
HP Notebook PC

———— Startup Guide

Notice

This manual and any examples contained herein are provided “as is” and are subject to change without notice. Hewlett-Packard Company makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard Co. shall not be liable for any errors or for incidental or consequential damages in connection with the furnishing, performance, or use of this manual or the examples herein.

Consumer transactions in Australia and the United Kingdom: The above disclaimers and limitations shall not apply to Consumer transactions in Australia and the United Kingdom and shall not affect the statutory rights of Consumers.

© Copyright Hewlett-Packard Company 2000. All rights reserved. Reproduction, adaptation, or translation of this manual is prohibited without prior written permission of Hewlett-Packard Company, except as allowed under the copyright laws.

The programs that control this product are copyrighted and all rights are reserved. Reproduction, adaptation, or translation of those programs without prior written permission of Hewlett-Packard Co. is also prohibited.

Portions of the programs that control this product may also be copyrighted by Microsoft Corporation, Phoenix Technologies, Ltd., ESS, S3 Incorporated, Accton, and Adobe Systems Incorporated. See the individual programs for additional copyright notices.

Microsoft, MS, MS-DOS, and Windows are registered trademarks of Microsoft Corporation. Pentium and the Intel Inside logo are U.S. registered trademarks and MMX is a U.S. trademark of Intel Corporation. Adobe and Acrobat are trademarks of Adobe Systems Incorporated.

**Hewlett-Packard Company
Mobile Computing Division
19310 Pruneridge Ave.
Cupertino, CA 95014, U.S.A.**

HP Software Product License Agreement

Your notebook PC contains factory-installed software programs. Please read the Software License Agreement before proceeding.

Carefully read this License Agreement before proceeding to operate this equipment. Rights in the software are offered only on the condition that the customer agrees to all terms and conditions of the License Agreement. Proceeding to operate the equipment indicates your acceptance of these terms and conditions. If you do not agree with the terms of the License Agreement, you must now either remove the software from your hard disk drive and destroy the Recovery CD, or return the complete computer and software for a full refund.

Proceeding with configuration signifies your acceptance of the License Terms.

Unless otherwise stated below, this HP Software Product License Agreement shall govern the use of all software that is provided to you, the customer, as part of the HP computer product. It shall supersede any non-HP software license terms that may be found online, or in any documentation or other materials contained in the computer product packaging.

Note: Operating System Software by Microsoft is licensed to you under the Microsoft End User License Agreement (EULA).

The following License Terms govern the use of the software:

Use. Customer may use the software on any one computer. Customer may not network the software or otherwise use it on more than one computer. Customer may not reverse assemble or decompile the software unless authorized by law.

Copies and Adaptations. Customer may make copies or adaptations of the software (a) for archival purposes or (b) when copying or adaptation is an essential step in the use of the software with a computer so long as the copies and adaptations are used in no other manner.

Ownership. Customer agrees that he/she does not have any title or ownership of the software, other than ownership of the physical media. Customer acknowledges and agrees that the software is copyrighted and protected under the copyright laws. Customer acknowledges and agrees that the software may have been developed by a third party software supplier named in the copyright notices included with the software, who shall be authorized to hold the Customer responsible for any copyright infringement or violation of this Agreement.

Product Recovery CD-ROM. If your computer was shipped with a product recovery CD-ROM: (i) The product recovery CD-ROM and/or support utility software may be used only for restoring the hard disk of the HP computer with which the product recovery CD-ROM was originally provided. (ii) The use of any operating system software by Microsoft contained in any such product recovery CD-ROM shall be governed by the Microsoft End User License Agreement (EULA).

Transfer of Rights in Software. Customer may transfer rights in the software to a third party only as part of the transfer of all rights and only if Customer obtains the prior agreement of the third party to be bound by the terms of this License Agreement. Upon such a transfer, Customer agrees that his/her rights in the software are terminated and that he/she will either destroy his/her copies and adaptations or deliver them to the third party.

Sublicensing and Distribution. Customer may not lease, sublicense the software, or distribute copies or adaptations of the software to the public in physical media or by telecommunication without the prior written consent of Hewlett-Packard.

Termination. Hewlett-Packard may terminate this software license for failure to comply with any of these terms provided Hewlett-Packard has requested Customer to cure the failure and Customer has failed to do so within thirty (30) days of such notice.

Updates And Upgrades. Customer agrees that the software does not include updates and upgrades which may be available from Hewlett-Packard under a separate support agreement.

Export Clause. Customer agrees not to export or re-export the software or any copy or adaptation in violation of the U.S. Export Administration regulations or other applicable regulation.

U.S. Government Restricted Rights. Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013. Hewlett-Packard Company, 3000 Hanover Street, Palo Alto, CA 94304, U.S.A. Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Edition History

Edition 1 July 2000



This manual is printed on recycled paper.

Contents

Introducing Your Computer	7
Taking Inventory	8
Software bundled on your computer	8
To find more information	9
Identifying Parts of the Notebook.....	10
Top and right side view.....	10
Front view	11
Rear and left side view	12
Bottom view.....	13
Status lights	14
Setting Up the Computer	15
To install the battery	15
To connect AC power	16
To connect a phone line	16
To turn on the computer.....	17
To set up Windows	18
To register your computer.....	18
To reset your computer	20
Using Your Computer	21
Operating the Computer	22
To use the Fn hot keys	22
To use the touch pad	22
Working in Comfort with a Notebook PC	24
Traveling with Your Computer	27
Managing Power Consumption	28
To use manual power management.....	28
Using Battery Power.....	30
To check the battery status.....	30
To respond to a low-battery warning	31
Configuring and Expanding Your Computer.....	33
Installing RAM modules.....	34
Removing RAM modules	35
Expanding the hibernate partition.....	36

Service and Support	37
Hewlett-Packard Limited Warranty Statement	38
Getting Support for Your HP Notebook PC	40
To use the <i>Reference Guide</i>	40
To get help from the HP notebook website.....	40
To call the HP Customer Care Center	41
Obtaining Repair Service.....	43
To receive warranty repair service.....	43
To prepare your computer for shipment	43
Solving Problems with Your Computer	45
Troubleshooting Techniques	46
Display problems	46
Power and battery problems.....	47
Startup problems	49
Standby and resume problems	50
Testing Hardware Operation.....	51
Recovering and Reinstalling Software	52
To recover the factory installation of your hard disk.....	52
Removing and Reinstalling the Hard Disk Drive	53
If you decide to remove the hard disk drive.....	53
To install the hard disk drive again.....	55
Specifications and Regulatory Information	57
Hardware and Software Specifications.....	58
Safety Information	59
Power Cords.....	59
Battery Safety.....	60
Laser Safety.....	61
LED Safety.....	61
Regulatory Information	62
U.S.A.....	62
Canada.....	63
European Union	63
Japan	64
Russia.....	64
International	64
Index	67

Introducing Your Computer

Taking Inventory

Your HP notebook PC is shipped with these items:

- battery
- AC adapter and power cord
- *Quick Start* sheet
- HP notebook PC *Startup Guide*
- Recovery CD (or CDs), used to restore Windows and all software included with your computer
- Microsoft Windows manual (Windows 98 or Windows 2000)
- telephone cord (if your computer has a built-in modem)

Software bundled on your computer

Your HP notebook PC comes with preinstalled software, and various models are configured with different combinations of software. To see the list of software included with your computer, check HP Notes in the HP Library: click Start, Programs, HP Library, HP Notes—or double-click the HP Notes icon on the desktop.

