

VALLEY *Comfort* VC95C

SINCE 1953

SOLID FUEL-FIRED HEATER

INSTALLATION AND OPERATION MANUAL



**READ THOROUGHLY AND COMPLY WITH ALL
LOCAL CODES AND REGULATIONS**

VALLEY COMFORT SYSTEMS INC.

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Welcome to the discriminating group of Canadian home owners who have selected Valley Comfort heating units to satisfy their home heating needs.

The product you purchased was made by skilled craftsmen who have given the company forty years of experience providing domestic heating appliances. Your heating unit has been tested by a certified independent testing laboratory to meet rigorous safety standards

This booklet contains the operating and installation instructions. If the installation instructions are not followed, you will not be getting the best results from your unit and Valley Comfort cannot honor its warranty.

"SAFETY NOTICE: FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS. IF THIS HEATER IS NOT PROPERLY INSTALLED, A HOUSE FIRE MAY RESULT. CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA."

Warranty

BLAZE KING WOOD LIMITED WARRANTY

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

Warranty Period		Components Covered	
Parts	Labor	Wood	
1 Year		X	All parts, materials and surface finishes (flaking and peeling) Subject to Conditions, Exclusion, and Limitations listed
2 Years		X	Fan assemblies and motors, thermal sensors, catalytic thermometer , bi-metallic thermostat assembly
5 Years	2 Year	X	Firebox & Heat Exchanger, Bypass Door Steel Components
6 Years		X	Catalyst Combustor (see Conditions, Exclusions, and Limitations)
1 Year		X	Other Replacement Parts
See Conditions, Exclusions, and Limitations.			

Blaze King Wood Limited 5 Year Warranty

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

Limited Six (6) Year Warranty:

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

Limited (5) Year Warranty:

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

Limited Two (2) Year Warranty:

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

Limited One (1) Year Warranty:

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

How the Warranty Works

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

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

Exclusions and Limitations:

1. This Warranty does not cover tarnish, discoloration or wear on the plated surfaces. Painted finishes will change colour after initial firing and will continue to change through the lifetime of the stove. This is normal occurrence for all high temperature coatings.
2. This Warranty does not cover gasket material or firebrick.
3. Blaze King strongly recommends installation by a certified installer. Failure to comply may adversely affect coverage under the terms of this warranty. This Limited Warranty covers defects in materials and workmanship only if the product has been installed in accordance with local building and fire codes; in their absence refer to the owner's manual. If the product is damaged or broken as a result of any alteration, wilful abuse, mishandling, accident, neglect, or misuse of the product, the Limited Warranty does not apply.
4. The stove must be operated and maintained at all times in accordance with the instructions in the Owner's Manual. If the unit shows signs of neglect or misuse, it is not covered under the terms of this Warranty policy. Performance problems due to operator error will not be covered by the Limited Warranty policy.
5. Some minor expansion, contraction, or movement of certain parts and resulting noise, is normal and not a defect and, therefore, is not covered under this Limited Warranty.
6. Misuse includes over-firing. Over-firing can be identified later by warped plates and paint pigment being burnt off. Over-firing this appliance can cause serious damage and will nullify the Limited Warranty.
7. The Limited Warranty will cover glass thermal breakage only and will not cover misuse of the stove glass, including but not limited to:
 - a) Glass that is struck, has surface contaminates or has had harsh or abrasive cleaners used on it.
 - b) If the door is slammed or is closed while wood in the firebox is protruding out the stove opening thus striking the glass.
8. This warranty does not cover products made or provided by other manufacturers and used in conjunction with the operation of this stove without prior authorization from Blaze King. The use of such products may nullify the Limited Warranty on this stove. If unsure as to the extent of this Limited Warranty, contact your authorized Blaze King dealer before installation.
9. Blaze King will not be responsible for inadequate performance caused by environmental conditions.
10. The Limited Warranty does not cover installation and operational related problems such as use of downdrafts or spillage caused by environmental conditions. Environmental conditions include but are not limited to nearby trees, buildings, roof tops, wind, hills, mountains, inadequate venting or ventilation, excessive offsets, negative air pressures or other influences caused by mechanical systems such as furnaces, fans, clothes dryers etc.
11. The Limited Warranty does not cover damage caused by burning salt-saturated wood, corrosive driftwood, chemically treated wood or any fuel not recommended in the Owner's Manual (use cord wood only).

