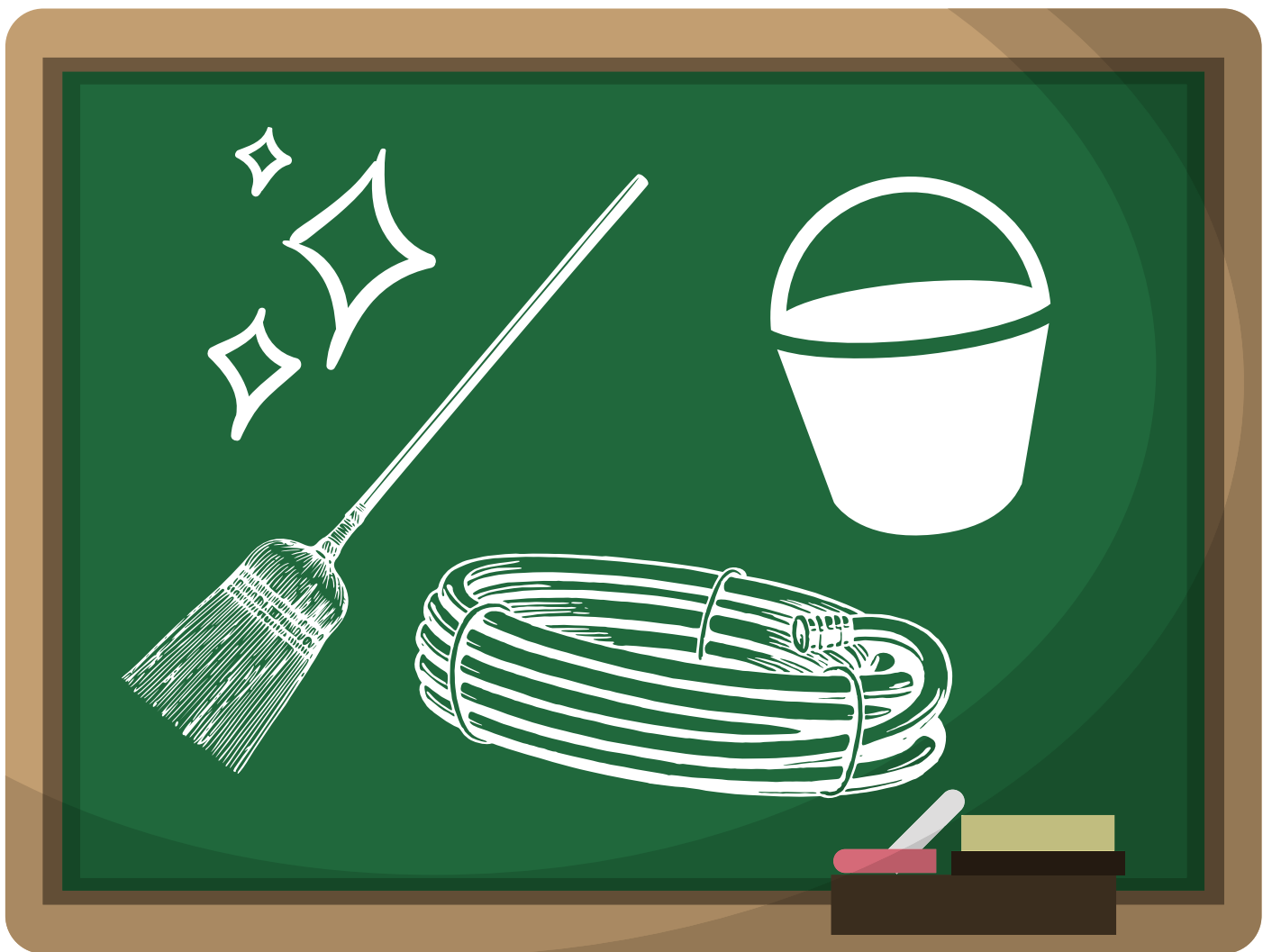


# Guide to Stove Cleaning

A How-to Guide to Deep Cleaning Your Pellet Stove



This guide is designed as a reference for cleaning out the rear exhaust chambers on ComfortBilt stoves.

*\*Whenever performing maintenance on your stove, ensure that the stove is cool, and that the power has been disconnected.*

# Regular Maintenance

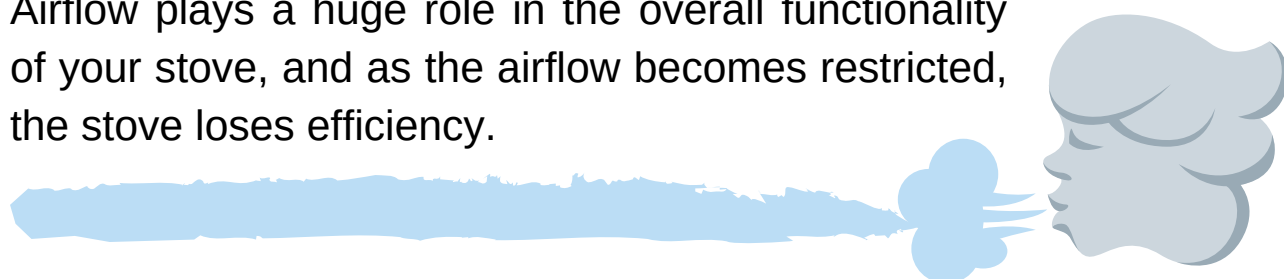
---



*A majority of all problems with pellet stoves are either directly or indirectly related to general maintenance and cleaning issues. Regularly cleaning your stove will allow it to function properly and extends the life of most of the stove's components. Use this guide in conjunction with your Operator's Manual for optimal results.*

## Airflow

Airflow plays a huge role in the overall functionality of your stove, and as the airflow becomes restricted, the stove loses efficiency.



