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

### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# Welcome to the Maintenance & Service Guide (MSG) for the

# Compaq Prosignia 150.

This is an online guide designed to serve the needs of those whose job it is to repair Compaq products.

Please first read the **Notice** which contains copyright and trademark information.

Then read the <u>Preface</u> which shows symbol conventions, technician notes and the serial number location for the unit.



Click here to download the complete ZIP file (2.2 MB) of this Maintenance & Service Guide to your hard drive.

This MSG will be periodically maintained and updated as needed. To report a technical problem, contact your Regional Support Center or IM Help Center. For content comments or questions, contact the <a href="Editor"><u>Editor</u></a>.

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

### **Preface**

This Maintenance and Service Guide is a troubleshooting guide that can be used for reference when servicing the Compaq Prosignia Series Portable Computers.

Compaq Computer Corporation reserves the right to make changes to the Compaq Prosignia Series Portable Computers without notice.

# **Symbols**

### The following words and symbols mark special messages throughout this guide:



**WARNING:** Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or loss of life.



**CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of data.

**IMPORTANT:** Text set off in this manner presents clarifying information or specific instructions.

**NOTE:** Text set off in this manner presents commentary, sidelights, or interesting points of information.

### **Technician Notes**



**WARNING:** Only authorized technicians trained by Compaq should repair this equipment. All troubleshooting and repair procedures are detailed to allow only subassembly/module level repair. Because of the complexity of the individual boards and subassemblies, the user should not attempt to make repairs at the component level or to make modifications to any printed circuit board. Improper repairs can create a safety hazard. Any indications of component replacement or printed circuit board modifications may void any warranty

### **Serial Number**

When requesting information or ordering spare parts, the computer serial number should be provided to Compaq. The serial number is located on the bottom of the computer.

# **Locating Additional Information**

The following documentation is available to support this product:

- Compaq Prosignia Series Portable Computer documentation set
- Introducing Windows 98 Guide
- Service Training Guides
- Compaq Service Advisories and Bulletins
- Compaq QuickFind
- Compaq Service Quick Reference Guide

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

### **Notice**

The information in this guide is subject to change without notice.

COMPAQ COMPUTER CORPORATION SHALL NOT BE LIABLE FOR TECHNICAL OR EDITORIAL ERRORS OR OMISSIONS CONTAINED HEREIN, NOR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS MATERIAL.

This guide contains information protected by copyright. No part of this guide may be photocopied or reproduced in any form without prior written consent from Compaq Computer Corporation.

Ó 1999 Compaq Computer Corporation. All rights reserved. Printed in the U.S.A.

Compaq, Prosignia Series Registered U. S. Patent and Trademark Office.

Microsoft, MS-DOS, and Windows are registered trademarks of Microsoft Corporation. Windows 98 is a trademark of Microsoft Corporation.

The software described in this guide is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of the agreement.

Product names mentioned herein may be trademarks and/or registered trademarks of their respective companies.

Maintenance and Service Guide

Compaq Prosignia Series Series Portable Computer

First Edition (March 1999) Compaq Computer Corporation

### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Specifications**

**Index Page** 

This chapter covers the following specifications of Compaq Prosignia Series Portable Computers. Click on a link to go to a particular specification:

*
System Unit
System Interrupts
System DMA
System I/O
System Memory
<u>Display</u>
Memory Expansion
Battery Pack
<u>Diskette Drive</u>
<u>Hard Drives</u>
CD/DVD Drives
<u>Modem</u>
AC Adapter
<u>Pin Assignments</u>
*

### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Increasing Battery Pack Operating Time**

Battery pack operating time differs depending on several variables. To avoid unnecessary replacement, consider the following variables when determining how long a charged battery pack should last:

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

**NOTE:** The power consumption requirements for PC Cards vary widely. Some cards drain the battery pack very rapidly.

Battery pack operating time can be increased by as much as 50 percent by controlling the energy required by the computer and the energy stored in the battery pack.

### **Minimizing the Energy Required**

To minimize the energy required by the computer, follow these steps:

- Set the power conservation levels in the Power Management utility to **Maximum**.
- Customize the timeout value to work more efficiently with the applications. The amount of battery life depends on the values selected.

### **Maximizing the Energy Stored**

To maximize the energy stored in the battery pack, follow these guidelines:

- Condition the battery pack at least every 30 days to improve overall battery performance.
- Keep a battery pack in the computer when using it with AC power to supply the battery pack with a constant trickle charge.
- Store the battery pack in a cool, dry place when not in use.

## **Conditioning a Battery Pack**



**CAUTION:** To avoid a loss of data, ensure that all data is saved before discharging a battery pack.

To condition a battery pack, complete the following steps:

- 1. Plug in the AC adapter and allow the battery to charge until the LED light on the display stops blinking. Your battery gauge may read 100 percent for a period of time before LED light on the display stops blinking. Do not unplug the AC adapter until the arrow disappears.
- 2. Unplug the AC adapter and allow the battery to drain until the computer reaches hibernation and turns itself off. **Do not plug in the AC adapter during this process or you will need to restart with Step No. 1.** You may use the computer while the battery is draining.
- 3. Your battery is re- conditioned.
- 4. Plug in the AC adapter and begin using the computer.

## The table below shows the approximate battery pack charge times:

Approximate Battery Charge Time				
Computer	On Line	Off Line		
NiMH Battery Pack	4.0 hours premature termination	2:00 hrs		
Li ion Battery Pack	4.5 hours premature termination	2:50 hrs		

## **Disposal of a Used Battery Pack**

In the interest of safeguarding our environment. Compaq Computer Corporation recommends that nickel metal hydride (NiMH) and lithium ion (Li ion) battery packs be recycled. Battery packs should be handled in accordance with country, state, province, or local regulations.



**CAUTION:** Never attempt to open or service a battery pack. Opening a battery pack not only damages the pack and makes it unusable, but also expose potentially harmful battery components.

### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Product Description**

**Index Page** 

**Models** 

Features & Controls

Front Bezel
Buttons

Front Bezel Lights

<u>Left Side</u> Components

Right side Components

**Bottom of Unit** 

<u>Rear</u> Connectors

Power Managing



### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

# **Illustrated Parts Catalog**

### **Index Page**

This section helps identify the number associated with each item(s) for the Compaq Prosignia Series Portable Computers. These Numbers are used to order replacement parts.

System Unit
<b>Mass Storage Devices</b>
<b>Board Components</b>
<u>Cable Kit</u>
<u>Hardware Kit</u>
Plastics Kit
<b>Display Assembly</b>
Miscellaneous Parts
<b>Documentation &amp;</b>
<u>Software</u>
·

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

**Preface** -or- Notice **Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack** Removal & Replacement

# **Troubleshooting**

### **Index Page**

> Preliminaries

>Clearing **CMOS** 

>Power-on **Self-test** 

>Compaq **Diagnostics** 

>Diagnostic **Error codes** 

>Test Utilities

>Solving Minor

**Problems** 

>Contacting Compaq

This section covers troubleshooting information for the Compaq Prosignia Series Portable Computers. The basic steps in troubleshooting include:

- 1. Follow the Preliminary Steps.
- 2. Run the Power-On Self-Test (POST).
- 3. Follow the recommended actions described in the diagnostic tables, if you are unable to run POST or if POST displays an error message.

When following the recommended actions in the Sections on POST and Diagnostic Error Codes perform them in the order listed. Rerun POST after each recommended action until the problem is solved and no error message occurs. Once the problem is solved, do not complete the remaining recommended actions.

**NOTE:** If the problem is intermittent, check the computer several times to verify that the problem is solved.

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

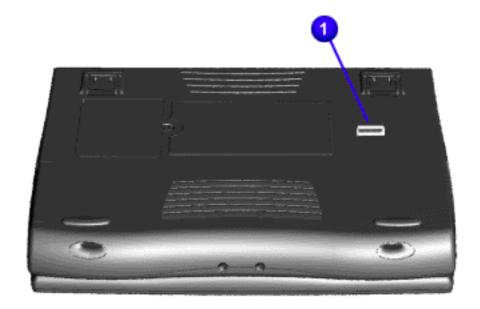
# **Removal & Replacement**

**Serial Number Location** 

### This section explains the removal and replacement procedures for the computer.

- > Preliminaries
- >Serial Number Location
- >Battery Pack
- >Touchpad Assembly
- > Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- **Drive**
- >Battery
- **Charger Board**
- >Modem
- >Display
- >CPU cover
- >Speakers
- > Diskette
- <u>Drive</u>
- >Fan Assembly
- >System
- Board
- >Dipswitch
- **Settings**
- >Memory
- **Module**

\*



Report the computer serial number 1 to Compaq when requesting information or ordering spare parts.

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

**Preliminaries** 

The following links are preliminary instructions which should be read before continuing with the Removal & Replacement section of this Guide. Please read the following pages before servicing your computer:

**Electrostatic Discharge** 

**Service Considerations** 

**Cables & Connectors** 

**Preparing Computer for Disassembly** 

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Electrostatic Discharge**

A sudden discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Often the spark is neither felt nor heard, but damage occurs. An electronic device exposed to electrostatic discharge (ESD) may not be affected at all and will work perfectly throughout a normal cycle. Although, it may function normally for a while, then degrade in the internal layers, reducing its life expectancy.

Networks built into many integrated circuits provide some protection, but in many cases, the discharge contains enough power to alter device parameters or melt silicon junctions.

# **Generating Static**

The table shows how different activities generate static electricity and at different electrostatic voltage levels.

Typical Electrostatic Voltages					
Event	Relative Humidity				
	10%	40%	<b>55%</b>		
Walking across carpet	35,000 V	15,000 V	7,500 V		
Walking across vinyl floor	12,000 V	5,000 V	3,000 V		
Motions of bench worker	6,000 V	800 V	400 V		
Removing DIPS from plastic tubes	2,000 V	700 V	400 V		
Removing DIPS from vinyl trays	11,500 V	4,000 V	2,000 V		
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V		
Removing bubble pack from PCBs	26,000 V	20,000 V	7,000 V		
Packing PCBs in foam-lined box	21,000 V	11,000 V	5,000 V		
<b>NOTE:</b> 700 volts can degrade a product.					

**Continue Preliminary pages:** 

**Service Considerations** 

**Cables & Connectors** 

**Preparing Computer for Disassembly** 

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

### **Removal & Replacement**

**Service Considerations** 

Listed below are some of the considerations that you should keep in mind during the disassembly and assembly of the computer:

### **Tool and Software Requirements**

To service the computer, you need the following:

- Compaq screwdriver kit (Spare Part No. 161946-001)
- Torx T-9 screwdriverS
- 3/16-inch and 5mm nut drivers (for screwlocks and standoffs)
- Small, standard screwdriver
- Small, Phillips screwdriver
- Diagnostics software

#### Screws

The screws used in the computer are not interchangeable. If an incorrect screw is used during the reassembly process, it can damage the unit. Compaq strongly recommends that all screws removed during disassembly be kept with the part that was removed, then returned to their proper locations.

**IMPORTANT:** 

As each subassembly is removed from the computer, it should be placed away from the work area to prevent damage.

**Continue Preliminary pages:** 

Cables & Connectors

**Preparing Computer for Disassembly** 

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

## **Removal & Replacement**

**Cables & Connectors** 

Most cables used throughout the unit are ribbon cables. Cables must be handled with extreme care to avoid damage. Apply only the tension required to seat or unseat the cables during insertion or removal from the connector. Handle cables by the connector whenever possible. In all cases, avoid bending, twisting, or tearing the cables, and ensure that the cables are routed in such a way that they cannot be caught or snagged by parts being removed or replaced.

#### **Cables**

Use the following precautions when handling cables to avoid damage to the cable or computer:

- Always handle cables by their connectors.
- Avoid bending, twisting, or pulling on the cables.
- Apply minimum required force when seating or unseating the cables from their connectors.
- Place the cables in such a manner that they cannot be caught or snagged by parts being removed or replaced.
- Handle flex cables with extreme care; they can tear easily.



**CAUTION:** When servicing these computers, ensure that cables are placed in their proper location during the reassembly process. Improper cable placement can cause severe damage to the unit.

#### **Select the desired illustration:**

Removing a Cable from a **ZIF Connector**.

The ribbon cable position for the **4.3-GB and 6.4-GB hard drive**.

The ribbon cable position for the **CD or DVD drive**.

The ribbon cable position for the diskette drive.

The cable position for the **speaker assembly.** 

#### **Plastic Parts**

Plastic parts can be damaged by the use of excessive force during disassembly and reassembly. When handling the plastic parts, use care. Apply pressure only at the points designated in the maintenance instructions.

Continue with last Preliminary page:

**Preparing Computer for Disassembly** 

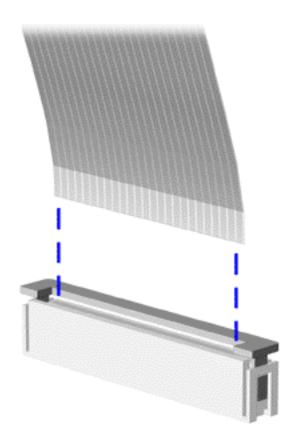
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

**ZIF Connector** 



The computer uses a zero insertion force (ZIF) connector for the keyboard cable to the system board. To remove a cable from a ZIF connector, lift both corners of the ZIF connector and slide simultaneously with constant light force.



**CAUTION:** A ZIF connector and its attached cable can be easily damaged. Handle only the connector slide when removing or replacing a cable. Never pull or twist on the cable while it is connected.



**CAUTION:** When servicing this computer, ensure that cables are placed in their proper location during the reassembly process. Improper cable placement can damage the computer.

Back to Cables and Connectors.

### for Prosignia 150 Series Computer

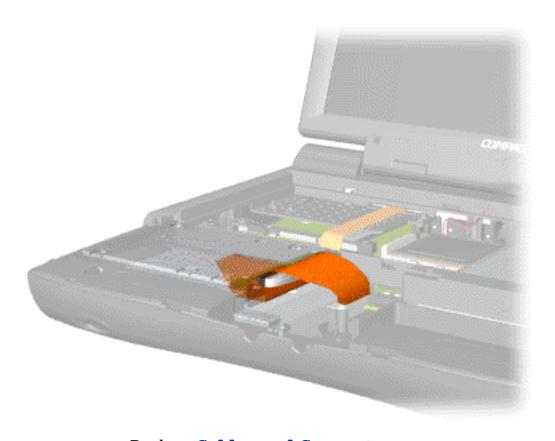
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

**Cable Position for the 4.3 or 6.4 GB Drives** 



**Back to Cables and Connectors.** 

### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

**Cable Position for the CD or DVD Drive** 



Back to Cables and Connectors.

