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COMPAQ

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5000 Series Hardware Guide

Contents

Introduction

Symbols and Graphics Used

The following words and symbols have special meaning in this guide:

Failure to follow directions may result in bodily harm or loss of life.

Understanding the background or concept may help you solve a problem.

Helpful hints make using your computer easier and faster.

Another document or another page in this document has related information.

Caution: Failure to follow directions may result in damage to equipment or loss of data.

Warnings and cautions are displayed to protect you from injury, your equipment from damage, and your files from data loss.

Computer Illustrations and Features

The manual provides general instructions for using your Compaq PC.

To stay ahead of the market, we are constantly seeking to improve our product line. After release of this manual, updates may have been made to the software or hardware configurations. Therefore, your system and other components may differ from the illustrations and descriptions in this guide.

Hardware Guide

This guide is supplementary to the Getting Started and Beyond Guide and covers the following topics:

Your Compaq PC at a Glance

Overview of the front and rear components of your PC.

Replacing Parts

Accessing and replacing the internal components of your PC using the easy access design.

Upgrading Your Computer

Expanding your PC performance by upgrading certain components such as memory, and by adding peripherals such as digital cameras and printers.

Your Compaq 5000 Series PC at a Glance

Discover the components of your Compaq 5000 Series PC.

Tip

Some components have colour-coded connectors that match the ports on the back of your computer.

Always make sure that you follow the colour coding, connecting the same colour connector to the same colour port.

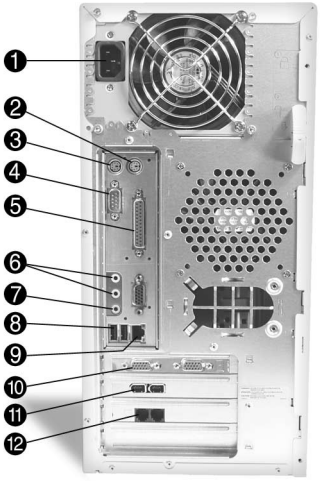
See also ...

See the Getting Started and Beyond Guide *which contains an overview of common rear panel connectors.*

What's at the Front? (5000 Series)

1. CD-R/RW or DVD R drive
2. Diskette drive
3. Two USB connectors for connecting USB devices, such as gamepads, joysticks, and video cameras
4. Power button
5. CD storage for storing a maximum of five CDs

What's at the Back? (5000 Series)



1. Power port
2. PS/2 mouse port
3. PS/2 keyboard port
4. Serial port for connecting a serial peripheral device
5. Parallel port for connecting a peripheral device, such as a printer
6. Audio speaker ports
7. Microphone port
8. USB ports for connecting an Internet keyboard or other USB devices
9. Ethernet port for connecting to an Ethernet network (if equipped)
10. Monitor port

    Note: location may vary by model; port may be located directly above audio speaker.
11. 1394 port
12. Modem port for connecting to a phone line

Select models offer TV Out functionality. The S-VHS connector is located next to the VGA monitor connector.

Note: Connectors may vary by model.

Replacing Parts

Your computer is constructed with an Easy Access panel. This design makes accessing the internal parts easy.

Warning

Failure to disconnect the power from the computer may result in personal injury.

Warning

Before working with the components inside the computer, you must ground yourself and the equipment to prevent static electricity from damaging the parts. To discharge any static buildup, you should touch a metal part of the computer chassis before touching any internal parts.

Did you know ...

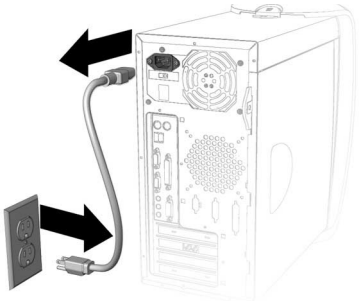
The screw(s) securing the side access panel are for shipping purposes only and do not need to be replaced.

