

### SOLID FUEL CATALYTIC STOVE: PE1006, PEJ1006



### **OPERATION & INSTALLATION MANUAL**



Installer: Please complete the details on the back cover and leave this manual with the homeowner. Homeowner: Please keep 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.

#### Manufactured By

Valley Comfort Systems Inc.

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Pour la version française de nos manuels S.V.P. vous référez à notre site web: www.blazeking.com

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### **INTRODUCTION**

#### **To Our Valued Customers**

Dear Customer:

Thank you for purchasing a Blaze King catalytic wood burning stove.

This owner's manual explains the steps required to safely assemble, install, operate, and maintain your new stove. Please carefully read these requirements for safe installation and proper operation before installing and using your stove.

Obtain permits from the Building Inspector or Fire Department, if local laws require. Check local building and fire codes before installing your stove. When you have completed the installation, have it checked by your local inspector. Disregarding inspection and code requirements may jeopardize your homeowner's insurance. Since some insurance carriers require notification of a stove installation, contact your insurance agent. We want your Blaze King to give you a lifetime of trouble-free operation.

While we have made every effort to make these instructions as complete as possible, some installation or operating conditions may not be covered. If you have any questions that are not answered here, contact your Blaze King dealer, Local Building Inspector, Fire Department, or our customer service department at Blaze King. In the USA please call (509)-522-2730 or in Canada please call (250)-493-7444.

The Management and Employees of

Blaze King Industries, Inc

### **SPECIFICATIONS**

Model		PE/PEJ 1006 (catalytic)		
Height		Classic Parlor Ultra	29-1/4" 34" 35-1/8"	
Width Depth		31" (without	removable bypass handle) optional fan kit but incl. door handle) n optional fans)	
Flue Collar Recommende	ed Flue Draft	6" I.D. .05" water column (on high burn) .0203 in. water column (on medium fire)		
Fire Door Op	ening	16-3/8" x 8-1	/4"	
Firebox	Depth Width Height Capacity	18" (Brick to J 21-1/8" 12-1/2" 2.85 cu. ft.	Brick, 20.5" Brick to Glass)	
Recommended Fuel length		16-17"		
Wood capacity (approximate) White oak Fir		60 lbs. 40 lbs.		
Construction		10 gauge. & 1/4" Firebox, Brick Lined 16 gauge. outer shields		
Shipping Wei	ght	355-400 lbs.		

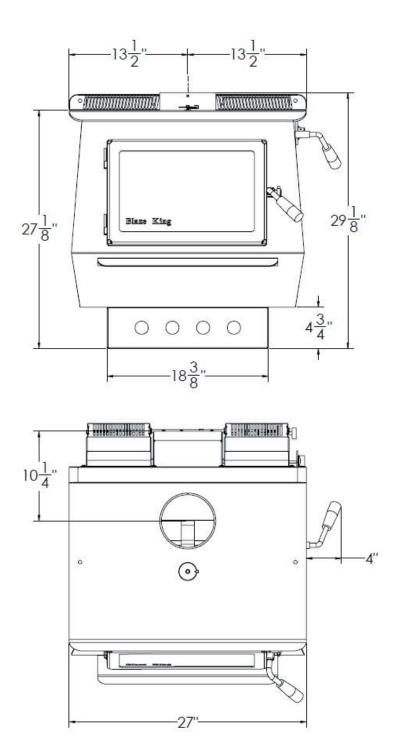
This unit is certified by the United States Environmental Protection Agency to comply with July, 1990 particulate emissions standards.

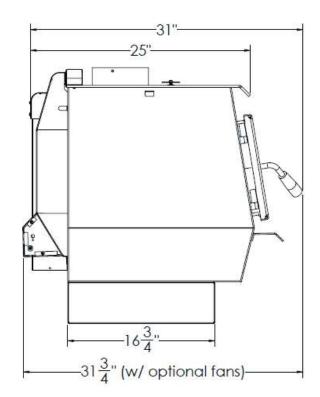
#### The following statement is required by the Environmental Protection Agency:

"This wood heater contains a catalytic combustor, which needs periodic inspection and replacement for proper operation. It is against the law to operate this wood heater in a manner inconsistent with operating instructions in this manual, or if the catalytic element is deactivated or removed."

### **PRODUCT INFORMATION**

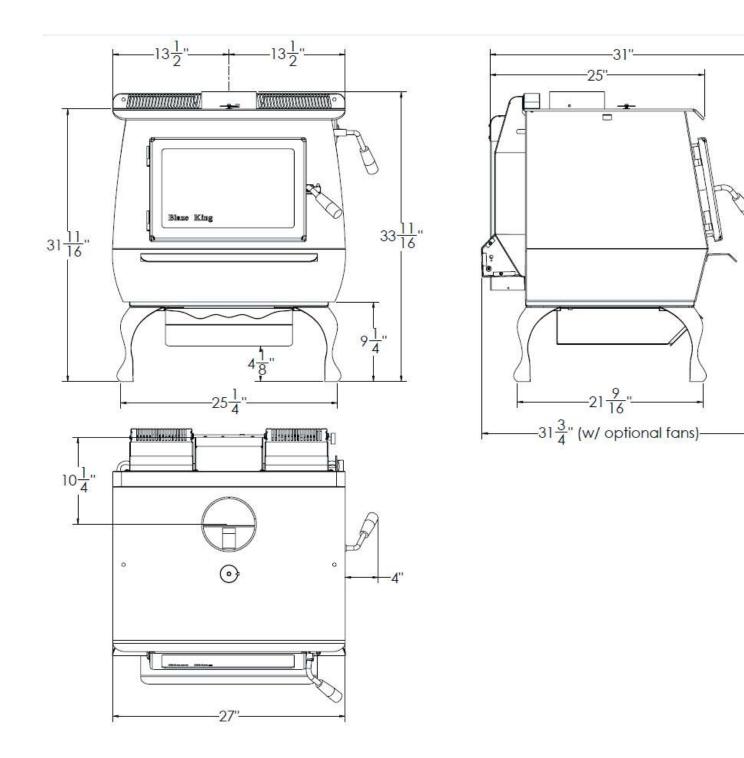
**APPLIANCE DIMENSIONS—Princess Classic PE1006BK** 





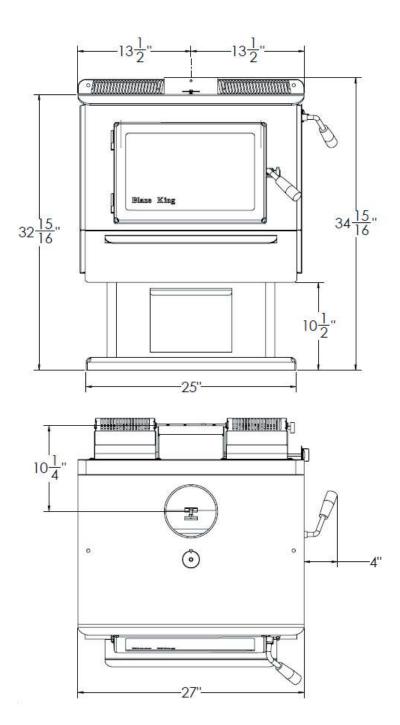
### **PRODUCT INFORMATION cont.**

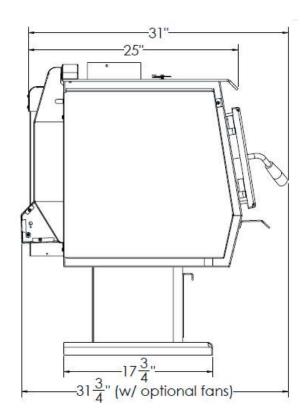
### **APPLIANCE DIMENSIONS—Princess Parlor PE1006LBK**



### **PRODUCT INFORMATION cont.**

APPLIANCE DIMENSIONS—Princess Ultra PE1006UBK







Mobile Home Installations / Installations pour maison mobile Roof exit parallel and corner. Use side shields, either fan kit or rear shield and outside air kit La sortie du toit, parallèle et le coin utiliser les boucliers latéraux, ou kit de ventilateur

254m ou un bouclier et un kit d'air extérieur

Floor protection may be any non-combustible material or Listed Floor Protector, and must extend at least

18" (456mm) (in Canada) or 16" (406mm) (in U.S.A.), in front of the loading door opening

Minimum size is 32"x 44" (813 x 1118mm) in U.S.A or 43" x 55" (1092 x 1397mm) in Canada (18"(456mm) front / 8" (203mm) rear / 8" (203mm) sides).