### for Prosignia 150 Series Computer

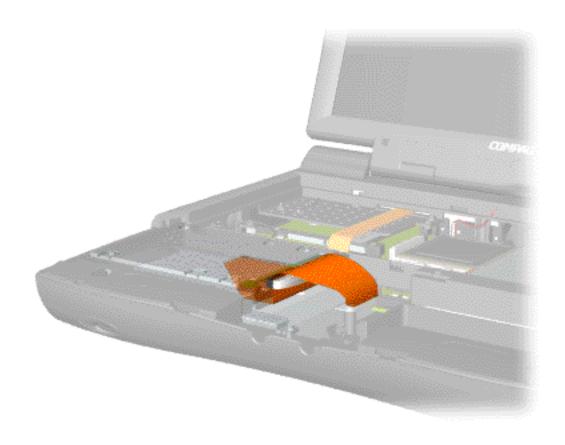
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

**Cable Position for the Diskette Drive** 



Back to Cables and Connectors.

### for Prosignia 150 Series Computer

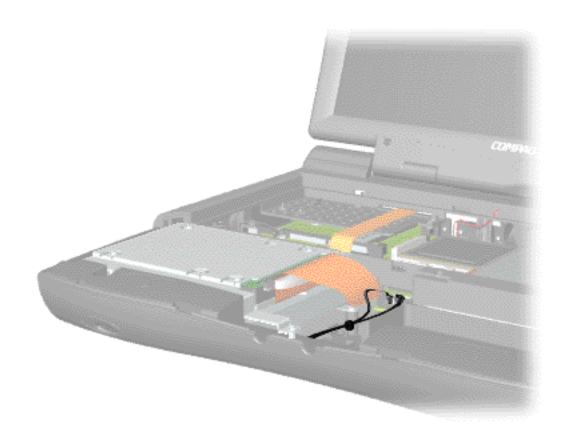
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

**Cable Position for the Speaker Assembly** 



**Back to Cables and Connectors.** 

### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

Preparing the computer for Disassembly

Before beginning removal and replacement procedures, complete the following procedures:

- 1. Disconnect AC power and any external devices.
- 2. Remove the battery pack.
- 3. Remove any PC Cards.

**IMPORTANT:** The battery pack should be removed before performing any internal maintenance on the computer.



**WARNING:** Metal objects can damage the battery pack as well as the battery contacts in the battery compartment. To prevent damage, do not allow metal objects to touch the battery contacts. Place only the battery pack for the Compaq Prosignia Series Portable Computers into the battery compartment. Do not force the battery pack into the bay if insertion does not occur easily.



**CAUTION:** Do not crush, puncture, or incinerate the battery pack. Do not open a battery pack, as this damages the pack, makes it unusable, and exposes potentially harmful battery components. There are no field-serviceable parts located inside the battery pack.

The Compaq Prosignia Series Portable Computers have several screws of various sizes which are **not** interchangeable. Care must be taken during **NOTE:** reassembly to ensure that the correct screws are used in their correct location. During removal please keep respective screws with their associated sub-assembly.

Go to Removal & Replacement Procedures.

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

**Removing the Battery Pack** 

- > Preliminaries
- >Serial
- <u>Number</u> Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- <u>Drive</u>
- <u>>Battery</u> Charger Board
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- **Drive**
- >Fan
- **Assembly**
- <u>>System</u> Board
- >Dipswitch
- **Settings**
- >Memory

Module

\*



To remove the battery pack, complete the following steps:

1. Slide the battery pack compartment door down and remove it from the battery pack.

Next Step

### for Prosignia 150 Series Computer

Index Page
Product Description

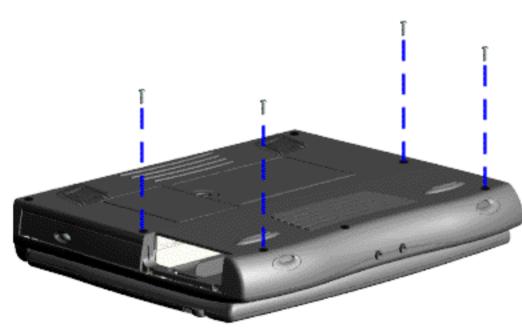
<u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

**Touchpad Assembly** 

- >Preliminaries
- >Serial Number Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD Drive
- >Battery
- **Charger Board**
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette Drive
- >Fan
- **Assembly**
- >System Board
- >Dipswitch
- Settings
- >Memory Module



The palmrest cover with touch pad must be removed to gain access to any of the interior components of the computer, and it is the first component that has to be removed to gain access to the interior components.

It is not necessary to remove the display panel

**NOTE:** assembly to access the interior components of the computer.

To remove the palmrest cover with touch pad, complete the following steps:

- 1. <u>Prepare the computer for disassembly.</u>
- 2. Close the computer and turn the computer upside down.
- 3. Remove four screws from the bottom of the computer.

**Next Step** 

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

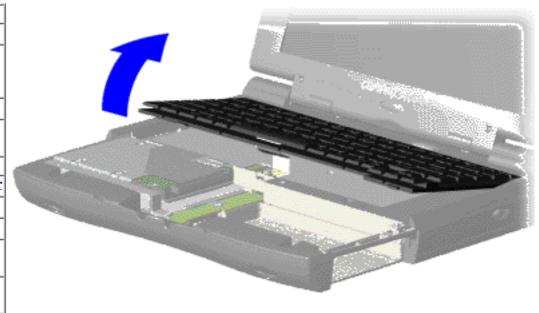
Battery Pack
Removal & Replacement

# **Removal & Replacement**

### **Keyboard**

- > Preliminaries
- >Serial
- Number Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- **Drive**
- <u>>Battery</u> Charger Board
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- **Drive**
- >Fan Assembly
- >System
- Board
- > Dipswitch
- **Settings**
- <u>>Memory</u> Module

\*



To remove the keyboard, complete the following steps:

- 1. <u>Prepare</u> <u>the computer</u> <u>for</u> disassembly.
- 2. Remove the palmrest cover with touch pad.
- 3. Gently lift and turn the keyboard over allowing it to rest on top of the palmrest cover with touchpad slot opening.
- 4. Remove the heatspreader.

**Next Step** 

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

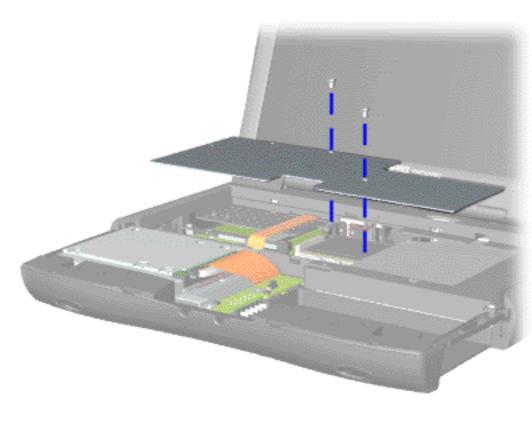
Battery Pack
Removal & Replacement

### **Removal & Replacement**

### Heatspreader

- > Preliminaries
- >Serial
- Number Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- Drive
- >Battery
- **Charger Board**
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- <u>Drive</u>
- >Fan Assembly
- >System
- **Board**
- > Dipswitch
- **Settings**
- >Memory Module

3



To remove the heatspreader, complete the following steps:

- 1. <u>Prepare</u> <u>the computer</u> <u>for</u> <u>disassembly</u>.
- 2. Remove the <u>palmrest</u> cover with touch pad.
- 3. Gently lift and turn the keyboard over allowing it to rest on top of the palmrest cover with touchpad slot opening.
- 4. Remove two screws from the heatspreader and lift out of the chassis.

To replace the heatspeader, reverse the previous procedures.

#### for Prosignia 150 Series Computer

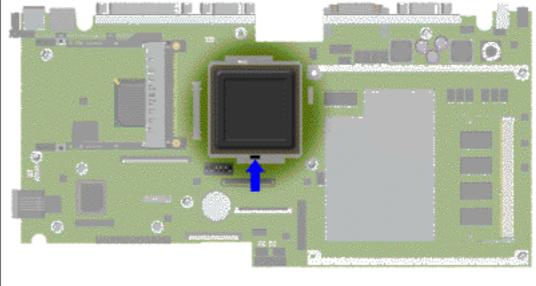
<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

#### **Processor**

- >Preliminaries
- >Serial
- Number Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- **Drive**
- >Battery
- <u>Charger Board</u> >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- **Drive**
- <u>>Fan</u> Assembly
- >System
- **Board**
- > Dipswitch Settings
- bettings
- >Memory
- <u>Module</u>



To remove the processor, complete the following steps:

- 1. <u>Prepare</u> the computer for disassembly.
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the <u>keyboard</u>.
- 4. Remove the heatspreader.
- 5. Insert a small blade screw driver into the bottom slot opening on the processor and push toward the display to release the processor from the chassis slot.
- 6. Lift the processor out of the processor chassis slot.

**Next Step** 

### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

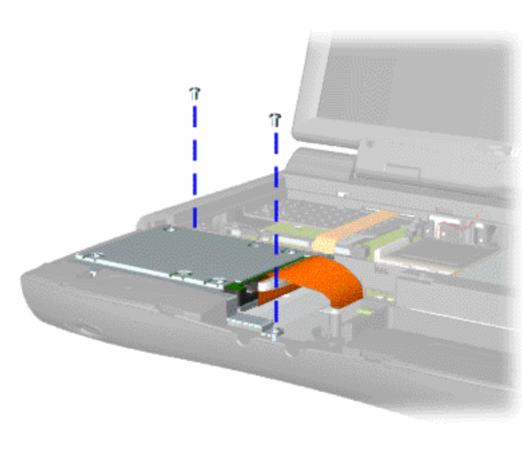
<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

4.3 GB or 6.4 GB Hard Drive

- > Preliminaries
- >Serial
- Number Location
- >Battery Pack
- >Touchpad
- Assembly >Keyboard
- \_\_\_\_
- >**Heatspreader**
- >Processor
- >Hard Drive
- >CD/DVD
- **Drive**
- > Battery Charger Board
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- **Drive**
- <u>>Fan</u> Assembly
- >System
- Board
- >Dipswitch
- Settings
- >Memory Module

\*



To remove the hard drive, complete the following steps:

- 1. Prepare the computer for disassembly.
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the keyboard.
- 4. Remove two screws from the hard drive mounting bracket and lift out the hard drive with drive mounting bracket attached.

**Next Step** 

### for Prosignia 150 Series Computer

Index Page
Product Description

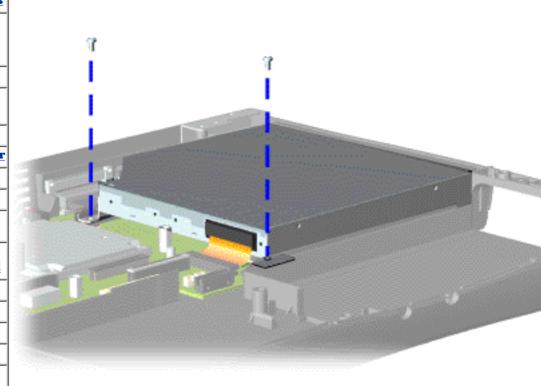
<u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

**CD** or **DVD Drive** 

- > Preliminaries
- >Serial
- Number Location
- \_\_\_\_
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD Drive
- >Battery
- **Charger Board**
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- **Drive**
- <u>>Fan</u> Assembly
- >System
- Board
- > Dipswitch
- **Settings**
- >Memory Module



To remove the DVD or CD drive, complete the following steps:

- 1. Prepare the computer for disassembly.
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the <u>keyboard</u>.
- 4. Remove the heatspreader.
- 5. Remove two screws located at the back DVD or CD drive.

**Next Step** 

### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

### **Removal & Replacement**

**Battery Charger Board** 



>Serial Number Location

>Battery Pack

>Touchpad Assembly

>Keyboard

>Heatspreader

>Processor

>Hard Drive

>CD/DVD

<u>Drive</u>

>Battery Charger Board

>Modem

> Display

>CPU cover

>Speakers

> Diskette

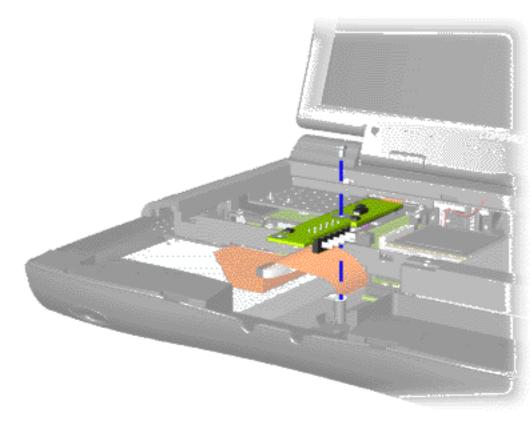
<u>Drive</u> >Fan

>System

<u>Board</u>

>Dipswitch Settings

<u>>Memory</u> Module



To remove the battery charger board, complete the following steps:

1. Prepare the computer for disassembly.

2. Remove the palmrest cover with touch pad.

3. Remove the keyboard.

4. Remove the heatspreader.

5. Remove the hard drive.

6. Remove one screw from the battery charger board, unplug the board from the connector on the system board, and lift out of the chassis.

When replacing the battery charger board, ensure

NOTE: the pins are aligned with the connector on the system board.

To replace the battery charger board, reverse the previous procedures.

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

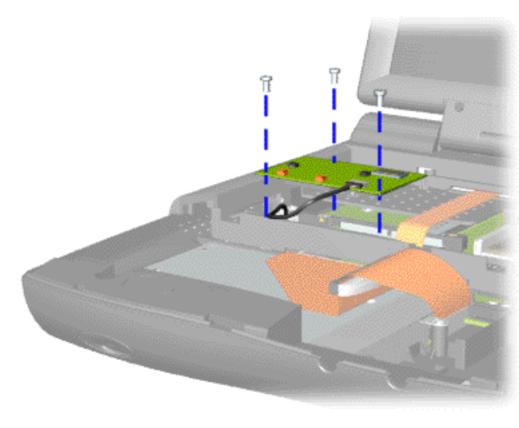
# **Removal & Replacement**

Modem

- > Preliminaries
- <u>>Serial</u> Number
- Location

  > Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- **Drive**
- <u>>Battery</u> Charger Board
- >Modem
- >Display
- >CPU cover
- >Speakers
- > Diskette Drive
- >Fan
- Assembly
- >System
- Board
- > Dipswitch
- **Settings**
- >Memory Module

\*



To remove the modem, complete the following steps:

- 1. Prepare the <u>computer</u> <u>for</u> disassembly.
- 2. Remove the <u>palmrest</u> <u>cover with</u> touch pad.
- 3. Remove the keyboard.
- 4. Remove the heatspreader.
- 5. Remove three screws securing modem and pull the modem off the connector on the system board.

