

## #8 Maintaining your heating system

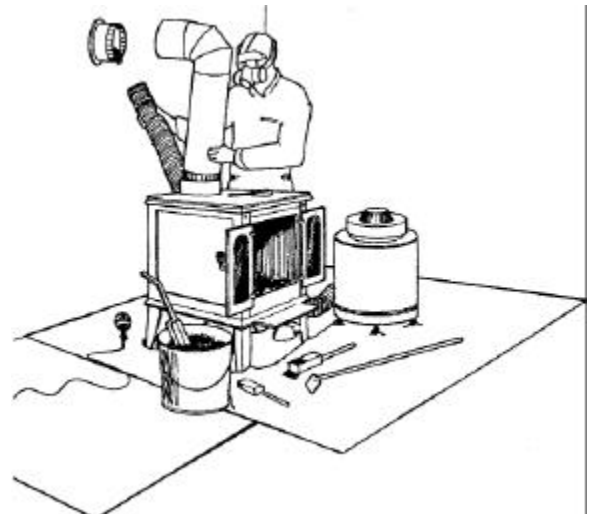
Your woodburning appliance and its venting system operate under very severe conditions. Steel and cast iron parts may be corroded by condensation and creosote acids. Creosote deposits that build up in the chimney and flue pipe must be removed regularly in order to prevent chimney fires. Regular maintenance is the key to ensuring that your woodburning system operates safely and efficiently.

Chronic creosote problems are a sure sign that something is wrong with your appliance, your operating procedures or your fuel. Refer to WISE fact sheets #7 and #11 (Operating Your Appliance... Safely and Purchasing, Processing and Seasoning Wood) for helpful hints on how to avoid creosote problems.

If you have a certified appliance, you should also check the operating manual for maintenance information. If you do not have an operating manual, write to the manufacturer to request one. (The manufacturer's name will be on the label.)

### CHIMNEYS AND FLUE PIPES

Flue pipes are often the weakest link in a wood heating system. Single-wall pipes are susceptible to corrosion by creosote acids and moisture. Joints in elbows can be weakened by corrosion. The connection between a flue pipe and a masonry chimney may need upgrading to meet current standards.



Cleaning the flue pipe

➤ Inspect your appliance's flue pipe assembly regularly. Check frequently at first, until you get to know how quickly deposits build up.

➤ You may wish to have a WETT-certified service person do the inspection and cleaning. If you do it yourself, be prepared! Working with flue pipes can be a messy job, so have your tools and vacuum cleaner ready before you start, and be sure to wear a dust mask and eye protection.

*(We do not recommend sweeping as a do it yourself job)*

➤ Separate the flue pipe assembly into manageable sections, but leave most sections screwed together. Be sure to mark the joints that you do separate in order to make reassembly easier. Take the assembly outside to inspect and clean it. Carry it with one end in a pail to keep creosote and soot from spilling in the house.

➤ Use a properly sized plastic or metal chimney brush to clean the pipes, and note any weak sections as you clean them. If the pipes have corroded noticeably, replace the entire assembly.

➤ Reinstall the assembly, making sure that each joint is securely fastened with three screws. Make sure the flue pipe is securely fastened to the chimney. Ensure that there is enough clearance between the flue pipe and nearby combustible materials (refer to WISE fact sheets #3 and #4).

The best way to clean chimneys is with a plastic or metal brush, but avoid using metal brushes in metal-lined chimneys - they may scratch the finish or punch into the metal when the brush is reversed. In most cases, you will need to make several passes with the brush to remove chimney deposits.

### Hire a Chimney Sweep!



Chimney sweeping is a very messy job, and can be difficult on high, steep roofs. As a result, many people prefer to have it done by a qualified chimney sweep. A WETT certified sweep will not only clean your chimney properly, he or she can also advise you on how to operate your appliance to minimize creosote production (see WISE fact sheet #7). WETT certified sweeps could also answer questions on clearances, chimney condition and other safety issues.

*Every woodburning system has a different rate of creosote build-up. Some need cleaning once a month; others only need cleaning once a year.*

### GASKETS

Replace gaskets as often as needed to keep a good seal between the loading and ash doors and the appliance body. Use a replacement gasket of the same thickness and density as the original. Asbestos gaskets are no longer recommended. A wide variety of high-temperature fiberglass gaskets are now available.



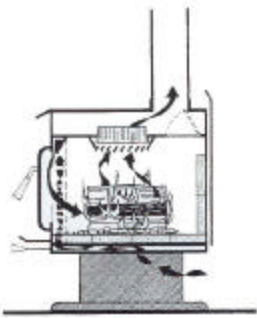
Use only enough furnace cement or gasket glue to hold the gasket in place. Too much cement will reduce its flexibility. You may need to adjust the door latch after installing a new gasket.

