

Laptop Care and Feeding

Your laptop represents a sizable investment in both money and time. As such you should take proper care of it.

General care



Do not place on uneven or unstable work surfaces. This includes blankets, beds, or sofa pillows.

This is for a couple reasons. First, the laptop could fall and get damaged. Second, when on a blanket, bed, or other soft surface, the fan ports may get covered. These surfaces are also good at insulating heat, rather than dissipating heat. Both situations lead to overheating the laptop which will cause severe damage.



Do not place or drop objects on top and do not insert any foreign objects into the laptop. Don't place anything heavy on top of your laptop.

While rare, computer screens have broken or cracked by heavy objects (such as school books) being stacked on top of the laptop. If it is heavier than the laptop, it probably should not be put on top of the laptop.



Do not expose to or use near liquids, rain, or moisture. Do not use the internet during an electrical storm, unless connected wirelessly.

Do not eat or drink over your laptop. The obvious hazard is spilling liquid into an electrical device (aka the Pepsi Syndrome). Laptop keyboards are made to very tight

tolerances. This means that even a very small amount of debris, such as crumbs from your sandwich or chips, can keep the keys from depressing properly or can cause keys to stick.



Do not expose to dirty or dusty environments. This includes eating around your laptop.



Do not press or touch the display panel. Do not place together with small items that may scratch or enter the laptop.

Aside from making your screen harder to clean, touching a laptop screen is dangerous. The glass of your laptop's screen is only about 1/16th of an inch thick! That is half the thickness of the glass in a picture frame. Laptop manufacturers use a very high grade of glass. Even so, it can be broken fairly easily. Tapping the screen with a ball point pen or pencil, along with being able to crack the glass, can also permanently mark or scratch the surface.



Do not expose to extreme temperatures above 50°C (122°F) or to direct sunlight. Do not block the fan vents (on the bottom, back, and sides of the laptop)!



Do not expose to extreme temperatures (below 0°C (32°F), otherwise the laptop may not boot.

Keep your laptop comfortable. A good rule of thumb is if you would not be comfortable in an area, your laptop won't be either. If you are

sweating or wearing a jacket, odds are your laptop is not happy. **This means don't leave it in your car, no matter what the weather!!**



Do not expose to strong magnetic or electrical fields.



Do not throw batteries in fires as they may explode. Check local codes for special battery disposal instructions.

Other Suggestions

Don't close anything inside your laptop. We have seen several laptop screens and keyboards destroyed because someone shut the lid with an ink-pen, or some other foreign object between the screen and keyboard. There is little or no clearance between the keyboard and the screen when the laptop is closed, even several sheets of paper can put stress on the screen. A thin cloth or chamois to prevent scratching is the thickest item you want to put between the screen and keyboard.

Secure your laptop

Laptops are getting smaller and smaller. This means they are getting easier and easier to steal. Make sure that if you are not using your laptop it is secured in some way. You can purchase cable locks for them fairly inexpensively, or you can make a habit of locking it in your drawer or file cabinet. Do not lock it in your car.

Keep your laptop clean

These days (2009), most manufacturers are no longer recommending using products that contain ANY alcohol, ammonia, or other strong solvents on LCD screens.

Steps

1. Create a gentle cleaning solution. The ideal solution is plain distilled water. If more heavy cleaning is needed a 50/50 mix of white vinegar and distilled water can also be effective.
*Manufacturers no longer recommend using any cleaners with alcohol, ammonia or solvents on LCD screens.
2. Put the solution in a small atomizer bottle, the type that you push from the top to get a fine mist. Don't use this, however, to spray on the screen itself.
3. Disconnect the AC power and remove the battery pack before cleaning.
4. Apply the solution to a cotton cloth, lint-free microfiber cloth, chamois, or some other very soft cloth. A large cloth is best, since it will help to reduce the risk of leaving streaks across the screen from finger pressure.
Never use paper towels, tissue, or similar products
5. Wipe the cloth against the screen in a circular, or other consistent motion. Rapid circular movements generally eliminate streaks. Apply an even pressure to the cloth but take care not to press your fingers into the cloth or screen.
6. Repeat these steps for cleaning the outer surfaces and keyboard area of the laptop.
7. Use a can of compressed air to blow any dust or particles from under the keyboard.

Moving your laptop

1. **Turn the laptop OFF** or close the lid to **put it to sleep**, and disconnect all external peripherals to prevent damage to the connectors.
2. The hard disk drive's head retracts when the power is turned OFF or put to sleep to prevent scratching the hard disk surface during transport.
3. Close the display panel and check that it is latched securely in the closed position to protect the keyboard and display panel.
4. Carry your laptop like a book, vertically, not horizontally. When you hold the laptop horizontally by a corner, you put stress on the motherboard. This will eventually cause the motherboard to crack, leading to motherboard failure, thus a dead laptop.
***Recommended:** Put a piece of soft cloth or chamois between the keyboard and the screen. This will help prevent the keys from scratching an imprint in the screen.

Extending the life-time of your battery

Laptop batteries are like muscles. If you don't use them, they atrophy and die. Keeping your computer plugged in all the time is probably the worst thing you can do for it.

Recommendations

1. It is not recommended to remove the battery completely as Li-Ion batteries prefer to be kept topped rather than left on a shelf.
2. Try to keep deep Depth of Discharge (DOD) cycles to a minimum (see #4 for explanation of DOD cycle)

- *Apple Laptops:** A charge cycle means using all of the battery's power, but that doesn't necessarily mean a single charge. For instance, you could use your notebook for two hours one day, using half its power, and then recharge it fully. If you did the same thing the next day, it would count as one charge cycle, not two, so you may take several days to complete a cycle.
3. After using the laptop, try to charge it up again as soon as possible to keep the battery topped up. Try not to use the laptop in very hot conditions when running on battery.
 4. Occasionally it can be a good idea to do one single deep DOD discharge, running the laptop until the battery is completely flat. Although this is a bad long-term practice it does re-calibrate the battery and may rejuvenate older batteries that have had continual shallow DOD cycles throughout their lifetime.

*The average Li-Ion battery will retain its charge for 300-500 charge cycles, which is typically 2 years. After that, its capacity will drop over time to 50-80% of its original capacity. Step 4 helps alleviate this problem once the capacity decline has begun.