10'

153m

20.5

520m

13"

330mr

6"

153m

16.75

425mm

U.S. ENVIRONMENTAL PROTECTION AGENCY- Certified to comply with July, 1990 particulate emission standards. This wood heater contains a catalytic combustor, which needs periodic inspection and replacement for proper operation. Consult owner's manual for further information.

It is against the law to operate this wood heater in a manner inconsistent with operating instructions in the owner's manual, or if the catalytic element is deactivated or removed.

"Operate with doors closed. Open door to feed fire ONLY. \*Do not obstruct combustion air openings. Provide adequate outside air for combustion. \* Use only ceramic glass if replacement is necessary, 5 mm. Thickness

La protection de plancher peut être n'importe quel matériel non combustible ou Protecteur de plancher approuvé, et doit se prolonger au moins, 18 "(456mm)(au Canada) ou 16 "(406mm)(aux Etats-Unis), devant l'ouverture de la porte de chargement. La taille minimum est de 32 "x 44" (813 x 1118mm) aux Etats-Unis ou 43" x 55" (1092 x 1397mm) au Canada (18 "(456mm) avant / 8"(203mm) po à l'arrière / 8"(203mm) Cote). , and the second se

8° (203mm) po a l'arrieré / 8° (203mm) Cote). AGENCE DE PROTECTION DE l'ENVIRONNEMENT DES États-Unis - certifiée pour se conformer aux normes d'émission de juillet 1990. Cette appareille à bois contient une chambre de combustion catalytique, qui a besoin d'inspection et de remplacement périodiquement pour le fonctionnement approprié. Consulter le manuel d'installation pour de plus amples informations. Il est contre la loi d'actionner cette appareille à bois en quelque sorte con tradictoire avec les consignes d'utilisation du manuel, ou si l'étément catalytique est enlevé ou désactivé. <sup>\*</sup> Fonctionner avec les portes fermées. Ouvrir la porte pour alimenterl le feu SEULEMENT. Ne pas obstruer l'ouverture d'air d e combustion. Fournir de l'air extérieur adéquat pour la combustion. \* Employer seulement le verre en céramique si le remplacement est nécessaire, d'une épaisseur de 5mm. MANUEACTURED IN MANUEACTURE DATE

H - 16" (406 mm) in U.S.A 18" (456 mm) in Canada

G.

G

0

G - 2.5"(64 mm) in U.S.A. 8" (203 mm) in Canada

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	Blaze King Industries 146A Street Walla Walla, WA.	Valley Comfort Systems 1290 Commercial Way Penticton, B.C.	JUL 🛛	AUG 🛛	SEP	ост 🗖	NOV 🗆	DEC 🛛
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### SAFETY PRECAUTIONS

#### IF THIS BLAZE KING STOVE 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 ROOM HEATER. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.



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### 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.



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 and may harm the combustor.

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



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



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 metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled. Other waste shall not be placed in this container.

### 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, driftwood or foil-backed paper such as gum wrappers or cigarette packages. Burn natural wood only. It will void all warranties and safety listings and may damage the catalyst.



Install at least one smoke detector on each floor of your home to ensure your safety. It should be located away from the woodstove and close to the sleeping areas. Locating a smoke detector too close to a woodstove can cause the smoke detector alarm to sound if a puff of smoke is emitted while the woodstove door is open during reloading. Follow the smoke detector manufacturers placement, installation, and maintenance instructions.



Never burn the stove with the loading door open. Leaving the door cracked open may damage the combustor.

Never block free airflow through vents on this appliance.



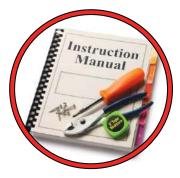
Never use gasoline, gasolinetype lantern fuel, kerosene, charcoal lighter fluid, or similar liquids to start or 'freshen up' a fire in this heater. Keep all such liquids well away from the heater while it is in use.



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.



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.



36"

wood, paper and other combustibles a minimum of 36in (914mm) away from the front of the appliance. ALSO, DO NOT STORE COMBUSTIBLES UNDER THE APPLIANCE (WOOD, PAPER etc.).

Keep furniture, curtains,

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

#### GENERAL

#### INSTALLATION IS TO BE PERFORMED BY A QUALIFIED INSTALLER

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. Please take time to read these instructions thoroughly. Not following the instructions could result in a faulty installation causing serious problems. Along with these general instructions you must follow the specific instructions which pertain to your particular installation.

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).



#### FREIGHT DAMAGE

This product was carefully inspected before it left Blaze King. Inspect the unit thoroughly upon its arrival. If damage is found report it to the carrier and then immediately file a freight damage claim. Blaze King will not be held responsible for damage incurred once the product leaves our factories.

#### PARTS INCLUDED WITH THE PRINCESS

- 1. Poker
- 2. Fire Starter
- 3. Manual Kit

#### **OPTIONAL EQUIPMENT**

- 1. Convection Deck
- 2. Fan Kit
- 3. Rear Shield
- 4. Ash Drawer (optional on Parlor model, standard on Pedestal model)

#### **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 in (50.8mm) on either side of the chimney connector.

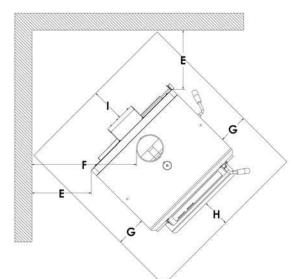
See the next page for minimum sizes depending on model. This floor protection is required to prevent sparks from falling onto the combustible floor. See CSA B365-M87). **This product does not require thermal hearth pad protection.** 

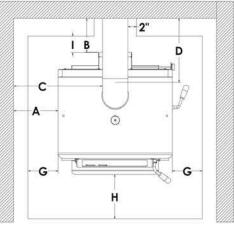
### INSTALLATION INSTRUCTIONS cont.

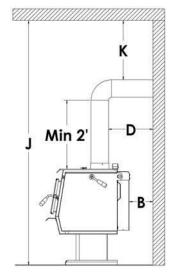
### MINIMUM CLEARANCES for PE1006 and PEJ1006

Residential Installations	Α	В	С	D	E	F	J
Roof exit, parallel and corner. No fan kit required.	16" 410mm	9" 230mm	26.5" 675mm	16" * 410mm	14" 360mm	24.75" * 629mm	72"
Roof exit, reduced side. Use side shields.	10" 254mm	9" 230mm	20.5" 520mm	16" 410mm			72"
Roof exit, reduced corner. Use side shields and either fan kit or rear shield.					6" 153mm	16.75" 425mm	72"
Roof exit, close clearance. Use side shields, and either fan kit or rear shield.	10" 254mm	6" 153mm	20.5" 520mm	13" 330mm			72"
Wall exit, parallel and corner. No fan kit required.	16" 410mm	9" 230mm	26.5" 675mm	18" * 460mm	14" 360mm	24.75" * 629mm	72" *
Wall exit, reduced side. Use side shields.	10" 254mm	9" 230mm	20.5" 520mm	18" 460mm			72"
Wall exit, reduced corner. Use side shields and either fan kit or rear shield.					7" 180mm	17.75" 451mm	72"
Alcove, roof exit. Use side shields, and either fan kit or rear shield.	10" 254mm	6" 153mm	20.5" 520mm	13" 330mm			72"
Mobile Home Installation							
Roof exit, parallel and corner. Use side shields, either fan kit or rear shield and outside air kit.	10" 254mm	6" 153mm	20.5" 520mm	13" 330mm	6" 153mm	16.75" 425mm	72"

\* Check with local codes and pipe manufacturer for pipe clearances. In Canada, 18" clearances from single wall pipe is required.







G = 2.5" (102mm) in USA	H = 16" (406mm) in USA	I = 0" (0mm) in USA	K = 18" (456mm) for single wall pipe in Canada
8" (203mm) in Canada	18" (456mm) in Canada	8" (203mm) in Canada	(If K=18", J=79.375" (2134mm) Minimum)

Alcove Dimensional Requirements:

Minimum Width 47", Maximum Depth 48", Minimum Height above Stove Top, 49"

This stove must be installed in compliance with all local codes and regulations.

#### COMBUSTION AIR

Insure 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 stove is located, to prevent air starvation.

