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 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Troubleshooting

This chapter covers troubleshooting and resolving common problems associated with Compaq Presario 1800XL Series Notebooks. The basic steps in troubleshooting include:

1. Preparing the Notebook for troubleshooting as outlined in Preliminary Steps on the following page.

2. Performing the Power-On Self-Test (POST) and observing any error messages displayed.

   Note: If the Notebook is unable to complete POST or an error message is displayed, skip to Step 3 below to try to resolve the problem.

3. Taking the recommended steps described later in this chapter to solve the problems.

When following the recommended actions provided in POST and Diagnostic Error Codes, perform the steps in the order listed above. Rerun POST after each recommended action until the problem is solved, even if no error message occurs. Once the problem is solved, do not perform any remaining recommended solutions.

   Note: If the problem is intermittent, check the Notebook several times to be sure that the problem is resolved.

1.800.At.Compaq

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Preliminary Steps

Before running POST, complete the following steps:

1. If a Power-on password is established, type the password and press the **Enter** key. If you do not know the password, clear the password (see Clearing the Power-On Password later in this chapter).

2. Run Compaq Diagnostics.

3. Turn off the Notebook and its external devices.

4. Disconnect any external devices you do not want to test.

   Note: Do not disconnect the printer if you want to test it or use it 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. Verify this by running POST both with and without the external device connected.

5. Install loopback plugs in the serial and parallel connectors if you would like to test these ports.

6. Ensure that the hard drive is installed in the Notebook.

7. Ensure that the battery pack is installed and the Notebook is connected to an external AC power source.

When these preliminary steps are completed, run POST.
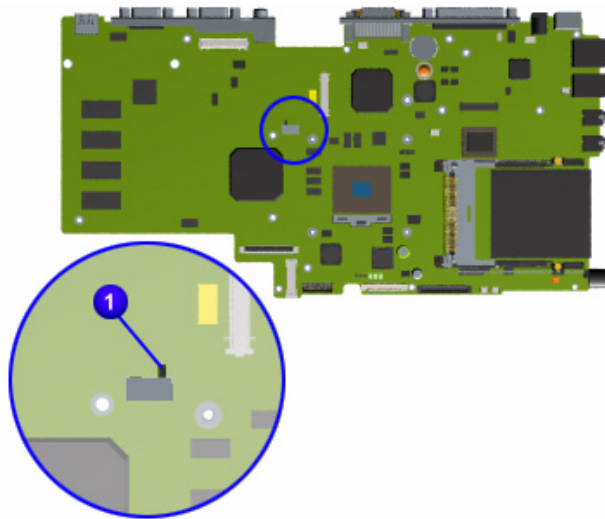
COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Clearing the Power-On Password

⚠ **CAUTION:** Clearing the Power-on password also removes all setup attributes that are programmed in the CMOS.

If you do not know the Power-on password, clear it by performing the following steps:

1. Turn off the Notebook.
2. Disconnect the power cord.
3. Remove the battery.
4. Remove the Palmrest cover.
5. Remove the keyboard.
6. Remove the heat sink.
7. Locate the CMOS switch to the right of the CD/DVD drive on the system board.
8. Slide the black switch to the right ❶ holding it in this position for at least 15 seconds to ensure that the password is cleared.

9. Reassemble the Notebook (refer to the Removal and Replacement chapter later in this MSG).
10. Turn on the Notebook to verify that the Power-on password has been cleared. If it has not been cleared, repeat this procedure.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Power-On Self-Test (POST)

To run POST, complete these steps:

Turn off the Notebook, then turn it on again. As soon as the Compaq logo appears, press the **ESC** key to display the POST messages as they occur. Remember any POST error codes that are displayed.

If the Notebook does not beep, POST has successfully completed its test and detected no errors. The Notebook will automatically restart.

> **Note:** If a bootable diskette is installed in the diskette drive, the system will boot from the diskette instead of the hard drive.

However, if POST detects errors, the Notebook will beep and/or display a text message.

> **Note:** If the Notebook is not functioning well enough to complete POST, or the display is unable to show POST error messages, refer to the section Solving Minor Problems later in this chapter.

POST Error Messages

A list of the POST error codes and their descriptions is shown in the tables below.

