

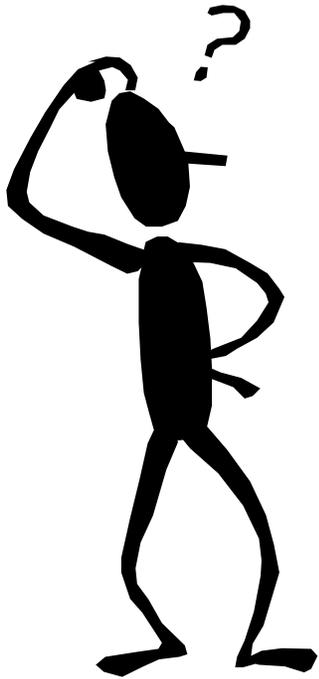


# CPU Disassembly Review

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**INSTRUCTIONS:** The following screens contain a series of questions and answers you should know about this subject. Read the stem of the question, review your notes, and then write down the answer the question. The correct answer can be found on the next screen. Review and compare your answer with mine. If they match... Great! If they don't... You have some studying to do before you take the module exam.

**Using a grounded wrist strap and a(n) \_\_\_\_\_  
mat assures an ESD safe environment.**



**Antistatic mats are specially designed mats that are grounded to earth with a detachable cable. The mats are somewhat expensive. However, along with the antistatic wrist strap this tool can drastically reduce the chances of destroying ESD devices.**



**The disassembly and assembly process of a computer workstation is complex. What are some things you should do to make sure you're successful?**



**I guess it's important to drive the point home that all procedures and devices should be used to make sure your workspace is static-safe. You can work without an antistatic wrist strap or mat and still be static safe using some procedures. However, it's best to use safety devices whenever possible. ESD damage occurs at the speed of light and are undetectable until you plug the thing in and it doesn't work.**



**To remove the main board or motherboard from the chassis, you must remove the mounting screws, power connector from the power supply, and the connectors leading to the \_\_\_\_\_ panel where power switch, LEDs, and other controls are mounted.**



**All of the switches and indicator lights you see on a computer are located on the front panel. Cables run from the front panel to the motherboard using push-on header plugs. Even the power switch on the front panel is connected mainboard.**





**Well... All of these things will hold a memory module but only one of these will protect ESD devices like memory modules and interface circuit cards. These devices should only be stored in static-safe bags.**



**During disassembly, it's important that you have a safe place to store the screws and other small parts you're going to remove from the computer. Your tool kit should include a zipper bag or \_\_\_\_\_ to store these pieces in until it's time to reassemble the computer.**



**One of the most important tricks of the computer repair trade you'll learn is keeping track of parts as you remove them. It's vitally important that all of the pieces you remove go back in the machine in the right place and right order. Select a parts box with lots of compartments. As you remove pieces you can place them in the box in compartments and in the same order as you remove them. Replacing the items is easier if you simply reverse the process.**



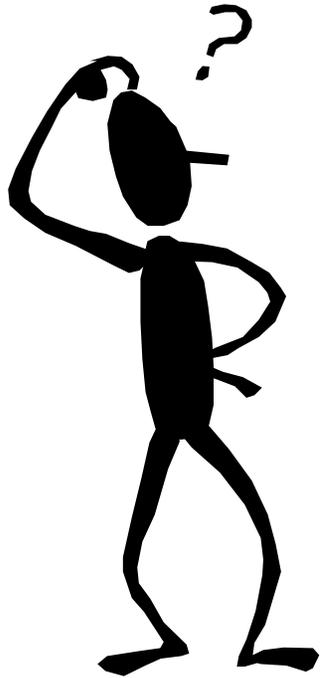
**The \_\_\_\_\_ is not a user serviceable device. Although it contains a fuse, opening this CPU component can subject you to lethal voltages even if the computer is unplugged. Only highly trained technicians should maintain these components.**



**The power supply unit is a self-contained module. Although you can get access to the internal circuitry by removing a few screws, that's not a good idea. The voltages available inside the power supply are lethal. There are also some rather large capacitors in the power supply that hold a charge even when the power supply has been turned off. There are no user serviceable parts inside the power supply. It's a field replaceable module and should not be opened.**



**Using too small of a screwdriver to remove and install screws will damage what?**



**It's really very important not to damage a customer's computer. That includes the slot on the screw heads. Damage is caused to tools and screws by using the wrong sized drivers. The driver head should fit snugly into the slots of the screw. Although it might work for a little while, using too small a driver will damage the screw head or screwdriver.**



**Most main boards accommodate ejector tabs to allow the easy removal and installation of memory SIMMs and DIMMs. To eject a memory module, push the tabs**



The main board or motherboard features slots for the memory modules. Memory modules would be very difficult to remove and install without some aide. To remove a memory module, ejectors are pushed down and away from each other. This forces the memory module out of the socket. To install the memory module you would lift the ejectors up at the same time.



**Typically... How many screws are required to secure the floppy, CD-ROM, and hard disk drives into a computer chassis?**



**This is a tricky question. It really depends upon the type of chassis the drives are mounted in. Typically, it takes 4 screws to properly secure the drives into the computer chassis. Some computer frames mount the drives in carriers that can be secured with 2 screws from the front.**



The motherboard is secured to the computer chassis on \_\_\_\_\_.



**The motherboard is mounted to the computer chassis on metal stand-offs that are secured to the metal computer case. The stand-offs are used to ground the motherboard electrically. Every screw used to secure the motherboard to the chassis also makes an electrical connection to ground. Using plastic stand-offs could cause damage to the motherboard because there would be no electrical path to ground.**

