

Drives
User Guide

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Product notice

This user guide describes features that are common to most models. Some features may not be available on your computer.

Table of contents

1 Identifying installed drives

2 Handling drives

3 Using an optical drive

Inserting an optical disc 5

Removing an optical disc when running on battery or external power 6

Removing an optical disc when no computer power is available 7

4 Improving hard drive performance

Using Disk Defragmenter 8

Using Disk Cleanup 8

5 Replacing the hard drive

Index 12

1 Identifying installed drives

To view the drives installed on the computer, select **Start > Computer**.

On models with a secondary hard drive (drive D), the optical drive becomes drive E. The next drive added to the system, such as a new USB drive, will be assigned the next available drive letter.

 **NOTE:** Windows® includes the User Account Control feature to improve the security of your computer. You may be prompted for your permission or password for tasks such as installing applications, running utilities, or changing Windows settings. Refer to [Windows online Help](#) for more information.

2 Handling drives

Drives are fragile computer components that must be handled with care. Refer to the following cautions before handling drives. Additional cautions are included with the procedures to which they apply.

△ **CAUTION:** To reduce the risk of damage to the computer, damage to a drive, or loss of information, observe these precautions:

Before you move a computer or external hard drive from one location to another, initiate Sleep, and allow the screen to clear.

Before handling a drive, discharge static electricity by touching the unpainted metal surface of the drive.

Do not touch the connector pins on a removable drive or on the computer.

Handle a drive carefully; do not drop a drive or place items on it.

Before removing or inserting a hard drive, shut down the computer. If you are unsure whether the computer is off, in the Sleep state, or in Hibernation, turn the computer on, and then shut it down through the operating system.

Do not use excessive force when inserting a drive into a drive bay.

Do not type on the keyboard or move the computer while the optical drive is writing to a disc. The write process is sensitive to vibration.

When the battery is the only source of power, be sure that the battery is sufficiently charged before writing to media.

Avoid exposing a drive to temperature or humidity extremes.

Avoid exposing a drive to liquids. Do not spray the drive with cleaning products.

Remove media from a drive before removing the drive from the drive bay, or traveling with, shipping, or storing a drive.

If a drive must be mailed, place the drive in a bubble-pack mailer or other suitable protective packaging and label the package "FRAGILE."

Avoid exposing a drive to magnetic fields. Security devices with magnetic fields include airport walk-through devices and security wands. The airport security devices that check carry-on luggage, such as conveyor belts, use x-rays instead of magnetism and will not damage a drive.

3 Using an optical drive

An optical drive, such as a DVD-ROM drive, supports optical discs (CDs and DVDs). These discs store or transport information and play music and movies. DVDs have a higher storage capacity than CDs.

Optical drives can read from and select models can write to optical media as described in the following table.

Optical drive type	Read CD and DVD-ROM media	Write to CD-RW media	Write to DVD±RW/R media	Write to DVD+R DL media	Write label to LightScribe CD or DVD±RW/R	Write to DVD-RAM media	Read Blu-ray DVD-ROM media	Write to HD DVD media
DVD-ROM Drive	Yes	No	No	No	No	No	No	No
HD DVD-R with SuperMulti DVD+/-R/RW Double Layer	Yes	Yes	Yes	Yes	No	Yes	No	Yes
HD-DVD ROM with SuperMulti DVD±R/RW Double Layer	Yes	Yes	Yes	Yes	No	Yes	No	No
DVD±RW/R and CD-RW Combo Drive	Yes	Yes	Yes	No	No	No	No	No
DVD±RW/R and CD-RW Combo Drive with Double-Layer support	Yes	Yes	Yes	Yes	No	Yes	No	No
LightScribe DVD±RW/R and CD-RW Combo Drive with	Yes	Yes	Yes	Yes	Yes	Yes	No	No

Optical drive type	Read CD and DVD-ROM media	Write to CD-RW media	Write to DVD±RW/R media	Write to DVD+R DL media	Write label to LightScribe CD or DVD±RW/R	Write to DVD-RAM media	Read Blu-ray DVD-ROM media	Write to HD DVD media
Double-Layer support								
Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer	Yes	Yes	Yes	Yes	No	Yes	Yes	No

NOTE: Some of the optical drives listed may not be supported by your computer. The listed drives are not necessarily all of the supported optical drives.

