

# Important Computer Repair Safety Tips

## Remember to Flip the Switch

Always, always, always remember to turn the power off before servicing anything. This should always be your first step.

Do not even open the computer case unless the power is turned off. Many computers have a number of lights inside that serve certain functions so check to see that no lights are on. If any are still on then the power is probably not completely off.

Many power supply units have a switch on the back, killing power to the device and ultimately the rest of your PC. If your PSU has one, be sure to turn it to the off position.

If you're working on a laptop, netbook, or tablet, be sure to remove the battery, as well as disconnect the AC power, before removing or disassembling anything.

## Unplug for Extra Safety

As a second precaution, it is wise to unplug the computer from the wall or power strip. If there was any doubt as to whether the computer was off before, it's settled now.

## Avoid Smoke and Smells

See smoke coming from the power supply or inside the case or smell a burning or solder scent? If so:

1. Stop what you're doing immediately.
1. Unplug the computer from the wall.
2. Allow the PC to cool or discharge unplugged for at least 5 minutes.

Finally, if you know which device was generating the smoke or smell, remove and replace it as soon as you can. Don't try to repair a device that's been damaged to this extent, especially if it's a power supply.

## Remove Hand Jewelry

An easy way to get electrocuted is to work around a high voltage device like a power supply with metal rings, watches, or bracelets on.

Remove anything conductive from your hands before working inside your computer, especially if you're doing something like testing your power supply.

## **Avoid Capacitors**

Capacitors are miniature electronic components contained in many of the parts inside a PC.

Capacitors can store electric charge for a short while after the power is turned off so it's a wise decision to wait a few minutes after pulling the plug before working on your PC.

## **Never Service the Non-Serviceable**

When you come across labels that say "No serviceable components inside" don't take it as a challenge or even a suggestion. This is a serious statement.

Some parts of a computer are just not meant to be repaired, even by most professional computer repair persons. You will usually see this warning on power supply units but you may also see them on monitors, hard drives, optical drives and other dangerous or highly sensitive components.

## **General Safety Rules:**

There are some equipment and materials in some classrooms and shops that could present a danger to you. Therefore, students are not permitted in other classrooms or shop areas without permission from the instructor.

The fire and evacuation plan for our classroom is posted in the room. Be prepared. Please review this posting periodically. Exit doors are located at all ends of the building as well as the front and back. Fire extinguishers are located inside each classroom.

Electrical equipment by its nature presents a constant hazard. If not handled properly and with respect for its inherent danger, it can cause serious physical damage / injury.

## **Classroom / Lab Safety Requirements:**

ESD (Electric Static Discharge) can destroy sensitive electronic components. ESD prevention methods and procedures will be adhered to at all times when handling sensitive materials.

Remember that a shock hazard exists whenever you are working around electrical devices. Take all necessary precautions and follow all safety guidelines to protect yourself and the equipment you are working on.

Individual workstations, network stations and printers will not be powered off unless instructed to do so by the instructor.

Always exit programs properly; never turn a computer off without properly exiting any open programs.

## **Workbench and ESD Safety Procedures:**

All electrical equipment on the workbench will be properly powered off when away from the workbench area. This includes all computers, peripherals, and test equipment.

When working with sensitive electronic devices that are susceptible to ESD damage your ESD wrist strap must be worn and properly grounded.

Only tools specifically designed for use on computers and sensitive electronic devices and approved by the instructor will be allowed. Magnetic tools and unprotected tools (no rubber or plastic handles) are not permitted for classroom use.

I, \_\_\_\_\_ hereby acknowledge and affirm that I have read and fully understand the safety requirements as stated in this document for the Computer Information Technology program.

Signature:

Date: