

OWNER'S INSTALLATION AND OPERATING INSTRUCTION BOOK

Blaze[®] King

WOOD STOVES

BLAZE KING, Rear Vent
KR-303 and KRJ-303

OM-06A

6/19/85
RCR

SAVE THESE INSTRUCTIONS

BLAZE KING WOODSTOVES
 Blaze King Model KR-303
 Blaze King Model KRJ-303

SAFETY NOTICE: If this Blaze King stove is not properly installed, a house fire may result. For your safety, follow the installation directions. Contact local building or fire officials about restrictions and installation inspection requirements in your area.

INSTALLATION AND OPERATION INSTRUCTIONS

You are now the proud owner of a Blaze King woodstove - the finest, most beautiful woodstove ever introduced in America. It is the desire of Woodcutters Mfg., Inc. that your stove give you a lifetime of trouble-free operation. We suggest that before starting installation you read these installation and operation instructions.

WARRANTY

To register your warranty, fill out the 'Warranty Card' packed with these instructions and return it to the address shown.

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 could endanger your home and family.

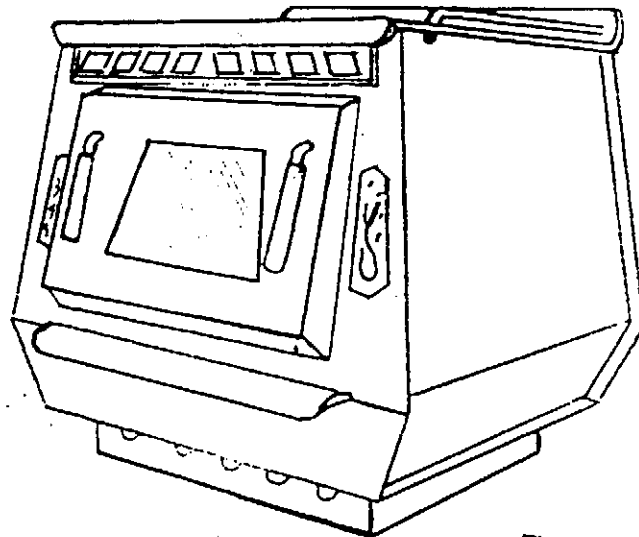


Figure 1

SPECIFICATIONS SUMMARY

MODEL	Width	Depth	Height	Approximate Base Dimensions	Weight	Minimum Floor Protection	Clearance to Combustibles		
							Side Wall	Rear Wall	Corner
KR-303	30	31	33	20" x 17"	345	36 1/4" x 50 3/4"	36"	36"	36"
KRJ-303	30	34	33	20" x 17"	360	36 1/4" x 50 3/4"	36"	36"	36"
KR-303 (mobile)	30	31	33	20" x 17"	360	not approved for mobile homes			
KRJ-303 (mobile)	30	34	33	20" x 17"	375	not approved for mobile homes			

