Windows PC troubleshooting

The troubleshooting tips provided here address basic, often-overlooked problems that do not require you to open your computer's case, handle hardware components, or delve deeper into Windows' inner workings. Remember that your goal here is to solve an existing problem, not create a new one. If you feel uncomfortable performing a certain action, contact 13 Tech for solution.

We focus on troubleshooting four common scenarios that occur with Windows-based computers.

1. The computer won't power up.
2. The computer powers up, but the monitor is blank.
3. The computer won't boot from the hard drive.
4. Windows won't start up properly

Please bear in mind that these are all generic recommendations. With the huge number of different makes and models of PCs out there, specific troubleshooting steps may vary somewhat. If these steps fail to address the issue you are encountering, you will need to seek advice from 13 Tech or, if your computer is still under warranty, from the manufacturer.

To troubleshoot your computer, follow the steps in each section below in order.

The Computer Won't Power Up

1. Is the PC's power cord plugged firmly into a wall socket or power strip, and is the power strip on? If so, try plugging the PC or the power strip into another wall socket. Likewise, check that the power cord is firmly connected to the PC's power-supply outlet.
2. Is the power supply (the part on the computer to which the power cord is attached) switched to the "on" position? Does the PC also have a voltage setting, and if it does, did it get changed to an incorrect setting?
3. If all the above fails, attach a known working power cord to the PC's power supply. Plug it in and try to power on again.
4. Unplug all external devices from the PC, such as printers and scanners, except the monitor. If the computer powers on without the devices, add the peripherals back one at a time until you can identify the problem device.
5. For laptops, in addition to the above, remove and reinsert the battery and power the device on without the cord. Most laptop batteries have charge indicator lights. Pressing them will cause them to light up and show how fully charged the battery is. If the indicators do not light up even after the laptop has been plugged in for a while, the battery will need to be replaced. Replacements can be obtained from the manufacturer or online through third-party resellers. If you buy from an online retailer, make sure that you confirm that the replacement is for your specific laptop model. Laptop batteries must fit each specific model exactly.

The Computer Powers Up, but the Monitor Is Blank

1. Is the monitor plugged firmly into a working wall socket or power strip, and is the power strip turned on? If so, try plugging the monitor or power strip into another wall socket.
2. Is the monitor's power button switched to the "on" position?
3. Are the monitor's brightness and contrast controls properly adjusted?
4. Check both ends of the video cable for bent pins. If they are bent, straighten them with a needle-nose pliers. This applies to VGA and DVI cables.
5. Check to see that the video cable is plugged firmly into the back of the monitor and that the pinned end is tightly screwed into the video output on the back of the computer's case.
6. If that doesn't work, try removing the existing cable and replacing it with a known working one.
7. Borrow a working monitor from another PC and hook it up. If the monitor doesn't work, your video card may not be working, and you will probably need a professional to diagnose the problem more closely.

The Computer Won't Boot from the Hard Drive

1. Make sure there are no DVDs or flash drives inserted in the computer.
2. Remove all external drives or devices and try restarting the computer.
3. If you receive a series of beeps or error messages, write them down, as they could be instrumental in diagnosing your problem. Beep codes vary by manufacturer, so consult your BIOS (basic input/output system) documentation if you have it for more in-depth information on what those beeps mean. You can also get that information from the manufacturer support page for that model.

4. If you get a specific error message, copy the error message into a search engine. You may be able to diagnose the problem that way. Don't buy or download software advertised for it, though.
5. For older computers without a solid-state hard drive (SSD), listen to make sure your hard drive is spinning. If you hear a clicking sound, your hard drive no longer works, and you will need to replace it.
6. Many newer computers have SSDs, which don't spin. On those machines, look to see if the hard drive light is flashing. If the hard drive light is flashing, but the computer doesn't start up, power the device off and then restart. If the hard drive light doesn't flash, that is an indicator that it has failed.
7. If none of the above works, check to see if the computer is under warranty. If it is, call the manufacturer for tech support.

If none of those options apply, you will likely need to get 13 Tech for professional help.

Windows Won't Start Up Properly

1. Make sure there are no DVDs or flash drives inserted in the computer.
2. Remove external drives or devices and then try restarting the computer.
3. If Windows seems to start booting but fails partway through, you may be able to fix it with a Windows 7 Startup Repair operation or a Windows 10 Startup Repair operation. If you're not given the option to do a startup repair at boot-up, insert a Windows installation disc or recovery disk and use the startup repair tool from there.
4. If you cannot boot into Windows at all, use the computer manufacturer's default recovery procedures to recover the drive and reset Windows to its original configuration. After that is complete, you will also need to restore your data, if you have backed it up.

If all else fails, you may want to reinstall Windows.

Beyond Troubleshooting

If your troubleshooting is not successful, don't hesitate to contact the computer manufacturer if the device is under warranty, or to get professional help from 13 Tech.