

OWNER'S INSTALLATION AND OPERATION INSTRUCTION BOOK

Blaze® King

WOOD STOVES

BLAZE KING® FIREPLACE INSERT
KFF-403

BLAZE PRINCESS, FIREPLACE INSERT
PFF-403

Baby Blaze King, Fireplace Insert
BFF-403

OM-05A

10/18/83
RCR

SAVE THESE INSTRUCTIONS

**BLAZE KING® FIREPLACE INSERT
BLAZE PRINCESS, FIREPLACE INSERT
BABY BLAZE KING, FIREPLACE INSERT**

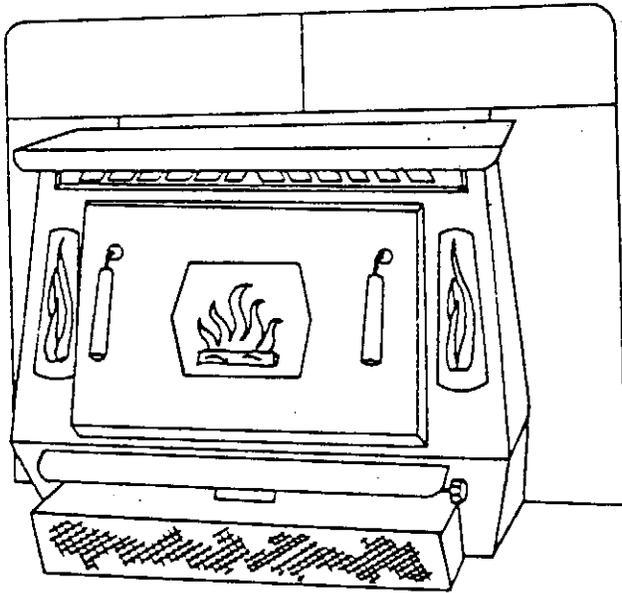
INSTALLATION AND OPERATION INSTRUCTIONS

You are now the proud owner of a Blaze King® Woodstove—the finest, most beautiful stove ever introduced in America.

It is the desire of Woodcutters Mfg., Inc. that your insert give you a lifetime of trouble-free operation. We suggest that you read all instructions before installing and using the appliance.

WARRANTY

To register your warranty, fill out and return the 'Warranty Card' packed with these instructions in the firebox of the unit.



**KING Model KFF-403
PRINCESS Model PFF-403
BABY Model BFF-403**

Figure 1

GENERAL INFORMATION

The Blaze King® fireplace inserts are designed to be installed inside a permanent masonry-type fireplace only. Installation in any zero clearance fireplace such as Heatilator, Magestic, etc., is not recommended as it may prove hazardous.

BLAZE KING® FIREPLACE INSERTS MINIMUM FIREPLACE SIZES AND SHROUD SIZES

Model	Minimum Size Fireplace			Shroud		Optional Shroud		Weight (pounds)
	Width	Depth	Height	Width	Height	Width	Height	
BLAZE KING® KFF-403	30"	12½"	23¾"	45"	33"	56"	36"	410
BLAZE PRINCESS PFF-403	26½"	12"	22½"	42"	30"	46"	32"	345
BABY BLAZE KING BFF-403	23½"	12"	20½"	38¾"	27¾"	43"	27¼"	285

PRODUCT INSPECTION

First, remove all packaged parts from your stove and inspect them. Make sure that the stove is complete. Examine the pieces to see that there is no damage caused by shipping. Should any part be missing or damaged, contact your dealer.

CHECK LIST

1. Insert with firebrick installed.
2. Doors with gasket material installed.
3. Wood handles.
4. Shrouds and mounting hardware
5. Thermostat Knob.
6. Rheostat Knob.
7. Ceramic rings and screws.
8. Ceramics (Fig. 2).



Figure 2

IMPORTANT

Improper installation of your Blaze King® woodstove, or failure to operate it according to the guidelines detailed in these instructions, may negate your warranty and endanger your home and family.

For years of carefree, efficient home heating, follow building and fire codes during installation and consult these instructions when operating your Blaze King® woodstove.

SOME CAUTIONS

1. The Insert must be vented ONLY to the outside, not to other rooms or buildings.
2. NEVER use a chimney cross section smaller than 60 square inches.
3. NEVER vent your woodburning stove into a 'Class B' gas vent chimney. Check with local authorities to make sure that you are not doing so inadvertently if you are using an existing chimney
4. DO NOT CONNECT THIS UNIT TO A CHIMNEY SERVING ANOTHER APPLIANCE.