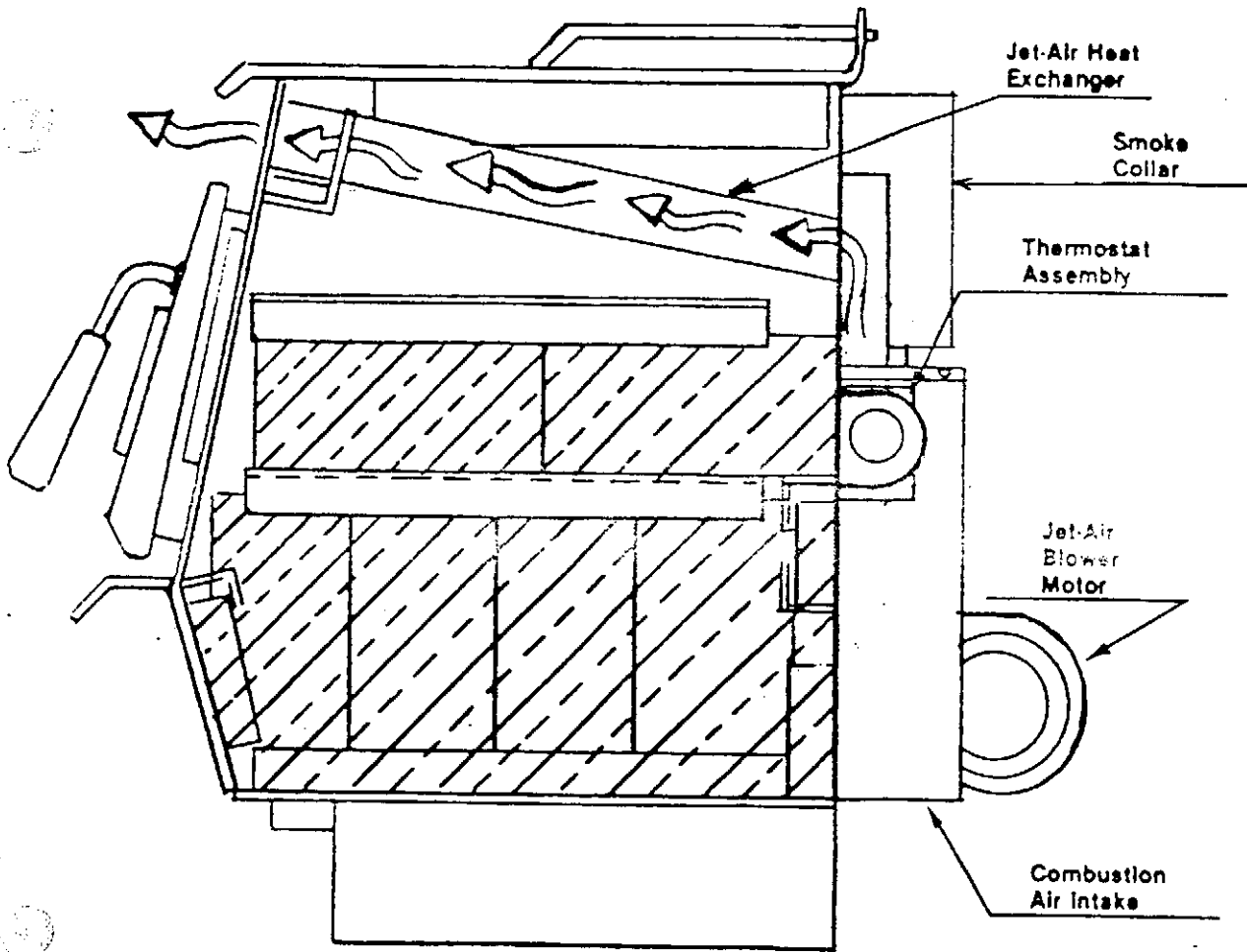


Figure 2

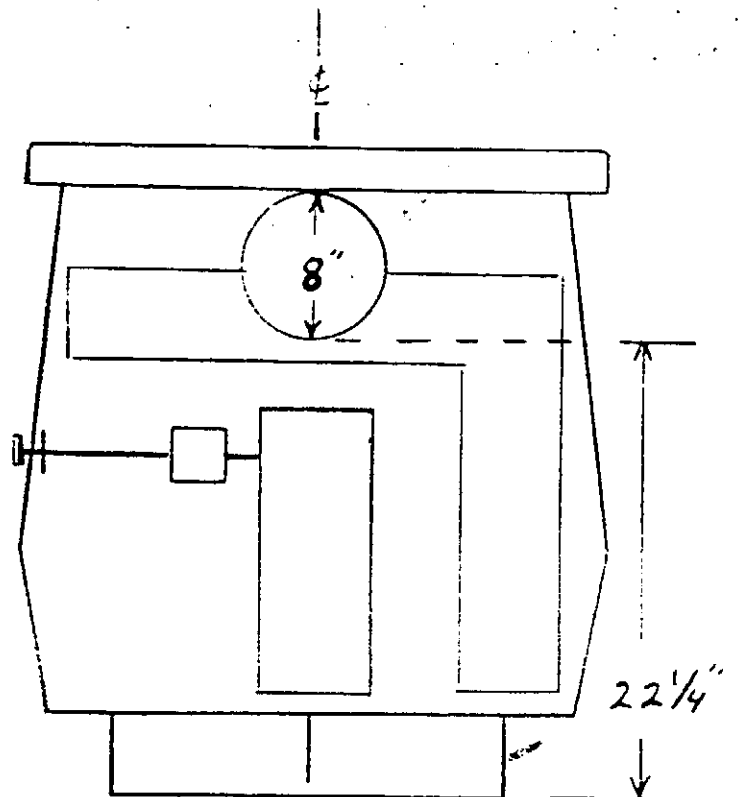


Figure 3

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. Stove with firebrick installed.
2. Door with gasket material installed.
3. Wood handles.
4. Blower motor and screws (Jet-Air models)
5. Thermostat Knob.
6. Top Rails and nuts.
7. Ceramic rings and screws.
8. Ceramics (Fig. 4)



Figure 4

SOME CAUTIONS

1. Stoves must be vented ONLY to the outside, not to other rooms or buildings.
2. NEVER use a chimney connector or chimney flue smaller than the 8" stove exhaust.
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.

