Thank you for purchasing this Factory Service Manual CD/DVD from servicemanuals4u.com.

Please check out our eBay auctions for more great deals on Factory Service Manuals:

servicemanuals4u

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144,
1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Product Description

Models and Features

Compaq Presario 1600XL Series Portable Notebook Computer Models		
	XL140	**XL141**
Display	12.1 inch TFT	12.1 inch TFT
Processor	Celeron 466-MHz w/128 Cache	Celeron 466-MHz w/128 Cache
Hard Drive	6.0GB	6.0GB
CD or DVD Drive	24 CD Drive	6X DVD Drive
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56.0 Kbps Data/Fax with PCI-I	56.0 Kbps Data/Fax with PCI-I
Networking	None	None
Battery	3.2 Li-ION	3.2 Li-ION
System Memory	64 MB PC100	64 MB PC100
Misc 1	TV-Out	TV-Out
	XL142	**XL143**
Display	12.1 inch TFT	14.1 inch TFT
Processor	Pentium III/500-MHz w/128 Cache	Pentium III/500-MHz w/128 Cache
Hard Drive	6.0GB	12.0GB
CD or DVD Drive	6X DVD Drive	6X DVD Drive
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56.0 Kbps Data/Fax	56.0 Kbps Data/Fax
Networking	None	None
Battery	3.2 Li-ION	3.2 Li- ION
System Memory	64 MB PC100	64 MB PC100

Additional Models on Next Page

1.800.At.Compaq

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Compaq Presario 1600XL Series Portable Notebook Computer Models		
	XL144	**XL145**
Display	14.1 inch TFT	14.1 inch TFT
Processor	Celeron 466-MHz w/128 Cache	Pentium III 500-MHz w/256 Cache
Hard Drive	6.0GB	6.0GB
CD or DVD Drive	6X DVD Drive	6X DVD Drive
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56.0 Kbps Data/Fax International with PCI	56.0 Kbps Data/Fax International with PCI
Networking	None	None
Battery	3.2 Li-ION	3.2 Li-ION
System Memory	64 MB PC100	64 MB PC100
Misc 1	TV-Out	TV-Out

	XL146	**XL147**
Display	14.1 inch TFT	14.1 inch TFT
Processor	Pentium III 500-MHz w/256 Cache	Pentium III 500-MHz w/256 Cache
Hard Drive	12.0GB	12.0GB
CD or DVD Drive	6X DVD Drive	6X DVD Drive
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56.0 Kbps Data/Fax	56.0 Kbps Data/Fax-I
Networking	None	None
Battery	3.2 Li-ION	3.2 Li-ION
System Memory	64 MB PC100	64 MB PC100

Additional Models on Next Page

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Compaq Presario 1600XL Series Portable Notebook Computer Models		
	XL150	**XL156**
Display	14.1 inch TFT	12.1 inch TFT
Processor	Celeron 500-MHz w/128 Cache	PIII/600(256) FCPGA
Hard Drive	6.0GB	6.0GB
CD or DVD Drive	6X DVD Drive	24X
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56.0 Kbps Data/Fax	56K Mini PCI d/f 1*
Networking	None	None
Battery	3.2 Li-ION	3.2 Li-ION
System Memory	64 MB PC100	64 MB PC101

	XL157	**XL255**
Display	14.1 inch TFT	13.3 inch TFT
Processor	PIII/600(256) FCPGA	Cel/566(128) FCPGA
Hard Drive	6.0GB	6.0GB
CD or DVD Drive	6X DVD Drive	DVD
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56K Mini PCI d/f 1*	56K Mini PCI d/f 2*
Networking	None	None
Battery	3.2 Li-ION	3.2 Li-ION
System Memory	64 MB PC102	64 MB PC100

Additional Models on Next Page

*Modem Legend
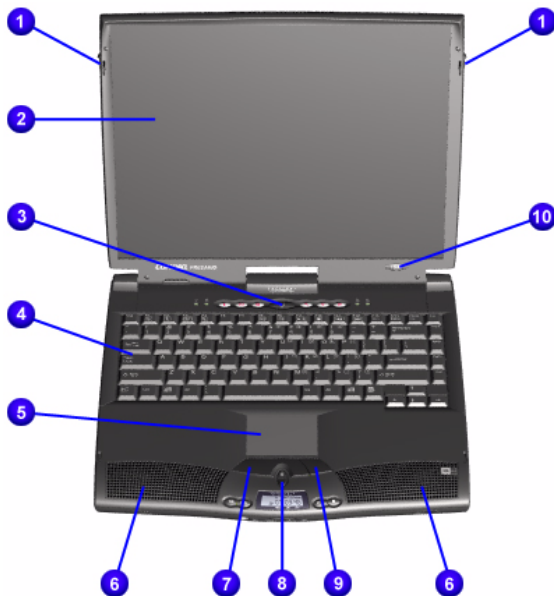1) 56K Mini PCI d/f 1 = Bear/Grizzly Modem/NIC Combo = NA, CKK, LA
2) 56K Mini PCI d/f 2 = Seminole = EMEA/APD
3) 56K Mini PCI d/f 3 = Seminole 2 = All AUS/NZ

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Compaq Presario 1600XL Series Portable Notebook Computer Models		
	XL256	**XL257**
Display	14.1 inch TFT	14.1 inch TFT
Processor	PIII/650(256) FCPGA	Cel/566(128) FCPGA
Hard Drive	6.0GB	12.0GB
CD or DVD Drive	DVD	DVD
Diskette Drive	3.5 inch Floppy Drive	3.5 inch Floppy Drive
Modem	56K Mini PCI d/f 2*	56K Mini PCI d/f 1*
Networking	None	None
Battery	3.2 LiON	3.2 LiON
System Memory	64 MB PC100	64 MB PC100

	XL258	
Display	14.1 inch TFT	
Processor	PIII/600(256) FCPGA	
Hard Drive	12.0GB	
CD or DVD Drive	DVD	
Diskette Drive	3.5 inch Floppy Drive	
Modem	56K Mini PCI d/f 1*	
Networking	None	
Battery	3.2 LiON	
System Memory	64 MB PC100	

Modem Legend
1) 56K Mini PCI d/f 1 = Bear/Grizzly Modem/NIC Combo = NA, CKK, LA
2) 56K Mini PCI d/f 2 = Seminole = EMEA/APD
3) 56K Mini PCI d/f 3 = Seminole 2 = All AUS/NZ

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258
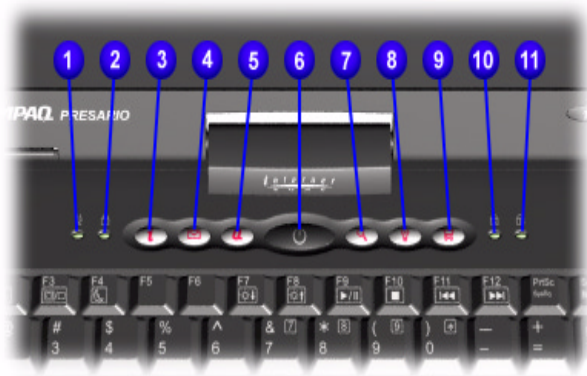
Front of Unit

No.	Description	No.	Description
❶	Display Release Latch	❻	Integrated Speakers
❷	Display	❼	TouchPad Button
❸	Power (On/Off) Button	❽	Scroll Up/Down Button
❹	Lid Switch	❾	Right TouchPad Button
❺	Keyboard	❿	Model Number