BUILDING CODES AND PERMITS

Some areas may require a permit from the city, county, Building Inspector, or Fire Marshal. Check local building codes before beginning installation. After the installation is completed, it should be checked by your local Fire Marshal or Building Inspector.

SELECTION OF STOVE LOCATION

Underwriters Laboratories, Inc. listed this appliance only to be connected to a masonry fireplace constructed in accordance with the requirements of the Standard for Chimneys, Fireplaces and Vents, NFPA No. 211, or applicable local code requirements, and minimum clearances to combustibles are observed. Installation in a masonry fireplace with a masonry chimney and a listed flue liner would also be acceptable under the above conditions.

PLACEMENT

The Insert should be installed no closer than:

- a. 16" from the side of the insert top to unprotected combustible walls.
- b. 27" from the top of the insert to the combustible mantel.
- c. 12" from the side of the insert top to any side trim.
- d. 15" from the top of the insert to any top trim.

WALL PROTECTION

Consideration must be made for following your local building codes regarding necessary air spaces between non-combustible and combustible materials when installing your insert. THESE AIR SPACES CANNOT BE IGNORED. Since sufficient air space constitutes one of the best forms of insulation in the installation of woodburning units, the safety of your home and family will depend largely on how well the local ordinances regarding such air spaces are followed.

FLOOR PROTECTION

Floor Protection Material: $\frac{3}{8}$ " millboard or a U.L. listed floor protector or a non-combustible material equal to $\frac{3}{8}$ " thick millboard having a thermal conductivity of $K = 0.84$ BTU in/ft. hr^oF.

The floor protector must extend beyond the base:

- 8" from each side
- 14" from the front (fan box)

These dimensions provide the required clearances from the door opening.

CHIMNEYS

Fireplace inserts may only be vented into existing masonry chimneys. Before installing any woodburning unit to an existing chimney, take care that the chimney is sound. There should be no cracks or holes. Relining or rebuilding may be necessary to make the chimney safe and efficient and bring it into conformity with local codes. Under no conditions may more than one woodburning appliance be connected to one chimney. A proper chimney is most important for safe, satisfactory operation of any wood heating system.

The taller the chimney, the stronger and more dependable the draft. The chimney should also be kept warm to enhance the draft and protect against condensation of water vapor and smoke, which creates creosote. A build-up of creosote can reduce the draft and will become a potential fire hazard. See CREOSOTE.

PRE-INSTALLATION PROCEDURES

Before installing the insert, check the position of the flue opening in your fireplace. If the flue of the insert will be more than one inch from being in vertical alignment with the flue opening in your fireplace, then the vertical distance between the insert flue and the fireplace flue should be at least three inches. If at least one of these clearances cannot be obtained, some creosote buildup, smoking problems, or inadequate draw problems will be encountered. Sometimes it is possible to correct adverse clearances by substituting a larger or smaller size fireplace insert.

All fireplace flues should be checked for obstructions, and cleaned if needed. A clean fireplace is essential for peak efficiency in any installation.