SELECTION OF STOVE LOCATION

This appliance should only to be connected to a suitable masonry chimney or an 8" listed, low heat, prefabricated, metal chimney system and minimum clearances to combustibles are observed. See CHIMNEY CONNECTORS.

WARNING: DO NOT cut ceiling or roof joists without maintaining the structural support of the dwelling.

DO check floor joists for proper support of the stove.

For MOBILE HOME INSTALLATIONS:

These rear vent models are not approved for mobile home installations.

CHIMNEYS

There are two major types of stove pipes, insulated and not insulated. Insulated stove pipe and air cooled stove pipe are listed as CLASS A and are actually pre-fabricated chimneys.

Freestanding wood stoves can only be vented into existing chimneys or into a listed, 8" low heat, pre-fabricated, metal chimney system (listed by Underwriters Laboratories, Inc. or other approved laboratory) installed through the ceiling. Horizontal installations are not allowed. Before installation of any wood burning unit to an existing chimney, take care that the chimney is sound. There should not be cracks or holes. Relining or rebuilding may be necessary to make the chimney safe and efficient and bring it into conformity with local codes. A proper chimney is most important for safe, satisfactory operation of any wood heating system.

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

Special methods are required when passing through a wall or ceiling. See chimney manufacturers instructions and local building codes.

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

A chimney should extend at least three feet above a flat roof, or at least two feet above any part of the roof within 10 feet. Chimney tops should NEVER be near trees or other tall objects that might cause down-drafts.

CHIMNEY CONNECTORS

CLASS A chimney is not normally required as a chimney connector for residential installations. Generally speaking, heavy duty, single wall, blue and black steel pipe (not less than 24 gauge) is used to connect the stove to a masonry or CLASS A factory built, pre-fabricated chimney.

Insulated and not insulated pipe is available from numerous manufacturers. Consult local building codes and fire codes to determine which type of pipe may be safely installed. Ask your local dealer about the availability of types of pipe which meet local codes. See

Fig. 5 and Table 1 for approved pipe systems.

The stove collar accepts only 8" pipe. The small end of the pipe fits into the collar to enable any distillates which may form in the chimney to fall back into the stove.

The chimney connector can also be used horizontally as a connection between the stove and masonry chimneys or CLASS A chimneys, provided that the length does not exceed three (3) feet AND THE PIPE SLOPES UPWARD TOWARD THE CHIMNEY AT A RATE OF 1/4" PER FOOT. This slope in the horizontal connection is required to facilitate the drainage of creosote deposits back into the stove.

The chimney connector is to be attached to the smoke collar with two screws.

OUTSIDE AIR SUPPLY

Residential Installations: It is not mandatory that outside air for combustion be used. However, if local codes require it, an Outside Air Kit is available from your dealer.

FUEL

THIS STOVE IS FOR USE WITH WOOD ONLY!

Glaze King wood stoves will burn just about anything. Therefore, it is tempting to burn materials which are inadvisable. 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.

TABLE 1, Suggested pipe systems. Refer to Figure 5.

		White Metal	Security	Pro-Jet	Metalbestos	Hart & Cooley	Dura-Vent	Dura-Vent DVL
1		8W-CA	8CPE	8RCSA	8S-CT/ 8S-SA	8DC	5278	8TWA
2		8W-SC		8SC	8S-SC	8DS	5259	5259
3		8W-RF	8FMH	8RF-17	8S-AF	8DF/ 8DTF	5249	5249
4		8W**	8L	8SL**	8S**	8DP	52**	5221
5		8W-T	8TI	8ITS	8S-IT	8DIT	5267	Note 2
6		8W-TFS	8RSM	8WRS	8S-WS	8DFW	5243	Note 2
7		8W**	8L**	SL**	8S**	8DP	52**	5221
8		8W**	8L**	SL**	8S**	8DP	52**	5221

- Notes: 1. ** = length of pipe sections (i.e. 12", 24", 36")
 2. These items included in KIT number listed in item 1.

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.

THE FIRST FIRE

DO NOT USE GRATE. BUILD FIRE DIRECTLY ON THE HEARTH.
 Set the thermostat to HIGH (fully counterclockwise).

