

Practical 04

Un-Cabling and Cabling the system unit

Objectives

- To be able to un-cable the internal components of the system unit.
- To be able to cable in the internal components of the system unit.
- Identify the risks and precaution while plugging-in and plugging-out the internal components of the system unit.

Tools

- System unit with motherboard.

Keywords: Cable, Un-Cable, System unit, Connectors.

Duration: 03 hours

4 Introduction

4.1 Un-Cabling the system unit

In this section we are going to see how we can open the system unit and unplug all the cables and internal components. First take a system unit box.



4.1.1 Procedure

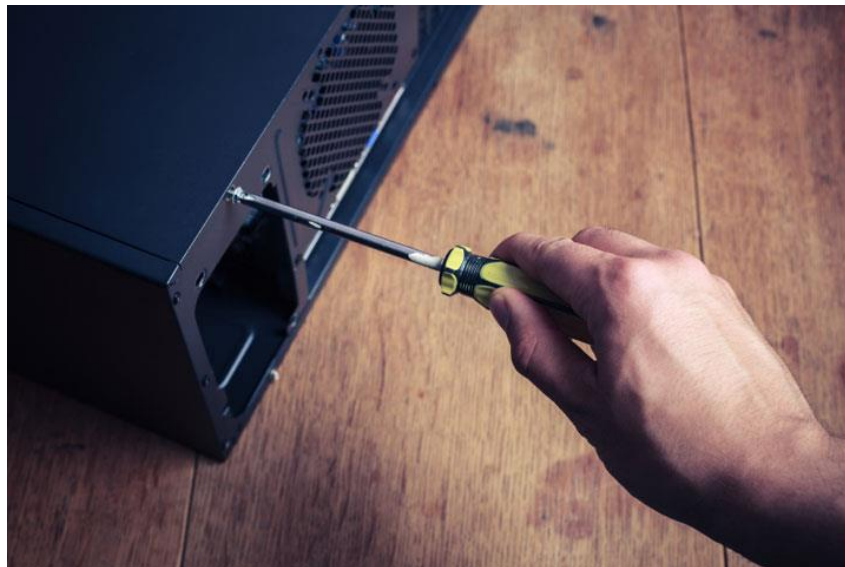
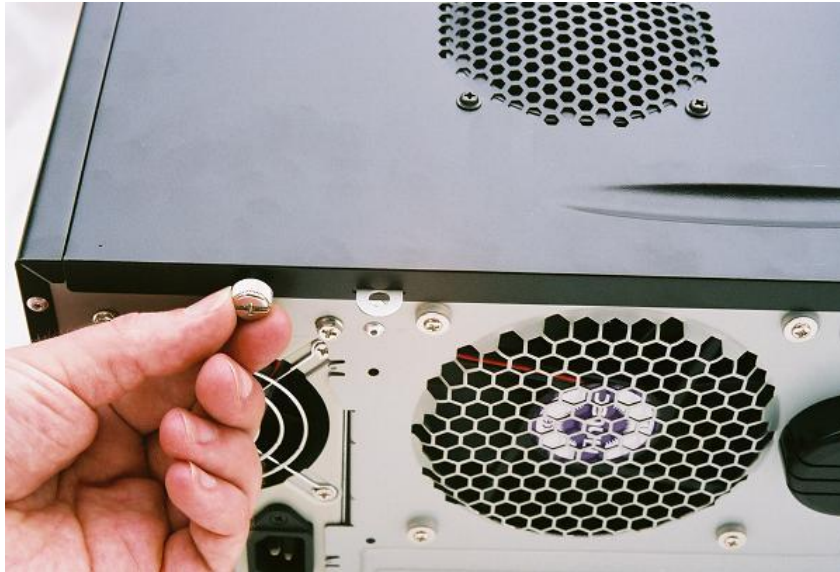
Step 01: Unplug the power cord at the back of the system unit and make sure there is no any power to the system unit.



Step 02: Unplug all the devices attached to the system unit. Devices may be connected to the back side ports and at the front of the system unit.



Step 03: Uncover the system unit chassis from the right side of the system unit. To do this, unscrew the two screws at the right-top and right-bottom of the back of the system unit.



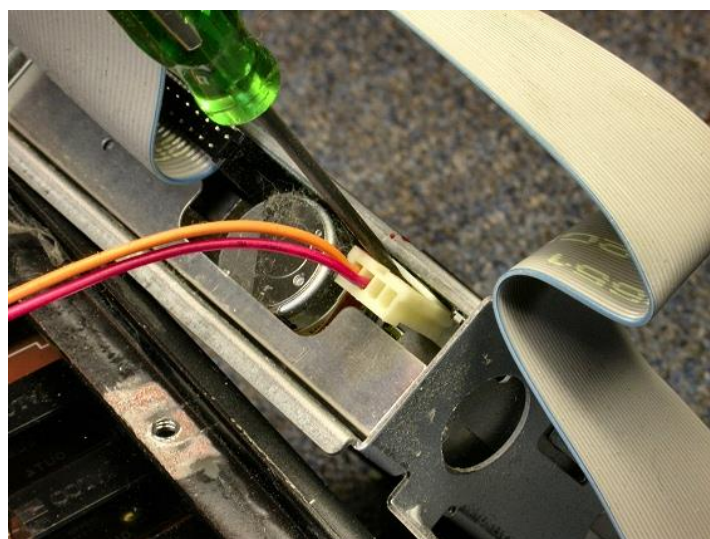
Step 04: Carefully uncover the system unit chassis from the side that you unscrewed.



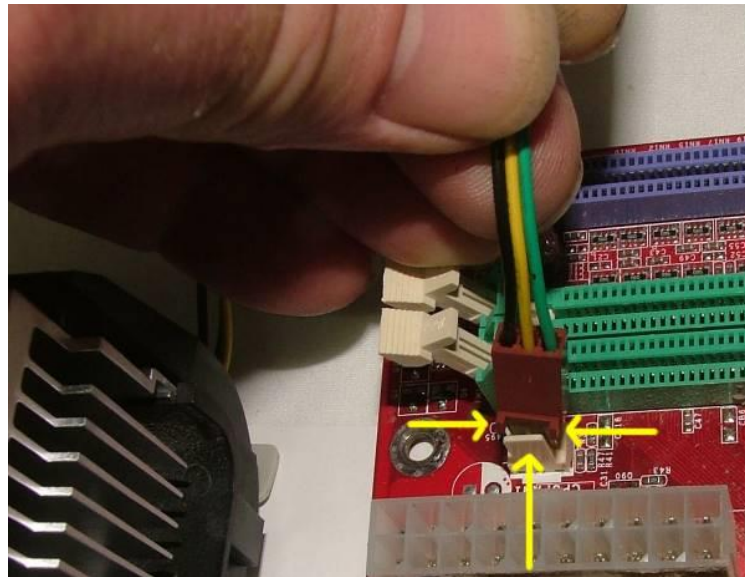
Step 05: Remove ATX power connector from motherboard. Gently press the notch at the side of the cable and then pull it upwards.