#### DRAFT

Draft is created by the heated air rising in the chimney system. This draft will pull fresh combustion air into the firebox. Recommended draft is .05 in. w.c. operated on high. Too little draft results in a sluggish fire and smoke spillage into the room when the stove door is opened. Too much draft (over 0.06 in. w.c.) makes it unsafe to operate the stove and will void manufacturers warranty. Use a key damper if necessary to avoid excessive draft.

#### **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 6" diameter, 24/26 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. Blaze King recommends the use of double wall pipe and two 45° elbows instead of a single 90° elbow. A minimum 36" rise is recommended prior to any elbows being used.

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:

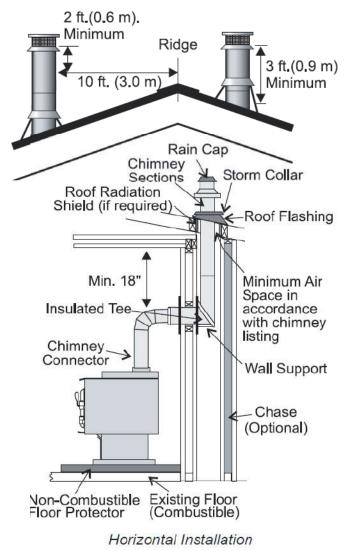
THE CHIMNEY CONNECTOR IS TO BE USED ONLY WITHIN THE ROOM, BETWEEN THE STOVE AND CEILING/WALL. NEVER USE A CHIMNEY CONNECTOR TO PASS THROUGH AN ATTIC OR ROOF SPACE, CLOSET OR SIMILAR CONCEALED SPACE, OR A FLOOR, OR CEILING. ALWAYS MAINTAIN THE MINIMUM CLEARANCES TO COMBUSTIBLES AS REQUIRED BY THE APPLICABLE BUILDING CODES.

#### CONNECTION TO A METAL PREFABRICATED CHIMNEY

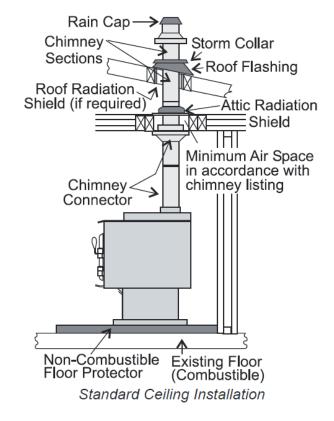
When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed precisely. You must also purchase (from the same manufacturer) and install the ceiling support package or wall pass through and "T" section package, fire stops (when needed), insulation shield, roof 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 12 feet, measured from the stove flue collar to the top of the chimney, not including the chimney cap.



#### CONNECTION TO A MASONRY CHIMNEY

#### Masonry chimney\*\*\*

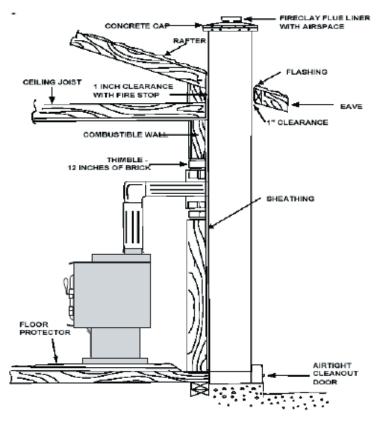
Ensure that a masonry chimney meets the minimum standards (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the stove is installed and operated. When connecting the stove through a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



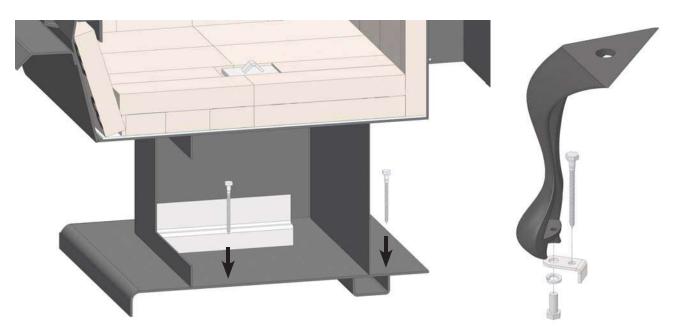
#### MOBILE HOME (AND RESIDENTIAL ALCOVE INSTALLATIONS)

Either Rear Shield OR Fan kit are required for these installations (See next page for kits and part numbers). Mobile home installations also requires the Outside Air Kit: Z1726B. They are easiest to mount before the stove is installed. See instructions packed with each kit.

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, and must be of same brand and model as listed prefabricated chimney. 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 need to be removable to allow for transportation of the mobile home.

#### MOBILE HOME: WARNING - DO NOT INSTALL IN SLEEPING ROOM CAUTION - 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 tie-downs provided in the Outside Air kit. (For the pedestal model, remove the ash drawer to access the screw down holes. For the Leg model, use the Leg Anchor Kit (P/N ZR8039) to secure stove to floor.)

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

#### **OPTIONAL ACCESSORIES**

Outside air kit, Rear Shield or Fan Kit are optional accessories, but are required for the following installations:

MOBILE HOME INSTALLATION — Requires Outside Air Kit and Fan Kit or Rear Shield RESIDENTIAL ALCOVE — Requires Fan Kit or Rear Shield

#### **REAR SHIELD KIT (R/SP1006)**

EITHER this Rear Shield OR the Fan Kit (P/N Z1714) is REQUIRED FOR:

MOBILE HOME, any installation

RESIDENTIAL ALCOVE

TOOLS NEEDED FOR INSTALLATION: Phillips or square drive screwdriver.

INSTALLATION : The rear shield goes across the back of the stove, just below the thermostat knob. Place shield into position, insert and tighten the two #10 X 1-1/4" screws provided.

#### FAN KIT (P/N Z1714)

EITHER this Fan Kit or the Rear Shield (R/SP1006) is REQUIRED FOR:

MOBILE HOME, any installation

RESIDENTIAL ALCOVE

NOTE: Fan Kit should be installed before the stove is placed into position INSTALLATION: See instructions included with Fan Kit. Tools needed: Square (Robertson nr. 2) screw driver.

#### 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 1726B)

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.

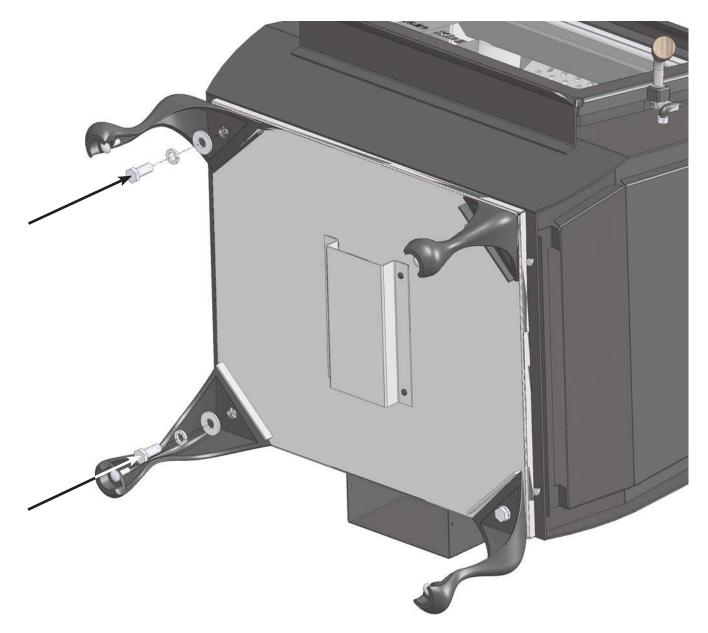
INSTALLATION

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.

#### LEG KIT (Z1713BK) PARLOR MODELS ONLY

TOOLS NEEDED FOR INSTALLATION: 3/4" wrench or socket wrench **INSTALLATION** 

- 1. Lean stove backwards to gain access to stove bottom. NOTE: Use extreme caution when leaning the stove over to avoid injury or damage to the flooring or appliance.
- 2. Position each leg accordingly and fasten to stove using the supplied washer, lock washer, and 1/2" bolt.
- 3. Lift stove back to its upright position.
- 4. Adjust carriage bolts in order to level stove.



