of a chimney fire, and remedies for those causes, can be found further in this section: "Excessive Creosote Formation", and "Spots of Creosote Accumulation in Chimney or Flue Connector".	

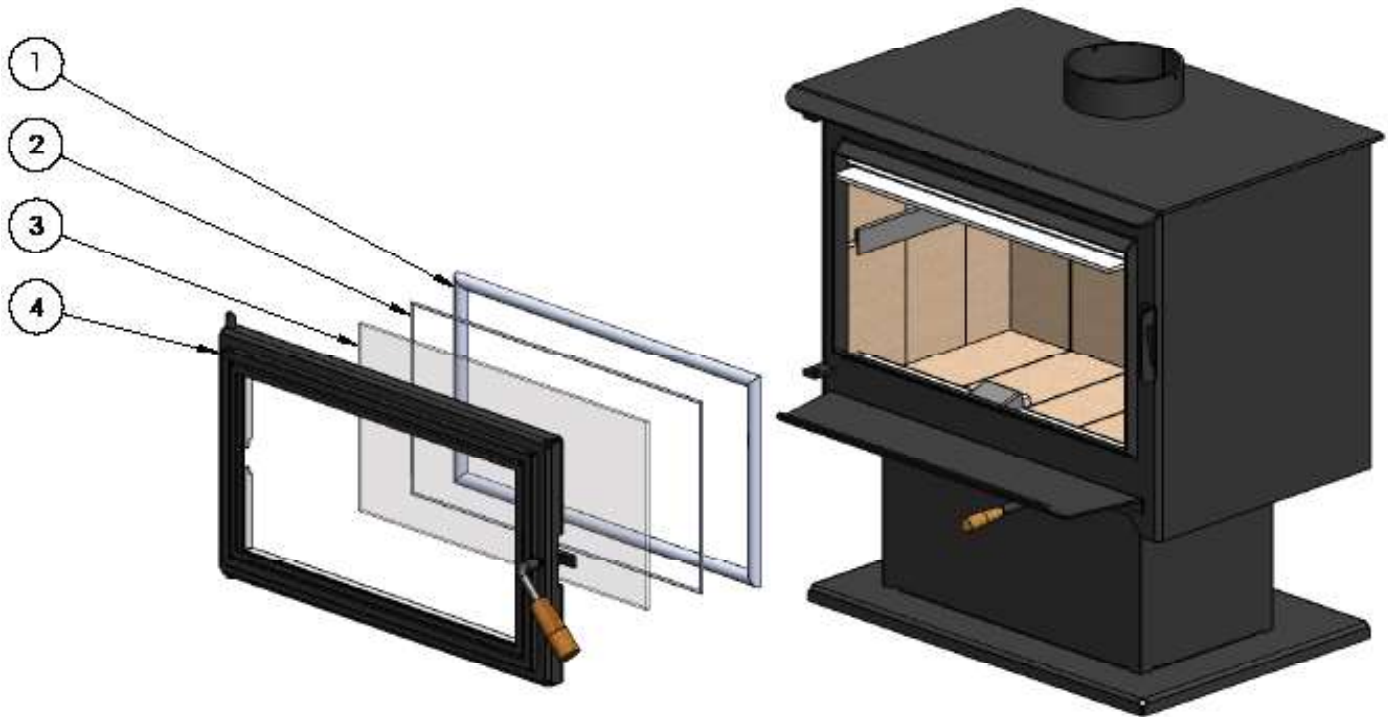
<b>PROBLEM: Not enough heat.</b>	
<b>CAUSE</b> Green or wet wood. Not enough fuel in stove.	<b>SOLUTION</b> Use seasoned wood. Don't be afraid to FULLY load the stove.
Poor draft caused by an oversize flue	Measure draft with Manometer. See "CHIMNEY DRAFTS" Consult your Blaze King dealer or a chimney sweep.
Strong, gusting winds causing downdraft in chimney	Install wind-resistant chimney cap. Directional caps may not stay freely rotating. If you have a directional cap, check it frequently.
Tightly sealed house, inadequate air supply.	Slightly open a window, near the stove or install an outside air kit.
Reloading too much wood on top of too few coals.	Allow a larger bed of coals to build up.