**Next Step** 

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

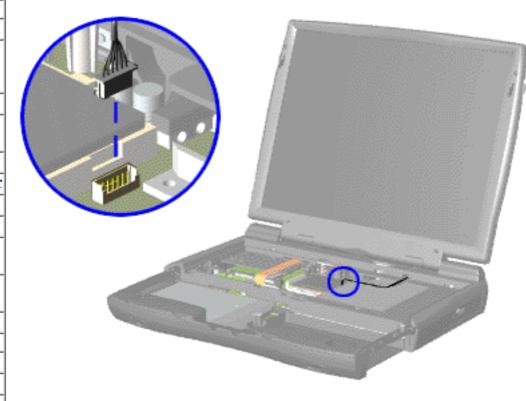
Battery Pack
Removal & Replacement

# **Removal & Replacement**

**Display Panel Assembly** 

- > Preliminaries
- >Serial Number
- Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- Drive
- >Battery
- **Charger Board**
- >Modem
- >Display
- >CPU cover
- >Speakers
- > Diskette
- <u>Drive</u> >Fan
- Assembly
- >System
- Board
- >Dipswitch
- **Settings**
- <u>>Memory</u> Module

×



To remove the display panel assembly, complete the following steps:

- 1. <u>Prepare</u> <u>the computer</u> <u>for</u> disassembly.
- 2. Remove the <u>palmrest</u> cover with touch pad.
- 3. Remove the <u>keyboard</u>.
- 4. Remove the heatspreader.
- 5. Remove the <u>modem</u>.
- 6. Disconnect the backlight cable attached to the display panel assembly from the connector on the system board.

**Next Step** 

### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

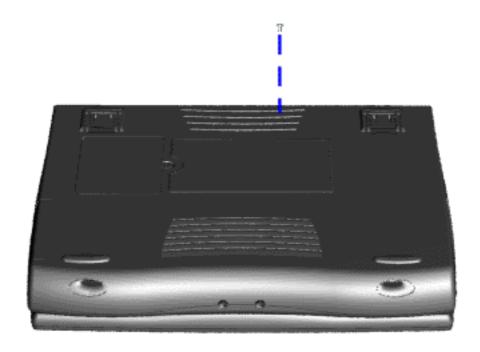
Battery Pack
Removal & Replacement

# **Removal & Replacement**

**Upper CPU Cover** 

- >Preliminaries
- >Serial
- <u>Number</u> Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- Drive
- >Battery
- **Charger Board**
- >Modem
- >Display
- >CPU cover
- >Speakers
- >Diskette
- <u>Drive</u>
- >Fan Assembly
- >System
- **Board**
- >Dipswitch
- **Settings**
- >Memory Module

\*



To remove the Upper CPU cover complete the following steps:

- 1. Prepare the computer for disassembly.
- 2. Remove the <u>palmrest</u> <u>cover with</u> <u>touch pad</u>.
- 3. Remove the keyboard.
- 4. Remove the heatspreader.
- 5. Remove the <u>hard</u> drive.
- 6. Remove the <u>display</u> panel assembly.
- 7. Remove the screw located under the bottom of the unit (rear) which secures the Upper CPU cover to the chassis.

**Next Step** 

### for Prosignia 150 Series Computer

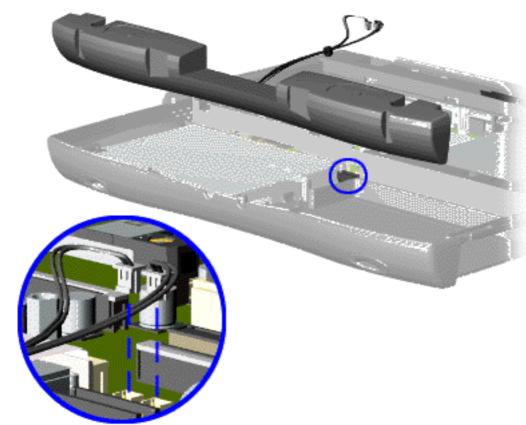
<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog <u>Specifications</u> <u>Troubleshooting</u> Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Speaker Assembly** 



**Module** 



To remove the speaker assembly, complete the following steps:

- 1. Prepare the <u>computer</u> <u>for</u> <u>disassembly</u>.
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the <u>keyboard</u>.
- 4. Remove the <u>heatspreader</u>.
- 5. Remove the <u>hard</u> <u>drive</u>.
- 6. Remove the <u>display</u> <u>panel</u> <u>assembly</u>.
- 7. Remove the <u>Upper</u> <u>CPU cover</u>.
- 8. Remove the <u>charger</u> board.
- 9. Disconnect the speaker cables from the system board and remove the speaker assembly from the chassis.

To replace the speaker assembly, reverse the previous procedures.

### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

**Diskette Drive** 



<u>Serial</u>

<u>Number</u>

<u>Location</u>

>Battery Pack

>Touchpad Assembly

>Keyboard

>Heatspreader

>Processor

>Hard Drive

>CD/DVD Drive

>Battery

**Charger Board** 

>Modem

>Display

>CPU cover

>Speakers

>Diskette Drive

<u>>Fan</u> Assembly

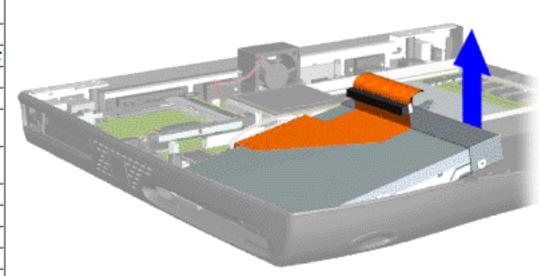
>System

**Board** 

>Dipswitch

<u>Settings</u>

<u>>Memory</u> <u>Module</u>



To remove the diskette drive, complete the following steps:

- 1. <u>Prepare the computer for disassembly.</u>
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the keyboard.
- 4. Remove the <u>heatspreader</u>.
- 5. Remove the hard drive.
- 6. Remove the display panel assembly.
- 7. Remove the <u>upper CPU</u> cover.
- 8. Remove the screw from the diskette drive and lift up the diskette drive.
- 9. Disconnect the diskette drive data cable from the system board.

To replace the diskette drive, reverse the previous procedures.

Ensure the diskette drive eject lever is properly inserted in the

NOTE: inserted in the chassis slot, when replacing

the diskette drive.

### for Prosignia 150 Series Computer

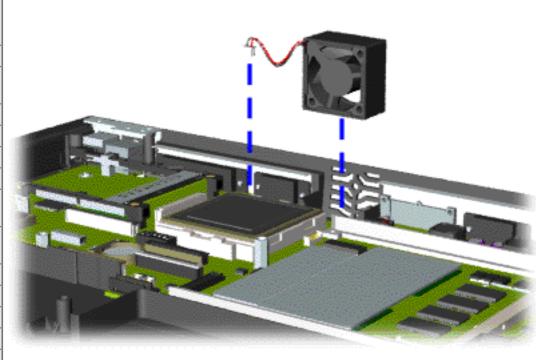
<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

**Fan Assembly** 

- > Preliminaries
- >Serial Number Location
- >Battery Pack
- >Touchpad Assembly
- >Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- Drive
- >Battery
- **Charger Board**
- <u>>Modem</u>
- >Display
- >CPU cover
- >Speakers
- > Diskette
- Drive >Fan
- Assembly
- >System Board
- > Dipswitch
- Settings
- >Memory
- <u>Module</u>



To remove the fan assembly, complete the following steps:

- 1. Prepare the computer for disassembly.
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the <u>keyboard</u>.
- 4. Remove the heatspreader.
- 5. Remove the <u>display</u> <u>panel</u> <u>assembly</u>.
- 6. Remove the <u>hard</u> drive.
- 7. Remove the <u>Upper</u> CPU cover.
- 8. Lift the fan assembly from the chassis slot and disconnect the fan cable from the connector on the system board.

Next Step

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# **Removal & Replacement**

### **System Board**

# To remove the system board, complete the following steps:

**IMPORTANT:** When replacing the system board remove the memory module on the system board.

- 1. Prepare the computer for disassembly.
- 2. Remove the palmrest cover with touch pad.
- 3. Remove the <u>keyboard</u>.
- 4. Remove the heatspreader.
- 5. Remove the <u>processor</u>.
- 6. Remove the modem.
- 7. Remove the hard drive.
- 8. Remove the display panel assembly.
- 9. Remove the <u>Upper CPU Cover</u>.
- 10. Remove the battery charger board.
- 11. Remove the <u>diskette drive</u>.
- 12. Remove the CD or DVD drive.
- 13. Remove the <u>fan assembly</u>.
- 14. Disconnect the <u>speaker assembly</u> cables.

**Next Step** 

### for Prosignia 150 Series Computer

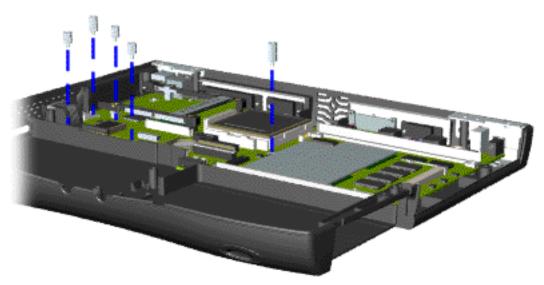
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

# **Removal & Replacement**

**System Board** 



15. Remove five standoffs from the system board.

**Next Step** 

#### for Prosignia 150 Series Computer

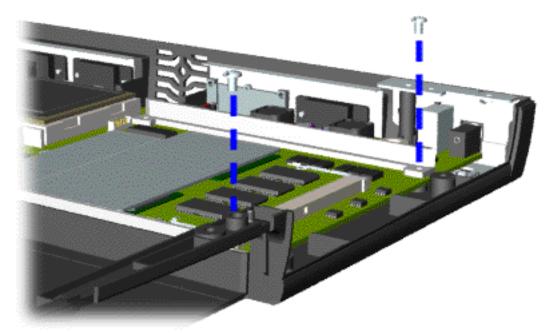
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Removal & Replacement**

**CD/DVD Drive** 



16. Remove two screws from the DVD or CD Drive mounting rails and remove the mounting rails from the system board.

Next Step

#### for Prosignia 150 Series Computer

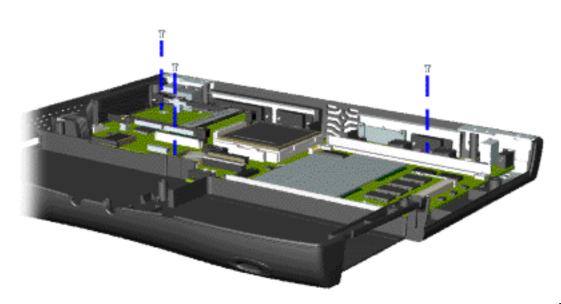
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Removal & Replacement**

**System Board** 



17. Remove three screws from the system board.

The **Ethernet Connector** Plug must be removed before removing the system board. After removing the screws and standoffs

**IMPORTANT:** from the

system board, remove the **Ethernet** Connector Plug (located on the left side of the base enclosure) by pushing it out from the inside of the chassis.

**Next Step** 

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Product Description**

**Left Side Components** 

\*
>Models
>Features &
Controls
>Front
Bezel
Buttons
>Front
Bezel Lights
>Left Side
Components
>Right side
Components
>Bottom of
Unit

>Rear

>Power

**Managing** 

Connectors

- 1. PC Card **Eject** Lever 2. PC **Card Slot** 3. Ethernet Connector Plug 4. Diskette **Drive Slot** 5. **Diskette Eject Button**

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> <u>Specifications</u> <u>Troubleshooting</u> Battery Pack
Removal & Replacement

## **Product Description**

**Models & Features** 

	. —
*	
>Models	
>Features &	ľ
<u>Controls</u>	
>Front Bezel	
<u>Buttons</u>	
>Front Bezel	
<u>Lights</u>	
>Left Side	l
<u>Components</u>	
>Right side	
Components	
>Bottom of	╟
<u>Unit</u>	╟
>Rear	
Connectors	
>Power	
Managing	_
imms	

Display	12.1" TFT
	14.1" TFT
AMD K6-2	350
Processors	380
	400
	433
	475
Cache	1MB
Hard Drives	4.0 GB
	4.3 GB
	6.4 GB
	10.0 GB
CD Drive	24x Max CD-ROM
DVD Drive	4x DVD-ROM Drive
Modem	56K V.90 PCI
	Modem

#### for Prosignia 150 Series Computer

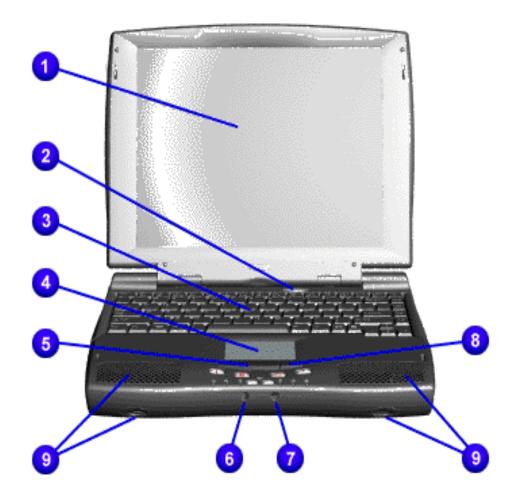
<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Product Description**

**Features & Controls** 





- 1. Display
- 2. Power (On/Off) Button
- 3.
- **Keyboard**
- 4. Touch
- Pad
- 5. Touch Pad Button (Left)
- 6.
- Headphone Jack
- 7
- Microphone Jack
- 8. Touch Pad Button (Right)
- 9.
- Integrated Speakers and Ports