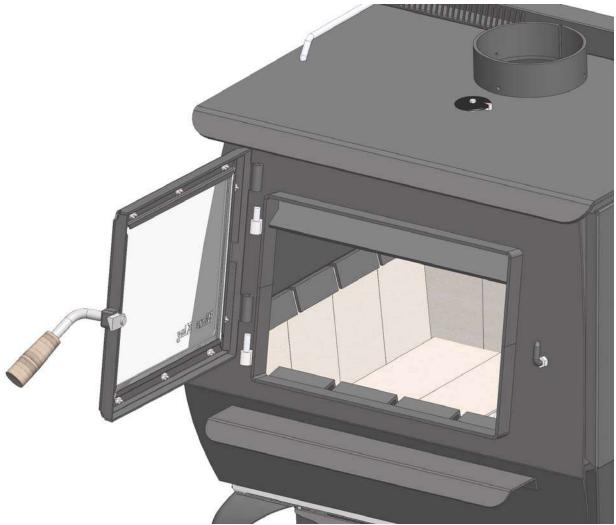
#### DOOR INSTALLATION AND CHANGE-OUT

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

#### WARNING: DOOR IS HEAVY, PLEASE HOLD FIRMLY.

#### **INSTALLATION**

- 1. Align bottom door hinge hole with bottom firebox hinge pin.
- 2. Lower door onto bottom hinge pin, then align top door hinge hole with top firebox hinge pin.
- 3. Lower door onto pins until door hinge surface contacts firebox hinge surface. 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**

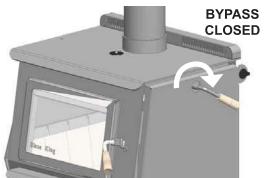
#### YOUR FIRST FIRE!

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

#### BYPASS

Most catalytic wood burning appliances have a bypass device to allow the smoke from the fire to temporarily bypass, or go around, the catalytic combustor. The bypass door is located inside the firebox at the top of the stove. The bypass is a steel plate door, hinged inside the stove, and is controlled by the bypass handle

on the right side of the stove. When the handle is pointing at you, the bypass is open, when pointing away, it is closed. It is a clockwise rotation from open to close.



FLAME SHIELD BYPASS OPEN OPEN

#### **COMBUSTOR THERMOMETER**

This thermometer is located on the top of the stove. It's purpose is to show you if the Combustor is active. Always burn the stove in the "active" zone. When the combustor is not active the stove will emit smoke and will not be efficient. For an accurate reading, turn fans off for approximately 10 minutes and then read the thermometer.

#### THERMOSTAT

The Thermostat knob is located on the top right rear corner of the stove. It controls the burn rate of the stove Any thermostat position between 1 (low) and 3 (high) will produce the desired clean burning characteristics However, since each installation is different, you may find it necessary to operate the thermostat to suit your

situation. A thermostat setting of 3 will produce maximum heat which is more than suitable for heating the average size home. All adjustments to the Thermostat should be done gradually. When you first light the stove and you should use the "High" setting, When the fire is established move the Thermostat towards medium setting for 5 minutes and then to a low setting if required. Too rapid an adjustment may cause the stove to operate improperly. The most common mistake new owners make is continually adjusting the Thermostat.



### **OPERATING INSTRUCTIONS cont.**

#### FUEL

Blaze King recommends using dry seasoned wood, split and stacked and protected from rain for at least 24 months with a moisture content of 13% 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. Green or wet wood will greatly increase creosote & combustor problems. Blaze King moisture meters are available at your Blaze King dealer. Our wood stoves are NOT designed for burning coal and doing so will void the warranty.

NEVER burn salt-water driftwood. It is very corrosive and will damage the firebox. Burning salty wood also voids the warranty. NEVER burn charcoal as it generates carbon monoxide. Carbon monoxide may lead to suffocation or death.

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.

#### **CAUTION:**

## BURN UNTREATED WOOD ONLY. MATERIALS SUCH AS WOOD PRESERVATIVES, METAL FOILS, COAL, PLASTIC, GARBAGE, SULPHUR, OR OIL, MAY DAMAGE THE COMBUSTOR.

#### WARNING:

#### BURNING WET UNSEASONED WOOD CAN CAUSE EXCESSIVE CREOSOTE ACCUMULATION. WHEN CREOSOTE IS IGNITED IT CAN CAUSE A CHIMNEY FIRE WHICH MAY RESULT IN A SERIOUS HOUSE FIRE.

#### **FIRST FIRE**

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

#### ALWAYS OPEN THE BYPASS DOOR BEFORE OPENING THE LOADING DOOR. ONCE THE LOADING DOOR IS CLOSED, CLOSE THE BYPASS DOOR DIRECTLY AFTER.

#### 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 at a low temperature setting 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 thermostat to high (maximum) position.
- 3. Open the loading door and open the by-pass door (turn counter-clockwise).
- 4. Place five to ten balls of paper in the firebox and place a fairly large quantity (15-20) pieces of kindling on top of the paper.
- 5. Lay two or three medium size (approx. 3") pieces of wood on top of the kindling. Light the fire and allow it to get a good start but DO NOT LEAVE THE STOVE UNATTENDED.

### **OPERATING INSTRUCTIONS cont.**

- 6. Keep the loading door closed over but not latched. Allow the kindling and most of the larger logs to get started before latching the loading door. When the fire has the larger pieces of wood burning, close and latch the loading door, but leave the by-pass door open. Turning down the thermostat too soon may cause a new fire to go out. DO NOT leave your BLAZE KING unattended when the loading door is not tightly closed or the bypass door is open. Leaving the loading door open AFTER the fire is well started may cause premature failure of the catalytic combustor.
- 7. When nearly all the wood in the firebox is burning, finish loading the stove. Lay the wood left to right, as far to the back of the stove as possible. After the loading door is closed and the catalytic thermometer is in the active zone, close the bypass door.
- 8. Let the fire burn on a higher setting (on the thermostat) for 20-30 minutes, or until the fire is well established, then turn the thermostat to the desired setting. It is good burning practice to burn the stove on high for 20-30 mins after every refueling, this will help in cleaning off any residual build-ups and lessen the chance of accumulation.

#### CAUTION:

#### DO NOT ABUSE THE GLASS DOOR BY SLAMMING IT OR STRIKING IT. DO NOT FORCE THE DOOR CLOSED IF THERE IS WOOD IN THE FIREBOX THAT IS OBSTRUCTING IT. DO NOT OPERATE WITH BROKEN GLASS.

Probably the least understood requirement in maintaining a good fire is that of establishing a good base of coals Many new stove users hesitate to load enough wood to sustain a fire.

Put as much fuel into the stove as it will hold. Don't be afraid to fill it completely\*. With the Blaze King automatic thermostat, the wood will only burn at the rate set on the thermostat.

Loading with a half load of fuel, and therefore reloading more often, causes the combustor to lose efficiency and may result in a faster creosote deposit.

A good bed of hot coals will maintain a more even temperature as well as getting the new load of wood started easily.

#### A Few Tips:

Always have your next intended load of wood ready when you open the Front Loading door. Doing so will decrease the amount of time that the Front Loading Door is open, allowing for the Combustor to remain hot and also provide a margin of safety by not leaving the Front Loading Door open while going to retrieve wood. Always open the Front Loading Door SLOWLY. This will reduce any vacuum causing smoke from the fire box to "spill" into your room.

Always put the by-pass handle in the open, full counter clockwise, position before you open the Front Loading Door. This will decrease the chances of "spilling" smoke into the room when you open the Front Loading Door to add wood. BUT REMEMBER TO PUSH IT BACK into the closed and locked position as soon as you have loaded your wood.

Congratulations. You now have the greatest, most efficient burning wood stove in full operation. You can now adjust the Thermostat to fit your needs. Keep in mind though you will not see any large amount of flame from

### **OPERATING INSTRUCTIONS cont.**

this point forward.

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, simple run the stove on "High" for a short time, 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 he type of wood you are burning, your home and of course how warm and cozy you like it inside.

Thank you again for purchasing a Blaze King catalytic wood stove. Be sure and tell your friends how you much less time and money you spent on obtaining wood for the winter because your new Blaze King uses wood so efficiently.

#### **OPTIMAL THERMOSTAT SETTING**

Any thermostat position between 1 (Low) and 3 (High) will produce the desired clean burning characteristics However, since each application can vary, you may find it necessary to operate the thermostat to suit your application. A thermostat setting on High will produce a maximum heat which is more than suitable for heating the average size home and offer the cleanest door glass.

