



Energy Saving Tips: Cleaning Inside Personal Computer Cases

Sonja Koukel
Assistant Professor of Extension
April 2008

Most people clean the outside of their personal computer cases. This can be done with almost any type of general household cleaner. However, cleaning the inside of your personal computer case should be a primary objective.

Why clean inside the computer case?

The accumulation of dust inside your personal computer case will clog air vents and diminish the fans' ability to cool your system. As your computer runs, two or more fans are constantly turning. The fans circulate air through the computer case in an effort to keep the internal parts cool. Unfortunately, as those fans bring in air, they also bring in dust. The dust settles and builds up on the inside components. If you ignore this buildup, the components will run at increasingly warmer temperatures. This situation may eventually result in permanent heat-related hardware failures.

Clean inside the computer case at least twice a year. If you live in a dusty environment or always leave your computer running, clean more often.

To clean the interior, you'll need a can of compressed air. Don't use anything wet, such as soapy washcloths or alcohol-soaked cotton swabs. The compressed air is used to blow out the dust found inside the computer case. Generally, this product is found wherever electronics are sold.

What is compressed air? Cans of compressed air aren't really filled with air at all. Instead, they contain a variety of chemical formulations that are packaged in cans in the form of compressed gas. When exposed to air, the compressed gas changes form very quickly. For this reason, it's important to hold the can in an upright position before and during use to prevent a gas-liquid mixture from being leaked. This type of liquid can cause frostbite and burns if it touches your skin. Also, it can discolor plastics and other materials.

Before using the compressed air, take a moment and pick your targets. You need to remember to *gently* blow the compressed air into the targets. Use the wand that comes with the can to direct the airflow with precision. Generally, manufacturer's instructions will suggest using a series of short bursts.

Step-by-Step Instructions for Cleaning Inside the Personal Computer Case

1. Shut Down and Power Off the computer.
2. Unplug all cables from the energy source.
3. **Beware!** Static discharge can ruin your computer's internal components.
 - a. Set the computer case on a clean, lint-free surface.
 - b. *Do not set the computer on carpet.*
 - c. An option is to use antistatic mats or antistatic grounding strips, available from most electronics retailers.
4. Ground yourself before touching any components inside the case! Discharge any static electricity you may be carrying. This can be done by:
 - a. placing your hand on the metal frame of the computer case, OR
 - b. putting on an antistatic wristband (sold by most electronics retailers).
5. *Never open the power supply case and don't insert anything into it. Doing so can result in a severe injury or a fatal electric shock.*
6. Cleaning with the compressed air:
 - a. Hold the can of compressed air as upright as possible.
 - b. Spray into the power supply vents located on the inside of the case. (You may want to refer to the Owner's Manual or User's Guide that came with your PC to locate these vents). Direct the spray so that dust particles exit the back of the case.
 - c. Spray all components within the case. Pay close attention to all the fans.
 - d. Spray through all of the port and jacks on the back of the computer. *Don't blow compressed gas from the inside of your case through the CD, DVD, or Zip drives as this might cause damage.*
7. Reassemble the computer case.

Frequently Asked Questions

- Do I need to clean the inside of my laptop? Owners of laptop computers should never disassemble their laptops. Simply spraying compressed air through any open vents or on fans is all that's required. Because laptops are so small, the accumulation of dust within them is rarely an issue.
- What about the small vacuums sold specifically for cleaning inside personal computer cases? These products are not recommended because they tend to leave a lot of dust behind. Also, the process of vacuuming generally results in touching internal components with the vacuum or one of its attachments. This can create even more problems.

++++
Source:

Clean your PC's case inside & out. Web-Only Articles (April 2006). *Smart Computing*. Retrieved April 28, 2008, from <http://www.smartcomputing.com>

For more information, contact the Cooperative Extension Service Juneau District
907-796-6221 or ffsdk@uaf.edu

Visit the Cooperative Extension Service Website at www.uaf.edu/ces