Compaq Presario Desktop Products

# Upgrading and Servicing Guide



## The information in this document is subject to change without notice.

Hewlett-Packard<sup>®</sup> Company makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

HP shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

HP assumes no responsibility for the use or reliability of its software on equipment that is not furnished by HP.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of HP.

Hewlett-Packard Company P.O. Box 4010 Cupertino, CA 95015–4010 USA

© 2001–2003 Hewlett-Packard Development Company, L.P. All rights reserved.

Hewlett-Packard is a registered trademark of Hewlett-Packard Company in the United States of America and other countries/regions.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited. Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, 4,819,098, and 4,907,093 licensed for limited viewing uses only.

Other brand or product names are trademarks of their respective holders.

HP supports lawful use of technology and does not endorse or encourage the use of our products for purposes other than those permitted by national copyright law.

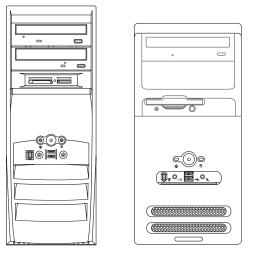
# table of contents

upgrading and servicing the pc	1
preparing the pc	1
removing or upgrading a drive	2
locating drive positions removing a drive	
replacing or adding a drive	5
upgrading or replacing memory	7
removing a memory module	7
replacing or adding a memory module	8
removing or installing an expansion card	8
reassembling the pc	10

# upgrading and servicing the pc

This guide describes procedures for accessing the internal parts of the PC and installing components.

**NOTE:** The procedures for the S0000 and 8000 series models are the same except where noted.



8000 series model and S0000 series model

### preparing the pc

Before you upgrade any component in your PC, you need to prepare the PC so that you can safely handle it and the components.



CAUTION: Static electricity can damage the electronic components of the PC or optional equipment. Ensure that you are discharged of static electricity by briefly touching a grounded metal object.

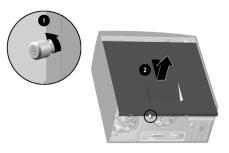
- Remove any diskette or optical disc (CD or DVD) from the PC.
- 2 Click the Start button, and then click Turn Off Computer. Click Turn Off to turn the PC off.
- **3** Disconnect the modem/telephone cable, if present.
- 4 Disconnect the power cord from the electrical outlet (1) and then from the PC (2).



disconnecting the power cord



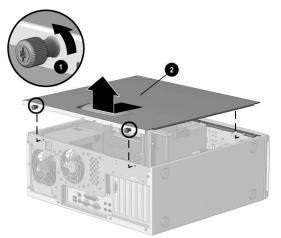
- WARNING: To reduce the risk of personal injury from electrical shock and hot surfaces, disconnect the power cord from the wall outlet, and allow the internal system components to cool before touching.
- **5** Disconnect all external devices connected to the PC.
- **6** Lay the PC on its side with the access panel (the side with the pull grip) facing up.
- 7 Remove the access panel by loosening the screw(s)
  (1) that secure the access panel to the PC chassis.
  Slide the access panel back (2) about 1 inch (2.5 cm), and then lift it up and off the unit.



removing the pc access panel on the S0000 series model



WARNING: Beware of sharp edges inside the chassis.



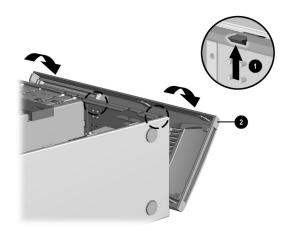
removing the pc access panel on the 8000 series

- 8 Remove the front bezel by following the appropriate method for your PC model:
  - To remove the front bezel from the S0000 series model, gently pry the top section (1) of the bezel away from the chassis. On the inside of the front bezel, press the center two tabs (not the bottom tabs) to release the bezel, and then pull it from the chassis (2).



removing the front bezel from the \$0000 series

• To remove the front bezel from the 8000 series, push up on the two release tabs (1), and then rotate the front bezel away from the chassis to release it (2).



removing the front bezel from the 8000 series

# removing or upgrading a drive

Depending on your PC configuration, you may have up to four of the following storage drives in your PC.