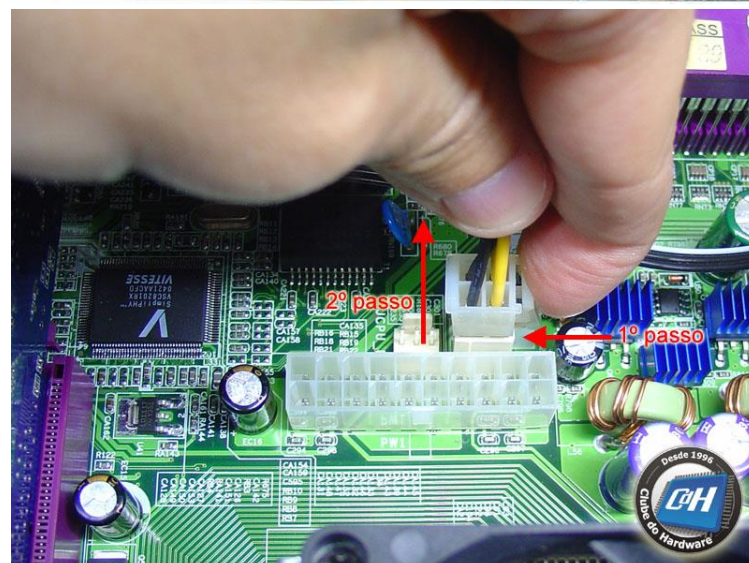
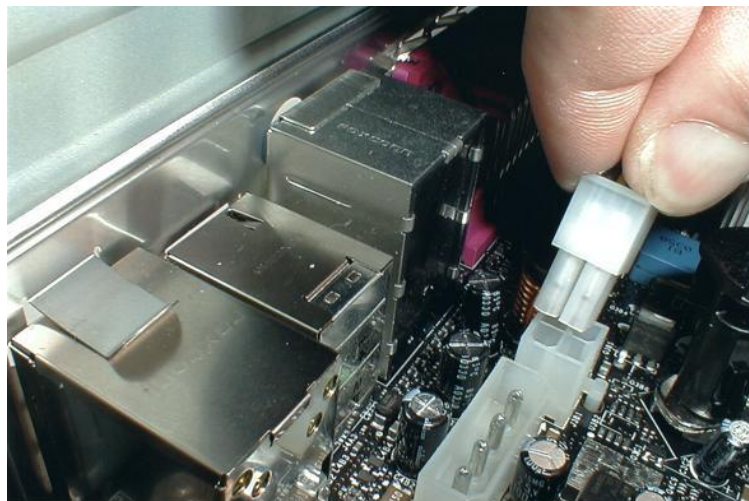
Step 06: Remove all Molex and Mini-Molex power connectors connected to Hard Drive, CD/DVD Rom and Floppy Diskette Drive.



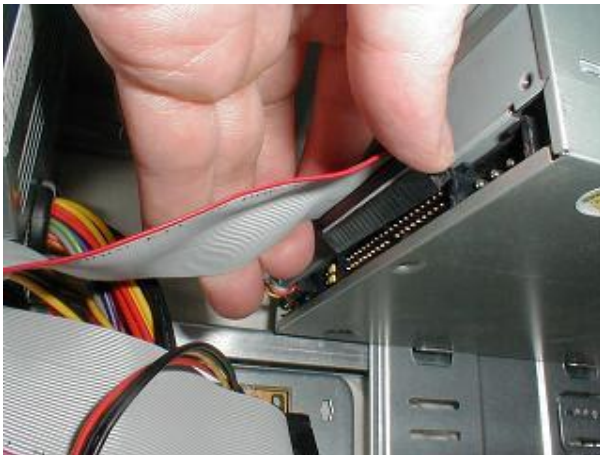
Step 07: Remove the chassis fan and microprocessor fan power connectors.



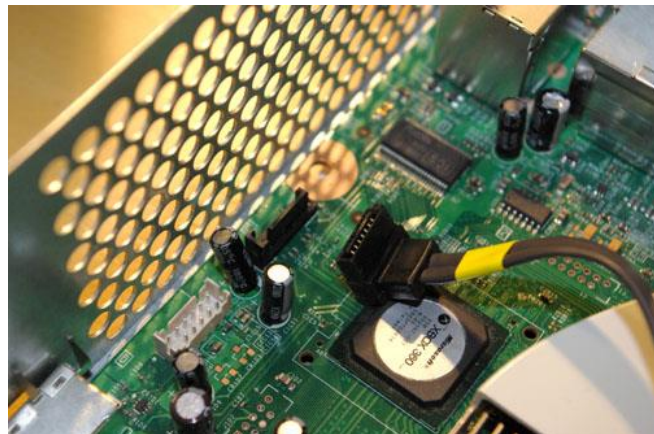
Step 08: Remove all other power connectors attached to the motherboard.



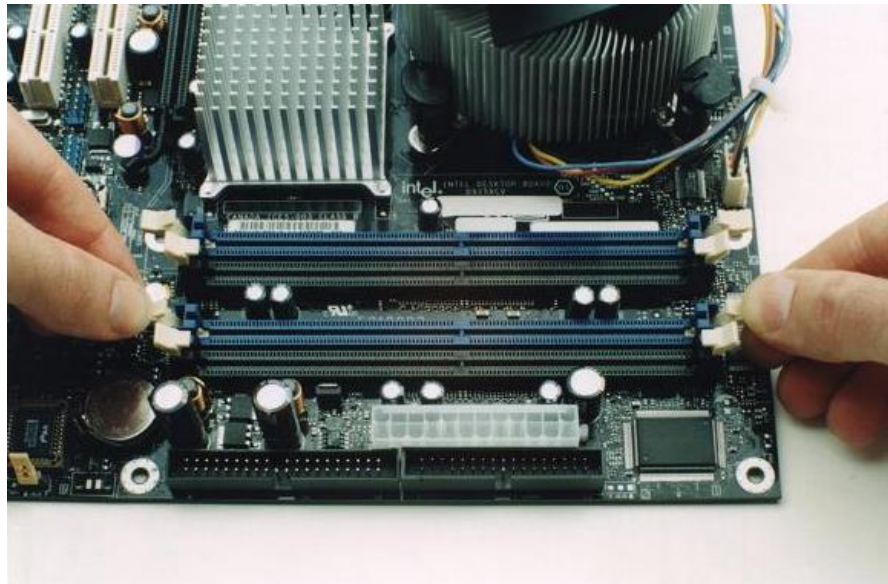
Step 09: Remove all IDE cables attached to the devices and motherboard.



