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Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Troubleshooting

This section provides information for troubleshooting Compag Presario 1400 Series Portable Notebooks. To isolate problems while troubleshooting the Notebook, refer to the following procedures:

- 1. Preliminary Steps.
- 2. Power-On Self-Test (POST).
- 3. Test the recommended actions described in the diagnostic tables if POST is unavailable or if POST displays an error message.

When following the recommended actions in the Sections about the Power-On Self-Test (POST) and Diagnostic Error Codes, perform the steps in the order listed. Rerun POST after each recommended action until the problem is solved or no error messages occur. Once the problem is solved, do not continue with any remaining recommended actions.

Note: If the problem is intermittent, check the Notebook several times to verify that the problem is solved.

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Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Preliminary Steps

Before running the Power-On Self-Test (POST), complete the following steps:

- 1. If a Power-on password has been established, type the password and press the **Enter** key. If the password is unknown, clear the password (See <u>Clearing the Power-On Password</u>).
- 2. Run the Computer Checkup (TEST).
- 3. Turn off the Notebook and all external devices.
- 4. Disconnect any external device that does not need testing. Do not disconnect the printer if it needs testing or if it is required to log error messages.

Important: If the problem only occurs when an external device is connected to the Notebook, the problem may be related to the external device or its cable. Check this by running POST both with and without the external device connected.

- 5. Install loopback plugs in the serial and parallel connectors if these ports need testing.
- 6. Ensure that the hard drive is installed in the Notebook.
- 7. Ensure that the battery pack is inserted into the Notebook, and that it is connected to an external AC power source.

When these preliminary steps are completed, run the Power-on Self-Test (POST).



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Clearing the Power-On Password

CAUTION: Clearing the Power-on password also removes all of the Notebook's setup attributes that are programmed in the CMOS.

If the password is unknown, clear the password by following these steps:

- 1. Turn off the Notebook.
- 2. Disconnect the power cord.
- 3. Perform the following steps from the Removal Procedures Section:

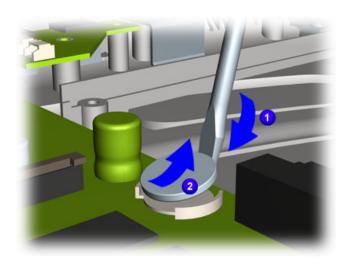
Battery Pack

Keyboard

Palmrest Cover with TouchPad (Upper CPU)

Heatspreader with Fan Assembly

4. Lift, with the flat end of a screwdriver 1, and remove the RTC battery 2 for 30 seconds, then replace.



- 5. Reassemble the Notebook.
- 6. Turn on the Notebook to verify that the Power-on password has been cleared. If it has not been cleared, repeat steps 1 through 9.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Power-On Self-Test (POST)

To run POST, complete the following action:

Turn off the Notebook, then turn it on again. As soon as the Compaq logo appears, press **ESC** to clear the logo and display the POST messages as they occur.

If the Notebook does not beep, POST has successfully completed its test and detected no errors. POST then re-boots from the hard drive, or from a bootable diskette if one is installed in the diskette drive.

However, if POST detects errors, these errors are indicated by either displayed or audible messages or both. Listed below are probable causes of and recommended actions to resolve the problems of each POST error codes.

The following tables list error codes, a description of the error condition, and the action required to resolve the error condition.

Note: If the system is not functioning well enough to run POST, or if the display is not functioning well enough to show POST error messages, refer to the Troubleshooting tables (pg 10).

Power-On Self-Test Messages		
102—System Board Failure		
Probable Cause	Recommended Action	
DMA, timers, etc.	Replace the system board.	
162—System Options Not Set		
Probable Cause Recommended Action		
Incorrect configuration.	Run Computer Setup.	
CMOS reflects an invalid configuration setting.	Run Computer Setup.	
RAM failure.	 Replace the memory modules. Replace the system board. 	
XX000YZZ RAM failure.	Replace the system board.	