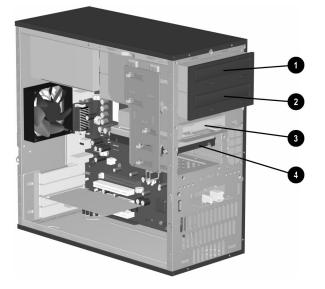
- CD-ROM or CD-RW drive
- DVD-ROM or DVD+RW/+R drive
- Hard disk drive
- Diskette drive
- 7-In-1 memory card reader (select models only)

You need a screwdriver to replace any of the drives.

CAUTION: Back up your personal files on the hard disk drive to an external storage device, such as a CD, before removing the hard disk drive. Failure to do so will result in data loss. After replacing the hard disk drive, you need to run System Recovery using the recovery discs to load the factory-installed files. See "using application recovery and system recovery" for details.

### locating drive positions

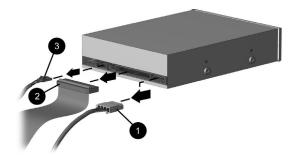
- 1 Optical drive, may be a CD-ROM, CD-RW, DVD-ROM, or DVD+RW/+R drive
- 2 Second optical drive, may be a DVD-ROM, DVD+RW/+R, CD-ROM, CD-RW drive, or 7-In-1 memory card reader (select models only)
- 3 Diskette (floppy) drive
- 4 Hard disk drive



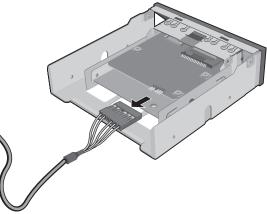
drive positions on the \$0000/8000 series (\$0000 shown)

### removing a drive

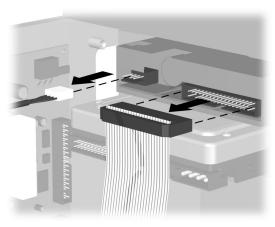
- 1 Locate the drive you want to remove.
- **2** Complete the procedure described in "preparing the pc" on page 1.
- **3** Disconnect the power cable **(1)** and data cable **(2)** from the back of the drive you want to remove, as indicated in the following illustrations. Use a gentle rocking motion. Some units may have a sound cable. If so, disconnect the sound cable **(3)**.



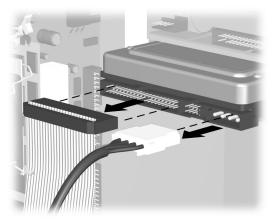
disconnecting the optical drive cables



disconnecting the 7-in-1 memory card reader cable

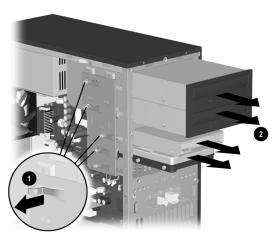


disconnecting the diskette (floppy) drive cables



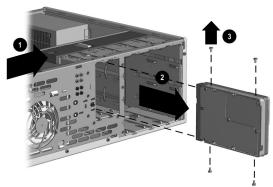
#### disconnecting the hard disk drive cables

- **4** Release the drive from the chassis by following the method appropriate for your PC model.
  - To release a drive from the chassis of the S0000 series, lift the release tab (1) on the latch drive bracket of the drive you want to remove, and then slide the drive from its drive bay (2). (The latch drive bracket secures the drives in their respective positions in the chassis.)



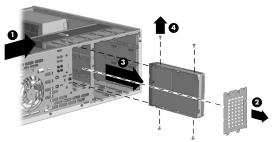
removing a drive from the S0000 series

• To release an optical drive or diskette drive from the chassis of the 8000 series, slide the drive lock mechanism (1) to unlock the drive in the drive bay and pull the drive out of the drive bay (2).



# removing an optical or diskette drive from the 8000 series

To release a hard disk drive from the chassis of the 8000 series, slide the drive lock mechanism (1) to unlock the drive in the drive bay, remove the metal drive shield (2) by pressing and lifting the two tabs on one side of the shield, and then pull the drive out of the drive bay (3).



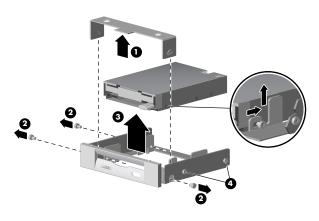
# removing a hard disk drive from the 8000 series

**5** For both the S0000 and 8000 series, if you are replacing the old drive with a new drive, remove the four screws (**4**) (two on each side) from the old drive. You need these screws to install the new drive.