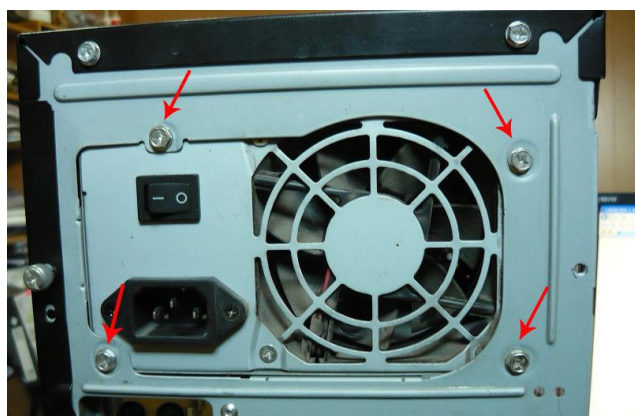
Step 10: Remove all the SATA cables attached to the devices and motherboard.



Step 11: Remove all RAM modules. Gently press both the notches at the edges, which will pop the RAM module up.



Step 12: Remove the power supply unit by unscrewing all the screws at back of the chassis.

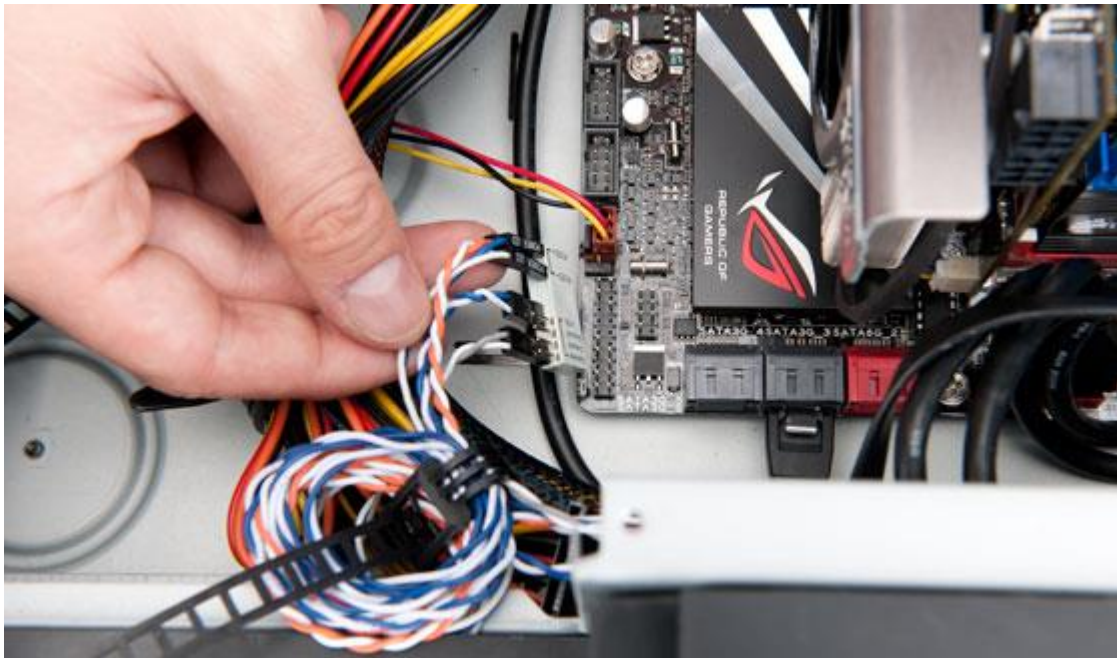




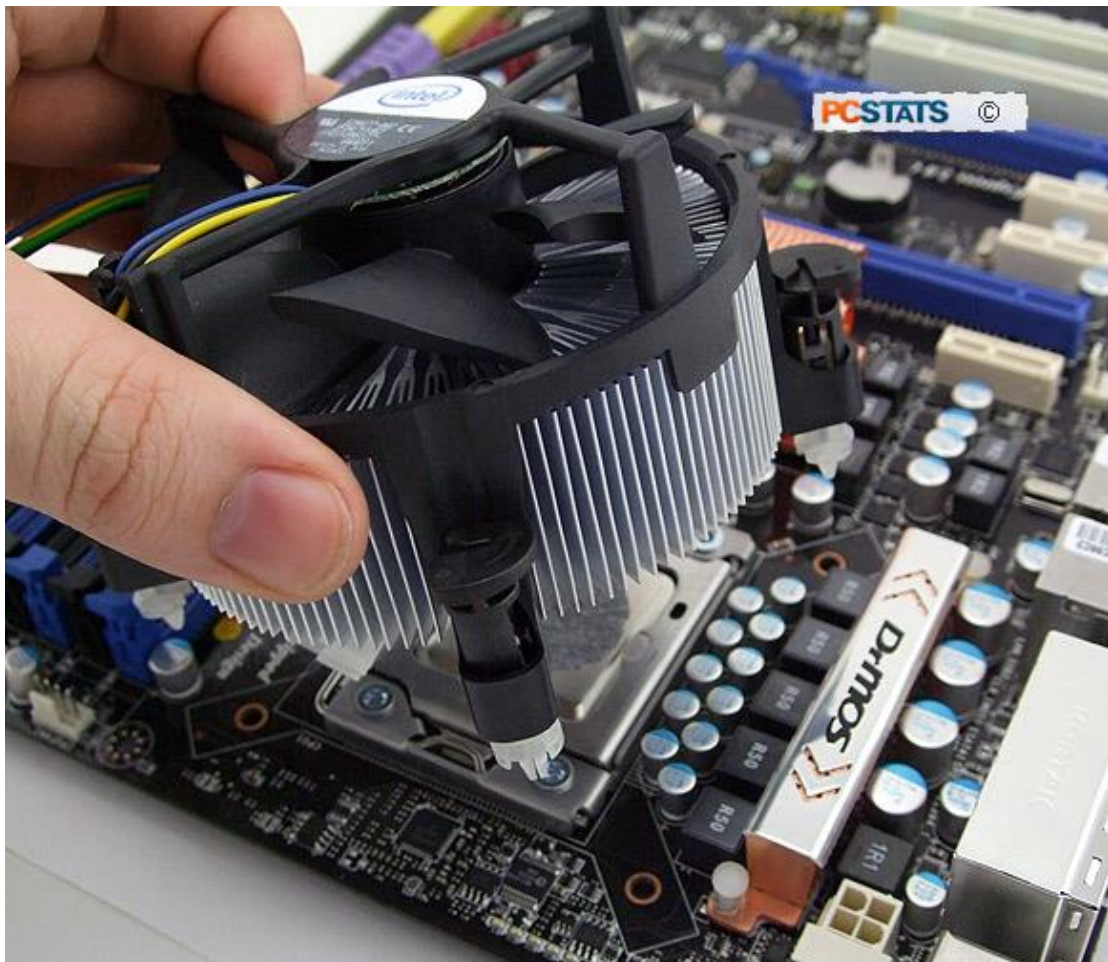
Step 13: Remove Hard Disk Drive, Floppy Drive and CD/DVD Drive.