Place two or three large balls of crumpled paper in the front of the firebox. Lay some dry sticks or wood chips on top of the paper as kindling. Use enough to establish a good fire base. Lay one or two larger pieces of wood (small logs) on top of the kindling.

(1) Cap with Spark
Arrester

(2) Storm Collar

(3) Flashing

(4) Class 'A'
Chimney

(5) Wall Thimble

(7) Chimney
Connector

(6) Insulated
Tee

Wall
Thimble

3/8"

3/8"

Figure 5

Figure 6

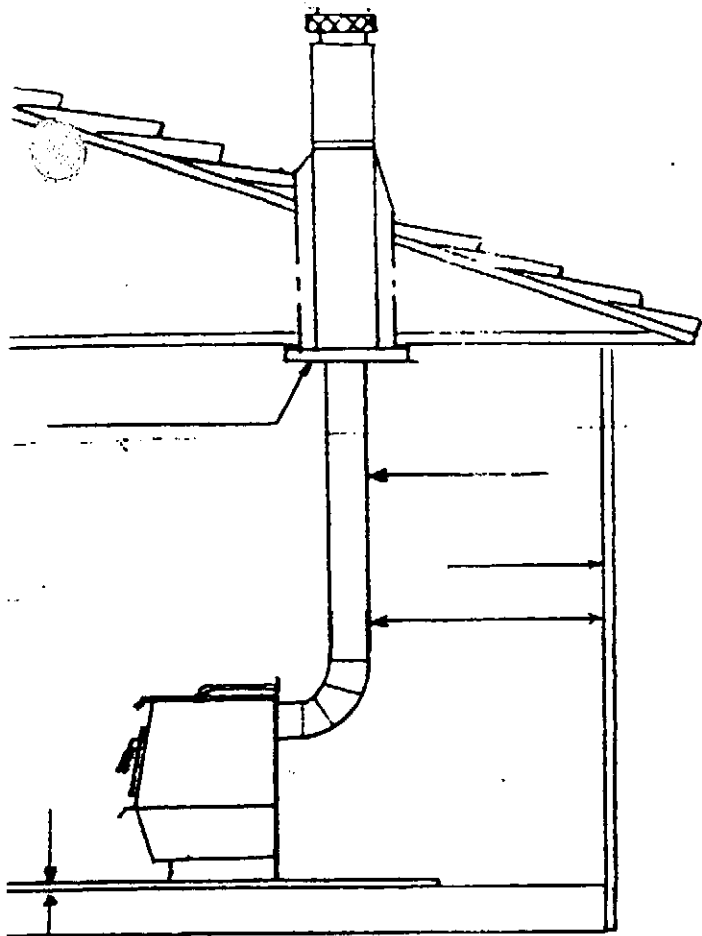


Figure 7

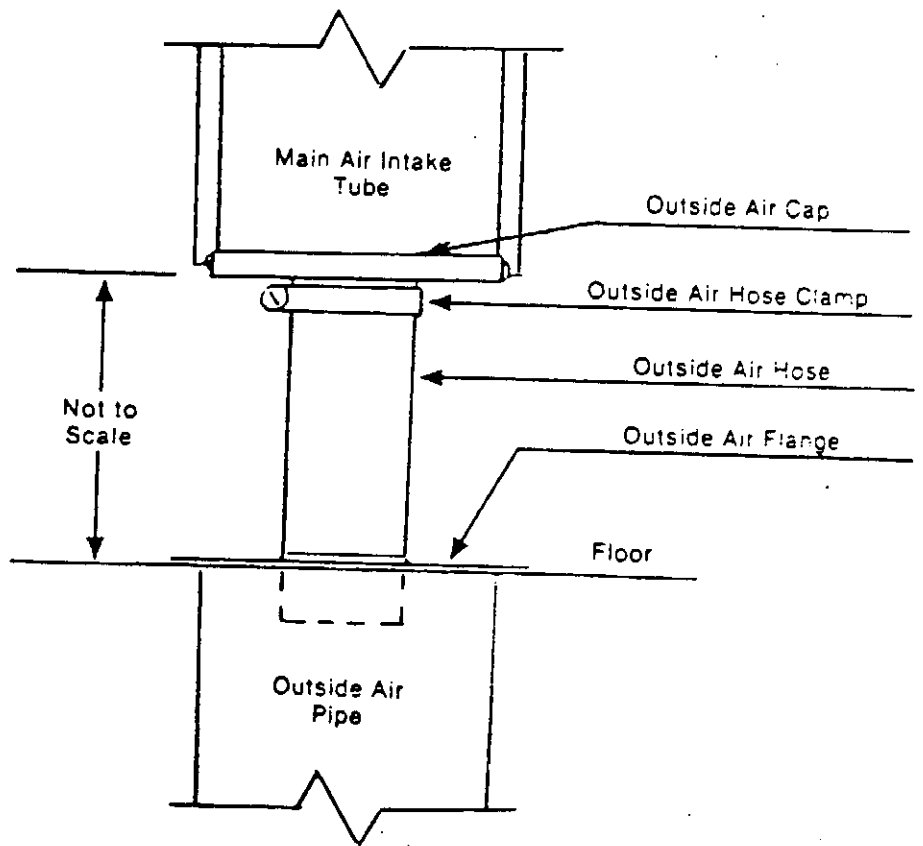


Figure 8

Light the paper, close the door, and allow the fire to get a good start.

Now open the door and carefully add three or four good sized logs. More can be added if desired without increasing the heat output – the fire will just burn longer. Close the door tightly and set the thermostat to midrange – adjust as required.

NOTE: As you heat up the stove for the first time, the paint will go through a curing process and it will give off an odor. To minimize this inconvenience, burn the stove at a low temperature setting for several hours. If the odor gets too unpleasant, you may have to open a door or window slightly until the odor dissipates.

Probably the least understood requirement in maintaining a good fire is that of establishing a good base of ash and coals. Many Woodstove users hesitate to load enough wood to sustain a fire, but a good bed of hot coals will maintain a more even temperature as well as getting the new load of wood started easily.

1. Crumpled paper in firebox front
2. Small dry sticks on top of paper