**NOTE:** If you have the S0000 series, and you removed a 7-In-1 memory card reader, continue to step 7; otherwise, you are finished with the task of removing a drive from the chassis.

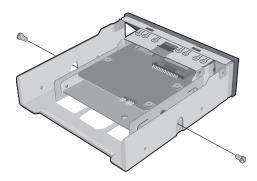
If you have the 8000 series and you removed a hard disk drive, a 7-In-1 memory card reader, or an optical drive, you are also finished with this task. If you have the 8000 series and you removed a diskette drive, continue to step 6.

6 For an 8000 series diskette drive, squeeze inward on both sides of the bracket brace and lift the brace up and out (1). Remove the two sets of screws (2) (left and right sides) that secure the drive to the drive adapter. Lift the diskette drive out of the drive adapter (3) by sliding the drive back and then up. Ensure that the guide screws (4) (left and right sides) are left in the drive adapter. You are finished with the task of removing the drive.



## removing a diskette drive from the drive adapter on the 8000 series

7 For the S0000 series 7-In-1 memory card reader, remove the reader from the drive bay adapter if the adapter is not included with your replacement reader. Remove the two screws (left and right sides) that secure the reader to the adapter. Lift the reader out of the adapter by sliding the reader back and then up. You are finished with the task of removing the reader.



removing a 7-in-1 memory card reader from the drive bay adapter on the S0000 series

### replacing or adding a drive

The steps to replace or add a drive are the same for both the S0000 and 8000 series, except when you are replacing a diskette drive on the 8000 series, or the 7-In-1 memory card reader on the S0000 series.

If you are replacing a diskette drive on the 8000 series, before starting step 1 in the following instructions, you need to fit the diskette drive in a diskette drive adapter as described in "reassembling the diskette adapter" on page 6.

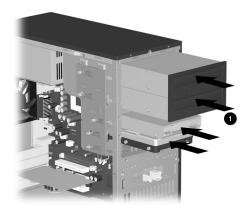
If you are replacing a 7-In-1 memory card reader, before starting step 1 in the following instructions, reassemble the reader in the drive bay adapter as described in step 7 of "removing a drive" on page 3.

If you are replacing or adding any other drive, begin with step 1 in the following instructions.

### to replace or add a drive

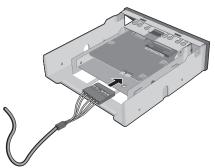
- Install four guide screws on the sides of the drive (two on each side). The screws help guide the drive into its proper position in the bay.
  - When replacing a drive on the S0000 and 8000 series, place the screws that you removed from the old drive in the new drive.
  - When adding a second hard disk drive on the 8000 series, use the four extra guide screws that are attached to the chassis under the front bezel.

2 Slide the drive into the drive bay (1), making sure to align the guide screws with the guide slots, until it snaps into place.

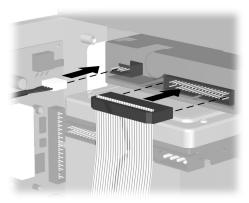


sliding the drive into the drive bay on the \$0000/8000 (\$0000 shown)

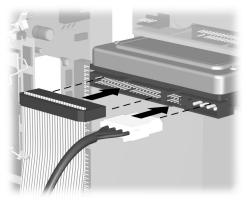
**3** Reconnect the power and data cables to your drive as indicated in the following illustrations.



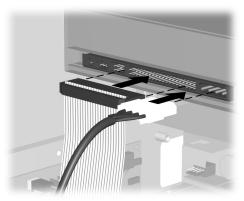
reconnecting the 7-in-1 memory card reader cable on the \$0000 series



reconnecting the diskette drive cables



reconnecting the hard disk drive cables



reconnecting the optical drive cables

**NOTE:** An optical drive for the 8000 series may include a sound cable. Connect this cable also.

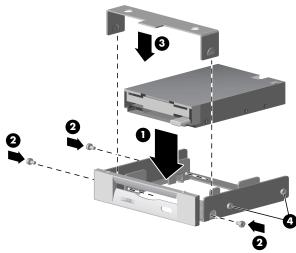
- **4** Complete the procedure described in "reassembling the pc" on page 10.
- **5** Turn on the PC.

### reassembling the diskette adapter

To replace or add a new diskette (floppy) drive on the 8000 series, you need to reassemble the adapter around the diskette drive. (The S0000 series does not need an adapter.)