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

XX000YZZ 201—Memory Error		
Probable Cause	Recommended Action	
Keyboard failure.	 Ensure that no keys are pressed during POST. Reconnect the keyboard with the Notebook off. Replace the keyboard. 	
304—Keyboard o	or System Unit Error	
Probable Cause	Recommended Action	
Keyboard or system board error.	 Replace the keyboard. Replace the TouchPad or mouse. Replace the system board. 	
601—Diskette Controller Error		
Probable Cause	Recommended Action	
Mismatch in drive type or failure in the diskette controller.	 Run Computer Checkup (TEST). Check or replace cables. Replace the system board. 	
605-Diske	tte Drive Error	
Probable Cause	Recommended Action	
Mismatch in drive type.	Run Computer Setup.	
1780—Primary I	Hard Drive 0 Failure	
Probable Cause	Recommended Action	
Disk 0 failed to respond.	 Run Computer Checkup (TEST). Replace the hard drive. 	
Hard drive format error.	 Run Computer Checkup (TEST). Replace the hard drive. 	
1782—Hard Drive Controller		
Probable Cause	Recommended Action	
Hard drive controller failure.	 Run Computer Setup. Replace the hard drive. 	



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Compaq Diagnostics

Compaq Diagnostics are installed on the hard drive of the Notebook. Run the Diagnostic utilities when viewing or testing system information or if devices have been installed or connected. If Compaq Diagnostics are performed from a diskette, ensure that the diagnostic program is version 10.11 or later.

Perform the following utilities from the Diagnostics menu:

- Run Computer Checkup (TEST).
- View System Information (INSPECT).
- Prepare Notebook for a Compag Service Call (RemotePag)

If a problem is unsolvable, run the following Diagnostics utilities before calling for support:

- 1. Run Computer Checkup.
- 2. Save the device list.
- 3. Save the log of errors to file and print.
- 4. Run the View System Information (INSPECT) utility.
- 5. Save and print the information generated by the utility.
- 6. Have the files and the printed information ready when calling for support.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Computer Checkup (TEST)

Computer Checkup (TEST) determines whether the various Notebook components and devices are recognized by the system and functioning properly. Information generated by Computer Checkup can be displayed, printed, or saved.

Follow this procedure to run Computer Checkup:

- 1. Plug the Notebook into an external power source. (A low-battery condition could interrupt the program.)
- 2. Turn on the external devices that need testing. Connect the printer if a log of error messages needs printing.
- 3. Insert the Compaq Diagnostics diskette in drive A.
- 4. Turn on or restart the Notebook. The Notebook starts from drive A, and the Diagnostics Welcome screen is displayed.
- 5. Press **Enter** to continue. The Diagnostics menu is displayed on screen.
- 6. Select **Computer Checkup** from the Diagnostics menu. A Test Option menu is displayed.
- 7. Select **View the Device List** from the Test Option menu. A list of the installed Compaq devices is displayed.
- 8. If the list of installed devices is correct, select **OK**. The Test Option menu is displayed.

Note: If the list is incorrect, check new devices for proper installation.

Select one of the following from the Test Option menu:

- **Quick Check Diagnostics**. This check runs a quick, general test on each device with a minimal number of prompts. If errors occur, they are displayed when the testing is complete. Error messages cannot be printed or saved.
- **Automatic Diagnostics**. This diagnostic runs unattended, performs maximum testing of each device with minimal prompts, and allows the operator to choose how many times to run the tests, to stop on errors or to print and save a log of errors.
- **Prompted Diagnostics**. This test allows maximum control over testing the devices. It permits the operator to choose attended or unattended testing, whether or not to stop on errors, or to choose to print or save a log of errors.
- 9. Follow the instructions on the screen as the devices are tested. When testing is complete, the Test Option menu is displayed.
- 10. Exit the Test Option menu.
- 11. Exit the Diagnostics menu.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

View System Information (INSPECT)

The View System Information (INSPECT) utility provides information about the Notebook and devices installed or connected to it. Display, print, or save the information.

Follow these steps to run View System Information (INSPECT) from the Compaq Diagnostics diskette:

- 1. Turn on the external devices that need testing. Connect the printer to print the information.
- 2. Insert the Compag Diagnostics diskette in drive A.
- 3. Turn on or restart the Notebook. The Notebook starts from drive A, and the Diagnostics Welcome screen is displayed.
- 4. Press **Enter** to continue. The Diagnostics menu is displayed.
- 5. Select **View System Information** (INSPECT) from the Diagnostics menu.
- 6. Select an item from the following list to view diagnostic codes:

System Memory
ROM Audio

KeyboardOperating systemSystem portsSystem filesSystem storageWindows files

Graphics

7. Follow the instructions on the screen to cycle through the screens, to return to the list and choose another item, or to print the information.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Diagnostic Error Codes

Diagnostic error codes are displayed if the system recognizes a problem while running the Compaq Diagnostic program. These error codes help to identify possibly defective subassemblies.

