

RAM

The RAM on your computer is where your computer stores information that it is still in the process of using. This memory is temporary, and, when your computer shuts down, all of this memory is erased. RAM, like any other computer component can go bad, but, most often, people are more interested in adding more memory because this will, to a certain extent, make your computer faster (the reason for this being that the access time to access information stored on RAM is much faster than trying to access the information on the hard disk).

Removing

1. Turn Off Computer - You NEVER want to remove any device from your computer without first turning off your computer, and you especially NEVER want to open your case with the power on. Any sort of electric shock (static electricity included) may render any device, or the whole computer, completely useless. Circuit boards are very sensitive devices, and if handled inappropriately, they can easily be broken.
2. Turn Off/Unplug Power Supply - This step goes hand-in-hand with the previous step. Although it may appear that your computer is off when you turn it off, the power supply is still on, and may still be providing power to many areas of your computer. There should be a switch on the back of your computer next to where the power cord is located; turn it off. Now unplug the power cord from either the outlet or the back of your computer. Your computer is now completely powered down.
3. Open Case - It seems that every computer you encounter has a different method for removing the outer casing; some you have to remove screws, other you merely have to push a button. This, undoubtedly, you will have to look inside your reference manual to accomplish.
4. Attach Static Wrist Band (If Applicable) - Again, circuit boards are sensitive devices, and the static electricity in your fingers can arch to the circuit boards and render them completely useless. In order to prevent this from happening you need to ground your body. The easiest way to do this is to buy a static electricity wrist band (they are cheap), and attach one end to your wrist and the other to any metal surface, including the computer case. The other method is to make sure that you always have one hand placed on a piece of metal at all times; this however means that you would only have one hand to work with.
5. Remove RAM Stick - Modern computers have two white tabs at both ends of a RAM slot; push down on these tabs to pop the stick out of the computer. Once these tabs are released, the stick should easily lift out of the computer, if it does not do not force it up -- push down on the tabs again.
6. Reorder Current RAM/Insert New RAM - It is always a good rule of thumb to make sure that your RAM are arranged in their slots correctly. The sticks should be in the slots found closest to the CPU (they are also labeled with numbers, put the first stick in slot one, the second in slot 2, etc.). Also, you will want the larger sticks to be in the lower order slots (e.g. If you have 1 stick of 256 and one stick of 128, you will want to put the stick of 256 in the first slot and the stick of 128 in the second slot).

7. Close Case - With everything installed you will want to close the case before powering the machine back up.
8. Turn on Computer - The device is now installed. Let's turn on the computer.
9. Verify Installed RAM on Boot - On most computers, when the computer boots up it counts the amount of RAM it has installed. You should count it up before hand, and when your computer starts you will want to make sure that this number reaches a point close to what you counted (it will in all likely hood not be exact). If you cannot see this information displayed on the screen that appears when your computer first starts up, you will want to go into the System Control Panel in Windows and verify it from there. If the amount is not what you calculated you will need to reopen the case and verify that your RAM is installed correctly.

Adding

1. Check Computer's State - It is vital that you computer be in the state in which it was after completing step (4) above. If you are unsure about your computer's state, redo steps (1) through (4) above before proceeding.
2. Insert RAM Stick - To install new RAM, you must first locate the slots on your motherboard (they are usually close to the processor), and then verify you have an available slot. The RAM stick has slots, or divots, in the row of contacts which make it impossible to insert a stick of RAM incorrectly. Just align these divots to the corresponding extrusions in the slot and push the stick directly down into the slot. It is often easier to insert one end of the stick at a time. When the stick is correctly inserted both tabs will be brought up into the stick to hold it into place.
3. Close Case - With everything installed you will want to close the case before powering the machine back up.
4. Turn on Computer - The device is now installed. Let's turn on the computer.

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