

HP Notebook PCs - Testing and calibrating the battery (Windows)

Calibrate the battery manually

Manually calibrating the battery requires you to discharge or drain the battery, and then to recharge the battery. These instructions work with most battery types.

Run a battery test after calibrating the battery. Calibrating the battery improves the accuracy of the battery gauge software so that it more accurately displays the current level of charge.

Note: You do not need to fully charge the battery before you calibrate it. Turn on the computer and use HP PC Hardware Diagnostics UEFI to discharge the battery.

You do need to update HP PC Hardware Diagnostics UEFI to the latest version. To download the latest version, go to the HP PC Hardware Diagnostics website. Select Diagnose PC issues outside of the OS, and then click Download.

Discharge the battery

Discharge the battery using HP PC Hardware Diagnostics UEFI.

Note: If the computer battery is already drained and the computer cannot turn on when you begin this procedure, wait a minimum of 5.5 hours and then go to Recharge the battery.

Disconnect the AC adapter.

Press and hold the power button for at least five seconds to turn off the computer.

Turn on the computer and immediately press esc repeatedly, about once every second.

When the startup menu appears, press f2. The HP PC Hardware Diagnostics menu is displayed.

Click Component Tests in the main menu.

Note: The purpose is to drain or discharge the battery, not get the results of the test. The battery discharges and the computer turns off before the test results are displayed.

In the list of Component Tests, click Battery.

On the Battery Test page, click Run once. The Battery Test begins. After the battery passes the test, click Calibrate Battery.

On the Battery Calibration page, click Start Calibration.

Note: To run battery calibration, the HP Battery Health Manager setting in BIOS must be Let HP manage my battery charging. If your HP Battery Health Manager setting is different, click Continue to change the setting when prompted.

If your AC adapter is still connected, disconnect the AC adapter, and then click Continue to continue the process when prompted.

HP PC Hardware Diagnostics UEFI discharges the battery and displays an estimated time to completion. After the calibration process is complete, reconnect the AC adapter and turn on the computer at the times displayed on-screen.

Note: The recommended times to reconnect the AC adapter and turn on the computer are usually about 6 and 10 hours after the calibration process is completed.

Recharge the battery

Recharge the battery fully to finish recalibrating the battery.

Note: If you run HP Battery Check before the battery charges fully, you might get a false battery failure result.

Plug in the AC adapter to charge the battery.

Charge the battery to a full charge, 99% to 100%. This takes approximately 4 hours.

Note: If you are using a business notebook, make sure that you are using the Let HP manage my battery charging setting in HP Battery Health Manager. You must use this

setting to fully charge the notebook. For more information, go to HP Business Notebook PCs - HP Battery Health Manager.

Note: The battery continues to charge whether the computer is on or off.

Check the battery charge. Turn on the computer and start Windows normally. Hover the pointer over the battery icon in the system tray to view the battery charge percentage. Make sure that the battery charge percentage is 99% or 100%.

Note: If you plug in your AC adapter and immediately run the HP Battery Check, you might get a false failure showing that the battery is bad. If the battery is in a low-charge state (that is, less than 3%), you might also get a false reading.

Wait two hours before using the notebook.

If your battery failed, continue with these steps.

If your battery failed, check the following table for suggested actions, and then write down the battery status and Failure ID. Keep the battery status and Failure ID so you have them available if you need to contact HP Customer Support. The information in the table is also available in the Test Logs section on the main menu.

Status

Message

Suggested action

Passed

The battery functions properly and as expected.

The battery does not need calibration. Read the remainder of the message for more information.

Calibrate

The battery functions correctly, but it needs to be calibrated.

Read and respond to the message that is displayed. If the option to use the HP battery auto calibration feature is displayed, this is preferred. Otherwise, click [Learn How to Calibrate your Battery](#) for the steps to calibrate your battery.

Note: Battery calibration might take several hours to complete and is best performed during long periods when the computer is not in use.

Weak

or

Very Weak

The battery functions correctly, but due to normal aging of the battery, the battery life between charges is now significantly shorter than when it was new.

This status message is displayed when there is decrease in capacity of battery that occurs over time and with use. The battery should be replaced to get the most working time out of your battery.

Replace

The battery reports a failure and needs to be replaced as soon as possible.

Replace the battery. If your computer is within its warranty period, you can contact HP support to verify if your battery is covered. To set up a repair online, go to HP Virtual Assistant. If this service is not available for your location, contact HP for further support.

Failure with an ID number

The battery experienced a hardware failure.

Write down the battery status and Failure ID. To set up a repair online, go to HP Virtual Assistant. If this service is not available for your location, contact HP for further support.

No Battery

HP Battery Check did not detect a battery.

A battery is not installed or detected in the battery compartment. If a battery is installed, remove the battery and inspect the pins to see if there is dirt or other foreign matter blocking the connection. Fully insert a battery into the compartment if a battery was not inserted and you want to test the battery in that compartment.

Unknown

HP Battery Check could not access the battery.

Remove and reinsert the battery. You might need to download and install all the updates from HP Support Assistant.