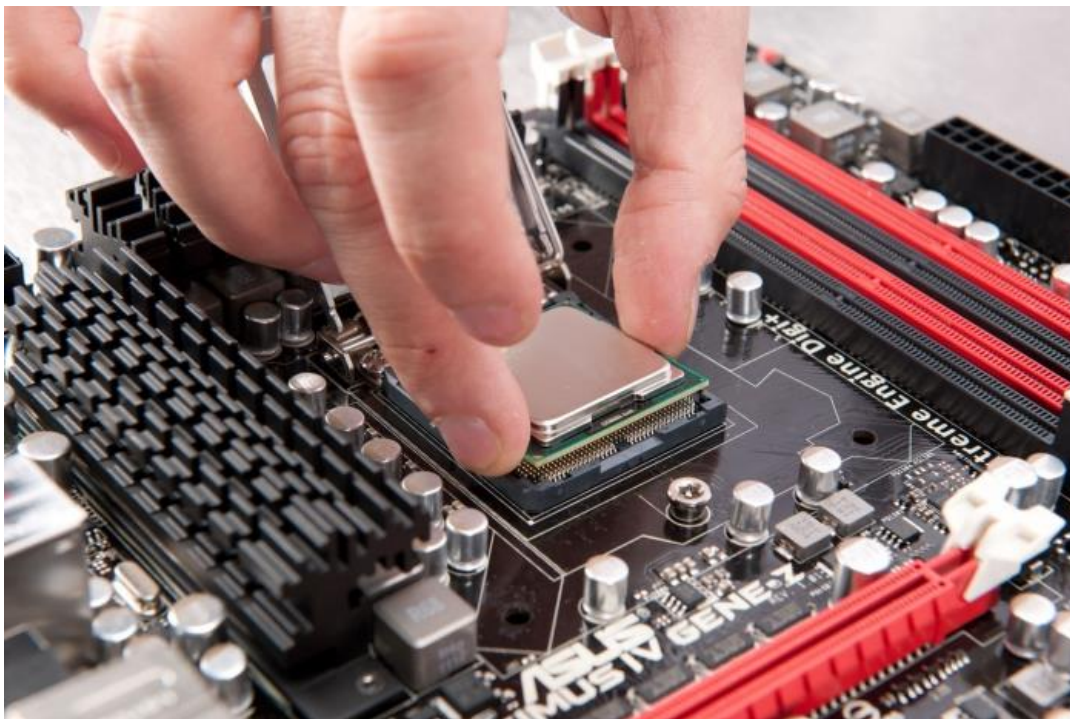
Step 14: Remove all cables from front panel. Before removing note down the pin position of each of the cable connected so that you can correctly attach while cabling the system unit.



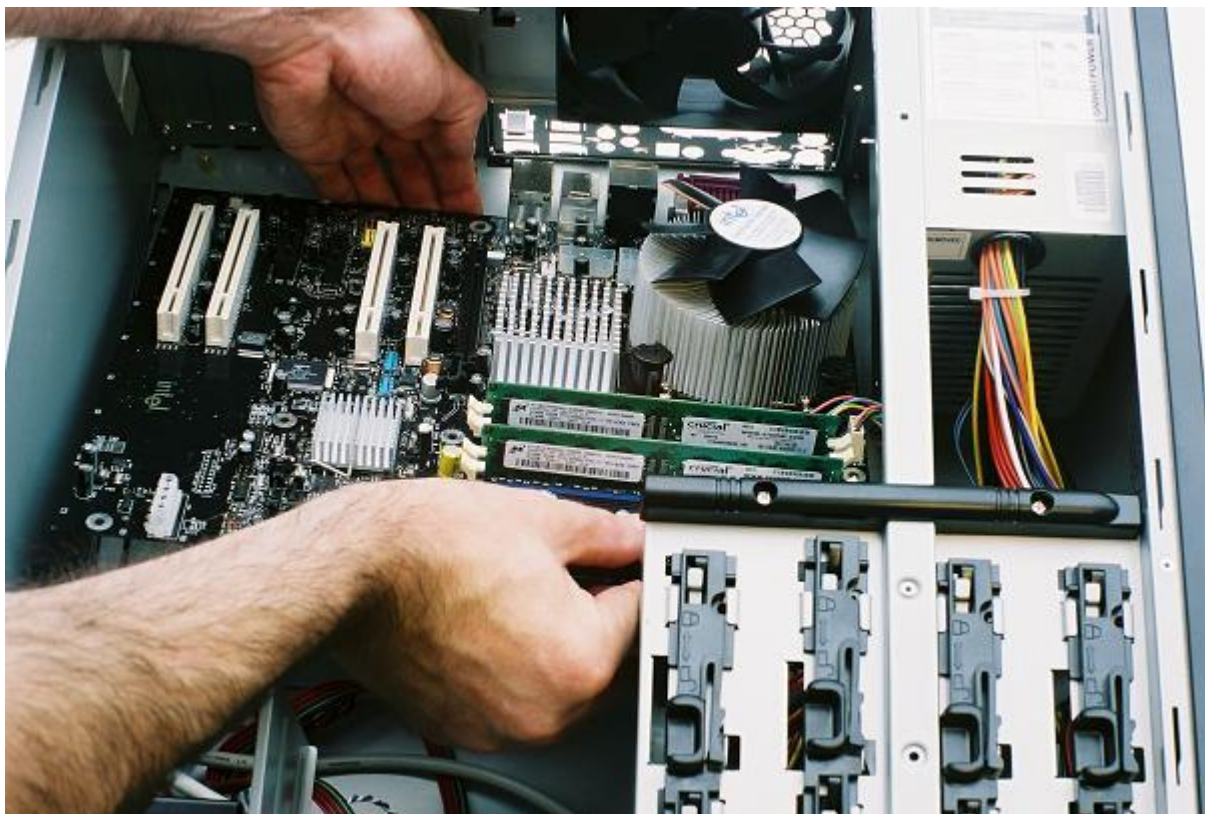
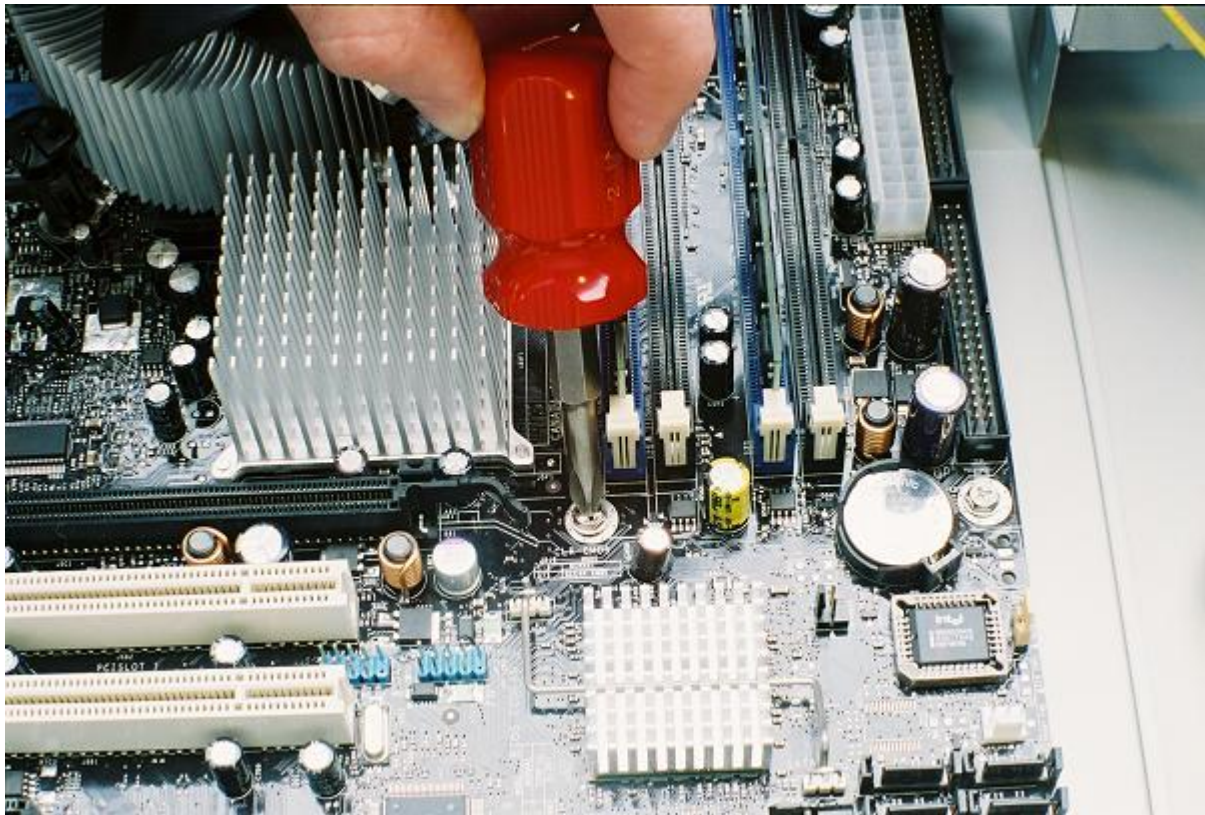
Step 15: Remove CPU heat sink and fan.



