Drives

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This guide explains the computer hard drive and optional external drives.

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1

Drive care

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:

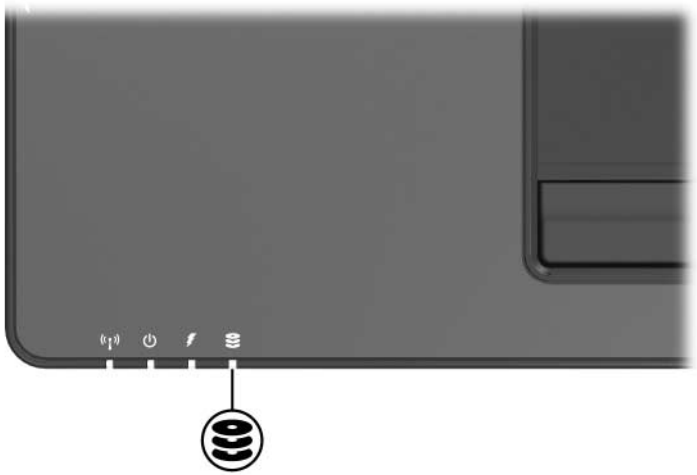
- Initiate Sleep, and allow the screen to clear, before you move a computer or external hard drive from one location to another.
- Before handling a drive, discharge static electricity by touching the unpainted metal surface of the drive.
- Do not touch the drive connector pins on a removable drive or on the computer.
- Handle the drive carefully; do not drop or compress the drive.
- Before removing or inserting a drive, shut down the computer. If you are unsure whether the computer is off 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.
- When the battery pack is the only source of power, ensure that the battery pack 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 it with cleaning products.
- Remove the 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.

2

Drive light

The drive light blinks when the hard drive is being accessed. The drive light changes to amber when the computer is dropped or moved while running on battery power. An amber drive light indicates that the hard drive is temporarily parked by HP Mobile Data Protection 3D.

Your computer may look slightly different from the illustration below.



3

Hard drive

HP Mobile Data Protection 3D with digital accelerometer

HP Mobile Data Protection 3D with digital accelerometer protects the disk drive by parking the drive and halting I/O requests when you

- Drop the computer.
- Move the computer with the display closed while the computer is running on battery power.

A short time after the end of one of these events, HP Mobile Data Protection 3D returns the disk drive to normal operation.

Internal disk drives and optional MultiBay II hard drives (select models only) are protected by HP Mobile Data Protection 3D. Disk drives that are connected to a USB port or in an optional docking station are not protected.

For more information, refer to the HP Mobile Data Protection 3D online Help.

HP Mobile Data Protection 3D status

The drive light on the computer changes to an amber color to show that the drive is parked. In addition, you can use Mobility Center to check whether drives are currently protected and whether a drive is parked.

- If the software is enabled, a green check mark is superimposed over the hard drive icon.
- If the software is disabled, a red X is superimposed over the hard drive icon.
- If the drive is parked, a yellow moon is superimposed over the hard drive icon.

If HP Mobile Data Protection 3D has parked the drive, the computer

- Will not shut down.
- Will not initiate Sleep or Hibernation, except as noted below.

  ✎ If the computer is running on battery power and reaches a critical battery level, HP Mobile Data Protection 3D allows the computer to initiate Hibernation.

- Will not activate battery alarms set on the Alarms tab in Power Options Properties.

HP recommends that you wait for the computer to completely shut down or initiate Sleep or Hibernation before you move it.

HP Mobile Data Protection 3D software

The HP Mobile Data Protection 3D software enables you to

- Enable and disable HP Mobile Data Protection 3D.

Depending on your user privileges, you may not be able to enable or disable HP Mobile Data Protection 3D.

- Determine whether a drive in the system is supported.

To open the software and change settings:

1. In the Mobility Center, click the hard drive icon to open the HP Mobile Data Protection 3D System window.
2. Click the appropriate button to change settings.
3. Click **OK**.

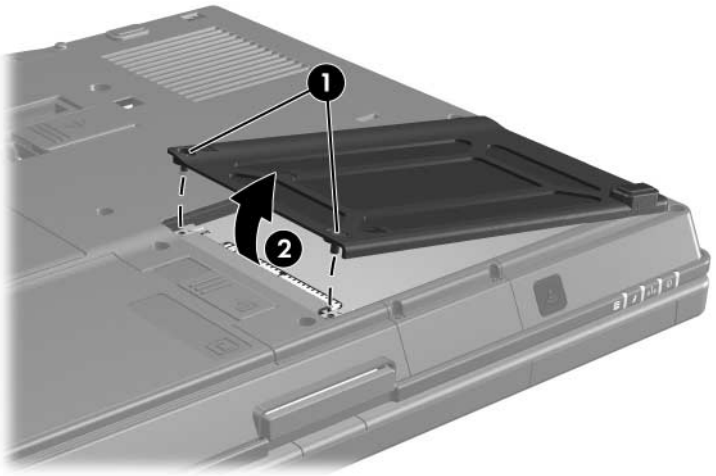
Replacing the hard drive

CAUTION: To prevent system lockup and loss of information:

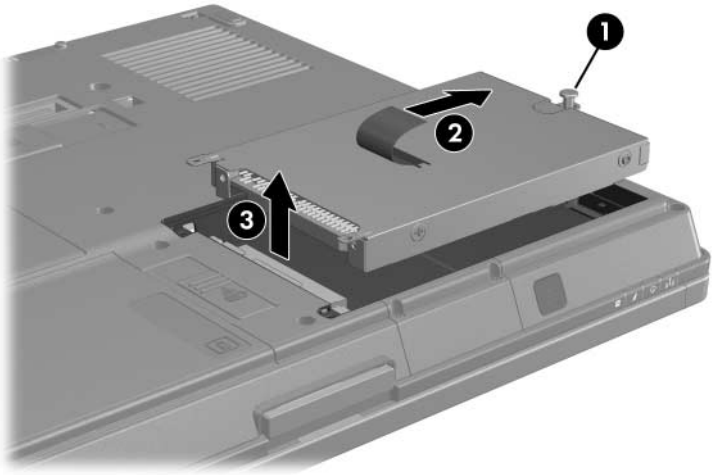
- Shut down the computer before removing the hard drive from the hard drive bay. Do not remove the hard drive while the computer is on, in the Sleep state, or in Hibernation.
- If you are not sure whether the computer is off or in Hibernation, turn the computer on by sliding the power switch toward the front of the computer. 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, with the front of the computer toward you.
6. Remove the battery pack from the computer.
7. Loosen the 2 hard drive cover screws ❶.
8. Lift the hard drive cover ❷ away from the computer.

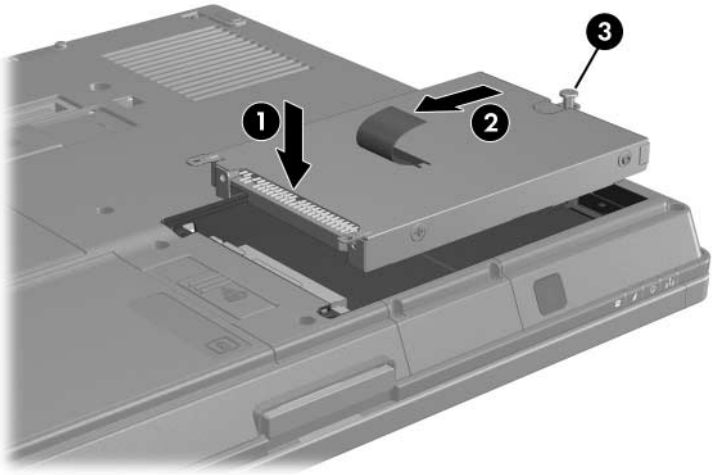


9. Loosen the hard drive screw ❶.
10. Pull the hard drive tab ❷ to the right to disconnect the hard drive.
11. Lift the hard drive ❸ away from the computer.

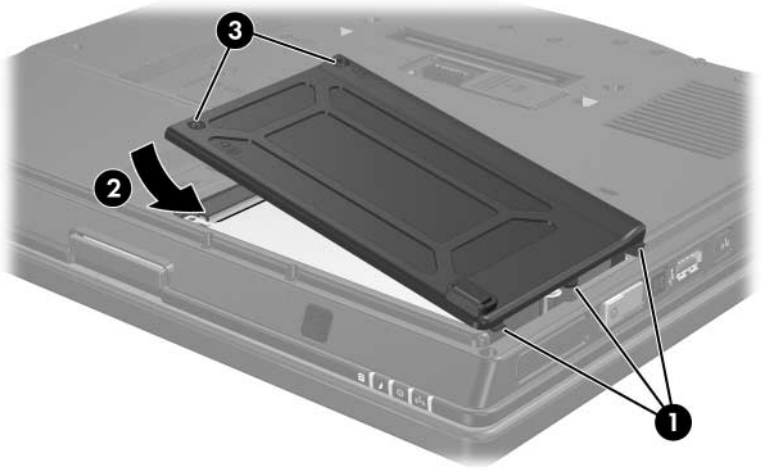


To install a hard drive:

1. Insert the hard drive ❶ into the hard drive bay.
2. Pull the hard drive tab ❷ to the left to connect the hard drive.
3. Tighten the hard drive screw ❸.



4. Align the tabs ❶ on the hard drive cover with the slots on the computer.
5. Close the cover ❷.
6. Tighten the hard drive cover screws ❸.



4

External drives

Removable external drives enable you to store and access information.

A USB drive can be added by connecting the drive to a USB port on the computer or on an optional docking device.

An external MultiBay or MultiBay II supports any MultiBay or MultiBay II device, including the following:

- 1.44-megabyte diskette drive
- Hard drive module (a hard drive with an adapter attached)
- DVD-ROM Drive
- DVD/CD-RW Combo Drive
- DVD+RW/R and CD-RW Combo Drive
- DVD±RW/R and CD-RW Combo Drive

Optional external devices

For information about required software, drivers, and which port on the computer to use, refer to the documentation included with the device.

To connect a standard external device to the computer:

1. If you are connecting a powered device, turn off the device.
2. Connect the device to the computer.
3. If you are connecting a powered device, plug the device power cord into a grounded electrical outlet.
4. Turn on the device.

To disconnect a standard external device from the computer, turn off the device, and then disconnect it from the computer.

Optional external MultiBay devices

An external MultiBay or MultiBay II connects to the computer USB port and enables you to use MultiBay and MultiBay II devices. The computer provides one powered USB port on the right side. This port provides power to the external MultiBay when used with a powered USB cable. The USB ports on the rear panel and left side of the computer do not provide power to the external MultiBay. External MultiBays connected to these USB ports must also be connected to AC power.

For more information about the external MultiBay, refer to the documentation that is included with the device.

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