<b>PROBLEM: Too much heat.</b>	
<b>CAUSE</b> Draft control set too high.	<b>SOLUTION</b> Slide draft control lower.
Loading door gasket leaking, admitting excess air into firebox.	Replace door gasket and/or adjust door. See "GASKET INSPECTION"
Excessive draft in the chimney.	Measure draft with a Manometer. See "DRAFTS". Consult your Blaze King dealer or a chimney sweep. Install a cap.
Wood is too small.	Use larger pieces.

## TROUBLESHOOTING cont.

<b>PROBLEM: One or both fans will not run, or there is no adjustment for fan speed.</b>	
<b>CAUSE</b> Fan mounted improperly.	<b>SOLUTION</b> Check that fan blade's not touch edges of housing.
Fan speed control.	Consult your Blaze King dealer for replacement.
<b>PROBLEM: Fans minimum speed too fast or maximum speed too slow.</b>	
<b>CAUSE</b> Fan speed control out of adjustment.	<b>SOLUTION</b> Consult your Blaze King Dealer.
<b>PROBLEM: Excessive creosote formation in chimney and chimney Connector.</b>	
<b>CAUSE</b> Wood too green or wet.	<b>SOLUTION</b> Use seasoned wood. Use a moisture meter to confirm.
Poor draft caused by an oversize or short flue, etc.	Measure draft with Manometer. See "DRAFTS". Consult your Blaze King dealer or a chimney sweep.
Chimney too cold or poorly insulated.	Upgrade chimney system. Consult your Blaze King dealer or a chimney sweep.
<b>PROBLEM: Spots of creosote accumulation in chimney or chimney connector.</b>	
<b>CAUSE</b> Air leaks in chimney or chimney connector.	<b>SOLUTION</b> Inspect chimney and / or chimney connector. Repair or replace as necessary. Check to be sure that the chimney connector is installed correctly.
<b>CAUTION: a leaking chimney connector is a fire hazard and demands immediate attention.</b>	
Poor draft caused by an oversize flue, single wall pipe, to many elbows, etc.	Measure draft with Manometer. See "DRAFTS". Consult your Blaze King dealer or a chimney sweep.
<b>PROBLEM: Door glass quickly becomes coated with creosote.</b>	
<b>CAUSE</b> <b>LOW</b> draft control setting.	<b>SOLUTION</b> Slide the draft control to <b>HIGH</b> during the first 20-30 minutes or until the fire is well established after each reloading.
Poor draft caused by an oversize or short flue, etc.	Measure draft with manometer. See "DRAFTS". Consult your Blaze King dealer or a chimney sweep.
Obstruction in chimney or cap screen.	Remove obstruction. Clean chimney and/or cap screen.
Strong, gusting winds causing downdraft in chimney.	Install wind-resistant chimney cap.
Tightly sealed house, inadequate air supply.	Open a window slightly, near the stove.
Burning poorly seasoned wet wood, or wood with high pitch content.	Use seasoned wood with low pitch content, such as some types of pine.
<b>PROBLEM: Smoke spills from door opening when loading fuel</b>	
<b>CAUSE</b> Chimney too cold.	<b>SOLUTION</b> Make certain double wall stove pipe is used in installation.
Not enough vertical rise.	Make certain a minimum vertical rise of 36" is observed prior to elbows. Use two 45 elbows instead of 90 elbow.
Chimney not drafting.	Slide draft control to <b>HIGH</b> setting and wait 5-10 minutes to increase chimney or flue temperature.

