

Lab 10.3.6: Cleaning Computer Components

Estimated Time: 25 Minutes

Objective

Upon completion of this lab, you will know the proper procedures to clean computer components.

Equipment

The following items are needed in order to complete this lab:

- A computer with a keyboard, mouse, and monitor
- Mild detergent (a little soap, a lot of water)
- Cleaning rag
- Container for the detergent (bucket or spray bottle)
- Can of compressed air
- Tool kit
- Keyboard cap puller (optional)

Scenario

As a PC repair technician, you have been sent to fix a computer that has stopped working. A good practice when repairing PCs is to clean the computer before you leave it.

Procedures

When cleaning electrical components, it is critical that you **UNPLUG the device before working with it**. If there is power running to a computer system when you run a damp cloth over it, the results could be deadly.

Step 1

The first thing that should be cleaned is the inside of the computer case. To begin, unplug the power cord if it is not already unplugged. Next, remove the case cover either by removing the appropriate screws or latch. When the case is open, it is a good idea to keep the case standing vertical or even angled so that when you blow the dust out, it does not settle back inside.

Review the precautions and directions on the side of the air can. Use the air sparingly to blow the dust out of the power supply and off of all visible surfaces inside the case. Once all surfaces are clean, reattach the case cover.

Has the inside of the case been thoroughly cleaned? _____

Step 2

When cleaning the monitor, the first and most important step is to turn off the unit and unplug it from the wall. Once unplugged, it is safe to clean the surfaces with a cloth that is dampened with a mild detergent. If the cloth leaves streaks on the screen, there is too much liquid. A damp or moist cloth has only enough cleaner to help remove dust and clean the surface. Using a dry cloth, wipe down the screen and sides to remove any residual cleaning fluid.

When all sides of the monitor have been cleaned, it is a good idea to let it sit and dry for at least a half hour, just in case something may have dripped inside.

Has the monitor been thoroughly cleaned? _____

Step 3

The keyboard is the one computer component that has the most physical contact with the user. There are two areas of the keyboard that should be cleaned: the surface of the keys and the area below the keys.

The fastest way to remove dust and other loose objects from below the keys is to blow it out with a can of air. Start at one side of the keyboard and work toward the other side until the dust buildup is removed.

Step 4

If a liquid such as soda was spilled on the keyboard, the keys will need to be removed in order to clean it out. Using a keyboard cap puller, remove the keys in the area where the spill occurred and use a cloth to clean the mess. When thoroughly cleaned, the keys can be replaced by positioning them in the correct spot then pressing them down.

Has the keyboard been thoroughly cleaned? _____

Step 5

The mouse is one of the most frequently cleaned components on a computer. The optical mouse requires less cleaning than a mechanical mouse.

To clean a mechanical mouse, remove the locking ring on the bottom. The proper direction to turn the ring should be indicated by an arrow. Once removed, turn the mouse over to catch the ring and ball.

Observe two posts that are inside the mouse: the x-axis and the y-axis. If there is a buildup of dirt on either one of these, use a Q-Tip and some alcohol to remove the dirt.

Step 6

Once the dirt is removed from the posts, inspect the ball to make sure it is clean. If it needs to be cleaned, use a mild cleanser and a clean lint-free rag to clean off the dirt. Once the ball is clean and dry, put the ball back into the mouse and return the ring to the locked position.

Has the mouse been thoroughly cleaned? _____

Troubleshooting

If dust builds up in a power supply, it could cause it to malfunction or shut down. If the fans stop and the system overheats, internal components can be damaged as well. Preventive maintenance can prolong the life of not only the power supply, but also the entire system.

Reflection

How often should a computer system be entirely cleaned?

Why should computer systems be cleaned?