△ **CAUTION:** To prevent possible audio and video degradation, loss of information, or loss of audio or video playback functionality, do not initiate Sleep or Hibernation while reading or writing to a CD or DVD.

To prevent loss of information, do not initiate Sleep or Hibernation when writing to a CD or DVD.

If Sleep or Hibernation is initiated during playback of a disc, you may experience the following behaviors:

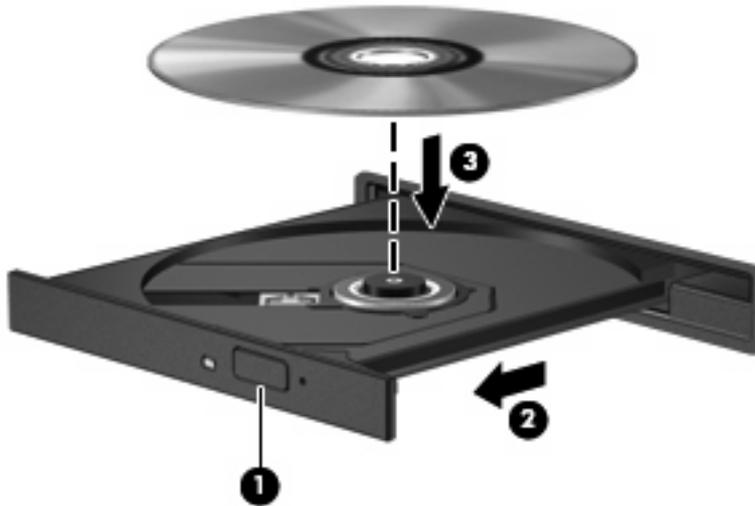
- Your playback may be interrupted.
- You may see a warning message asking if you want to continue. If this message is displayed, click **No**.
- You may need to restart the CD or DVD to resume audio and video playback.

Inserting an optical disc

1. Turn on the computer.
2. Press the release button (1) on the drive bezel to release the media tray.
3. Pull out the tray (2).
4. Hold the disc by the edges to avoid touching the flat surfaces and position the disc label-side up over the tray spindle.

 **NOTE:** If the tray is not fully accessible, tilt the disc carefully to position it over the spindle.

5. Gently press the disc (3) down onto the tray spindle until the disc snaps into place.



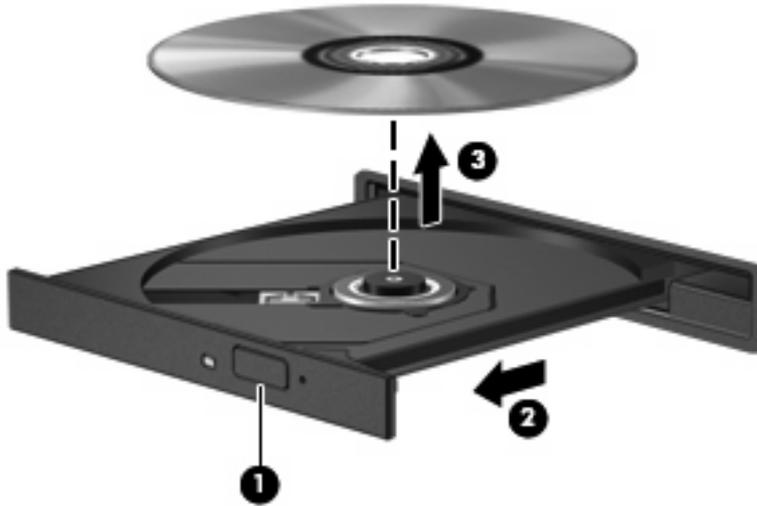
6. Close the media tray.

 **NOTE:** After you insert a disc, a short pause is normal. If you have not selected a media player, an AutoPlay dialog box opens. It prompts you to select how you want to use the media content.