102-System Board Failure	
Probable Cause	**Recommended Action**
DMA, timers, and so on	Replace the system board.

162–System Options Not Set	
Probable Cause	**Recommended Action**
Incorrect configuration	Run Setup.
CMOS reflects an invalid configuration setting.	Run Setup.
RAM failure	1. Replace the memory modules. 2. Replace the system board.
Memory test data error	1. Replace the memory modules. 2. Replace the system board.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

XX000YZZ 201–Memory Error	
Probable Cause	**Recommended Action**
Memory failure	1. Replace the memory modules. 2. Replace the system board.

301-Keyboard Error	
Probable Cause	**Recommended Action**
Keyboard failure	1. Make sure the keys are not depressed during POST. 2. With the Notebook in Full-Off mode, reconnect the keyboard. 3. Replace the keyboard.

304–Keyboard or System Unit Error	
Probable Cause	**Recommended Action**
Keyboard or system board error	1. Replace the keyboard. 2. Replace the TouchPad. 3. Replace the system board.

601–Diskette Controller Error	
Probable Cause	**Recommended Action**
Mismatch in drive type or failure in the diskette controller	1. Run Checkup (TEST). 2. Check or replace cables. 3. Replace the system board.

605–Diskette Drive Error	
Probable Cause	**Recommended Action**
Mismatch in drive type	1. Run Setup. 2. Check or replace cables. 3. Replace the diskette drive. 4. Replace the system board.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

1780−Primary Hard Drive 0 Failure	
Probable Cause	**Recommended Action**
Disk 0 failed to respond	1. Run Checkup (TEST). 2. Replace the hard drive.
Hard drive format error	1. Run Checkup (TEST). 2. Replace the hard drive.

1782−Hard Drive Controller	
Probable Cause	**Recommended Action**
Hard drive controller failure	1. Run Setup. 2. Replace the hard drive.

Compaq Diagnostics

Compaq Diagnostics utilities come pre-installed on 1800XL Series Notebooks. Run the diagnostic utilities to view or test system information and external devices. If you run Compaq Diagnostics from a diskette, be sure that the diagnostic program is version 10.11 or later.

The Diagnostics menu includes the following utilities:

- Checkup (TEST)

- View System Information (INSPECT)

- Prepare Notebook for a Compaq Service Call (RemotePaq)

Customers are encouraged to run the Diagnostics utilities to try to solve a problem before calling for support. Checkup (TEST) should be run with the options for saving the device list to a file and printing or saving the error log. The View System Information (INSPECT) utility should also be run with the option for printing or saving the information. Customers should have these files or the printed information available when calling for support.

Checkup (TEST)

TEST is included on the *Compaq Diagnostics Diskette*. TEST determines if the various Notebook components and devices are recognized by the system and are functioning properly. You can display, print, or save the information generated by TEST.

Follow these steps to run TEST:

1. Plug the Notebook into an external power source. (A low-battery condition could interrupt the program.)

2. Turn on the external devices you want to test. Connect the printer if you want to print a log of error messages.

3. Insert the *Compaq Diagnostics Diskette* in the diskette drive.

4. Turn on or restart the Notebook. The Notebook boots from the diskette, and after a few seconds, the diagnostics Welcome screen is displayed.

5. Press **Enter** to continue. The Diagnostics menu is displayed.

6. Select **Computer Checkup** from the Diagnostics menu. The Test Option menu is displayed.

7. Select **View the Device List** from the Test Option menu. A list of 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, ensure that any new devices are installed properly and run Checkup again.

9. Select one of the following from the **Test Option** menu:

   • **Quick Check Diagnostics**. Runs a quick, general test on each device with minimal prompts. If errors occur, they are displayed when the testing is complete. You cannot print or save the error messages.

   • **Automatic Diagnostics**. Runs unattended, maximum testing of each device with minimal prompts. You can choose how many times to run the tests, stop on errors, or print or save a log of errors.

   • **Prompted Diagnostics**. You can choose attended or unattended testing. Allows the most control over testing options. You can choose to stop on errors, or choose to print or save a log of errors.

Continued on the next page.

10. Follow the on-screen instructions as the devices are tested. When testing is complete, the Test Option menu is displayed.

11. Exit the Test Option and Diagnostics menus.

View System Information (INSPECT)

The INSPECT utility provides information about the Notebook and installed or connected devices. You can display, print, or save the information.

Follow these steps to run INSPECT from the *Compaq Diagnostics Diskette*:

1. Turn on the external device(s) you want to test. Connect the printer if you want to print the information.

2. Insert the *Compaq Diagnostics Diskette* in the diskette drive.

3. Turn on or restart the Notebook. The Notebook boots from the diskette, and after a few seconds, 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. The following list is displayed:

System	Memory
ROM	Audio
Keyboard	Operating system
System ports	System files
System storage	Windows files
Graphics	

6. Select the item you want to view and follow the on-screen instructions to cycle through the screens, return to the list and choose another item, or print the information.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Diagnostic Error Codes

Diagnostic error codes are displayed if the system recognizes a problem while running the Compaq Diagnostics program. These error codes help identify subassemblies that may be damaged or defective.

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 been resolved, do not complete any remaining steps.

> **Note:** Some of the solutions provided in this chapter involve replacing Notebook components. Refer to the specific Removal and Replacement procedures later in this guide for each component.

Select error codes by number or type:

- 101 - 114: Processor Test (pg 10)
- 200 - 215: Memory Test (pg 10)
- 300 - 304: Keyboard Test (pg 11)
- 401 - 403: Parallel/Printer Test (pg 11)
- 501 - 516: Video Test (pg 14)
- 600 - 699: Diskette Drive Test (pg 12)
- 1101: Serial Test (pg 12)

- 1701 - 1736: Hard Drive Test (pg 13)
- 2402 - 2418: Video Test (pg 15)
- 2419 - 2480: Video Test (pg 16)
- 3206: Audio Test (pg 16)
- 3301 - 6623: DVD or CD Test (pg 17)
- 8601 - 8602: TouchPad Test (pg 17)

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

Processor Test Error Codes		
Error Code	**Description**	**Recommended Action**
101-xx	CPU test failed	Replace the processor and retest.
102-xx	Coprocessor or Weitek Error	1. Run the Configuration and Diagnostics utilities. 2. Replace the processor and retest.
103-xx	DMA page registers test failed	The following solution applies to error codes 103-xx through 113-xx: Replace the system board and retest.
104-xx	Interrupt controller master test failed	
105-xx	Port 61 error	
106-xx	Keyboard controller self-test failed	
107-xx	CMOS RAM test failed	
108-xx	CMOS interrupt test failed	
109-xx	CMOS clock test failed	
110-xx	Programmable timer load data test failed	
113-xx	Protected mode test failed	
114-01	Speaker test failed	1. Check system configuration. 2. Verify cable connections to speakers. 3. Replace the system board and retest.

Memory Test Error Codes		
Error Code	**Description**	**Recommended Action**
200-xx 202-xx	Memory machine ID test failed Memory system ROM checksum failed	1. Flash the system ROM and retest. 2. Replace the system board and retest.
203-xx	Write/Read test failed	The following steps apply to error codes 203-xx through 215-xx: 1. Remove the memory module and retest. 2. Install a new memory module and retest.
204-xx	Address test failed	
211-xx	Random pattern test failed	
214-xx	Noise test failed	
215-xx	Random address test failed	

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Keyboard Test Error Codes		
Error Code	**Description**	**Recommended Action**
300-xx	Failed ID Test	The following steps apply to error codes 300-xx through 304-xx:
301-xx	Failed Self-Test/Interface Test	1. Check the keyboard connection. If disconnected, turn off the Notebook and reconnect the keyboard.
302-xx	Failed Individual Key Test	2. Replace the keyboard and retest.
304-xx	Failed Keyboard Repeat Test	3. Replace the system board and retest.

Parallel/Printer Test Error Codes		
Error Code	**Description**	**Recommended Action**
401-xx	Printer failed or not connected	The following steps apply to error codes 401-xx through 403-xx:
402-xx	Failed Port Test	1. Connect the printer.
403-xx	Printer pattern test failed	2. Check power to the printer.
		3. Install loopback connector on printer port and retest.
		4. Check port and IRQ configuration.
		5. Replace the system board and retest.