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144,
1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258
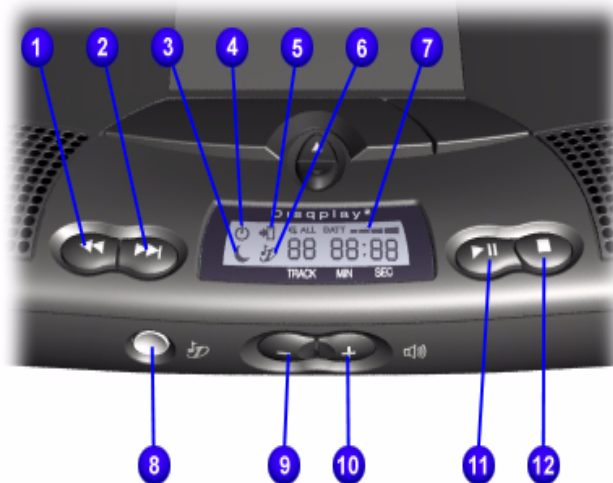
Internet Zone Buttons and Lights

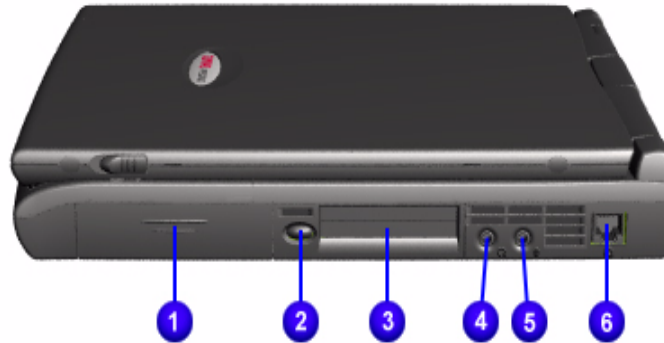| No.	Description	No.	Description
❶	AC Adapter Light	❼	Instant Search Button
❷	Cap Lock Light	❽	Online Marketplace Button (US/Puerto Rico) Instant Answer Button (countries outside the US)
❸	Instant Internet Access Button	❾	Retail Central Button (US/Puerto Rico), Instant E-Commerce Button (countries outside the US)
❹	Instant E-mail Access Button	❿	Num Lock Light 11
❺	My Presario Instant Access Button	⓫	Scroll Lock Light
❻	Power Button		

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Front Bezel Components

No.	Description	No.	Description
❶	Previous Track Button	❼	Battery Gauge
❷	Next Track Button	❽	DisqPlay On/Off Button
❸	Sleep Status Icon	❾	Volume Down Button
❹	Power Status Icon	❿	Volume Up Button
❺	Battery Charging Status Icon	⓫	Play/Pause Button
❻	DisqPlay Status Icon	⓬	Stop Button

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144,
1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258
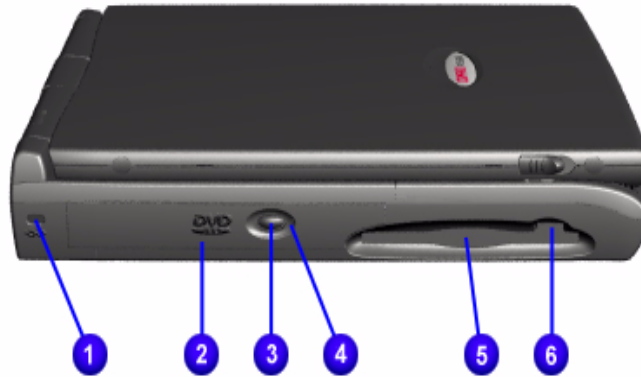
Right-Side Components

No.	Description
❶	Battery Compartment
❷	PC Card Eject Button
❸	PC Card Slot
❹	Headphone Jack
❺	Microphone Jack
❻	Modem Port

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144,
1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Left-Side Components with Diskette Drive