- Starting The Fire. Each stove/home/installation/homeowner combination works a little differently. The
  first several times you fuel the stove, it may not react as you expect. A little experimentation may be
  needed to find the right combination of fuel and thermostat setting to achieve the maximum efficiency.
  This is one of the joys of burning wood. You, the wood burner, make it work. And you can see what
  happens as it is working. Be Patient. The air/fuel mixture and temperature must be stabilized before
  maximum combustion efficiency can be achieved.
- 2. As the combustor temperature (as indicated by the thermometer on top of the stove) passes into the active zone, further adjustment to achieve the desired room temperature should be made in small increments for the most effective cleaner burning operation. Changes, generally speaking, should be made as few times each day as possible. When the thermostat knob is moved from high to low, more gases is produced, so the combustor has more fuel; consequently the combustor thermometer may register a higher heat for several hours after the thermostat is turned down.
- 3. Keep hot coals active so when you reload the stove you will reduce the time necessary to maintain an active combustor.
- 4. The thermostat is adjusted at the factory and should not be tampered with. If the thermostat breaks, the damper will close automatically.

### **OPERATING INSTRUCTIONS cont.**

#### FAN OPERATION

If you have the Optional Fan Assembly installed, the fan should be off until the stove reaches normal operating temperatures. After approximately 30 minutes, the fan speed adjustment should match the thermostat 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...

The fan assembly is controlled by an on/off temperature sensor as well as a fan speed control. The fire will have to heat the stove to the predetermined sensor temperature before the fan will come on. Usually this takes about 1 hour if the stove is started from cold. Conversely, the fans may continue to operate one hour or longer after the fire goes out. At this time, you may wish to turn the fans off manually with the rheostat fan switch.

#### **ICE - FORMATION AND PREVENTION**

Most of what you see coming from the chimney of a properly operating catalytic stove is water vapor. In extremely cold weather - and with some exterior chimneys - this vapor may freeze in the chimney, to the point of actually blocking the chimney and extinguishing the fire. In such weather, occasionally burn the stove for 4 or 5 minutes with the bypass open and the thermostat set at maximum to melt any possible ice buildup.

#### DO NOT BURN THE STOVE WITH THE DOOR OPEN.

### CREOSOTE

#### **CREOSOTE** — 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 slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire The chimney connector and chimney should be inspected at least once every 2 months during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated (3 mm (1/8") or more) it should be removed to reduce the risk of a chimney fire.

#### WHAT TO DO IF THERE IS A CREOSOTE FIRE:

Turn the thermostat to lowest setting, check loading door to be sure it is tightly closed. Call Fire Department. Creosote is a black, foul smelling liquid. The best way to prevent or minimize creosote build up is to follow proper firing methods. The amount of creosote depends on several factors that include:

1) Moisture content of the fuel	2) Stack or flue temperature
3) Amount of draft	4) Efficiency of the appliance
5) Turbulence of smoke	6) Age of combustor

At stack temperature below 120°C (250°F), the creosote will condense out of the gasses (smoke). Once a chimney connector becomes heavily coated with creosote, the only safe way to remove it is mechanically with a proper chimney cleaner or brush. A combination of wet fuel and poor operating procedure may necessitate weekly cleaning to remove creosote buildup.

Remember - the hotter the fire the less creosote. Small intense fires create less creosote than large, smoldering fires. We recommend that each day a small intense fire be built, preferably in the morning. This daily practice should burn out the small deposits of creosote before they build to a dangerous level. The combustion air inlet should be opened for at least 30 minutes by turning the thermostat up in the morning and evening. NEVER "burn out" large deposits of more than one days accumulation.

In conclusion, creosote can best be controlled as follows:

- 1. Burning dry split wood.
- 2. Mixing small and large pieces of wood.
- 3. During warm weather using smaller split wood.
- 4. Operate the stove on a higher temperature setting for the half hour after reloading.
- 5. Establish a routine for the storage of fuel, care of the appliance, and firing techniques.
- 6. Keeping stack temperature up by using double wall pipe on flue runs and protect outside chimney installations in a chase. Minimize elbows and keep flue runs as short as possible and ensure tight connections.
- 7. Checking frequently for creosote until experience shows how often cleaning is required. Remember a clean chimney is a safe chimney.
- 8. Having a clearly understood plan should a chimney fire occur.

#### WARNING:

#### FAILURE TO INSPECT AND CLEAN YOUR CHIMNEY SYSTEM REGULARLY CAN RESULT IN A SERIOUS FIRE WHICH MAY DAMAGE YOUR CHIMNEY OR CAUSE A HOUSE FIRE

### MAINTENANCE

Your appliance has been manufactured in the Blaze King tradition of high quality. To ensure years of trouble free operation, have your stove serviced regularly by your Blaze King dealer. Periodically during the heating season thoroughly clean the chimney and firebox so your system is ready for next fall. Inspect all firebricks and replace any damaged bricks. A broken firebrick should be replaced to prevent warping of the firebox.

#### INSPECT VENT PIPES, VENT PIPE JOINTS AND VENT PIPE SEALS REGULARLY TO ENSURE THAT SMOKE AND FLUE GASES ARE NOT DRAWN INTO, OR CIRCULATED BY, THE AIR CIRCULATION SYSTEM

## MAKE SURE THE STOVE IS COOLED OFF COMPLETELY BEFORE DOING ANY OF THE NEXT CLEANING, TESTS OR REPLACEMENT PROCEDURES.

#### ASH REMOVAL

This appliance is required to be cleaned frequently because soot, creosote and ash may accumulate. Wait until the stove is fully cooled off before removal of the ashes. 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 stove. 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.

#### CATALYTIC COMBUSTOR, TESTING

(Conduct test with fans off) Test the combustor in your Blaze King as follows:

Build a fire using the same technique (paper, kindling, logs) you have used in the past. Leave the thermostat knob on a medium (2) setting. When the fire is well established (within one to three hours) turn the thermostat knob between 1 and 2. A properly operating combustor will remain active, and the combustor thermometer will remain in the "active" zone until the wood load is mostly consumed. A "tired" or "dead" combustor will, with the thermostat on 2 or lower, go out completely, and the thermometer needle will fall into the "inactive" zone. Repeat this procedure several times over several days. (Remember that the combustor thermometer has a built-in lag of 4-8 minutes.) If, after several test burns, the thermometer will not indicate an active" combustor, it may require cleaning or replacement. Contact Blaze King for a replacement combustor, read "**REPLACEMENT PARTS**". It is also possible that the thermometer, itself, may not be reading accurately. Before condemning the combustor, read "**THERMOMETER**".

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### MAINTENANCE cont.

#### CATALYTIC COMBUSTOR, CLEANING

Under certain conditions, ash particles may become attached to the face of the combustor. These may be seen while the combustor is in the glowing stage, or when the fire is out. Any deposit on the visible face of the combustor should be removed. Wait until the fire is out and the stove is cold. (Hot ash in a vacuum cleaner bag will burn.) Brushing the combustor with a soft bristle paint brush will remove some deposits. Passing a plastic vacuum cleaner wand or brush near the face of the combustor will remove most deposits. Never scrape the combustor with any hard tool or brush. Some stove owners have run pipe cleaner through every individual cell of the combustor. This is not needed, and may actually do more harm than good. Limit cleaning to the face of the combustor.

**NOTE:** Never remove a combustor without approved combustor gasket in hand as original gasket will fall apart when removed from stove. Remember to re-install the Flame Shield (the perforated plate) in same position it was found.

TIP: A nice hot fire will usually prove to be the best method of cleaning the combustor of deposits.