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

Diskette Drive Test Error Codes		
Error Code	**Description**	**Recommended Action**
600-xx	Diskette ID drive types test failed	The following steps apply to error codes 600-xx through 698-xx:
601-xx	Diskette format failed	1. Replace the diskette media and retest.
602-xx	Diskette read test failed	2. Check and/or replace the diskette drive cables and retest.
603-xx	Diskette write, read, compare test failed	3. Replace the diskette drive and retest. 4. Replace the system board and retest.
604-xx	Diskette random read test failed	
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	
697-xx	Diskette type error	
698-xx	Diskette drive speed not within limits	
699-xx	Diskette drive/media ID error	1. Replace media. 2. Run the Configuration and Diagnostics utilities.

Serial Test Error Codes		
Error Code	**Description**	**Recommended Action**
1101-xx	Serial port test failed	1. Check port configuration. 2. Replace the system board and retest.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Hard Drive Test Error Codes		
Error Code	**Description**	**Recommended Action**
1701-xx	Hard drive format test failed	The following steps apply to error codes 1701-xx through 1736-xx:
1702-xx	Hard drive read test failed	
1703-xx	Hard drive write/read/compare test failed	1. Run the Configuration and Diagnostics utilities and verify drive type.
1704-xx	Hard drive random seek test failed	2. Verify that all secondary drives have secondary drive capability.
1705-xx	Hard drive controller test failed	3. Replace the hard drive and retest.
1706-xx	Hard drive ready test failed	4. Replace the system board and 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

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

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

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Video Test Error Codes		
Error Code	**Description**	**Recommended Action**
2402-xx	Video memory test failed	The following steps apply to error codes 2402-xx through 2418-xx:
2403-xx	Video attribute test failed	
2404-xx	Video character set test failed	1. Run the Configuration and Diagnostics utilities.
2405-xx	Video 80 x 25 mode 9 x 14 character cell test failed	2. Replace the display assembly and retest.
2406-xx	Video 80 x 25 mode 8 x 8 character cell test failed	3. 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 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	

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

Video Test Error Codes		
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	1. Run the Configuration and Diagnostics utilities.
2422-xx	ECG/VGC 640 x 350 16-color set test failed	2. Disconnect external monitor and test with the Notebook display.
2423-xx	ECG/VGC 640 x 350 64-color set test failed	3. Replace the display assembly and retest.
2424-xx	ECG/VGC monochrome text 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 failure	
2432-xx	320 x 200 graphics (256-color mode) test failure	
2448-xx	Advanced VGA Controller test failed	
2451-xx	132-column Advanced VGA test failed	
2456-xx	Advanced VGA 256 Color test failed	
2458-xx	Advanced VGA BitBLT test failed	The following solution applies to error codes 2458-xx through 2480-xx:
2468-xx	Advanced VGA DAC test failed	Replace the system board and retest.
2477-xx	Advanced VGA data path test failed	
2478-xx	Advanced VGA BitBLT test failed	
2480-xx	Advanced VGA LineDraw test failed	

Audio Test Error Codes		
Error Code	**Description**	**Recommended Action**
3206-xx	Audio System Internal Error	Replace the system board and retest.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

TouchPad Interface Test Error Codes		
Error Code	**Description**	**Recommended Action**
8601-xx	Mouse test failed	The following steps apply to error codes 8601-xx through 8602-xx: 1. Replace the TouchPad and retest. 2. Replace the system board and retest.
8602-xx	Interface test failed	

DVD or CD Drive Test Error Codes		
Error Code	**Description**	**Recommended Action**
3301-xx	DVD or CD drive read test failed	The following steps apply to error codes 3301-xx through 6623-xx: 1. Replace the DVD or CD media and retest. 2. Verify that the speakers cables are properly connected. 3. Verify that drivers are loaded and properly installed. 4. Replace the CD/DVD drive and retest. 5. Replace the system board and retest.
3305-xx	DVD or CD drive seek test failed	
6600-xx	ID test failed	
6605-xx	Read test failed	
6608-xx	Controller test failed	
6623-xx	Random read test failed	

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

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.

⚠ **CAUTION:** Carefully match the symptoms against the problem described 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.