Step 16: Carefully remove the CPU from the socket.



Step 17: Remove the motherboard from the chassis by unscrewing all the screws on the motherboard. Be careful and do not touch at the back side of the motherboard. The static charge stored in your body may damage the tiny components when you make contact with them from the contacts exposed at the back of the board.

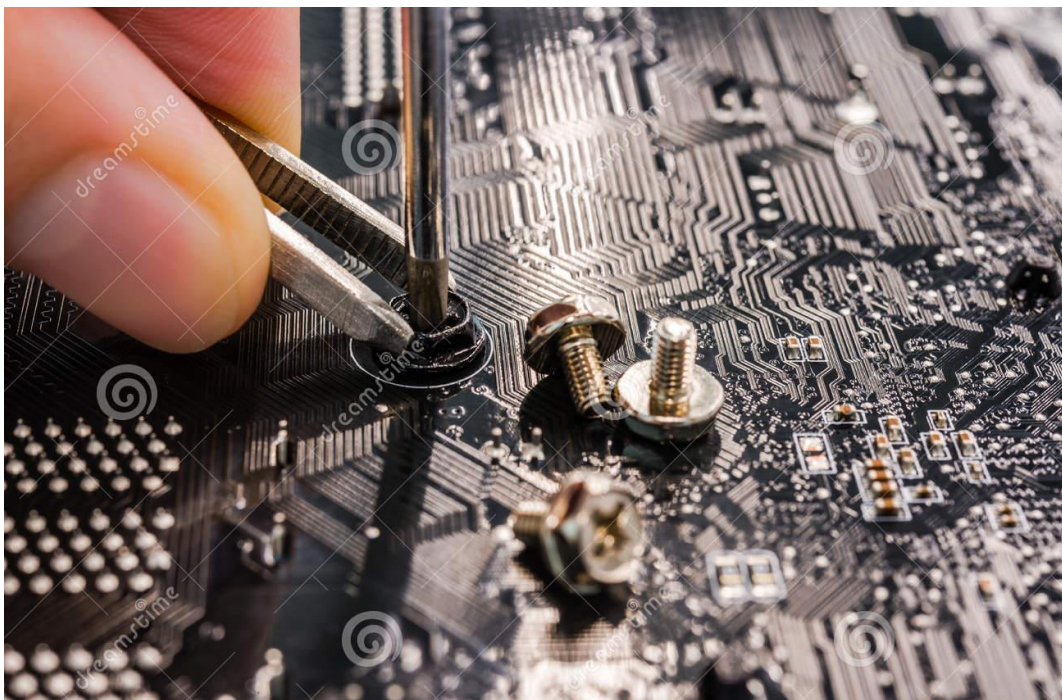


4.2 Cabling the system unit

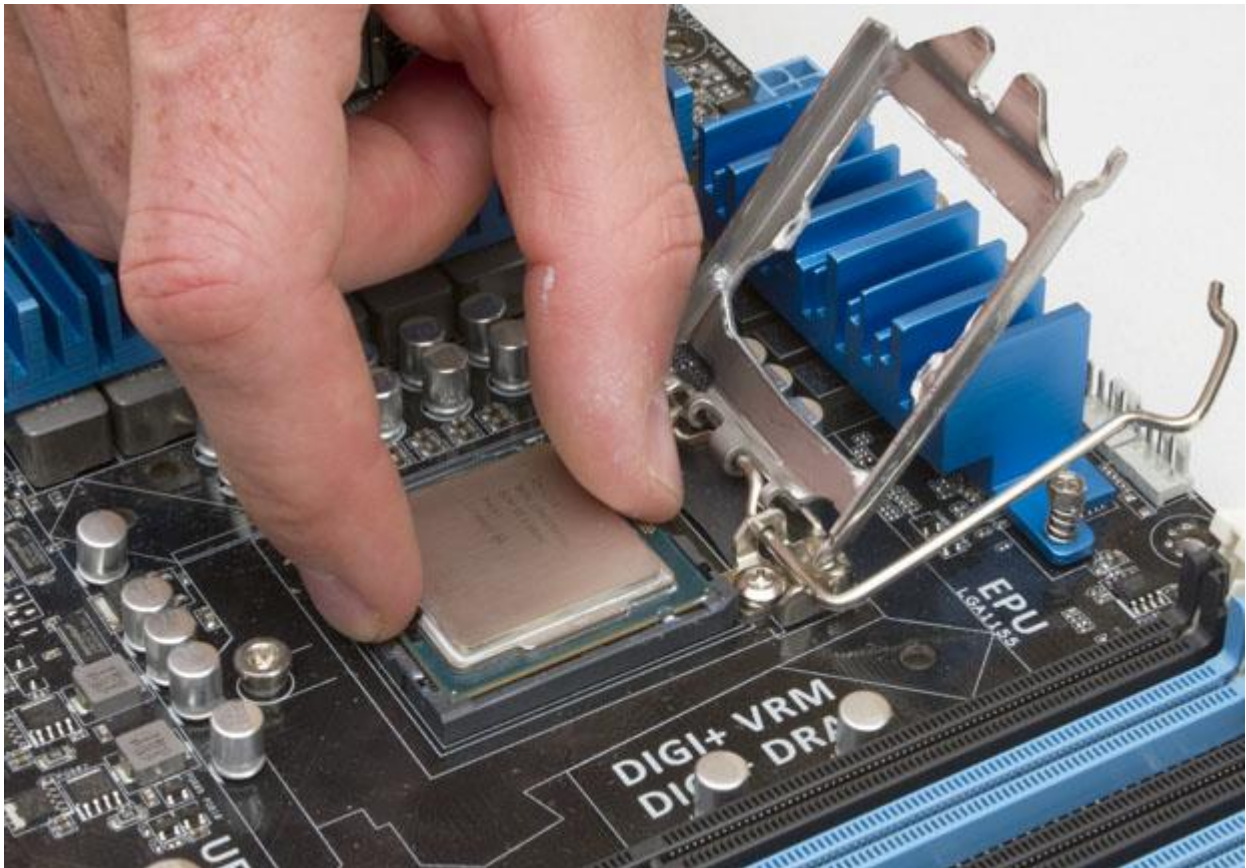