The Limited Warranty is void if:

 - a) The stove has been operated in atmospheres contaminated by chlorine, fluorine or other damaging chemicals.
 - b) The stove is subject to submersion in water or prolonged periods of dampness or condensation.
 - c) Any damage to the unit, combustion chamber or other components due to water, or weather damage which is the result of, but not limited to, improper chimney/venting installation.
 - d) Salt air in coastal areas or high humidity can be corrosive to the finish; these environmental conditions can cause rusting. Damage caused by salt air or high humidity is not covered by the Limited Warranty.
12. Exclusions to the Limited Warranty include: injury, loss of use, damage, failure to function due to accident, negligence, misuse, improper installation, alteration or adjustment of the manufacturer's settings of components, lack of proper and regular maintenance, alteration, or act of God.
13. The Limited Warranty does not cover damage caused to the stove while in transit. If this occurs, do not operate the stove and contact your courier and/or dealer.
14. The Limited Warranty does not extend to or include paint, door or glass gaskets or firebricks damage caused by normal wear and tear, such as paint discoloration or chipping, worn or torn gaskets, chipped or cracked firebrick, etc.
15. The Limited Warranty does not include damage to the unit caused by abuse, improper installation, or modification of the unit.
16. Damage to plated surfaces caused by fingerprints, scratches, melted items, or other external scores and residues left on the plated surfaces from the use of abrasive cleaners or polishes is not covered in this warranty.
17. Blaze King is free of liability for any damages caused by the stove, as well as inconvenience expenses and materials. The Limited Warranty does not cover incidental or consequential damages.
18. The Limited Warranty does not cover any loss or damage incurred by the use or removal of any component or apparatus to or from the Blaze King stove without the express written permission of Blaze King and bearing a Blaze King label of approval.
19. Any statement or representation of Blaze King Products and their performance contained in Blaze King advertising, packaging literature, or printed material is not part of the Limited Warranty.
20. The Limited Warranty is automatically voided if the stove's serial number has been removed or altered in any way. If the stove is used for commercial purposes, it is excluded from the Limited Warranty.

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

INSTALLATION INSTRUCTIONS

EXAMINE THE SHIPMENT

Please inspect this shipment as soon as it arrives. If you discover any parts missing, or any damage, have the carrier make an inspection immediately and make a notation on the freight bill. Should you discover damage after unpacking the crate notify the carrier and have him inspect the heater within fifteen days. Send the inspection report, freight bill and your explanation of the damage to your local Valley Comfort dealer. You will be advised on what parts will be replaced.

MINIMUM INSTALLATION CLEARANCE

It is of great importance that all combustible materials, including firewood, be kept a safe distance from this heater. The minimum distances should be:

Top of the Heater .	.....	48"
Wood Charging End	.....	48"
Rear of Heater	.....	24"
Front of Heater	.....	36"
Other Side	.....	12"
Flue Pipe	.....	18"

If the heater is being installed on a combustible floor, a regulation insulating sheet metal covered stove board should be placed under it. This board should extend at least 18" beyond the heater on the wood charging side and 6" on all other sides.

INSTALLATION

Valley Comfort Systems Inc. supports the Wood Energy Technology Transfer Inc. this organization provides training and certification for personnel involved in installation and maintenance of wood heating systems across Canada. For your safety and satisfaction your system must be properly installed.

The installation of this heater shall be in accordance with the regulations of authorities having jurisdiction. It shall be installed where there is an adequate supply of combustion air to assure proper combustion. If necessary, provisions must be made to compensate for air drawn by other appliances, such as exhaust fans, clothes dryers or fireplaces.