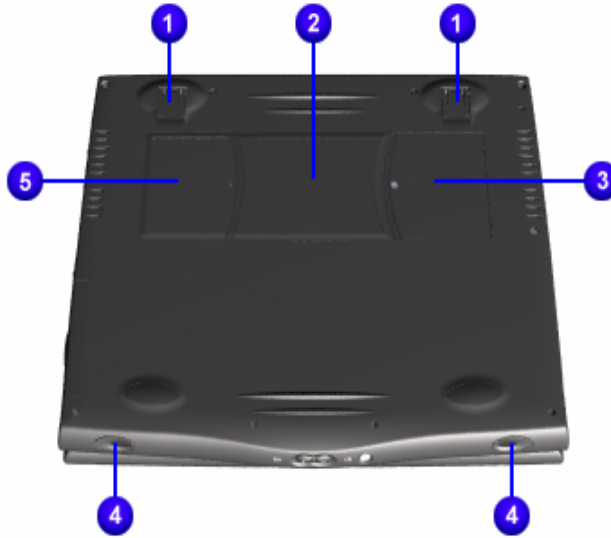| No.	Description	No.	Description
❶	Security Slot	❹	CD or DVD Manual Eject Hole
❷	CD or DVD Drive	❺	Diskette Drive
❸	CD/DVD Eject Button	❻	Diskette Drive Eject Button

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258
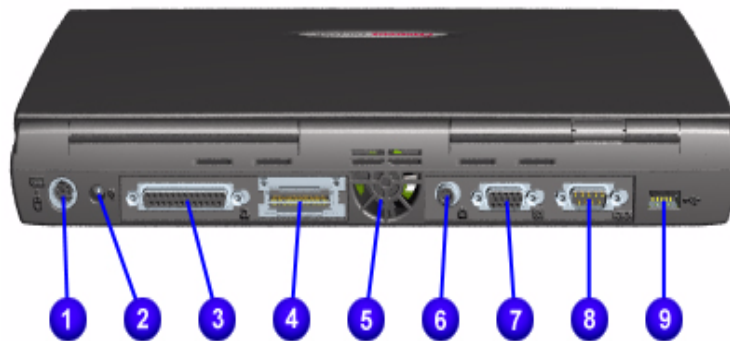
Underneath the Unit

No.	Description	No.	Description
❶	Pop-up Feet	❹	Speaker Ports
❷	Serial and Model Number	❺	Modem Door
❸	Memory Compartment Door		

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258
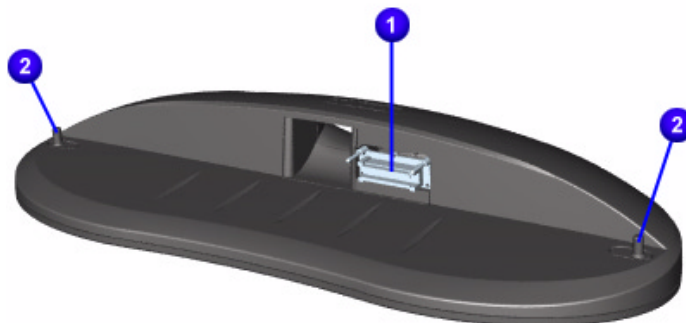
Rear Connectors

No.	Description	No.	Description
❶	Keyboard/Mouse Port	❻	TV Out Connector
❷	AC Adapter Connector	❼	VGA External Monitor Port
❸	Parallel Port	❽	Serial Port
❹	QuikDock Connector	❾	Universal Serial bus Port
❺	Fan Vent		

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

QuikDock Components

No.	Description
❶	QuikDock Interface Connector
❷	QuikDock Guide Posts

QuikDock Connectors

No.	Description	No.	Description
❶	Universal Serial Bus Port	❽	Serial Port
❷	Universal Serial Bus Port	❾	External Monitor Port
❸	Power (AC Adapter) Connector	❿	10/100TX Ethernet
❹	Keyboard/Mouse Port	⓫	S Video
❺	Keyboard/Mouse Port	⓬	(Composite) TV Out
❻	Parallel Port	⓭	Audio Out
❼	Game Port		

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Power Management

The following power management features are available for conserving AC power and extending battery operating time:

- Power Management Settings

- Low-Power Modes

- Battery Operating Life

- Servicing the Notebook - Full Off Mode

- Rebooting After a Lockup

- Recovering From a Loss of Electrical Power

Power Management Settings

Different patterns of Notebook use determine the level of power management needed. These power management levels can be initiated based on the amount of time passed since the last system activity. System activity examples include keyboard strokes or mouse movement, DVD/CD playback (while under program control that monitors Standby), and modem use.

