

GENERAL COMPUTER CLEANING TIPS

Below is a listing of general tips that should be taken when cleaning any of the components or peripherals of a computer as well as tips to help keep a computer clean.

1. Never spray or squirt any type of liquid onto any computer component. If a spray is needed spray the liquid onto a cloth and then use that cloth to rub down the component.
2. Users can use a vacuum to suck up dirt, dust, or hair around their computer on the outside case and on their keyboards. However, **do not** use a vacuum for the inside of your computer as it generates a lot of static electricity that can damage the internal components of your computer. If you need to use a vacuum to clean the inside of your computer use a portable battery powered vacuum designed to do this job.
3. When cleaning a component and/or the computer turn it off before cleaning.
4. Never get any component inside the computer or any other circuit board damp or wet.
5. Be cautious when using any type of cleaning solvents, some individuals may have allergic reactions to chemicals in cleaning solvents and some solvents can even damage the case. Try to always use water or a highly diluted solvent.
6. When cleaning be careful not to accidentally adjust any knobs or controls. In addition when cleaning the back of the computer if anything is plugged in make sure not to disconnect any of the plugs.
7. Never eat or drink around the computer.
8. Limit smoking around the computer.

CLEANING TOOLS

Although many companies have created products to help improve the process of cleaning your computer and peripherals users can also use household items to clean their computers and peripherals. Below is a listing of items you may need or want to use while cleaning your computer or computer peripherals.

Keep in mind that some components in your computer may only be able to be cleaned using a product designed for cleaning that component, if this is the case it will be mentioned in the cleaning tips.

- **Cloth** - A cloth is the best tool used when rubbing down a component, although paper towels can be used with most hardware we recommend using a cloth when ever possible.
- **Water or rubbing alcohol** - When moistening a cloth it is best to use water or rubbing alcohol. Other solvents may be bad for the plastics used with your computer.
- **Portable Vacuum** - Sucking the dust, dirt, hair, cigarette particles, and other particles out of a computer can be one of the best methods of cleaning a computer. Over time these items can restrict the airflow in a computer and cause circuitry to

- corrode. Do not use a standard vacuum as it can generate a lot of static electricity that can damage your computer.
- **Cotton swabs** - Cotton swabs moistened with rubbing alcohol or water are excellent tools for wiping hard to reach areas in your keyboard, mouse, and other locations.
 - **Foam swabs** - Whenever possible it is better to use lint free swabs such as foam swabs.

CASE CLEANING

Why? Keeps the appearance of the computer looking new. During cleaning if ventilation locations are found these can be cleaned helping the case keep a steady airflow to the computer keeping components cool and in good working condition.

Procedure: The plastic case that houses the PC components can be cleaned with a lint free cloth that has been slightly dampened with water. For stubborn stains, add a little household detergent to the cloth. It is recommended that you never use a solvent cleaner on plastics.

Make sure all vents and air holes are hair and lint free by rubbing a cloth over the holes and vents. It is also helpful to take a vacuum around each of the hole, vents, and crevices on the computer. It is safe to use a standard vacuum when cleaning the outside vents of a computer, however if you need to clean the inside of the computer, use a portable battery powered vacuum to prevent static electricity.

CD-ROM CLEANING

Why? A dirty CD-ROM drive or other disc drive can cause read errors with CD discs. These read errors could cause software installation issues or issues while running the program.

Procedure: To clean the CD-ROM drive we recommend purchasing a CD-ROM cleaner from your local retailer such as a local Radio Shack. Using a CD-ROM cleaner should sufficiently clean the CD-ROM laser from dust, dirt, and hair.

Also see our below CD cleaning recommendation for steps on cleaning each of your CDs.

CD CLEANING

Why? Dirty CDs can cause read errors and/or cause CDs to not work at all.

Procedure: Cleaning CDs should be done with a CD cleaning kit, however can also be done with a normal clean cotton cloth or shirt. When doing this with a clean cotton cloth or shirt, wipe against the tracks, starting from the middle of the CD and wiping towards

the outer side of the CD. Never wipe with the tracks doing so may put more scratches on the CD.

It is recommended when cleaning a CD that water is used. However, if the substance on a CD cannot be removed using water, pure alcohol can also be used.

FLOPPY DRIVE CLEANING

Why? Dirty read/write heads on the floppy drive can cause errors during the reading and/or writing process.