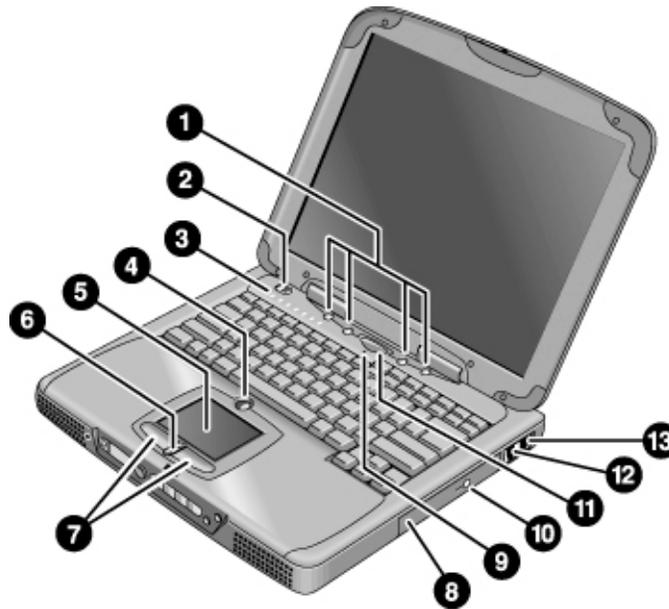
To find more information

Here are some sources of information about your HP notebook PC.

Source	Description
<i>Quick Start</i> sheet	This pictorial introduction shows you how to get the computer up and running quickly.
<i>Reference Guide</i>	The <i>Reference Guide</i> is a help file located on your hard drive. It provides you with detailed information about your notebook PC (Start, Programs, HP Library, Reference Guide).
HP Notes	This document contains late-breaking information available after the <i>Reference Guide</i> was completed (Start, Programs, HP Library, HP Notes—or double-click the HP Notes icon on the desktop).
Introductory Microsoft manual for Windows	This manual contains information about using the standard features of Microsoft Windows (Windows 98 or Windows 2000, depending on which operating system your computer is shipped with).
HP notebook PC website	www.hp.com/notebooks

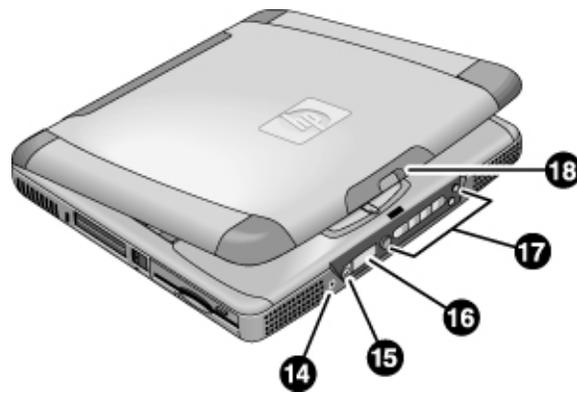
Identifying Parts of the Notebook

Top and right side view



- | | | | |
|---|--|----|---|
| 1 | One-Touch buttons | 8 | CD-ROM drive or DVD |
| 2 | Power switch | 9 | Microphone |
| 3 | Status lights (see “Status lights” on page 14) | 10 | CD-ROM or DVD eject button |
| 4 | Pad Lock touch pad on/off button | 11 | Blue standby button |
| 5 | Touch pad (pointing device) | 12 | Modem port (on certain models) |
| 6 | Scroll up/down toggle | 13 | LAN port (networking—on certain models) |
| 7 | Click buttons | | |

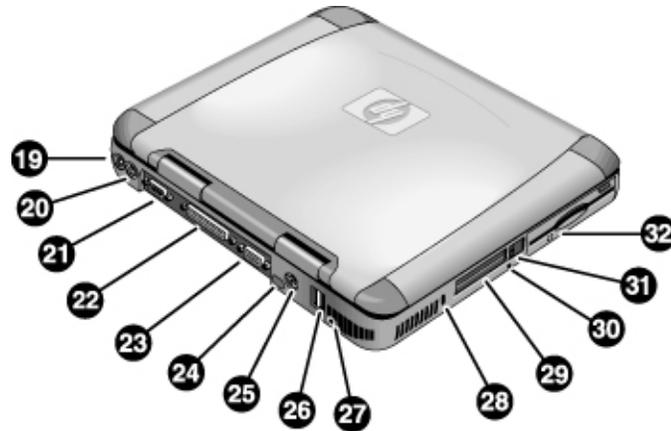
Front view



- 14 Headphone audio jack
- 15 Status panel mode select button
- 16 Status panel
- 17 Multimedia buttons (see “Multimedia Buttons” in the *Reference Guide*)
- 18 Latch (to open computer)

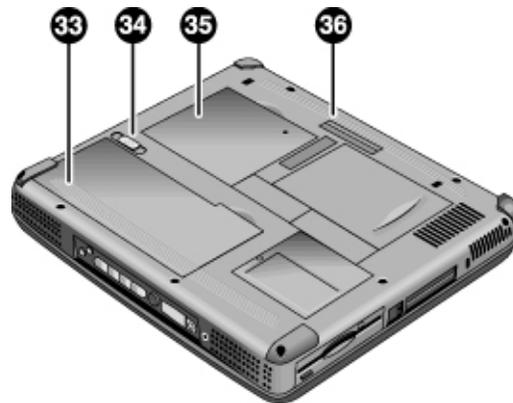
Introducing Your Computer
Identifying Parts of the Notebook

Rear and left side view



- | | | | |
|----|--|----|--|
| 19 | AC adapter (power) jack | 26 | USB ports |
| 20 | PS/2 port (external mouse or keyboard) | 27 | Microphone jack |
| 21 | Serial port | 28 | Kensington lock slot (security connector) |
| 22 | Parallel port | 29 | PC card slots |
| 23 | VGA port (external monitor) | 30 | System-off button (for resetting computer) |
| 24 | Infrared port | 31 | PC card eject buttons |
| 25 | TV output port | 32 | Floppy disk drive |

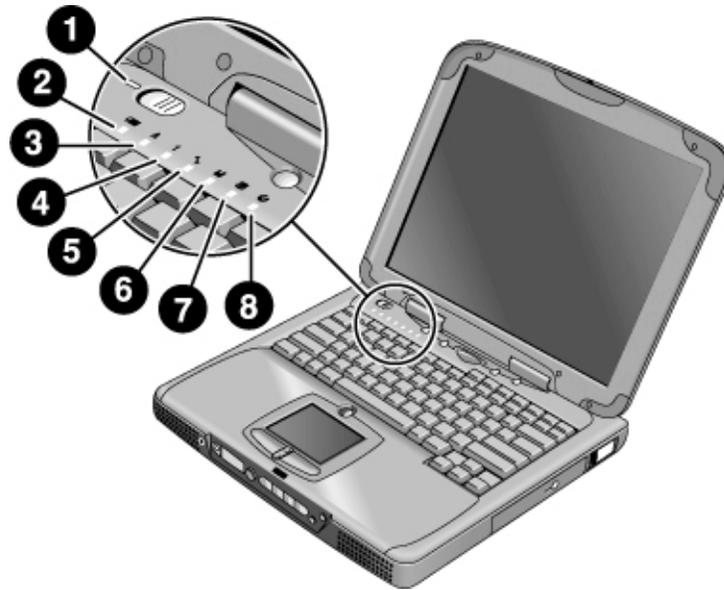
Bottom view



- 33 Battery
- 34 Battery latch
- 35 RAM expansion cover
- 36 Port replicator (docking) connector

Introducing Your Computer
Identifying Parts of the Notebook

Status lights



- 1 Power
- 2 Battery
- 3 Caps lock (capital letters)
- 4 Num lock (numeric keypad)
- 5 Scroll lock
- 6 Floppy disk drive access
- 7 Hard disk drive access
- 8 CD-ROM drive or DVD access

Setting Up the Computer

To install the battery

Your computer is shipped with the battery installed. If the battery has been removed, you can install it by inserting it into the battery bay on the bottom of your computer. Insert the back edge first, as shown, then press down the front edge until the battery latch clicks shut.



Once you have installed the battery, connect the AC adapter to the computer and recharge the battery while you work. You can also replace a low battery with another that is more fully charged.

WARNING

Do not mutilate, puncture, or dispose of batteries in fire. A battery can burst or explode, releasing hazardous chemicals. A rechargeable battery must be recycled or disposed of properly.