Power Schemes

You may select different settings or Power Schemes through Power Management from the Control Panel. The default Power Schemes are Home/Office Desk, Portable/Laptop, and Always On. The settings can be customized by changing the following options:

- **System Standby**: length of inactivity before the Notebook goes into Standby mode

- **Turn Off Monitor**: length of inactivity before the screen times out and goes blank

- **Turn Off Hard Disks**: length of inactivity before the hard drive goes into low-power mode

  Important: The setting for the Hard Disk must be less than or equal to the setting for the system. If the Notebook is on a network, Compaq recommends that System Standby be set to **Never**.

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

The following table shows the default settings for each Power Scheme.

Power Schemes		
Always on	**AC Power**	**Battery Power**
System Standby Turn OFF Monitor Turn OFF Hard Disks	Never 15 minutes 1 hour	5 minutes 2 minutes 3 minutes
Portable/Laptop	**AC Power**	**Battery Power**
System Standby Turn OFF Monitor Turn OFF Hard Disks	Never 3 hours 15 minutes	15 minutes Never 10 minutes
Home/Office Desk	**AC Power**	**Battery Power**
System Standby Turn OFF Monitor Turn OFF Hard Disks	20 minutes 15 minutes 30 minutes	1 minute 2 minutes 10 minutes

Alarms

The Notebook can be set to Alarm when the battery power level is reduced or when it reaches a critical low level. The Notebook can also be set automatically to enter a low-power mode when the battery reaches a specific power level.

⚠ **CAUTION:** The settings on the Alarms tab are preset for the Notebook to run at its best. Changing any of these settings could cause the Notebook to function improperly. It is recommended that these settings be left at their default values.

Alarms		
Alarm	**Default**	**Alarm Action**
Low Battery	10%	Notification: Text Power Mode: No Action
Critical Battery	0%	Notification: No Action Power Mode: Hibernation

maintenance & service guide

SpeedStep(™) Technology Modes

SpeedStep(TM) Technology features several speed options for processor response to low-power conditions. These speed options are:

- **Maximum Performance**: always at high speed

- **Battery Optimized**: always at low speed

- **Reversed**: opposite recommended

- **Recommended**: performance on AC, battery optimized on battery

- **Disabled**: no run-time support, high speed

SpeedStep options can be accessed in three ways:

- Access **F10 Setup** during startup and select the **Advanced** screen.

- Click **Start>Settings>Control Panel>Power Options>Intel(R) SpeedStep(TM) technology** tab.

- Double-click the **Flag** icon on the Windows taskbar to open the **Intel(R) SpeedStep(TM) technology** dialog box.

maintenance & service guide

Low-Power Modes

Compaq Presario 1600XL Series Notebook Computers have two levels of low-power management: **Hibernation** and **Standby**.

Hibernation

Hibernation helps conserve battery life and protect data. The Notebook automatically enters Hibernation mode when the battery has little power left or when the Notebook (operating on battery power) is in Standby mode for more than one hour. As the Notebook enters Hibernation, it automatically stores the contents of its memory to the hard drive before it shuts down. When the Notebook comes out of Hibernation, it returns to its former state.

Activate Hibernation mode by pressing the **Power** button once.

To restart the Notebook, press the **Power** button once. When the Notebook enters or wakes from Hibernation mode, a Progress window is displayed on the screen.

Standby

Standby is a low-power mode, also referred to as Sleep mode. Selecting Standby mode instead of turning off the Notebook when finished has two advantages: 1. It enables the Notebook to wake up faster than if it had been turned off completely; 2. It saves more power than the active (On) mode.

Activate Sleep mode by pressing **Fn+F4**. Or click **Start,** select the **Shut Down** option, and click **Standby**.

