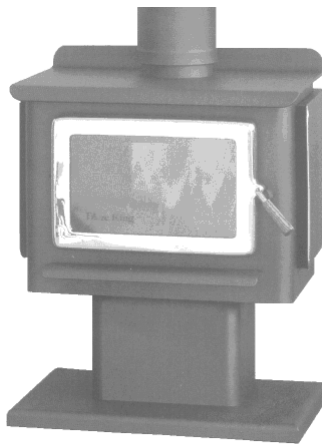


# *Blaze King*

# Royal



## Owner's Installation and Operation Manual

Manufactured By

**Valley Comfort Systems Inc.**  
1290 Commercial Way  
Penticton, BC V2A 3H5  
CANADA  
Phone: 250-493-7444  
Fax: 250-493-5833



**Blaze King Industries**  
146 A Street  
Walla Walla, WA 99362  
U.S.A.  
Phone: (509) 522-2730  
Fax: (509) 522-9803

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

## **SAFETY NOTICE**

IF THE BLAZE KING, ROYAL GUARDIAN, MODEL RGT-3001, 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.

THIS STOVE MUST BE CONNECTED TO A LISTED (UL103 OR ULC S629) HIGH TEMPERATURE RESIDENTIAL TYPE AND BUILDING HEATING APPLIANCE TYPE HT CHIMNEY OR AN APPROVED MASONRY CHIMNEY WITH FLUE LINER.

IMPROPER ASSEMBLY, INSTALLATION, MAINTENANCE OR OPERATION OF THIS APPLIANCE CAN CAUSE DAMAGE TO PROPERTY, SERIOUS INJURY OR DEATH. READ THESE INSTRUCTIONS.

This unit certified by the United States Environmental Protection Agency, certificate number 168. Certified to comply with July, 1990 particulate emission standards.

SAVE THESE INSTRUCTIONS

## **CAUTION!**

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

**DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE.  
DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS.  
DO NOT CONNECT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.**

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

Dear Customer:

Thank you for purchasing the Blaze King, Royal Guardian, Model RGT-3001, Wood burning Stove (hereafter referred to as "stove"). The Royal Guardian's contemporary elegance, complementary trim and decorator colors make it the first choice for improving your life style and enhancing the decor of your home.

This owner's manual explains the steps required to safely assemble, install operate, and maintain your new stove. Be a responsible stove owner; carefully read these requirements for safe installation and proper operation BEFORE installing and using your stove. If local laws require, obtain permits from the Building Inspector or Fire Department. Check local building and fire code 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 home owner's insurance. Since some insurance carriers require notification of a stove installation, contact your insurance agent. We want your Royal Guardian 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 you BLAZE KING dealer, Local Building Inspector, Fire Department, or call our customer service department at B.K.I. Inc. in the U.S.A. at (509) 522-2730 or in Canada call Valley Comfort at 250-493-7444.

The Management and Employees of Blaze King.

**KEEP THIS MANUAL FOR FUTURE REFERENCE.**

**IF YOU HAVE NOT ALREADY DONE SO, PLEASE TAKE A FEW MINUTES TO COMPLETE THE WARRANTY CARD FOUND IN THE FIREBOX AND MAIL IT TODAY.**

**PRODUCT INSPECTION BLAZE KING**

Blaze King stoves are known for their quality materials and construction, however, mistakes occasionally occur. Inspect all parts for damage due to shipping and to be sure that all needed parts are enclosed. If you discover a part is missing or damaged, contact your dealer immediately for replacement or repair. Refer to the part number listed below and the model and serial numbers of your stove (see the tag on the back of the stove).

**Standard Contents**

<b>Quantity:</b>	<b>Item:</b>
1	Firebox, with brick
1	Owners Manual
1	Warranty Card
1	Thermostat Handle
1	Door Assembly, with handle

**OPTIONAL ACCESSORIES**

<b>DESCRIPTION</b>	<b>PART #:</b>	<b>PAGE #:</b>
Side Shield Kit With Fan Assembly	Z8301A	23
Back Shield Kit (must be installed with Side Shield Kit #Z8301A)	Z8310A	23
Outside Air Kit	Z8300AA	24

## **BLAZE KING**

### **LIMITED WOODSTOVE WARRANTY**

**WARNING: TO VALIDATE THIS WARRANTY YOU MUST COMPLETE AND RETURN THE WARRANTY CARD WITHIN 20 DAYS OF THE DATE OF PURCHASE.**

#### **WHAT THE WARRANTY COVERS:**

Blaze King Industries and/or Valley Comfort Systems Inc. shall be referred to throughout this document as "Blaze King".

This warranty contains different terms which cover different parts of the stove. Blaze King warrants the STEEL COMPONENTS of this BLAZE KING stove, which is delivered with this warranty, against defects in material or workmanship to you, the original retail purchaser (hereafter referred to as purchaser), for a period of up to five (5) years following the date of original retail purchase, subject to the provisions of the RESPONSIBILITIES OF THE COMPANY below. Blaze King warrants the FAN ASSEMBLY, FRONT DOOR GASKET, and WOOD HANDLES of this BLAZE KING, which is delivered with this warranty, against defects in material or workmanship, to the purchaser, for a period of one (1) year following the date of original retail purchase, subject to the provisions of the RESPONSIBILITIES OF THE COMPANY below. There is no warranty on paint, ceramics, glass, bricks or gold-plating. No person is authorized to modify this warranty or to make any additional warranties on behalf of Blaze King.

#### **WHAT THE WARRANTY DOES NOT COVER:**

Unless otherwise provided by law or covered by this warranty, Blaze King is not responsible for removal, transportation or re-installation of any product repaired or replaced pursuant to this warranty. Blaze King shall in no event be liable for special, incidental, consequential, indirect or other similar damages arising from the breach of the warranty, even if Blaze King has been advised of the possibility of such damages. Some states / provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Blaze King limits all implied warranties, if any, including the warranties of merchantability or fitness for particular purpose, to one (1) year from the date of original retail purchase. Some provinces / states do not allow limitations on how long implied warranty lasts, so the above limitation may not apply to you. Actions for breach of this warranty must be brought within one (1) year of the expiration of this warranty.

#### **HOW YOU CAN GET SERVICE:**

If this product requires repair or replacement due to defects in material or workmanship covered by this warranty, contact your Blaze King dealer and explain the defect. If the dealer does not repair or replace the product to your satisfaction, contact the Service Department of Blaze King in the U.S.A. at 1-509-522-2730 and in Canada at 1-250-493-7444 or write to Blaze King at one of the addresses at the end of this warranty. Please explain the defect and state the model, serial number, date of retail purchase, and the name and address of your Blaze King dealer. Blaze King may request that the defective part, parts, or the entire stove, be shipped to one of Blaze King's manufacturing locations at the purchaser's expense.

#### **WARPING:**

Blaze King stoves have been thoroughly tested under extreme conditions, only abuse and over firing may create noticeable warping of components. Over firing of your stove will void all warranties implied or otherwise.

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

**BLAZE KING**  
**LIMITED WOODSTOVE WARRANTY**

**RESPONSIBILITIES OF THE COMPANY:**

If the purchaser has complied with all of the terms and conditions of this warranty and If the purchaser has notified Blaze King of a defect prior to the expiration of the respective warranty period and after shipment, Blaze King will either repair or replace the product, AT ITS ELECTION, or MAY ELECT to refund a portion of the purchase price, based on the formula below, if it cannot readily and quickly provide the purchaser with a replacement. The repaired product or replacement will be returned to a Blaze King dealer nearest the purchaser at Blaze King's expense. If it is determined by Blaze King that there is no defect, or that the defect resulted from causes not within the scope of this warranty, then the purchaser must bear the cost of storing the product and of returning the product to the purchaser. For parts of this woodstove or fireplace insert warranted beyond the first year, Blaze King will have the same obligations as described in this paragraph, 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 which the defect is brought to the attention of Blaze King:

during the 2nd year	purchaser pays 20%
during the 3rd year	purchaser pays 40%
during the 4th year	purchaser pays 60%
during the 5th year	purchaser pays 80%

The above warranty is conditional upon the proper installation and use of the stove according to the manufacturer's directions embodied in the Owner's Installation and Operation Instructions published by Blaze King and in compliance with the local building or fire codes in the area where it is installed. The stove should be inspected by the Local Building Inspector or Fire Department prior to beginning use. A copy of the Owner's Installation and Operation Instructions is provided with each unit, or can be obtained by writing to Blaze King at one of the addresses shown below. READ THE OWNER'S INSTALLATION AND OPERATION INSTRUCTIONS BEFORE INSTALLING OR USING THE STOVE. SAVE THESE INSTRUCTIONS FOR FURTHER MAINTENANCE AND SAFETY PROCEDURES. Alteration of, abuse of, damage to, lack of maintenance of, faulty repair, OR misuse of the stove, VOIDS this warranty. Use of fuel other than natural untreated wood (such as artificial logs, wood exposed to salt water, or coal that may burn at excessively high temperatures or may release fumes that can explode) will VOID this warranty. Burning the stove with the loading door open (other than during the brief start-up period) will also VOID this warranty.

**OTHER LEGAL RIGHTS OF THE PURCHASER:**

This warranty gives you specific legal rights, and you may have other rights that vary from province to province or state to state. All parts of this warranty are to be interpreted in accordance with the laws of British Columbia/Canada and or Washington State/U.S.A.. If you do not agree to the purchase of the stove on the terms and conditions set out in this warranty, then you must return the stove to the dealer prior to use or installation, and the purchase price will be refunded.

**THIS WARRANTY ONLY COVERS UNITS INSTALLED IN CANADA AND U.S.A.**

**PLEASE KEEP YOUR RECEIPT, AS PROOF OF PURCHASE.**

**ALL WARRANTY CLAIMS SHOULD BE MADE THROUGH THE DEALER YOU  
ORIGINALLY PURCHASED YOUR HEATER FROM:**

**WARNING**

**TO VALIDATE THIS WARRANTY, YOU MUST  
COMPLETE AND RETURN THE WARRANTY CARD  
WITH 20 DAYS OF THE DATE OF PURCHASE**

**Blaze King is proudly manufactured by:**

**VALLEY COMFORT SYSTEMS**  
1290 COMMERCIAL WAY  
PENTICTON, BRITISH COLUMBIA  
CANADA  
V2A 3H5

**BLAZE KING INDUSTRIES**  
146 A Street  
Walla Walla, Washington  
U.S.A.  
99362

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

**DEFINITIONS**

**CHIMNEY**

One or more passageways, vertical or nearly so, for sending flue gases (smoke) to the outside atmosphere.

1. Listed Residential Type (UL103 OR ULC S629) and Building Heating Appliance Chimney which complies with the requirements as described on page 25: PREFABRICATED 6 inch listed high temperature (tested at 2100 degrees F) residential type and building heating appliance chimney. Components required by manufacturers for installation such as the chimney support base, firestop (as appropriate), attic insulation shield, insulated tee, etc., are necessary to assure a safe chimney installation. Use only components manufactured for the chimney.
2. Masonry Chimney: A field-constructed of solid masonry units, bricks, stones, listed masonry chimney units or reinforced Portland cement concrete, with at least 5/8" fire clay lining joined with refractory cement or other listed lining system suitable for use with wood stoves.

**AVOID FIRE**

Maintain the designated clearance distance to combustibles. Insulation must not touch the chimney. There must be the designated air space clearance around the chimney. This air space around a chimney is necessary to allow natural heat removal from the area. Insulation in this space will cause a heat buildup which may ignite wood framing.

**CHIMNEY CONNECTOR**

Also known as stove pipe, connects a fuel-burning appliance to a chimney. A chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, ceiling, wall or partition of combustible construction. The chimney connector should be 6" in diameter, of 24/26 MSG black/blue steel.

**COMBUSTIBLE MATERIAL**

Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or other materials that will ignite and burn. This includes materials flame proof or not or materials plastered or not.

**COMBUSTION AIR INTAKE**

Located on the back of the stove, on the centerline. Combustion air is drawn into this opening, through the control and into the firebox.

**FANS (Optional)**

Two variable speed axial fans (105 CFM each). The fans circulate room air around the firebox and back into the home.

**FANS SPEED CONTROL**

Located on the Fan Assembly, controls the fan speed.

**FIREBOX**

Steel, 1/4" and 3/16", lined with firebrick. The recommended log length that should be used in this firebox is up to 16".

**FLOOR PROTECTOR**

Non combustible surfacing applied to the floor area underneath and extending in front, to the sides and to the rear of a heat producing appliance.

**FLOOR PROTECTION MATERIAL**

For the RGT-3001, any non-combustible material or a Listed floor protector.

**FLUE**

The general term for a passage through which flue gasses pass from the combustion chamber to the outside air.

**HEARTH**

The floor area within the fire chamber of a fireplace or fireplace stove. The bottom of the firebox. Build the fire directly on the Hearth.

**MOBILE HOME**

A residence mounted on wheels, or capable of having wheels installed for moving to another location. Typically, a residence with a steel frame supporting the structure and providing an axle(s) for the installation of wheels to move it into the location and out again. Frequently referred to as "Manufactured Homes" to differentiate between travel trailers and more permanent residences.

**THIMBLE**

A manufactured or site-constructed (brick) device installed in combustible walls. It is intended to keep walls from igniting.

## **SAFETY**

### **CHIMNEY FIRE**

#### **In the event of a fire in the chimney:**

- a. Adjust the thermostat to its lowest setting.
- b. Check the Loading Door to be sure it is tightly closed.
- c. Get everyone out of the house.
- d. Call the Fire Department immediately. After the fire is out, have your chimney inspected by a Building Inspector or certified chimney sweep. Any damaged chimney components should be replaced before the stove is used again. A masonry chimney that is damaged should be repaired or rebuilt.

Contact you Fire Department for further advice. Your family should have a prearranged plan so that each person will know what to do and will act immediately if such an emergency arises.

### **SMOKE DETECTORS**

Install at least one smoke detector on each floor of your home to ensure your safety. It should be located away from the wood stove and close to the sleeping areas. Locating a smoke detector too close to a wood stove can cause the smoke detector alarm to sound if a puff of smoke is emitted while the wood stove door is open during reloading. Follow the smoke detector manufacturers placement, installation, and maintenance instructions Your local fire Department may provide assistance in selecting smoke detectors.