#### for Prosignia 150 Series Computer

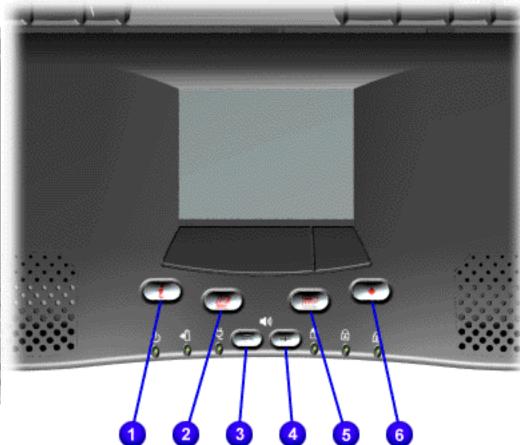
<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Product Description**

**Front Bezel Buttons** 





- 1. Instant Internet Access Button
- 2. Instant E-mail Button
- 3. Volume Down Button
- 4. Volume Up Button
- 5. Instant Calendar Button

User-Defined/Programmable Button

#### for Prosignia 150 Series Computer

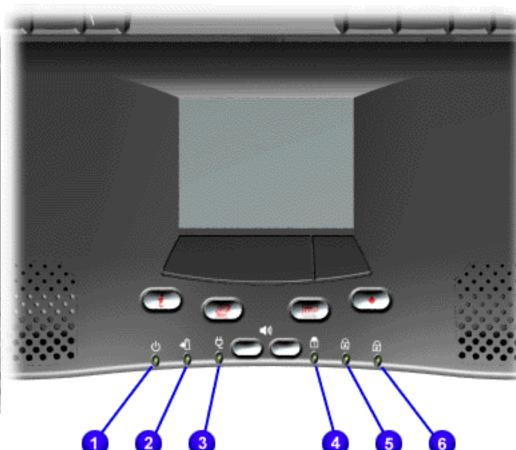
<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Product Description**

**Front Bezel Lights** 





1. **Power** Light 2. **Battery** Charge Light 3. **Power** Cord Light 4. Num Lock Light 5. Cap Lock Light 6. Scroll Lock Light

#### for Prosignia 150 Series Computer

Index Page
Product Description

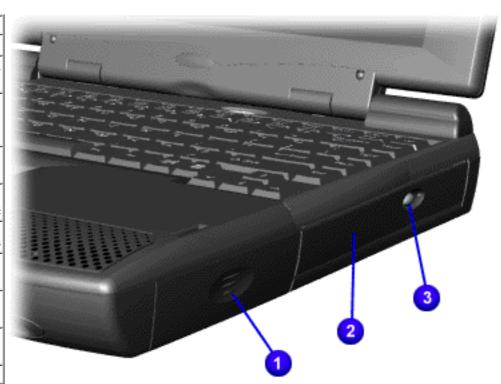
<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Product Description**

**Right Side Components** 

- >Models
- >Features & Controls
- >Front Bezel Buttons
- <u>>Front</u> Bezel Lights
- >Left SideComponents
- >Right side Components
- >Bottom of Unit
- <u>>Rear</u> Connectors
- >Power
  Managing



- 1. Battery Compartment
- 2. DVD or CD Drive Manual Eject Hole
- 3. DVD or CD Drive Eject Button

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Product Description**

**Bottom of Unit** 

- >Models >Features & **Controls** >Front Bezel **Buttons** >Front **Bezel Lights** >Left Side **Components** >Right side **Components** >Bottom of Unit >Rear **Connectors** >Power **Managing**
- 1. Memory Compartment Door
- 2. Stand Feet

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Product Description**

#### **Rear Connectors**

- >Models >Features & **Controls** >Front **Bezel Buttons** >Front **Bezel Lights** >Left Side **Components** >Right side **Components** >Bottom of Unit >Rear **Connectors** >Power **Managing**
- 1 2 3 4 5 6 7 8 9
- 1. AC Adapter
- 2. Universal Serial Bus
- 3. Security Slot
- 4. Serial Port
- 5. Port Replicator
- 6. External Monitor Port
- 7. Parallel Printer Port
- 8. Keyboard/Mouse Port
- 9. Modem Jack

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

**Preface** -or- Notice **Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

Running on Batteries

15 minutes

After 10 minutes

## **Power Management for Windows 98**

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

- Power Management Settings
- Sleep
- Hibernation
- Battery operating time
- Rebooting After a Lockup
- Servicing Your Computer Full Off Mode

# **Power Management Settings**

Depending on your patterns of computer use, you can set different levels of power management. These different power management levels can be activated based on the amount of time passed since the last system activity. System activity examples include keyboard or mouse movement, CD or DVD playback (while under program control that monitors Sleep), and modem use.

You can select different conditions or power schemes through Power Management. The optional settings are **Home/Office Desk**, **Portable**/ **Laptop**, and **Always On**. From the default settings, you can change the following settings:

• the System goes to Sleep (Standby) mode

drive must be less than or equal to the setting for System.)

the screen times out and goes blank

Tab: Power Schemes:

**Turn OFF Monitor** 

Tab: ADVANCED

Always on System Standby:

• the hard drive spins down

**IMPORTANT:** If you're on a network, it's recommended that you set **System Standby** to **Never**.

Each of these system components will go to sleep after the selected or default periods of inactivity. (The setting for hard

There are five categories of power management settings under the Control Panel. The default setting for each feature is

After 15 minutes

Plugged in

Never

Default

listed below in the tables. **Power Management Properties** 

Always on System Standby:	After 15 minutes	After 10 minutes
	Power Management Propert	ies
Tab: <b>ALARMS</b> ::		
Low Battery Alarm:	10%	
Critical Battery Alarm	0%	

Alarm Actions:	X Display Message Notification		
	Text Action	No Action	
	Power Manage	ement Properties	
Tab: <b>POWER METER</b> :	Default		

Display Properties		
Tab: <b>Monitor</b> : Laptop Display (Maximum resolution according to unit display size)		

Sleep

You can select Sleep mode instead of turning off the computer when you have finished using it. This allows the computer to wake up faster than turning it completely off and saves power over the active (On) mode. Compag Prosignia Series Notebook computers have two levels of sleep, Hibernation and Sleep.

computer into Off mode. **Sleep** – is a low power mode, also referred to as Standby mode. While in Sleep mode, your computer will maintain system

**Hibernation** – by pushing the power button once your computer will perform a save to disk followed by a shut down of the

information and open files. Unsaved information will be lost if you turn off your system prior to system wake-up, or if you lose power while using the AC adapter.



information will be lost if you turn off your system prior to system wake-up, or if you lose power while using the AC adapter.

**CAUTION:** While in Sleep mode, your computer will maintain system information and open files. Unsaved

## Hibernation helps conserve battery life and protects your data. Hibernation can be a routine power saving event, or can be the result of a low battery condition. As it enters Hibernation your computer will display a progress screen, as it

**Hibernation Mode** 

automatically saves the machine state before it shuts down and turns itself off. Your computer will automatically go into Hibernation, when the battery has little power left, or when the system (operating on battery power) has been in Sleep mode for more than an hour. You can also manually initiate Hibernation by pressing the power button once while the system is active. To restore the computer's previous state, simply press the power button once again. While waking up, the computer will display a progress screen. The following table shows the conditions and indicators for getting in and out of the various power management modes, Sleep, Hibernation, and Off.

To End Mode To Initiate Indicators Sleep Manual keys Press any key Flashing green Power

ысер	combination - Fn+F4	ress any key	LED
	Time Out Default 15 minutes. If on Battery power (system will not go to Sleep if on AC power)		
Hibernate	Manual - Press Power Button once	Press Power Button once	No Power LED, blank screen
	Time Out Default If low battery or after 1 hour of sleep (system will not Hibernate if on AC power)		
Off	Perform normal Windows shutdown via the start button, or press and hold down the power button for 4 seconds	Press Power Button once	No Power LED, blank screen

#### instructions above for properly putting the computer into Off mode, unplug from the outlet, and remove the battery (see battery section for instruction on removing battery).

If you need to install or replace components in your system, you must turn the computer off completely. Follow the

**Rebooting After a Lockup** 

Occasionally you may encounter a frozen keyboard or a locked screen. To reboot your computer (as if from a cold start) press and hold down the Power Button for at least four seconds, which will cause a manual shutdown. Then, restart it with a

#### single press of the Power Button. If it still doesn't recover, press the Power Button and hold it 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.

**Battery Operating Time** 

# Battery operating time is affected by variables, such as the following:

 Power conservation settings Hardware configuration

- Installed options Display brightness
- Hard drive usage

Software applications

- Power button 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 <u>Battery Pack Operations</u>. Return to the **Top of Page** 

Return to Product Description Index Page.

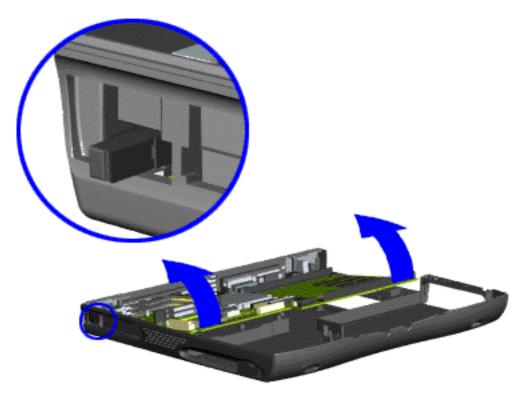
#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**System Board** 



18. Pull the PCMCIA eject lever out (straight), lift up the right side of the system board and pull forward to remove the system board from the chassis.

**IMPORTANT:** Remove all cables from the system board.

To replace the system board, reverse the previous procedures.

Return to Removal & Replacement Index Page.

Or go to Dip Switch System Board Settings.

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> <u>Removal & Replacement</u>

## **Removal & Replacement**

**Processor Dipswitch Settings** 

If the system board dip switch voltage settings are not correct, damage may occur to the computer and/or system board.

#### For the 350, 380, 400 & 475 MHz Processors:

only change settings 1-5 on SW1 1. Settings 6-10 vary by model and should not be changed when replacing the system board. Ensure the dip switch voltage settings (SW1 1 and SW3 3) on the system board are correct for the computer model and processor voltage marked on the processor chip.

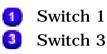
#### For the 433 MHz Processor:

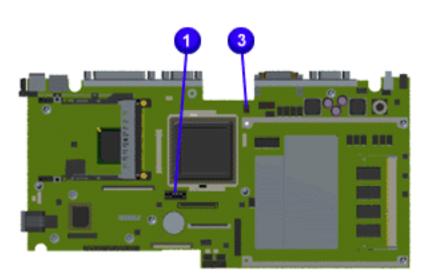
You may change settings 1-5 as well as 10. Settings 6-9 vary by model and should not be changed when replacing the system board. Ensure the dip switch voltage settings (SW1 and SW3 on the system board are correct for the computer model and processor voltage marked on the processor chip.



**Module** 

**NOTE:** The black area on the dip switch indicates the position of the switch.





## AMD K6-II 475 MHz, 2.2v



# AMD K6-II 433 MHz, 2.2v



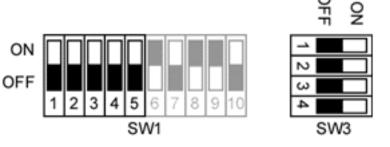
# AMD K6-II 400 MHz, 2.2V



# AMD K6-II 380 MHz, 2.2V



# AMD K6-II 350 MHz, 2.2V



#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

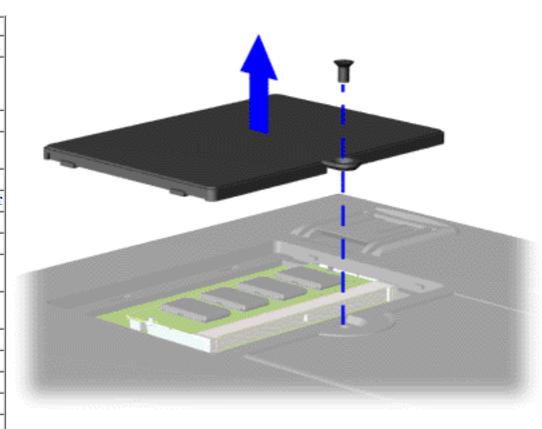
Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Memory Module** 

- > Preliminaries
- >Serial
- <u>Number</u> Location
- >Battery Pack
- >Touchpad Assembly
- > Keyboard
- >Heatspreader
- >Processor
- >Hard Drive
- >CD/DVD
- <u>Drive</u>
- <u>>Battery</u> Charger Board
- Charger Duart
- <u>>Modem</u>
- <u>>Display</u>
- >CPU cover
- >Speakers
- >Diskette
- **Drive**
- >Fan
- Assembly > System
- Board
- >Dipswitch Settings
- >Memory Module

×



To remove the memory module, complete the following steps:

- 1. Prepare the computer for disassembly.
- 2. Close the computer and turn the computer upside down.
- 3. Remove the screw from the memory module door, and slide the memory module door to the right.

Next Step

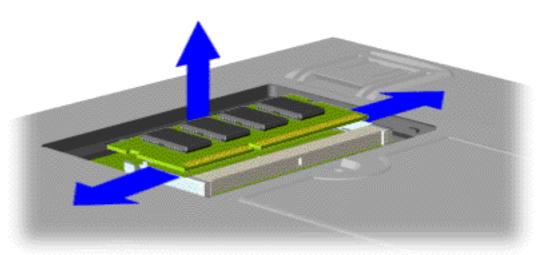
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Memory Module** 



4. Pull side levers to release the memory module and unplug the memory module from the system board.

To replace the memory module, reverse the previous procedures.

Return to Removal & Replacement Index Page.

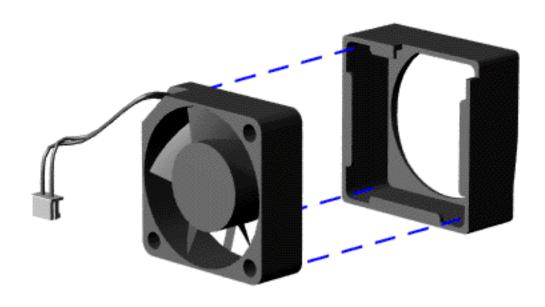
#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Fan Assembly** 



To remove the fan gasket, pull it away from the fan.

When replacing the fan assembly ensure the arrow

**IMPORTANT:** (located

on the top of the fan gasket) is

pointing inward.

To replace the fan assembly and gasket, reverse the previous procedures.

Return to Removal & Replacement Index Page.