#### CATALYTIC COMBUSTOR, REPLACEMENT

The catalytic thermometer on top of the stove should read in the active zone after the stove has been in operation for several hours. If the thermometer's indicator needle does not stay above the 1/3 mark in the active zone, even with a hot fire, over a 7-10 day period of regular use, the combustor may need replacement. If the combustor must be examined or replaced, follow this procedure:

- 1. Allow the stove to burn out and cool down.
- 2. Open the door and remove the flame shield the perforated plate that is just above the inside of the door opening. Lift it slightly and pull it forward and down.
- 3. The combustor may now be seen. The combustor is held together by a stainless steel band. Use a screwdriver and gently pry under the band at each end. The combustor will loosen enough that it can be pulled forward, lowered and out through the door.
- 4. The insulating material around the stainless band will probably disintegrate as the combustor is removed. When the combustor is placed back into the stove, the insulating material MUST be replaced. Obtain a piece 2" x 30" from your dealer. When installing the insulation, ensure the ends are butted closely together.
- 5. Do not burn the stove with the combustor removed, or without the insulation around the combustor.
- 6. To replace the combustor, first clean the combustor seat and the area around it. Also take this opportunity to clean the area around the by-pass -- use a vacuum cleaner.
- 7. Lift the new combustor into position, with the stainless flanges on each end and the bottom. The combustor should slide into position, as far to the back of the stove as possible. Don't be concerned if it appears a bit loose. The insulation around the outside of the stainless band will expand during the first fire and will hold the combustor in.
- 8. Replace the flame shield (the Perforated plate) by holding it inside the firebox with the triangular wings facing away from you. Lift it into position, between the door and the combustor, and rest the bottom of the plate on the two pins that protrude below the combustor. The flame shield should rest at an angle (about 45 degrees) with its bottom near the combustor, and its top near the stove front.

### MAINTENANCE cont.

#### 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 thermostat 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**. Use a soft cloth and a **NONABRASIVE** household cleaner. 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.

#### DOOR GLASS, REPLACEMENT

(Blaze King recommends your dealer perform this task)

Your BLAZE KING is equipped with a door which uses a strong, heat-resistant ceramic glass intended to withstand extremely high temperatures and tested for continuous use above 1200 degrees Fahrenheit. However, this glass can be broken through improper use. If glass replacement becomes necessary, use only 9" x 15" x 5mm thick **BLAZE KING CERAMIC GLASS** (see "**REPLACEMENT PARTS**"). **DO NOT SUBSTITUTE ANY OTHER MATERIAL FOR THIS PURPOSE.** 

#### WARNING:

#### BROKEN DOOR GLASS IS SHARP. ALWAYS WEAR EYE PROTECTION AND PROTECTIVE GLOVES WHEN HANDLING GLASS. DISCARD THE GLASS IN A CLOSED CONTAINER INACCESSIBLE TO CHILDREN.

- 1. Allow the fire to completely burn out and the stove to cool down.
- 2. Retain all metal parts for re-installation.
- 3. Open the door and remove the door gasket, then remove the nuts holding the retainers to the inside of the door.
- 4. Remove the damaged glass and the old glass gasket.
- 5. The replacement glass has the gasket installed on its outer perimeter. Place the glass in the door frame. Be sure the words "Blaze King" etched in the glass read correctly when the door is closed.
- 6. Replace the gasket and reinstall the retainers with the proper nuts. (Do not over tighten nuts as studs may break off)

#### **GASKET INSPECTION**

Inspect the door and bypass door gasket for physical deterioration, missing sections or obvious leakage. The stove 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 a 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 stove 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.

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### MAINTENANCE cont.

#### LOADING DOOR GASKET REPLACEMENT

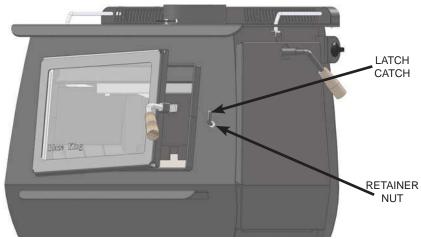
(Blaze King recommends your dealer perform this task)

- 1. If the door gasket is to be replaced, be sure you have Blaze King 7/8" fiber glass gasket material, ready to re-install. See your Blaze King dealer.
- 2. Be sure the fire is out and the stove has cooled down. The door does not have to be removed from the stove.
- 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. Run a small bead of a high temperature silicone adhesive (such as G.E. Silicone Sealer, or the equivalent) along the center of the channel. **DO NOT USE HOUSEHOLD SILICONE CAULKING.** High temperature silicone may be obtained from most auto parts stores.
- 6. Start the new gasket in the lower right corner. Do not stretch or cut the gasket. Distribute the gasket evenly around the frame.
- 7. Allow the adhesive to dry before closing the loading door.
- 8. 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" below).
- 9. A tight sealing door extends the burn times & protects the combustor.

#### LOADING DOOR TENSION ADJUSTMENT

To tighten the seal, use a 9/16" wrench to loosen retainer nut on the outside and tighten nut on inside firebox to move latch catch in (see figure beside). Secure retainer nut and (repeat) paper test. (see step 8 above)

Use penetrating oil if necessary to make turning easier. DO NOT FORCE !!



#### 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.

### MAINTENANCE cont.

#### **CHIMNEY DRAFTS**

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. 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. 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.) makes it unsafe to operate the stove and will void manufacturers warranty. Use a key damper if necessary to avoid excessive draft.

#### **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, snap disk or rheostat, contact your local dealer.

#### PAINT

If the finish on the stove ever becomes blemished, you can repaint with high temperature paint available from your dealer. **DO NOT** paint the stove while it is **HOT**.

#### THERMOMETER

The combustor thermometer tells you what was happening 4-8 minutes ago. And remember, it is only an indication of the temperatures of the gasses, after they pass through the combustor. The thermometer probe, the part that fits into the stove, must be cleaned at least once a year. Lift it from the stove (be careful, it may be hot) and wipe or scrape it clean. At room temperature, away from the stove, the indicator should point near the bottom of the "Inactive" zone. If, after several years use, you find that the needle no longer points to the bottom of the "Inactive" zone when the thermometer has been at room temperature for 10 minutes or longer, it may need adjustment. Holding the probe with a pair of pliers, loosen the bolt on the top of the dial. Turn the dial to align the pointer with the bottom of the "Inactive" zone, then retighten the bolt.

# NOTE: IF YOUR BLAZE KING IS EQUIPPED WITH OPTIONAL FANS, TURN OFF FANS AND WAIT 10 MINUTES PRIOR TO READING CATALYTIC THERMOMETER INDICATOR. AIR MOVEMENT ACROSS THE TOP OF THE STOVE MAY PROVIDE FALSE READING.

#### THERMOSTAT

The thermostat is adjusted at the factory and should not be tampered with. If the thermostat breaks, the damper will automatically close and replacement (by a qualified technician) of the complete thermostat is required.

### 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 six major needs of a well-controlled fire are:

- 1. Knowledgeable operator.
- 2. Adequate air supply.
- 3. Firewood of good quality and proper size.
- 4. Catalytic combustor in good condition.
- 5. Clean chimney, properly sized and installed.
- 6. 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 six 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.

PROBLEM: Chimney Fire	
CAUSE Act immediately regardless of cause	SOLUTION Turn the thermostat to lowest setting, check loading door to be sure it is tightly closed. Call Fire Department.

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".

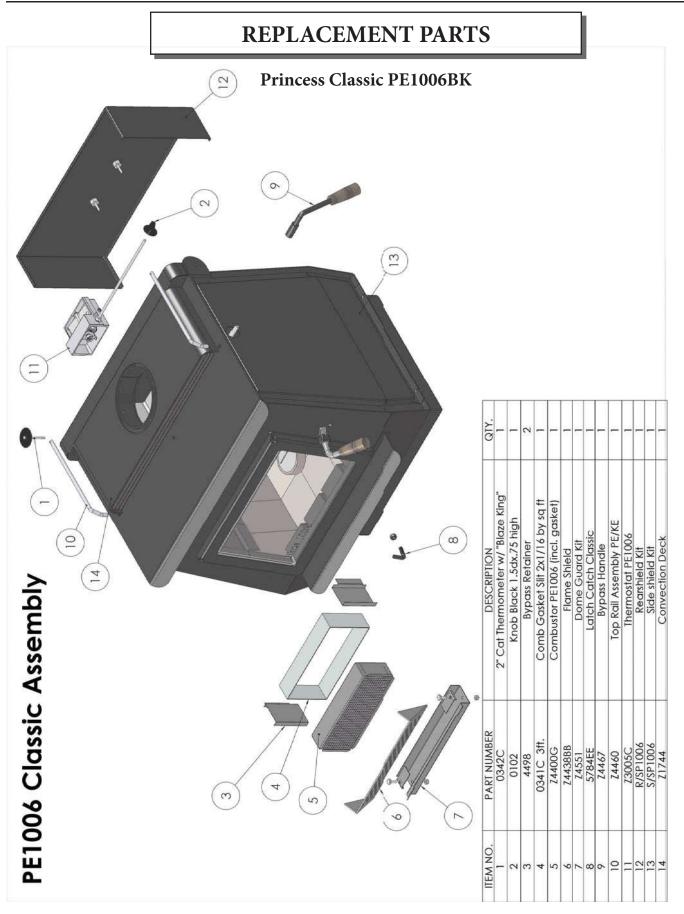
PROBLEM: Not enough heat.	
CAUSE Green or wet wood. Not enough fuel in stove.	<b>SOLUTION</b> Use seasoned wood. Don't be afraid to FULLY load the stove. A FULL load of wood won't burn any hotter than the thermostat is set.
Obstruction in chimney or cap screen. Combustor plugged or coated.	Remove obstruction. See "COMBUSTOR, TESTING" See "COMBUSTOR, CLEANING"
Combustor not functioning.	See "COMBUSTOR, TESTING". If needed, replace combustor, See""COMBUSTOR, REPLACING".
Thermostat set too low.	Raise thermostat setting.
Thermostat not operating properly.	Consult your Blaze King dealer.
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.