## REPLACEMENT PARTS cont.

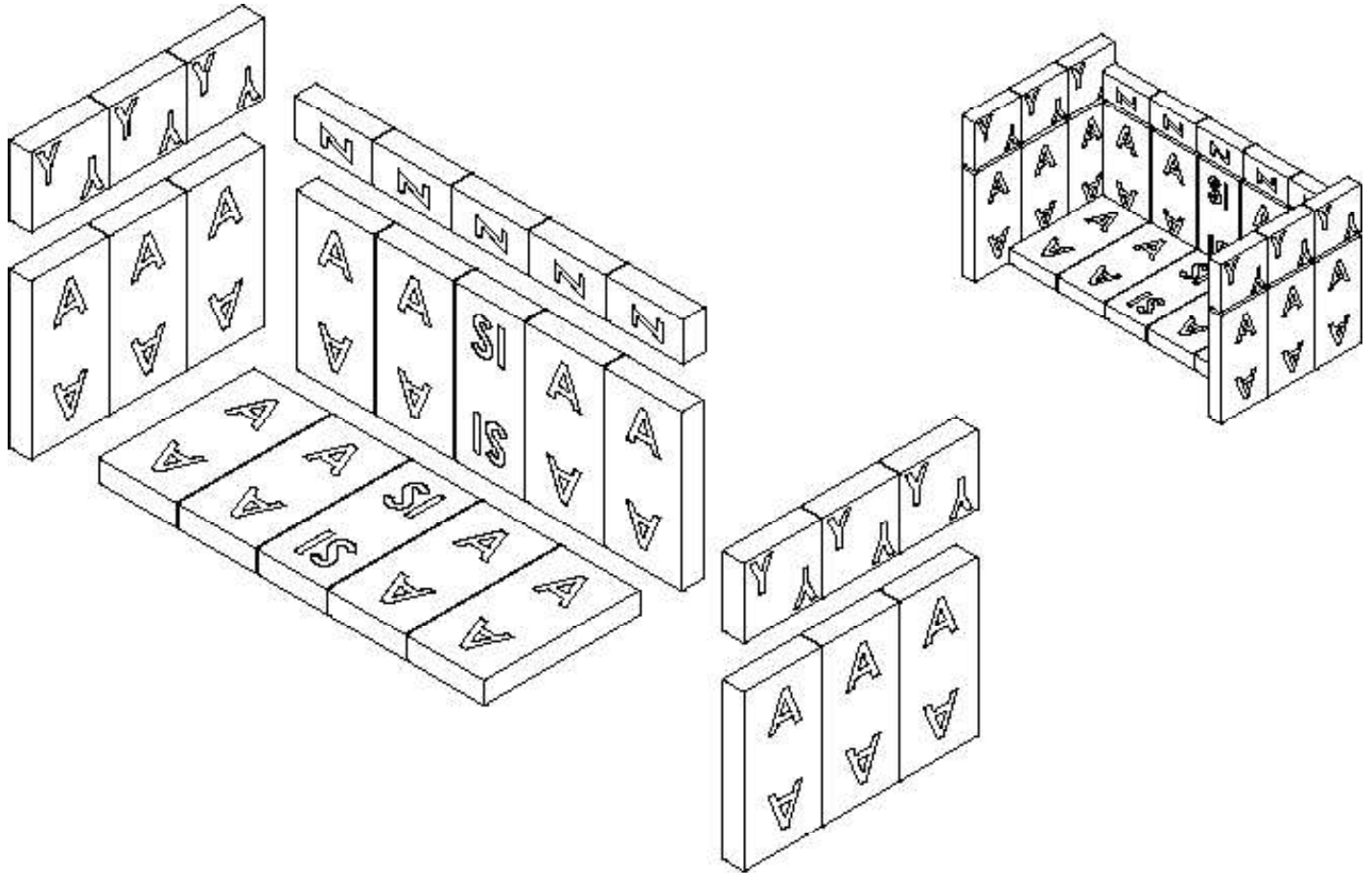


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	0186A-6ft	Gasket 7/8" hard rope for Briarwood	1
2	0254AS-6ft	1/8" window gasket	1
3	0730	Robax Glass 10 5/8" x 21 5/8"	1
4	ZBR518	Door without glass	1
	ZBR518P-C	Door with glass, no handle	1