3. 5"-6" diameter logs added to firebox after kindling is burning briskly

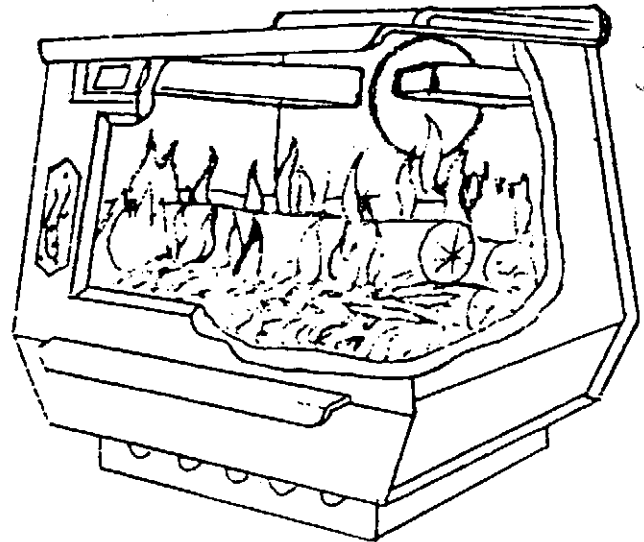


Figure 9

OPERATION

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

Seven or eight 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 the 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.

If at some time it seems that the stove is not getting hot enough for the corresponding draft setting, check to see that something is not blocking the draft inlet inside the stove such as ashes or a piece of wood.

DOOR GASKET

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

THE 'GLASS' DOOR AND GLASS REPLACEMENT

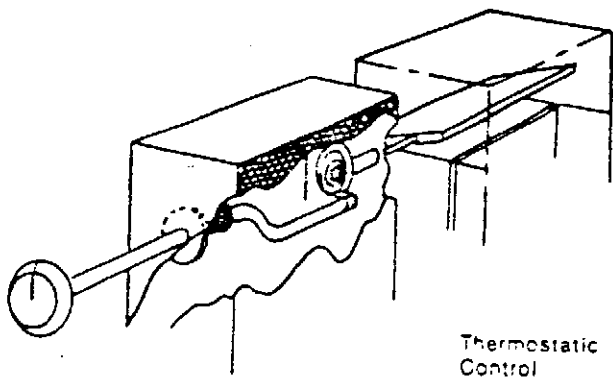
The door with the ceramic glass window is installed the same way as the regular door. Set the hinge rods in the hinges with the door in the vertical position. Open or close as desired.

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 cracked or 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. To install the braided gasket to the lower 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.

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. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. **PREVENT CREOSOTE FIRE.** Inspect Chimney Connector and Chimney **TWICE** monthly and clean if necessary.



Thermostatic
Control

Figure 10

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.

LUBRICATION

Lubricate the fan motor bearings of Jet-Air models every 6 months with 10 to 20 drops of SAE 10W or 20W non-detergent oil (ML type) or with electric motor oil.