The following tables list error codes, a description of the error condition, and the action required to resolve the error condition.

Important: Retest the system after completing each step. If the problem has not been resolved, do not proceed with the remaining steps.

For the removal and replacement of a particular subassembly, see Procedures.

Select error codes by number or type:

101 through 114 (pg 10)	Processor Test
200 through 215 (pg 10)	Memory Test
300 through 304 (pg 10)	Keyboard Test
401 through 403 (pg 10)	Parallel Printer Test
501 through 516 (pg 13)	Video Test
600 through 699 (pg 11)	Diskette Drive Test
1101 (<u>pg 11</u>)	Serial Test
1701 through 1736 (pg 12)	Hard Drive Test
2402 through 2456 (pg 14)	Video Test
2419 through 2456 (pg 15)	Video Test
2458 through 2480 (pg 15)	Video Test
3206 (<u>pg 16</u>)	Audio Test
3301 through 6623 (pg 16)	DVD or CD Test
8601 through 8602 (pg 16)	TouchPad Pointing Device Test



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Memory, Keyboard, and Parallel Printer Test Error Codes

Memory Test Error Codes		
Error Code	Description	Recommended Action
200-xx	Memory machine ID test failed.	 Flash the system ROM and retest. Replace the system board and retest.
202-xx	Memory system ROM checksum failed.	retest.
203-xx	Read-write test failed.	Remove the memory module and
204-xx	Address test failed.	retest. 2. Install a new memory module and
211-xx	Random pattern test failed.	retest.
214-xx	Noise test failed.	
215-xx	Random address test failed.	

Keyboard Test Error Codes		
Error Code	Description	Recommended Action
300-xx	ID test failed.	1. Check the keyboard connection. If
301-xx	Self/interface test failed.	disconnected, turn off the Notebook and reconnect the keyboard.
302-xx	Individual key test failed.	2. Replace the keyboard and retest.
304-xx	Keyboard repeat test failed.	3. Replace the system board and retest.

Parallel Printer Test Error Codes		
Error Code	Description	Recommended Action
401-xx	Printer failed or not connected.	1. Connect the printer.
402-xx	Port test failed.	2. Check power to the printer.3. Install the loop-back connector and
403-xx	Printer pattern test failed.	retest. 4. Check port and IRQ configuration. 5. Replace the system board and retest.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Diskette Drive and Serial Test Error Codes

Diskette Drive Test Error Codes		
Error Code	Description	Recommended Action
600-xx	Diskette ID drive types test failed.	Replace the diskette media and
601-xx	Diskette format failed.	retest. 2. Check and/or replace the diskette
602-xx	Diskette read test failed.	power and signal cables and retest.
603-xx	Diskette read-write, compare test failed.	3. Replace the diskette and retest.4. Replace the system board and retest.
604-xx	Diskette random read test failed.	i dedde
605-xx	Diskette ID media failed.	
606-xx	Diskette speed test failed.	
609-xx	Diskette reset controller test failed.	
610-xx	Diskette change line test failed.	
697-xx	Diskette type error.	
698-xx	Diskette drive speed not within limits.	
699-xx	Diskette drive/media ID error.	 Replace media. Run the Configuration and Diagnostics Utilities.

Serial Test Error Codes		
Error Code	Description	Recommended Action
1101-xx	Serial port test failed.	 Check port configuration. Replace the system board and retest.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Hard Drive Test Error Codes

Hard Drive Test Error Codes		
Error Code	Description	Recommended Action
1701-xx	Hard drive format test failed.	1. Run the Configuration and
1702-xx	Hard drive read test failed.	Diagnostics Utilities and verify drive type.
1703-xx	Hard drive read-write, compare test failed.	2. Ensure that all secondary drives have secondary drive
1704-xx	Hard drive random seek test failed.	capability. 3. Replace the hard drive and retest.
1705-xx	Hard drive controller test failed.	4. Replace the system board and
1706-xx	Hard drive ready test failed.	retest.
1707-xx	Hard drive recalibration test failed.	
1708-xx	Hard drive format bad track test failed.	
1709-xx	Hard drive reset controller test failed.	
1710-xx	Hard drive park head test failed.	
1715-xx	Hard drive head select test failed.	
1716-xx	Hard drive conditional format test failed.	
1717-xx	Hard drive ECC* test failed.	
1719-xx	Hard drive power mode test failed.	
1724-xx	Network preparation test failed.	
1736-xx	Drive monitoring test failed.	