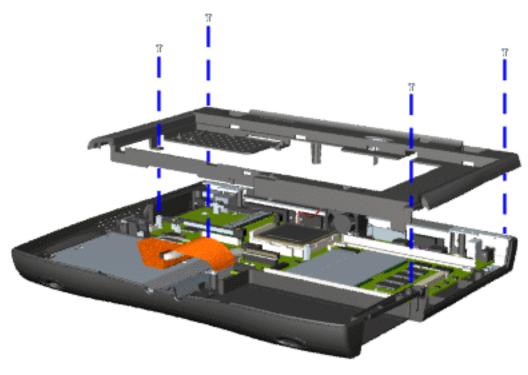
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Removing CPU Cover** 



- 8. Remove four screws located on the top of the Upper CPU cover.
- 9. Lift the Upper CPU cover off the snaps on the chassis which will disconnect the power switch from the connector on the system board.

To replace the Upper CPU cover, reverse the previous procedures.

Return to <u>Removal & Replacement Index</u> <u>Page</u>.

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

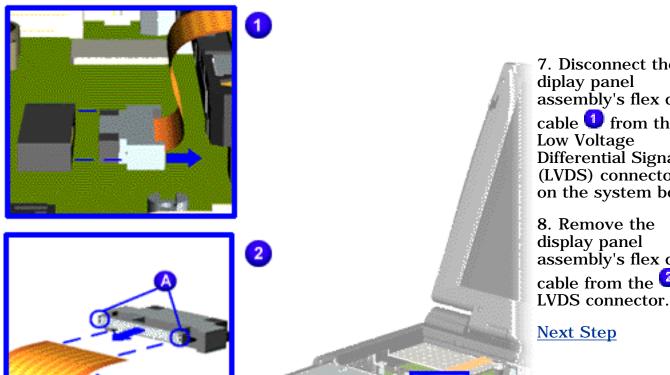
**Preface - or- Notice Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

## **Removal & Replacement**

**Display Panel Assembly** 



7. Disconnect the diplay panel assembly's flex data cable 1 from the Differential Signal (LVDS) connector the on the system board.

8. Remove the display panel assembly's flex <u>d</u>ata cable from the

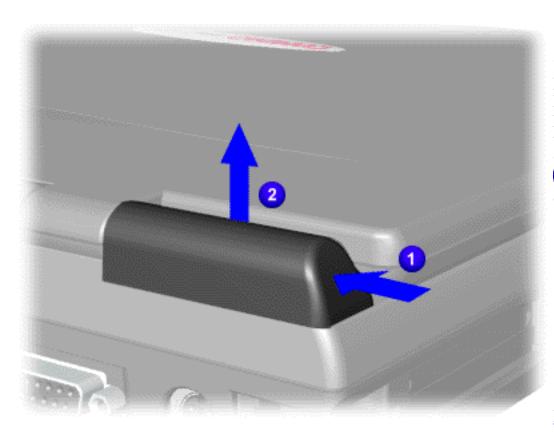
#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Display Panel Assembly** 



9. Close the display panel assembly and push back on top of the hinge covers 1 and lift up from the bottom edge of the hinge covers to remove the covers off the chassis.

**IMPORTANT:** display

remove the display panel assembly hinge covers.

Carefully

**Next Step** 

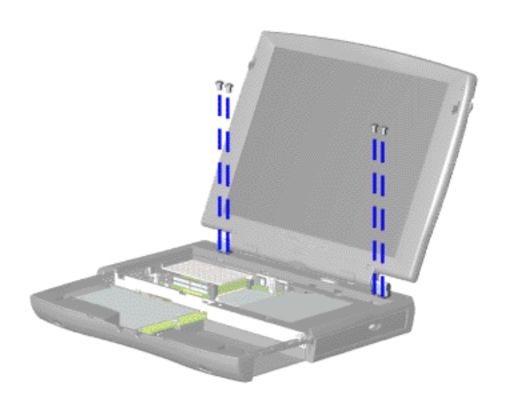
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Display Panel Assembly** 



10. Support the back of the display panel assembly and remove two screws from each of the display panel hinges.

**Next Step** 

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

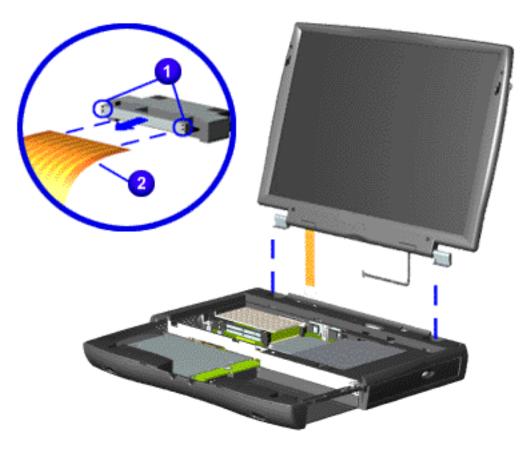
**Preface** -or- Notice **Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

## **Removal & Replacement**

**Display Panel Assembly** 



11. Remove the connector  $\mathbf{0}$  on the end of the display flex cable 2.

Compaq recommends replacing the LVDS **IMPORTANT:** interface connector on the display flex cable after removing.

**CAUTION:** The connector on the end of the flex cable must be removed before the cable can be routed through the slot on the Upper CPU cover.

12. Gently pull the flex cable attached to the display panel assembly through the slot on the Upper CPU cover and remove the display panel assembly with flex and backlight cable attached.

> When removing the display panel assembly, observe

**NOTE:** the display panel assembly flex cable routing and position.

To replace the display panel assembly, reverse the previous procedures.

Return to Removal & Replacement Index Page.

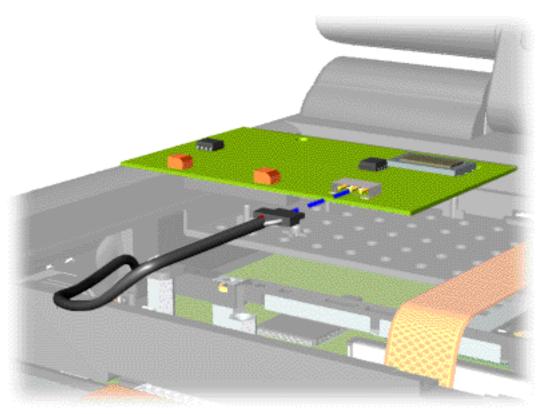
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Modem** 



6. Disconnect the modem cable from the modem.

To replace the modem, reverse the previous procedures.

Return to <u>Removal & Replacement Index</u> <u>Page</u>.

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Removal & Replacement**

**CD** or **DVD Drive** 



6. Remove two screws from the base enclosure which secure the DVD or CD drive to the chassis.

**Next Step** 

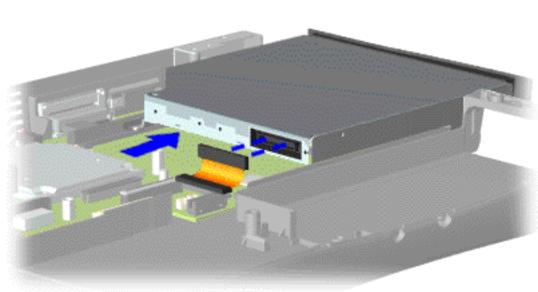
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**CD** or **DVD Drive** 



7. Disconnect the DVD or CD drive cable from the DVD or CD drive and remove the DVD or CD drive from the chassis.

To replace the DVD or CD drive, reverse the previous procedures.

Return to Removal & Replacement Index Page.

#### for Prosignia 150 Series Computer

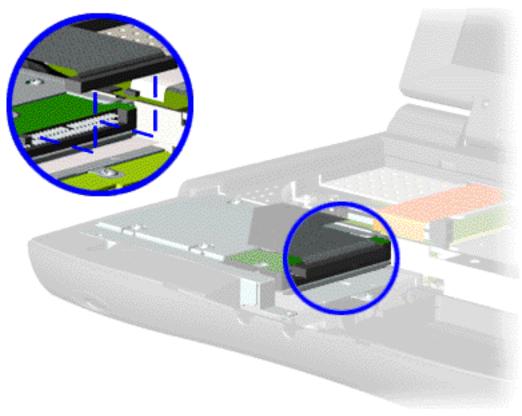
Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Removal & Replacement**

**Hard Drive** 



5. Disconnect the hard drive data cable from the hard drive and remove from the chassis.

**Next Step** 

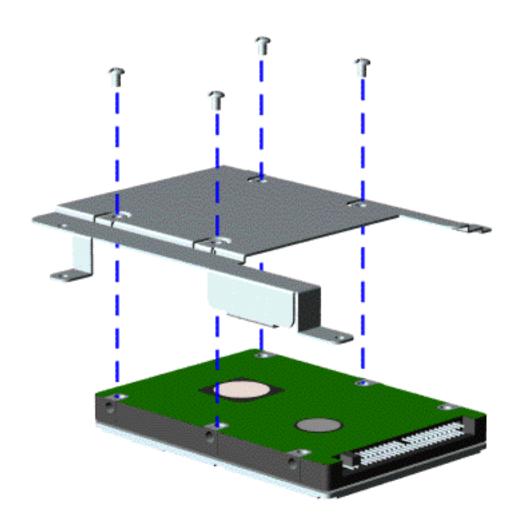
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Hard Drive** 



To remove the hard drive mounting bracket, complete the following step:

Remove the four screws from the hard drive mounting bracket and lift it off of the drive.

To replace the hard drive and hard drive mounting bracket, reverse the previous procedures.

Return to <u>Removal & Replacement Index Page</u>.

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

#### **Processor**

To replace the processor complete the following steps:

1. Insert the processor into the slot on the system board.

The notch on the upper left corner of the processor serves as an **IMPORTANT:** orientation indicator. Align the notch on the left corner of the processor with the notch on the left corner of the processor chassis slot.

When installing the processor into the chassis slot, be sure that the hole **NOTE:** pattern on the chassis slot lines up with the pins on the processor. The processor should drop into the socket without any force.

2. Insert a small blade screw driver into the top slot opening on the processor and push away from the display to lock the processor.

Return to Removal & Replacement Index Page.

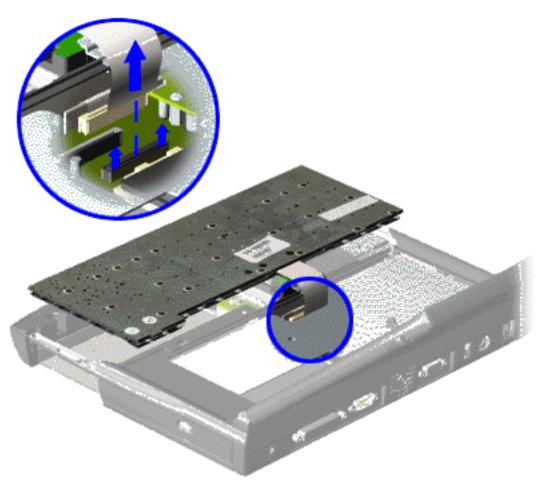
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Keyboard** 



5. Disconnect the flex cable from the ZIF connector on the system board and remove the keyboard.

To replace the keyboard, reverse the previous procedures.

Return to Removal & Replacement Index Page.

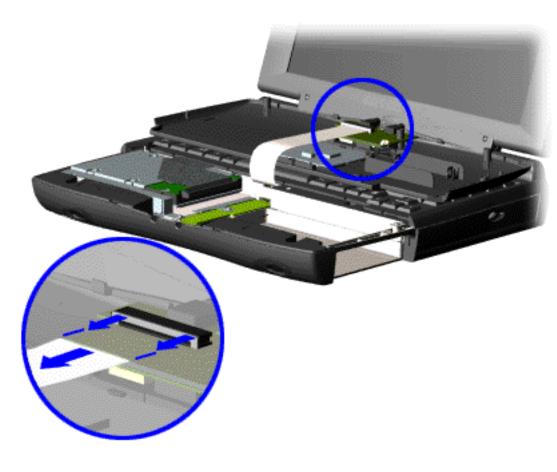
#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Touchpad Assembly** 



- 4. Turn the computer over (right side up), pull forward on the display latches to release and open the display assembly.
- 5. Lift up front end of the palmrest cover with touch pad and remove it from the groove in the chassis.
- 6. Tilt the palmrest cover with touch pad, allowing it to rest on top of the keyboard, and disconnect the flex cable from the LIF connector on the palmrest cover.

caution: When replacing the palmrest cover with touch pad, ensure that the cable is fully inserted into the LIF connector on the system board. If the metal end comes in contact with the keyboard, it could damage the computer.

To replace the palmrest cover with touch pad, reverse the previous procedures.

When replacing
the palm rest
cover, ensure
that the cable is
properly routed
through the slot
on the Upper
CPU cover.

Return to Removal & Replacement Index Page.

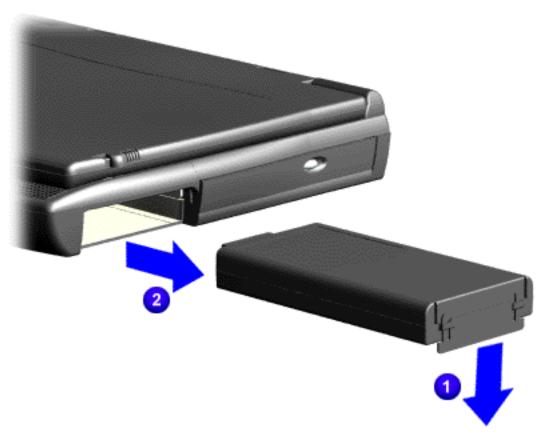
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Removal & Replacement**

**Batery Pack** 



2. Pull down on the battery pack tab

**1** and

2 pull the battery pack from the chassis.

To replace the battery pack, reverse the previous procedures.

Return to Removal & Replacement Index Page.

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

**Preface** -or- Notice **Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack** Removal & Replacement

## **Troubleshooting**

#### **Preliminary Steps**

*	
>Preliminaries	
>Clearing	
<u>CMOS</u>	
>Power-on	
Self-test	
>Compaq	
<b>Diagnostics</b>	
>Diagnostic	
Error codes	
>Test Utilities	
>Solving	
<u>Minor</u>	
<u>Problems</u>	
>Contacting	
Compaq	
*	

Before running POST, complete the following preliminary steps:

- 1. If a power-on password has been established, type the password and press the **Enter** key. If the password is not known, clear the password.
- 2. Run Computer Checkup.
- 3. Turn off the computer and its external devices.
- 4. Disconnect any external devices that you do not want to test. Do not disconnect the printer if you want to test it or use it to log error messages.

If the problem only occurs when an external device is **IMPORTANT:** connected to the computer, the problem may be related to the external device or its cable. Verify this by running POST 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 the hard drive is installed in the computer.
- 7. Ensure that the battery pack is inserted in the computer and the computer is connected to an external AC power source.