CAUTION: DO NOT over-lubricate. The excess oil may damage the windings or electrical wiring on the motor.

CAUTION: Disconnect power cord BEFORE performing lubrication operation.

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 below.

REPLACEMENT PARTS

Ceramics	0114	Orange, Brown, Blue, Green, Black
Door Handles	0118	
Motor	0112	
Spray Paint	0128	Aerosol Can
Thermostat Knob	0102	
Outside Air Kit	0150	
Door Gasket	0180	

BLAZE KING - Addendum 1
Models KR-303 and KRJ-303
For Residential Installations - Wall Penetration

INSTALLATION

1. Set hearth and stove in location for marking holes in accordance with the dimensions listed on the label and Figures of these instructions.
2. Mark the position of the hole through the wall.
3. Check that the intended location will not interfere with floor joists, wall studding, plumbing, or electrical wiring before proceeding further.
4. (If required) mark the position of the hole for the Outside Air Hose.
5. (If required) move the stove, and using a saber saw with a masonry blade, cut a 6" hole for the Outside Air Pipe.
6. Cut a pilot hole in the wall.
7. Cut a 14" diameter hole and frame in the sides of this hole in the wall. Follow the pipe manufacturers installation instructions.
8. Install the Wall Thimble.
9. Slide the stove back into position.
10. To start installing the pipe, turn the first section of pipe upside down and slip the crimped end of the pipe into the stove flue. Follow the pipe manufacturers installation instructions.
11. Install the remaining lengths of pipe to the wall thimble and secure to each other.
12. If your Blaze King is to be vented to an external chimney, install the 'Class A' chimney at this time. Follow the pipe manufacturers installation instructions. NOTE: To meet the code, the chimney must extend above the roof at least three feet, and two feet above any area of the roof within ten feet of the chimney.
13. (If required) Install the Outside Air Pipe and secure to the floor. Attach the Outside Air Cap to the bottom of the main Air Intake Tube. Push a few inches of Outside Air Hose down through the hole in the Outside Air Flange. Place the Outside Air Hose clamp over the top end of the Outside Air Hose and install the Outside Air Hose to the Outside Air Cap. Tighten the Outside Air Hose Clamp to hold the Outside Air Hose in place. Adjust the length of the Outside Air Hose by moving it in or out of the Outside Air Flange. When the desired position has been obtained, secure the Outside Air Hose to the Outside Air Flange with a small bead of high temperature silicone sealer.
14. Install the Top Rails. Insert the long end through the hole in the back of the stove top and rotate the rail until it drops through the hole in the stove top. Attach with the 7/16" nut provided.
15. Install the ceramic in the ceramic ring. Mount the Assembly to the stove with the 6-32 x 1/4" screws provided. REMEMBER, these ceramics are a fragile clay product and must be handled carefully.
16. On Jet-Air models, attach the blower motor to the Blower Intake Tube on the back of the stove with four self tapping screws, one of which has an internal Tooth Lock Washer attached to it. The motor is equipped with a three-pronged (grounded) plug to prevent shock hazard. THIS PLUG SHOULD BE INSERTED DIRECTLY INTO A PROPERLY GROUNDED, THREE-PRONGED RECEPTACLE. DO NOT CUT OR REMOVE THE GROUNDING PRONG FROM THIS PLUG. Do not route the power cord in front of this heater.

MINIMUM CLEARANCES TO COMBUSTIBLE SURFACES

FLOOR PROTECTION

Floor protection material: 3/4" millboard. Listed floor protector of a noncombustible material equal to 3/8" thick millboard having a thermal conductivity of $K = 0.84 \text{ BTU in/ft hr degrees F}$.

The floor protector must extend beyond the base:

8" from each side

21" from the front

These dimensions provide the required clearances from the door openings.