Introducing Your Computer
Setting Up the Computer

To connect AC power

Plug in the AC adapter, then connect the AC adapter to the rear of the computer. The battery starts charging.



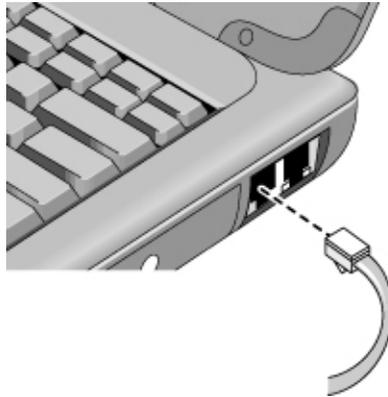
CAUTION

Use only an HP AC adapter intended for this product, either the adapter that came with the computer or another authorized HP adapter. Using an unauthorized AC adapter can damage the computer and may void your warranty. Refer to the warranty statement for your product.

To connect a phone line

Selected models of the HP notebook PC include a built-in modem. If you prefer, you can instead use a PC card modem or an external modem to connect a phone line.

1. Plug one end of the phone line into the modem phone jack on the computer. Be sure it clicks into place.



2. Plug the other end of the phone line into a telephone jack. (If the phone line does not fit your telephone jack, you may need to use an adapter.)

CAUTION

Your built-in modem may not work with multiple phone lines or a private branch exchange (PBX), cannot be connected to a coin-operated telephone, and does not work with party lines. Some of these connections may result in excess electrical voltage and could cause a malfunction in the internal modem. Check your telephone line type prior to connecting your phone line.

To turn on the computer

Slide the power switch to the left—it's the control above the left side of the keyboard. Windows starts automatically. If you are turning on the computer for the first time, go to "To set up Windows" on page 18.

The power status light next to the power switch (see "Status lights" on page 14) reports the following:

- steady green light: computer is on
- steady amber light: computer is in system standby (or suspend) mode
- no light: computer is off or in hibernate mode

See "Managing Power Consumption" on page 28 for additional information about turning off your computer.

Introducing Your Computer

Setting Up the Computer

Hint

If your computer does not turn on when operating on battery power, the battery may be out of power. Plug in the AC adapter and slide the power switch to the left again.

To set up Windows

Your HP notebook has Microsoft Windows—either Windows 98 or Windows 2000—preinstalled on the hard disk drive. The first time you turn on your computer, a Windows Setup program will automatically run so that you can customize your setup.

Before you begin, connect the AC adapter to your notebook, since your battery may not be sufficiently charged to complete the Windows setup. Also, be sure to connect the notebook to a phone line; see “To connect a phone line” on page 16.

1. Slide the power switch to the left.
2. The Windows Setup program starts automatically.
3. Follow the instructions as they appear on the screen.

During setup, you are prompted to:

- enter a user name
- accept the License Agreement

You can also register your computer at this time. Follow the instructions on the screen during setup, or—if registration does not occur during setup—double-click the HP Notebook Registration icon on the desktop.

Note

You may be required to enter your Windows ID number. To locate it, look on the Certificate of Authenticity packaged with the Microsoft Windows manual or look for a sticker in the battery compartment.

If you have any connection problems with your modem, try redialing. If that doesn't work, you can skip registration for now.

To register your computer

Be sure to register your computer. Registering is free and fast, and it ensures you will receive quicker, more personalized support. The information you provide during registration will be used to provide you with better products and services.

There are three ways to register:

- by modem
- by phone
- by fax

By modem

If you have Windows 98, you are prompted automatically to register. To register by modem, see that the phone is connected, then follow the onscreen instructions.

If you have Windows 2000, you are not prompted to register, but you can register by modem if you double-click the HP Notebook Registration icon on the desktop or click the Register link in the Windows 2000 welcome screen. See that the phone line is connected and follow the onscreen instructions.

With either operating system, if you choose not to register right away, you can register by modem later by double-clicking the Registration icon on the desktop. This icon disappears after you register.

If your computer does not have a built-in modem, you can register after you set up a PC card modem or an external modem—or you can register by phone or fax.

By phone

You can call your HP Customer Care Center and register by phone. Check “To call the HP Customer Care Center” on page 41 for the phone number.

By fax

If a printer is connected to your computer, you can print a copy of your registration and fax it to HP. You will find the fax number on the registration form.

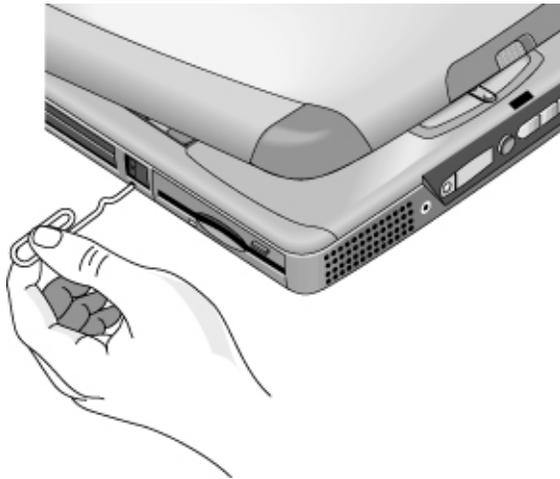
By completing registration, you will:

- Record your ownership of the computer with Hewlett-Packard and gain access to service, support, and information.
- Record your ownership of the Windows 98 operating system with Microsoft. If you have Windows 2000, please contact Microsoft separately for registration of the operating system.

To reset your computer

If Windows or your computer stops responding, you can reset the computer and restart Windows.

1. If possible, shut down Windows (Start, Shut Down, Shut down, OK).
2. If the computer does not shut down, slide and hold the power switch for five seconds, then release it.
3. If the computer still does not shut down, insert a pin or straightened paper clip into the recess on the left side of the computer, underneath the PC card eject buttons.



4. After the computer shuts down, slide the power switch and release it to turn the computer on again.

Using Your Computer

Operating the Computer

To use the Fn hot keys



The combination of the Fn key plus another key creates a *hot key*—a shortcut key sequence—for various system controls. Press *and hold* Fn while pressing the appropriate key. (When using an external keyboard, press and hold Ctrl+Alt with the appropriate key—use the Ctrl and Alt keys on the left side of the keyboard.)

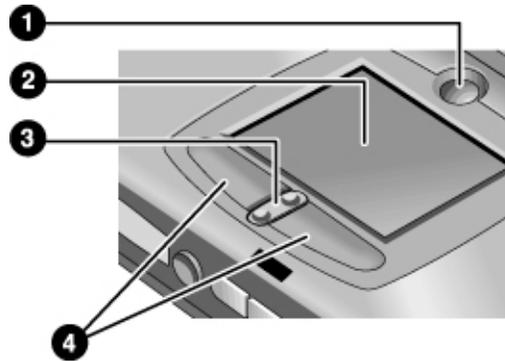
Hot key	Does this
Fn+F1	Decreases the display's brightness
Fn+F2	Increases the display's brightness
Fn+F5	Switches among the built-in display, an external display, and simultaneous displays
Fn+F7	Toggles the sound on and off (mutes sound)
Fn+F8	Toggles the numeric keypad on and off
Fn+F12	Enters hibernate mode (in Windows 2000 only)
Fn+Lock key*	Toggles Scroll Lock on and off (except on external keyboard)
Fn+Up arrow	Increases sound volume (except on external keyboard)
Fn+Down arrow	Decreases sound volume (except on external keyboard)

*The Lock key is in the top row of the keyboard:



To use the touch pad

The touch pad, a touch-sensitive pointing device that controls the motion and speed of the pointer on the screen, is built into your computer.