In this section we are going to see how we can plug and cable in system unit internal components.

4.2.1 Procedure

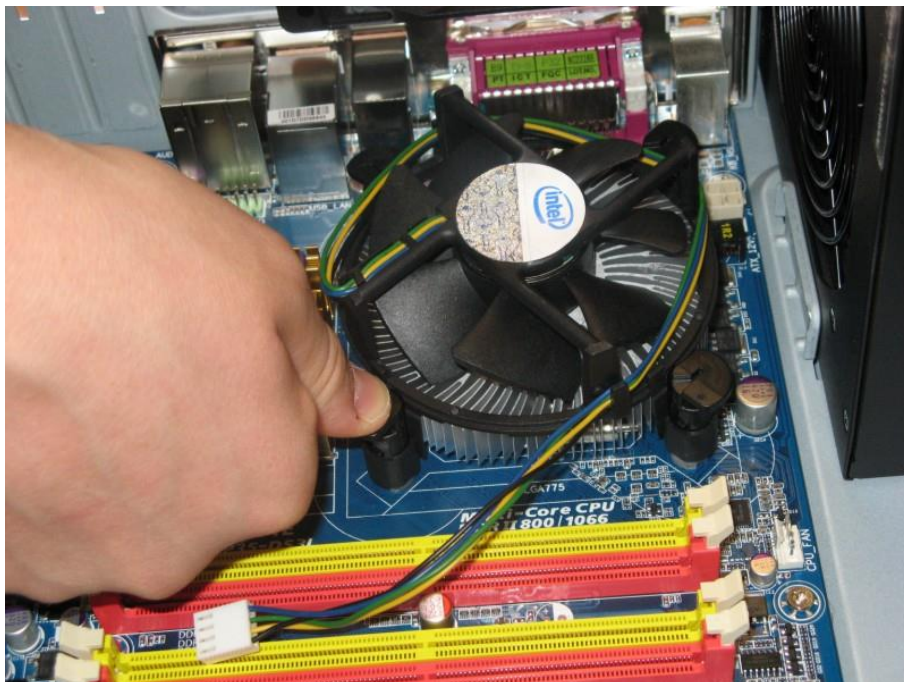
Step 01: Place in the motherboard in the chassis and tight-in the screws.



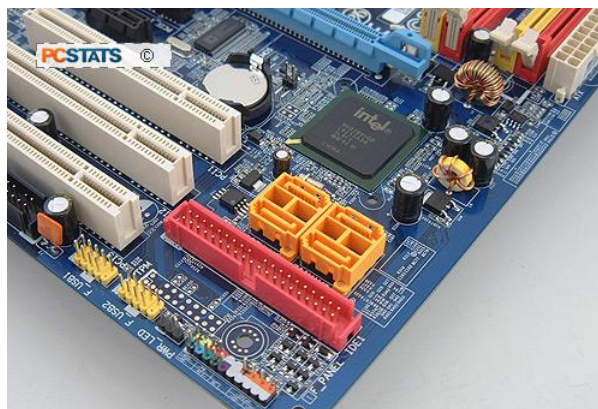
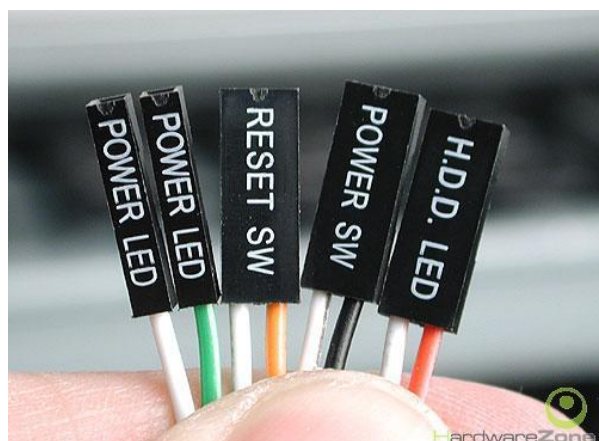
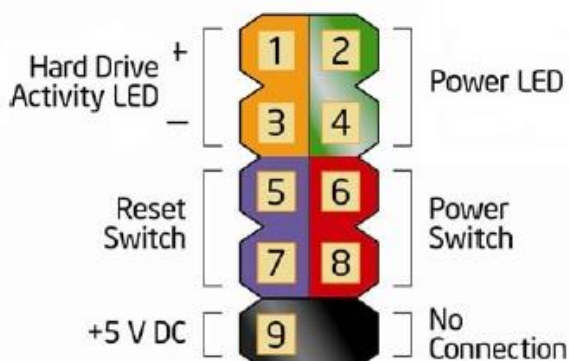
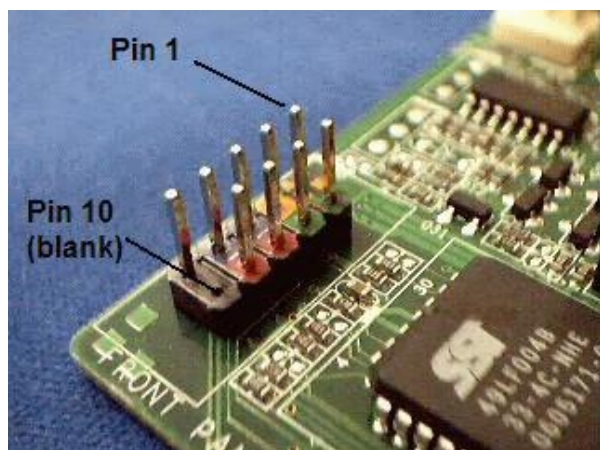
Step 02: Place in the CPU in the socket carefully and the lock the socket.



