



DIY Computer Repair

You have the parts,
here you will find the
technical expertise to
complete your custom
PC!

DIY Computer Repair Checklist

Trouble shoot it!



Brought To You By:

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WebMaster

www.diy-computer-repair.com

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Introduction

Hello and welcome.

I'm very excited about this particular e-course because of the way it is beneficial to you and your search for the right computer repair.

As with any repair always read the instructions if provided first. If you don't understand the instructions read them again. Lacking understanding of some instructions will be disastrous. Not only to your data, your computer, and maybe to you personally.

**DIY Computer Repair
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Repairing a Computer

Installing New Hardware

Installing new hardware is fairly simple, you check the oil level in your car engine, and if it is low you add the appropriate amount.

ESD - Electro Static Discharge - This is static electricity that is present everywhere. When you move you store up static electricity, when you touch something with less charge or more charge than your body you get a discharge of the static electricity either from you or to you. To keep from damaging components with static electricity you need to ground your body before handling them.

For a computer [safety](#) is the most important part of hardware installation.

So here is a small checklist to help you (print it out if you would like a hard copy).

- Disconnect the power cord
- If you are working in an area where access is tight I suggest you move the computer to an area where you have more room.
- Have an anti-static wrist band.
- Have an anti-static mat (optional)

Handling new components

New components come in an anti-static container.

- Envelope
- Plastic box
- Ground yourself before opening the case or packages.
- Leave the part in the package until ready to install.

Check the area where the new component will go, remove any components in the way, set aside in an anti-static environment. (on the anti-static mat or in a anti-static container).

Read the installation instructions (You experts too!)

Insure you are grounded.

Remove the new component from the package. (Now is a good time to look at the component for defects and damage)

Install the new component per the written instructions.

If you bought a component from some where and there aren't any installation instructions most components are easy to install.

A add on card or memory that will go in a slot.

- If you are inserting a card in the slot I have found that if you set the card in the slot, align the slot cover plate and press lightly it will go in the slot about one eighth of an inch. once you hit the spring tension on the contact fingers for the connectors then apply enough pressure to both ends of the card to get it to slide in to the slot.
- Some slots have a locking mechanism such as the locks on the memory slots.
- These should give you an audible 'click' when the locks pop in to place.

Drive mounting in case

- Drives should be mounted where the manufacture has designated a drive bay. The reason for this is the case (for most manufactures) has an air flow design.
- That is air flow in the case was a consideration when placing the drive bays where they are. For the best cooling mount drives in bays.
- Most cases have cut outs or holes for the mounting screws for the drives.
- If the drive came with out mounting screws and you are using left over screws from other projects make sure that the length of the screw is correct.
- A screw that is too long could be driven in to the PCB and damage the drive. (I usually put the screw I have selected in the threads and run it down to see how close it comes to the PCB before mounting the drive).

Power Supply

The power supply is a self contained unit and should never be opened by anyone that is not qualified to do so! There are no useable components in a power supply. Damaged power supplies should be disposed of in a safe and proper manner.

- Two things about the power supply –
 - Size - If the power supply is physically larger than the one you are replacing then you may have to modify the case.
 - If you modify the case be sure that you can use all the mounting hardware and that there is not any obstructions to the cooling.
- Cables - Route the new power supply cable where nothing will pinch or cut the cables, remember you are dealing with electricity, and electricity is not for giving.

Next will be the power on test.

- Before doing your power on test double check your work.
- Insure all cards are fully seated in their slots.
- Insure all cables are fully seated
- Check power connectors
- No extra screws?
- Nothing in the case that doesn't belong, loose screws, tools?
- Put the covers back on the computer, this will preclude you from touching parts while the computer is powered up.

Have the BIOS keypress ready to enter BIOS to check for the installed component.

- Power up.
- Did it start?

Yes - check for the new component in the BIOS

No – Power down, remove the power cord, check you work something is not installed properly.

Device Drivers

- When you have your new component installed chances are that it will need a driver to communicate with the Operating System before you can use it.
- Most manufactures know this and provide a means to get or to install the driver check the documentation that came with the component.
- If you have a old, second hand, or the manufacture did not provide a driver for the component this web site has a lot of drivers -

<http://www.nodevice.com/>

Enjoy your new component!



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