- 1 Pad Lock touch pad on/off button
- 2 Touch pad (pointing device)
- 3 Scroll up/down toggle
- 4 Click buttons

- Move a thumb or finger across the touch pad in the direction you want the pointer to move.
- Use the click buttons, which function like the left and right buttons on a mouse, to make your selection. You can also tap on the touch pad instead of clicking a button.
- To open an application, move the pointer over the icon, then press the left click button twice rapidly (double-click). You can instead tap twice on the touch pad.
- To make a menu selection, move the pointer to the item and click the left click button once.
- To open the shortcut menu for an item, move the pointer over the item and click the right click button.
- To drag an item, move the pointer over the item. Press and hold the left click button while you move the pointer to the new location. Release the button.
- To scroll up and down, press the top or bottom of the center toggle below the touch pad.
- To disable the touch pad, press the Pad Lock button. (The amber touch pad indicator lights.) To reenale it, press the Pad Lock button again. You may wish to disable the touch pad, for example, when you are entering text and do not want to move the cursor accidentally. Avoid contact with the touch pad itself at the same time you are pressing the Pad Lock button (to disable or to reenale); simultaneous contact will not allow the Pad Lock button to work properly.

Working in Comfort with a Notebook PC

You can use your HP notebook computer virtually anywhere, anytime. The following recommendations should help you work more comfortably.

Note that if you are using your portable computer as your primary computer, or using it for extended periods, you should use it with a full-size keyboard, monitor, and mouse. This will give your portable computer the adjustability and comfort features of a desktop unit. HP docking accessories offer quick, easy connections to these devices. More information on how to prepare your workspace environment and set up your HP equipment is available in *Working in Comfort*, which is preloaded on the hard disk in the HP Library and available on the Recovery CD in \hp\library—as well as at www.hp.com/ergo.

WARNING

Improper use of keyboards and other input devices has been associated with ergonomic injury. For more information about reducing your risk, visit our ergonomics website or see *Working in Comfort* in the online HP Library.

Your mobile work environment

- Use a chair that provides good support for your lower back. If an adjustable chair is not available, you can use a pillow or rolled-up towel to provide lower back support.
- Try to keep your thighs parallel to the floor and your feet flat on the floor. In a mobile environment, you can do this by using a phone book or briefcase to support your feet.
- Adjust the height of either your work surface or chair to keep your arms in a neutral position. Your arms should be relaxed and loose, elbows at your sides, with the forearms and hands parallel with the floor.
- Position your notebook computer display to minimize glare and reflection. For example, on an airplane, lower the window shade; or in a hotel room, draw the curtains. You also should maintain a comfortable viewing distance—approximately 40 to 60 cm (16 to 24 inches). Adjust the angle of your display to help keep your head angled slightly downward in a comfortable position.

Using your mobile computer

- Position the computer so your wrists and hands are in a neutral position. Your wrists should be as straight as possible and should not have to bend sideways or more than 10 degrees up or down. Your HP notebook computer has a built-in palm rest, which is ideal for this purpose.
- Try to type as lightly as possible. The notebook keyboard requires little force to activate.
- Take frequent, short rest breaks—this is especially important in a mobile computing environment.
- Portable computers weigh between approximately 1.5 and 4 kilograms (approximately 3 to 8 pounds). When traveling, be sure to carry your computer properly to minimize strain on your body. Shift the bag containing your notebook equipment frequently between your left and right hands and shoulders.

Traveling with Your Computer

Managing Power Consumption

When you are not using your computer, you will want to maximize battery operating time without compromising performance. It is not necessary to turn the computer off in order to reduce power consumption and extend battery life.

With Windows 98 and Windows 2000, Advanced Configuration and Power Interface (ACPI) provides both manual and automated tools for reducing power consumption.

- You can set power management options to occur automatically, based on timeout values that you have entered. See “To use automated power management” in the *Reference Guide*.
- You can also invoke power management options manually at any time by pressing the appropriate key. See “To use manual power management” below.

To use manual power management

You can shut down your computer manually whenever you need to with any of the following three levels of shutdown.

System standby

Action	Turns off the display and hard disk drive.
When	Press the blue standby button.
Resume	Press the blue standby button to return to your current session.

System standby can also occur automatically when the timeout setting in the Power Management Properties window is reached. (In Windows 98 and Windows 2000, *standby* and *suspend* are equivalent terms.)

Hibernate

Action	Saves the current session to disk, then shuts down. Provides maximum power savings while still allowing you to recover the current session.
When	Press Fn+F12 (in Windows 2000 only).
Resume	Slide the power switch to the left to recover your current session. This takes several seconds.

In Windows 2000, hibernate mode also occurs automatically when battery power reaches a critically low level; see “To respond to a low-battery warning” on page 31.

In Windows 98, hibernate mode occurs automatically with low battery power, but manual initiation of hibernate is not available (except that, if you wish, you can modify the default setting for the power switch or the standby button to initiate hibernate mode instead).

Off

Action	Turning off your computer provides maximum power savings. The current session is not saved and unsaved data will be lost.
When	Start, Shut Down, Shut down.
Resume	Slide the power switch to the left to start a new session. This will take several seconds.

If the system stops responding and you are not able to turn off the computer as described above, you can still recover; see “To reset your computer” on page 20.

Note

When the system hibernates as a result of a critically low battery, you will find when resuming that all your data has been saved but that some functions may be disabled. To resume normal operation, restore power (by connecting AC power or installing a charged battery), perform a full shutdown, and then restart the computer.

Using Battery Power

You can operate the HP notebook PC on battery power for extended periods, but you should be prepared to save your work and shut down if the battery is low.

To check the battery status

From the battery status light



The battery status light reports the following information:

Green	AC attached—battery full
Amber	AC attached—battery charging
Red	AC attached—battery will not accept charge (abnormal)

From the Windows taskbar

The System Tray on the Windows taskbar includes a power icon that allows access to more detailed battery status information. The icon looks like a battery when AC is not connected.

- Place pointer over the power icon to display a percentage of remaining time.
- Right-click the power icon to view the options for displaying power information.
- Left-click the power icon to display a menu of the available power schemes.

From the status panel

Press the status panel mode button repeatedly until you see the battery icon and the percentage of charge remaining.

To respond to a low-battery warning

The computer automatically alerts you when the battery power drops to a critically low level. First you will hear a high-pitched beep. Then, if you have not taken restorative action within a short time, the system hibernates.

You won't be able to turn the computer on again until you restore power by one of the following actions:

- Plug in the AC adapter (see "To connect AC power" on page 16).

OR

- Replace the battery with one that is charged (see "To install the battery" on page 15).

Note

If you plug in the AC adapter, you can continue to work while your battery recharges.

Configuring and Expanding Your Computer

Installing RAM modules

The notebook provides an optional memory expansion slot for installing up to two RAM expansion modules. Use HP SDRAM modules only; EDO RAM is not supported.

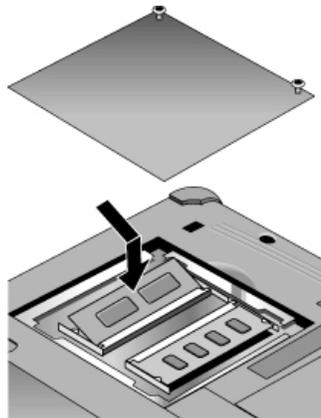
Your computer's computer chips are extremely static-sensitive. Static electricity can permanently damage computer chips. Carefully read the following caution information.

CAUTION

Handle the RAM module only by its three nonconnector edges. Otherwise, you may damage the module due to electrostatic discharge. Static electricity can permanently damage computer chips. It is therefore important to discharge the static electricity from your body before touching or installing the memory module. Discharge your body's electricity by touching the metal shielding around the connectors on the rear of the computer.

You'll need a small Phillips screwdriver to complete this procedure.

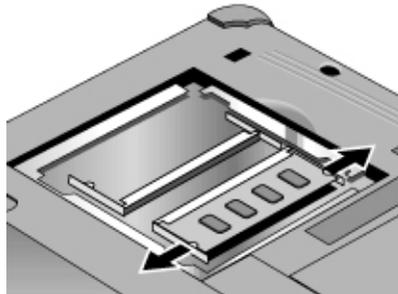
1. Click the Start Button and select Shut down.
2. Unplug the AC adapter and remove the battery.
3. Remove the RAM expansion cover located on the bottom of the computer, using a Phillips screwdriver.