### **FIRE EXTINGUISHERS**

Every home should have at least one approved "Class A-B-C" fire extinguisher. It should be mounted on the wall, near an exit and close to the stove but not so close that accessibility to the extinguisher could be blocked by a fire. Your local fire department can advise you concerning the most appropriate location.

### **BUILDING AND FIRE CODES, PERMITS, AND INSPECTIONS**

The installation of this wood stove must comply with you local building and fire codes. Always contact you local Building Inspector and /or Fire Department before beginning the installation process. If required, obtain a permit before installation and have the completed installation inspected. Remember that noncompliance with building and/or fire codes may jeopardize your homeowner's insurance.

### **CHILDREN**

Do not allow children to play near the stove or with the operating knobs. Severe burns may be inflicted by touching some of the parts of the stove and by opening the loading door. Train children to stay away from the stove and never leave children unattended in the room when the stove is in operation.

### **CLEARANCES TO COMBUSTIBLE MATERIALS**

For a safe installation, proper clearances to combustible materials **must be observed** (see pages 17 & 18). Failure to follow these guidelines voids the certification and warranty, is illegal, and can result in a fire causing property damage, injury, or death. Keep combustible (burnable) materials at least as far away form the wood stove as the table on page 17 indicates. Combustible materials include items such as plasterboard or wood-paneled walls, furniture, wooden mantles, bookshelves, carpets and drapes. Firewood should not be stored within the specified clearances.

### **AVOID FIRE**

Maintain the designated clearance distance to combustibles. Insulation must not touch the chimney. There must be the designated air space clearance around the chimney. This air space around a chimney is necessary to allow natural heat removal from area. Insulation in this space will cause a heat buildup which may ignite wood framing.

### **FUEL**

THIS WOOD STOVE IS FOR USE WITH SOLID WOOD FUEL ONLY.

**NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.**

Do not burn materials soaked in flammable liquids, trash, garbage, plastics, gift wrappings, coal, charcoal, naptha, engine oil, chemical cleaners, chemical fire starters, treated or painted wood, saltwater drift wood, railroad ties, plywood, particle board. Do not burn sawdust wood shavings or chips in this wood stove.

# **Blaze King, Royal Guardian, Model RGT-3001**

## **OWNER'S INSTALLATION AND OPERATION MANUAL**

When selecting wood for the Model RGT-3001, it is preferable that you use seasoned wood. Dry, seasoned wood will burn cleaner and produce less creosote. Dry or small pieces of fuel will provide a hotter fire. Larger pieces can be used to provide a longer burn time.

**CAUTION:** Do not place wood fuel within the space heater installation clearances or within the space required for wood loading and ash removal.

### **DISPOSAL OF ASHES**

Ashes should be placed in a sealed non combustible container until they are thoroughly cooled. The closed container of ashes should be placed on a non-combustible material pending final disposal. Once they are cooled they can be disposed of by burial in soil or other suitable methods. Do not store other waste in the ash container.

Ashes should never be placed in wooden or plastic containers, or in paper or plastic bags, no matter how long the fire has been out. Coals have been known to stay hot for several days when embedded in ashes.

**WARNING REMOVE ASHES ONLY WHEN THEY ARE COOL. NEVER STORE HOT ASHES IN A GARAGE OR BASEMENT. HOT ASHES WILL GENERATE CARBON MONOXIDE AND/OR FLAMMABLE GASES. THESE GASES MAY CAUSE SUFFOCATION.**

### **CHIMNEYS** (See "Definitions" on page 6)

The use of make-shift chimney installation is not allowed. Before connecting a wood-burning unit to an existing chimney, inspect the chimney to be sure it is in good condition. There should be no cracks or holes. Often it is impossible to see these from the outside. A certified chimney sweep should inspect your chimney and give you an accurate assessment of its condition. The cross-sectional area must not be less than that of the 6" diameter flue collar (28.27 square inches). Relining or rebuilding may be necessary to make a Masonry Chimney safe. A proper chimney is **most important** for safe, satisfactory operation of any wood heating system. **Inspect** the Chimney and Chimney Connector (if installed) at least twice each month during the heating season. Any leak must be repaired or it may admit more air and cause exhaust gasses to condense and form creosote. Patches of creosote in your chimney indicates that such Leaks are present. If a significant amount of creosote has accumulated, it should be removed to reduce the risk of a chimney fire. (See "Creosote and Soot Formation and Need for Removal", below)

**"Never intentionally start a chimney fire to clean the flue."**

### **CREOSOTE and SOOT 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 and Chimney Connector should be inspected at least twice each month during the heating season to determine if a creosote or soot build-up has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire. To control creosote build-up, It is preferable to build a small intense fire, rather than to have a large smoldering one.

### **LOADING DOOR**

**Do not operate you stove with the loading door open.** This stove is not designated or intended to be operated with the loading door open. Do not leave your stove unattended when the loading door is not tightly closed even when starting a fire. Leaving the loading door open AFTER the fire is well established can cause overheating of the stove. Such overheating can cause the stove to warp.

Check the loading door gasket for deterioration at least twice each heating season. Inspect the gasket for physical deterioration, missing sections or obvious leakage. To check the gasket further, insert a piece 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.

## **SPECIFICATIONS FOR MODEL RGT-3001**

Heat Output.....	39,000 Btu/hr.
Wood Capacity (Approximate)	
White Oak .....	30 lbs.
Fir.....	20 lbs.
Recommended Wood Length .....	16 in./40.6cm
Total Weight with Firebrick (approximate).....	300 lbs.
Width.....	25 in./63.5cm
Depth .....	24.5 in./62.2cm
Height.....	32 in./81.3cm
Door Opening Width.....	14 in./35.6cm
Door Opening Height .....	8.5 in./21.6cm
Flue Size (Diameter) .....	6 in./15.2cm
Fans, Two Variable Speed.....	105 CFM
Door Glass .....	High Temperature Ceramic 3/16" X 9 1/8 in. X 15 in. 3/16" X 23.2cm X 38.1cm
Minimum chimney Cross-Sectional Area .....	28.27 (square inches)

**Tested and listed to U.L. 1482 / ULC S627 by:  
INTERTEK TESTING SERVICES**

## PREPARATION AND ASSEMBLY

**WARNING** IMPROPER ASSEMBLY AND/OR INSTALLATION OF YOUR BLAZE KING WOOD STOVE OR FAILURE TO OPERATE IT ACCORDING TO THE GUIDELINES DETAILED IN THESE INSTRUCTIONS, WILL VOID THE STOVE WARRANTY, CAN CAUSE A HOUSE OR CHIMNEY FIRE, AND MAY ENDANGER YOU FAMILY. FOR YOUR SAFETY, FOLLOW THE ASSEMBLY AND INSTALLATION INSTRUCTIONS CAREFULLY. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTIONS IN YOUR AREA. PLEASE READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW STOVE

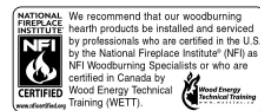
This Blaze King Model RGT-3001 Wood stove is Listed by INTERTEK TESTING SERVICES, ONLY if: it is connected to a suitable masonry chimney, or a 6 Listed Residential Type and Building Heating Appliance Type Chimney System (hereafter referred to as Chimney) and minimum clearances to combustible (burnable) materials are observed. See CHIMNEY and CHIMNEY CONNECTOR, and Table 1, Page 17 for minimum clearances.

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

### TOOLS NEEDED FOR INSTALLATION

If you are planning to install this stove yourself, you will need the tools listed below. Consult the chimney and chimney connector manufacturer's installation instructions for tools needed for installation.

- 1/4 Wrench, Nut driver, or Socket with Handle
- Medium Flat Blade Screwdriver and Square Screwdriver.
- Tape measure.
- Carpenters Level.
- See Mobile Home section for tools needed for Mobile Home stove installations.



### PLANNING FOR YOUR STOVE PLACEMENT

As you plan your installation, consider the following:

- Stove should be placed in the most central location in the home. Consider safety, convenience, traffic flow, and the fact that the stove will need a chimney and chimney connector
- MINIMUM CLEARANCES SHOWN IN FIGURES 21-26, PAGE 18 ARE TO PREVENT WALLS AND CEILINGS FROM CATCHING ON FIRE.
- The dimensions and position of the Floor Protector. See pages 17 & 18
- The type of chimney system to be used. See page 17.

Electrical Power. (Optional) The stove can be equipped with a fan assembly and a seven foot electrical cord. Do not route the cord in front of the stove.

### REDUCED WALL CLEARANCES

The stove and chimney connector may be placed closer to the wall than shown in Figures 21-26, Page 18 if the wall is properly protected. The two wall protection systems described on pg. 11 & 12, allow a reduced clearance from the wall to the stove.

### CHECK YOUR CHIMNEY

Before connecting any wood-burning unit to an existing chimney, inspect the chimney to be sure that it is in good condition. There must be no cracks or holes. The cross-sectional area must not be less than that of the flue collar (6" diameter 28.27 square inches). A proper chimney is crucial for safe, satisfactory operation of any wood heating system. Relining or rebuilding may be necessary to make the chimney safe, efficient, and in conformity with local codes. Masonry chimneys that have a very large cross-section (100 square inches or more) may experience poor draft and may require relining to reduce the cross-section and provide a proper draft.

This is also an ideal time to clean the existing chimney. For peak efficiency, a clean chimney flue is essential. A qualified professional chimney sweep can perform both inspection and cleaning. If you choose to clean your own chimney, use the proper tools. Homemade cleaners, such as chains, may damage your chimney.

Be sure the Ash Clean-Out door for the masonry chimney is closed tightly. This door may be in the wall in the room below the chimney or outside near the ground level of the chimney. This is frequently overlooked, and can cause severe drafting problems in masonry chimney installations.

The chimney MUST extend above the roof at least three feet & two feet above any area of the roof within ten feet of the termination of the chimney.

If the chimney is a prefabricated metal chimney system be sure chimney pipe is attached, together and, to the wood-burning unit with a minimum of three (3) screws securing each connection.

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

### **CHIMNEY HEIGHT AFFECTS DRAFT**

Tall chimneys usually provide a strong, dependable draft. The chimney should be kept warm to enhance the draft. This will also reduce creosote accumulation caused by smoke and condensation of water vapor. A buildup of creosote can reduce the draft and will become a potential fire hazard. Chimney tops should NEVER be near trees or other tall objects that might cause down drafts. In new or weatherized homes that are very air-tight, operating exhaust fans, such as those installed in kitchens and bathrooms, can create a negative pressure in the room and can result in a down draft in a chimney. Smoke may be drawn into the room, particularly when the loading door is opened for loading. If this problem arises, open a window while the exhaust fan is being used or turn off exhaust fan while reloading the stove. If make-up air is NOT supplied, the negative pressure may also draw gasses from a gas furnace. An outside air connection directly to the stove is the preferred system. Outside air kits are an option available from your dealer.

If you have a forced-air heating system, you can use the existing ducts and furnace fan to circulate air through the house. DO NOT connect any ducting between the stove and the heating system ducts or any other air-distribution ducts.

### **STOVE ASSEMBLY**

Remove all items placed within the firebox for shipping.

**IF YOU HAVE NOT ALREADY DONE SO, PLEASE TAKE A FEW MINUTES TO COMPLETE THE WARRANTY CARD FOUND IN THE FIREBOX AND MAIL IT TODAY.**

## **REDUCED WALL CLEARANCES**

### **REDUCED WALL CLEARANCES**

NOTE: Before planning on or using reduced wall clearances, consult local building authorities. Local codes may vary.

The stove and chimney connector may be placed closer to the wall than shown in Figures 21-26 if the wall is properly protected. The two wall protection systems described below allow a 12 inch clearance from the wall to the stove.

The National Fire Protection Association Standard 211 recognizes 8 different wall protection systems. Two of these clearance reduction systems are galvanized steel sheet metal with a minimum thickness of 24 gauge, or 4-inch nominal thickness brick (FIGURE 23-25). Either of these materials must be spaced out 1 inch from the wall surface. Non-combustible spacers, with sheet metal screws, are used to maintain the 1-inch air space providing free air circulation. It is also required that there are openings around the entire system, including the bottom, so that cooling air can circulate in the 1-inch air space.

