

Pellet Performance and Stove Maintenance

Stove maintenance is an integral part of heating with pellets. Many performance issues can be resolved with a thorough cleaning. Inadequate maintenance can lead to reduced heat output, increased ash, ignition failure, and even safety hazards. Maintenance frequency will depend on stove design, usage, and fuel quality.

As each stove is unique, start by reading your manual to understand the required maintenance schedule. Your manual will also include important safety precautions. The instructions below are typical and apply to most stoves. They are in no way intended to replace the instructions provided by your stove manufacturer.

Routine Maintenance Tasks

- 1. Burn Pot and Grate: Inspect daily. Remove ash/clinkers to fully open the air inlets. Blocked air inlets can prevent adequate combustion air from reaching pellets, potentially causing ignition failure or incomplete combustion. Hazards of incomplete combustion include creosote and carbon monoxide.
- 2. Ash Drawer: Empty ashes and deposit into non-combustible container with fitted lid.
- **3. Heat Exchanger:** Fly ash builds up here and acts as an insulator, reducing heat transfer to your home. It can also interfere with combustion airflow, which again is imperative for a successful and safe fire.
- 4. Ash Traps/Baffles: Fly ash also accumulates here. Inspect regularly and clean when necessary.
- **5. Glass:** Clean with glass cleaner when glass is completely cool. Some stoves may recommend more vigorous cleaning methods.

Advanced Maintenance Tasks

These tasks are also part of an essential maintenance schedule. Some handy stove owners tackle these tasks themselves, while others hire a professional technician:

- 1. Motors and Fans: Clean to remove fly ash, house dust, and other buildup. Failure to remove accumulation can reduce fan speed and interfere with airflow. Some designs may require lubrication. Manufacturer instructions should be closely followed.
- **2. Venting System:** Ash byproducts, left unmaintained, can block combustion air. If maintaining yourself, be certain to use the proper vacuum and tools. Assembly joints should be checked for possible leaks.

Professional Service

Most stove manufacturers recommend a professional service at least once a year. To find a National Fireplace Institute (NFI) Certified Pellet Professional in your area, visit www.nficertified.org. A professional service should include:

- 1. Thorough cleaning and inspection of the entire system. A professional technician has the necessary tools and knowledge to access and service complex components.
- 2. Testing and calibration of stove settings with proper gauges and measures
- 3. Inspection of all mechanical and electrical components and repairing/replacing as needed
- 4. Inspection of all gaskets/seals and resealing as needed