12" from the back

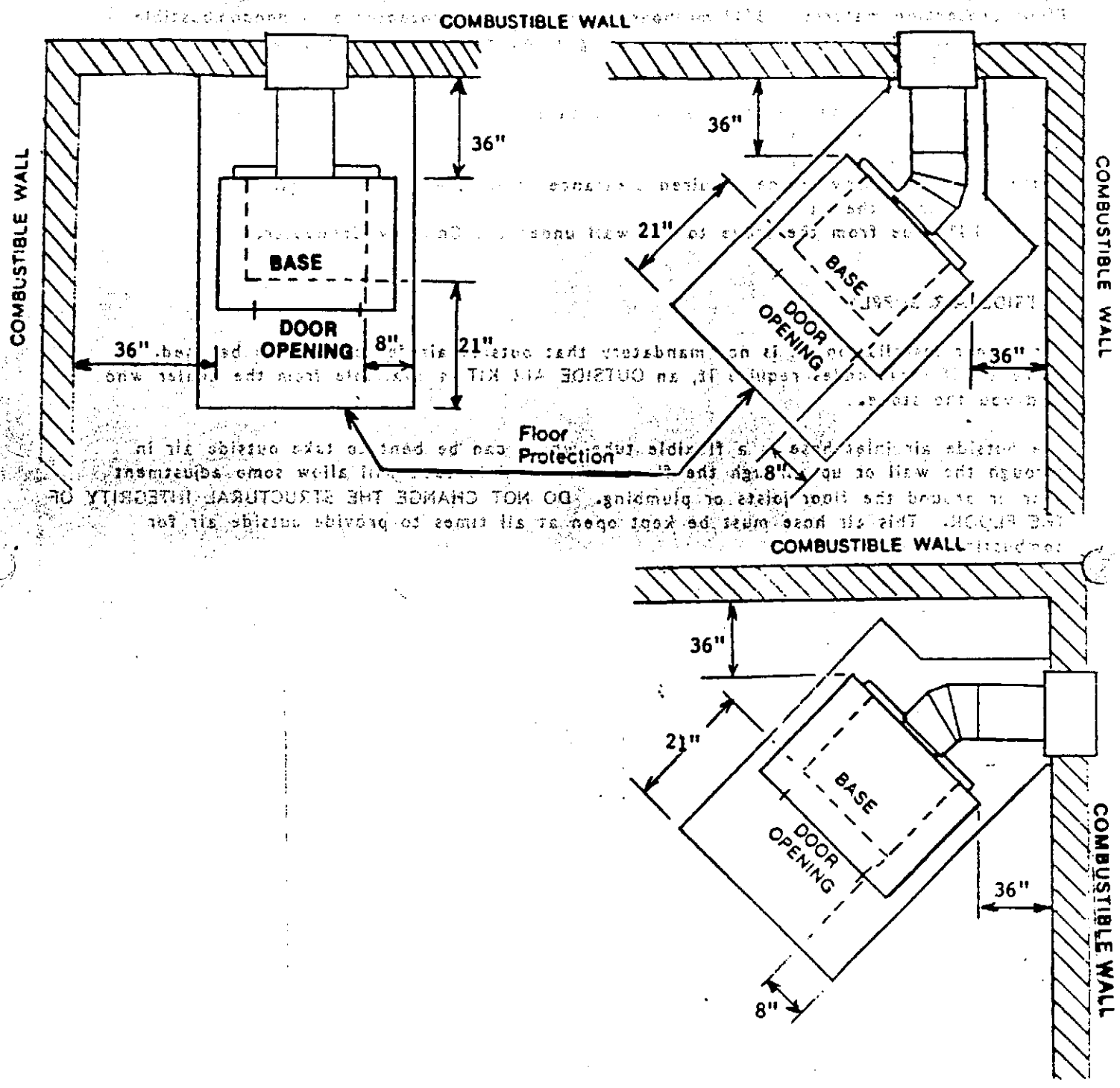
12" wide from the stove to the wall under the Chimney Connector.

OUTSIDE AIR SUPPLY

For proper installation, it is not mandatory that outside air for combustion be used. However, if local codes require it, an OUTSIDE AIR KIT is available from the dealer who sold you the stove.

The outside air inlet hose is a flexible tube which can be bent to take outside air in through the wall or up through the floor. The flexible tube will allow some adjustment over or around the 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. See Figure 8.

MINIMUM CLEARANCES TO COMBUSTIBLE SURFACES



THE FLOOR. This air hose must be kept open at all times to provide outside air for
 to be around the floor joists or plumbing. DO NOT CHANGE THE STRUCTURAL INTEGRITY OF
 rough the wall or up 8" from the ceiling. This is a mandatory requirement. It is an OUTSIDE AIR KIT
 outside air intake. This is a mandatory requirement. It is an OUTSIDE AIR KIT
 Floor Protection

BLAZE KING
Models KR-303 and KRJ-303
For Residential Installations - Ceiling Penetration