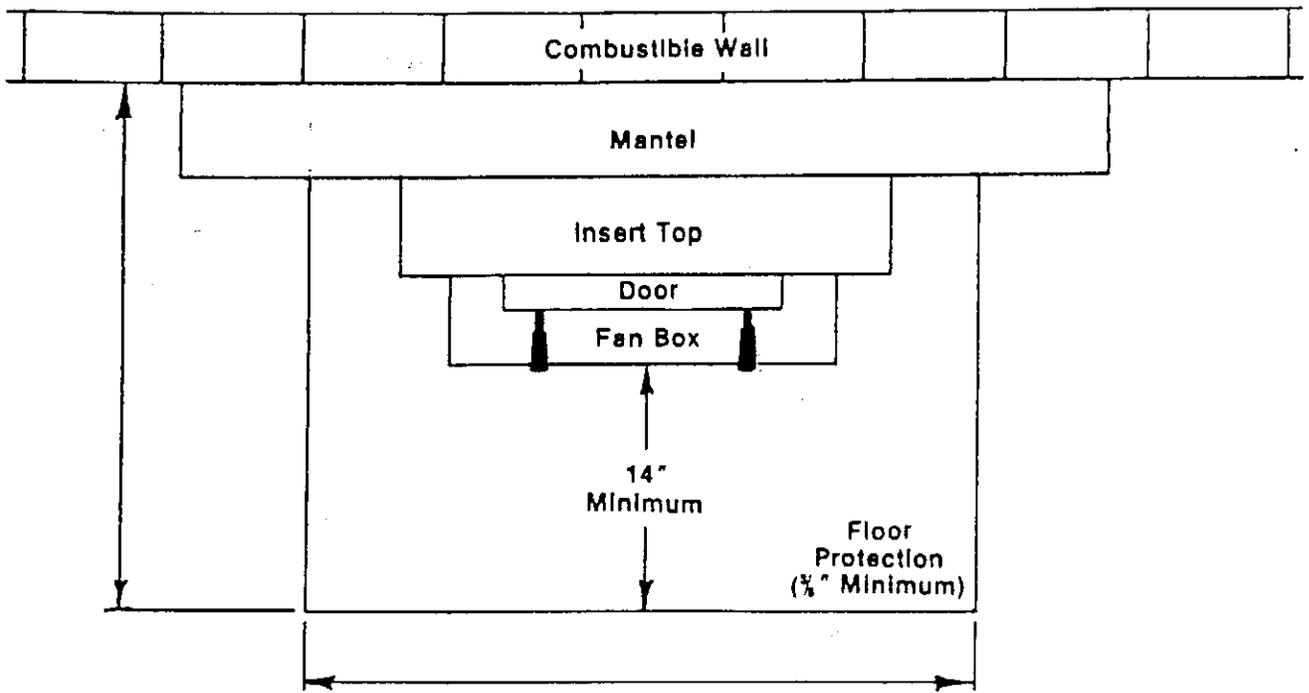


Figure 3

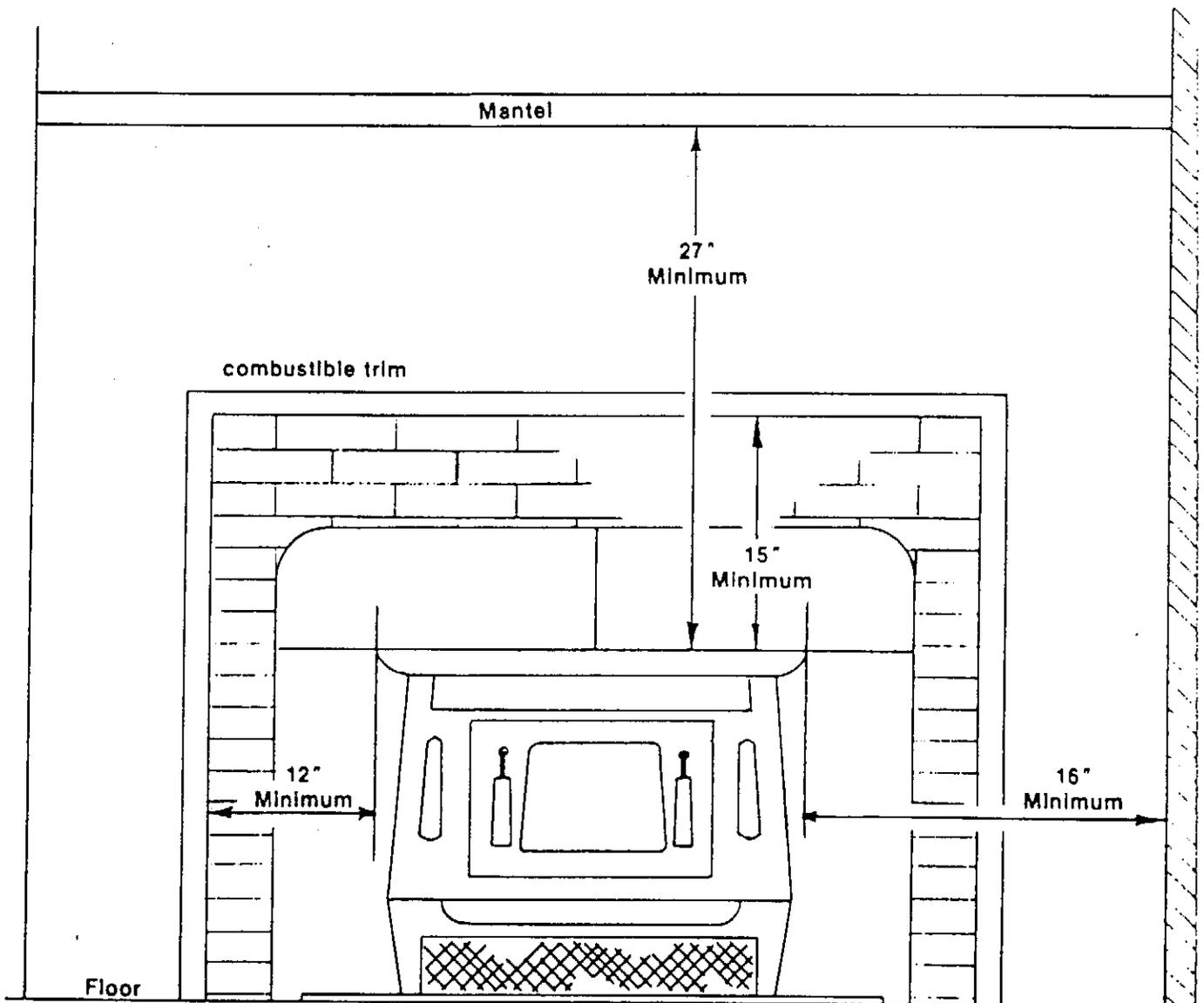


Figure 4

THE POSITIVE FLUE CONNECTOR

If your local building code requires a positive flue connector, contact your dealer. The Woodcutters Fireplace Insert Flue Connector was tested by U.L. for this purpose. Installation Instructions are included with the components.

INSTALLATION INSTRUCTIONS

1. If a Woodcutters Fireplace Insert Flue Connector is to be installed, proceed to those instructions now.
2. Remove the existing fireplace flue damper or securely fasten it in an open position.
3. For convenience, remove the insert door.
4. Screw leveling bolts into the two $\frac{1}{2}$ " nuts located on the left and right rear corners.
5. Set fireplace insert on hearth with back portion extending part way into the fireplace.
6. Place the two "U" shaped tracks on the hearth so that the leveling bolts will slide in them when they are extended.
7. Screw leveling bolts down so they make contact with the tracks placed in Step 6 above. This will keep the insert level when it is pushed into the fireplace.
8. Using the two $\frac{1}{4}$ " x $\frac{1}{2}$ " bolts with flat washers, bolt the side shrouds on. Do not tighten bolts. Slide one "tinnerman nut" (illustrated in Fig. 5) over each hole in the Top Shroud Angle located on top of the insert. Position the top shroud with the tabs on each side shroud. Install two $\frac{1}{4}$ " x $\frac{3}{4}$ " screws through the holes in the top shroud and into the "tinnerman nuts" previously installed. Adjust the side shroud to line up with the top shroud. Tighten side shroud bolts, then tighten top shroud screws.
9. Push the insert back to within several inches of the fireplace face.
10. Insulation, furnished, must be placed around the entire perimeter of the shroud back to form a seal between the shroud and the fireplace face. Using a high temperature silicone sealant (not furnished) such as "G.E. Silicone Sealant" or the equivalent, run a bead about 1" in from the edge of the shroud at point "A" around the perimeter to Point "B" (see Figure 7). Apply the insulating material just in from the edge, sticking it to the silicone, allowing no gaps or skips. A complete seal must be obtained between shroud and fireplace or the insert will not draw properly, causing smoking and inefficient burning, among other problems.