Removing an optical disc when running on battery or external power

1. Press the release button **(1)** on the drive bezel to release the media tray, and then gently pull out the tray **(2)** until it stops.
2. Remove the disc **(3)** from the tray by gently pressing down on the spindle while lifting the outer edges of the disc. Hold the disc by the edges and avoid touching the flat surfaces.

 **NOTE:** If the tray is not fully accessible, tilt the disc carefully as you remove it.

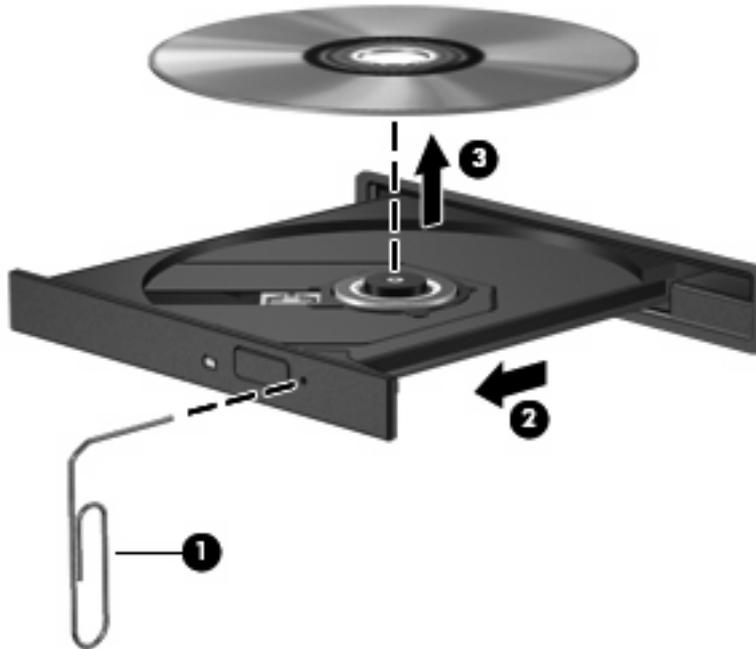


3. Close the media tray and place the disc in a protective case.

Removing an optical disc when no computer power is available

1. Insert the end of a paper clip (1) into the release access in the front bezel of the drive.
2. Press in gently on the paper clip until the tray is released, and then pull out the tray (2) until it stops.
3. Remove the disc (3) from the tray by gently pressing down on the spindle while lifting the outer edges of the disc. Hold the disc by the edges and avoid touching the flat surfaces.

 **NOTE:** If the tray is not fully accessible, tilt the disc carefully as you remove it.



4. Close the media tray and place the disc in a protective case.

4 Improving hard drive performance

Using Disk Defragmenter

As you use the computer, files on the hard drive become fragmented. Disk Defragmenter consolidates the fragmented files and folders on the hard drive so that the system can run more efficiently.

To run Disk Defragmenter:

1. Select **Start > All Programs > Accessories > System Tools > Disk Defragmenter**.
2. Click **Defragment now**.



NOTE: Windows® includes the User Account Control feature to improve the security of your computer. You may be prompted for your permission or password for tasks such as installing applications, running utilities, or changing Windows settings. Refer to Windows online Help for more information.

For additional information, access the Disk Defragmenter online Help.

Using Disk Cleanup

Disk Cleanup searches the hard drive for unnecessary files that you can safely delete to free up disk space and help the computer to run more efficiently.

To run Disk Cleanup:

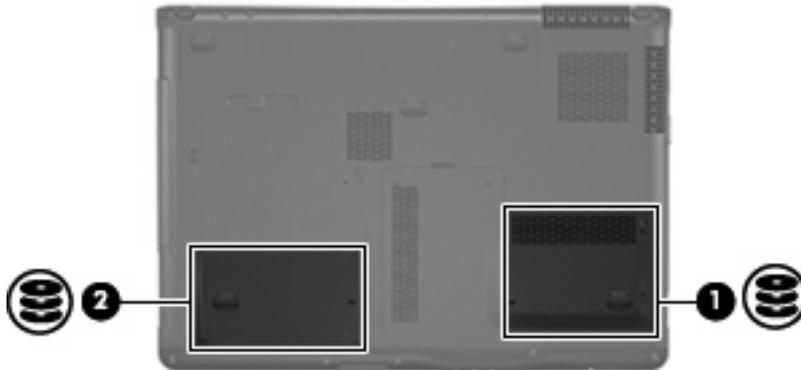
1. Select **Start > All Programs > Accessories > System Tools > Disk Cleanup**.
2. Follow the on-screen instructions.