Accessing Internal Computer Components

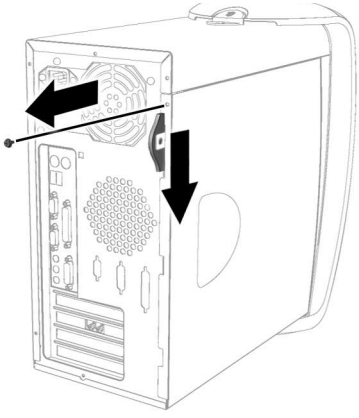
Note: if you would like to replace the system board or microprocessor, please contact the Compaq Technical Support Centre at the telephone number listed in your warranty.

Your safety is important. Before performing any procedures involving the components, take a few minutes to read the Warning and Caution Statements in the Introduction chapter of the *Getting Started and Beyond Guide*. Following the guidelines in these statements will help reduce the risk of personal injury or equipment damage.

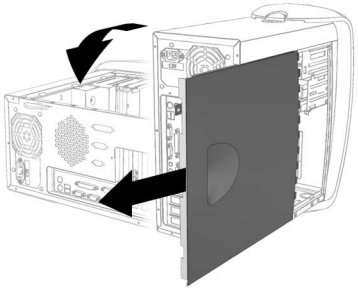
1. Turn off the computer according to the instructions provided in the *Getting Started and Beyond Guide*.
2. Disconnect the power cable from the wall socket and computer.



3. Disconnect all peripheral device cables from the computer.
4. Remove the screws securing the side access panel.
5. Locate the latch directly below the screw, pull down, and hold in the down position.



6. Grab the handle and slide the side panel from the chassis.
7. Turn the computer on its side, with the open side facing up.



Upgrading Your Computer

The CD-ROM, CD-RW, and DVD-ROM drives are often called optical drives because they use light to read and write information to a compact disc (CD) or DVD. These discs store massive amounts of information.

Your CD-ROM drive allows you to read data from a CD. A CD holds 600 MB of data.

The CD-RW drive allows you to read and write data to disc(s) for permanent storage. The CD-RW drive allows you to record video and audio.

The DVD-ROM drive allows you to view your favourite movies and listen to music on DVDs. It can also read CDs.

Did you know ...

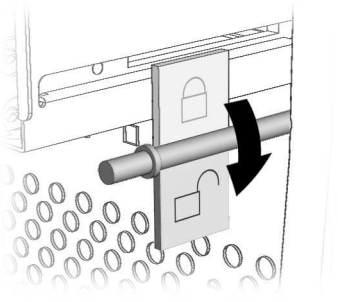
You do not have to place the lock in the up position after replacing the new drive(s).

Upgrading the CD-ROM, CD-RW, and DVD-ROM Drives

1. Complete the "Accessing Internal Computer Components" procedure.
2. Disconnect the flat grey IDE cable and the power cable from the back of the drive.

   Note: you may need to move the cable from side to side as you pull it, to loosen it.

3. Locate the drive door lock inside the chassis.
4. Rotate the lock to the down position to unlock the upper front panel door.



5. Press the indention located on the lower front panel to open the lower door.

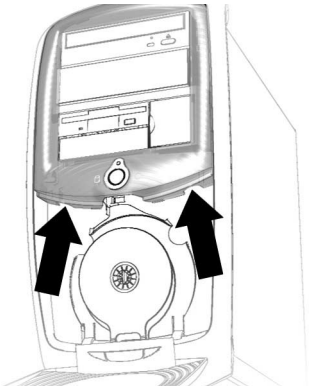
Tip

The upper front panel door was designed with finger holes to make opening the door easy.

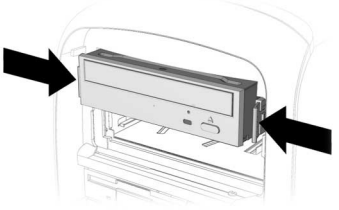
Tip

The drive data cable has a colour pull tab to help you identify the cable.

6. With the index fingers of both hands, grasp the finger holes under the upper front panel and pull this hard towards you.