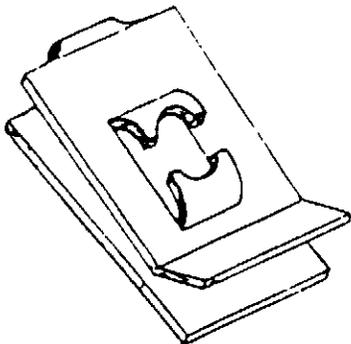


Figure 5

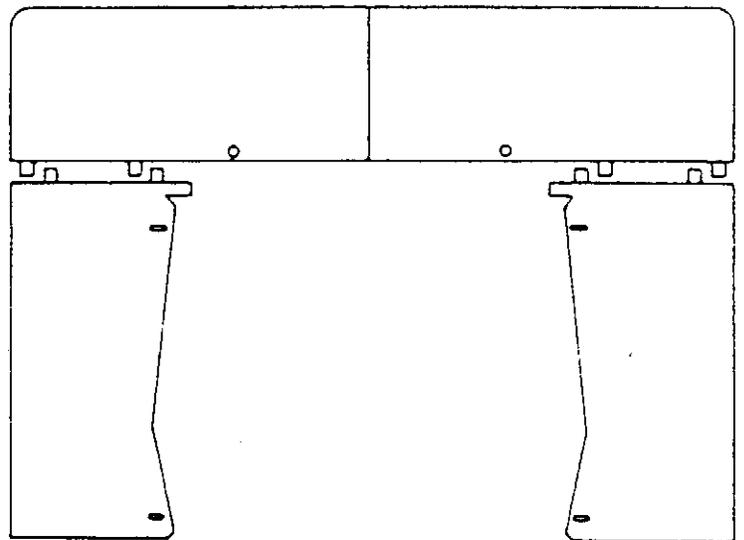


Figure 6

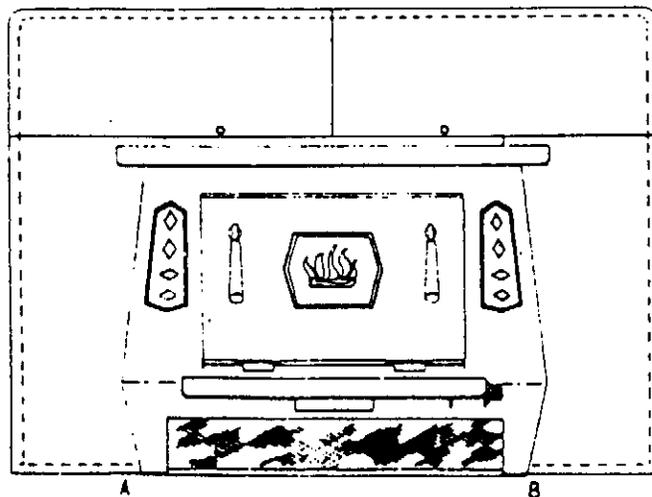


Fig. 7 A B

11. Push the insert tight against the fireplace.
12. Put the door back on.
13. Install the ceramics in the ceramic rings. Mount the assembly to the insert with the 6-32 x 1/4" screws provided.
14. This Fireplace Insert is equipped with a fan assembly for increasing heat circulation in the room. It has a three prong (grounded) plug to prevent shock hazard. THIS PLUG SHOULD BE INSERTED DIRECTLY INTO A PROPERLY GROUNDED, THREE-PRONG RECEPTACLE FOR 115 VOLT, 60 HZ POWER. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG. Do not route power cord in front of, or through this insert.

FUEL

THIS STOVE IS FOR USE WITH SOLID WOOD ONLY!!

Green softwoods burn slowly and with smoke. The soot and moist tar from this smoke sticks to the inside of the chimney. Moisture in green wood will release a great amount of vapor which will condense on the inside of the chimney. The use of dry wood will retard any excessive build up.

Do not burn trash, paper, pine branches or artificial fire logs. Such abuse may void the warranty.