Lower the diskette drive into the adapter (1). Ensure that the holes are aligned, and reinstall the screws (2) that secure the diskette drive to the adapter.

- 2 Press inward on each side of the bracket brace (3), and lower the bracket until it snaps into place over the diskette drive. Ensure that the guide screws (4) are installed in the adapter.
- **3** Return to "replacing or adding a drive" on page 5, and begin with step 1.



replacing the diskette drive adapter on the 8000 series

# upgrading or replacing memory

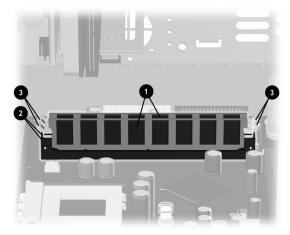
Your PC comes with random access memory (RAM), which temporarily stores data and instructions on your PC. You can install memory expansion modules in the memory expansion slots in the PC. The procedures for upgrading or replacing these modules are the same for the S0000 and 8000 series.

### removing a memory module



CAUTION: When handling a memory module, be careful not to touch any of the contacts. Doing so may damage the module.

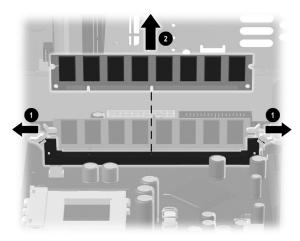
- Complete the procedure described in "preparing the pc" on page 1, but do not remove the front bezel.
- 2 Locate the memory module inside your PC. See the following illustration for the location of the memory modules (1), memory slots (2), and release latches (3) on the system board.



locating the memory module

**NOTE:** The location and number of memory modules may vary slightly by model.

3 Open both latches of the memory module socket(1) found at each end of the memory module. Lift the memory module (2) from the memory slot.



removing a memory module

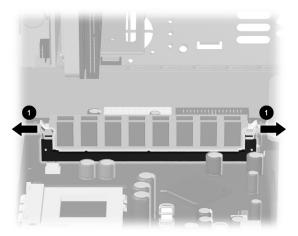
### replacing or adding a memory module

Upgrade the memory in your PC with memory of the same type and speed as the memory originally installed in your PC.



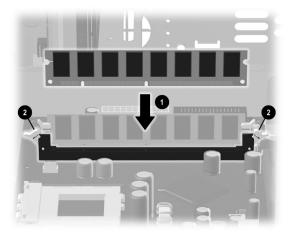
CAUTION: When handling a memory module, be careful not to touch any of the contacts. Doing so may damage the module.

1 Open both latches of the memory module socket (1).



# opening the latches on the memory module socket

- If you are *replacing* a memory module, put the new memory module in the same memory slot from which the old memory was removed.
- If you are *adding* a memory module, install the new module into the socket nearest the preinstalled module, and install additional modules in the next available sockets.
- 2 The memory module can be installed in only one way. Match the notch on the module (1) with the tab on the memory socket. Push the module carefully and firmly into the slot, ensuring that the latches (2) on both ends snap into place.



#### installing a memory module

**3** Complete the procedure described in "reassembling the pc" on page 10.

**NOTE:** If a blank screen is displayed after replacing or adding a memory module, the memory is installed incorrectly or it is the wrong type of memory. Remove and reinstall the memory module.

### removing or installing an expansion card

An expansion card is a circuit board that fits into a PC expansion slot. Your PC contains several expansion slots that can be used to add components to your PC. Component configurations vary by model.

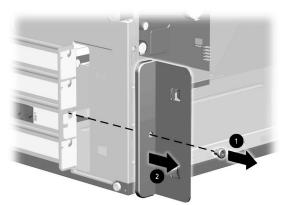
Expansion cards you can replace or add to your PC include:

- Modem
- Network Interface Card (NIC)
- Graphics Card
- Sound Card
- FireWire™ (IEEE 1394) Auxiliary Card

A Phillips screwdriver is needed to remove, replace, or add an expansion card.

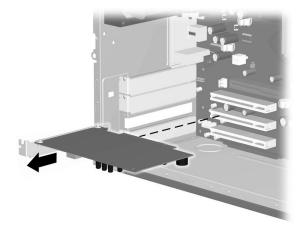
### to remove an expansion card

- Complete the procedure described in "preparing the pc" on page 1, but do not remove the front bezel.
  - To remove an expansion card from the S0000 series, continue to step 2.
  - To remove an expansion card from the 8000 series, skip to step 3.
- 2 On the S0000 series, on the rear of the PC, remove the expansion bracket covering the expansion slots by removing the screw from the bracket cover (1), and then remove the expansion bracket cover (2).



