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AOIT 1

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## Disassemble and Reassemble a Computer System Unit



Welcome to the, “Disassemble and Reassemble a Computer System Unit Station”. This station may look very intimidating from it’s many parts but once broken down, is very simple and easy to get through. You will learn how to take out and put back in a System Unit Case, Modem Card. NIC Card, Sound Card, RAM Stick, Heat sink, SATA Cable, and CPU from a computer. That may sound like a lot to take on, but is easy to understand and execute as the parts are easy to install and reinstall.

# What You Need

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- 1 wristband able to discharge static charge (Img. 1)
- 1 Cross Slot/Phillips Screw Driver (Img. 2)

These are the 2 items you might need to search for as they can be easily misplaced, the other 4 items should be easy to find.

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- 1 HP Pavillion not capable of any functionality (Img 3.)
  - 1 Dell Dimension 2100 capable of full functionality (Img 4.)
  - Random pile of computer parts (Img. 5)
  - Board to place computer parts on (Img. 6)
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Img 1.



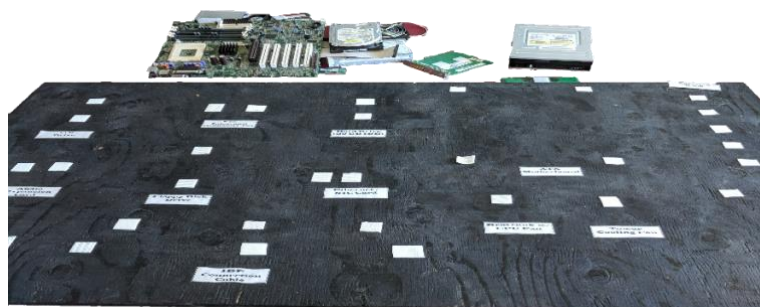
Img 2.



Img 3.



Img. 4



Img. 5 &amp; 6

## Part 1

1. Turn on the Dell computer at station #3, “Dissassemble and Reassemble a Computer System” To turn on the Dell Computer, quickly press and release the power button once.



2. Once the computer is fully turned on, the desktop should be shown on the monitor. The computer can take a minute to several minutes to turn on.



3. Now that the desktop has been shown on the monitor, turn off the machine by clicking the “windows” button at the bottom, left-hand corner of the desktop and clicking, “Turn Off the Computer”



4. Unplug all cables from the back of the computer once the computer's monitor has turned black.



5. Remove the System Unit Case from the computer by pulling back on the slide at the top of the computer and pulling the Case back to let it slide off.



6. Discharge all static electricity from your body by putting the wristband around your wrist and connecting the pinchers at the end of the wire to a piece of metal around the rim of the computer. Before touching any components, touch another piece of metal not on the Dell Computer to make sure all static electricity is discharged.
7. Remove the Modem Card by unscrewing the top screw with the Phillips Screwdriver and then pulling the Modem Card out of PCI slot.
8. Repeat this process for the Network (NIC) Card and Sound Card.
9. Then remove the RAM stick by pushing downwards on the white tabs on each end of the RAM slots and pulling the RAM stick out.



This is all that is required to be removed from the Dell Computer. In part 2, the System Unit Case, 2 RAM sticks, Heat Sink, SATA Cable, and a CPU will be removed from the HP computer.



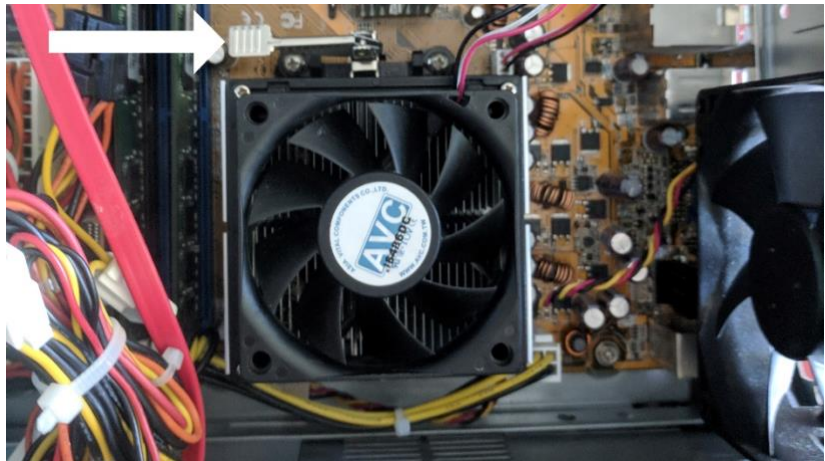
## Part 2

1. You can now take off the wristband as the HP computer is broken and will not work ever again.
2. Take off the System Unit Case by unscrewing the one screw in the middle of the panel and then sliding the panel off.

3. Find the 2 RAM sticks by the CPU Cooling Fan and Heat Sink, remove them in the same process as the RAM stick from the Dell computer was removed.



4. The Heat Sink is then removed right beside the two RAM sticks by pushing down on the tabs on each side of the Heat Sink and jiggling the Heat Sink from side to side until it comes loose.



5. Next is the SATA cable which is the red cable shown to the left of the CPU Cooling Fan. Find

the ends of each side of the SATA Cable and disconnect each end from the SATA slot.



6. The last part to remove is the CPU. This is the most delicate part as the underside of the CPU is covered with gold pins which have to fit perfectly into a slot in the Motherboard. One of the pins is bent though, so just be aware of that before you take out the CPU. To take out the CPU, lift up the metal bar beside the CPU and push the bar outwards. This will cause the CPU to become loose in the slot and be pulled out. Before pulling out the CPU, call Mrs. Awde over to make sure every step has been executed correctly with the CPU.

That was the last step for taking apart the parts of the HP computer. In part 3, you will place parts on a board with their appropriate label under them and then be quizzed by Mrs. Awde. Parts 3 and 4 will be the shortest as they do not require many steps.

## Part 3

1. Beside the HP computer should be a black board with many labels and velcro to side of them, above them, or below them. Around the black board should be a random pile of computer parts with velcro on them. For each label, you must find the correct part that corresponds to it and stick it onto the blackboard. Do this for each part until the blackboard is complete.

2. Once the blackboard is complete, call Mrs. Awde over and she will quiz you on each part you placed on the board by covering up its name.



Once this is done, Mrs. Awde will sign your packet and you are onto your last part.

## Part 4

1. The first step to the last few steps is to take every part off the blackboard and put it back into a random pile beside the board.
2. Next is to reinstall every part of the HP by simply doing the inverse of the process to take out each part.
3. The inverse of taking out each part to reinstall each part in the Dell computer will also be done in the same manner as the HP.
4. You will now want to turn on the Dell computer to make sure it functions fully after being taken apart. You will want to call Mrs. Awde over to let her see the Dell is fully operational and let her sign your packet. After this, turn off the Dell computer completely and move onto your next station. If the Dell is not working for some reason, she will help you to figure out why.

Well done! You now know how to remove a System Unit Case, Modem Card, NIC Card, Sound Card, RAM Stick, Heat sink, SATA Cable, and CPU from a computer. Being able to do this will allow you to do things such as upgrade your own computer at home and discover how each component interacts with another. Have a nice day and don't be intimidated by all the parts of a computer, it may look complex but you now know how to work with them.