^{*}ECC = Error Correction Code



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Video Test Error Codes

Video Test Error Codes		
Error Code	Description	Recommended Action
501-xx	Video controller test failed.	The following steps apply to error
502-xx	Video memory test failed.	codes 501-xx through 516-xx: 1. Disconnect external monitor
503-xx	Video attribute test failed.	and test with internal LCD
504-xx	Video character set test failed.	display. 2. Replace the display assembly
505-xx	Video 80 x 25 mode 9 x 14 character cell test failed.	and retest. 3. Replace the display assembly and retest.
506-xx	Video 80 x 25 mode 8 x 8 character cell test failed.	retest.
507-xx	Video 40 x 25 mode test failed.	
508-xx	Video 40 x 25 mode test failed.	
509-xx	Video 320 x 200 mode color set 0 test failed.	
510-xx	Video 640 x 200 mode color set 1 test failed.	
511-xx	Video screen memory page test failed.	
512-xx	Video gray scale test failed.	
514-xx	Video white screen test failed.	
516-xx	Video noise pattern test failed.	

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Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Video Test Error Codes		
Error Code	Description	Recommended Action
2402-xx	Video memory test failed.	The following steps apply to error
2403-xx	Video attribute test failed.	codes 2402-xx through 2418-xx: 1. Run the Configuration and
2404-xx	Video character set test failed.	Diagnostics Utilities.
2405-xx	Video 80 x 25 mode 9 x 14 character cell test failed.	Replace the display assembly and retest.
2406-xx	Video 80 x 25 mode 8 x 8 character cell test failed.	Replace the system board and retest.
2408-xx	Video 320 x 200 mode color set 0 test failed.	
2409-xx	Video 320 x 200 mode color set 1 test failed.	
2410-xx	Video 640 x 200 mode color test failed.	
2411-xx	Video screen memory page test failed.	
2411-xx	Video screen memory page test failed.	
2412-xx	Video gray scale test failed.	
2414-xx	Video white screen test failed.	
2416-xx	Video noise pattern test failed.	
2418-xx	ECG/VGC memory test failed.	

Continued



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Video Test Error Codes (Continued)		
Error Code	Description	Recommended Action
2419-xx	ECG/VGC ROM checksum test failed.	The following steps apply to error codes 2419-xx through 2456-xx:
2421-xx	ECG/VGC 640 x 200 graphics mode test failed.	Run the Configuration and Diagnostics Utilities. Disconnect external monitor
2422-xx	ECG/VGC 640 x 350 16 color set test failed.	and test with internal LCD display.
2423-xx	ECG/VGC 640 x 350 64 color set test failed.	Replace the display assembly and retest.
2424-xx	ECG/VGC monochrome graphics mode test failed.	4. Replace the system board and retest.
2425-xx	ECG/VGC monochrome graphics mode test failed.	
2431-xx	640 x 480 graphics test failed.	
2432-xx	320 x 200 graphics (256 color mode) test failed.	
2448-xx	Advanced VGA Controller test failed.	
2451-xx	132-column Advanced VGA test failed.	
2456-xx	Advanced VGA 256 Color test failed.	

Video Test Error Codes (Continued)			
Error Code	Description	Recommended Action	
2458-xx	Advanced VGA BitBLT tes.t	The following action applies to	
2468-xx	Advanced VGA DAC test.	error codes 2458-xx through 2480-xx:	
2477-xx	Advanced VGA data path test.		
2478-xx	Advanced VGA BitBLT test.	Replace the system board and	
2480-xx	Advanced VGA LineDraw test.	retest.	



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Audio, DVD or CD, and TouchPad/Pointing Device Test Error Codes

Audio Test Error Codes			
Error Code	Description	Recommended Action	
3206-xx	Audio System Internal Error.	Replace the system board and retest.	
7	ouchPad/Pointing Device Inter	face Test Error Codes	
Error Code	Description	Recommended Action	
8601-xx	Mouse test failed.	Replace the TouchPad and retest.	
8602-xx	Interface test failed.	2. Replace the system board and retest.	
	DVD or CD Drive Test E	rror Codes	
Error Code	Description	Recommended Action	
3301-xx	DVD or CD drive read test failed.	1. Replace the DVD or CD and	
3305-xx	DVD or CD drive seek test failed.	retest. 2. Verify that the speakers are	
6600-xx	ID test failed.	connected.	
6605-xx	Read test failed.	3. Verify that drivers are loaded and properly installed.	
6608-xx	Controller test failed.	4. Replace the DVD or CD drive	
6623-xx	Random read test failed.	and retest. 5. Replace the system board and	

retest.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Troubleshooting without Diagnostics