**REPLACEMENT PARTS cont.**

**Briarwood Brick Layout**



ITEM NO.	PART NUMBER	QTY.
1	A Size Brick	14
2	SI Size Brick	2
3	Y Size Brick	6
4	Z Size Brick	5

# WARRANTY

## BLAZE KING WOOD LIMITED WARRANTY

Blaze King and Valley Comfort’s respective brands extend the following warranty for wood fired appliances purchased from an authorized Blaze King / Valley Comfort dealer and installed in the United States of America or Canada. Warranty starts with date of purchase by the original owner (End User) except as noted for replacement parts.

Warranty Period		Components Covered	
Parts	Labor	Wood	
1 Year		X	All parts, materials and surface finishes (flaking and peeling) Subject to Conditions, Exclusion, and Limitations listed.
2 Years		X	Fan assemblies and motors, thermal sensors, door handle metal components.
5 Years	2 Years	X	Firebox & Heat Exchanger
1 Year		X	Other Replacement Parts
See Conditions, Exclusions, and Limitations			

## WARRANTY cont.

### Blaze King Wood Limited 5 Year Warranty

Blaze King is the manufacturer of the Blaze King line of heating products. At Blaze King, our commitment to the highest level of quality and customer service is the most important thing we do. Each Blaze King stove is built on a tradition of using only the finest materials and is backed by our limited warranty to the original purchaser. With Blaze King, you're not just buying a stove; you're buying a company with years of unequalled performance and quality.

#### Limited (5) Year Warranty:

Under this warranty, Blaze King covers the stove body and accessories against defects in materials and workmanship, for part repair or replacement for the first five (5) years \*\*\* to the original purchaser. This Warranty covers: All Steel firebox components against defects in material and workmanship. Please see the exclusions and limitation section below as certain restrictions and exclusions apply this warranty.

#### Limited Two (2) Year Warranty:

Under this warranty, Blaze King covers, fan assemblies, modular thermostat and door handle steel components against defects in materials and workmanship, for part repair or replacement and limited labor for the first two (2) years to the original purchaser. Please see the exclusions and limitation section below as certain restrictions and exclusions apply to this warranty.

#### Limited One (1) Year Warranty:

Under this warranty, Blaze King covers all parts and materials against defects in materials and workmanship including exterior paint finishes, for part repair or replacement and limited labor for the first year to the original purchaser. Please see the exclusions and limitation section below as certain restrictions and exclusions apply to this warranty.

#### How the Warranty Works

1. All warranties by the manufacturer are set herein and no claim shall be made against the manufacturer on any oral warranty or representation. All claims under this Limited Warranty must be made in writing by your dealer.
2. Any stove or part thereof that is repaired or replaced during the Limited Warranty period will be warranted under the terms of the Limited Warranty for a period not exceeding the remaining term of the original Limited Warranty or six (6) months, whichever is longer.
3. For any part or parts of this stove, which in our judgment show evidence of defects, Blaze King reserves the option to repair or to replace the defective part(s) through an accredited distributor or agent, provided the defective part is returned to the distributor or agent, transportation prepaid, if requested.
4. If you discover a problem that you think may be covered by the Limited Warranty, you **MUST REPORT** it to your Blaze King dealer **WITHIN 30 DAYS** from the date the problem was first detected, giving them proof of purchase and the date of purchase. The dealer will investigate the problem and work with Blaze King to determine whether the problem:
  - a) Is covered by the Limited Warranty or
  - b) Can be fixed in your home or does the product need to be returned to Blaze King for repair.
5. If Blaze King determines that the stove needs to be returned to Blaze King for repair, the customer has the responsibility and the expense of removing it from their home and shipping it to Blaze King. If the problem is covered by the Warranty, Blaze King will repair or replace the item at their discretion and the customer will be responsible for return shipping and re-installation in their home.
6. If the problem is not covered by the Limited Warranty, the customer will be responsible for all repair costs, as well as all storage, shipping and the cost of removing and re-installing the stove.