When the preliminary steps are completed, you are ready to run POST.

#### for Prosignia 150 Series Computer

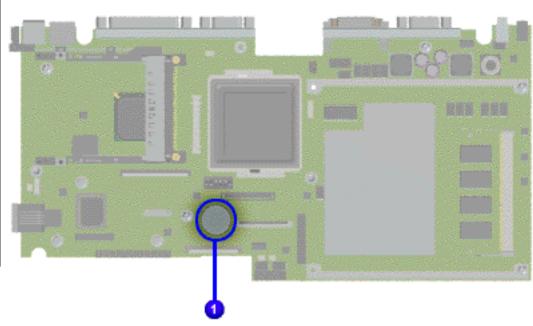
<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Troubleshooting**

**Clearing the Power-on Password** 





Clearing the power-on password requires removing all Setup attributes that are programmed in the CMOS.

The TRTC battery is located on the system board.

If the password is not known, clear it by performing the following steps:

- 1. Turn off the computer.
- 2. Disconnect the power cord.
- 3. Remove the <u>battery</u> pack.
- 4. Remove the <u>Palmrest</u> <u>Cover with</u> <u>Touch Pad</u>.
- 5. Remove the heatspreader.
- 6. Remove the <u>keyboard</u>.
- 7. Remove RTC battery for 30 seconds and replace it .
- 8. Reassemble the computer.
- 9. Turn on the computer to verify that the power-on password has been cleared. If it has not been cleared, repeat Steps 1 through 9.

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

# Troubleshooting

**Power-on Self Test (POST)** 

# \* >Preliminaries >Clearing CMOS >Power-on Self-test >Compaq Diagnostics >Diagnostic Error codes >Test Utilities >Solving Minor Problems >Contacting Compaq

### To run POST, complete the following steps:

- $1. \ \ \text{Turn off the computer, then turn on the computer.}$
- 2. If POST does not detect any errors, the computer will not beep. This indicates successful completion of POST test. POST has run successfully and boots from the hard drive (or from a bootable diskette if one is installed in the diskette drive).
- 3. If POST detects errors, the errors are indicated by screen and/or audible messages. Refer to "Power-On Self-Test (POST) Codes" in the tables for a list of POST codes and their relevant descriptions.

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.

Power-On Self-	Test Messages	
102-System Board Failure		
Probable Cause	<b>Recommended Action</b>	
DMA, timers, etc.	Replace the system board.	
162-System Op	otions Not Set	
Probable Cause	<b>Recommended Action</b>	
Configuration incorrect	Run Computer Setup.	
CMOS reflects that an invalid configuration has been set.	Run Computer 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.	
XX000YZZ RAM failure	Replace the system board.	

		board.
XX000YZZ RAM failure		Replace the system board.
YY000V77	7 201-	Memory Error
Probable Cause		mmended Action
1 Tobable Sauge		initiated Action
001	<u> </u>	
Probable Cause		ard Error mmended Action
Keyboard failure		sure the keys are not
	depre	ssed during POST.
	2. Reconnect the keyboard with the computer off.	
	3. Rep	place the keyboard.
•		ystem Unit Error
Probable Cause		mmended Action
Keyboard or system board error	1. Rep	place the keyboard.
	2. Rep	place the TouchPad or e.
	3. Rep	place the system board.
601-Diske	ette Co	ontroller Error
Probable Cause	Reco	mmended Action
Mismatch in drive type or failure in the diskette controller	1. Rui (TEST	n Computer Checkup ).
	2. Che	eck and/or replace cables.
	3. Rep	place the system board.
		Drive Error
<b>Probable Cause</b> Mismatch in drive type		mended Action
msmatch in drive type	Kun C	omputer Setup.
		d Drive 0 Failure
		mended Action
Disk 0 failed to respond	(TEST	•
TT 11. C	_	place the hard drive.
Hard drive format error	(TEST	•
	2. Rep	place the hard drive.
1782-Ha	rd Dri	ve Controller
Probable Cause	Reco	mmended Action
Hard drive controller failure		n Computer Setup. place the hard drive.
	<sub> </sub> ≈. nej	nace the hard unve.

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Troubleshooting**

**Compaq Diagnostics** 

>Preliminaries
>Clearing
CMOS
>Power-on
Self-test
>Compaq
Diagnostics
>Diagnostic
Error codes
>Test Utilities
>Solving
Minor
Problems
>Contacting
Compaq

Compaq Diagnostics is installed on the hard drive of the computer. Run the Diagnostics utilities when you want to view or test system information and if you have installed or connected devices. If you run Compaq Diagnostics from a diskette, ensure that it is version 10.11 or later.

The Diagnostics menu includes the following utilities:

Computer Checkup (TEST)

- Computer Checkup (TEST)
- View System Information (INSPECT)
- Prepare Computer for a Compaq Service Call (RemotePaq)

If you have a problem you cannot solve, run the Diagnostics utilities before you call for support. Run Computer Checkup and select to save the device list to a file and to print or to save the log of errors. Run the View System Information (INSPECT) utility and select to print or to save that information. Have the files or the printed information available when you call for support.

## Computer Checkup (TEST)

Computer Checkup (TEST) determines whether the various computer components and devices are recognized by the system and are functioning properly. You can display, print, or save the information generated by Computer Checkup.

Follow these steps to run Computer Checkup:

- 1. Plug the computer into an external power source. (A low battery condition could interrupt the program.)
- 2. Turn on the external devices that you want to test. Connect the printer if you want to print a log of error messages.
- 3. Insert the Compaq Diagnostics diskette in drive A.
- 4. Turn on or restart the computer. The computer starts from drive A, and the **Diagnostics Welcome** screen appears.
- 5. Press **Enter** to continue. The **Diagnostics** menu appears.
- 6. Select Computer Checkup from the **Diagnostics** menu. A **Test Option** menu appears.
- 7. Select **View the Device List** from the **Test Option** menu. A list of the installed Compaq devices appears.
- menu appears.

  NOTE: If the list is incorrect, ensure that any new devices are installed

8. If the list of installed devices is correct, select **OK**. The **Test Option** 

properly.

- 9. Select one of the following from the **Test Option** menu:
  - Quick Check Diagnostics. Runs a quick, general test on each device
  - with a minimal number of prompts. If errors occur, they display 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, to stop on errors, or to print or save a log of errors.
    Prompted Diagnostics. Allows maximum control over testing the devices. You can choose attended or unattended testing, decide to
- 10. Follow the instructions on the screen as the devices are tested. When testing is complete, the **Test Option** menu appears.

stop on errors, or choose to print or save a log of errors.

12. Exit the **Diagnostics** menu.

11. Exit the **Test Option** menu.

print, or save the information.

System

# The View System Information (INSPECT) utility provides information about the computer and installed or connected devices. You can display,

**View System Information (INSPECT)** 

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

if you want to print the information.

1. Turn on the external devices that you want to test. Connect the printer

- 3. Turn on or restart the computer. The computer starts from drive A, and the **Diagnostics Welcome** screen appears.
- 4. Press **Enter** to continue. The Diagnostics menu appears.

2. Insert the Compaq Diagnostics diskette in drive A.

5. Select **View System Information (INSPECT)** from the **Diagnostics** menu.

**Memory** 

ROM Audio Keyboard Operating system

6. Select the item you want to view from the following list:

System ports System files
System storage Windows 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.

## for Prosignia 150 Series Computer **Preface** -or- Notice

**Index Page Product Description** 

>Solving

>Contacting **Compaq** 

<u>Minor</u> **Problems**  **Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

# **Diagnostic Error Codes**

**Troubleshooting** 

Diagnostic error codes occur if the system recognizes a problem while

running the Compaq Diagnostic program. These error codes help identify >Preliminaries possibly defective subassemblies. >Clearing **CMOS** The following tables list error codes, a description of the error condition, >Power-on and the action required to resolve the error condition. Self-test Retest the system after completing each step. If the >Compaq **IMPORTANT:** problem has been resolved, do not proceed with the **Diagnostics** remaining steps. >Diagnostic **Error codes** >Test Utilities

For the removal and replacement of a particular subassembly, see Removal and Replacement Procedures. Select error codes by number or type:

101 through 114 **Processor Test** 200 through 215

**Memory Test** 

401 through 403 **Keyboard Test** 600 through 699 **Parallel Printer Test** 

300 through 304

Diskette Drive Test 1101 **Serial Test** 1701 through 1736 501 through 516 **Hard Drive Test** Video Test 2402 through 2456 2458 through 2480 **Audio Test** 3206 **Touch Pad Pointing Device Test** 8601 through 8602 **CD Test** 

	8601 through 8602 3301 through 6623	<u>CD Test</u>
Error	Processor Test 1	
Code 101-xx	Description CPU test failed	Recommended Action  Replace the processor and retest.
102-xx	Coprocessor or Weitek Error	1. Run the Configuration and Diagnostics Utilities.
		2. Replace the processor board and retest.
103-xx	DMA page registers test failed	Replace the system board and retest.
104-xx	Interrupt controller master test failed	
105-xx 106-xx	Port 61 error Keyboard controller self-test	
107-xx	failed  CMOS RAM test failed	
108-xx 109-xx	CMOS interrupt test failed CMOS clock test failed	
110-xx	Programmable timer load data test failed	
113-xx	Protected mode test failed	
114-01	Speaker test failed	<ol> <li>Check system configuration.</li> <li>Verify cable connections to speaker.</li> </ol>
		3. Replace the system board and retest.
200-xx	Memory Test Endemory machine ID test	rror Codes  1. Flash the system ROM and
202-xx	failed  Memory system ROM	retest.  2. Replace the system board and
203-xx	checksum failed Write/Read test failed	retest.  1. Remove the memory module
204-xx	Address test failed	and retest.  2. Install a new memory module
211-xx 214-xx	Random pattern test failed Noise test failed	and retest.
215-xx	Random address test failed <b>Keyboard Test I</b>	Error Codes
300-xx	Failed ID Test	1. Check the keyboard connection. If disconnected, turn
301-xx	Failed Selftest/Interface Test	off the computer and connect 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
	Parallel Printer Tes	retest. st Error Codes
401-xx	Printer failed or not connected	<ol> <li>Connect the printer.</li> <li>Check power to the printer.</li> </ol>
402-xx	Failed Port Test	3. Install the loop-back connector and retest. 4. Check port and IRQ
403-xx	Printer pattern test failed	configuration. 5. Replace the system board and
	Diskette Dri	retest.  ve Test
600-xx	Diskette ID drive types test failed	1. Replace the diskette media and retest.
601-xx 602-xx	Diskette format failed Diskette read test failed	2. Check and/or replace the diskette power and signal cables and retest.
603-xx	Diskette write, read, compare test failed	3. Replace the diskette drive and retest.
604-xx	Diskette random read test failed	4. Replace the system board and retest.
605-xx	Diskette ID media failed	
606-xx 609-xx	Diskette speed test failed 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	<ol> <li>Replace media.</li> <li>Run the Configuration and Diagnostics Utilities.</li> </ol>
	Serial Test Err	ror Codes
1101-xx	Serial port test failed	<ol> <li>Check port configuration</li> <li>Replace the system board and retest.</li> </ol>
	Hard Drive Test	Error Codes
	Hard drive format test failed Hard drive read test failed	1. Run the Configuration and Diagnostics Utilities and verify drive type.
1703-xx	Hard drive write/read/compare test	2. Verify that all secondary drives have secondary drive
1704-xx	failed Hard drive random seek test	capability. 3. Replace the hard drive and retest.
1705-xx	failed Hard drive controller test	4. Replace the system board and retest.
	failed Hard drive ready test failed	
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	
	Hard drive ECC* test failed Hard drive power mode test	
1719-xx	failed  Network preparation test	
1724-xx 1736-xx	failed  Drive monitoring test failed	
	Error Correction Code	the ten
	Go back to t	<del>ων ωμ</del>
FO 1	Video Test Err	
501-xx 502-xx	Video controller test failed  Video memory test failed	The following apply to error codes 501-xx through 516-xx:
503-xx	Video attribute test failed Video character set test	1. Disconnect external monitor and test with internal LCD
504-xx	failed Video $80 \times 25 \text{ mode } 9 \times 14$	display. 2. Replace the display assembly and retest.
505-xx	character cell test failed	2 Popless the greater board and

character cell test failed Video  $320 \times 200$  mode color set 0 test failed Video  $320 \times 200$  mode color

failed 2416-xx Video noise pattern test failed 2418-xx ECG/VGC memory test failed 1. Run the Configuration and 2419-xx ECG/VGC ROM checksum test failed Diagnostics Utilities.

ECG/VGC 640 × 200

color set test failed

color set test failed

|2422-xx| | ECG/VGC 640 × 350 16

graphics mode test failed

ECG/VGC 640 × 350 64

Video  $80 \times 25 \text{ mode } 8 \times 8$ 

Video 320 × 200 mode color

Video  $320 \times 200$  mode color

Video  $640 \times 200$  mode test

Video screen memory page

Video gray scale test failed

Video white screen test

Video noise pattern test

Video character set test

character cell test failed

Video  $80 \times 25 \text{ mode } 9 \times 14$ 

Video  $80 \times 25 \text{ mode } 8 \times 8$ 

Video  $640 \times 200$  mode test

Video screen memory page

Video gray scale test failed

Video white screen test

character cell test failed

character cell test failed  $\overline{\text{Video } 40 \times 25 \text{ mode test}}$ 

set 0 test failed

set 1 test failed

2402-xx | Video memory test failed

2403-xx Video attribute test failed

set 1 test failed

506-xx

507-xx

508-xx

509-xx

510-xx

511-xx

512-xx

514-xx

516-xx

2404 - xx

2405-xx

2406-xx

2408-xx

2409-xx

2410-xx

2411-xx

2412-xx

2414-xx

2421-xx

2423-xx

failed

failed

failed

failed

failed

failed

test failed

test failed

retest.

3. Replace the system board and

ECG/VGC monochrome text 2424-xx mode test failed ECG/VGC monochrome 2425-xx graphics mode test failed  $640 \times 480$  graphics test 2431-xx failure  $320 \times 200$  graphics (256) 2432-xx color mode) test failure 2448-xx Advanced VGA Controller

test failed 132-column Advanced VGA 2451-xx test failed Advanced VGA 256 Color 2456-xx test failed 2458-xx Advanced VGA BitBLT test 2468-xx Advanced VGA DAC test

2477-xx Advanced VGA data path

2478-xx Advanced VGA BitBLT test

2480-xx Advanced VGA LineDraw test

3206-xx Audio System Internal Error

8601-xx Mouse test failed

8602-xx Interface test failed

3301-xx CD drive read test failed 1. Replace the CD and retest. 2. Verify that the speakers are connected. 3. Verify that drivers are loaded 3305-xx CD drive seek test failed 6600-xx ID test failed 6605-xx Read test failed

error codes 2402-xx through 2456-xx: 1. Run the Configuration and Diagnostics Utilities. 2. Replace the display assembly and retest. 3. Replace the system board and retest.