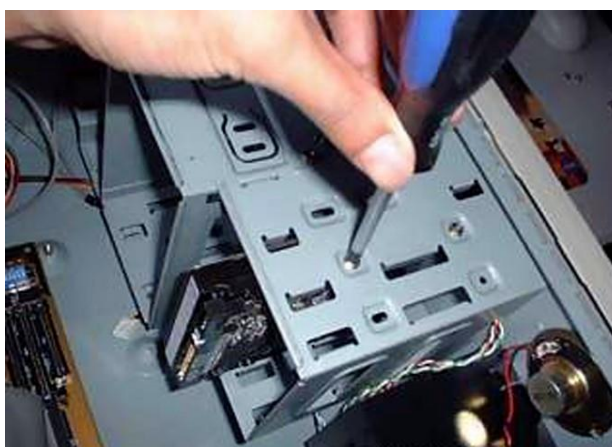
Step 03: Attach CPU heat sink and fan over the CPU.



Step 04: Insert all the cables in to front panel. See the specification below for connections. Note, the specifications may vary according to the motherboard you do have.



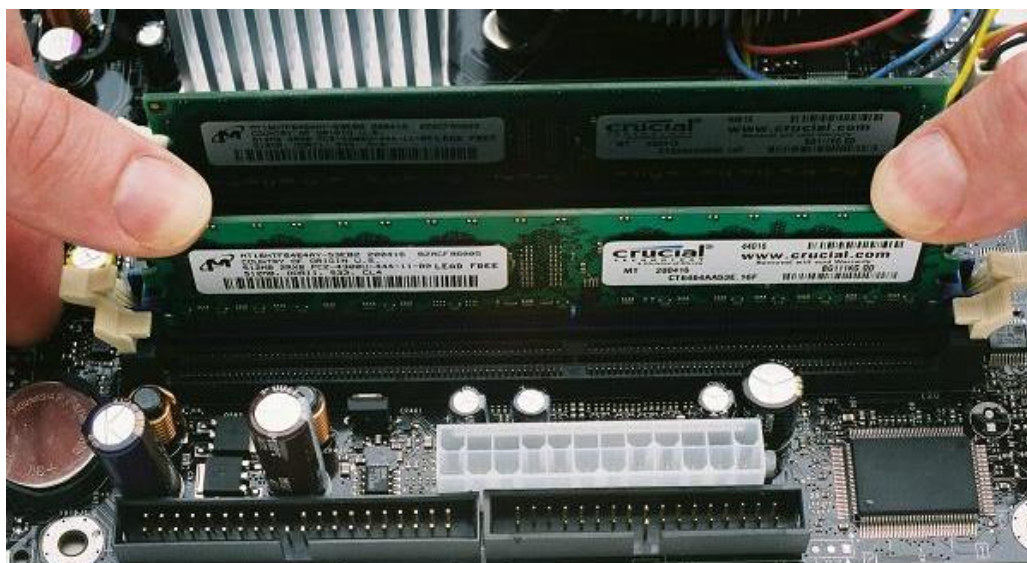
Step 05: Place in Hard Disk Drive, Floppy Drive and CD/DVD Drive in to the chassis and tight-in the screws.



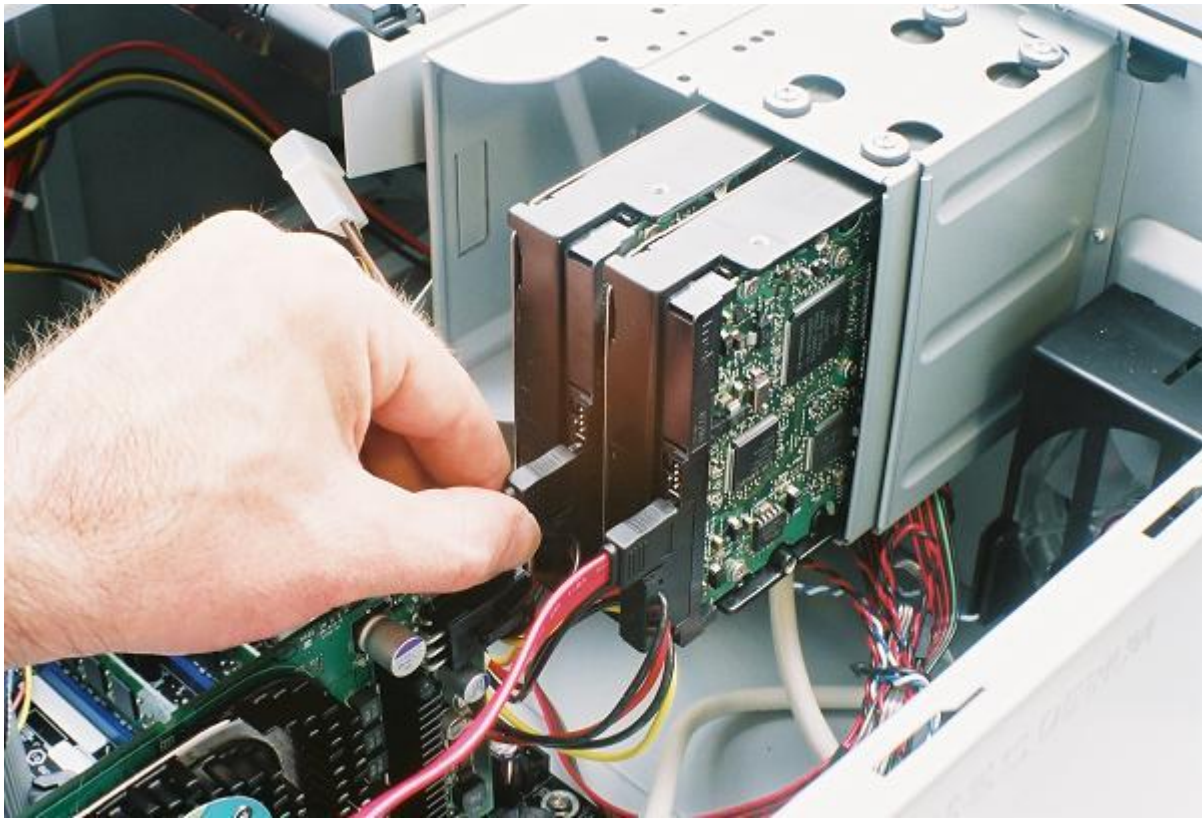
Step 06: Place in the power supply unit by in to the system unit and tight-in the screws.