## removing the screw and expansion bracket cover on the S0000 series

- **3** Inside the PC on either the S0000 or 8000 series, locate the expansion slots on the system board.
  - If you have the 8000 series, continue to step 4.
  - If you have the S0000 series, skip to step 5.
- **4** On the 8000 series, remove the screw that secures the expansion card to the chassis.
- **5** Remove the expansion card from either an S0000 or 8000 series by holding the card at each end and carefully rocking it back and forth until the connectors pull free from the socket. Be sure not to scrape the card against the other components.

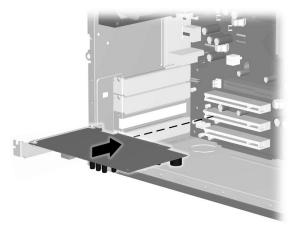


## removing an expansion card on the \$0000/8000 (\$0000 shown)

6 If you are not replacing the old expansion card with a new expansion card, reinstall the expansion slot cover to close the open slot. Insert the metal slot cover into the opened slot, and screw a screw into the top of the cover to secure it in place.

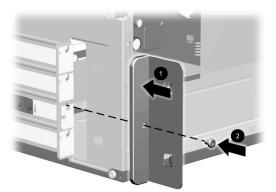
### to install an expansion card

1 If you are replacing or adding a new expansion card, in either the S0000 or 8000 series, align the edge of the expansion card with the slot on the chassis and gently but firmly press the card straight down into the expansion slot. The whole connector should be seated properly in the expansion slot.



replacing or adding an expansion card on the \$0000/8000 (\$0000 shown)

- If you have an 8000 series, continue to step 2.
- If you have an S0000 series, skip to step 3.
- **2** For the 8000 series, secure the expansion card to the chassis with the slot cover screw.
- **3** For both the S0000 and 8000 series, if you have replaced an expansion card, store the old card in the anti-static packaging that contained your new card.
  - If you have an SOOOO series, continue to step 4.
  - If you have an 8000 series, skip to step 5.
- 4 For the S0000 series, replace the expansion cover bracket (1) and screw (2).



replacing the expansion bracket cover on the S0000 series

**5** For both the S0000 and 8000 series, complete the procedure described in "reassembling the pc" on page 10.

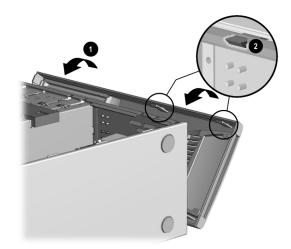
### reassembling the pc

- **1** Replace the front bezel by following the method appropriate for your PC model.
  - To replace the front bezel on the S0000 series, position the chassis in the upright position. At an angle, align the top of the front bezel with the top slots of the chassis (1) so that the front bezel hooks onto the chassis, and then press the bottom end of the bezel to the chassis until it snaps into place (2).



#### replacing the front bezel on the S0000 series

• To replace the front bezel on the 8000 series, lay the chassis on the side with the open side up. Place the front bezel in the correct position. Ensure the slots (2) are aligned correctly, and rotate the bezel toward the chassis (1) until it snaps into place.

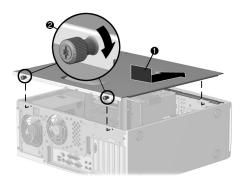


#### replacing the front bezel on the 8000 series

2 For either the S0000 or 8000 series, place the side access panel in the proper position on the chassis and slide it into place (1). Ensure that the hole for the thumbscrew(s) align with the hole in the chassis (2), and replace the thumbscrew(s).



replacing the side access panel on the S0000 series



replacing the side access panel on the 8000 series

**3** Reconnect the power cable (1) to the PC, and plug the cable into an electrical outlet (**2**).



# reconnecting the power cable on the \$0000/8000 (\$0000 shown)

- **4** Reconnect the modem/telephone cable, if present.
- **5** Reconnect all peripheral devices to the PC.
- WARNING: To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telecommunications or telephone connectors into the network interface card (NIC) (sometimes labeled as an Ethernet connector).
- 6 Turn on the PC by pressing the On button.

Printed in