2. Disconnect external monitor and test with internal LCD

3. Replace the display assembly

4. Replace the system board and

The following step applies to error codes 2458-xx through

Replace the system board and

Replace the system board and

1. Replace the TouchPad and

2. Replace the system board and

2480-xx:

retest.

retest.

retest.

retest.

**Audio Test Error Codes** 

**TouchPad/Pointing Device Interface Test Error Codes** 

**CD Drive Test Error Codes** 

display.

retest.

and retest.

The following steps apply to

and properly installed. 4. Replace the CD drive and 5. Replace the system board and retest. 6608-xx Controller test failed 6623-xx Random read test failed

Go back to the top

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog <u>Specifications</u> Troubleshooting Battery Pack
Removal & Replacement

## **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 below listed items contain specific troubleshooting information regarding:

Audio

Battery/Battery gauge

CD drive

Diskette/Diskette drive

Display

Memory

PC Card

Power

Power

Printer

Touch Pad

<u>Hard drive</u> <u>Keyboard/Numeric keypad</u>

**Hardware Installation** 

Since symptoms can appear to be similar, carefully match the symptoms of the computer 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.

#### **Before Replacing Parts**

- Verify that cables are connected properly to the suspected defective parts.
- Run Computer 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.

# for Prosignia 150 Series Computer

**Preface** -or- Notice **Index Page Product Description Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

# **Troubleshooting 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(s)
Computer 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.

#### **Solving Battery Pack and Battery Gauge Problems** Problem **Probable Cause**

Problems" section in this chapter may also be applicable.

**Solving Battery Pack and Battery Gauge Problems** 

Solution(s) Computer won't turn on when battery Connect the computer to an external Battery pack is discharged.

Some common causes and solutions for battery pack problems are listed in the following table. The "Solving Power

pack is inserted and power cord is unplugged.		power source and charge the battery pack.
		Replace the battery pack with a fully charged battery pack.
		Check the battery connectors on the system board to verify they are evenly spaced and that they are not bent or broken.
Computer is beeping and battery LED icon is blinking.	Battery charge is low.	Immediately save any open file(s). Then do any one of the following:
		<ul> <li>Connect the computer to an external power source to charge the battery pack.</li> </ul>
		<ul> <li>Turn off the computer or initiate         Hibernation until you can find         another power source or charge         the battery pack.</li> </ul>
Computer battery LED icon (front on the unit) blinks to indicate low battery condition, but computer does not beep		Adjust the volume.
Battery LED 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 end of its life.	Replace battery pack.
You have to set the date and time ever time you turn on the computer.	RTC battery is dead.	Replace the RTC battery.
Problem	Probable Cause	Solution(s)
Battery charge does not last as long as expected.	Battery is being exposed to high temperatures or extremely cold temperatures.	Keep the battery pack within the recommended operating temperature range 50° F to 104° F (10° C to 40° C) or recommended storage range -4° F to 86° F (-20° C to 30° C). Recharge the battery pack.

Battery has partially self-discharged.

An external device or PC Card is draining

Normal warming has occurred due to

Power management is disabled.

the battery.

charging.

Recharge the battery. Discharge the battery completely and then recharge it.

Turn off or disconnect external devices

Set a power management level in

Computer Setup.

Solution(s)

statement.

prompt, enter

FORMAT A:

write-protected.

Use another diskette.

Disable the diskette's write-protect feature or use a diskette that is not

Check the drive letter in the path

Run Computer Checkup from the Compaq Diagnostics diskette.

Format the diskette. At the system

Run Computer Checkup from the

Compaq Diagnostics diskette.

Tilt display or move computer.

and allow it to cool off.

Restart the computer.

CRT.

Solution(s)

Press any key or touch the Touch Pad.

If computer is in direct sunlight, move it

Press any key or touch the Touch Pad.

Use **Fn** + **F2** to switch between **LCD** or

Use the type of diskette required by the

when not using them.

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 using them.
	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 computer when it is connected to external power.
		If the computer is disconnected from external power for more than two weeks, remove battery packs from the computer 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 ranges.  Operating: 50° F to 104° F (10° C to 40° C) Storage: -4° F to 86° F (-20° C to 30° C)
		Recharge the battery pack.
Solving CD Drive Problems  Some common causes and solutions for	r CD drive problems are listed in the follow <b>Solving CD Drive Problems</b>	ing table:
Problem	Probable Cause	Solution(s)
CD drive cannot read a compact disc.	Compact disc is upside down or is improperly inserted in the CD drive.	Open the CD 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.
Solvi	ng Diskette and Diskette Drive P	roblems

Diskette drive cannot read a diskette.

Diskette drive cannot write to a diskette.

Problem

Screen is blank.

flashing.

information.

**Problem** 

external monitor.

Display is blank and the Suspend icon is

Internal display is blank and the screen

Internal display flashes or has garbled

characters when computer is connected to

on an external monitor displays

Battery pack is warm to the touch

after charging.

drive. Diskette has a bad sector. Copy files to hard drive or another diskette. Reformat bad floppy.

Drive error has occurred.

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

Diskette is write-protected.

**Probable Cause** 

drive.

diskette.

**Solving Diskette and Diskette Drive Problems** 

Computer is writing to the wrong

Not enough space is left on the

The wrong type of diskette is being

Drive error has occurred.

Diskette is not formatted.

	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.
Solving Display Problems		
This section lists some common causes and	d solutions for computer display and ext	ernal monitor problems.
You can perform a monitor self-test on an the computer. To do so, complete the follo		itor by disconnecting the monitor from
1. Turn off the monitor.		
2. Turn off the computer.		
3. Disconnect the monitor signal cab	le from the computer.	
4. Turn on the monitor and allow it to	o warm up for one minute.	
The display should be white. A narrow blac these displays indicates that the monitor is		d right sides of the display. Either of
	<b>Solving Display Problems</b>	
Problem	Probable Cause	Solution(s)
Screen is dim.	Control for brightness or contrast (if applicable) is not set properly.	Adjust the Brightness of the display by using <b>Fn</b> + <b>F7</b> ( <sup>-</sup> ) or <b>Fn</b> + <b>F8</b> (- ).
		Adjust the Contrast of the display by using <b>Fn</b> + <b>F5</b> ( ) or <b>Fn</b> + <b>F6</b> ( ).

Computer screen is in direct light.

Management due to lack of user

Display has overheated.

external monitor.

System is in Suspend mode.

activity.

Screen save was initiated by Power

Display function was switched to the

**Probable Cause** 

supports up to  $800 \times 600$ .

Using  $1024 \times 768$  or higher

and have toggled back to internal display, which

resolution on external monitor

The light tubes on the edge of the display panel do not light up at all and 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 at all and 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 <b>Fn</b> + <b>F7</b> ( <sup>-</sup> ) or <b>Fn</b> + <b>F8</b> (- ).***	Improper display cable connections.	<ol> <li>Reseat the display cable to the system board.</li> <li>Replace the display assembly.</li> </ol>
	Defective inverter board.	Replace the display assembly.
	Defective display cable.	Replace the display assembly.
	Defective system board.	Replace the system board.
Contrast cannot be adjusted with <b>Fn</b> + <b>F5</b> ( <sup>-</sup> ) or <b>Fn</b> + <b>F6</b> (- ).	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.

up. If an external monitor is not available, verify that POST completes by opening and closing the display, listening for the

Problem	Probable Cause	Solution(s)
This display panel has a continuous pattern across it (e.g., a "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.
Ghost bars extending from graphics on the display.	Common characteristic of STN displays.	<ol> <li>Change the background colors.</li> <li>Adjust the Contrast of the display by using <b>Fn</b> + <b>F5</b> (<sup>-</sup> ) or <b>Fn</b> + <b>F6</b> (- ).</li> </ol>
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.
To perform a "self-test" on an external NOTE: should be white. A narrow black border is displays indicates that the monitor is wo	may also appear on the left and ri rking properly.	

**Solving Hard Drive Problems Problem Probable Cause** Solution(s) Reading hard drive takes an unusually System entered Hibernation due to Give the system time to restore the previously saved data to its exact state long time after restarting the computer. low battery condition and is now

Hard drive has bad sectors or has

Hard drive is not seated properly.

**Solving Hardware Installation Problems** 

Cable(s) of new external device are

Device is not seated properly.

loose or power cables are unplugged.

**Solving Keyboard/Numeric Keypad Problems** 

Num Lock function is not enabled.

Power switch of new external device is

before Hibernation.

Solutions(s)

device.

securely connected.

the computer system.

Solution(s)

Run Computer Checkup.

Turn off and unplug the computer,

and then reinstall the hard drive.

remove the battery pack, and remove

Ensure that all cables are properly and

computer to integrate the device with

Turn off the computer and reinsert the

Press the **Shift+NumLk** keys to

Check the application documentation

for memory requirements.

Install additional memory.

Remove from memory any TSR

applications that you do not need.

Turn off the computer, turn on the external device, then turn on the

exiting from it.

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

**Probable Cause** 

not turned on.

failed.

Embedded numeric keypad on computer

A new device is not recognized as part of

**Solving Hardware Installation Problems** 

**Solving Keyboard/Numeric Keypad Problems** 

Hard drive error occurs.

Hard drive does not work.

Problem

Problem

the computer system.

enable the Num Lock function and keyboard is disabled. embedded numeric keypad. The Num Lock icon on the status panel turns on.

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

**Probable Cause** 

Embedded numeric keypad is disabled and Num Lock function is on.	External numeric keypad is connected to the computer.	Disconnect the external numeric keypad from the computer.
Solving Memory Problems		
Some common causes and solutions for mem		table.
Some common causes and solutions for mem	Solving Memory Problems	table.
Some common causes and solutions for mem  Problem		Solution(s)

Too many TSR (terminate-and

stay-resident) applications are

#### "Out of Memory" message is displayed on the System ran out of memory for the screen or insufficient memory error occurs application. during operation.

Solving Minor Problems (con	<u>tinued)</u>

running.

## for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> Specifications

Troubleshooting

Battery Pack
Removal & Replacement

## **Troubleshooting**

Solving PC Card Problems

## Listed in the following tables are some common causes and solutions for PC Card problems:

2	Solving PC Card Problems		
Problem	Probable Cause	Solution(s)	
When turned on, the computer does not beep when a PC Card is inserted.	Card is not inserted properly.	Ensure the card is inserted in the correct orientation.	
when a FC card is inserted.	PC Card beeps are disabled.	Double-click the PC Card icon in the Control Panel, click the <b>Global Settings</b> tab, the enable PC Card sound effects.	
	Speaker is turned off or volume is turned down.	Press <b>volume buttons</b> to turn the speaker on, then increase the volume.	
	PC Card drivers are not installed.	Double click the <b>Add New Hardware</b> icon in the Control Panel 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 your Compaq 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 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 <u>Specifications</u> to verify COM port.	
	The card conflicts with a serial device.	See <u>Specifications</u> to verify address.	

			address.
		The card is not supported	. Use supported cards only.
Modem network work.	k PC Card does not	Network driver is not installed or is not set up properly.	Install driver.
		Telephone cord is not properly connected.	Verify telephone connection.
Memory or stor not work.	age card does	SRAM and flash memory cards require the memory card driver to be loaded (turned on).	Install driver.
		Flash memory cards require the Microsoft FlashFile System to be loaded.	
		Hard drives on flash mass storage cards require the PC Card ATA driver to be loaded.	
		You are trying to access the hard drive card using the wrong drive letter.	Double-click <b>My Computer</b> to verify the drive letter assigned to the card.
		The card is not supported.	Contact your Compaq authorized service provider for a list of PC Cards tested

## Also see "Solving Battery and Battery Gauge Problems" in this section.

**Solving Power Problems** 

Solving Power Problems

Probable Cause Solution(s)

successfully in Compaq PC Card platforms.

Solution(s)

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

# If the self-test fails, it is a printer-specific problem. Also refer to the printing section of your application documentation.

**Solving Printer Problems** 

If you experience problems printing, run a printer self-test. Refer to the documentation provided with your printer for instructions.

Solving Printer Problems

**Probable Cause** 

Problem

Troblem	Trobuble cause	
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 off line.	Turn the printer on and set it to on line.
	The device drivers for your application are not installed.	Refer to the printer documentation to install the correct printer driver.
	Printer that is set up for a network is not connected to the 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.
	Correct printer drivers are not installed.	Refer to the printer documentation to install the correct printer driver.
Printer prints garbled information.	Cable is not connected properly.	Ensure that the printer signal cable is properly connected to the computer.
	Cable is defective.	Replace the printer cable and retest.
	g Touch Pad/Pointing Device ons for Touch Pad/pointing device pro	
Sol	ving Touch Pad/Pointing Device P	roblems
	<u> </u>	

Touch Pad or mouse does not work.

Incorrect or no device driver and add to the AUTOEXEC.BAT file or

Cause

Solution(s)

		CONFIG.SYS file.
	The device driver is not installed in Windows.	Install the Touch Pad/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.
Touch Pad 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 device driver each time computer is turned on or restarted.
	Cable not properly seated in Touch Pad board.	Reseat cable.
	Defective Touch Pad board.	Replace Touch Pad 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 Touch Pad.	The Touch Pad needs to be cleaned.	Clean the Touch Pad with a cloth dampened with alcohol or an ammonia-based glass cleaner. Wipe up liquid with a dry cloth.