The main reason for inefficiency in a pellet stove is an improper fuel-to-air ratio.

Knowing the total airflow circuit will aid in the troubleshooting of your stove.

1. Air is drawn in through the 2" air intake pipe on the back.
2. It then makes its way to the chamber underneath the burn pot.
3. As the air is drawn through the burn pot, it produces a bellows effect, creating a torch-like flame.
4. The hot air is then drawn to the top of the stove and around the heat-transfer tubes.
5. Passing around the tubes, the air is then drawn down the rear airflow/exhaust chambers. (Ash will travel with the hot air and deposit into these chambers).
6. Once in the rear chamber, the air is drawn to the left side of the stove and expelled out of the 3" exhaust pipe on the back by the exhaust fan. (Not all of the ash will deposit into these rear chambers, but over time it will build up and need to be cleaned out to restore proper airflow and efficiency.

*\*A good rule of thumb is to thoroughly clean these chambers once every 1-2 tons of pellets burned).*

## Instruction

*First, you will need to locate the access panels/chamber covers to the rear exhaust chambers. These access panels/chamber covers are small, rectangular, metal plates that are affixed with 2 wing nuts*



- Refer to “**Location of Chamber Covers by Model**” for a description of where to find the panels on your stove model.
- Once you have located the chamber cover panels, you will then remove them by unscrewing the wing nuts and pulling the plate back.
- There is a gasket behind the plate to help make an airtight seal so that the stove does not draw in air through these panels. It is okay to cut through the center of the gasket to access the chamber behind it. As long as there is adequate gasket material around the perimeter, it will provide a proper seal.
- Using a slender hose attachment on your ash vac, thoroughly vacuum out these chambers top to bottom. As stated in the “Airflow” section above, these chambers extend all the way up to the heat transfer tubes near the top of the stove, so it is imperative that the entire chamber is cleaned, top to bottom.
- Using a cross-hatching/sweeping motion will ensure that no area is neglected and as much of the ash and debris is removed as possible.

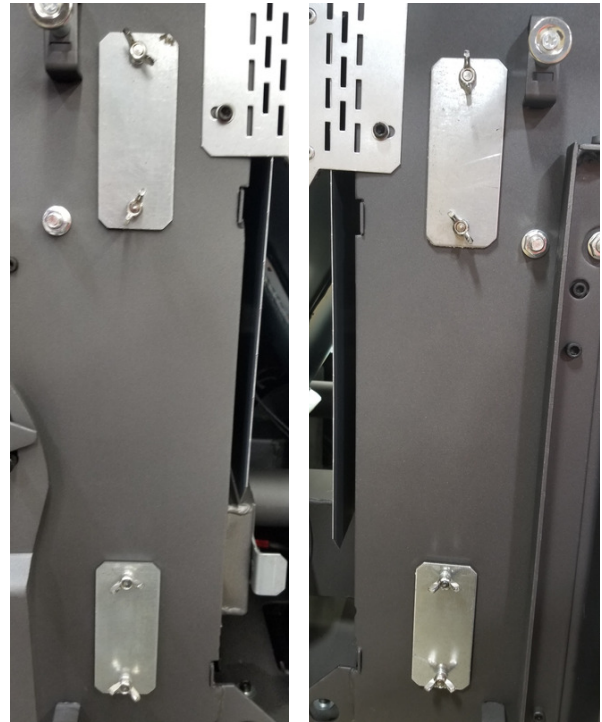
*\*If your ash vac does not have a hose attachment that is long, slender, or flexible enough, many people have used a 3 foot section of garden hose (or similar) attached to the end of their ash vac. Any hose that is rigid enough to reach the top of the stove, but flexible enough to make the angles needed will work*

# Location of Chamber Covers by Model



- **HP21 & HP22i Insert**

On both the HP21 and the HP22i Insert models, there are a total of 4 clean-out access ports. There are 2 ports on each side of the stove. (2 left, and 2 right - top and bottom) These are accessed via the side panels.



- **HP50**

The HP50 has similar access panels to the above HP21, with the difference being it only has 2 total ports. (One on the left, and one on the right - on the bottom)





- **HP22 & HP22N**

On both the HP22 and the HP22N models, there are 2 total clean-out access ports. One is about 6 inches below the air intake damper, the other is on the top portion of the square exhaust pipe, adjacent to the exhaust motor housing.



- **HP61**

The HP61 model has the same two access ports as the HP22 above, but also has one more mounted vertically to the back of the burn box / firewall on the exhaust side of the stove.



## Final Steps

Once all of the cleaning of the rear chambers is finished, you will want to reaffix the cover plates using the wing nuts provided. Ensure that there is enough gasket material around the perimeter to ensure a proper seal. If the current gasket is unusable, simply scrape it off and replace it with another high-temperature gasket. (This can be either a liquid or sheet gasket material). When affixing the plate with the wing-nuts, avoid over tightening/stripping the threads on the wing nuts.