4. Insert the RAM expansion module into the connector at about a 30° angle until it's fully inserted. Then press down at both sides of the module until it latches.
5. Replace the RAM expansion module door.
6. Insert the battery.

Removing RAM modules

After you remove the RAM expansion cover:



1. Release the two latches at the sides of the RAM expansion module by pushing them gently outward (away from the sides of the module). When you release the latches, the free edge of the module pops up.
2. Pull the module out of the connector.
3. Replace the RAM expansion module door.

Expanding the hibernate partition

You can create the hibernate partition by booting from the Recovery CD. The partitioning and recovery process takes approximately 10 or 15 minutes. Do not interrupt the process or unplug the AC adapter until the process is completed.

CAUTION

This procedure will format the hard disk drive and erase all data on the disk. Be sure to back up all data from your hard disk before you begin this procedure. After the hard disk drive is formatted, you'll need to reinstall any applications.

1. Back up all data from your hard disk.
2. If you wish to install additional RAM, do so now.
3. Connect the AC adapter to the computer.
4. Insert the Recovery CD in the CD-ROM (or DVD) drive. (If your system came with two Recovery CDs, insert Disc 1.)
5. Restart the computer, and when you see the HP logo, press Esc.
6. Select CD-ROM/DVD Drive as the first boot device, and press Return to continue.
7. If you want to choose a nondefault partition size, select the Advanced menu and select a size from the Hibernate Partition Size drop-down list.
8. If you want to create a hibernate partition without recovering the operating system, select the "Do not load operating system" checkbox and select one of the partition options.
9. Choose Continue.
10. Click OK to begin.

If your system came with two Recovery CDs, you may be prompted to insert Disc 2 during the partitioning process.

11. When you are prompted to reboot your computer, remove the Recovery CD and press Ctrl+Alt+Delete.
12. Follow the onscreen instructions for setting up Windows.
13. When Windows setup is complete, reinstall any applications and restore backed-up data.

Service and Support

Hewlett-Packard Limited Warranty Statement

1. HP warrants to you, the end-user customer, that HP hardware, accessories, and supplies will be free from defects in materials and workmanship after the date of purchase, for the period specified in the Warranty Duration sheet included with your HP computer. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.
2. HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified in the Warranty Duration sheet included with your HP computer, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.
3. HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.
4. HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.
5. Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts, or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.
6. TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.
7. TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL

(INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Getting Support for Your HP Notebook PC

HP offers a number of ways that you can get technical support for your computer. If you have questions or problems, here are the resources available to you:

- Look up information in the electronic *Reference Guide*.
- Visit the HP notebook website.
- Call HP support.

To use the *Reference Guide*

The *Reference Guide* is an electronic help system included on your hard disk. To open the *Reference Guide*, select Start, Programs, HP Library—or double-click the HP Library icon on the desktop. To locate information in the guide, use the Contents, Index, and Search tabs to look for information. The Contents tab lists the headings of all the topics in the guide. The Index tab provides an alphabetical list of the keywords in the guide; you can locate a keyword either by typing it in the box or by scrolling through the list. The Search tab allows you to find specific words and phrases.

To get help from the HP notebook website

HP has a website on the Internet dedicated to HP notebook owners: www.hp.com/notebooks. This website contains information about the various HP notebook models, warranties, support, and special promotions.

To get help with your computer, click the Technical Support button. In the technical support area, you will have access to:

- answers to frequently asked questions
- software, driver, and BIOS updates
- electronic manuals
- troubleshooting solutions
- self-help tools, such as bulletin boards, CD-ROM subscriptions, and service parts information

- the basic services included with your warranty, as well as descriptions of enhanced and custom services
- latest support telephone numbers for HP products

To call the HP Customer Care Center

If you are unable to solve a problem with your computer, you can call the HP Customer Care Center. The Customer Care Center will assist you at no charge during the term of the warranty; you are responsible only for cost of the telephone call. During the free assistance period, HP will assist with questions about:

- applications and operating systems included with your computer
- HP-described operation environments and conditions
- HP accessories, HP upgrades, and basic operation and troubleshooting

HP will not be able to help with questions about:

- non-HP hardware, software, operating systems, or usage not intended for—or not included by HP with—the product
- how to repair the product yourself
- product development or custom installations
- consulting

To locate the Customer Care Center in your area, check the following table. HP Customer Care Centers will assist you for free during the term of the warranty; you are responsible only for the cost of the telephone call. Check the HP notebook website (www.hp.com/notebooks) for the most complete and current list of phone numbers

North America

United States	+1 (970) 635-1000
Canada	+1 (905) 206-4663
Mexico City	+52 58 9922
Mexico (outside Mexico City)	+52 01 800 472 6684

Service and Support
Getting Support for Your HP Notebook PC

Asia Pacific

Australia	+61 (0)3 8877 8000
Hong Kong	+852 800 96 7729
Japan	+81 (0)3 3335 8333
Malaysia	+60 (0)3 295 2566
New Zealand	+64 (0)9 356 6640
People's Republic of China	+86 800 810 5959
Singapore	+65 272 5300

Europe

Austria	+43 (0)7114 20 1080
Belgium (Dutch)	+32 (0)2 626 8806
Belgium (French)	+32 (0)2 626 8807
Czech Republic	+42 (0)2 6130 7310
Denmark	+45 39 29 4099
English (from outside UK)	+44 (0)207 512 52 02
Finland	+358 (0)203 47 288
France	+33 (0)1 43 62 34 34
Germany	+49 (0)180 52 58 143
Greece	+30 (0)1 619 64 11
Hungary	+36 (0)1 382 1111
Ireland	+353 (0)1 662 5525
Italy	+39 02 264 10350
Netherlands	+31 (0)20 606 8751
Norway	+47 22 11 6299
Poland	+48 22 519 06 00
Portugal	+351 21 317 6333
Russia (Moscow)	+7 095 797 3520
Russia (St. Petersburg)	+7 812 346 7997
Spain	+34 902 321 123
Sweden	+46 (0)8 619 2170
Switzerland	+41 (0)848 80 11 11
Turkey	+90 (0)212 221 69 69
United Kingdom	+44 (0)207 512 52 02

Africa/Middle East

Israel	+972 (0)9 952 4848
South Africa	+27 (0)86-000-1030

Obtaining Repair Service

To receive warranty repair service

To receive warranty repair service, contact your HP Customer Care Center. Check “To call the HP Customer Care Center” on page 41 for the phone number.

The support technician will help qualify your unit for warranty repair, based on the warranty applicable to your unit and original purchase date, and will provide you with repair processes. Warranty service may include the cost of shipping, handling, duties, taxes, freight, or fees to or from the service location.

To repair your computer outside the warranty period

If your PC is no longer in the warranty period, contact the appropriate Customer Care Center. The HP support person will let you know about repair charges and processes.

To prepare your computer for shipment

1. **Important.** Back up the contents of your hard disk drive to floppy disks, tape, or a network drive.

While your computer is being repaired, the hard disk may be replaced or reformatted.

2. Hewlett-Packard cannot guarantee the return of removable components. Please remove the following before you send your computer for service:

- PC cards
- AC adapter and power cord
- CDs in the CD player
- floppy disks in the floppy disk drive

3. When shipping your computer to Hewlett-Packard, please use the original product packaging or other substantial packaging in order to avoid damage in transit.

HP recommends that you leave the hard disk drive in the computer when you send it for repair. When the computer is returned, you can restore your data from the backup you made. If you nevertheless want to remove the hard disk drive for this (or some other) reason, see “Removing and Reinstalling the Hard Disk Drive” on page 53.

Solving Problems with Your Computer

Troubleshooting Techniques

This section contains solutions to a few common problems and troubleshooting techniques for your HP notebook PC. Here in the *Startup Guide*, you will find suggestions about situations that might occur when you cannot access information on your computer. A more complete set of troubleshooting solutions and techniques is in the electronic *Reference Guide*.