If you are not satisfied with the service provided by the Blaze King dealer, write to Blaze King at the address listed on the last page of the Owner's Manual. Include a copy of the original purchase invoice and a description of the problem.

## WARRANTY cont.

### Exclusions and Limitations:

1. This Warranty does not cover tarnish, discoloration or wear on the plated surfaces. Painted finishes will change color after initial firing and will continue to change through the lifetime of the stove. This is normal occurrence for all high temperature coatings.
2. This Warranty does not cover gasket material or firebrick.
3. Blaze King strongly recommends installation by a certified installer. Failure to comply may adversely affect coverage under the terms of this warranty. This Limited Warranty covers defects in materials and workmanship only if the product has been installed in accordance with local building and fire codes; in their absence refer to the owner's manual. If the product is damaged or broken as a result of any alteration, wilful abuse, mishandling, accident, neglect, or misuse of the product, the Limited Warranty does not apply.
4. The stove must be operated and maintained at all times in accordance with the instructions in the Owner's Manual. If the unit shows signs of neglect or misuse, it is not covered under the terms of this Warranty policy. Performance problems due to operator error will not be covered by the Limited Warranty policy. Some minor expansion, contraction, or movement of certain parts and resulting noise, is normal and not a defect and, therefore, is not covered under this Limited Warranty.
5. Misuse includes over-firing. Over-firing can be identified later by warped plates and paint pigment being burnt off. Over-firing this appliance can cause serious damage and will nullify the Limited Warranty.
6. The Limited Warranty will cover glass thermal breakage only and will not cover misuse of the stove glass, including but not limited to:
  - a) Glass that is struck, has surface contaminates or has had harsh or abrasive cleaners used on it.
  - b) If the door is slammed or is closed while wood in the firebox is protruding out the stove opening thus striking the glass.
7. This warranty does not cover products made or provided by other manufacturers and used in conjunction with the operation of this stove without prior authorization from Blaze King. The use of such products may nullify the Limited Warranty on this stove. If unsure as to the extent of this Limited Warranty, contact your authorized Blaze King dealer before installation.
8. Blaze King will not be responsible for inadequate performance caused by environmental conditions.
9. The Limited Warranty does not cover installation and operational related problems such as use of downdrafts or spillage caused by environmental conditions. Environmental conditions include but are not limited to nearby trees, buildings, roof tops, wind, hills, mountains, inadequate venting or ventilation, excessive offsets, negative air pressures or other influences caused by mechanical systems such as furnaces, fans, clothes dryers etc.
10. The Limited Warranty does not cover damage caused by burning salt-saturated wood, corrosive driftwood, chemically treated wood or any fuel not recommended in the Owner's Manual (use cord wood only).
11. The Limited Warranty is void if:
  - a) The stove has been operated in atmospheres contaminated by chlorine, fluorine or other damaging chemicals.
  - b) The stove is subject to submersion in water or prolonged periods of dampness or condensation.
  - c) Any damage to the unit, combustion chamber or other components due to water, or weather damage which is the result of, but not limited to, improper chimney/venting installation.
  - d) Salt air in coastal areas or high humidity can be corrosive to the finish; these environmental conditions can cause rusting. Damage caused by salt air or high humidity is not covered by the Limited Warranty.
12. Exclusions to the Limited Warranty include: injury, loss of use, damage, failure to function due to accident, negligence, misuse, improper installation, alteration or adjustment of the manufacturer's settings of components, lack of proper and regular maintenance, alteration, or act of God.
13. The Limited Warranty does not cover damage caused to the stove while in transit. If this occurs, do not operate the stove and contact your courier and/or dealer.
14. The Limited Warranty does not extend to or include paint, door or glass gaskets or firebricks damage caused by normal wear and tear, such as paint discoloration or chipping, worn or torn gaskets, chipped or cracked firebrick, etc.
15. The Limited Warranty does not include damage to the unit caused by abuse, improper installation, or modification of the unit.