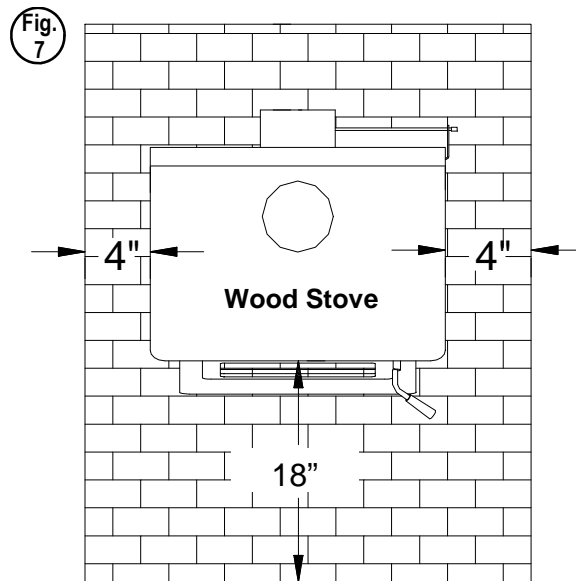
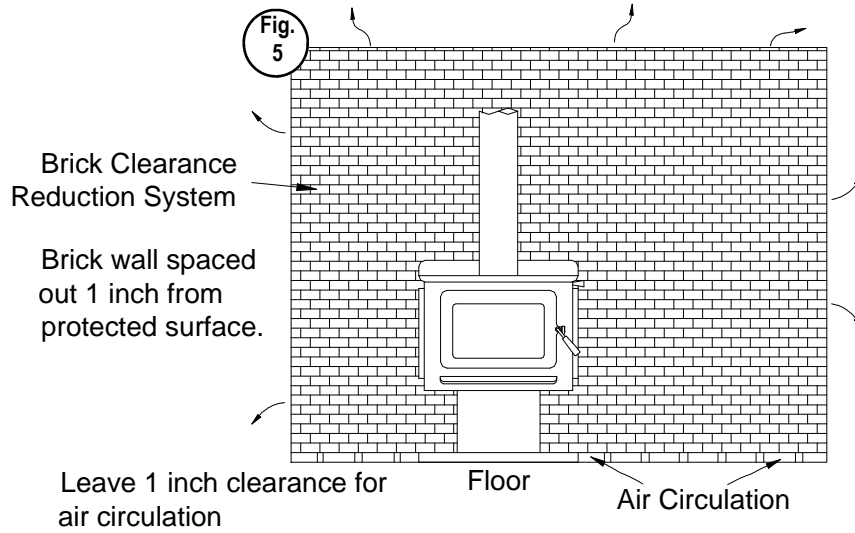
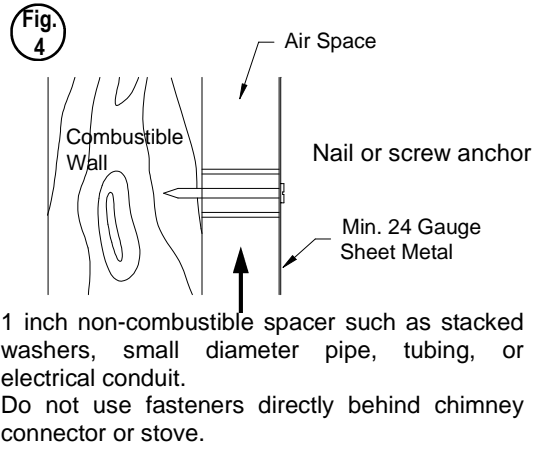
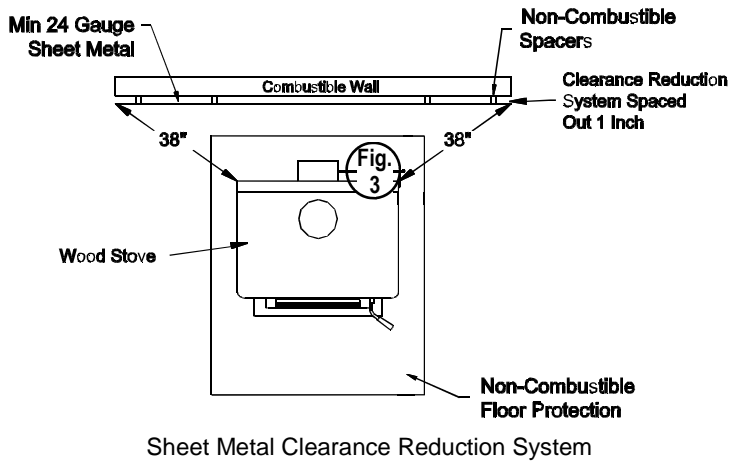
(This clearance reduction system is independent of clearance kits described on Page 12, and minimum clearances detailed on Page 29. Both clearance reduction systems maybe combined, with local code approval .)

The clearance reduction system should extend 38 inches beyond each side of the heater measured diagonally from the back stove corner (figure 6), 38 inches above the stove top in ceiling exit installations (measured diagonally from the back of the stove top), and it must extend as high as the thimble penetration of the wall to the chimney wall behind the vertical run of the chimney connector.

A variety of prefabricated clearance reduction systems may be available through your stove dealer. Always look for a safety listing label on the product when selecting a prefabricated clearance reduction system and make sure it designed for use with a wood stove. Follow exactly the installation instructions provided with the system.

# Blaze King, Royal Guardian, Model RGT-3001

## OWNER'S INSTALLATION AND OPERATION MANUAL



## **GENERAL INSTRUCTION**

### **FLOOR PROTECTOR**

The stove must be placed on a floor protector if the floor is made of wood or other combustible flooring.

Floor protection material: Any non-combustible material or Listed floor protector.

To provide the proper clearances, the floor protector must extend beyond the front and sides, see Figure 7.

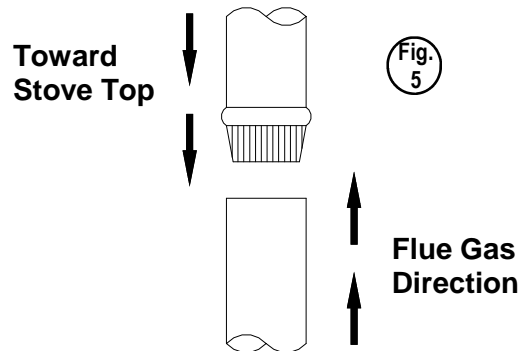
The floor protector must extend to the wall under a wall exit installation and must extend 2" beyond each side of the horizontal section of chimney connector.

**WARNING FAILURE TO ALLOW THE REQUIRED CLEARANCES TO COMBUSTIBLE MATERIALS OR TO PROVIDE ADEQUATE FLOOR PROTECTION CAN CAUSE A HOUSE FIRE. SUCH A FIRE CAN RESULT IN DAMAGE TO PROPERTY AND SERIOUS INJURY OR DEATH.**

### **VENTING SYSTEMS**

For further information on chimney that meets the approval specifications for this unit, please see page 25 of this manual or check the approval label on the rear of the stove. Many of the illustrations in this manual are courtesy of the Consumer Products Safety commission. The venting system consists of a chimney connector and a chimney. These get extremely hot during use. In the event of a creosote fire temperatures inside the chimney may exceed 2000 degrees. To protect against the possibility of a house fire the chimney connector and chimney must be properly installed and maintained. A thimble must be used when a connection is made through a combustible wall to a chimney. A chimney support package must be used when a connection is made through the ceiling to a prefabricated chimney. These accessories are absolutely necessary to provide safe clearances to combustible wall and ceiling material.

This stove may be connected to a lined masonry chimney or a listed high temperature prefabricated residential type chimney. 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.



### **CHIMNEY CONNECTOR**

The chimney connector must be 6 inch 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. Do not use chimney connector pipe as a chimney. You must connect your stove to a chimney comparable to those illustrated in this manual.

Chimney connector sections must be attached to the stove and to each other with the crimped end toward the stove (FIGURE 5). This allows creosote to run into the stove and not onto the outside of the pipe. All joints should be secured with three metal screws.

For proper operation the chimney connector should be as short as possible. Horizontal lengths of chimney should have an upward slope from the stove of 1/4 inch per foot.

Maintain 18 inches clearance between the chimney connector and the wall and ceiling unless a wall protection system is installed, or a listed double wall connector pipe system is used to connect to the chimney.

# Blaze King, Royal Guardian, Model RGT-3001

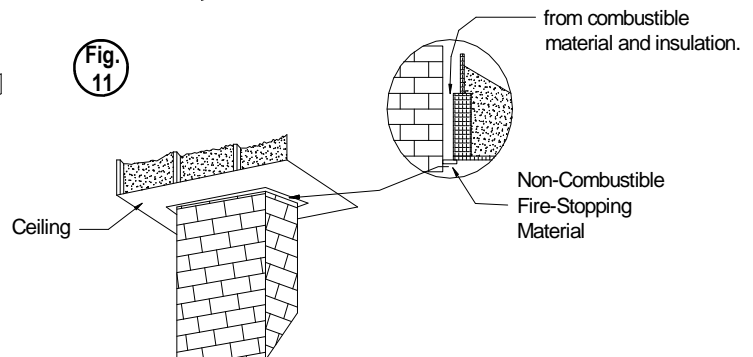
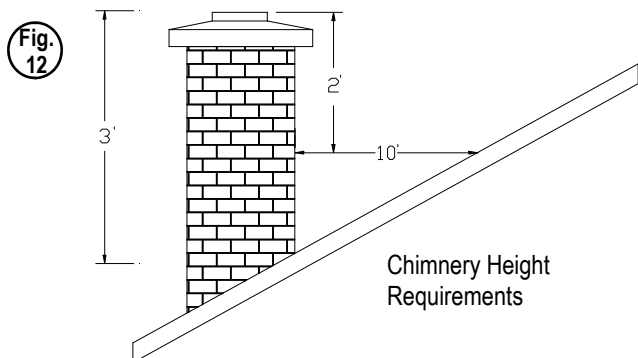
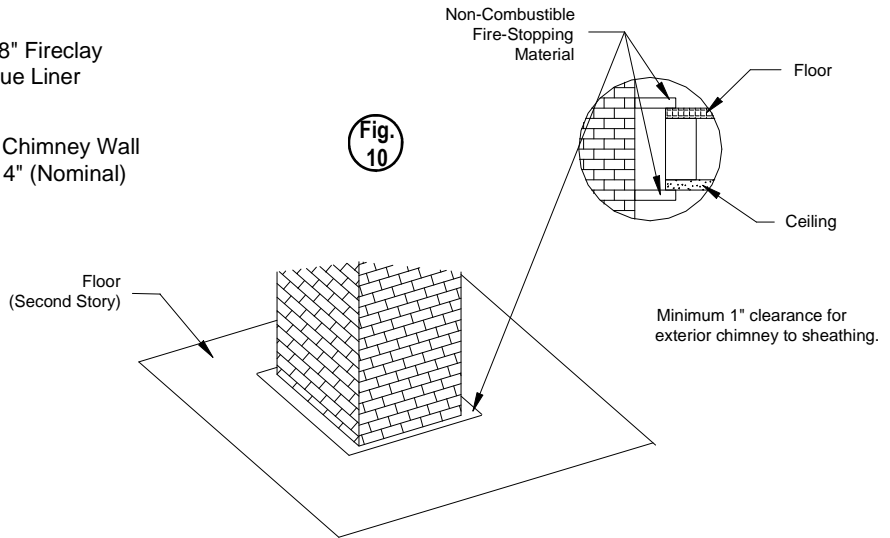
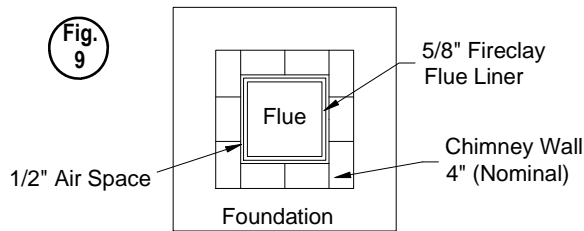
## OWNER'S INSTALLATION AND OPERATION MANUAL

### CONNECTION TO A MASONRY CHIMNEY

If the stove is being connected to a masonry chimney, the chimney should be examined for cracks, loose mortar and signs of deterioration or blockages. The stove should not be installed until it is determined that the chimney is safe for use. Since an oversized flue contributes to the accumulation of creosote, the size of the flue should be checked to determine that it is not too large for the stove. For this stove, it is recommended that the flue size should not exceed the overall area of a 6" flue (28.27 square inches). The chimney should also be checked to assure it meets the minimum standards of the National Fire Protection Association (NFPA) Standard 211 or CAN-CSA B365. Following is a list of the more critical minimum requirements for a properly constructed chimney.

1. The masonry wall of the chimney, if brick or modular block, must be a minimum of 4 inches. A mountain or rubble stone wall must be at least 12 inches thick.
2. The chimney must have a fire clay flue liner (or equivalent) with a minimum thickness of 5/8 inch and must be installed with refractory mortar. There must be at least 1/2 inch air space between the flue liner and the chimney wall (FIGURE 9). An equivalent liner must be a listed chimney liner system or other approved material.
3. A chimney inside the house must have at least 2 inches of clearance to the combustible structure.
4. A chimney outside the house must have at least one inch clearance to the combustible structure. A fire stops must be installed at the spaces where the chimney passes through floors and/or ceiling (FIGURE 10). Remember that insulation must not contact the chimney. There must be air space around the chimney. Insulation must be 2 inches or more from the chimney (FIGURE 11).

A 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 (FIGURE 12).



# Blaze King, Royal Guardian, Model RGT-3001

## OWNER'S INSTALLATION AND OPERATION MANUAL

### THIMBLE

A thimble must be used when the connection from the stove is made through a combustible wall to a masonry chimney. There are several methods to use for connection through a combustible wall, two of which are illustrated in this manual. Local building authorities may be consulted or NFPA 211 and/or CAN-CSA B365 may be used for additional methods of chimney connection.

Listed prefabricated metal thimbles may also be used with wood stoves. The manufacturer's installation instructions for the thimbles must be strictly followed to assure the safety of the system. Be sure to maintain the designated clearance to combustible materials.

#### 1. Brick Chimney Thimble Assembly:

Construction of the brick thimble assembly requires 12 inches of brick around a fire clay liner. Be sure the point of penetration allows an 18 inch clearance from the connector to the ceiling. An appropriate opening for a 6 inch chimney connector must be cut in the wall to maintain the required 12 inches of brick separation from combustibles. It will be necessary to cut wall studs and install a header and sill frame to maintain proper dimensions and to hold the weight of the brick (FIGURE 13).

**NOTE: Whenever cutting through a wall, check first with local building authorities to be sure building integrity is secured.**

If it is necessary to cut a hole in the chimney liner, use extreme care to keep it from shattering. Refractory mortar must be used at the junction to the chimney liner (FIGURE 14). After the assembly is complete, insert the chimney connector in the fire clay liner. Do not push it beyond the inside edge of the chimney liner because this will affect the draw of the chimney.