If the heater is being installed where normal air infiltration does not meet the requirements for combustion and ventilating, outside air must be introduced to the heater area.

THE FLUE PIPE

The Flue pipes used should be 6" in diameter and constructed of uncoated steel sheet metal or stainless steel with a thickness of at least 24 gauge. Always fit the small crimped end of the pipe into the large section of the pipe below, beginning with the small end of the flue pipe fitting into the flue collar on the heater. This will allow any creosote that may form in the pipe to run back in to the combustion chamber and burn safely, rather than run out the joints and onto the floor.

Avoid long horizontal runs when installing the flue pipe. It is best if you can obtain at least 1/4 rise per foot to the chimney. If possible avoid using more than two elbows between the chimney and the heater.

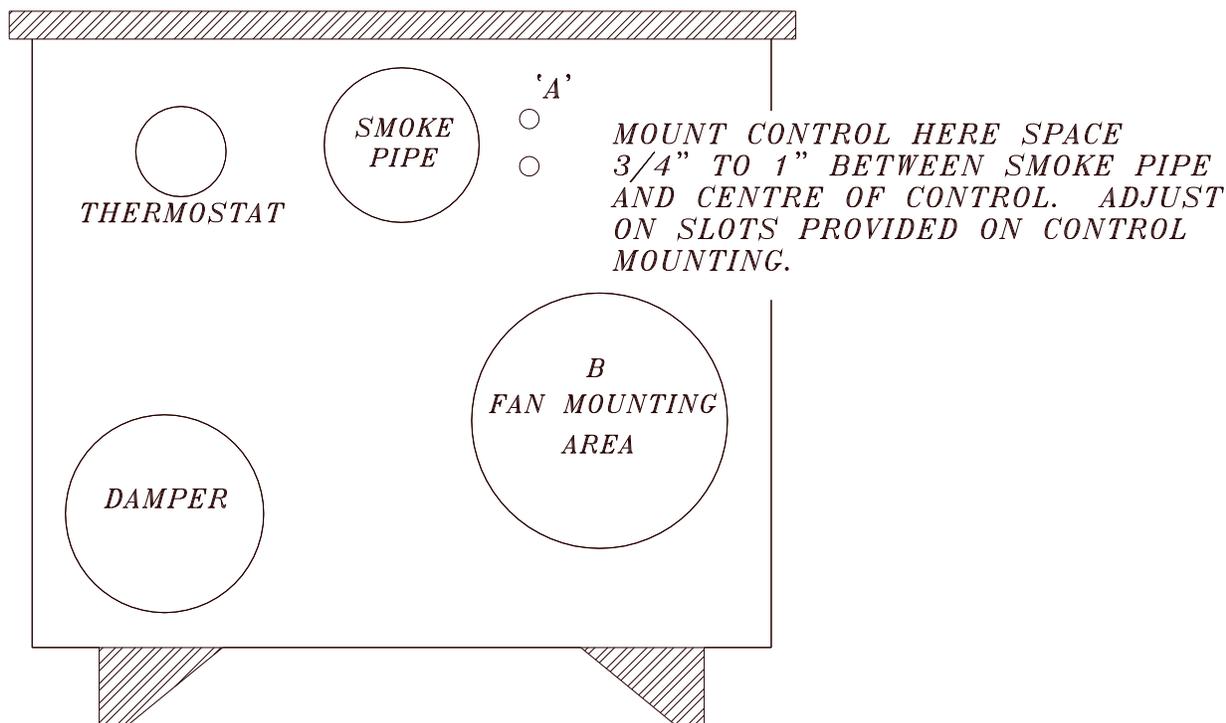
Fasten all pipe joints, including the heater flue collar, with sheet metal screws. Use a bolt on the heater flue collar. On long pipe installations the joints should be sealed with furnace cement.