INSTALLATION

1. Set hearth and stove in location for marking holes in accordance with the dimensions listed on the label and Figures of these instructions.
2. Mark the position for the hole in the ceiling and roof by using a string and plumb-bob.
3. Check that the intended location will not interfere with floor joists, ceiling joists, or rafters before proceeding further.
4. (If required) mark the positions of the hole for the outside air hose.
5. (If required) move the stove and, using a saber saw with a masonry blade, cut a 6" hole for the outside air pipe.
6. Cut a pilot hole in the ceiling.
7. Cut a 14-1/2" square hole and frame in both sides of this hole in both ceiling and roof (FOR SAFE INSTALLATION HOLE MUST NOT BE SMALLER THAN 14-1/2"). Follow the pipe manufacturers installation instructions.
8. Measure the distance from the ceiling to the top of any combustible material. If required, trim the top of the joist shield so that it will clear any combustible material when installed in step 11. Note that the joist shield may extend completely through the roof on some installations and may require trimming, only to allow the proper positioning and attachment of the roof flashing and storm collar. See Fig. 5.
9. Slide the stove back into position.
10. To start installing pipe, turn the first section of pipe upside down and slip the crimped edge of the pipe inside the stove flue. Follow the pipe manufacturers installation instructions.
11. Install the remaining lengths of pipe one on top of the other to the finished height the chimney connector and secure to each other. When approaching the ceiling, slip the ceiling trim plate and joist shield over the chimney so that after the chimney is extended through the ceiling, the ceiling trim plate can be secured to the ceiling. The joist shield rests on the ceiling trim plate but is not secured to it.
12. Slip the roof flashing down over the chimney and nail to the roof being careful to keep the pipe centered in the opening. NOTE: To meet the code, the chimney must extend above the roof at least three feet and two feet above any area of the roof within ten feet of the chimney.
13. (If required) install the Outside Air Pipe and secure to the floor. Attach the Outside Air Cap to the bottom of the main Air Intake Tube. Push a few inches of Outside Air Hose down through the hole in the Outside Air Flange. Place the Outside Air Hose Clamp over the top end of the Outside Air Hose and install the Outside Air Hose to the Outside Air Cap. Tighten the Outside Air Hose clamp to hold the Outside Air Hose in place. Adjust the length of the Outside Air Hose by moving it in or out of the Outside Air Flange. When the desired position has been obtained, secure the Outside Air Hose to the Outside Air Flange with a small bead of a high temperature silicone sealer.
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21" from the front

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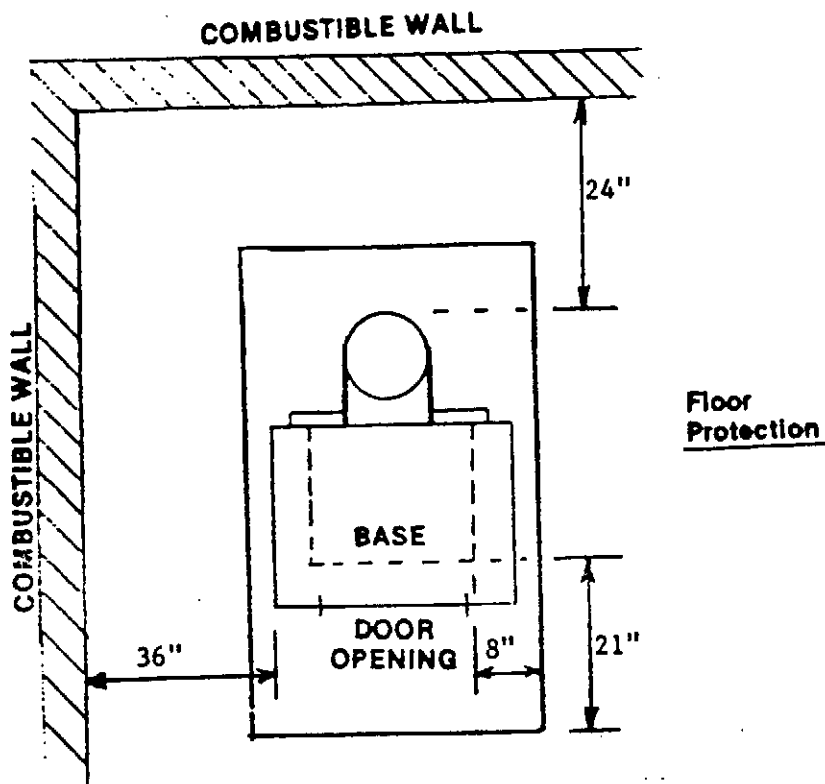
12" from the back and at least 2" beyond the chimney connector in all directions.

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MINIMUM CLEARANCES TO COMBUSTIBLE SURFACES



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