FLAMMABLE LIQUIDS

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

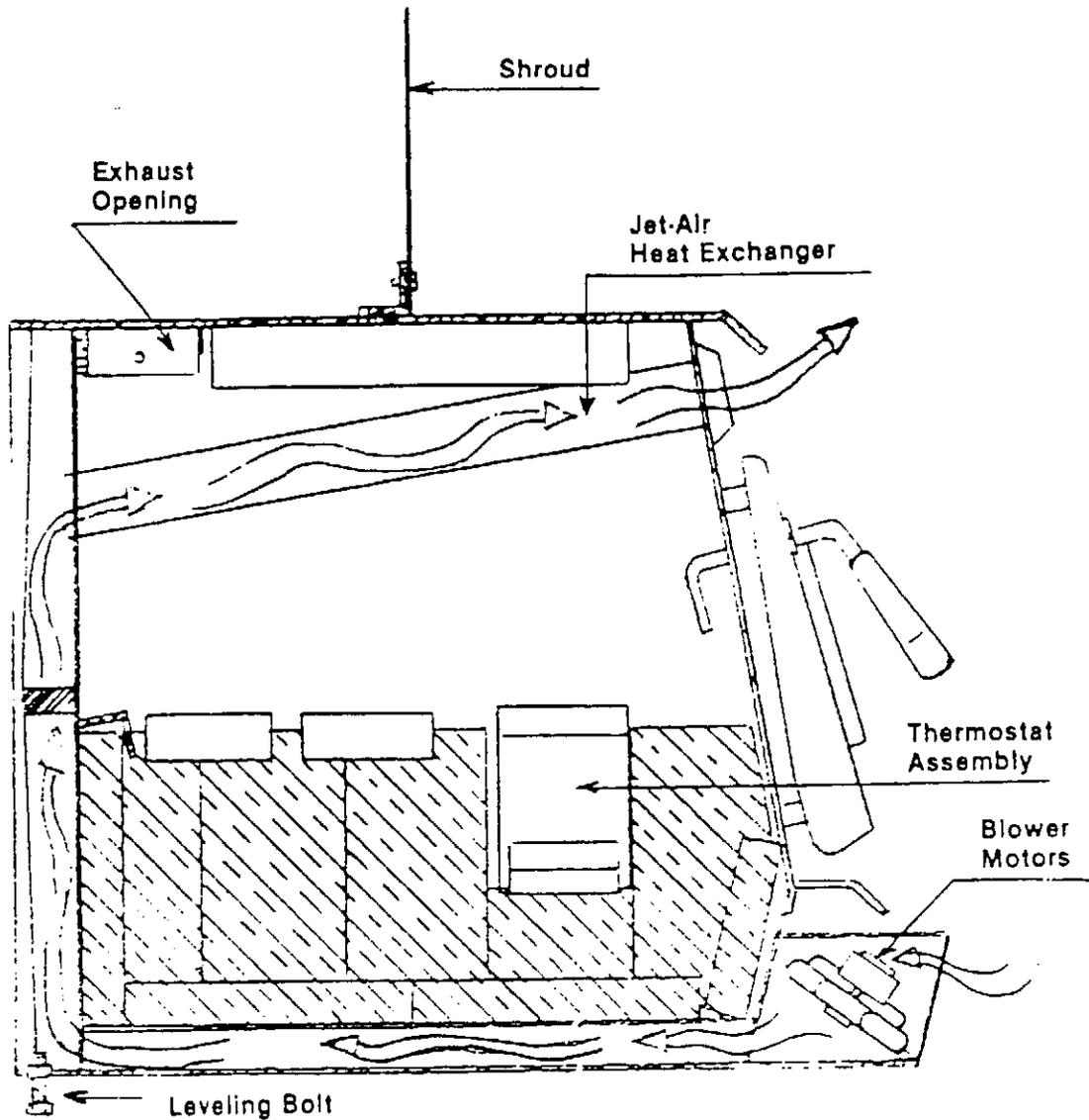


Figure 8

THE FIRST FIRE

1. DO NOT USE GRATE. BUILD FIRE DIRECTLY ON THE HEARTH.
2. Set the thermostat to HIGH. (fully counter clockwise)
3. Place two or three large balls of crumpled paper on the hearth. Lay some small dry sticks or wood chips on top of the paper to use as kindling. Use enough to establish a good fire base. Lay some larger pieces of wood on top of the kindling. Light the paper and close the door tightly. Allow the fire to get a good start.

4. When nearly all the wood in the firebox is burning, open the door (slowly) and load the firebox with wood. Close the loading door tightly.
5. Adjust the thermostat control knob for the heat setting desired. The control knob is factory adjusted so that the thermostat setting corresponds to the side temperature adjacent to the thermostat sensor. The thermostat was designed to allow the stove to come up to temperature quickly. This small surge of heat in the beginning of the burn cycle provides the extra heat needed to bring your room up to temperature. It also creates clean burning conditions in the early part of the woodburning cycle when the tendency to produce creosote is the greatest.
6. **CAUTION:** Your stove is controlled thermostatically and large increases in settings could cause creosote, which might be present in your flue pipe, to ignite without your knowing it.
7. **HELPFUL HINTS:** Your thermostat will provide very even heat in your home. Our home tests have indicated that only electric heat is more even. Most homes are sufficiently massive that the steady heat coming from your thermostat-controlled stove will provide steady room temperature for hours even though outside temperatures are changing. For this reason we recommend that you change the thermostat setting infrequently, generally no more than 3 times daily.
8. Turn on the fan as desired.
9. 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. A good bed of hot coals will maintain a more even temperature as well as getting the new load of wood started easily.