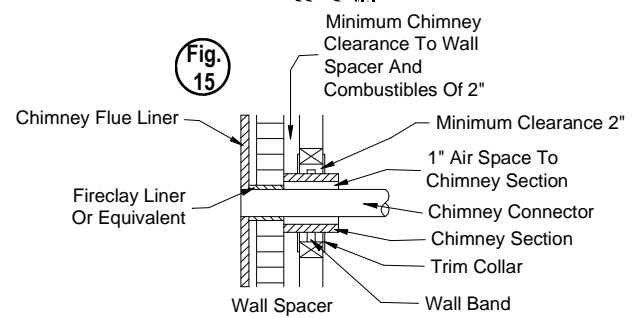
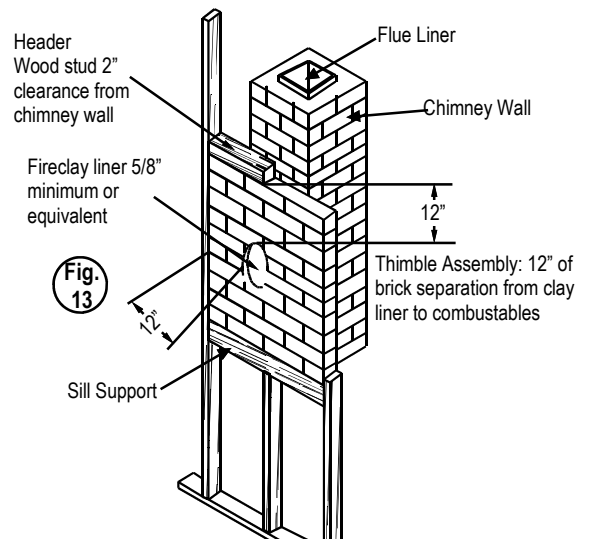
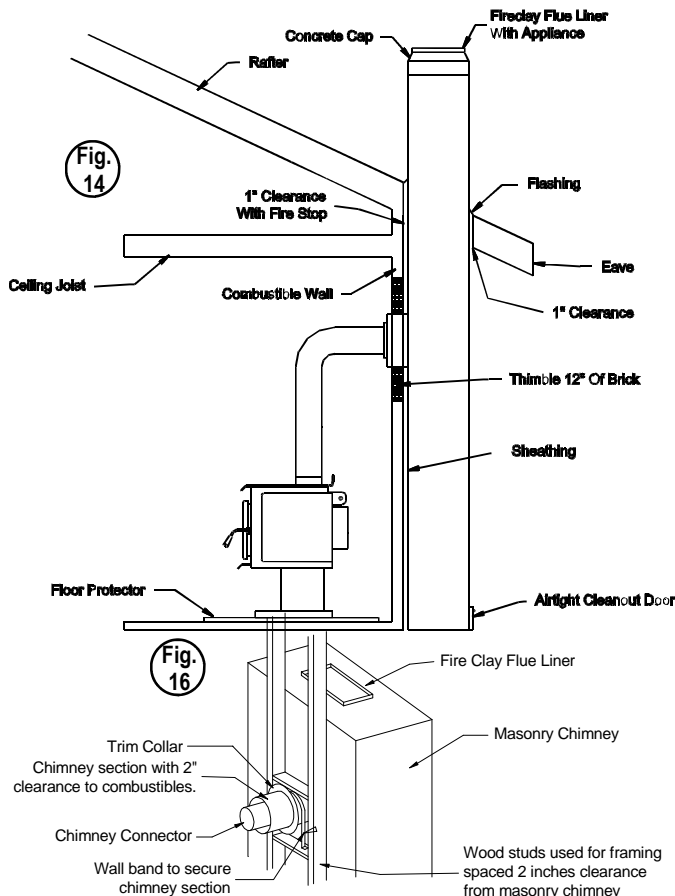
#### 2. 6 inch solid pack chimney with metal supports as a thimble.

For the method of installation to a masonry chimney shown in FIGURES 15 and 16, it will be necessary to purchase a 6 inch inside diameter 12 inch long section of prefabricated listed solid pack chimney to use as a thimble. Purchase a wall spacer, trim collar and wall band that are manufactured to fit the chimney section you purchase.

The safety features of this system are; the 2 inch air space between the chimney section and the combustible wall, and the 1 inch air space around the chimney connector as it passes through the chimney section to the chimney.

The location of the opening through the wall to the chimney must leave a minimum 18 inch vertical clearance between the connector pipe and the ceiling to prevent the ceiling from catching fire.

For instructions on installation of the thimble, refer to chimney manufacturer's instructions.



## CONNECTION TO A METAL PREFABRICATED CHIMNEY CHIMNEY

One of the following listed chimney connectors (with compatible listed chimney system) can be used with this stove. In the U.S.A.: Duravent Dura Plus HT, AmeriTec HS, Metalbestos HT or Security 103 HT. In Canada; you must use high temperature chimney meeting S629M requirements.

When a metal prefabricated chimney is used, the manufacturer's installation instructions must be followed precisely. You must also purchase and install the ceiling support package or wall pass through and "T" section package, firestops (where needed), insulation shield, roof flashing chimney cap, etc. (from the same manufacturer). 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.

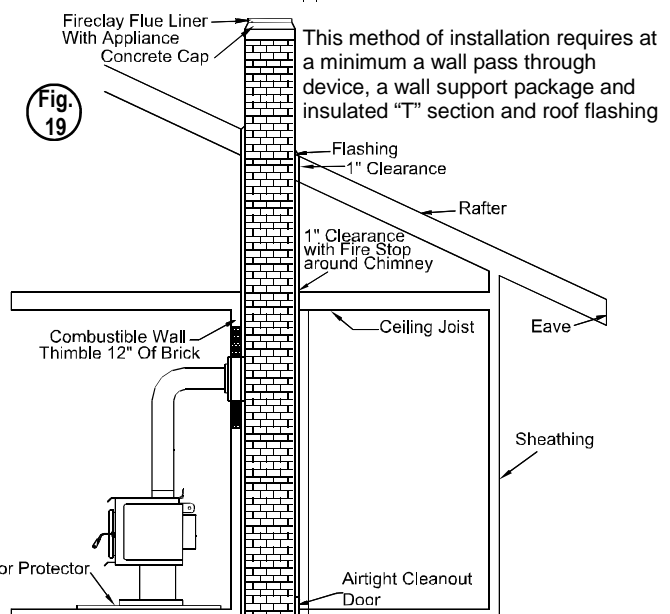
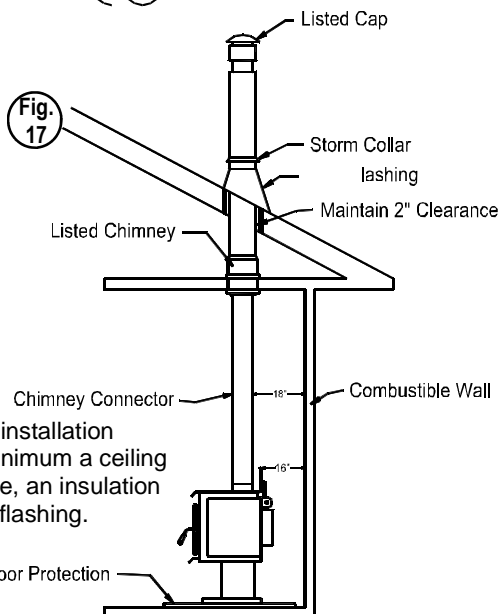
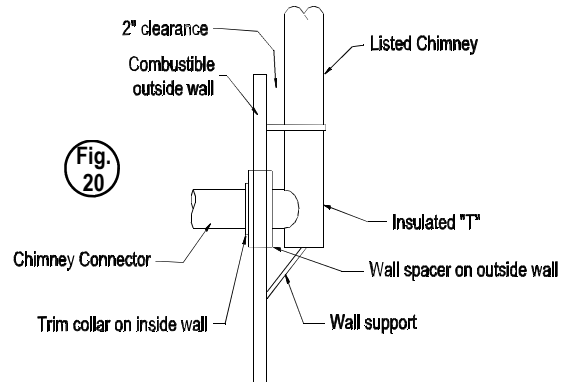
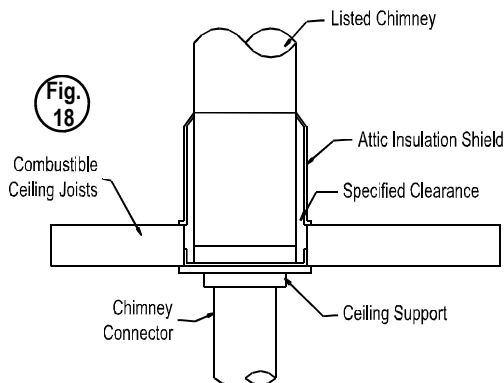
There are basically two methods of metal chimney installation. One method is to install the chimney inside the residence through the ceiling and the roof (FIGURES 17 and 18). The other method is to install an exterior chimney that runs up the outside of the residence (FIGURES 19 and 20). The components illustrated may not look exactly like the system you purchase, but they demonstrate the basic components you will need for a proper and safe installation. Make sure chimney pipe is attached together and to the wood-burning unit with a minimum of three (3) screws to secure each connection.

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 (FIGURE 12 on page 14).

### THIMBLE

When a wall exit installation is used, a thimble must be installed. Either a manufactured or a site-constructed (brick) thimble may be used.

In a roof exit installation, the ceiling support box supplied with the manufactured chimney acts as a thimble.



**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

**REMEMBER:** Follow the manufacturer's installation instructions and maintain the manufacturer's specified clearance distances. Install an attic insulation shield to maintain the specified clearance to insulation. Insulation in this air space will cause a heat buildup which may ignite the ceiling joists. This method of installation requires at a minimum a wall pass through device, a wall support package and insulated "T" section and roof flashing.

**INSTALLATION OPTIONS**

**Residential**

- |   |             |
|---|-------------|
| 1. Standard Clearance, parallel with wall, using ceiling exit.  | See Page 19 |
| 2. Standard Clearance, corner installation, using ceiling exit, | See Page 22 |
| 3. Standard Clearance, parallel with wall, using wall exit.     | See Page 20 |
| 4. Standard Clearance, corner installation, using wall exit.    | See Page 21 |
| 5. Reduced Clearance, wall exit.                                | See Page 20 |
| 6. Reduced Clearance, ceiling exit.                             | See Page 19 |
| 7. Alcove Installation.   | See Page 22 |

**Mobile Home (all ceiling exit)**

- |                           |             |
|---------------------------|-------------|
| 1. Parallel Installation. | See Page 22 |
| 2. Corner Installation.   | See Page 22 |
| 3. Alcove Installation.   | See Page 22 |

\* These numbers correspond with the table below.

**CLEARANCES TO COMBUSTIBLE SURFACES**

**WARNING**

**FAILURE TO ALLOW THE REQUIRED CLEARANCES TO COMBUSTIBLE MATERIALS OR TO PROVIDE ADEQUATE FLOOR PROTECTION CAN CAUSE A HOUSE FIRE. SUCH A FIRE CAN RESULT IN DAMAGE TO PROPERTY AND SERIOUS INJURY OR DEATH.**

**1. TABLE #1 MINIMUM CLEARANCES TO COMBUSTIBLE SURFACES**  
(All Dimensions are in Inches)

<u>CLEARANCE ILLUSTRATIONS</u>	<u>Fig.</u>	<u>*See Ref # Above</u>	<u>CLEARANCES</u>				<u>INST</u>
			<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>Pg</u>
<b>RESIDENTIAL INSTALLATIONS</b>							
Parallel	23	1	16"	10"	25.5"	16"	19
Corner	21	1	12"	--	21.5"	--	19
Reduced Side Clearance	23	2	13"	10"	22.5"	16"	19
Reduced Corner Clearance	21	2	8"	--	17.5"	--	19
Reduced Back Clearance	23	3	16"	6"	25.5"	12"	22
Alcove	22	3	16"	6"	25.5"	12"	22
Wall Exit, Parallel	24 & 25	4	14"	10"	23.5"	16"	20,21
Wall Exit, Corner	24 & 26	4	8"	--	17.5"	--	20,21
For wall exit, minimum clearance from horizontal pipe to ceiling is 18".							
<b>MOBILE HOME INSTALLATIONS</b>							
Parallel	23	5	16"	6"	25.5"	12"	22
Corner	21	5	8"	--	17.5"	--	22
Alcove	22	5	18"	8"	27.5"	14"	22
<b>ALCOVE REQUIREMENTS</b>							
Minimum Height	64"						
Minimum Width	57"						
Maximum Depth	30"						

# Blaze King, Royal Guardian, Model RGT-3001

## OWNER'S INSTALLATION AND OPERATION MANUAL

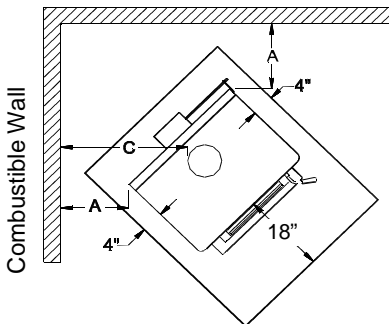
### \*REQUIRED TO ATTAIN ABOVE CLEARANCES

1. 6" dia. 24/26 MSG Black/Blue steel chimney connector with Listed Residential Type and Building Heating Appliance type chimney.
2. Side Shield with Fan Kit (P/N Z8301A), and 6" dia. 24/26 MSG Black/Blue steel chimney connector with Listed Residential Type and Building Heating Appliance type chimney.
3. Residential Alcove/Reduced Back Clearance Kit (Z8310A), and an approved chimney system with Close Clearance Connector (See Page 16 or approval label on the rear of the stove for approved chimney systems).
4. Side Shield with Fan Kit (P/N Z8301A) and 6" dia. 24/26 MSG Black/Blue steel chimney connector with Listed Residential Type and Building Heating Appliance chimney with listed wall pass through, or masonry residential type chimney with listed wall pass through. And additional floor protection which must extend to wall under chimney connector and must extend 2" beyond each side of chimney connector.
5. For Mobile Homes and Mobile Home Alcove Kit (P/N Z8340A), and an approved chimney system with Close Clearance Connector (See Page 16 or approval label on the rear of the stove for approved chimney systems).

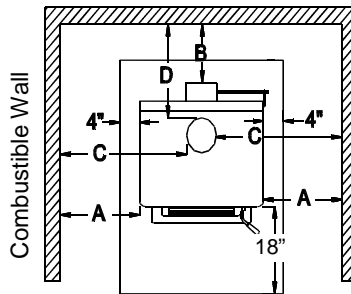
### \*\*CHIMNEY TYPE

- |                           |        |
|---------------------------|--------|
| 1. Prefabricated Chimney, | Pg. 16 |
| 2. Masonry Chimney,       | Pg. 14 |

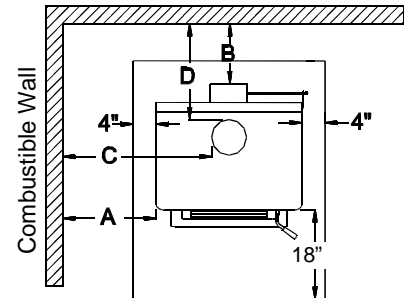
## CLEARANCE ILLUSTRATIONS



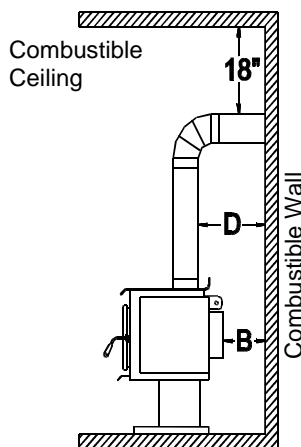
**FIG. #21**  
ROOF EXIT CORNER  
MOBILE HOME/RESIDENCE



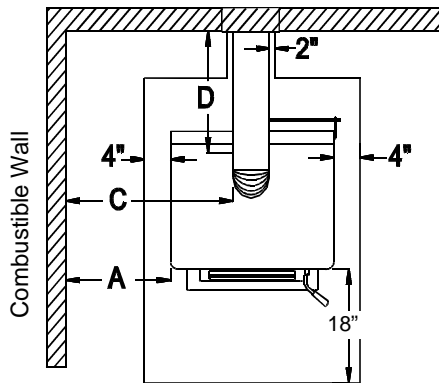
**FIG. #22**  
ROOF EXIT CORNER ALCOVE  
MOBILE HOME/RESIDENCE



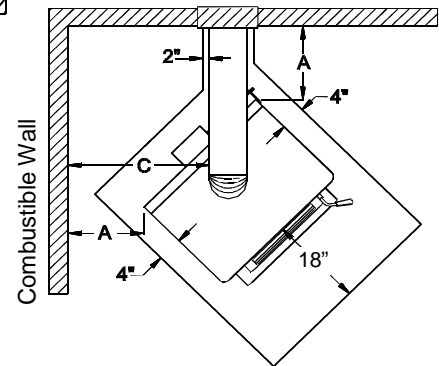
**FIG. #23**  
ROOF EXIT/PARALLEL  
MOBILE HOME/RESIDENCE



**FIG. #24**  
WALL EXIT/SIDE VIEW  
OF FIGS. 25 & 26



**FIG. #25**  
WALL EXIT/PARALLEL  
RESIDENCE ONLY



**FIG. #26**  
WALL EXIT/CORNER  
RESIDENCE ONLY

## INSTALLATION INSTRUCTIONS

### A. RESIDENTIAL STANDARD AND REDUCED CLEARANCE CEILING EXIT INSTALLATION INSTRUCTIONS USING A PREFABRICATED CHIMNEY. Refer to Page 18, Fig. 21-23.