## GLASS

The glass doors on your woodburning appliance will stay relatively clean if you burn hot, bright fires. If the glass needs cleaning, use a commercial product intended specifically for fireplace and wood stove glass.

- Do not use oven cleaner: it attacks gaskets.
- Never use abrasive cleaners or scrapers.
- Never try to clean hot glass: wait until it cools to room temperature.
- Avoid getting glass cleaner on metal finishes.

If you must replace the door glass on your wood stove or fireplace, use only the glass specified by the appliance manufacturer.



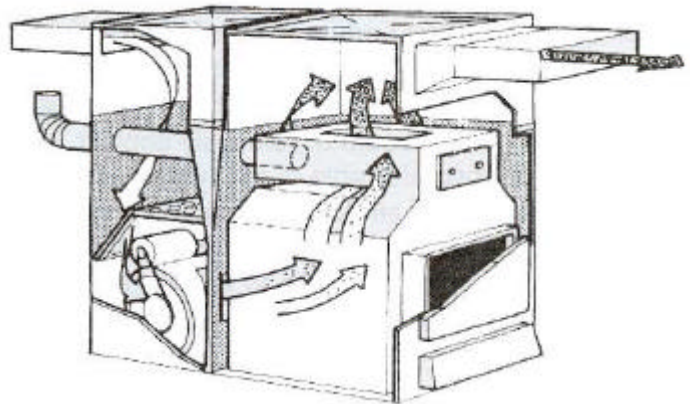
## CATALYTIC Combustors

Catalytic combustors should be inspected regularly and cleaned at least once a year. Some manufacturers suggest cleaning after every two months of full-time operation, so be sure to check the instructions for your appliance. Be careful when handling the combustor, as many are quite fragile.

If you suspect your combustor isn't working properly, ask a WETT-certified professional for advice.

## WOOD FURNACES

You should inspect your wood furnace at least three times a year: around Christmas, at the beginning of March and at the beginning of May. Clean the flue passages and heat exchange surfaces, and inspect them for heat stress and corrosion. You may wish to have a WETT certified technician or chimney sweep do the inspection and maintenance for you.



## FIREBOX LINERS

The firebox liner protects the shell of your woodburning appliance from intense heat, and keeps the interior of the firebox hot to promote complete combustion. Be sure to replace firebricks promptly if they're cracked or damaged.

## MAINTENANCE CHECKLIST

- Check the flue pipes and chimney regularly for creosote build-up, particularly in the fall or when getting used to a new appliance. Clean when deposits exceed 6 mm (1/4 in.).
- Replace damaged gaskets promptly.
- Give your system an annual tune-up.
- Clean the flue passages and heat exchange surfaces of your wood furnace regularly, and inspect them for heat stress and corrosion. Replace damaged parts.
- Replace damaged firebox parts promptly.
- Empty ashes frequently. Don't let them build up! Store ashes in a covered metal bucket, well away from anything that could burn.

## OFF-SEASON maintenance

Creosote left in flue pipes and appliances can mix with humid air in the summer to form a very corrosive mixture. You can avoid off-season corrosion problems by thoroughly cleaning the system after the last fire of the heating season.

*This fact sheet is intended only to provide an introduction to the topic of "Maintaining your heating system" not a "how to" manual! Be sure to consult a WETT certified professional for more detailed information and explanations.*

## The WISE Fact sheet Series

1. Is Your Wood Heat Installation Safe?
2. Space Heating With Wood
3. Appliance and Flue Pipe Clearances
4. Reducing Clearances With Heat Shields
5. Chimneys
6. Flue Pipes
7. Operating Your Appliance ...Safely
8. Maintaining Your Heating System
9. Fireplaces
10. Fireplace Inserts
11. Purchasing, Processing and Seasoning Wood
12. Central Heating With Wood

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## Wood Energy Technical Training (WETT)

The Wood Energy Technical Training Inc, is a non-profit, educational institution established in 1988. Provincial affiliates of WETT Inc are dedicated to chimney and venting system safety, and to the elimination of residential chimney fires, carbon monoxide intrusion and other chimney related hazards that result in the loss of lives and property. WETT devotes its resources to educating the public, chimney service professionals, and other fire prevention specialists about the prevention and correction of chimney and venting system hazards.

WETT has developed a training and certification program for wood heat appliance installers, inspectors, chimney sweeps and other professionals called the "Wood Energy Technical Training" (WETT) program. Be sure that any wood heat professional you consult is WETT certified. Look for the WETT logo, it's your best guarantee of reliable advice. For additional information, contact:

*Wood Energy Technical Training Inc* at 1-888-358-9388 or fax at 1-416-968-6818 or email at [info@wettinc.ca](mailto:info@wettinc.ca)

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