

Computer Tech Talk

Computer Preventive
Maintenance - Hardware
By Dennis Henson

Most car owners understand the best way to keep a vehicle running for years is to change the oil and filter regularly. What are preventive maintenance (PM) steps you can take to extend the useful life of your personal computer (PC)? This "Tech Talk" article discusses hardware preventive maintenance actions that you can complete.

Hardware Maintenance. There are several hardware pieces to your computer and most can do with some simple cleaning; the main computer case, the mouse, the keyboard, the screen, and the CD drive. Just don't get the PC wet!

The System Case. Computer cases are designed to allow air to flow into and out of them keeping the internal components cool enough to operate properly. Most computers have at least two fans, some three or four. Don't let these air intakes become clogged with a blanket of dust and lint. With your computer turned off, take a soft cloth or paper towel and wipe the dust and lint from these air intakes on the outside. It's OK to use a vacuum here. You may have to search a little to find the air intake. It's the one with all the dust hanging around. If you operate a PC in a very dusty environment, you will have to do this often. Some internet discussions suggest that once a year, you take the cover off of the case and blow out the internal accumulated dust with a can of compressed air. Never use an A/C powered vacuum cleaner to do this internal job. You may generate a static spark and damage sensitive components inside your computer. If you ever get inside your PC, make sure to disconnect the AC power cord from the PC before you open the case. Keep it unplugged until the case is closed, to prevent injury to yourself or your PC. If you don't feel comfortable or qualified getting inside the machine, leave that job for a professional.

The Keyboard. I've heard (don't know if it's true) that a computer keyboard contains more surface germs than a toilet seat. Great... So, how do we

clean and disinfect the alcohol (without lotions) and let keyboard? Do not spray a it dry. Don't rub too hard. cleaner directly on to the keys. Laptop screens are particularly sensitive to chemicals and too agent or disinfectant on a soft much pressure. If you ever have cloth and rub it over the entire the urge to get inside a computer set of keys (with the computer monitor [cathode ray tube turned off) and let the keyboard (CRT)] and repair it --- DON'T. dry. If there is dirt and debris in Color computer monitors contain the cracks between the keys, use voltages in excess of 25,000 a can of compressed air to blow volts, even when the monitor is out the crumbs. If you get tired turned off and unplugged. of looking at a dirty keyboard, go Monitor repair is best left to buy a new one for under \$20. monitor repair professionals.

The Mouse. The most common computer mouse contains a small rubber coated steel ball in the bottom that contacts both the mouse pad and two internal rollers connected to electronics. These mice require occasional cleaning for smooth, bump-free motion. With the computer turned off, turn the mouse upside down to find a retaining plate that can be twisted about one-fourth turn to release the ball assembly. Clean the ball with mild soap and water and dry it. Don't use alcohol as it can break down the rubber coating. Carefully inspect and clean the two roller axles inside the belly of the mouse. You can use a q-tip dampened with alcohol to rub the axles as you turn them. Sometime stubborn lint may require a flick from a fingernail to dislodge the lint. Don't press too hard and damage the roller axles. Dry the axles with the unused end of a q-tip and reassemble the mouse. It should glide like a dream. If not, you may need a new mouse. For most users, I recommend an optical mouse—one that contains no rolling ball and cannot get dirty. Optical mice use a red LED light and a small sensor to pick up movement of the mouse relative to the surface on which it glides. Optical mice work very well and are priced about the same as the kind with the roller ball. Don't confuse an optical mouse with a wireless mouse. Wireless mice require batteries and may not be optical.

The Computer Screen. Most manufacturers recommend cleaning a computer screen with specially designed cloth wipes containing a screen cleaning solution. See your owner's manual for the proper cleaning materials. You should not use standard window cleaner containing ammonia. In a pinch, wipe the screen with a soft cloth lightly moistened with a mixture of 50% water and 50% isopropyl

The Optical (CD) Drives. CD and DVD drives collect dust around the door opening, on the tray, and on the laser lens inside the unit. You can blow the dust away from the opening and off of the tray with canned air, or you can use a small vacuum cleaner to remove surface dust. When the internal lens needs cleaning it is best done with a cleaning CD. These specially made compact discs have little "whiskers" positioned at just the right height to wipe dust from the internal lens. Most cleaning CDs come with a cleaning solution. Place a drop or two on the whiskers prior to use. If your songs are skipping, or some disks read well and others do not, you may need a cleaning CD. When in doubt, check your owner's manual for cleaning recommendations.

Power Conditioning. Our rural electric cooperative does an excellent job providing quality electric service to our community. Power surges and short outages are a fact of life, especially during thunder storms. You should have all your computer components plugged into a surge suppressing power strip connected directly to a standard three wire grounded electrical outlet. Surge suppressors are rated in watt-seconds (joules) and a larger value is better. In addition to moderate surge suppression, an uninterruptible power supply (UPS) will run your computer on battery backup power without stopping for a few minutes. This should give you time to close out your work and shut down your PC normally.

Next week,
Software Maintenance.

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