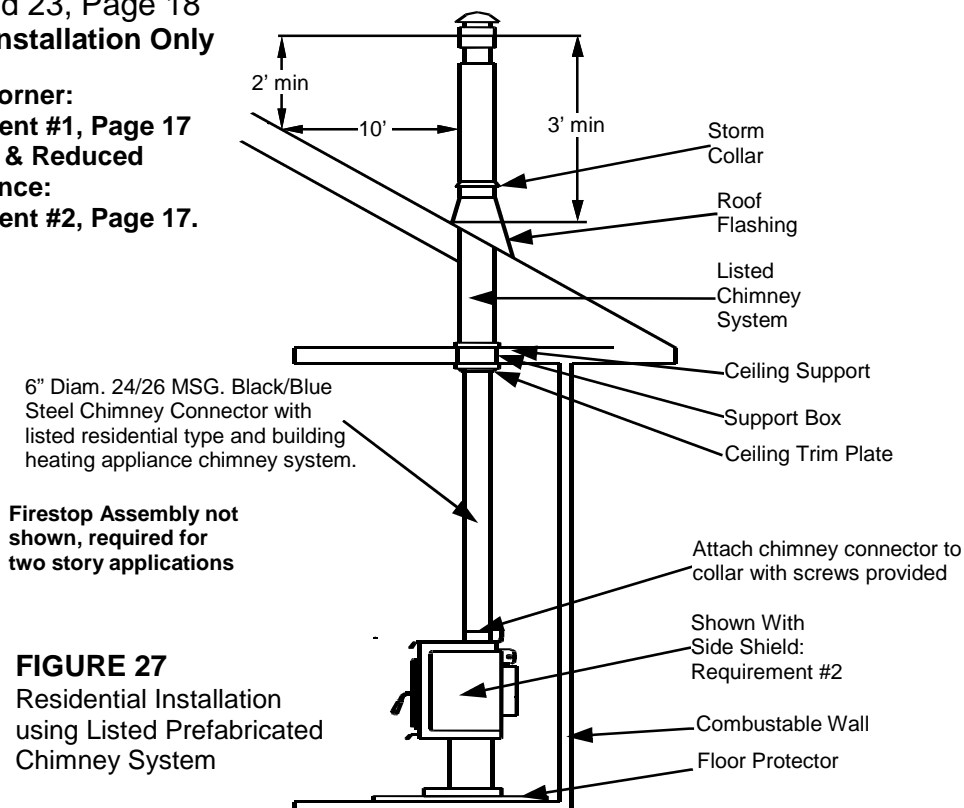
1. Set floor protector and stove in location for marking holes in accordance with the label and figures of these instructions (page 18, Fig. 21-23).
2. Mark the position for the hole in the ceiling and roof by using a string and plumb-bob.
3. Check that the intended location will not interfere with floor joists, ceiling joists, or rafters before proceeding further.
4. (IF REQUIRED), be sure you have marked the hole for the Outside Air Kit.
5. Move the stove out of the way.
6. Cut a pilot hole in the ceiling.
7. Cut a hole for the ceiling penetration components and frame in the sides of this hole in both ceiling and roof. Refer to the pipe manufacturer's installation instructions.
8. Install the Support Box and Chimney through roof. Install the slip section for the Chimney Connector at this time. Refer to the pipe manufacturer's installation instructions.
9. Following the Manufacturer's Installation Instructions, slip the roof flashing down over the chimney and secure 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 termination of the chimney. Be sure all pieces (including outside air cap, flange, collar and pipe) are installed at this point before putting the stove in its final position.
10. Slide the stove back into position.
11. To install the Chimney Connector, slip the lower (crimped) edge of the pipe inside the smoke collar. Install the remaining lengths of pipe, one on top of the other, to the finished height of the Chimney Connector, and secure to each other.
12. IF REQUIRED, install the Outside Air Flex Pipe.

If the OPTIONAL Fan and Side Heat Shield Assembly is installed the fan motors are equipped with a three-prong (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 or under this heater.

### ROOF EXIT

For Figures 21 and 23, Page 18  
Residential Stove Installation Only

**Parallel and Corner:**  
See Requirement #1, Page 17  
**Reduced Side & Reduced  
Corner Clearance:**  
See Requirement #2, Page 17.



**FIGURE 27**  
Residential Installation  
using Listed Prefabricated  
Chimney System

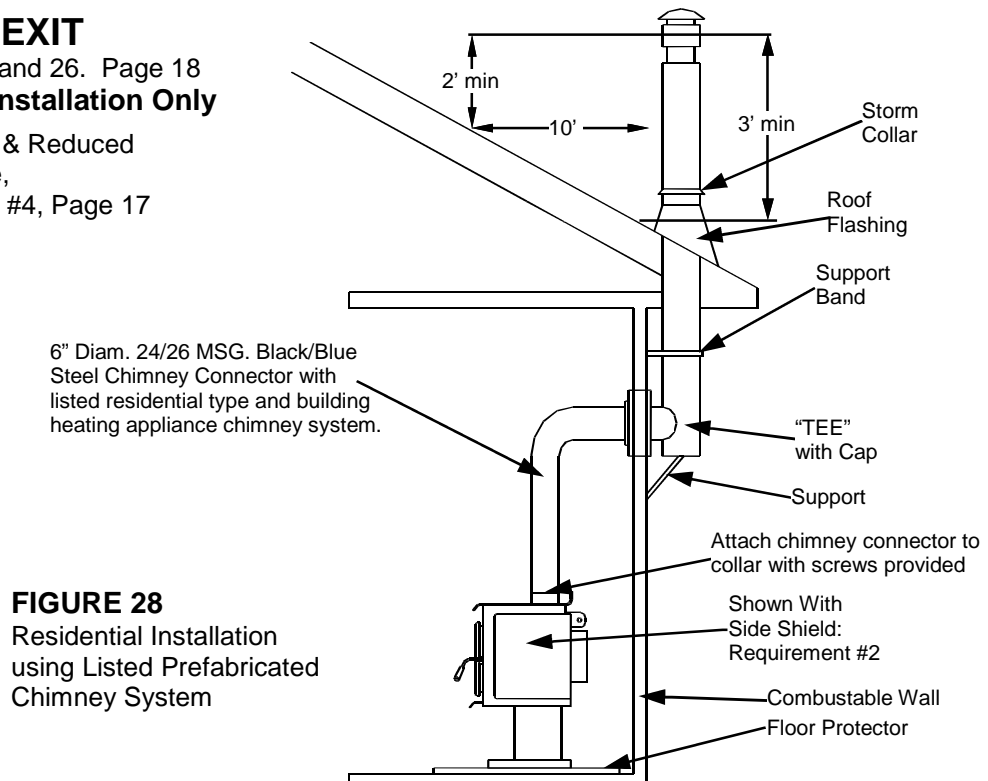
# Blaze King, Royal Guardian, Model RGT-3001

## OWNER'S INSTALLATION AND OPERATION MANUAL

### B. RESIDENTIAL STANDARD AND REDUCED CLEARANCE WALL EXIT WITH PREFABRICATED CHIMNEY Refer to Page 18, Figures 24-25-26.

1. Set floor protector and stove in location for marking holes in accordance with the label and figures of these instructions (Page 18, Fig. 24-25-26).
2. Mark the position for the hole in the wall.
3. IF REQUIRED, be sure to mark the hole for Outside Air Kit.
4. Move the stove out of the way.
5. Cut pilot hole in the wall.
6. Cut the hole for the wall penetration components and frame in the sides of this hole. Install Listed Wall Pass-Through. Refer to the pipe manufacturer's installation instructions.
7. Follow the Manufacturer's Installation Instructions to install Prefabricated Chimney system. 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 termination of the chimney. The RGT-3001's flue collar accepts only 6" chimney connector. The small end of the connector fits into the collar to enable any water vapor which may form in the chimney to drain back into the stove. Close clearance chimney connector is not normally required for residential standard clearance installations. Check with your local building or fire inspector for local requirements. Chimney connectors can also be used horizontally as a connection between the stove and a masonry chimney provided that the horizontal length does not exceed three feet AND THE CONNECTOR SLOPES UPWARD TOWARD THE CHIMNEY AT THE RATE OF 1/4" PER FOOT. This slope in the horizontal connection is required to encourage the water vapor to drain back into the stove. Use a carpenter's level and a ruler or tape measure to check the slope. You should also use a level to check the chimney connector exiting the stove to be sure it is vertical. Under no condition should the chimney connector have more than one 90 degree bend or two 45 degree bends. The distance between the chimney connector and the ceiling must not be less than 18". The chimney connector sections should be secured together with no less than three sheet metal screws per joint. The chimney connector should be attached to the stove's flue collar with screws provided. Be sure all options, including outside air cap, flange, collar and pipe are installed at this point before putting the stove in its final position.
8. Slide the stove back into position.
9. To install the Chimney Connector, slip the lower (crimped) edge of the pipe inside the smoke collar. Install the remaining lengths of pipe, one on top of the other, to the finished height of the Chimney Connector, and secure to each other.
10. IF REQUIRED, install the Outside Air Flex Pipe.
11. If the OPTIONAL Fan and Side Heat Shield Assembly is installed, the fan motors are equipped with a three-prong (grounded) plug to prevent shock hazard. THIS PLUG SHOULD BE INSERTED DIRECTLY INTO A PROPERLY GROUNDED, THREE-PRONGED RECEPTACLE. DO NOT CUT OR REMOVE THIS GROUNDING PRONG FROM THIS PLUG. Do not route the power cord in front of or under this heater.

**WALL EXIT**  
For Figures 24, 25, and 26. Page 18  
**Residential Stove Installation Only**  
Reduced Parallel & Reduced  
Corner Clearance,  
See Requirement #4, Page 17



**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

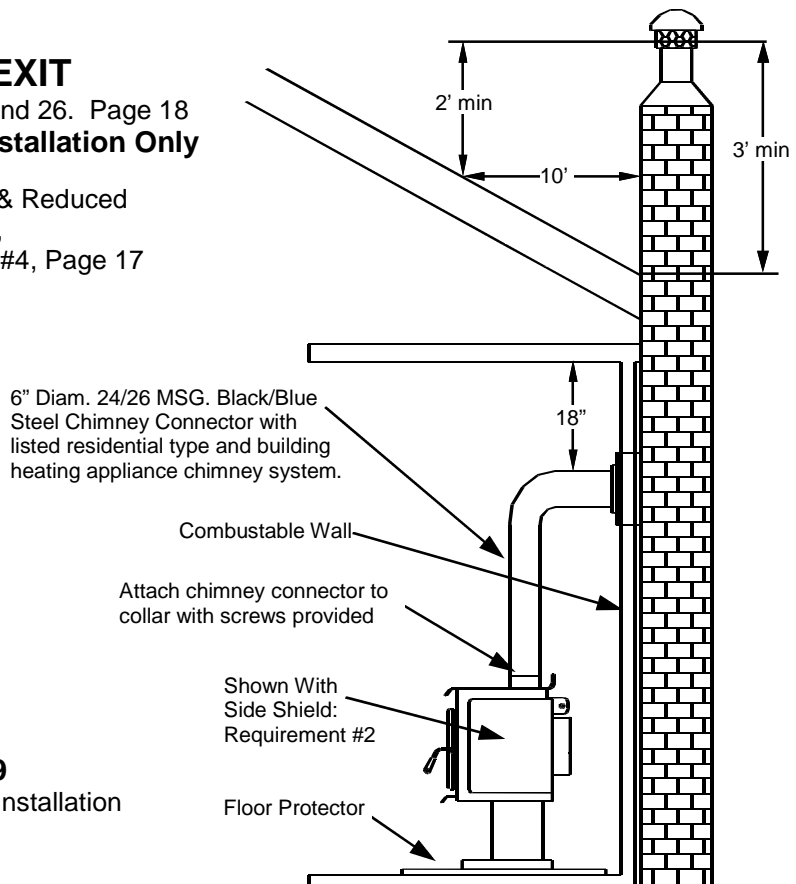
**C. RESIDENTIAL STANDARD AND REDUCED CLEARANCE WALL EXIT WITH EXTERIOR MASONRY CHIMNEY**  
**Refer to Page 18, Fig. 24-25-26.**

1. Set floor protector and stove in location for marking holes in accordance with the label and figures of these instructions (Page 18, Fig. 24-25-26).
2. Mark position for the hole in the wall or masonry chimney.
3. IF REQUIRED, be sure to mark the hole for Outside Air Kit.
4. Move the stove out of the way.
5. Cut the pilot hole in the wall and/or masonry chimney.
6. Cut the hole for the wall penetration components and frame in the sides of this hole. Install Listed Wall Pass-Through. Refer to the pipe manufacturer's installation instructions.
7. Follow the manufacturer's installation instructions to install Prefabricated Chimney system. 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 termination of the chimney. The RGT-3000's flue collar accepts only 6" chimney connector. The small end of the connector fits into the collar to enable any water vapor which may form in the chimney to drain back into the stove. Close clearance chimney connector is not normally required for residential standard clearance installations. Check with your local building or fire inspector for local requirements. Chimney connectors can also be used horizontally as a connection between the stove and a masonry chimney, provided that the horizontal length does not exceed three feet AND THE CONNECTOR SLOPES UPWARD TOWARD THE CHIMNEY AT THE RATE OF 1/4" PER FOOT. This slope in the horizontal connection is required to encourage the water vapor to drain back into the stove. Use a carpenter's level and a ruler or tape measure to check the slope. You should also use a level to check the chimney connector exiting the stove to be sure it is vertical. Under no condition should the chimney connector have more than one 90 degree bend or two 45 degree bends. The distance between the chimney connector and the ceiling must not be less than 18". The chimney connector sections should be attached to the stove's flue collar with screws per joint. The chimney connector should be attached to the stove's flue collar with screws provided. Be sure all options including outside air cap, flange, collar and pipe are installed at this point before putting the stove in its final position.
8. Slide the stove back into position.
9. To install the Chimney Connector, slip the lower (crimped) edge of the pipe inside the smoke collar. Install the remaining lengths of pipe, one on top of the other, to the finished height of the Chimney Connector, and secure to each other.
10. IF REQUIRED, install the Outside Air Flex Pipe.
11. If the OPTIONAL Fan Assembly is installed, the fan motors are equipped with a three-prong (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.