5 Replacing the hard drive

 **NOTE:** Your computer may look slightly different from the illustrations in this chapter.

The following illustration identifies the primary hard drive bay (1) and the secondary hard drive bay (2) (select models only).

 **NOTE:** The primary hard drive bay is marked with the number 1. If your computer is equipped with a secondary hard drive bay, the bay is marked with the number 2 on the inside of the hard drive compartment. A secondary hard drive bay may be empty or may contain a second hard drive.



 **CAUTION:** To prevent information loss or an unresponsive system:

Shut down the computer before removing the hard drive from the hard drive bay. Do not remove the hard drive while the computer is on, in the Sleep state, or in Hibernation.

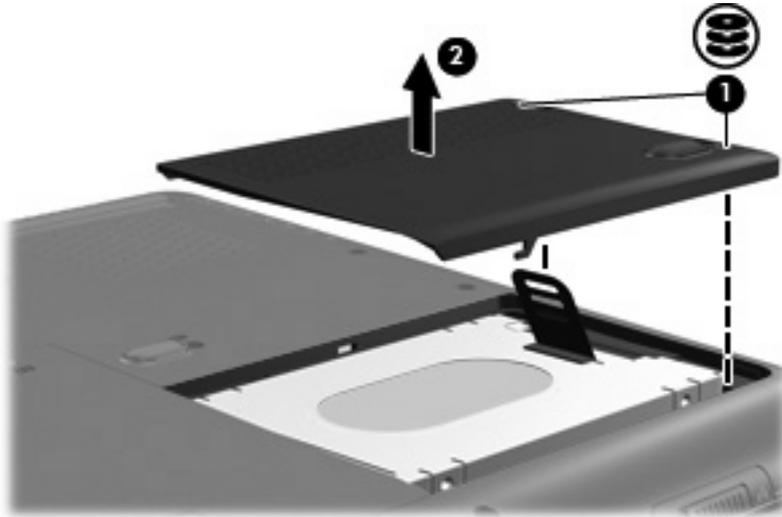
If you are not sure whether the computer is off or in Hibernation, turn the computer on by pressing the power button. Then shut down the computer through the operating system.

To remove the hard drive:

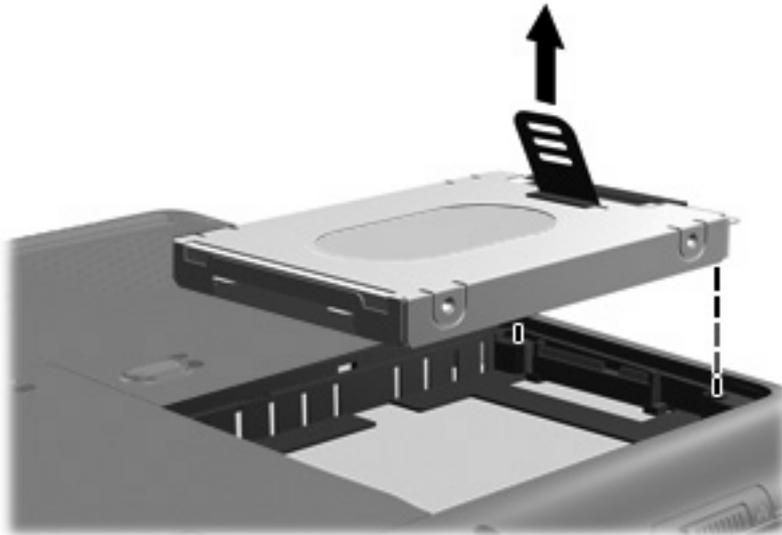
1. Save your work.
2. Shut down the computer and close the display.