Display problems

If the computer is on, but the screen is blank

- Try pressing Fn+F2 to increase the brightness.
- Press Fn+F5 in case the internal display was disabled. (Do this three times to return to the state you started from.)
- If the computer is cold, allow it to warm up.

If the screen is difficult to read

- Check whether the display resolution is set to its default setting—800×600 for 12" displays or 1024×768 for larger displays.
 1. Click Start, Settings, Control Panel.
 2. Double-click Display.
 3. Click the Settings tab.

If part of the Windows desktop is not visible and you have to scroll down to see the taskbar

- Your display resolution may be set to 1024×768 on a 12" display, instead of 800×600. You need to set the monitor type to Laptop Display Panel (800×600).
 1. Click Start, Settings, Control Panel.
 2. Double-click Display.
 3. Click the Settings tab.
 4. Move the Screen area arrow to (800×600 pixels).
 5. Click OK.

If an external display does not work

- Check the connections.
- Press Fn+F5 in case the external monitor was disabled. (Do this three times to return to the state you started from.)
- The external monitor may not be detected. In the BIOS Setup utility, try setting Video Display Device to LCD/CRT in the Main menu.

You may also want to test the display with diagnostics. See “Testing Hardware Operation” in the *Reference Guide*.

Power and battery problems

If the computer turns off immediately after it turns on

- Battery power is probably extremely low. Plug in the AC adapter or insert a newly charged battery.

If the computer keeps beeping

- The computer beeps for 15 seconds when the battery is low. Save your work, shut down Windows immediately, and insert a charged battery or plug in the AC adapter.

If the computer has a short operating time

- Try conserving power by setting power timeouts to shorter periods. In Windows, you can adjust these settings in the Power Management applet in Control Panel.
- If you are running any applications with an automatic save feature, such as MS Word for Windows, you can extend the save time or disable this feature to reduce hard disk access.
- If the operating time has become shorter and the battery is more than a year or two old, you may need to replace the battery.
- Set the display brightness to the lowest comfortable level.
- Heavy modem use can affect battery operating time.
- PC card use can affect battery operating time.

Solving Problems with Your Computer Troubleshooting Techniques

If the battery doesn't charge

- Make sure the AC adapter is plugged into the power source and that the light on the adapter is on.
- If you're using a power strip, remove the AC adapter from the power strip and plug it directly into a wall outlet.
- Check that the battery is fully installed and locked in place.
- Turn off the computer, then check that the battery contacts are clean and that the AC adapter cables are fully plugged in.
- Move the computer away from any nearby heat source. Unplug the AC adapter and allow the battery to cool down. An elevated battery temperature prevents charging.
- If another battery is available, try it.
- If another AC adapter is available, try it.

If the Time Remaining percentage for the battery is not correct

- The Time Remaining value on the power (battery) icon is an estimate based on your current usage, not a precise value.

If the computer stops responding

- Press Ctrl+Alt+Del to end the application that is not responding.
- Slide the power switch to the left, hold it for at least five seconds, and release it to turn off the computer. Then slide the power switch again to turn the computer back on.
- If nothing happens, insert a paper clip into the system-off button on the left side of the computer. Then slide the power switch to turn the computer on.

If the computer doesn't standby as expected

- If you have a connection to another computer, the computer doesn't standby if the connection is actively in use.
- If the computer is performing an operation, it normally waits for the operation to finish.

You may also want to test the power management system with diagnostics. See "Testing Hardware Operation" in the *Reference Guide*.

Startup problems

If the computer doesn't respond at turn-on

- Connect the AC adapter.
- Slide the power switch to try turning on the unit.
- Use the system-off button to reset the computer.
- If you get no response, remove the battery and AC adapter, remove any PC cards, and undock the computer—then plug in the AC adapter and try resetting.
- If you still get no response, call HP for assistance.

If the computer doesn't boot from battery power

- Make sure the battery is properly inserted and fully charged.
- Check battery contacts.
- If another battery is available, try it.

If the computer doesn't boot from the floppy disk drive

- Check the boot order in the BIOS Setup utility.
 1. Click Start, Shut Down, Restart.
 2. When you see the HP logo, press F2 to start the BIOS Setup utility.
 3. Tab to the Boot menu. The default boot order is (1) Floppy Drive, (2) Hard Drive, and (3) CD-ROM/DVD Drive.
 4. Select Floppy Drive for first boot device.
 5. Exit the BIOS Setup utility.

Standby and resume problems

If the computer takes a long time to resume after being on standby

- In Windows, the computer can take a minute or longer to resume when a network card is installed. While the operating system is loading drivers and checking hardware and network connections, you will see a blinking cursor on your display. As soon as the hardware has been reinitialized, the Windows desktop will appear.

If the operating system hangs after you have gone on standby or resumed

- Your system may hang if you dock or undock your notebook while you are in the process of going on standby or resuming the computer. Make sure your computer has completely finished going on standby or completely resumed before you dock or undock it.

Testing Hardware Operation

The DiagTools program provides two levels of testing:

- Automated testing using the basic hardware test.
- Advanced testing using individual hardware tests.

The tests are designed to run after the system reboots. This ensures that the computer will be in a predictable state, so the diagnostic program can properly test the hardware components. The tests are nondestructive and are intended to preserve the state of the computer. The computer reboots when you exit the program, so that drivers can be loaded.

To run the diagnostic test

1. Reboot the computer and, when you see the HP logo , press F10.
2. When you see the initial diagnostics screen, press F2 twice to continue.
3. When the hardware detection finishes, check the list of detected hardware.

If a device is not detected or fails its test, it may be configured incorrectly in the BIOS. You can confirm the problem by running BIOS Setup utility and checking the settings.

4. Press F2 twice to run the basic hardware test.
5. If you want to run additional hardware tests, press F2 twice. From the advanced test screen, select and run the appropriate tests. Tests are not listed if no such hardware is detected. Press the following keys to run tests:

Enter	Runs the highlighted test.
F5 or Space	Marks or unmarks the highlighted test.
F6	Marks or unmarks all tests in the current menu.
F7	Marks or unmarks all tests in all menus.

6. When you have finished running advanced tests, press Esc to exit.
7. If you want to view or save system and test information, press F4 repeatedly (twice if you are at the advanced test screen, three times from the basic test screen) to create a Support Ticket log file. (You will need a blank floppy disk to save the Support Ticket—or you can save it on the hard disk by following onscreen instructions.)
8. If you want to view the Support Ticket, press F7.
9. Press F3 twice to exit and reboot.

Recovering and Reinstalling Software

You can use the Recovery CD to recover an original build, or you can use it to install the HP custom software over a user-installed alternate operating system. If you need to recover a specific application, you can reinstall the software directly from your hard drive; for instructions, see “To recover an application” in the *Reference Guide*.

The Recovery CD provides the HP notebook–specific Windows drivers to configure your custom system. You can find drivers:

- On the hard drive under `c:\hp\drivers`.
- On the Recovery CD, under `\hp\drivers`.
- On the HP notebook website at www.hp.com/notebooks. This website contains the latest updates of software drivers for your computer.

To recover the factory installation of your hard disk

The following procedure describes how to recover the original Windows software and operating system that came with your computer.

CAUTION

This procedure will format the hard disk drive. After the hard disk drive is formatted, you’ll need to reinstall any applications. Reformatting the hard disk drive will erase all data on the disk.

1. Back up all data from your hard disk.
2. Connect the AC adapter to the computer.
3. Insert the bootable Recovery CD in the CD-ROM drive.
4. Reboot and, when you see the HP logo, press F2.
5. Select the CD-ROM drive as the first boot device and reboot.

You can find more details about recovering the factory installation of Windows on the Recovery CD: the file `readme.txt` is in the CD’s root directory.