THE FAN COMPLETE WITH CONTROL

Study the diagram on the next page. Then attach the control with the two screws provided, as shown at "A". Adjust it by moving it to and from the smoke pipe. Moving the control towards the smoke pipe will allow a fast cut-in of the fan, away will provide slower cut-in. The average setting is from 3/4" to 1" from the smoke pipe to the center of the control.

Attach the fan with the four 1/4 x 1/2 bolts provided, making certain that the oiling holes on the motor are facing up. Using a light oil (SAE 20/30), oil the motor at each end of the shaft once a season or every six months when in use. If the fan motor is a sealed bearing type there are no holes, no oiling is required.

ATTACHING A FAN CONTROL ON THE THERMOSTATIC WOOD HEATER



BAROMETRIC DAMPER & CHIMNEY

If your heater is being connected to a chimney with a consistently high draft install a barometric draft regulator set at .03 inches water column. Do not use a turn damper.

It is recommended that you connect the heater to a nominal 8" x 8" tile lined masonry chimney, which is in good repair, and free from any leaks or obstructions. Alternately, a 6" diameter prefabricated chimney approved for solid fuel can be used.

NOTE: Care should be taken to prevent the products of combustion, in the flue pipe which may contain carbon monoxide, from entering the room where the heater is installed.

Particular care should be paid to the joints to ensure that there are no leaks from the flue pipe.

SPECIFICATIONS

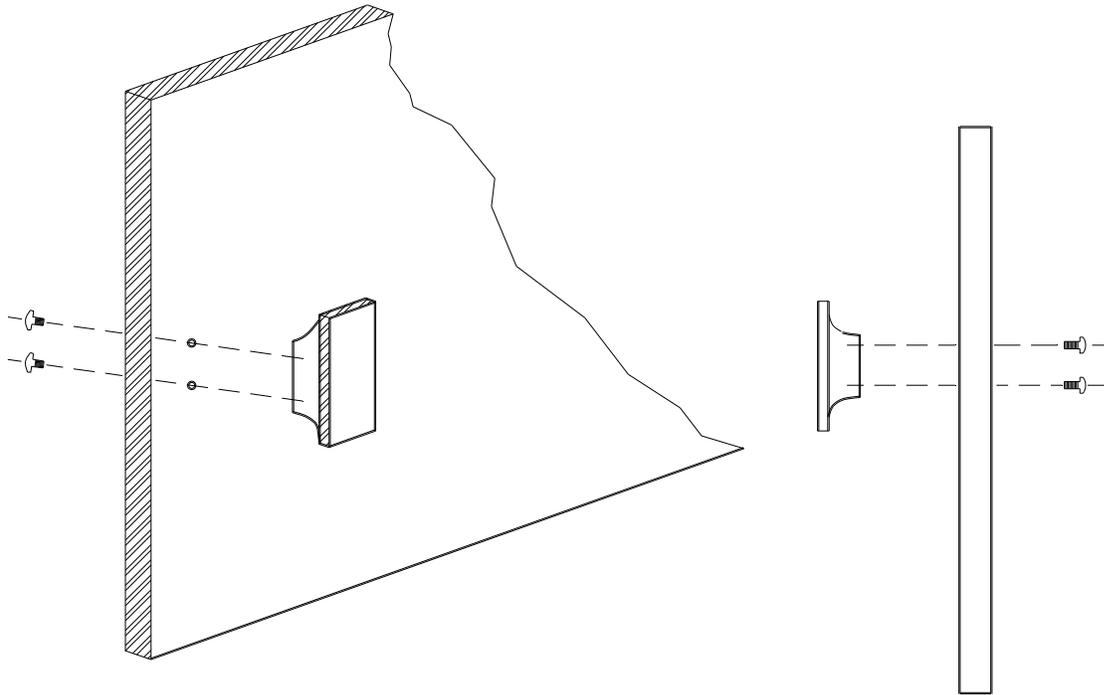
Overall Size
Size of Pipe Collar
Size of Fuel Door
Length of Wood Used
Capacity

MODEL VC95C

34 1/2" wide x 22 1/4" deep x 35" high
6"
10" x 11"
24"
4 cubic feet

ASSEMBLY OF DOOR HANDLE

The door handle should be assembled as shown in the diagram below.