**WALL EXIT**  
For Figures 24, 25, and 26. Page 18  
**Residential Stove Installation Only**

Reduced Parallel & Reduced  
Corner Clearance,  
See Requirement #4, Page 17

**FIGURE 29**  
Residential Installation



**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

**D. MOBILE HOME (FIG. 23,30), MOBILE HOME ALCOVE (FIG. 22), MOBILE HOME CORNER (FIG. 21), AND RESIDENTIAL ALCOVE (FIG. 22), INSTALLATIONS USING PREFABRICATED CHIMNEY. Refer to Page 18, Fig. 21, 22, 23, and Fig. 30 below.**

**NOTES:**

1. For MOBILE HOME installations, use these instructions with Mobile Home Kit #8340AA and Insulated Pipe components. The use of components, other than those specified, is not allowed.
2. For MINIMUM CLEARANCE residential alcove installations, use these instructions. Alcove Kit #8339AA and Insulated Pipe components. The Outside Air Kit is not required for residential alcove installations.

**WARNING - DO NOT INSTALL IN SLEEPING ROOM**

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

1. Set floor protector and stove in location for marking holes in accordance with the label and figures of these instructions.
2. Mark the position for the hole in the ceiling and roof 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. Mark the positions for the tie down and the hole for the outside air pipe.
5. Move the stove and using a saber saw, cut a 6 1/2" hole for the outside air pipe and install as per instructions, Page 47. Drill a pilot hole for the tie down.
6. Cut a pilot hole in the ceiling.
7. Cut a hole for the ceiling penetration components and frame in the sides of this hole in both the ceiling and roof. Refer to pipe manufacturers installation instructions. Install the support box. Be sure all options including outside air cap, flange, collar and pipe are installed at this point before putting the stove in its final position.
8. Slide the stove back into position.
9. Install the tie down through the stove base.
10. To install Close Clearance Connector to the stove, slip the lower end marked by arrow inside the Smoke Collar. Fasten chimney connector to stove with screws provided. Slide connector up and snap into ceiling support. (Make sure it "snaps" in place). Refer to the pipe manufacturer's Installation Instructions.
11. Following the Pipe Manufacturer's Installation Instructions, install chimney system into support box, slip the roof flashing down over the chimney and secure 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 termination.
12. Install the Outside Air Pipe 4" flex tube.

**ROOF EXIT**

For Figures 21 and 23, Page 18

**Residential Reduced Back Clearance & Alcove**

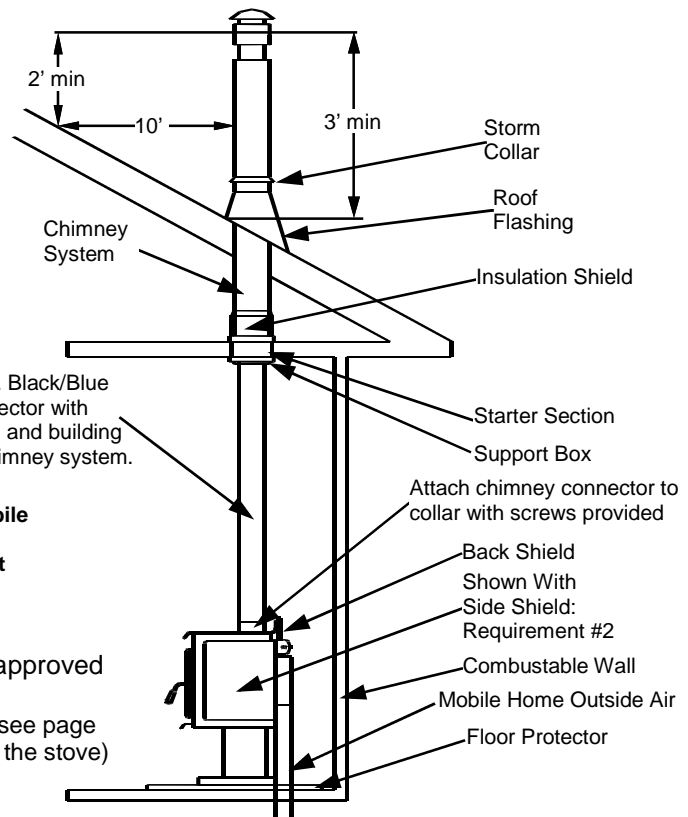
See Requirement #3, Page 17

**Mobile Home Parallel, Corner & Alcove:**

See Requirement #5, Page 17.

6" Diam. 24/26 MSG. Black/Blue Steel Chimney Connector with listed residential type and building heating appliance chimney system.

**Shown with Mobile Home & Mobile Home Alcove Kit**



**FIGURE 30**

Mobile Home & Residential Installation using an approved Chimney System and close clearance connector. (for information on approved chimney systems please see page 25 of this manual of your approved label on the rear of the stove)

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

**SIDE - SHIELD & FAN KIT**  
**P/N Z8301A**

Standard RGT Fan Assembly - Uppco, Model 50-T with insulated spade type connectors.  
Alternate RGT Fan Assembly - T30max Model 904-4999 with "push-in" connectors on the motor coil.

REQUIRED FOR: MOBILE HOME INSTALLATIONS  
RESIDENTIAL WALL EXIT CHIMNEY SYSTEMS  
RESIDENTIAL REDUCED CLEARANCE

CHECK LIST:

<u>ITEM</u>	<u>QTY</u>	<u>DESCRIPTION</u>
2	1	Side Shield, Left With Fan
3	1	Side Shield, Right With Fan
5	4	#10 x 1/2" Screws

**INSTALLATION:**

1. Place the right side shield behind the stove in the center, with enough slack in the Interconnect cord to install the left side shield.
2. Align the notch in the shield with the top mount on the stove and then slide the shield on until it comes into contact with the side of the stove. Make sure you push gently on the wooden handle (do not bend the shaft) there should be just enough room to slide the shield onto the stove.
3. Put in the top screw and then the bottom screw on the left side shield.
4. Place the right side shield onto the side shield mounts and slide it until it comes in contact with the side of the stove.
5. Put in the top screw and the bottom screw on the right side shield.
6. Plug in the power cord and test fan operation.

**NOTE: The illustrations and instructions for the side shields with fan kit are included with the kit.**

**ELECTRICAL CONNECTION:**

Your Royal Guardian 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.

**REAR SHIELD KIT**  
**P/N Z8310A**

REQUIRED FOR: MOBILE HOME  
MOBILE HOME CORNER  
MOBILE HOME ALCOVE  
RESIDENTIAL ALCOVE

**NOTE: The rear shield kit #Z8310A cannot be installed without the Side Shield Kit #Z8301A installed. The rear shield kit is mounted to the Side Shield Kit.**

CHECK LIST:

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	2	0297	#10 x 1 S/M tapping hex washer
2	1	5773	Back Shield
3	1	0123	Thermostat Control Indicator
4	2	0041A	Nut 1/2" square

**TOOLS NEEDED FOR INSTALLATION:**

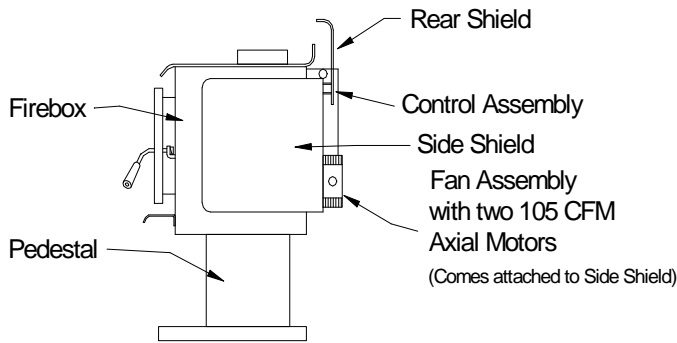
1. Robertson (square drive) screwdriver.

**INSTALLATION:**

1. Pull the thermostat control rod as far toward the outside of the stove as it will go (lowest setting).
2. Install the Rear Heat Shield with the two #10 x 1-14" Sheet Metal Screws

# Blaze King, Royal Guardian, Model RGT-3001

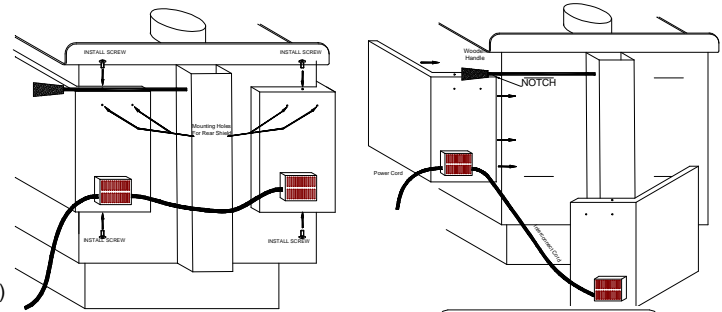
## OWNER'S INSTALLATION AND OPERATION MANUAL



**COMPONENT LOCATIONS**

**FIGURE 31**

Location of Major Components,  
RGT-3001



**FIG. 35**



**FIG. 36**

### OUTSIDE AIR KIT 4" P/N Z8304

**REQUIRED FOR:** ALL MOBILE HOME INSTALLATIONS  
**OPTIONAL:** ALL RESIDENTIAL INSTALLATIONS

**PRODUCT INSPECTION:**

First, remove all packaged parts from the box and inspect them. Examine the pieces to see that there is no damage caused by shipping. Should any part be missing or damaged, contact your dealer. See CONTENTS LIST below.

**CONTENTS LIST**

ITEM	QTY	PART#	DESCRIPTION
1	4	0070A	Screw 10 x 1 1/4 wood
2	2	0295A	Screw 10 x 1 1/2 Black
3	2	0145	Washer 1/4 flat plated
4	2	0513A	Lag screw
5	1	Z8317	Outside Air Cap 4" with collar
6	1	FHOSE4	Flex hose 4" x 30" c/w clamp
7	1	FLPLATE4	Outside air floor flange 4"
8	1	0624	6"x24" 30Ga Snap lock

**TOOLS NEEDED FOR INSTALLATION:**

- 1/4" or 3/8" drill motor.
- Saber Saw
- Saber Saw wood & metal blades
- 5/6" Nut Driver or Wrench
- 7/16" Wrench
- Small tube of Hi-Heat Silicone

**OUTSIDE AIR SUPPLY**

The outside Air Inlet Hose is a flexible tube used 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:**

- Set floor protector and stove in location for marking holes in accordance with the dimensions listed on the label and figures of these instructions.
- Check that the intended location will not interfere with floor joists, ceiling wiring or plumbing.
- Mark the positions for the tie down and the hole for the outside air pipe (Item 7).\*\*
- Move the stove and using a saber saw, cut a 6 1/2" hole for the outside air pipe. Drill a pilot hole for the tie down.\*\*
- Install the Outside Air Cap on the bottom of the Main Tube with three #10 x 3/8" screws (Item 1).
- Install the Outside Air Pipe to the Outside air Flange and Collar (Items 7 & 8) with three #10 x 3/8" Sheet Metal Screws.
- Install the Outside Air Pipe through the floor. Drill pilot holes and attach the Outside Air Flange to the floor with four 1/4" x 3/4" screws.
- Position the stove in its intended location. Secure to floor with one 1/4" x 3" Lag screw (Bottom center of base).\*\*
- Attach the Outside Air Hose to the Outside Air Cap with the Outside Air Hose Clamp. Push the other end of the Outside Air Hose into the outside Air Flange and seal with high temperature silicone.

**\*\* (Not required for residential installations)**

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

## OPERATION

Your stove's performance (including its efficiency, pollutant emission level and service lifetime) depends largely on how it is operated. You are the most important factor affecting your stoves performance. Read these operation instructions carefully.

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**BEFORE PROCEEDING FURTHER, be sure to read the following**

**SAFETY INFORMATION: Section 4, pages 6-8**  
**INSTALLATION CLEARANCE INFORMATION: Section 6, pages 17 & 18.**  
**FLOOR PROTECTION INFORMATION: Section 8, pages 17 & 18.**

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**WARNING - PROVIDE ADEQUATE AIR CIRCULATION.** It is essential that a source of fresh air for combustion be provided at all times when this wood stove is in operation. In extremely tight houses, partially open a window near the wood stove or install an Outside Air Kit.

### FUEL

THIS WOOD STOVE IS FOR USE WITH SOLID WOOD FUEL ONLY. NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR "FRESHEN UP" A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IT IS IN USE.

Do not burn materials soaked in flammable liquids, trash, garbage, artificial or paper logs, plastics, gift wrappings, coal, charcoal, naphtha, engine oil, chemical cleaners, chemical fire starters, treated or painted wood, saltwater driftwood, railroad ties, plywood, particle board. Do not burn sawdust, wood shavings or chips in this wood stove.

When selecting wood for the Model RGT-3001, it is preferable that you use seasoned wood. Dry, seasoned wood will burn cleaner and produce less creosote. Dry or small pieces of fuel will provide a hotter fire. Larger pieces can be used to provide a longer burn time.