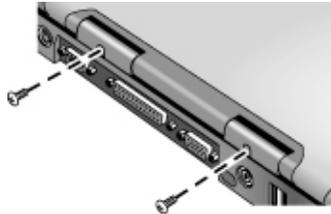
The recovery process can take about 10 or 15 minutes. *Do not interrupt the process or unplug the AC adapter until the process is completed.*

Removing and Reinstalling the Hard Disk Drive

Removing the hard disk drive is not a simple task since, to improve stability, the drive is located in the middle of the computer. If you do need to remove it, HP recommends that you back up your data and allow a qualified service person to do it. If you decide to remove the drive yourself, follow these instructions carefully.

If you decide to remove the hard disk drive

1. Shut down the computer, unplug the AC adapter, and remove the battery.
2. Close the display, and from the rear of the computer remove the two Phillips screws from the back of the plastic hinge covers.



3. Lean the display backward as far as possible, so that it is out of the way.

CAUTION

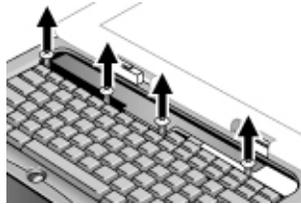
Do not touch metal surfaces inside the computer until they have cooled off, especially if the computer has just been running.

4. Carefully pry up the plastic cover above the keyboard at the hinges, using a flathead screwdriver, and remove it.



Solving Problems with Your Computer Removing and Reinstalling the Hard Disk Drive

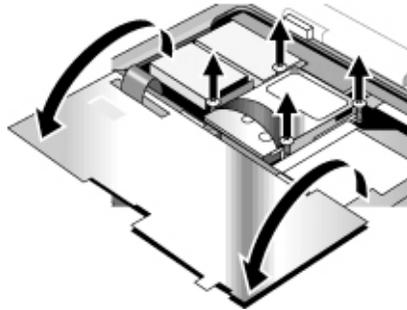
5. Unscrew the four Phillips screws at the top of the keyboard. (They remain attached to the keyboard.)



WARNING

Handle the hard drive by its edges only, since static electricity can permanently damage computer parts. Before touching the interior of the computer, discharge static electricity by touching the metal shielding around the connectors on the rear of the computer.

6. Slide the keyboard backward to detach it, then tilt it forward and turn it upside down. (Keep the keyboard cable attached.)



7. Unscrew the four Phillips screws from the sides of the hard disk drive case. (They remain attached to the case.)
8. Tilt up the rear of the hard disk drive case and, pulling gently by the strap, detach it from the connector and lift it out of the computer.



To install the hard disk drive again

If you have removed the hard disk drive when you shipped the computer for service or for some other reason, here's how to install it again:

1. Unplug the AC adapter and remove the battery.
2. Close the display, and from the rear of the computer remove the two Phillips screws from the back of the plastic hinge covers.
3. Lean the display backward as far as possible, so that it is out of the way.
4. Carefully pry up the plastic cover above the keyboard at the hinges, using a flathead screwdriver, and remove it.
5. Unscrew the four Phillips screws at the top of the keyboard. (They remain attached to the keyboard.)
6. Slide the keyboard backward to detach it, then tilt it forward and turn it upside down. (Keep the keyboard cable attached.)
7. **Important.** Move the wires to the left of the drive location out of the way.
8. Tilt up the rear of the hard disk drive you want to install and—rocking it carefully side to side—push the drive forward into the connector.
9. Fasten the hard disk drive with the four attached Phillips screws in the sides of the case.
10. Tilt the keyboard back, slide the flanges on the front edge forward into the slots, and fasten the keyboard with the four attached Phillips screws at the top.
11. Replace the plastic cover that is above the keyboard, front edge first.
12. Hold both hinge covers and snap the plastic cover in place. If necessary, push downward at each end of the cover to secure it.
13. Close the display and replace the two screws at the rear of the hinge covers.
14. Insert the battery, connect the AC adapter, and press the reset button.
15. If necessary, restore the original Windows software and operating system with the Recovery CD.

Specifications and Regulatory Information

Hardware and Software Specifications

You will find detailed information about your computer's hardware and software specifications in the *Reference Guide*. For the most up-to-date information on HP notebook PC specifications, go to the HP notebook website at www.hp.com/notebooks.

Safety Information

Power Cords

The power cord supplied with the notebook AC adapter should match the plug and voltage requirements for your local area. Regulatory approval for the AC adapter has been obtained using the power cord for the local area. However, if you travel to a different area and need to connect to a different outlet or voltage, you should use one of the power cords listed below. To purchase a power cord (including one for a country not listed below) or a replacement AC adapter, contact your local Hewlett-Packard dealer or sales office.

Country	Rated Voltage and Current	HP Part Number
Canada Mexico Philippines Taiwan United States	125 Vac (3 A)	8120-6313
Europe Egypt Israel Saudi Arabia	250 Vac (2.5 A)	8120-6314
Hong Kong Singapore United Kingdom	250 Vac (2.5 A)	8120-8699
Australia New Zealand	250 Vac (2.5 A)	8120-6312
Japan	125 Vac (3 A)	8120-6316
India South Africa	250 Vac (2.5 A)	8120-6317
People's Republic of China	250 Vac (2.5 A)	8120-8373

Battery Safety

- To avoid risk of fire, burns, or damage to your battery pack, do not allow a metal object to touch the battery contacts.
- The battery pack is suitable for use only with compatible HP notebook models. Check the “Support and Service” section of this *Startup Guide* for your local HP contact.
- Do not disassemble. There are no serviceable parts inside. Do not dispose of the battery pack in fire or water.
- Handle a damaged or leaking battery with extreme care. If you come in contact with the electrolyte, wash the exposed area with soap and water. If it contacts the eye, flush the eye with water for 15 minutes and seek medical attention.
- Do not expose the battery pack to high storage temperatures, above 60° C (140° F).
- When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.
- To obtain a replacement battery, contact your local dealer or HP sales office.
- Do not charge the battery pack if the ambient temperature exceeds 45° C (113° F).
- When discarding a battery pack, contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.



Laser Safety

The CD-ROM and DVD drives used with the HP notebook PC are certified as Class 1 laser devices according to the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard and International Standards IEC 825 / IEC 825-1 (EN60825 / EN60825-1). These devices are not considered harmful, but the following precautions are recommended:

- Ensure proper use by reading and following the instructions carefully.
- If the unit requires service, contact an authorized HP representative—see the “Support and Service” section of this *Startup Guide*.
- Do not attempt to make any adjustment of the unit.
- Avoid direct exposure to the laser beam—do not disassemble the drive.

CLASS 1 LASER PRODUCT LASER KLASSE 1

LED Safety

The infrared port located on the back panel of the notebook is classified as a Class 1 LED (light-emitting diode) device according to International Standard IEC 825-1 (EN60825-1). This device is not considered harmful, but the following precautions are recommended:

- If the unit requires service, contact an authorized HP service center—see the “Support and Service” section of this *Startup Guide*.
- Do not attempt to make any adjustment of the unit.
- Avoid direct eye exposure to the infrared LED beam. Be aware that the beam is invisible light and cannot be seen.
- Do not attempt to view the infrared LED beam with any type of optical device.

CLASS 1 LED PRODUCT LEDSCHÜTZKLASSE 1 PRODUKT
--

Regulatory Information

This section presents information that shows how the HP notebook PC complies with regulations in certain regions. Any modifications to the computer not expressly approved by Hewlett-Packard could void the authority to operate the HP notebook PC in these regions.

U.S.A.

The HP notebook PC generates and uses radio frequency energy and may interfere with radio and television reception. The HP notebook PC complies with the limits for a Class B computing device as specified in Part 15 of FCC Rules, which provide reasonable protection against such interference in a residential installation. In the unlikely event that there is interference to radio or television reception (which can be determined by removing the unit's batteries and AC adapter), try the following:

- reorienting or relocating the receiving antenna
- relocating the computer with respect to the receiver
- connecting the computer's AC adapter to another power outlet

Connections to Peripheral Devices

To maintain compliance with FCC Rules and Regulations, use properly shielded cables with this device.

