



## Maintain your Cool

### *First Day of Summer on June 21st.*

With summer just around the corner, heat is a big concern for your Computer System(s). Inside your computer, your processor is working 24/7 processing commands, and as a result, it gets hot very quickly. Because of this, all computer processors are outfitted with a heatsink & fan.

### **What is a heatsink?**

A heatsink is a device that dissipates the heat of an attached component (in this case, the processor) through increased surface area. A fan is then attached to the heatsink to improve heat dissipation through increased air movement.

Fans are great at keeping your system on the cooler side. However, they also add to the overall temperature of the processor as well. **Confused?** Fans suck air into the computer to aid the heatsink in the dissipation of heat. Riding that stream of air into the computer is the arch-nemesis of electronics... **DUST!** Dust is very sticky, and acts as an insulator. This traps heat in the component, thereby shortening its lifespan.

The most destructive places for dust to accumulate is in the heatsink. As it turns out, because the fan is forcing air over the heatsink to aid in heat dissipation... this is exactly where the dust settles.

### **What does the accumulation of dust result in?**

Because dust acts as an insulator, it traps heat in the heatsink, thereby preventing the chip from cooling off. The result can be a fried or damaged chip. Once this happens, you're pretty much looking at a new computer purchase.

**"When it comes to computer hardware failures, the inability to dissipate heat is ranked as #1, and power fluctuations are listed as #2."**

R. Schijf - TSG Computer Services

### **What can I do to prevent this from happening?**

Preventative Maintenance is the key. Vacuuming is an option. However, you must remember that vacuums dissipate static electricity. The static charge that can be transferred from a vacuum is enough to damage your system permanently. Therefore, you need to have your system plugged into an electrical outlet in order to shunt any impending static charge immediately to ground.

If you need to unplug your computer from the electrical outlet to clean it, then we recommend avoiding the vacuum and instead, using a can of compressed air. The compressed air found in a can is a good choice because it can often clean out areas that a vacuum can't get to. However, once you are finished blowing air into the case and over the components of the computer, make sure to plug the computer into the electrical outlet (do not turn it on), and vacuum it out the best you can.

### **Summarizing**

The cleaning out of your computer should be an important part of your computer maintenance program. Most people are unaware of the fact that a computer needs to be cleaned out every so often. As a result, these customers tend to be plagued by slow computers that occasionally lock up or frequently even shutdown on their own. This is often followed by the motherboard suffering irreversible damage. The fact of the matter is, these kind of situations can be avoided by performing some simple maintenance on their PC. As a general rule, a computer should be cleaned every 3 - 6 months depending on the amount of dust in the air. If the computer is situated in a dusty environment, then this service should be performed every 3 months.

Wrapping up, with a proper maintenance program in place for your PCs, they will experience less problems and last substantially longer.

**Chad Rushka**



604-272-3607

604-803-2824

chad@tsgcs.ca

If you would like to unsubscribe from this list and no longer want to receive these newsletters packed full of Valuable Information, click [here](#).