If you are not sure whether the computer is off or in Hibernation, turn the computer on by pressing the power button. Then shut down the computer through the operating system.
3. Disconnect all external devices connected to the computer.
4. Unplug the power cord from the AC outlet.
5. Turn the computer upside down on a flat surface.

6. Remove the battery from the computer.
7. With the hard drive bay toward you, loosen the 2 hard drive cover screws (1).
8. Lift the hard drive cover away from the computer (2).

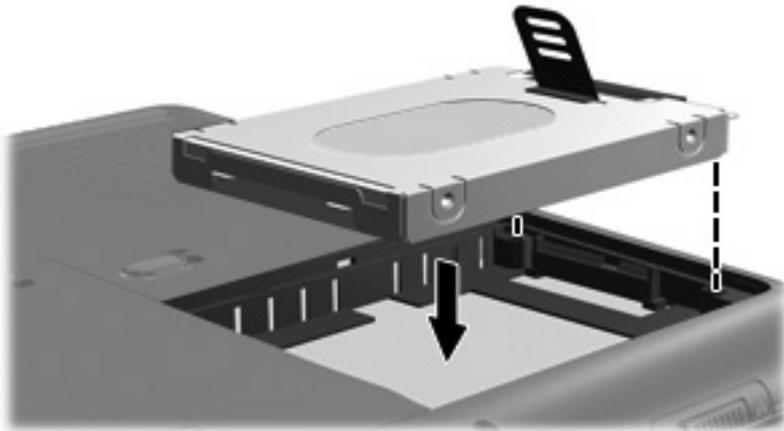


9. Pull the hard drive tab up, and then lift the hard drive away from the computer.

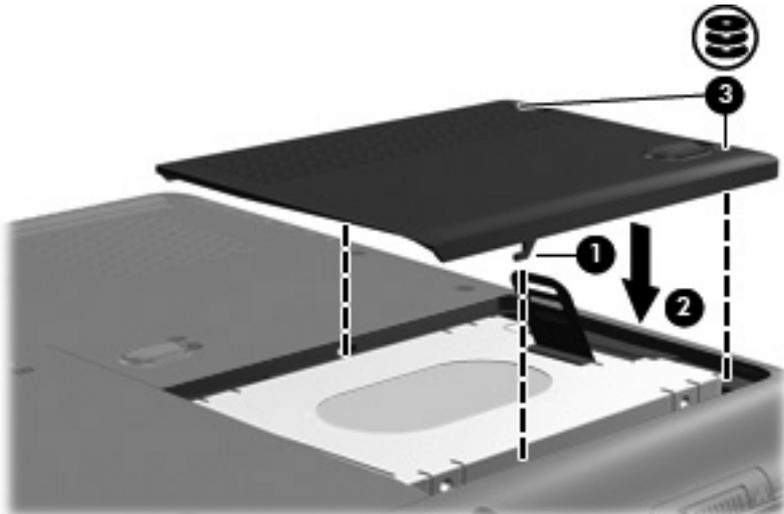


To install a hard drive:

1. Insert the hard drive into the hard drive bay, and gently press the hard drive down until it snaps into place.



2. Align the tabs (1) on the hard drive cover with the notches on the computer.
3. Close the cover (2).
4. Tighten the hard drive cover screws (3).



Index

A

airport security devices 2

C

CD

inserting 5

removing, with power 6

removing, without power 7

CD drive 3

D

Disk Cleanup software 8

Disk Defragmenter software 8

disk performance 8

drives

caring for 2

hard drive 9, 11

optical drive 3

See *also* hard drive; optical drive

DVD

inserting 5

removing, with power 6

removing, without power 7

DVD drive 3

H

hard disk drive

installing 11

removing 9

replacing 9

hard drive

installing 11

removing 9

replacing 9

M

maintenance

Disk Cleanup 8

Disk Defragmenter 8

O

optical disc

inserting 5

removing, with power 6

removing, without power 7

optical drive 3

S

software

Disk Cleanup 8

Disk Defragmenter 8