For more information, consult your dealer, an experienced radio/television technician, or the following booklet, prepared by the Federal Communications Commission: *How to Identify and Resolve Radio-TV Interference Problems*. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock Number 004-000-00345-4. At the first printing of this manual, the telephone number was (202) 512-1800.

Declaration of Conformity (U.S.A.)

Responsible Party: Hewlett-Packard Company
Manager of Corporate Product Regulations
3000 Hanover Street
Palo Alto, CA 94304, U.S.A.
+1 (650) 857-1501

declares that the product

Trade name: Hewlett-Packard Company
Product name: Notebook PC
Model Number(s): OmniBook XE3, Pavilion N5D series Notebook PC
(*D* is any digit 0–9)

complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Canada

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

European Union

The equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In event of problems, you should contact your equipment supplier in the first instance.

This equipment has been designed to work in all of the countries of the European Economic Area (Public Switched Telephone Networks). Network compatibility is dependent on internal software settings. Contact your equipment supplier if it is

Specifications and Regulatory Information

Regulatory Information

necessary to use the equipment on a different telephone network. For further product support, contact Hewlett-Packard at the phone numbers provided in your *Reference Guide*.

Japan

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると受信障害を引き起こすことがあります。
取り扱い説明書に従って正しい取り扱いをして下さい。

Japan Telecommunications Approval

JATE approval number: A00-0143JP, A00-0434JP

Name of Equipment: T18M038.00, T18N040.00

Russia

Продукт сертифицирован в системе ГОСТ Р

Модем сертифицирован в системе ЭЛЕКТРОСВЯЗЬ



International

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.

Products sold internationally by Hewlett-Packard and its authorized dealers meet the specifications listed below.

Declaration of Conformity (according to ISO/IEC Guide 22 and EN 45014)

Manufacturer's Name: Hewlett-Packard Company
Manufacturer's Address: Hewlett-Packard Company
Mobile Computing Division
19310 Pruneridge Ave.
Cupertino, CA 95014, U.S.A.

declares that the following product

Product Name: Notebook PC
Model Number(s): OmniBook XE3, Pavilion N5D series Notebook PC (*D* is any digit 0–9)
Product Options: All

conforms to the following product specifications

Safety: IEC 950: 1991 +A1,A2,A3,A4 / EN 60950: 1992 +A1,A2,A3,A4,A11
IEC 60825-1: 1993 +A1/EN60825-1: 1994 +A11 Class 1 (LED)
GB4943-1995

EMC: CISPR 22: 1993 +A1,A2 / EN 55022: 1994 +A1,1995 +A2: 1997 Class B [1]
EN 61000-3-2:1995 +A1: 1998 +A2: 1998 / EN 61000-3-3:1995
GB9254-1988 FCC Title 47 CFR, Part 15 Class B/ANSI C63.4: 1992
AS/NZS 3548: 1995 Rules and Regulations of Class B
EN50082-1: 1997
EN 61000-4EN50082-1: 1997-2: 1995: 4kV CD, 8kV AD EN 61000-4-5: 1995
EN 61000-4-3: 1995: 3V/m EN 61000-4-6: 1996
EN 61000-4-4: 1995: 0.5kV Signal Lines EN 61000-4-11: 1994
1kV Power Lines ENV 50204: 1995

Telecom: TBR 21: 1998, EG 201 121: 1998

Supplementary Information: The product herewith complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC, amended by 92/31/EEC & 93/68/EEC, and the R&TTE Directive 1999/5/EC (Annex II) and carries the CE marking accordingly.

[1] The product was tested in a typical configuration with Hewlett Packard Personal Computer peripherals.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The HP F1454A and F1781A AC/DC adapter used with this product is designed to operate on all power systems, other than IT power systems.

Corvallis, OR, May 4, 2000


Gary Howard, Quality Execution Section Manager



European Contact for regulatory topics only: Hewlett Packard GmbH, HQ-TRE, Herrenberger Straße 130, 71034 Boeblingen, Germany. Fax: +49 7031 143143).

USA Contact: Hewlett Packard Co., Corporate Product Regulations Manager, 3000 Hanover Street, Palo Alto, CA 94304, U.S.A. Phone: +1 (650) 857-1501.

Index

A

- AC adapter
 - connecting, 16
 - location, 12
- ACPI, 28
- address, HP website, 9

B

- battery
 - installing, 15
 - latch location, 13
 - location, 13
 - low power warning, 31
 - recharging, 15
 - safety, 60
 - status, 30
 - status light, 14
 - troubleshooting, 47
- BIOS, updating, 40
- bottom view, 13

C

- Caps lock status light, 14
- CD-ROM
 - access light, 14
 - drive location, 10
- click buttons location, 10
- computer support, 40
- copyrights, 2

D

- diagnostic testing, 51
- display, troubleshooting, 46
- docking connector location, 13
- drivers, updating, 40
- DVD
 - access light, 14
 - drive location, 10

E

- eject button, PC cards, 12
- ergonomics, 24

F

- factory installation, 52
- floppy disk drive
 - access light, 14
 - location, 12
- Fn key, 22
- front view, 11

H

- hard disk drive
 - access light, 14
 - installation, 55
 - location, 13
 - removal, 53
- hardware testing, 51
- headphone jack location, 11
- hibernate, 29
- hibernate partition, creating, 36
- hot keys, 22
- HP Customer Care telephone numbers, 41
- HP notebook website, 40
- HP Notes, 9
- HP warranty, 38

I

- infrared port location, 12
- installing hard disk drive, 55
- inventory, 8

K

- Kensington lock slot location, 12

L

- LAN port location, 10
- laser safety, 61
- latch location, 11
- LED safety, 61
- license agreement, 3

M

- microphone
 - jack location, 12
 - location, 10
- modem
 - built-in, 17
 - port location, 10
- multimedia buttons location, 11

N

- notebook
 - bottom view, 13
 - front view, 11
 - rear and left view, 12
 - support, 40
 - top and right view, 10
- Num lock status light, 14

O

- on/off switch
 - location, 10
 - using, 17
- One-Touch buttons location, 10

P

- Pad Lock button location, 10
- parallel port location, 12
- PC card slot location, 12
- phone line, connecting, 17
- plug requirements, 59
- pointing device
 - location, 10
 - using, 23
- power
 - connecting AC, 16
 - resetting, 20
 - standby, 28
 - status light, 14
 - switch location, 10
 - troubleshooting, 47
- power cords, 59
- power management, 28
- PS/2 port location, 12

Q

Quick Start sheet, 9

R

RAM, installing, 34

rear and left view, 12

recovering

hard disk, 52

software, 52

Recovery CD, using, 52

registering computer, 18

regulatory information, 62

removing hard disk drive, 53

repair

service, 43

shipment, 43

resetting computer, 20

resume, troubleshooting, 50

S

safety

battery, 60

laser, 61

LED, 61

power, 59

voltage, 59

scroll lock status light, 14

scroll toggle location, 10

security connector location, 12

serial port location, 12

setting up, 15

shutting down, 28

software, 8

license, 3

updates, 40

standby, 28

button location, 10

troubleshooting, 50

startup, troubleshooting, 49

status lights

battery, 30

location, 10, 14

power, 17

status panel location, 11

support, 40

telephone, 41

system-off button

location, 12

resetting, 20

T

telephone

numbers, 41

support, 41

testing hardware, 51

top and right view, 10

touch pad

location, 10

using, 23

troubleshooting, 46

battery, 47

display, 46

power, 47

resume, 50

standby, 50

startup, 49

turning off, 28

turning on, 17, 28

TV port location, 12

U

USB port location, 12

User's Guide (electronic), 9

V

VGA port location, 12

views of computer

bottom, 13

front, 11

rear and left, 12

top and right, 10

voltage requirements, 59

W

warranty, 38

repair, 43

website, 9

Windows

manual, 9

setting up, 18

work environment, 24

working in comfort, 24