> ⚠ **CAUTION:** The Notebook maintains system information and open files while in Standby mode. However, unsaved information is lost if the Notebook is turned off prior to system wake-up, or if a power loss occurs while using the AC adapter.

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

The following table shows the conditions and indicators for entering and exiting the various power-management modes: Standby, Hibernation, and Off.

Power-Management Modes			
Standby	**Activation**	**Deactivation**	**Indicators**
Manual	Press **Fn+F4** key combination or click the **Start** button on the Windows taskbar, then point to **Shutdown** and click **Standby**.	Press any key.	Flashing **Power** light*
Time-Out Default	15 minutes if using battery power. Notebook will not automatically enter Standby mode if using AC Power.		
Hibernate	**Activation**	**Deactivation**	**Indicators**
Manual	Press **Power** button once.	Press **Power** button once.	**Power** light is off, screen is blank**
Time-Out Default	When battery is low or after 1 hour of Standby. Notebook will not automatically enter Hibernation mode if using AC Power.	Press **Power** button once.	**Power** light is off, screen is blank**

* Moon icon appears on status display (1600XL Series only)
** Power icon does not appear on status display (1600XL Series only)

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Power-Management Modes			
Off	**Activation**	**Deactivation**	**Indicators**
Standard	Perform normal Windows shutdown using the **Start** button on the Windows taskbar.	Press **Power** button once.	**Power** light is off, screen is blank.
Manual	Press and hold down the **Power** button for 4 seconds.		

Important: The manual shutdown mode is not recommended unless the standard shutdown mode does not work.

Battery Operating Life

Battery operating life is affected by variables such as:

- Power conservation settings
- Hardware configuration
- Software applications
- Installed options
- Display brightness
- Hard drive usage
- Changes in operating temperature
- Type and number of installed PC Cards

For more information on increasing battery-pack operating time, conditioning the battery pack, and disposing of a used battery pack, refer to the Battery Operations section in this *Maintenance and Service Guide*.

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144, 1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258

Servicing the Notebook - Full Off Mode

The Notebook must be turned off completely when installing or replacing components in the system. Follow the instructions for putting the Notebook into Off mode properly, unplugging it from the outlet, and removing the battery (see *Battery Pack Removal Sequence*).

Rebooting After a Lockup

To reboot the Notebook (from a cold start) when the keyboard is frozen or the screen is locked, press and hold down the **Power** button for at least four seconds; this causes a manual shutdown. Then, restart the Notebook with a single press of the **Power** button.

If the Notebook still does not recover, press the **Power** button and hold for four seconds to shut it down, then remove the battery or unplug the AC power for at least 30 seconds. Reinsert the battery or reconnect AC power and press the **Power** button once to reboot.

Recovering From a Loss of Electrical Power

Loss of electrical power causes the Notebook to turn off automatically. This may cause loss of data because the Microsoft Windows operating system is not able to close all files and programs properly.

Loss of power may be caused by one of the following:

- Electrical power service is interrupted.
- The power cord is accidentally disconnected.

If power surges or sags, the display and status lights may flicker, and the Notebook may automatically restart. If an improper shutdown occurs, the Microsoft Windows utility program, ScanDisk, runs automatically once power is restored. ScanDisk determines whether the improper shutdown caused any errors on the hard disk. These errors may occur if the Microsoft Windows operating system is not able to close all files properly before the shutdown. If no errors are found, the restart process continues. If ScanDisk does detect errors, follow the instructions on the screen to continue the restart process. Work that was not saved before the loss of power or shutdown may be lost.

If a power failure occurs, or the power cord disconnects while the Notebook is turned on, turn it off until normal service is restored. The next time the Notebook is turned on, ScanDisk may run to check the hard disk for errors caused by improper shutdown.

COMPAQ

maintenance & service guide

Presario 1600XL Series
Model 1600T, 1600-XL140, 1600-XL141, 1600-XL142, 1600-XL143, 1600-XL144,
1600-XL146, 1600-XL147, 1600-XL150 XL156, XL157, XL255, XL256, XL257, and XL258