**WARRANTY cont.**

16. Damage to plated surfaces caused by fingerprints, scratches, melted items, or other external scores and residues left on the plated surfaces from the use of abrasive cleaners or polishes is not covered in this warranty.
17. Blaze King is free of liability for any damages caused by the stove, as well as inconvenience expenses and materials. The Limited Warranty does not cover incidental or consequential damages.
18. The Limited Warranty does not cover any loss or damage incurred by the use or removal of any component or apparatus to or from the Blaze King stove without the express written permission of Blaze King and bearing a Blaze King label of approval.
19. Any statement or representation of Blaze King Products and their performance contained in Blaze King advertising, packaging literature, or printed material is not part of the Limited Warranty.
20. The Limited Warranty is automatically voided if the stove's serial number has been removed or altered in any way. If the stove is used for commercial purposes, it is excluded from the Limited Warranty.
21. No dealer, distributor, or similar person has the authority to represent or warrant Blaze King Products beyond the terms contained within the Limited Warranty. Blaze King assumes no liability for such warranties or representations.
22. Blaze King will not cover the cost of the removal or re-installation of the stove, hearth, facing, mantels, venting or other components.
23. Labor to replace or repair items under this Limited Warranty will be covered per our warranty service fee reimbursement and labor rates are set per component schedule. Labor rates vary from location to location and as such total labor costs may not be covered. Please consult with your dealer or service technician for any additional charges such as travel time or additional labor charges that may apply.
24. For parts of the Blaze King woodstove or fireplace insert warranted beyond the first year, the five year limited warranty will have the same obligations as described in this document, provided, however that the purchaser shall pay the following percentage of the then current retail cost of the repair or the replacement, according to the year after purchase in the which the defect is brought to the attention of Blaze King.\*\*\* During the 2nd year----purchaser pays 20%. 3rd year ----purchaser pays 40%. 4th year -----purchaser pays 60%. 5th year---- purchaser pays 80%.
25. If a defect or problem is determined by Blaze King to be non warrantable, Blaze King is not liable for travel costs for service work. In the event of in-home repair work, the customer will pay any in-home travel fees or service charges required by the Authorized Dealer.
26. At no time will Blaze King be liable for any consequential damages which exceed the purchase price of the unit. Blaze King has no obligation to enhance or modify any stove once manufactured (example: as a stove model evolves, field modifications or upgrades will not be performed).
27. This Limited Warranty is applicable only to the original purchaser and it is nontransferable.
28. This warranty only covers Blaze King Products that are purchased through an authorized Blaze King dealer.
29. If for any reason any section of the Limited Warranty is declared invalid, the balance of the warranty remains in effect and all other clauses shall remain in effect.
30. The Limited Warranty is the only warranty supplied by Blaze King, the manufacturer of the stove. All other warranties, whether express or implied, are hereby expressly disclaimed and the purchaser's recourse is expressly limited to the Limited Warranty.
31. Blaze King and its employees or representatives will not assume any liability for damages, either directly or indirectly, caused by improper usage, operation, installation, servicing or maintenance of this stove.
32. Blaze King reserves the right to make changes without notice. Please complete and mail the warranty registration card and have the installer fill in the installation data sheet in the back of the manual for warranty and future reference.
33. Blaze King is responsible for stocking parts for a maximum of seven (7) years after discontinuing the manufacture or incorporation of the item into its products. An exception to this would be if an OEM supplier is not able to supply a part.