Select from the following to diagnose and solve problems related to each topic:

Audio	Keyboard/Numeric Keypad
Battery	Memory
CD or DVD Drive	PC Card
Diskette Drive	Power
Display	Printer
Hard Drive	TouchPad
Hardware Installation	

Before Replacing Parts

- Verify that all cables are properly connected to the parts that are to be tested.

- Run Setup after connecting external devices.

- Verify that all required device drivers are installed.

- Verify that all required changes have been made to the CONFIG.SYS file.

- Verify that all required changes have been made to the AUTOEXEC.BAT file.

- Verify that all printer drivers have been installed for each application.

- Check the printer connection.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

Solving Minor Problems

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

Audio Solutions

A common audio problem and solution are listed in the following table.

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

Battery Pack/Gauge Solutions

Some causes and solutions for common battery pack problems are listed in the following table. Power Solutions later in this chapter may also be applicable to the following problems.

Battery Pack/Gauge		
Problem	**Probable Cause**	**Solution(s)**
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 verify that they are evenly spaced and not bent or broken.

maintenance & service guide

COMPAQ

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

Battery Pack/Gauge		
Problem	**Probable Cause**	**Solution(s)**
Notebook is beeping and battery (BATT ▪ ▪ ▪) icon is blinking.	Battery charge is low.	Immediately save any open file(s). Then complete one of the following steps: • 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.
Battery (BATT ▪ ▪ ▪) icon on the front of the unit blinks to indicate low-battery condition, but Notebook does not beep.	Volume is turned down too low.	Adjust the volume.
Battery charging ➜ icon doesn't light and battery pack won't fast charge.	Battery pack is already charged.	No action is necessary.
	Battery pack was exposed to temperature extremes.	Allow time for the battery pack 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.
Battery charge does not last as long as expected.	Battery is 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°C to 30°C) Recharge the battery pack.

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Battery Pack/Gauge		
Problem	**Probable Cause**	**Solution(s)**
	Battery has partially self-discharged.	Recharge the battery. Discharge the battery completely and then recharge it.
Battery charge does not last as long as expected.	Power management is disabled.	Set a power management level in Setup.
	An external device or PC Card is draining the battery.	Turn off or disconnect external devices when not in use.
Battery pack 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 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.
	Battery pack has partially self-discharged.	Condition the battery pack by fully charging, fully discharging, then fully recharging it. 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 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°C to 30°C) Recharge the battery pack.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

CD and DVD Drive Solutions

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

CD or DVD Drive		
Problem	**Probable Cause**	**Solution(s)**
CD or DVD drive cannot read a Compact Disc or Digital Versatile Disc.	Disc is upside down or is improperly inserted in the CD or DVD drive.	Open the loading tray, lay the compact disc in it (label side up), then close the tray.
	CD is CD Plus or Pregap/Track 0 type.	Cannot read these type CDs in 24X. Remove the CD.

Diskette Drive Solutions

Some causes and solutions for diskette drive problems are listed in the following table.

Diskette Drive		
Problem	**Probable Cause**	**Solution(s)**
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 occured.	Run TEST from the Compaq Diagnostics diskette.
	Diskette is not formatted.	Format the diskette. At the system prompt, enter **FORMAT A:**
Diskette drive cannot read a diskette.	The wrong type of diskette is being used.	Use the type of diskette required by the drive.
	Diskette has a bad sector.	Copy files to hard drive or another diskette. Reformat bad diskette.
	Drive error has occurred.	Run TEST from the Compaq Diagnostics diskette.

maintenance & service guide

Diskette Drive		
Problem	**Probable Cause**	**Solution(s)**
Diskette drive cannot read a diskette.	Diskette is not formatted.	Format the diskette. At the system prompt, enter **FORMAT A:**
Cannot boot from diskette.	Bootable diskette is not in the diskette drive.	Put the bootable diskette in the diskette drive.
	Diskette Boot has incorrect setting in Setup.	Run Setup and set diskette as first to boot.

Display Solutions

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 completing 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 be white. A narrow black border may also appear on the left and right sides of the display. Either of these displays indicates that the monitor is working properly.