Procedures: The floppy drive can be cleaned two different ways. The first method of cleaning a floppy drive and our recommended method is to purchase a kit at your local retail store designed to clean the read/write heads on your floppy drive.

The second method of cleaning the floppy drive is only recommended for experienced computer users. Open the floppy drive casing and physically swab the read/write heads with a lint-free foam swab soaked in pure alcohol, free-on, or trichloroethane. When performing these steps be extremely careful when cleaning the heads to ensure that you do not lock them out of alignment causing the floppy drive to not work. To help prevent the heads from becoming out of alignment use a dabbing motion lightly putting the swab on the head and removing it, do not perform a side-to-side motion with the swab.

HARD DISK DRIVE CLEANING

Why? While hard drives cannot be cleaned physically they can be cleaned with various utilities on the computer to help it running fast and more efficiently. Utilizing these utilities will prevent the hard drive from slowing down.

Procedure: Refer to our basic troubleshooting section for your operating system for steps that can be done to help improve the performance of your computer.

HEADPHONES CLEANING

Why? Headphones that are used by multiple people may need to be cleaned frequently to help with the spreading of germs and head lice.

Procedure: If the headphones being used are plastic and/or vinyl moisten a cloth with warm water and rub the head and earpieces of the headphones. As mentioned earlier in our cleaning tips it is recommended that your headphones are being used for a library or school that you do not use any type of disinfectant or cleaning solvent as users may have allergic reactions to the chemicals they contain.

Headphones that have cushions often also have the availability of replacement cushions. Replacing these cushions can also help keep the headphones clean.

Finally, in regards to headphones and the spreading of head lice if multiple students are using your headphones you should consider having the students using their own headphones, using bags that are placed over the headphones, or having headphones that can be wiped with warm water after each student has used the headphones.

KEYBOARD CLEANING

Why? Dirt, skin cells, dust and hair can build up causing the keyboard to not function properly.

Procedure: Many people clean the keyboard by turning it upside down and shaking. A more effective method is to use compressed air. Compressed air is pressurized air contained in a can with a very long nozzle. Simply aim the air between the keys and blow away all of the dust and debris that has gathered there. A vacuum cleaner can also be used, but make sure the keyboard doesn't have loose "pop off" keys that could possibly be sucked up by the vacuum.

Why? If the keyboard has anything spilt into it, not taking the proper steps can cause the keyboard to be destroyed.

Procedure: The following are a few recommendations to help prevent a keyboard from becoming bad once a substance has been spilt within it. First, turn the computer off immediately. Once the computer is turned off quickly flip the keyboard over helping to prevent the substance from penetrating circuits. While the keyboard is upside shake the keyboard on a surface you do not mind getting wet or that can be cleaned up later. While still upside down use a cloth to help clean out what can be reached. Once the keyboard has been cleaned the best it can, leave the keyboard upside down for at least one night. The longer it can be left without plugged in the better.

If a keyboard does not work after having a substance spilt into it, it is recommended that it be replaced.

Why? A keyboard that is used by multiple people such as students or different employees may need to be disinfected to help the spread of germs.

Procedure: Turn off the computer. Spray a disinfectant onto a cloth or damp a cloth with alcohol and rub each of the keys on the keyboard. As mentioned in our general cleaning tips never spray any type of liquid onto the keyboard.

LCD CLEANING

Why? Dirt, dust, and finger prints can cause the computer screen to be difficult to read.

Procedure: Unlike a computer monitor the LCD is not made of glass therefore requires special cleaning procedures.

When cleaning the LCD screen it is important to remember to not spray any liquids onto the LCD directly, do not use a paper towel as it may cause the LCD to become scratched.

To clean the LCD screen we recommend that you use a soft cotton cloth if a dry cloth does not completely clean the screen you can apply rubbing alcohol to the cloth and wipe the screen with the damp cloth. Rubbing alcohol is actually used to clean the LCD before it leaves the factory.

MONITOR CLEANING

Why? Dirt, dust, and fingerprints can cause the computer screen to be difficult to read.

Procedure: The monitor screen can be cleaned with ordinary household glass cleaner. Be sure to remove power from the monitor and spray the cleaner onto a lint free cloth so the fluid doesn't leak into the electrical components inside the monitor. Vacuum off any dust that has settled on top of the monitor, and make sure no books or papers have been placed on the air vents. Obstructed monitor vents can cause the monitor to overheat or even catch on fire.