This section provides information about how to identify and correct some common hardware, memory, and software problems. It also explains several types of common messages that may be displayed on the screen. The following pages contain troubleshooting information for the topics in the list below:

Audio (pq 19) Memory Problems (pq 30)

Battery (pg 19) PC Card (pg 31)

DVD or CD drive (pg 22) Power (pg 32)

Diskette drive (pg 23) Printer (pg 33)

Display (pg 24) TouchPad (pg 34)

Hard drive (pg 27) Keyboard/Numeric keypad

Hardware Installation (pg 28) (pg 29)

Since symptoms of different problems can appear to be similar, carefully match the symptoms of the Notebook malfunction against the problem description in the Troubleshooting tables to avoid a misdiagnosis.



WARNING: To avoid a potential shock hazard during troubleshooting procedures, disconnect all power sources before removing the keyboard cover or the display bezel.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Before Replacing Parts

- 1. Verify that cables are connected properly to the parts suspected to be defective.
- 2. Run Computer Setup after connecting external devices.
- 3. Verify that all required device drivers are installed.
- 4. Verify that all required changes have been made to the CONFIG.SYS file.
- 5. Verify that all required changes have been made to the AUTOEXEC.BAT file.
- 6. Verify that all printer drivers have been installed for each application.



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Solving Minor Problems

Some minor problems and possible solutions are outlined in the following tables. If the problem appears related to a software application, check the documentation provided with the software.

Solving Audio Problems

Some common audio problems and solutions are listed in the following table:

Solving Audio Problems			
Problem	Probable Cause	Solution	
Notebook does not beep after the Power-On Self-Test (POST).	This action is typical; it indicates successful completion of the Power-On Self-Test (POST).	No action is required.	

Solving Battery Pack and Battery Gauge Problems

Some causes and solutions for common battery pack problems are listed in the table below. The "Solving Power Problems" section in this chapter may also be applicable.

Solving Battery Pack and Battery Gauge Problems			
Problem	Probable Cause	Solution	
Notebook won't turn on when battery pack is inserted and power cord is unplugged.	Battery pack is discharged.	 Connect the Notebook to an external power source and charge the battery pack; OR Replace the battery pack with a fully charged battery pack. Check the battery connectors on the system board to ensure that they are evenly spaced and not bent or broken. 	

Continued



COMPAQmaintenance & service guide

Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Solving Battery Pack/Gauge Problems		
Problem	Probable Cause	Solution
Notebook is beeping and battery icon is blinking.	Battery charge is low.	 Immediately save any open file(s). Then try either pf the following solutions: Connect the Notebook to an external power source to charge the battery pack. Turn off the Notebook or initiate Hibernation until you can find another power source or charge the battery pack.
Notebook battery icon on the front of the unit blinks to indicate low- battery condition, but the Notebook does not beep.	Volume is turned down too low.	Adjust the volume.
Battery icon does not light, and battery pack will not fast charge.	Battery pack is already charged.	No action is necessary.
Battery pack was exposed to extreme temperatures.		Allow the battery pack time to return to room temperature.
Battery pack is at the end of its life.		Replace the battery pack.
You have to set the date and time every time you turn on the Notebook.	RTC battery is dead.	Replace the RTC battery. See Removing the RTC Battery section in this guide.
Battery charge does not last as long as expected.	Battery is being exposed to high or extremely cold temperatures.	Keep the battery pack within the recommended temperature range for operation or storage. • Operating Range: 50° F to 104° F (10° C to 40° C) • Storage Range: -4° F to 86° F (-20 degrees C to 30° C) Recharge the battery pack.
Continued	ı	ı



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Solving Battery Pack/Gauge Problems (Continued)		
Problem	Probable Cause	Solution
	Battery has partially self-discharged.	Recharge the battery. Discharge the battery completely, and then recharge it.
	Power management is disabled.	Set a power management level in Computer Setup.
	An external device or PC card is draining the battery.	Turn off or disconnect external devices when not in use.
Battery is warm to the touch after charging.	Normal warming has occurred due to charging.	No action is required.
Battery pack operating time is far less than the documented average operating time.	Power management is turned off or disabled.	Enable power management in Computer Setup and in Windows Power Properties.
	An external device or PC card is draining the battery.	Turn off or disconnect external devices when not in use.