Display		
Problem	**Probable Cause**	**Solution(s)**
Screen is dim.	Brightness control (if applicable) is not set properly.	Adjust the display brightness by using **Fn+F7** or **Fn+F8**.
	The Notebook display is in direct sunlight.	Tilt the display or move the Notebook.
Screen is blank.	Screen saver was initiated or display was turned off by Power Management due to lack of user activity.	Press any key or touch the TouchPad.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Display		
Problem	**Probable Cause**	**Solution(s)**
	Display has overheated.	Turn off the Notebook, and if necessary move it out of direct sunlight to allow it to cool.
Display is blank and the Standby 🌙 icon is flashing.	System is in Standby mode.	Press any key or touch the TouchPad.
Notebook display is blank and the screen on an external monitor displays information.	Display function was switched to the external monitor.	Press **Fn+F3** to switch between the external monitor and the Notebook display (you may have to press more than once).
Notebook display flashes or has garbled characters when Notebook is connected to external monitor.	The external monitor is set for 1024 x 768 or higher resolution and view is toggled back to the Notebook display, which supports up to 800 x 600.	Restart the Notebook.
The light tubes on the edge of the display panel do not light up at all and the Power-On Self-Test (POST) completes on startup.**	Improper backlight or display cable connections.	1. Check the display cable connections and retest. 2. 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 at all and the Power-On Self-Test does not complete on startup.**	Defective system board.	Replace the system board.

**The backlight or its power circuitry has failed. If the backlight is not functioning, the POST result cannot be observed. Connect the unit to an external monitor before restarting the unit. If an external monitor is not available verify that POST is complete 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.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Display		
Problem	**Probable Cause**	**Solution(s)**
Backlight (brightness) cannot be adjusted with Fn+F7 or Fn+F8.	Improper display cable connections.	1. Reseat the display cable to the system board. 2. 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 display panel has a continuous pattern across it (e.g., "jailbars" pattern), has a single color on it, or has garbled graphics across the entire panel. This failure is for patterns across the entire panel (not just on one section).	Improper display cable connections.	Reseat the display cable to the following until the problem is solved: 1. System board 2. Display assembly
	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 a section of the display panel.	Defective display panel.	Replace the display assembly.

Note: When you perform a "self-test" on an external VGA color or monochrome monitor, the screen should be white. A narrow black border may also appear on the left and right sides of the display. Either of these displays indicates that the monitor is working properly.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Hard Drive Solutions

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

> ⚠ **CAUTION:** To prevent loss of information, maintain an up-to-date backup of your hard drive in case of errors or failures.

Hard Drive		
Problem	**Probable Cause**	**Solution(s)**
Reading hard drive takes an unusually 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 Checkup (TEST).
Hard drive does not work.	Hard drive is not seated properly.	Turn off and unplug the Notebook, remove the battery pack, and remove and then reinstall the hard drive.

Hardware Installation Solutions

The possible cause and some solutions for a hardware installation problem are listed in the following table.

Hardware Installation		
Problem	**Probable Cause**	**Solution(s)**
A new device is not recognized as part of the system.	Cable(s) of new external device are loose or power cables are unplugged.	Ensure that all cables are proplerly 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 system.
	Device is not seated properly.	Turn off the Notebook and reinsert the device.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Keyboard/Numeric Keypad Solutions

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

Keyboard/Numeric Keypad		
Problem	**Probable Cause**	**Solution(s)**
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 (Num Lock light 🔒 is 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.

Memory Solutions

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

Memory		
Problem	**Probable Cause**	**Solution(s)**
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, and then restart the Notebook.
"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. If necessary, install additional memory.
	Too many TSR (terminate-and-stay-resident) applications are running.	Remove from memory any TSR applications you do not need.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

PC Card Solutions

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

PC Card		
Problem	**Probable Cause**	**Solution(s)**
While turned on, the Notebook does not beep when a PC card is inserted.	Card is not inserted properly.	Make sure that the card is inserted properly.
	PC card beeps are disabled.	From Control Panel, double-click **PC Card**, click the **Global Settings** tab, and enable **PC Card sound effects**.
	Speaker is turned off or volume is turned down.	Press **Volume** buttons to turn the speaker on and then increase the volume.
	PC card drivers are not installed.	From Control Panel, double-click **Add New Hardware** for installation instructions. If 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 a Compaq authorized Service Provider for a list of PC cards tested sucessfully in Compaq 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 slot in the correct orientation.
	Telephone cord is not plugged in all the way.	Check and secure telephone connection.
	Necessary drivers are not installed (enabled).	Install drivers.
PC card modem or fax card does not work.	You are trying to access the card using the wrong COM port.	See the Specifications chapter to verify the correct COM port.
	The card conflicts with a serial device.	See the Specifications chapter to verify the correct address.

