

# 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.



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# 1 Identifying installed drives

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

 **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 Help for more information.

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## 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, 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.

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## 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.

Type of Optical Drive	Read from CD and DVD-ROM media	Write to CD-RW media	Write to DVD $\pm$ RW/R media	Write to DVD +R DL media	Write to DVD-RAM media
DVD and CD-RW Combo Drive	Yes	Yes	No	No	No
8X DVD $\pm$ RW SuperMulti Drive with Double-Layer support	Yes	Yes	Yes	Yes	Yes

**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.

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

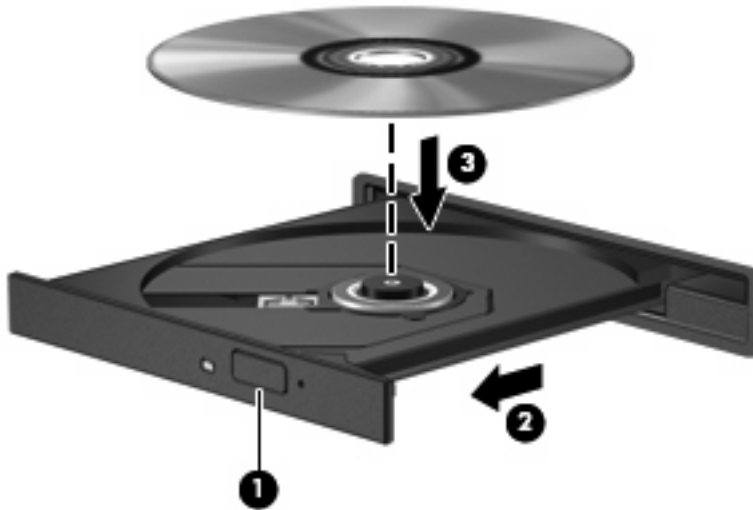
- Your playback may be interrupted.
- You may need to restart the CD or DVD to resume audio and video playback.

## Inserting an optical disc (CD or DVD)


1. Turn on the computer.
2. Press the release button (1) on the drive bezel to release the disc 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 disc 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.

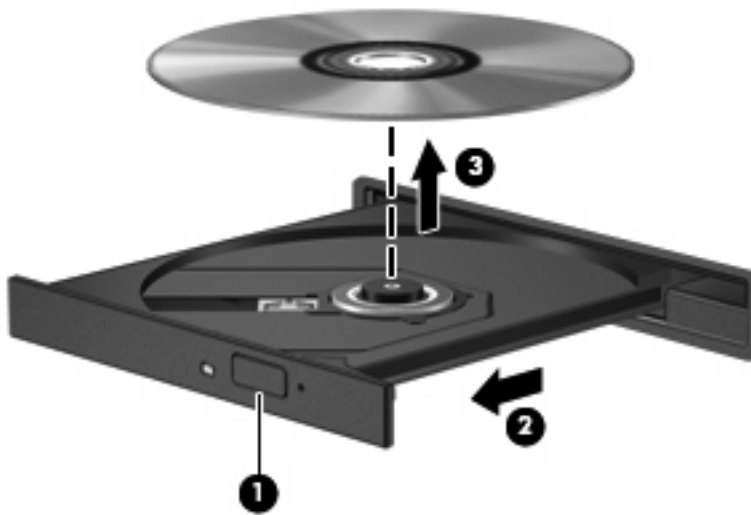
## Removing an optical disc (CD or DVD)

There are 2 ways to remove a disc, depending on whether the disc tray opens normally or not.

### When the disc tray opens

1. Press the release button **(1)** on the drive bezel to release the disc 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.




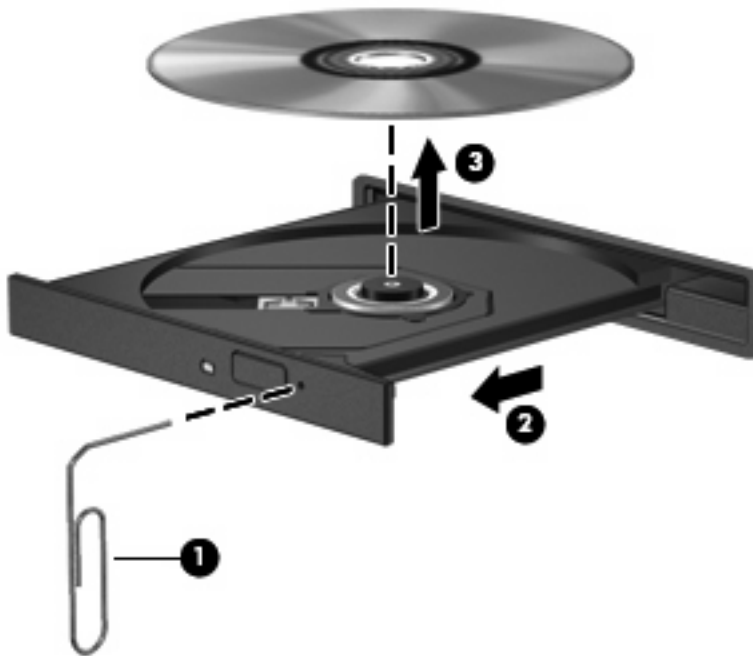
3. Close the disc tray and place the disc in a protective case.

### When the disc tray does not open

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 disc tray and place the disc in a protective case.

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# 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**.

