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Top 12 ways to keep your PC cool this summer

Keep your computer out of the hot zone even as temperatures climb indoors and out

Hi there. This is your laptop computer speaking – well, writing to you. Please forgive the temporary disruption of service, but you and I need to have a little chat. Guess what time of year it is? Summer. Guess what time of year I hate the most? Summer. Why? Because it's hot. And the last thing I need is exposure to more heat.

My cousins, the desktop PC and the solid-state drive, feel the same way. None of us likes it when the temperature goes above 85 degrees indoors, or when the humidity rises above 65 percent. We slow down, we become less stable and we can crash. Worse, we can check out permanently (see Figure 1).

But you can keep us running. All you've got to do is practice a bit of common sense. You'll be happier, we'll function better, and work will get done faster and glitch-free. So, take it from us—you want to have a pleasant summer? Then remember these maintenance tips:

Figure 1: If you're not careful with how you treat your computer, your household could heat up in more ways than one this summer.

1: Work where it's as cool as possible

Try to locate your PC in a cool room, or a cool place within an otherwise warm room. If your room has air conditioning, place the computer itself as close to an air conditioning vent as possible, or somewhere where outside air circulation is available. If you do not have or do not want to use air conditioning, try to get air circulating around the computer, either with an oscillating fan or by placing it near a window with some air circulation. Ideal room temperature is below 85 degrees Fahrenheit, as non-solid-state drive computers run about 25 degrees hotter than the outside temperature.

2: Watch computer placement

If working from a desk, keep your computer a few inches away from the wall. Make sure your desk has sufficient venting—the case should not be packed in like a book on a shelf, nor should your laptop be squeezed in amidst external drives, USB hubs, pencil carousels, lamps and other desktop items. And remember to keep draperies and other fabrics away from computer, especially near vents.

3: Prop up your laptop

The rubber feet on your laptop are designed to allow airflow to the underside of the computer. Avoid working with it on a bed or other soft surface (even outdoors on the grass), as this can block vents and cause overheating. If you can't work on a table or desk, try keeping the underside exposed to air by placing the unit in your lap or propping it up with a small book (be careful not to cover the fan vent), or even two small rulers on either side of the machine.

4: Don't put the desktop's CPU directly onto the floor

Although tower models are designed for placement anywhere, particularly near foot or knee level, they should not be directly on the floor or carpet. Buy a computer stand and elevate the unit several inches off the ground to reduce dust accumulation. Make sure the stand doesn't block air vents.

5: Unplug your laptop's charger as soon as the battery is full

A common mistake people make is keeping it plugged in at a constant source of electricity, which heats the battery and in turn heats the laptop.

6: Watch application use

The fewer items your CPU uses at once, the less likely it will overheat. Also, regularly run anti-spyware and anti-virus software to keep the laptop free of performance-compromising programs. And, be cautious of some of the cooling products on the market. Some of these actually use more power than they cool down or block your laptop's internal cooling fan, making matters worse.

7: Check the fans

Desktop users should open up their PCs from time to time to make sure all internal fans are operating. The onset of hot weather is a good time to tackle this chore. Usually removing a few easy-to-find screws or popping a simple latch is all you need to do to inspect the inside of your computer. Make sure you do this when the computer is off. Once the case is open, turn the computer back on and make sure that all internal fans spin up and operate consistently. You should see two or three internal fans in your average computer - usually one fan is over the central processor, while another may be located atop the graphics card, into which your monitor cable usually plugs.

8: Beware of dust

Just as with household filters in your furnace, air conditioner and even your car, dust and debris can collect around the air vents and prevent proper air flow. A dusty PC will get hotter internally - and generate more heat externally - than a PC that's relatively dust free. Use common sense when removing dust from the computer. Turn it off and unplug it first, and try not to directly touch any sensitive electrical components within. Use canned air to blow short bursts of air into the fan vent and remove any dust particles.

9: Don't smoke around your computer

Cigarette smoke will be drawn into the PC and stick to everything, creating a layer of tar on the electronics (see Figure 2). This could cause premature death to your system (sound familiar?).

10: Turn the computer off when not in use

If turning off is not an option, at least set the computer to hibernate after a few minutes of inactivity. For desktops, remember to also look for other heat-generating electronic components that can be powered down while the computer does its work, such as printers, spare monitors or scanners.

Figure 2: Just as cigarette smoke is bad for your lungs, it doesn't do your computer any favors, either.

11: Shut down your laptop before placing in a carrying bag

It may be convenient to plop your hibernating laptop into a bag, but the environment inside the case may be too warm for the computer, and can quickly damage the hardware and the screen.

12: Don't intentionally overclock the system

Some people like to speed up their computer's operating system beyond recommended norms. This can be accomplished through specific keystrokes entered at the time you reboot the computer. While this can squeeze more speed out of your system, it will also cause it to run hotter, making it more likely that it will one day crash (perhaps permanently). Leave well enough alone and your machine's internal temperature will remain consistent during normal use.

Laptop Do's and Don'ts during summer

Here are some other quick ways to keep your laptop PCs happy during the hot summer months:

- **Do** keep your laptop and its accessories stored in a carry case that is insulated against heat, moisture and direct sunlight.

- **Don't** work on your laptop in extremely humid conditions, especially near the beach or pool. If you are using your laptop in humid conditions, **do** gently wipe it, your external mouse (if any) and any external hard drives before packing them away.

- **Don't** work directly in front of a de-humidifier or humidifier. Laptops can generally withstand humidity levels between 30 percent and 80 percent. Stray away from that and you're asking for trouble.

- **Don't** move your laptop from an air-conditioned location straight outdoors into a humid environment. The rapid change in temperature and air moisture could cause the humidity to condense inside your laptop.

- Similarly, **do** allow the laptop to cool down when you bring it indoors, before trying to switch it on. Do the same when you bring it outdoors, allowing it to warm up slightly before using it.

- As with your pets, **don't** leave your laptop and accessories in closed, hot vehicles during hot days, as this will cause damage to the internal components.

- **Don't** expose your laptop to direct sunlight whether you are using it, or it is being stored.

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