SUBSEQUENT OPERATION

When you add fuel to the insert, open the damper first; then open the door slightly (about 1") and hold in that position for 10-30 seconds or until fire livens up. Then open the door the rest of the way.

Four or five 5" or 6" diameter logs may burn for up to 14 hours. This will vary considerably with the variables of model of stove, type of wood, whether the wood is "seasoned," the thermostat setting, the position of the stove in the house, and how well the house is insulated. The stove can be fully loaded without increasing the heat output. The stove will simply burn longer.

CAUTION: After the fire has been allowed to liven up and door closed, **DO NOT** open the door for at least 4-5 minutes. Hot gasses build up right after the door is closed and the addition of oxygen when the door opens will cause a rapid combustion, sending smoke into the room.

Under normal operations, the thermostat should be set on a mid-range setting. At this setting the stove is capable of heating an average size home. The setting should be adjusted as required to achieve the desired room temperature. The thermostat is set at the factory and should not be tampered with. If the thermostat breaks, the damper will close automatically.

DOOR GASKETS

Check the loading door gasket for deterioration at least twice each heating season.

THE 'GLASS' DOOR

The door with the ceramic glass window is installed the same way as the regular door. Set the hinge rods in the hinges with the door in the vertical position. Open or close as desired.

The basic design of the door will keep the glass from becoming clouded rapidly. However, after some amount of use the glass will have to be cleaned. After the door has been removed and allowed to cool, it can be cleaned with soap and water or a non-abrasive cleanser.

If the glass gets broken, your Blaze King® dealer can provide a replacement. After the door has been removed and allowed to cool, remove the screws and the retaining strips on the inside of the door. Retain these parts. Remove the broken glass. Install the braided gasket to the lower edge of the glass. Remove the adhesive backing and with the gasket centered over the edge of the glass, fold the gasket so that it adheres to both sides of the lower edge of the glass. Insert the gasketed lower edge into the bottom channel. Attach the top retainer with the screws previously removed. Attach the right and left glass retainers as above.

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 should be inspected at least twice monthly during the heating season to determine if a creosote build-up has occurred.

If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.

ASH REMOVAL

Ashes should be removed any time they start to cover the draft inlet into the firebox. The frequency with which you need to empty the ashes depends on the type of fuel being used. Remove ashes only when they are cold so the hot coals are not dumped where they may start a fire.

DISPOSAL OF ASHES

Ashes should be placed in a metal container with a tight-fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

PAINT

If the black 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.

FURTHER INFORMATION

For further information on using your heater, obtain a copy of the National Fire Protection Association publication, "Using Coal and Woodstoves Safely" NFPA #HS-10. The Address is:

National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

AUTHORIZED SERVICE REPRESENTATIVE

Your local Blaze King® dealer is your authorized service representative. Should you have any problems with operations or maintenance of your Blaze King® stove, contact him as soon as possible. He will assist you in resolving any operation problems, provide replacement parts, and/or arrange warranty repairs as required. He will need information such as model, serial number, date of purchase, and a summary of the problem. A list of some of the more common replacement parts is given in the following table.

REPLACEMENT PARTS

Item	Part #	Description
Thermostat Knob	0102	
Ceramics		
King	0114	Orange, Brown, Blue, Green, Black
Princess	0116	Orange, Brown, Blue, Green, Black
Baby	0116	Orange, Brown, Blue, Green, Black
Door Handles	0118	
Spray Paint	0128	Aerosol Can
Rheostat (with nut)	0136 and 0139	
Rheostat Knob	0137	
Door Gasket	0180	
Fan Assembly	3700	
OPTIONAL PARTS		
OVERSIZE SHROUD—36" x 56" (For King Insert Only)..... See your Blaze King® dealer		
OVERSIZE SHROUD—32" x 46" (For Princess Insert Only)..... See your Blaze King® dealer		

*** Save these Instructions ***

MANUFACTURED UNDER LICENSEE AGREEMENT
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WALLA WALLA, WA 99362

BY:

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