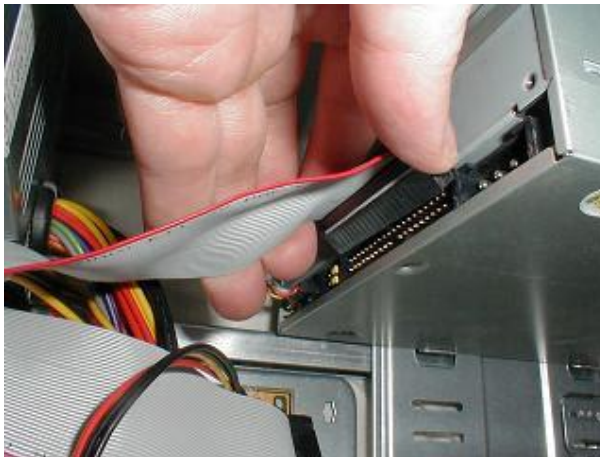
Step 07: Carefully insert all RAM modules in to the RAM slots. Gently press RAM module downwards inserting the equal force on both sides of RAM at the same time until the notches are closed.



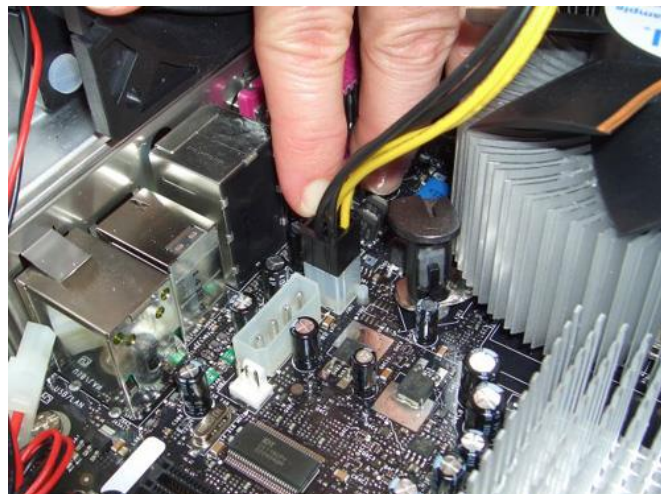
Step 08: Plugin all SATA connectors to the devices and motherboard.



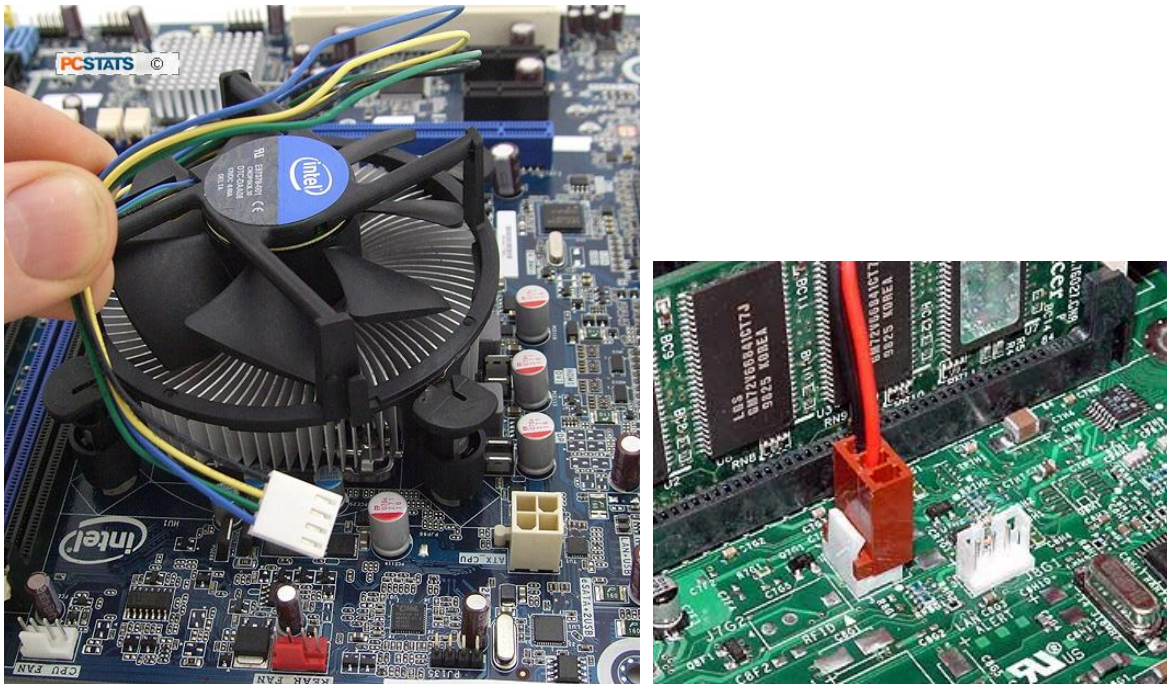
Step 09: Plugin all IDE connectors to the devices and motherboard.



Step 10: Plugin ATX and other power connector into motherboard.



Step 11: Plugin the chassis fan and microprocessor fan power connectors.



Step 12: Plugin all the Molex and Mini-Molex power connectors connected to Hard Drive, CD/DVD Rom and Floppy Diskette Drive.



Step 13: Cover the system unit chassis and tight-in the screws.



Step 14: Plugin all the peripheral devices to ports at the back of system unit.



Step 15: Plug the power cord at the back of the system unit and you are ready to hit start button.



EXERCISE

- 1. Un-Cable the system unit and specify the followings:**
 - a. Describe the entire procedure step by step.**
 - b. With every step, capture and place in the image.**
 - c. Capture the image of each of the internal component separately, label it with its name and describe its functionality briefly.**

- 2. Cable the system unit and specify the followings:**
 - a. Describe the entire procedure step by step.**
 - b. With every step, capture and place in the image.**