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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

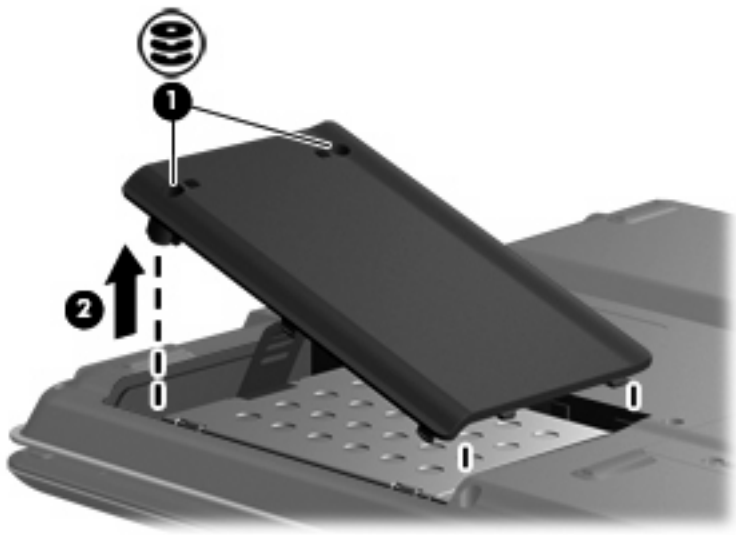
△ **CAUTION:** To prevent information loss or an unresponsive system:

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.

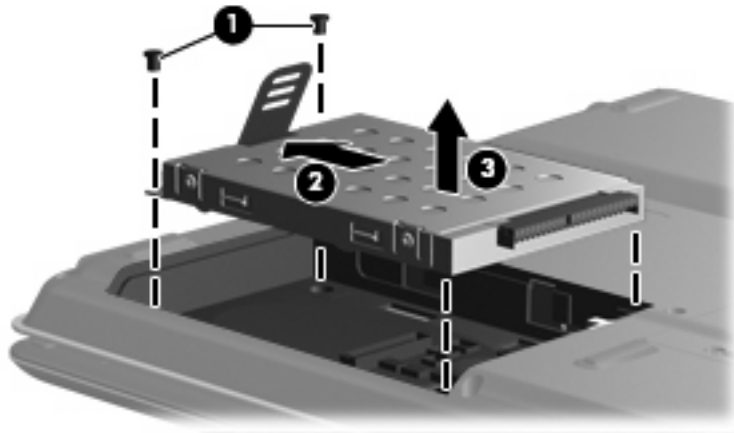
To remove the hard drive:

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



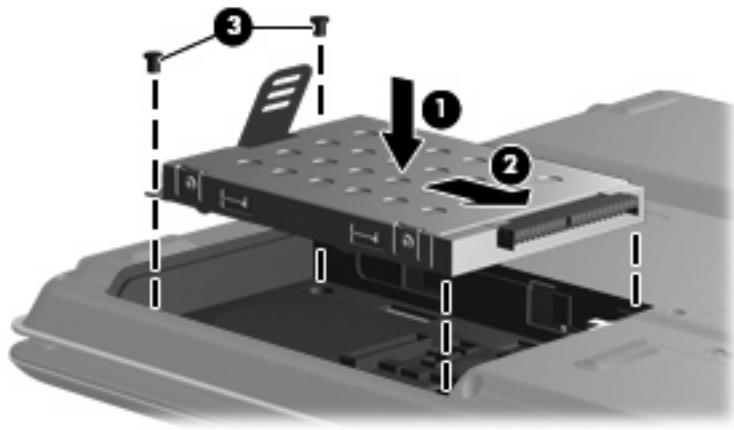
9. Remove the 2 hard drive screws (1).

10. Disconnect the hard drive **(2)** by sliding it to the left.
11. Lift the hard drive away from the computer **(3)**.



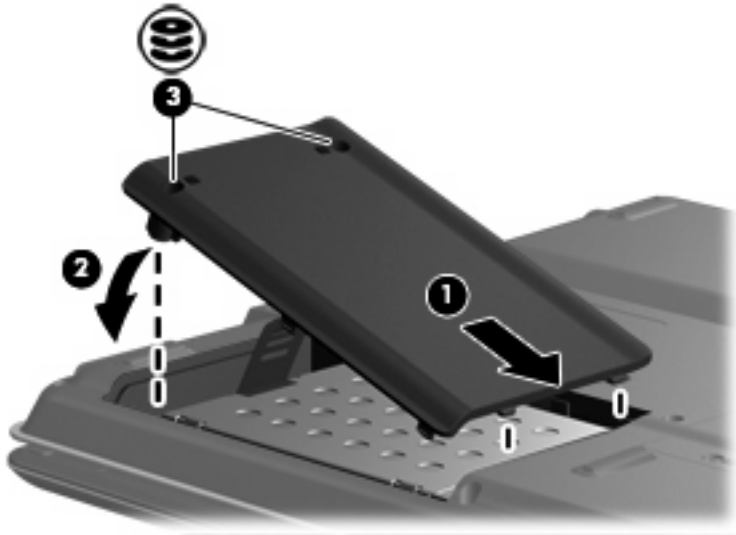
To install a hard drive:

1. Lower the hard drive into the hard drive bay **(1)**.
2. Slide the hard drive toward the hard drive connector **(2)** until it is fully seated.
3. Replace the 2 hard drive screws **(3)**.



4. Align the tabs **(1)** on the hard drive cover with the notches on the computer.
5. Close the cover **(2)**.

6. Tighten the 2 hard drive cover screws (3).





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