The wood for the Model RGT-3001 should be cut to lengths that are not more than 18" long; while 18" lengths will fit, 16" lengths are preferred.

**CAUTION: DO not place wood fuel within the space heater installation clearances or within the space required for fueling and ash removal.**

**CAUTION: Do not overfire. If heater or chimney connector glows, you are overfiring.**

## STARTING A FIRE IN YOUR ROYAL GUARDIAN MODEL 3001

**NEVER USE A GRATE IN THIS WOOD STOVE. Never use a grate or other methods of supporting the firewood in this wood stove. Build the fire directly on the firebox hearth bricks.**

1. **Initial start-up.** Use only dry, well seasoned fuel, which has been cut, split and stacked for a minimum of six months.
2. **SET THE COMBUSTION AIR CONTROL LEVER.** Move the lever in the direction of the warmest setting, HIGH. See Fig. 36.
3. Open the Loading Door by lifting the loading door handle up to release the door latch.

**CAUTION: Do not operate this stove if the door glass is cracked or broken. To replace broken glass, see page 29.**

### 4. Starting the fire:

Place several balls of newspaper near the FRONT of the firebox and put a fairly large quantity of dry kindling on top of the paper. Next, lay two or three pieces of wood on top of the kindling. Load the wood in a side-to-side orientation with the ends of the logs toward the sides of the stove. Light the paper, partially close the Loading Door so that the latch touches the stove, but do not latch it. Allow the kindling and most of the larger logs to get started, then latch the loading door. If you close the loading door too soon, a new fire may go out. **NEVER LEAVE ANY WOOD STOVE UNATTENDED WHEN THE DOORS ARE NOT TIGHTLY CLOSED!** The first fire should be long and MEDIUM-HOT to cure as much of the firebox paint as possible.

### 5. Loading the firebox:

When the larger wood pieces are burning well, open the Loading Door and completely load the firebox. Close and latch the Loading Door. 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. Let the fire burn on MEDIUM to HIGH for 20-30 minutes, or until the fire is well established. Then you may adjust the combustion air to achieve the desired room temperature. See Combustion Air Control Adjustments.

**COMBUSTION AIR CONTROL**  
OPTIMUM SETTING AFTER LOADING OR RELOADING

**1.Position:** Leave the combustion air-control in the Medium to High position for at least fifteen minutes before making further adjustments.

**2.Temperature Adjustments:** Adjustments to achieve the desired room temperature should be made in small increments for the most effective clean burning operation. Even a small change may increase emissions slightly for 10-15 minutes. Changes should be made as few times each day as possible.

**3.Tampering:** The combustion air control is adjusted at the factory and should not be tampered with.

**FAN OPERATION (Optional)**

If you have the Optional Fan Assembly installed, wait 30 minutes before you turn the fans on to begin circulating the warm air into the room. Use LOW speed setting when the stove is set for a low burn and a higher speed setting with hotter fires.

**RELOADING THE FIREBOX**

1. **Maintaining an efficient fire.** A bed of hot coals is the most important requirement for keeping an efficient fire. A bed of hot coals will help the stove maintain a more even temperature as well as getting the new load of wood started easily. Let each full load burn down to a coal bed before reloading. Many new wood stove users hesitate to load enough wood to sustain a fire, fearing that a full wood stove automatically means a hotter fire. The combustion air control, set at the lowest air control setting, permits a low fire even with the firebox full. Maintaining a clean burning low fire is easier with a partial load of wood. For medium and high burn rates, a full load of wood may be used. Four 6" diameter logs may burn up to 8 hours. Burn times may vary considerably due to the quality of wood and how well it is seasoned. How well your house is insulated and what you set your air control at will also affect burn times.

2. Set the Combustion Air Control Knob to the warmest setting.

3. Open the Loading Door.

**WARNING**

**ALWAYS OPEN THE DOOR LATCH AND ALLOW THE FIRE TO BUILD UP SLIGHTLY BEFORE FULLY OPENING THE LOADING DOOR. IF THE LOADING DOOR IS OPENED TOO FAST, THE SUDDEN INTRODUCTION OF AIR CAN CAUSE THE FIRE TO FLARE AND DISCHARGE SMOKE AND FLAME INTO THE ROOM. SUCH A DISCHARGE CAN BURN PERSONS WHO ARE NEAR THE WOOD STOVE.**

4. Load The Firebox. Rake the bed of hot coals to the FRONT of the firebox BEFORE putting the new fuel load in the stove. To allow combustion air to flow under and around the fuel, make a trench in the exact center the coal bed, from front to back. The bottom of the coal bed trench must be lower than the air jet hole just inside the bottom of the firebox door. If anything blocks the air jet, poor ignition and improper burning will result. FULLY LOAD THE FIREBOX. Put the wood in the firebox in a side-to-side orientation with the ends of the logs toward the sides of the stove. The firebox will easily accept logs up to 16".

5. Close the Loading Door and latch it. 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.

6. Combustion Air Control Adjustment. Leave the air control in the fully open position (the warmest setting or 15 minutes, or until the fire is well established) before making further adjustments. Turning down the thermostat too soon may cause creosote formation in the chimney. Once the fire is well established, adjustments may be made for low, medium or high fire, depending on heat needs of the home.

For a low fire, (11,000 to 15,000 btu/hr) getting the fire well established is particularly critical. If the wood being used is not well seasoned, it may be necessary to leave the air control setting in the fully open position for much longer than 15 minutes to assure a clean, low burn. When the fire is burning well on high, reset the air control in steps to medium, then lower, over a 5-10 minute period. Watch the flames in the top of the firebox. Try to keep a good flame pattern just under the secondary air diffuser at all times. When there is no flame pattern in the top of the firebox, the stove is less efficient (produces less heat from a load of wood) and burns less clean (makes and deposits more creosote in the chimney system). When starting a low fire, do not turn the fans on for the first 30 minutes. After 30 minutes, the fans may be turned on. For a medium burn (16,000 to 22,000 btu/hr) leave the air control set at high for 15 minutes, or until the fire is well established. Then move the air control to the medium setting. Watch for a flame pattern in the top of the stove. When that flame is out the stove is less efficient and burns dirtier. When starting a medium fire turn the fans on low to medium, depending on the heat needs of the home.

For a high fire (23,000 to 35,000 btu/hr) the air control setting may be left on high at all times. The fans may be turned on medium to high at any time during the burn cycle.

## **DISPOSAL OF ASHES**

### **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.**

**Disposal of ashes:** Ashes should be placed in a sealed non combustible container until they are thoroughly cooled. The closed container of ashes should be placed on a non-combustible material pending final disposal. Once they are cooled they can be disposed of by burial in soil or other suitable methods.

### **ASH REMOVAL**

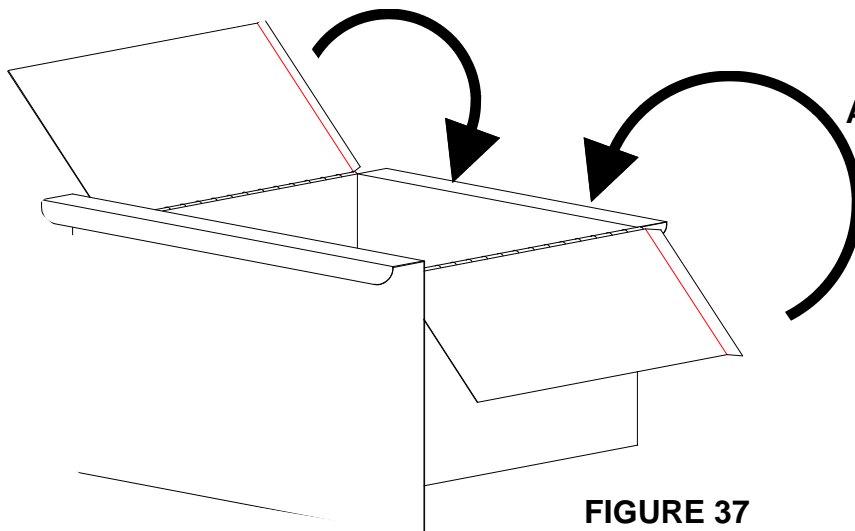
The ashes should be removed any time they come within one inch of the door's lower sill. A thick bed of ashes will significantly limit the amount of wood you can get in the firebox. Wood burns best in a bed of ashes 1/2 inch to one inch thick. It is not necessary or advisable to completely remove all of the ashes when cleaning this wood stove.

### **ASH PAN REMOVAL (OPTIONAL)**

If your Royal Guardian RGT3001 is fitted with an optional ash pan follow these instructions for ash removal. The ash pan is factory installed option and can not be added to stoves which were originally manufactured without the optional ash pan.

**WARNING: REMOVE ASHES ONLY WHEN THEY ARE COOL. NEVER STORE HOT ASHES IN A GARAGE OR BASEMENT. HOT ASHES WILL GENERATE CARBON MONOXIDE AND / OR FLAMABLE GASES. THESE GASES MAY CAUSE SUFFOCATION BE SURE YOU OBSERVE THE SAFETY INSTUCTIONS REGARDING "DISPOSAL OF ASHES" DESCRIBED ABOVE.**

1. After the ash bed has cooled down, remove the ash plug, located at the bottom centre of the firebox, by slipping a poker or similar tool through the small handle loop on the top of the plug
2. Scrape the ashes down through the open ash dump hole and into the ash pan fitted into the stove pedestal. Do not be concerned about "cleaning" the fire box completely as the next fire will burn better on a small bed of ash (up to 1/2" deep).
3. When the necessary ashes have been dumped down the ash dump into the ash pan, clean out the area around the dump to ensure that the plug fits properly back into the ash dump.
4. REPLACE THE ASH DUMP PLUG; NEVER OPERATE THE STOVE WITH THE PLUG REMOVED. TO OPERATE THE STOVE WITH THE PLUG REMOVED OR NOT PROPERLY IN PLACE IS DANGEROUS.
5. After you have replaced the ash dump plug spread the remaining ashes across the firebox and cover the ash dump plug with a layer of ashes.
6. Remove the ash pan from the stove pedestal and flip up the two side lids to cover the open ash pan. (See Fig. 37,) CAUTION: ENSURE THE PAN HAS COOLED DOWN BEFORE REMOVAL.
7. Dispose of the ashes in a safe manner as described above: "DISPOSAL OF ASHES".
8. Before you replace the ash pan back into the stove pedestal ensure the pedestal is cleaned to allow proper seating of the ash pan back into the pedestal. Replace the ash pan into the pedestal ensuring that the ash pan lids are OPEN. It is important that the ash pan be fully inserted and seated against the pedestal front.



**! IMPORTANT !**  
**Close Lids Before Moving  
Ash Pan Away From Stove!**

**FIGURE 37**

## **MAINTENANCE**

### **AUTHORIZED SERVICE REPRESENTATIVE**

Your local BLAZE KING dealer is your authorized service representative. Contact him as soon as possible if you have any problems with operating or maintaining your BLAZE KING Model 3001. The dealer will help you solve operating problems, provide replacement parts, and/or arrange warranty service repairs as required. Dealers will need information such as model, serial number, date of purchase, and a summary of the problem.

### **CREOSOTE AND SOOT FORMATION**

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 twice each month during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated it should be removed to reduce the risk of a chimney fire.

The design of the Model 3001 should reduce the accumulation of creosote to a low level if it is operated properly (see Operation Instructions, Section 9, page 25). Even so, some creosote will eventually accumulate and must be dealt with. The frequency of start-up operations and the temperatures at which the stove is usually operated will affect the rate of accumulation. If significant creosote buildup occurs, re-examine your fire-building and burning procedures. Consult the trouble-shooting guide at the end of these instructions.

### **CREOSOTE REMOVAL**

The chimney connector and chimney should be inspected at least twice each month during the heating season to determine if a creosote or soot buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire. Hire a chimney sweep, or clean the chimney yourself with a tight-fitting chimney brush. Makeshift equipment; hoses, tire chains, etc. - can damage the flue and/or do an unsatisfactory cleaning job. The stove should also be inspected at this time and cleaned if needed. To inspect and clean the chamber inside the stove, allow the fire to go out and the stove to cool down. Remove the first section of pipe above the stove and inspect the area immediately below the flue exit. Clean with a vacuum cleaner. Remove as much creosote and fly ash as possible from the area around the 2" x 4" Air Intake Transfer Tube. Heavy accumulations of creosote and ash in this chamber, if not removed, may ignite and cause a very intense fire which could structurally damage the stove. Re-install the first section of pipe to the stove. Refer to the Installation Instructions.

### **LOADING DOOR GASKET MAINTENANCE**

Safe and efficient operation of any airtight wood stove depends greatly on the integrity of the gaskets. Check the loading door gasket at the beginning of the heating season and at least twice during the heating season. When the gasket is frayed or no longer seals, it must be replaced. Inspect the gasket for physical deterioration, missing sections or obvious leakage. To check the gasket further, insert a piece 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 this door.

### **REPLACING THE DOOR GASKET**

If the door gasket is to be replaced, be sure you have a replacement part ready to reinstall. See your Blaze King dealer.

Be sure the fire is out, and the stove has cooled down. The door does not have to be removed from the stove.

With a pair of pliers, pull the old door gasket out of the channel and dispose of it. Clean out the channel so the new gasket can fit smoothly. Run a small bead of high temperature silicone adhesive (such as G.E. Silicone Sealer, or the equivalent) along the center of the channel. Start the new gasket in the lower right corner. Do not stretch or cut the gasket. Distribute the gasket evenly around the frame. Close the Loading Door and allow the adhesive to dry. Check the fit of the door gasket. Insert a piece 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.

### **CLEANING THE GLASS**

The glass may become coated during a low (overnight) burn. Adjusting the thermostat to the warmest setting after reloading each morning will usually keep the glass clean. 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 suitable glass Cleaner, available from most hearth dealers. 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 will be very difficult to remove.

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

**LOADING DOOR GLASS REPLACEMENT**

Your BLAZE KING Model 3001 is equipped with 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 contact your dealer for replacement Blaze King parts only. 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. Open the door and remove the twelve #10 x 3/8" screws holding the six retainers to the inside of the cast door.
3. Be sure to put aside all parts for re-installation.
4. Remove the damaged glass and the old glass gasket.
5. The replacement glass has the gasket installed on it's outer perimeter. Place the glass in the door frame. Be sure the words "Blaze King" etched in the glass reads correctly when the door is closed.
6. Install the retainers with the 10 x 3/8" round head screws.