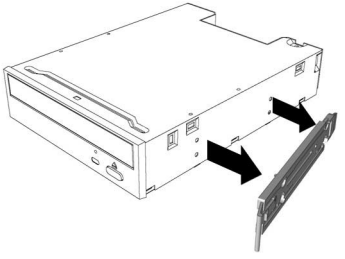


7. Push the plastic flaps on both sides of the drive inwards and pull towards you.



8. Pull the drive from the front of the computer.

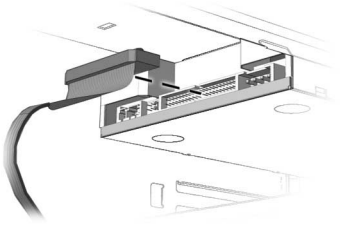
9. Remove the drive rails from each side of the drive and place the rails on the new drive. Slide the new drive back into the empty drive slot.



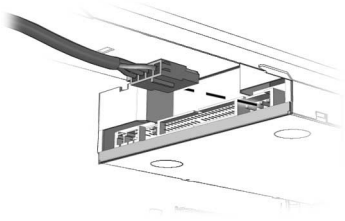
Tip

The drive rails snap on and off the drive(s). Save the drive rails that came with your computer. They will be used on your new drive(s).

10. Connect the data cable to the drive.



11. Connect the power cable to the drive.



12. Replace the top panel and close the CD bezel.
13. Flip up the lock on the front panel.

Upgrading Computer Memory

Random access memory (RAM) is the working space of your computer. Data and instructions are stored there temporarily in memory.

There are several different types of memory modules. You must install the same type of memory currently in your computer.

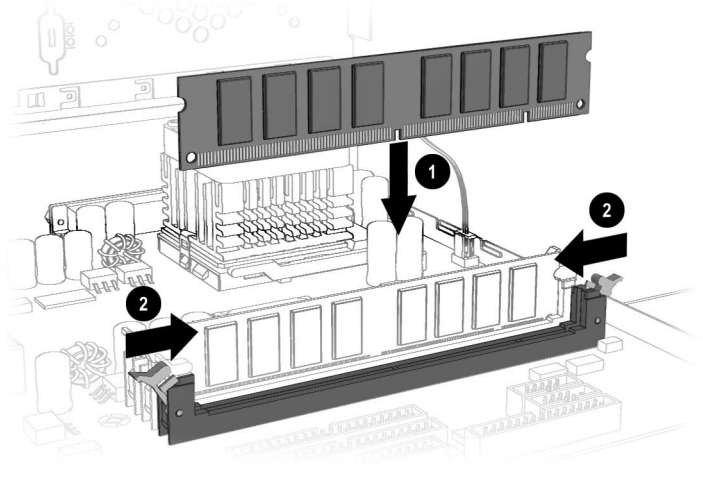
Did you know ...

If a blank screen is displayed after replacing the memory module, the memory is installed incorrectly. Repeat the procedure to ensure that the memory module is properly positioned.

Tip

Upgrade the memory in your computer with modules of the type and speed that are identical to the memory originally installed in your computer.

1. Complete the "Accessing Internal Computer Components" procedure for your computer model.
2. Pull outward on the release latches found on both ends of the memory slot ❷.
3. Align the memory module ❶ with the memory slot on the system board.
4. Push the module carefully and firmly into the slot, ensuring that the latches ❷ on both ends snap into place.



Note: Press gently to ensure the memory module is properly positioned.

Adding an Additional Hard Drive

The hard drive is used to store information permanently inside your computer. Before adding an additional hard drive, back up the important data files of your original hard drive for safekeeping on CD or diskette.

Tip

Save the screw securing the hard drive for your replacement hard drive.

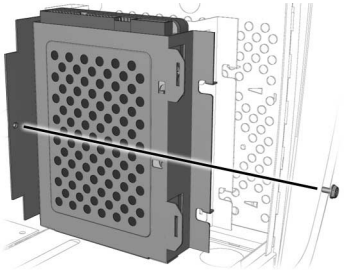
Did you know ...