OPERATING YOUR HEATER

Before firing your new Valley Comfort heater - spread an inch of sand or ashes over the floor of the combustion chamber. This will reduce any danger of warping due to overheating.

Next. Turn the control knob of the regulator or thermostat to a medium position. This opens the draft damper at the base of the heater.

Place crumpled newspapers in the heater and cover them with kindling and small pieces of wood. Ignite this and, as the fire grows, add larger pieces of wood.

Do not be alarmed by fuming or smoke the first time you use your heater. This is caused by the high temperature paint which is simply curing. You may wish to open a few windows to clear the air.

MAKING ADJUSTMENTS

When your home reaches the desired temperature, turn down the knob on the regulator until the large draft damper closes. The small pilot damper will stay open and the temperature should remain the same without anymore adjustments, until the fuel level becomes low. With the heater at room temperature and the control knob at the 2.5 setting, adjust the damper chain (if necessary) so that the damper just closes.

When the outside temperature changes suddenly, you may find it necessary to turn the control knob to obtain more or less heat. We suggest that you turn the knob no lower than one position at night or you will use more fuel trying to reheat the house in the morning.

When loading the heater keep the wood level beneath the bottom of the wood charging door.

USING THE PROPER FUEL

A dry seasoned hardwood will produce the greatest amount of heat and the least amount of creosote. Using green wood results in heat loss due to the evaporation of the excess moisture content. This decreases efficiency and can cause a creosote build-up.

Check your flue pipes and chimney periodically during the heating season and clean them if necessary.

IMPORTANT: This heater was designed to burn only wood. DO NOT burn coal, gasoline, kerosene, engine oil, garbage, chemical fire starters, manufactured logs or painted wooden boards. This could result in extremely high temperatures or an explosion. DO NOT use salt water driftwood as it will corrode the heater and will void any warranty.

ADDING FUEL

It is best to add fuel when the previous load has been converted to charcoal, as there is very little smoke at this stage. Rake the ashes lightly to uncover pieces of charcoal trapped where they will not burn. Add a few small pieces of wood to the fire, than larger logs. Weather conditions will determine the firing rate.

DURING MILD WEATHER

When the temperature is warmer you only need to add enough of the driest wood available to last four to six hours. This will cut down on the amount of fuel you use. **DO NOT** use green or wet wood, as the moisture in it will cause the heater to smolder and deposit creosote in the flue and chimney. It is wisest to use small pieces of wood and turn the thermostat control knob up at least once a day for long enough to burn off any creosote which may have built up overnight in a slow fire (about 15 minutes).

REMOVING THE ASHES

When the ashes are within two inches of the bottom of the louvers on each corner of the inside side liners, they must be removed. A shovel is provided for this purpose. Leave about one inch of ashes in the chamber to prevent warping.

This heater has an over fire air duct which allows entry of preheated secondary combustion air over the fire. This ensures complete burning of the gases and minimizes the incidence of creosote in the flue pipe and chimney.

USING THE FAN/BLOWER

The ten inch circulating fan with automatic fan control is an optional feature. This single speed blower has a 400 CFM capacity to circulate the warm air into hard to heat places.

Twice a year you should oil the motor with a few drops of motor oil (SAE 20/30) Be careful not to over oil it. If your fan is a sealed bearing type, no oiling is required.

UNCONTROLLED FIRES

Uncontrolled fires can be caused by too much fuel, opening the combustion air damper too far, or too much flue draft. Should this occur: **CALL THE FIRE DEPARTMENT! DO NOT REMOVE THE FLUE PIPES UNTIL THE FIRE IS COMPLETELY EXTINGUISHED!**

CREOSOTE

Creosote can be a problem with any type of wood burning equipment so it is important to know what it is and how to avoid it.