**CHIMNEY DRAFTS**

If you suspect a draft problem in an existing chimney, determine the draft by using a water manometer (draft gauge). The draft should be measured with the stove at medium burn. After the measurement is completed, fill any holes that were made to take the reading by using a sheet metal screw of proper size. The draft should measure between .02" and .10" of water. If the draft is outside these limits, the stove may not be operating properly. Drafts below .02" will cause excessive smoke spillage, incomplete combustion and fire start-up problems. A draft over .10 may cause overheating and short burn times. A draft near the upper limit will contribute to the door glass staying clean.

**OPTIONAL FAN ASSEMBLY**

Routine maintenance of the OPTIONAL Fan Assembly on the back of the stove is not required. Should it become necessary to replace the Fan Assembly, order Part # Z8310A from your local dealer.

**RHEOSTAT REPLACEMENT**

1. Unplug the fan power cord from the wall.
2. Remove the four screws on the fan cage containing the rheostat switch.
3. Remove the bower from the cage. DO NOT DISCONNECT THE WIRES; Locate the two wires coming from the rheostat switch.
4. Unplug the two wires from the rheostat switch.
5. Pull the knob straight off the switch.
6. Unscrew the nut holding the switch to the cage.
7. Replace the switch with the proper replacement part from your Blaze King dealer.
8. To reinstall the switch, reverse the above steps being sure to tuck the wires back into the assembly so they do not come in contact with the fan blade.

**REPLACING THE SECONDARY AIR DIFFUSER**

If it is necessary to replace the Secondary Air Diffuser, proceed as follows:

1. Obtain a replacement Secondary Air Diffuser from your Blaze King dealer.
2. Allow the fire to go out and the stove to cool down.
3. Remove all of the brick from the firebox and clean out the ashes. Back off the set nut on the bolt between diffuser and front of stove.
4. From inside the stove, pull the Secondary Air diffuser straight toward the front of the stove (about 1") until the front clip allows it to drop free. WARNING: There are four bricks ON TOP OF the diffuser. When released from the front clip, the diffuser is unexpectedly heavy.
5. Lower the Air Diffuser into the firebox and remove the bricks.
6. Pivot the Secondary Air Diffuser until it can be removed from the firebox.
7. Install the new Secondary Air Diffuser. Replace the four firebricks on top of the diffuser and lift it into position. Position the back of the diffuser so the two tabs on the back of the diffuser fit into the rectangular hole in the top back of the stove, push the front up, and slip the front clip into position.
8. Tighten the set nut between the diffuser and the stove front.
9. Re-install the firebrick in the firebox.

## TROUBLESHOOTING

Your Blaze King, Model RGT-3001 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 problem early so that major problems can be avoided.

### The most important elements for a well-controlled fire are:

1. Knowledgeable operator.
2. Adequate air supply.
3. Properly sized, good quality firewood
4. Clean chimney, properly sized and installed.

A knowledgeable operator is the most important factor for the safe and efficient operation of any wood stove. The remaining three factors above are also very important. A deficiency in any one will effect all of the others. If you encounter a problem, determine the source and then follow-up by checking the factors above for a possible solution. Please study the operation instructions carefully (Section 9, beginning page 25). If you have any questions not answered in this manual, consult your BLAZE KING dealer or call the Customer Service Department: in the U.S.A. at B.K.I., Inc. (509 522-2730) or in Canada at Valley Comfort Systems (250-493-7444),

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### PROBLEM: Chimney Fire

#### CAUSE:

Creosote build up, high draft.  
Act immediately regardless of cause.

#### SOLUTION:

Adjust Combustion Air Control 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 damaged prefabricated chimney (factory built) should be replaced. Any damage to the flue connector should be corrected before the system is used again.

Possible causes for a chimney fire, and remedies for those causes, can be found on page 31: "Excessive Creosote Formation", and "Spots of Creosote Accumulation in Chimney or Flue Connector".

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### PROBLEM: Not enough heat

#### CAUSE:

Green or wet wood  
Obstruction in chimney or cap screen  
Heat exchange chamber filled with ash  
Thermostat not operating properly  
Poor draft caused by an oversize flue  
  
Strong, gusting winds causing down draft in chimney  
Tightly sealed house, Inadequate air supply  
Reloading too much wood on top of too few coals

#### SOLUTION:

Use seasoned wood.  
Remove obstruction  
Clean heat exchanger chamber  
Consult your Blaze King dealer  
Measure draft with Manometer  
SEE DRAFTS, Pg. 29  
SEE CHECK YOUR CHIMNEY, Pg. 10  
Consult your Blaze King Dealer or a chimney sweep.  
  
Install wind-resistant chimney cap  
Open a window, slightly, near the stove.  
Allow a larger bed of coals to build up.  
SEE Pg. 26

**Blaze King, Royal Guardian, Model RGT-3001**  
OWNER'S INSTALLATION AND OPERATION MANUAL

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**PROBLEM: Too much heat**

**CAUSE:**

Thermostat not operating properly  
Loading door gasket leaking, admitting excess air into firebox  
Excessive draft in the chimney

Wood is too dry  
Wood in too small pieces

**SOLUTION:**

Consult your Blaze King Dealer  
Replace door gasket and/or adjust door  
SEE Pg. 28  
Measure draft with a Manometer SEE DRAFTS, Pg. 29  
Consult your Blaze King Dealer or a chimney sweep  
Install a cap.  
Replace wood or mix with not-so-dry pieces.  
Use larger diameter pieces

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**PROBLEM: Fan will not run, or there is no adjustment for fan speed**

**CAUSE:**

Not plugged in or lack of power  
Fan speed control  
Faulty Fan

**SOLUTION:**

Check to be sure fans are plugged in.  
Consult your Blaze King Dealer  
For replacement: SEE RHEOSTAT REPLACEMENTS See Pg 29

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**PROBLEM: Excessive creosote formation**

**CAUSE:**

Improper operation  
Wood too green or wet  
Poor draft caused by an oversize flue, etc.

Chimney too cold or poorly insulated

**SOLUTION:**

Check Combustion Air Control setting operating procedures SEE Pg. 26.  
Use seasoned wood.  
Measure draft with Manometer  
SEE DRAFTS, Pg. 29  
SEE CHECK YOUR CHIMNEY, Pg. 10  
Upgrade chimney system. Consult your Blaze King Dealer or a Chimney sweep.

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**PROBLEM: Spots of Creosote accumulation in chimney or flue**

**CAUSE:**

Air leaks in chimney or flue connector  
Poor draft caused by an oversize flue, etc.

**SOLUTION:**

Inspect chimney and/or flue connector Repair or replace as necessary Check to be sure that the flue connector is installed correctly. CAUTION: A leaking flue  
Measure draft with Manometer  
SEE DRAFTS, Section 10, Pg. 54  
SEE CHECK YOUR CHIMNEY, Pg. 12

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**PROBLEM: Door glass quickly becomes coated with creosote**

**CAUSE:**

Low thermostat setting  
Lowering the thermostat setting  
Poor draft caused by an oversize flue, etc.  
Obstruction in chimney or cap screen Heat exchange chamber filled with ash  
Strong, gusting winds causing down draft in  
Tightly sealed house, inadequate air supply  
Burning poorly seasoned wet wood, or wood with

**SOLUTION:**

Turn the thermostat to the warmest setting during the first 20-30 minutes or  
Turn the thermostat to the warmest setting too far, too quickly during the first 20  
Measure draft with Manometer SEE DRAFTS, Pg 29 SEE CHECK YOUR  
Remove obstruction. Clean heat exchanger chamber. SEE Section 10, page 54 Measure draft with Manometer SEE DRAFTS, Pg. 29 Some chimneys may need to be relined. Consult your Blaze King Dealer or a chimney sweep.  
Install wind-resistant chimney cap.  
Open a window, slightly, near the stove. Use seasoned wood with low pitch content

## REPLACEMENT PARTS

Listed below are some of the more commonly needed replacement parts.

<b>ITEM:</b>	<b>PART#:</b>	<b>NOTES:</b>
Damper Handle	0131A	
Door Handle	0121AA	
Spray Paint	Contact your Blaze King dealer .	(Specify Color)
Door Gasket	Gasket 6'x 7/8"	
Rheostat Knob	O137	
Door Glass Replacement Asmb.	Contact your Blaze King dealer	Sizes Vary
Outside Air Kit	Z8300AA	
Back Shield Kit	Z8310A	
Side Shields with Fan Kit	Z8301A	



Also suitable for use in **MOBILE HOME**

**MODEL: RGT 3001**

Tested to: **UL 1482/ULC S627**  
 Report NO: **632-000500 (1/90)**

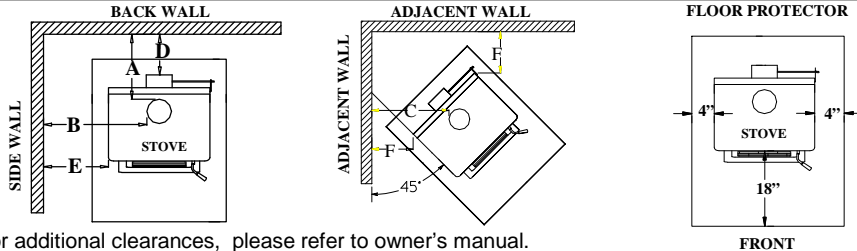
WH-

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

Use 6"/152mm minimum 24 GA. black or blued steel chimney connector with a listed factory-built chimney suitable for use with solid woods, or an approved, lined masonry chimney. Refer to local building codes and manufacturer's instructions for precautions required when passing a chimney or connector through a combustible wall or ceiling. **DO NOT CONNECT THIS UNIT TO A CHIMNEY SERVING ANOTHER APPLIANCE.**

**MINIMUM CLEARANCES TO COMBUSTIBLE CONSTRUCTION (in./mm)**

	CONVENTIONAL- USING SINGLE WALL CONNECTOR	REDUCED CLEARANCE USING DOUBLE WALL CONNECTOR
A. Connector to Backwall	16"/406mm	12"/305mm
B. Connector to Sidewall	25.5"/648mm	21.5"/546mm
C. Connector to Adjacent Wall	21.5"/546mm	17.5"/445mm
D. Unit to Backwall	10"/254mm	6"/152mm
E. Unit to Sidewall	16"/406mm	12"/305mm
F. Corner to Adjacent Wall	12"/305mm	8"/204mm



For additional clearances, please refer to owner's manual.

**COMBUSTIBLE FLOOR REQUIRES** use of a minimum 3/8"/9.5mm non-combustible floor protector extending a minimum of 18"/406mm to the front and 8"/203mm to each side of the fuel loading and/or ash drawer, and 2"/51mm to either side of the chimney connector.

**ALCOVE INSTALLATIONS:** Minimum ceiling height 64"/1626mm, minimum width 59"/1499mm, maximum depth 30"/762mm. Listed double wall chimney connector required. Requires use of Side Heat Shield Part No. 8301AA and Rear Heat Shield No. 8302AA.

**MOBILE HOME INSTALLATIONS:** Roof exit required. **DO NOT INSTALL IN A SLEEPING ROOM.** The structural integrity of the mobile home must be maintained.

**COMPONENTS REQUIRED FOR MOBILE HOME INSTALLATION**

Outside Air Kit No. Z8300AA - Side Heat Shield No. Z8301AA - Rear Heat Shield No. Z8310AA

One of the following listed chimney connectors (with compatible listed chimney system)

**In the U.S.A:** Duravent Dura Plus HT/Ameri-Tec HS/Metalbestos HT/Security 103 HT

**In Canada:** Canadian stoves require high temperature pipe meeting S629M requirements and listed double wall pipe.

Replace glass only with ceramic glass available from your Blaze King Dealer.

Operate with doors closed only.

Electrical rating: 115 V, 0.58 Amps, 60 Hz. Route power cord away from appliance.

Risk of electrical shock. Disconnect power before servicing.

For use with solid wood fuel only. Do not use grate or elevate fire. Build fire directly on hearth.

Manufactured by:	Blaze King Industries 400 W. Whitman Dr. College Place, WA. 99362 USA	Valley Comfort Systems 1290 Commercial Way Penticton, B.C. V2A 3H5 Canada
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Design and specifications subject to change without notice. Covered by one or more of the following U.S. Patents D249890, D250541, D263993, D270087, 4261324. In Canada, patents 45026 and 45247. Other U.S. and Canadian patents pending.

**DO NOT REMOVE OR COVER THIS LABEL**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
 Certified to comply with July 1990 particulate emission standard

DATE OF MANUFACTURE								
1999	2000	2001	2002	2003	2004	JAN	FEB	MAR
APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC

## INDEX OF TOPICS, TABLES & ILLUSTRATIONS

<b><u>Page:</u></b>	<b><u>Topic:</u></b>
3	Introductory Letter
3	Clearance Kits and Optional Accessories
4	Warranty
6	Definitions
7	Safety
9	Specifications
10	Installation Preparation
11	Reduced Wall Clearances
13	General Installation Instructions
17	Minimum Clearances to Combustible Surfaces
19	Residential Standard/Reduced Roof Exit Installation
20	Residential Reduced Clearance Wall Exit Inst.
21	Residential Reduced Clearance Wall Exit Masonry Chimney Installation
22	Mobile Home and Alcove Installation
23	Side Shield and Fan Kit
23	Trim on Side Shield
23	Back Shield Kit
24	Outside Air Kit
25	Operation Instructions
27	Disposal Of Ashes
28	Maintenance Instructions
30	Troubleshooting
32	Replacement Parts
33	Label

<b><u>Table:</u></b>	<b><u>Page:</u></b>	<b><u>Description:</u></b>
1	17	Minimum Clearances to Combustible Surfaces
2	22	Pipe for Mobile Home Installations

<b><u>Figure:</u></b>	<b><u>Page:</u></b>	<b><u>Illustrations:</u></b>
21-26	17	Clearance Diagrams
27	19	Residential Installation with Prefabricated Chimney Systems
28	20	Residential Installation with Prefabricated Chimney Systems
29	21	Residential Installation with Prefabricated Chimney Systems with Exterior Masonry Chimney
30	22	Mobile Home and Residential Installation using Dura-Plus Chimney and Close Clearance Connector
31	24	Location of Major Components
35	24	Outside Air Kit
36	24	Combustion Air Control Label
37	27	Ash Pan