Continued



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Solving Battery Pack/Gauge Problems (Continued)		
Problem	Probable Cause	Solution
	Battery pack has partially self-discharged.	Condition the battery pack by fully charging, fully discharging, then fully recharging again.
		To maintain the charge, leave battery packs in the Notebook when it is connected to external power.
		If the Notebook is disconnected from external power for more than two weeks, remove battery packs from the Notebook to reduce the discharge rate.
	Battery pack is being exposed to high temperatures or extremely cold temperatures.	Keep the battery pack within the recommended temperature range for operation or storage. • Operating Range: 50° F to 104° F (10° C to 40° C) • Storage Range: -4° F to 86° F (-20° d C to 30° C) Recharge the battery pack.

Solving DVD or CD Drive Problems

Some causes and solutions for common DVD or CD drive problems are listed in the following table.

Solving DVD or CD Drive Problems			
Problem	Probable Cause	Solution	
DVD or CD drive cannot read a compact disc.	Disc is upside down or improperly inserted in the DVD or CD drive.	Open the loading tray, place the compact disc in tray (label side up), then close tray.	
	CD is CD Plus or Pregap/Track 0 type.	Cannot read these types of CDs in 24X. Remove the CD.	



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Solving Diskette Drive Problems

Some causes and solutions for common diskette drive problems are listed in the table below:

Solving Diskette Drive Problems			
Problem	Probable Cause	Solution	
Diskette drive cannot write to a diskette.	Diskette is write-protected.	Disable the diskette's write- protect feature or use a diskette that is not write-protected.	
	Notebook is writing to the wrong drive.	Check the drive letter in the path statement.	
	Not enough space is left on the diskette.	Use another diskette.	
	Drive error has occurred.	Run Computer Checkup from the Compaq Diagnostics diskette.	
	Diskette is not formatted.	Format the diskette. At the system prompt, enter FORMAT A:	
Cannot boot from diskette.	Bootable diskette is not in drive A.	Put the bootable diskette in drive A.	
	Diskette boot has incorrect setting in Computer Setup.	Run Computer Setup and set diskette as first to boot.	



Presario 1400 Series

Models: XL240, XL241, XL242, XL244, XL245, XL246, XL247, XL250, XL340, XL341, XL342, XL343, XL344, XL345, XL346, XL350, XL352, XL355, and XL356

Solving Display Problems

This section lists some causes and solutions for common Notebook display and external monitor problems.

You can perform a monitor self-test on an external VGA color or monochrome monitor by disconnecting the monitor from the Notebook. To do so, complete the following steps:

- 1. Turn off the monitor.
- 2. Turn off the Notebook.
- 3. Disconnect the monitor signal cable from the Notebook.
- 4. Turn on the monitor and allow it to warm up for one minute.

The display should appear white. On the left and right sides of the screen, a narrow black border may also be present. If the display screen indicates either of these patterns, the monitor is working properly.

Solving Display Problems		
Problem	Probable Cause	Solution
Screen is dim.	Brightness control is set too low.	Adjust the Brightness of the display by using Fn+F7 or Fn+F8 .
	Notebook screen is in direct light.	Tilt display or move Notebook.
Screen is blank.	Screen save was initiated by Power Management due to lack of user activity.	Press any key or touch the TouchPad.
	Display has overheated.	If the Notebook is in direct sunlight, move it to shaded area and allow it to cool off.
Display is blank and the Suspend icon is flashing.	System is in Suspend mode.	Press any key or touch the TouchPad.
Internal display is blank, but the screen on an external monitor displays information.	Display function was switched to the external monitor.	Use Fn+F3 to switch between LCD or CRT.
Internal display flashes or has garbled characters when the Notebook is connected to an external monitor.	Used 1024 x 768 or higher resolution on external monitor and toggled back to internal display, which supports up to 800 x 600.	Restart the Notebook.
<u>Continued</u>		•



Presario 1400 Series

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Solving Display Problems			
Problem	Probable Cause	Solution	
The light tubes on the edge of the display panel do not light up, and the Power-On Self-Test (POST) completes when the unit is powered up.**	Improper backlight or display cable connections	Replace the display assembly.	
	Defective inverter board	Replace the display assembly.	
	Defective display cable	Replace the display assembly.	
	Defective display panel	Replace the display assembly.	
	Defective system board	Replace the system board.	
The light tubes on the edge of the display panel do not light up, and the Power-On Self-Test (POST) does not complete when the unit is powered up.**	Defective system board	Replace the system board.	
Backlight (brightness) cannot be adjusted with Fn+F7 or Fn+F8.	Improper display cable connections	 Reseat the display cable to the system board. Replace the display assembly. 	
	Defective inverter board	Replace the display assembly.	
	Defective display cable	Replace the display assembly.	
	Defective system board	Replace the system board.	