Creosote is an oily or tarry liquid resulting from the distillation of wood during the process of combustion. It is present in the gases given off all types of burning wood, and in its solid and semi-liquid state is highly combustible.

When creosote forms on the inside of flue pipes and chimneys it can build up considerable thickness. As the creosote builds up, the draft opening is reduced. When the build up is permitted to take place over an extended period of time, sufficient creosote may be present in the stack to cause a serious fire if ignited. All users of automatic wood burning equipment should be thoroughly familiar with the causes, control and cure of creosote. When automatic wood burning equipment is properly installed and used, the incidence of creosote buildup is greatly reduced.

CAUSES OF CREOSOTE FORMATION

Creosote is formed from flue gasses when the stack temperature drops below 250 degrees F (120 degrees C). The amount of creosote deposited in the pipe and the chimney is affected by the amount of moisture in the flue gases, the temperature of the stack, the amount of draft in the stack, and how completely the combustion elements in the flue gases have been consumed in the process of combustion.

REMOVAL OF CREOSOTE

A:) When the flue pipe and chimney become coated due to improper burning conditions, the only practical way of cleaning is to disassemble the pipe and scrape the inside of the chimney..

The best way to remove creosote from the chimney is with a two cone-shaped wire brush slightly larger than the chimney. As they are pulled up the chimney, they scrape away the creosote.

B:) The small amounts of creosote that are normally deposited can be kept from accumulating by :

1. Opening the draft by turning up the thermostat for 20 or 30 minutes before adding fuel. This will increase the stack temperature and cause any creosote in the pipe to dry. In the process of drying, the creosote shrinks, and the scale falls from the inner wall of the pipe.
2. Remember a fast fire a day will keep creosote away. A small intense fire is preferable to a large smoldering one.

CONTROL OF CREOSOTE

A) Moisture in the flue gas can be kept low by:

1. Using the driest wood obtainable.
2. Mixing small pieces with every charge. These smaller pieces should be placed on the charcoal bed when adding fuel.
3. Not using only large wood during mild weather when combustion is relatively slow. Add small pieces.
4. Always using dry, split wood in mild weather.
5. Never adding more than a 12 hour supply of wood at one time.

B) The temperature of the stack can be increased to reduce creosote formation by:

1. Insulating smoke pipe extensions so that they will be cooled as little as possible before reaching the chimney.
2. Using an insulated chimney

C) The amount of draft in the stack can be controlled by:

1. Having as few elbows as possible
2. Insuring adequate height and diameter
3. Preventing any air leaks
4. Eliminating any external obstructions at the chimney outlet.

D) The rate at which the wood is burned is dependent upon the seasons and your heating requirements.

Creosote deposits are more apt to occur during mild weather when the draft damper is closed, and the wood just sits in the firebox smoldering. During mild weather when little heat is required feed only enough dry wood to last four to six hours.

SUMMER CARE

After your last fire of the season, remove the ashes from your heater and clean it thoroughly inside and out.

Handy Hints

Using cotton gloves when tending the heater will keep your hands clean and prevent any small burns.

Place an open newspaper on the floor in front of the heater to protect the floor covering when adding fuel.

Smoke discharging into the room when the fuel charging door is opened usually indicates that the previous charge has not completely burned or that there is insufficient draft in the chimney.

If your heater is attached to a good chimney with adequate draft and is operated according to our instructions you should have years of trouble free comfort.

If, however, you do experience any trouble contact your Valley Comfort dealer. They will need to know the kind of wood you've been burning, the average size of pieces, the type, condition and size of the flue and whether it is tile lined. Sketch the heater and flue pipe hook-up to the chimney.

**NOTE: Products of combustion can contain carbon monoxide,
especially when the fire is smoldering and starving for air.
To prevent this, do no close the damper too tightly.**