The hard drive data cable has a colour pull tab to help identify it.

Caution: To prevent loss of work and damage to the computer or drive:

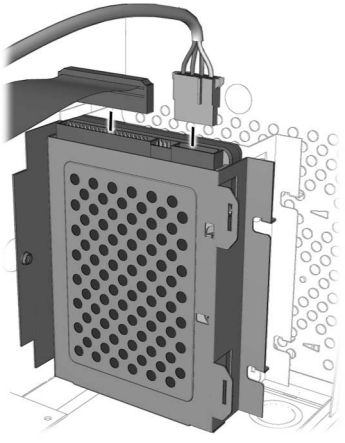
- If you are inserting or removing a hard drive, shut down the operating system properly, then power off the computer. Do not remove a hard drive while the computer is on or in standby mode.
- Before handling a drive, ensure that you are discharged of static electricity. See the *Safety and Comfort Guide* for information on how to become static free.
- While handling a drive, avoid touching the connectors.
- Handle a drive carefully, do not drop it.
- Do not use excessive force when inserting a drive.
- Avoid exposing a hard drive to liquids, temperature extremes, or products that have magnetic fields such as monitors or speakers.

1. Complete the "Accessing Internal Computer Components" procedure.
2. Remove the screw from the second hard drive bracket.



Caution: Dropping the hard drive might damage the read/write head, which can cause damage to the head or loss of data.

3. Mount the extra hard drive bracket tabs into the hooks on the hard drive bracket.
4. Insert the screw and secure the hard drive bracket to the chassis wall.
5. Connect the hard drive data and power cable.



Adding an Expansion or Option Card

An expansion card is a circuit board that fits into a computer expansion slot. The card adds a certain function such as a modem, sound or audio card, Network Interface Card (NIC), or Small Computer System Interface (SCSI) adapter.

This topic shows you how to add or replace expansion and option cards in your computer.

Did you know ...

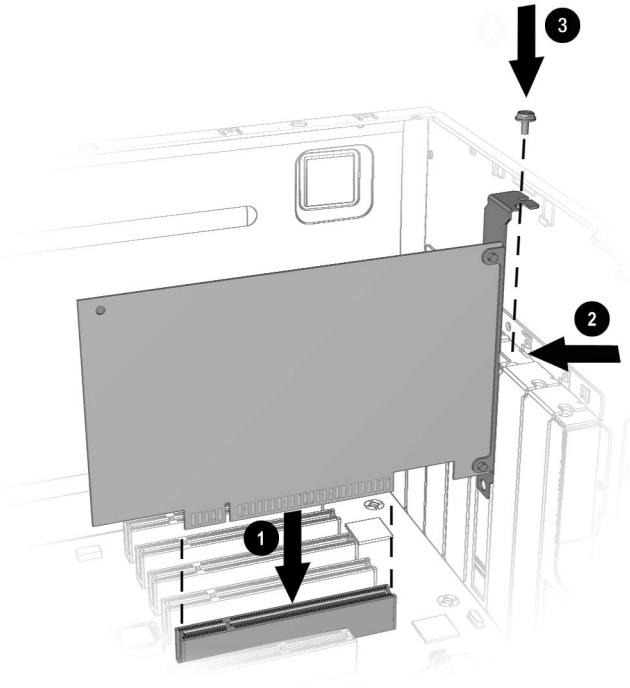
The type and number of expansion slots may vary by computer model.

Tip

Be sure the expansion card is properly positioned in the rear connector slot on the chassis.

Note: Some PCs come with AGP slots for graphics card options only.

1. Complete the "Accessing Internal Computer Components" procedure for your computer model.
2. Align the card ❶ with the connector on the system board and with the rear connector slots ❷ on the chassis.
3. Insert the card carefully and firmly into the connector on the system board.



4. Place the slot screw ❸ into the chassis slot and secure the expansion card to the chassis.