

## 9.4.2 Laptop Maintenance Facts

---

Be aware of the following when working with portable devices:

- Most laptop manufacturers provide service manuals on their websites that you can use to learn specific disassembly/reassembly procedures for a particular laptop make and model.
- The components used in laptop systems are much smaller than those used in desktop system. You should carefully organize and label each part as you remove it from the system to ensure that it doesn't get lost and that it gets reinstalled in the correct location.
- Keep devices away from food and drink. Liquid spills are especially damaging to a portable device. Liquid can easily run beneath the keyboard and onto internal components.
- For individual keys that stick, you might be able to remove the key and clean underneath it. If that does not work, you will need to replace the keyboard.
- Clean the display with lint-free cloth and isopropyl alcohol. Spray the cleaner on the cloth, not directly on the screen, to avoid getting cleaner on other components.
- Cooling is a major concern for portable devices. Follow these recommendations:
  - Keep all air vents clear and unobstructed. Vents are typically located on the back of the unit.
  - To help heat dissipation, do not place a laptop on a surface where air cannot circulate beneath it evenly. The best way to keep a laptop properly ventilated is to purchase special laptop cooling bases that provide fans for the bottom of the unit. If a laptop cooling base is not available, set it on top of a hard, solid surface, such as a desk or countertop. Soft surfaces, such as a couch or your lap, should be avoided because it is likely they will obstruct even air flow.
  - Adjust processor throttling (if supported) and configure Power Options to reduce power consumption. Lower power consumption not only saves battery life, it lowers the heat output.
- When moving from outside to inside, allow the computer to warm up before using it. One of the main reasons is to prevent water vapor condensation that can occur when the system is powered on and warms up quickly.
- Do not leave portable devices in cars where the temperature can reach extremes or where direct sunlight can be magnified.
- Although they are built to withstand portability, protect portable devices in properly-padded cases or include proper packaging materials when shipping them.
- When installed, both PCMCIA and ExpressCard cards extend past the outer edge of the laptop. You should remove the cards from the slots before putting them in a case to prevent them from catching on objects and breaking.

---

TestOut Corporation All rights reserved.