MOTHERBOARD CLEANING

Why? Dust and especially particles of cigarette smoke can build up and corrode circuitry causing various problems such as computer lockups

Note: When inside the computer take the necessary ESD precautions and try to avoid unplugging any cables or other connections.

Procedure: Our recommendation when cleaning the Motherboard from dust, dirt, or hair is to use compressed air. When using compressed air hold it in the up-right position otherwise it is possible chemicals may come out of the container that could damage or corrode the Motherboard or other component within the computer. Also ensure when using compressed air that you always blow the dust or dirt away from the motherboard, or out of the case.

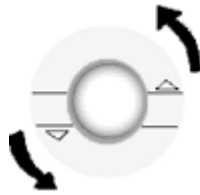
Another good alternative to compressed air is to use a portable battery powered vacuum that can effectively remove the dust, dirt, and hair from the motherboard completely and prevent it from getting trapped within the case. However, do not use a standard electricity powered vacuum as it can cause a lot of static electricity that can damage the computer. When using the vacuum it is vital that you stay a couple inches away from the motherboard and all other components to help prevent contact as well as to help prevent anything from being sucked into the vacuum. Ensure that you do not remove any small components with the vacuum such as jumpers.

Tip: When cleaning the inside of the case also look at any fans and/or heat sinks. Dust, dirt, and hair often collect around these components the most.

MOUSE CLEANING

Why? A dirty optical-mechanical mouse (mouse with a ball) can cause the mouse to be difficult to move as well as cause strange mouse movement.

Procedure: To clean the rollers of an optical-mechanical mouse you must first remove the bottom cover of the mouse. To do this examine the bottom of the mouse to see which direction the mouse cover should be rotated. As you can see in the below illustration the mouse cover must be moved counter clockwise. Place two fingers on the mouse cover and push the direction of the arrows.



Once the cover has rotated about an inch rotate the mouse into its normal position covering the bottom of the mouse with one hand and the bottom should fall off including the mouse ball. If this does not occur attempt to shake the mouse gently.

Once the bottom cover and the ball are removed you should be able to see three rollers located within the mouse. Use a cotton swab, your finger, and/or fingernail and move in a horizontal direction of the rollers. Usually there will be a small line of hair and or dirt in the middle of the roller, remove this dirt and or hair as much as possible.

Once you have removed as much dirt and hair as possible place the ball back within the mouse and place the cover back on.

If the mouse still appears to be having the same issue repeat the above process, if after several attempts the mouse is still having the same issues its likely that your mouse has other hardware issues and we recommend that it be replaced.

Note: Cleaning your mouse pad with a damp cloth can also help improve a computers mouse movement.

Why? To help keep a mouse clean and germ free it can be helpful to clean the mouse.

Procedure: Use a cloth moistened with rubbing alcohol or warm water and rub the surface of the mouse and each of its buttons.

PALM PILOT CLEANING

Why? Dirty touch screens can cause difficult navigation.

Procedure: To clean the Palm Pilot Screen use a soft cloth moistened with rubbing alcohol and rub the screen and the casing of the palm pilot. It is not recommended to use glass cleaner as it could damage plastics over time.

PRINTER CLEANING

Why? Cleaning the outside of a printer can help keep the printers appearance looking good and in the case of a printer that is used by many different people keep the printer clean of germs.

Procedure: First make sure to turn off the printer before cleaning it. Dampen a cloth with water or rubbing alcohol and wipe the case and each of the buttons or knobs on the printer. As mentioned earlier never spray any liquid directly onto the printer.

Why? With some printers it may be necessary to clean the inside of the printer to help keep the printer running smoothly.

Procedure: Because of numerous types of printers, different steps in cleaning printers, and printer manufacturers policies on cleaning the inside of the computer we recommend you obtain the printer cleaning steps from your printer manufacturer.

SCANNER CLEANING

Why? Flatbed scanners commonly become dirty with dust, fingerprints, and hair. When a scanner is dirty the images may have distortions.

Procedure: Clean a flatbed scanners surface by spraying a window cleaner onto a paper towel or cotton cloth and wipe the glass until clean. As mentioned earlier never spray a liquid directly onto the component.

To clean the outside of the scanner the same towel or cotton cloth can be used.