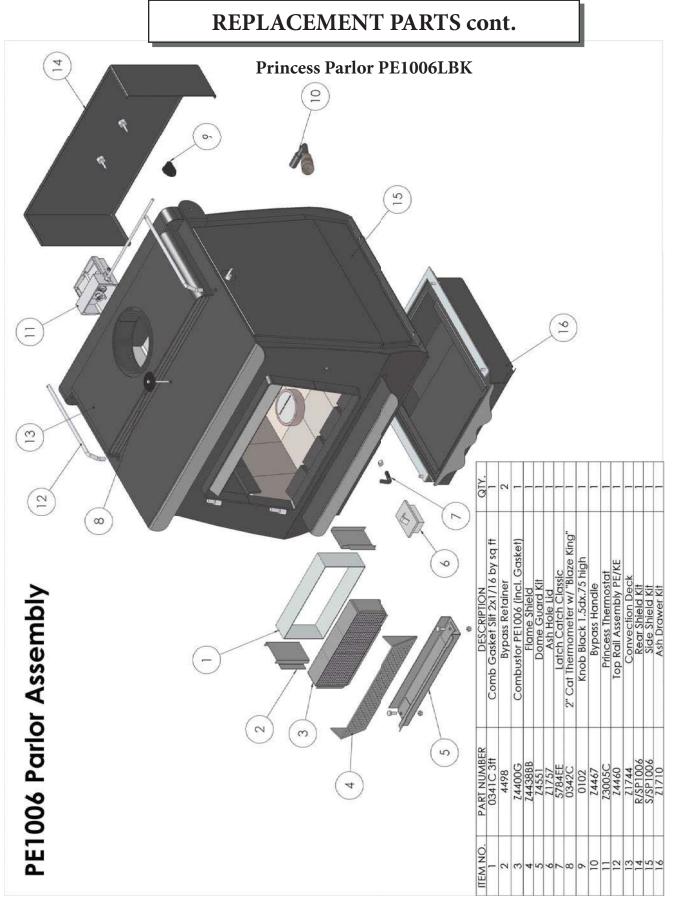
### **TROUBLESHOOTING cont.**

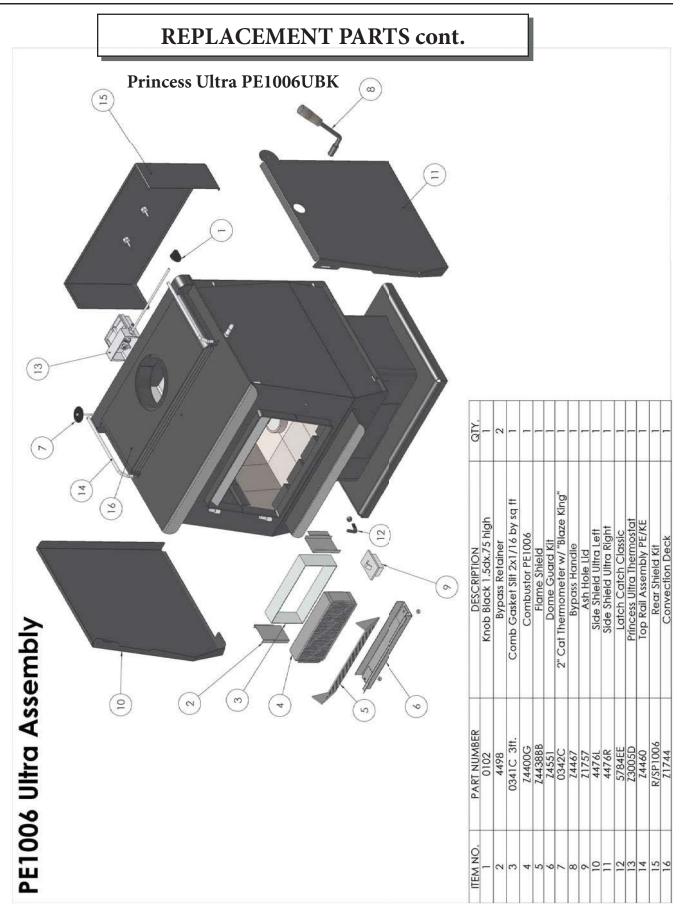
PROBLEM: Too much heat.	
CAUSE	SOLUTION
By-Pass door left open.	Close the by-pass door.
Thermostat set too high.	Lower thermostat setting.
Loading door gasket leaking, admitting excess air	Replace door gasket and/or adjust door. See "GASKET
into firebox.	INSPECTION"
Excessive draft in the chimney.	Measure draft with a Manometer. See "DRAFTS". Consult your
	Blaze King dealer or a chimney sweep. Install a cap.
Thermostat not operating properly.	Consult your Blaze King dealer.
Wood is too small.	Use larger pieces.
PROBLEM: One or both fans will not run, or the	re is no adjustment for fan speed.
CAUSE	SOLUTION
Fans mounted improperly.	Check that fan blade's not touch edges of hole.
Fan speed control.	Consult your Blaze King dealer for replacement.
Snap Disk.	Check if snap disk is touching back of stove, otherwise replace.
PROBLEM: Fans minimum speed too fast or ma	ximum speed too slow.
CAUSE	SOLUTION
Fan speed control out of adjustment.	Consult your Blaze King Dealer.
PROBLEM: Excessive creosote formation in chi	mney and chimney Connector.
CAUSE	SOLUTION
By-pass door left open.	Close by-pass door.
By-pass door not sealing tightly.	Inspect by-pass door and seal for warping. Ash or creosote buildup may occur on door or seat. With stove cold scrape and vacuum area around by-pass. Be sure all mating steel surfaces are clean and smooth.
Improper operation.	Check thermostat setting and operating procedures. See "THERMOSTAT & OPTIMAL THERMOSTAT SETTING"
Wood too green or wet.	Use seasoned wood. Use a moisture meter to confirm.
Catalytic combustor not operating properly.	Inspect the combustor. See "CATALYTIC COMBUSTOR, TESTING"
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.
PROBLEM: Catalytic combustor thermometer (o there for long. (Fans must be in "off" position fo	on top of stove) does not go into "Active" zone, or does not stay or 10 minutes prior to checking)
CAUSE Improper operation.	SOLUTION Check thermostat setting and operating procedures. See "THERMOSTAT & OPTIMAL THERMOSTAT SETTING"
Obstruction in chimney or cap.	Clean chimney, remove obstructions.
	Replace thermometer and Recheck combustor operating
Faulty combustor thermometer.	Temperature.