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

PC Card		
Problem	**Probable Cause**	**Solution(s)**
PC card modem or fax card does not work.	The card is not supported.	Use supported cards only.
Modem network PC card does not work.	Network driver is not installed or is not set up properly.	Install driver.
	Telephone cord is not properly connected.	Verify telephone connection.
Memory or storage PC card does not work.	SRAM and Flash memory cards require the memory card driver (loaded and enabled). Flash memory cards require the Microsoft FlashFile System. Hard drives on Flash mass storage cards require the PC card ATA driver.	Install driver(s).
	You are trying to access the hard drive card using the wrong drive letter.	Double-click **My Computer** to verify the drive letter assigned to the card.
	The card is not supported.	Contact a Compaq-authorized Service Provider for a list of PC cards tested successfully in Compaq platforms.

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381, and XL390

Power Solutions

Some causes and solutions for power problems are listed in the following table. See also Battery Pack/Gauge Solutions in this chapter.

Power		
Problem	**Probable Cause**	**Solution(s)**
Notebook will not turn on and the 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 turned off while it was left unattended and the Power ○ icon is off.	System initiated Hibernation after a preset timeout.	Turn on the Notebook.
	System initiated 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 board is defective.	Replace the system board.

COMPAQ

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

Printer Solutions

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, the problem is associated with the printer, not the Notebook. To diagnose other printing problems, refer to the printing section of the application documentation.

Printer		
Problem	**Probable Cause**	**Solution(s)**
Printer will not turn on.	The signal cable may not be connected properly, or the printer is unplugged.	Make sure 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.
	Paper tray is empty.	Fill the paper tray with paper and set the printer to online.
	The device drivers for the application are not installed.	Refer to the printer documentation to install the correct printer driver.
	Printer is set up for a network, but is not connected to the network.	Connect the printer to the network.
	Printer cable is too long, unshielded, or defective.	Replace the cable.
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.	Make sure that the printer signal cable is properly connected to the Notebook.
	Cable is defective.	Replace the printer cable and retest.

maintenance & service guide

Presario 1800/1800T Series
Models: XL280, XL380, XL381,
and XL390

TouchPad/Pointing Device Solutions

The following table lists some causes and solutions for TouchPad/pointing device problems.

TouchPad/Pointing Device		
Problem	**Probable Cause**	**Solution(s)**
TouchPad or mouse does not work.	Incorrect or no device driver is installed.	Install the device driver and add 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. Add a line in the AUTOEXEC.BAT file to automatically activate the mouse driver each time the computer is turned on or restarted.
	Cable is not properly seated on TouchPad board.	Reseat cable.
	Defective TouchPad board.	Replace the TouchPad board.
	Defective system board.	Replace 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 up liquid with a dry cloth.

maintenance & service guide

Contacting Compaq Support

Customers should provide the following information when contacting Compaq Reseller Support:

- Product name

- Product serial number

- Purchase date

- Conditions under which the problem occurred

- Any error messages that have occurred

- Hardware configuration

- Type of printer connected

- Hardware/software installed

- Printed result of Checkup (TEST)

- Printed copies of CONFIG.SYS and AUTOEXEC.BAT files, if possible.

Shipping Preparation

Before shipping the Notebook, complete the following steps:

1. Back up the critical hard drive files. Ensure that backup tapes/diskettes are not exposed to electrical or magnetic fields while stored or in transit.

2. Turn off the Notebook and all external devices.

3. Disconnect the external devices from their power sources, then from the Notebook.

   Important: Make sure that there is no diskette in the diskette drive and that there are no PC cards in the PC slots.

4. Close the display and all exterior doors of the Notebook.

5. Pack the Notebook with sufficient packing material to protect it. Use the original packing box or similar packaging.