^{**}This problem indicates that the backlight or its power circuitry has failed. Since you cannot observe the POST results on the display panel when the backlight is not functioning, connect the unit to an external monitor before powering it up. If an external monitor is not available, confirm that POST completes by opening and closing the display, listening for the single or double beep and watching for the icons to turn on at the front of the Notebook.

Continued



Presario 1400 Series

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Solving Display Problems (Continued)			
Problem	Probable Cause	Solution	
The display panel has a continuous pattern across it (for example, "jailbars" pattern), has a single color on it, or has garbled graphics across the entire panel. This failure occurs across the entire panel, not just in one section.	Improper display cable connections	Reseat the display cable to the system board and the display assembly until the problem is solved.	
	Defective display cable	Replace the display assembly.	
	Defective inverter board	Replace the display assembly.	
	Defective system board	Replace the system board.	
A single line, small group of lines, or block appears on the display panel. This failure occurs in only one section of the display panel.	Defective display panel	Replace the display assembly.	

Note: To perform a "self-test" on an external VGA color or monochrome monitor, verify the following: The screen should appear white. On the left and right sides of the screen, a narrow black border may also be present. If the display screen indicates either of these patterns, the monitor is working properly.



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Solving Hard Drive Problems

Some causes and solutions for common hard drive problems are listed in the table below.

CAUTION: To prevent loss of information, always maintain an up-to-date backup file on the hard drive at all times, in case of errors or failures.

Solving Hard Drive Problems		
Problem	Probable Cause	Solution
Reading the hard drive takes an usually long time after restarting the Notebook.	System entered Hibernation due to low-battery condition and is now exiting from it.	Give the system time to restore the previously saved data to its exact state before Hibernation.
Hard drive error occurs.	Hard drive has bad sectors or has failed.	Run Computer Checkup.
Hard drive does not work.	Hard drive is not seated properly.	Turn off the Notebook, disconnect it from the electric outlet, and remove the battery pack. Remove and reinstall the hard drive.



Presario 1400 Series

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Solving Hardware Installation Problems

Some causes and solutions for common hardware installation problems are listed in following table.

Solving Hardware Installation Problems		
Problem	Probable Cause	Solution
A new device is not recognized as part of the Notebook system.	Cable(s) of the new external device are loose or power cables are unplugged.	Ensure that all cables are properly and securely connected.
	Power switch of new external device is not turned on.	Turn off the Notebook, turn on the external device, then turn on the Notebook to integrate the device with the Notebook system.
	Device is not seated properly.	Turn off the Notebook and reinsert the device.



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Solving Keyboard and Numeric Keypad Problems

Some causes and solutions for common keyboard and numeric keypad problems are listed in the following table.

Solving Keyboard/Numeric Keypad Problems		
Problem	Probable Cause	Solution
Embedded numeric keypad on Notebook keyboard is disabled.	Num Lock function is not enabled.	Press the Shift + NumLk keys to enable the Num Lock function and embedded numeric keypad. The Num Lock icon on the status panel turns on.
Embedded numeric keypad is disabled and Num Lock function is on.	External numeric keypad is connected to the Notebook.	Disconnect the external numeric keypad from the Notebook.



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Solving Memory Problems

Some causes and solutions for common memory problems are listed in the table below.

Solving Memory Problems		
Problem	Probable Cause	Solution
Memory count during Power-On Self-Test (POST) is incorrect.	Optional memory expansion card is installed incorrectly, is incompatible with the Notebook, or is defective.	Ensure that the optional memory expansion card is installed correctly.
"Out of Memory" message is displayed on the screen, or insufficient memory error occurs during operation.	System ran out of memory for the application.	Check the application documentation for memory requirements. Install additional memory.
	Too many TSR (terminate- and-stay-resident) applications are running.	Remove from memory any TSR applications you do not need.



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Solving PC Card Problems

The following table lists some causes and solutions for common PC Card problems.