### TROUBLESHOOTING cont.

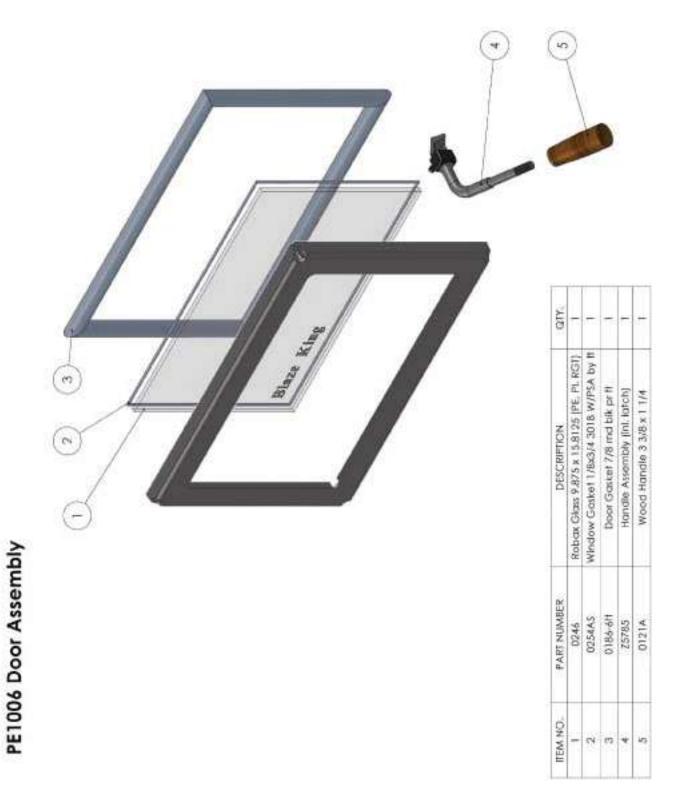
Combustor plugged or coated.	Clean combustor. See "CATALYTIC COMBUSTOR TESTING"			
Combustor not functioning.	Check and test combustor. If needed replace combustor. See "CATALYTIC COMBUSTOR, REPLACING"			
Thermostat not operating properly.	Consult your blaze King Dealer.			
By-pass door leaking or not closing completely.	Inspect and clean area around by-pass doors. Adjust or replace gasket if necessary. Consult your Blaze King Dealer.			
PROBLEM: Spots of creosote accumulation in cl	himney or chimney connector.			
<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.			
CAUTION: a leaking chimney connect	or is a fire hazard and demands immediate attention.			
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.			
PROBLEM: Door glass quickly becomes coated	with creosote.			
CAUSE Low thermostat setting or lowering the thermostat setting too far, too quickly.	<b>SOLUTION</b> Turn the thermostat to the warmest setting 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.			
PROBLEM: The combustor temperature cannot be combustor temperature go up.	be controlled. Turning the thermostat down often makes the			
	half of the burn cycle, causes the fire to emit more smoke, which is therefore climbs for up to several hours. This is normal, and is of no a is elevated, there is nothing to worry about.			
PROBLEM: Smoke spills from door opening when loading fuel				
CAUSE Spark arrestor screen on cap plugged.	SOLUTION Clean spark arrestor screen to bare metal wire.			
Chimney too cold.	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.	Turn thermostat to highest setting, open bypass, leave loading door closed and wait 5-10 minutes to increase chimney or flue temperature.			



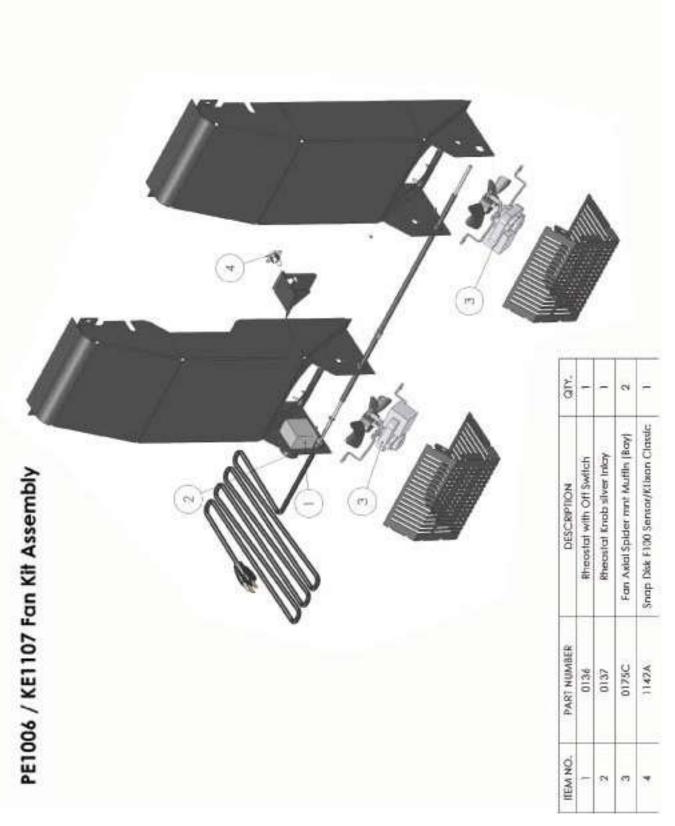




### **REPLACEMENT PARTS cont.**



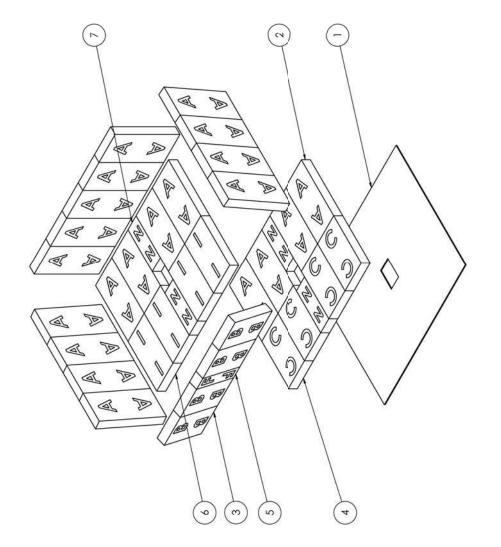
### **REPLACEMENT PARTS cont.**



#### **REPLACEMENT PARTS cont. Princess Classic Brick Layout** 00 5 2 Te D ন্থ 10 T Sa ৰ \$ SA 6 6 Fe 10 05 S 63 S SA 2 C 3 B Se A 25 9 P 3 a 3 S D S. 69 50 Я 20 ST. D 14 0 n QTY. 4 4 4 5 0 6 0 3 ~ 4 0830D A Size Brick B Size Brick C Size Brick C Size Brick E Size Brick H Size Brick H Size Brick I Size Brick J Size Brick PART NUMBER NON. 10 9 8 7 6 5 0 10 4

### **REPLACEMENT PARTS cont.**

Princess Parlor & Ultra Brick Layout



NO.	PART NUMBER	QTY.
	0830C	-
	A Size Brick	21
	B Size Brick	4
	C Size Brick	4
	F Size Brick	-
	I Size Brick	4
	N Size Brick	4

### WARRANTY

#### BLAZE KING WOOD LIMITED WARRANTY

Blaze King and its respective brands extend the following warranty for wood fired appliances purchased from an authorized Blaze King 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 Per	Warranty Period		
Parts	Parts Labor		
1 Year		Х	All parts, materials and surface finishes (flaking and peeling) Subject to Conditions, Exclusion, and Limitations listed
		_	-
2 Years		Х	Fan assemblies and motors, thermal sensors, catalytic thermometer , bi- metallic thermostat assembly
5 Years	2 Years	Х	Firebox & Heat Exchanger, Bypass Door Steel Components
6 Years		Х	Catalyst Combustor ( see Conditions, Exclusions, and Limitations)
1 Year		Х	Other Replacement Parts
	See Conditions,	Exclusions, and Lin	nitations

### 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 Six (6) Year Warranty:

The CATALYTIC COMBUSTOR is under warranty by Blaze King for six (6) years from the date of original retail purchase. The purchaser shall pay the following share of the then current retail price for the combustor: The first three (3) years no charge, 4th year 60%; 5th year 70%, 6th year 80%. The Combustor must be returned to your dealer along with a completed COMBUSTOR FAILURE REPORT and original proof of purchase document.

#### 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 and modular thermostat 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

 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.
 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.

5. 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.

6. Misuse includes over-firing. Over-firing can be identified later by warped plates and paint pigment being burnt off. Overfiring this appliance can cause serious damage and will nullify the Limited Warranty.

7. 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.
 8. 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.

9. Blaze King will not be responsible for inadequate performance caused by environmental conditions.

10. 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.

11. 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).

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.

 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.
 The Limited Warranty does not include damage to the unit caused by abuse, improper installation, or modification of the unit.

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.

### WARRANTY cont.

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.

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.
 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 non-transferable.

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.

### NOTES

Installer: Please complete the following information

Dealer Name & Address:	
Installer:	
Phone #:	
Date Installed:	
Serial No.:	