	Solving PC Card Problems	
Problem	Probable Cause	Solution
When the Notebook is turned on and a PC card is inserted, the Notebook does not beep.	Card is not inserted properly.	Ensure that the card is inserted in the correct orientation.
	PC card beeps are disabled.	Double-click the PC card icon in the Control Panel, then click the Global Settings tab, enabling the PC Card sound effects.
	Speaker is turned off or volume is turned down.	Press volume buttons to turn the speaker on, then increase the volume.
	PC card drivers are not installed.	Double-click the Add New Hardware icon in the Control Panel for installation instructions. If the PC card or drivers are not compatible with Windows, install drivers and use the PC Card in MS-DOS mode.
	Card or card driver is not supported.	Contact Compaq's authorized service provider for a list of PC cards tested successfully in Compaq PC card platforms.
PC card modem, fax, or network card does not work.	Card is not fully inserted into the slot or is not inserted properly.	Ensure that the card is inserted in the correct orientation.
	Telephone cord is not plugged in all the way.	Check and secure telephone connection.
	Necessary drivers are not installed (turned on).	Install drivers.
PC card modem or fax card does not work.	You are trying to access the card using the wrong COM port.	See Specifications to verify COM port.
	The card conflicts with a serial device.	See Specifications to verify address.
	The card is not supported.	Use supported cards only.



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Solving Power Problems

See also "Solving Battery Pack and Battery Gauge Problems" in this section.

Solving Power Problems		
Problem	Probable Cause	Solution
Notebook will not turn on and battery pack is not inserted.	Notebook is not connected to a power source.	Insert battery or connect an external power source.
	Power cords to the external power source are unplugged.	Ensure that power cords connecting the Notebook and the external power source are plugged in properly.
	Power adapter is defective.	Replace AC adapter, and restart Notebook.
Notebook turned off while it was left unattended and the Power icon is off.	System board is defective.	Replace the system board.
	System intiated Hibernation due to a critical low-battery condition.	Replace the battery pack with a fully charged battery pack, or connect the Notebook to an external power source. Then turn on the Notebook.
	System initiated Hibernation after a preset timeout.	Turn on the Notebook.



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Solving Printer Problems

If you experience problems printing, run a printer self-test. Refer to the documentation provided with the printer for instructions. If the self-test fails, it is a printer-specific problem. Refer also to the printing section of the application documentation.

Solving Printer Problems		
Problem	Probable Cause	Solution
Printer will not turn on.	The signal cable may not be connected properly, or the printer is unplugged.	Ensure that the signal cable is properly connected and that the power cord is connected to the electrical outlet.
Printer will not print.	Printer is not turned on or is offline.	Turn the printer on and set it to online.
	The device drivers for the application are not installed.	Refer to the printer documentation to install the correct printer driver.
	A Printer is set up for a network, but is not connected to that network.	Connect the printer to the network.
	Printer cable is too long, unshielded, or defective.	Replace the cable.
	Paper tray is empty.	Fill the paper tray with paper and set the printer to online.
Printer prints garbled information.	Correct printer drivers are not installed.	Refer to the printer documentation to install the correct printer driver.
	Cable is not connected properly.	Ensure that the printer signal cable is properly connected to the Notebook.



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Solving TouchPad/Pointing Device Problems

The following table lists some causes and solutions for common TouchPad/Pointing Device problems.

Solving TouchPad/Pointing Device Problems		
Problem	Probable Cause	Solution
TouchPad or mouse does not work.	No device driver is installed, or an incorrect driver is installed.	Install the device driver and add it to the AUTOEXEC.BAT file or CONFIG.SYS file.
	The device driver is not installed in Windows.	Install the TouchPad/mouse driver in Windows.
External mouse does not work.	Mouse is not securely connected or is connected to an incorrect external connector.	Ensure that the mouse is securely connected to the appropriate external connector.
TouchPad or mouse does not work even though the device is enabled in Windows.	Mouse is not enabled.	Enter MOUSE at the system prompt to activate the mouse device driver.
	Cable is not properly seated in TouchPad board.	Reseat the cable.
	The TouchPad board is defective.	Replace the TouchPad board.
	The system board is defective.	Replace the system board.
	Device driver is not correctly installed in Windows.	Install the appropriate device driver in Windows.
Cursor skips or moves abnormally when using the TouchPad.	The TouchPad needs to be cleaned.	Clean the TouchPad with a cloth dampened with alcohol or an ammonia-based glass cleaner. Wipe liquid with a dry cloth.