Revised: September 16, 1999

Problem

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Specifications**

**System Unit** 

*	Com	puter Specifications	
ystem t		US	Metric
<u>errupts</u>			
ystem A	Dimensions		
<u>stem</u>			
stem	Height	1.97 in	5.0 cm
nory	Depth Width	12.32 in 10.12 in	31.3 cm 25.7 cm
<u>splay</u>	Width	10.12 111	25.7 Cm
emory ansion	Weight	J	l
ttery	14.1" TFT	7.99 lbs	3.63 kg
<u>k</u>	12.1" TFT	7.35 lbs	3.34 kg
skette e	Stand-alone Power Requir	rements	-
rd 'es	Nominal Operating Voltage (Li Ion)	14.8	VDC
es	Maximum Operating Power	56.5 W	
odem	Peak Operating Power	58.5	W
Adapter	AC Power Requirements	00.0	
<u>gnments</u>		100-2	40 V
*	Operating Voltage		
	Operating Current	0.8/0.4	
	Operating Frequency	47-63	3 Hz
	Maximum Transient	Meets IEC 801-4 and IEC801-5 1kV for 50 ns	
	Temperature		
	Operating	41° to 95 °F	5° to 35 °C
	Non-operating	-4° to 140 °F	-20° to 60 °C
	Relative Humidity (Non-co	ondensing)	
	Operating	10 to	90%
	Non-operating (tw = 38.7°C max)	5 to 9	95%
	Maximum Altitude (un-pre	esurized)	
	Operating	10,000 ft	3.15 km
	Non-operating	30,000 ft	10.14 km
	Shock		
	Operating	10 G, 11 ms, half sine	
	Non operating	240 G, 2 ms	s, half sine
	Vibration		
	Operating	0.55 G, 0.25 Oct	
	Non-operating	1.5 G, 0.5 Oct /	Min sween rate

NOTE: Applicable product safety standards specify thermal limits for plastic surfaces. Compaq Prosignia Series Portable Computers operate well within this range of temperatures.

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Specifications**

## **System Interrupts**

*
>System Unit
>System Interrupts
>System DMA
>System I/O
>System Memory
>Display
>Memory Expansion
>Battery Pack
> <u>Diskette</u> <u>Drive</u>
>Hard Drives
>CD/DVD Drives
>Modem
>AC Adapter
> <u>Pin</u> <u>Assignments</u>
*

Hardware IRQ	System Function
IRQ 0	System timer
IRQ1	Standard 101/102-Key or Microsoft Natural Keyboard
IRQ2	Programmable interrupt controller
IRQ3	(free)
IRQ4	Communications Port (COM1)
IRQ5	ALi PCI to USB Open Host Controller
IRQ5	ESS SOLO-1 PCI AudioDrive
IRQ5	IRQ Holder for PCI Steering
IRQ5	IRQ Holder for PCI Steering
IRQ6	Standard Floppy Disk Controller
IRQ7	Printer Port (LPT1)
IRQ8	System CMOS/real time clock
IRQ9	RAGE LT PRO AGP 2X (English)
IRQ9	IRQ Holder for PCI Steering
IRQ10	Lucent 56K V.90 PCI DF Modem
IRQ10	Generic CardBus Controller
IRQ10	IRQ Holder for PCI Steering
IRQ11	(free)
IRQ12	Synaptics PS/2 TouchPad
IRQ13	Numeric data processor
IRQ14	Primary IDE controller (dual fifo)
IRQ14	ALi M5229 PCI Bus Master IDE Controller
IRQ15	Secondary IDE controller (dual fifo)
IRQ15	ALi M5229 PCI Bus Master IDE Controller

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Specifications**

#### **System DMA**

*	Hardware DMA	System Function
>System Unit	0	(free)
>System Interrupts	1	ESS SOLO-1 DOS Emulation
>System DMA >System I/O	2	Standard Floppy Disk Controller
>System	3	(free)
Memory  > Display	4	Direct memory access controller
>Memory	5	(free)
Expansion  > Battery Pack	6	(free)
>Diskette	7	(free)
<u>Drive</u>	<u> </u>	
>Hard Drives		
>CD/DVD Drives		
>Modem		
>AC Adapter		
>Pin		

Revised: September 16, 1999

**Assignments** 

MAINTENANCE & SERVICE GUIDE for Prosignia 150 Series Computer **Preface** -or- Notice **Specifications Index Page Battery Pack Illustrated Parts Catalog Product Description Troubleshooting** Removal & Replacement **Specifications** System I/O Address I/O Address (xxxxx-xxxxx) - System Function (Shipping Configuration) >System Unit <u>>System</u> x0000 - x000F Direct memory access controller <u>Interrupts</u> x0020 - x0021 Programmable interrupt controller System DMA x0040 - x0043 System timer x0060 - x0060 Standard 101/102-Key or Microsoft Natural >System I/O Kevboard >System x0061 - x0061 System speaker **Memory** x0064 - x0064 Standard 101/102-Key or Microsoft Natural >Display Kevboard >Memory x0070 - x0071 System CMOS/real time clock **Expansion** x0080 - x0080 Motherboard resources >Battery Pack x0081 - x008F Direct memory access controller x0092 - x0092 Motherboard resources >Diskette x00A0 - x00A1 Programmable interrupt controller **Drive** x00B1 - x00B3 Motherboard resources >Hard Drives x00C0 - x00DF Direct memory access controller >CD/DVD x00EA - x00EB Motherboard resources **Drives** x00F0 - x00FF Numeric data processor >Modem x0100 - x010F Motherboard resources >AC Adapter x0170 - x0177 ALi M5229 PCI Bus Master IDE Controller x0170 - x0177 Secondary IDE controller (dual fifo) >Pin x01F0 - x01F7 ALi M5229 PCI Bus Master IDE Controller <u>Assignments</u> x01F0 - x01F7 Primary IDE controller (dual fifo) x0200 - x0203 Gameport Joystick x0220 - x022F ESS SOLO-1 DOS Emulation x0330 - x0331 ESS SOLO-1 DOS Emulation x0376 - x0376 ALi M5229 PCI Bus Master IDE Controller x0376 - x0376 Secondary IDE controller (dual fifo) x0378 - x037F Printer Port (LPT1) x0388 - x038B ESS SOLO-1 DOS Emulation x03B0 - x03BB RAGE LT PRO AGP 2X (English) x03C0 - x03DF RAGE LT PRO AGP 2X (English) x03F0 - x03F5 Standard Floppy Disk Controller x03F6 - x03F6 ALi M5229 PCI Bus Master IDE Controller x03F6 - x03F6 Primary IDE controller (dual fifo) x03F7 - x03F7 Standard Floppy Disk Controller x03F8 - x03FF Communications Port (COM1) x040B - x040B Motherboard resources x0480 - x048F Motherboard resources x04D0 - x04D1 Motherboard resources x04D6 - x04D6 Motherboard resources x0500 - x050F Alias of Motherboard resources x0570 - x0577 Alias of ALi M5229 PCI Bus Master IDE Controller x0570 - x0577 Alias of Secondary IDE controller (dual fifo) x05F0 - x05F7 Alias of ALi M5229 PCI Bus Master IDE Controller x05F0 - x05F7 Alias of Primary IDE controller (dual fifo) x0776 - x0776 Alias of ALi M5229 PCI Bus Master IDE Controller x0776 - x0776 Alias of Secondary IDE controller (dual fifo) KU/BU - XU/BB Alias of RAGE LT PRO AGP 2X (English) x07C0 - x07DF Alias of RAGE LT PRO AGP 2X (English) x07F6 - x07F6 Alias of ALi M5229 PCI Bus Master IDE Controller x07F6 - x07F6 Alias of Primary IDE controller (dual fifo) x0900 - x090F Alias of Motherboard resources x0970 - x0977 Alias of ALi M5229 PCI Bus Master IDE Controller x0970 - x0977 Alias of Secondary IDE controller (dual fifo) x09F0 - x09F7 Alias of ALi M5229 PCI Bus Master IDE Controller x09F0 - x09F7 Alias of Primary IDE controller (dual fifo) x0B76 - x0B76 Alias of ALi M5229 PCI Bus Master IDE Controller x0B76 - x0B76 Alias of Secondary IDE controller (dual fifo) x0BB0 - x0BBB Alias of RAGE LT PRO AGP 2X (English) x0BC0 - x0BDF Alias of RAGE LT PRO AGP 2X (English) x0BF6 - x0BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x0BF6 - x0BF6 Alias of Primary IDE controller (dual fifo) x0CF8 - x0CFF PCI bus x0D00 - x0D0F Alias of Motherboard resources x0D70 - x0D77 Alias of ALi M5229 PCI Bus Master IDE Controller x0D70 - x0D77 Alias of Secondary IDE controller (dual fifo) x0DF0 - x0DF7 Alias of ALi M5229 PCI Bus Master IDE x0DF0 - x0DF7 Alias of Primary IDE controller (dual fifo) x0F76 - x0F76 Alias of ALi M5229 PCI Bus Master IDE x0F76 - x0F76 Alias of Secondary IDE controller (dual fifo) x0FB0 - x0FBB Alias of RAGE LT PRO AGP 2X (English) x0FC0 - x0FDF Alias of RAGE LT PRO AGP 2X (English) x0FF6 - x0FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x0FF6 - x0FF6 Alias of Primary IDE controller (dual fifo) x1000 - x103F Motherboard resources x1040 - x105F Motherboard resources x1100 - x110F Alias of Motherboard resources x1170 - x1177 Alias of ALi M5229 PCI Bus Master IDE x1170 - x1177 Alias of Secondary IDE controller (dual fifo) x11F0 - x11F7 Alias of ALi M5229 PCI Bus Master IDE Controller x11F0 - x11F7 Alias of Primary IDE controller (dual fifo) x1376 - x1376 Alias of ALi M5229 PCI Bus Master IDE Controller x1376 - x1376 Alias of Secondary IDE controller (dual fifo) x13B0 - x13BB Alias of RAGE LT PRO AGP 2X (English) x13C0 - x13DF Alias of RAGE LT PRO AGP 2X (English) x13F6 - x13F6 Alias of ALi M5229 PCI Bus Master IDE Controller x13F6 - x13F6 Alias of Primary IDE controller (dual fifo) x1500 - x150F Alias of Motherboard resources x1570 - x1577 Alias of ALi M5229 PCI Bus Master IDE Controller x1570 - x1577 Alias of Secondary IDE controller (dual fifo) x15F0 - x15F7 Alias of ALi M5229 PCI Bus Master IDE Controller x15F0 - x15F7 Alias of Primary IDE controller (dual fifo) x1776 - x1776 Alias of ALi M5229 PCI Bus Master IDE Controller x1776 - x1776 Alias of Secondary IDE controller (dual fifo) x17B0 - x17BB Alias of RAGE LT PRO AGP 2X (English) x17C0 - x17DF Alias of RAGE LT PRO AGP 2X (English) x17F6 - x17F6 Alias of ALi M5229 PCI Bus Master IDE Controller x17F6 - x17F6 Alias of Primary IDE controller (dual fifo) x1900 - x190F Alias of Motherboard resources x1970 - x1977 Alias of ALi M5229 PCI Bus Master IDE Controller x1970 - x1977 Alias of Secondary IDE controller (dual fifo) x19F0 - x19F7 Alias of ALi M5229 PCI Bus Master IDE Controller x19F0 - x19F7 Alias of Primary IDE controller (dual fifo) x1B76 - x1B76 Alias of ALi M5229 PCI Bus Master IDE x1B76 - x1B76 Alias of Secondary IDE controller (dual fifo) x1BBO - x1BBB Alias of RAGE LT PRO AGP 2X (English) x1BC0 - x1BDF Alias of RAGE LT PRO AGP 2X (English) x1BF6 - x1BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x1BF6 - x1BF6 Alias of Primary IDE controller (dual fifo) x1D00 - x1D0F Alias of Motherboard resources x1D70 - x1D77 Alias of ALi M5229 PCI Bus Master IDE Controller x1D70 - x1D77 Alias of Secondary IDE controller (dual fifo) x1DF0 - x1DF7 Alias of ALi M5229 PCI Bus Master IDE Controlle x1DF0 - x1DF7 Alias of Primary IDE controller (dual fifo) x1F76 - x1F76 Alias of ALi M5229 PCI Bus Master IDE |Controller x1F76 - x1F76 Alias of Secondary IDE controller (dual fifo) x1FB0 - x1FBB Alias of RAGE LT PRO AGP 2X (English) x1FC0 - x1FDF Alias of RAGE LT PRO AGP 2X (English) x1FF6 - x1FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x1FF6 - x1FF6 Alias of Primary IDE controller (dual fifo) x2100 - x210F Alias of Motherboard resources x2170 - x2177 Alias of ALi M5229 PCI Bus Master IDE Controller x2170 - x2177 Alias of Secondary IDE controller (dual fifo) x21F0 - x21F7 Alias of ALi M5229 PCI Bus Master IDE Controller x21F0 - x21F7 Alias of Primary IDE controller (dual fifo) x2376 - x2376 Alias of ALi M5229 PCI Bus Master IDE Controller x2376 - x2376 Alias of Secondary IDE controller (dual fifo) x23B0 - x23BB Alias of RAGE LT PRO AGP 2X (English) x23C0 - x23DF Alias of RAGE LT PRO AGP 2X (English) x23F6 - x23F6 Alias of ALi M5229 PCI Bus Master IDE |Controller x23F6 - x23F6 Alias of Primary IDE controller (dual fifo) x2500 - x250F Alias of Motherboard resources x2570 - x2577 Alias of ALi M5229 PCI Bus Master IDE Controller x2570 - x2577 Alias of Secondary IDE controller (dual fifo) x25F0 - x25F7 Alias of ALi M5229 PCI Bus Master IDE Controller x25F0 - x25F7 Alias of Primary IDE controller (dual fifo) x2776 - x2776 Alias of ALi M5229 PCI Bus Master IDE Controller x2776 - x2776 Alias of Secondary IDE controller (dual fifo) x27B0 - x27BB Alias of RAGE LT PRO AGP 2X (English) x27C0 - x27DF Alias of RAGE LT PRO AGP 2X (English) x27F6 - x27F6 Alias of ALi M5229 PCI Bus Master IDE Controller x27F6 - x27F6 Alias of Primary IDE controller (dual fifo) x2900 - x290F Alias of Motherboard resources x2970 - x2977 Alias of ALi M5229 PCI Bus Master IDE Controller x2970 - x2977 Alias of Secondary IDE controller (dual fifo) x29F0 - x29F7 Alias of ALi M5229 PCI Bus Master IDE Controller x29F0 - x29F7 Alias of Primary IDE controller (dual fifo) x2B76 - x2B76 Alias of ALi M5229 PCI Bus Master IDE Controller x2B76 - x2B76 Alias of Secondary IDE controller (dual fifo) x2BB0 - x2BBB Alias of RAGE LT PRO AGP 2X (English) x2BC0 - x2BDF Alias of RAGE LT PRO AGP 2X (English) x2BF6 - x2BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x2BF6 - x2BF6 Alias of Primary IDE controller (dual fifo) x2D00 - x2D0F Alias of Motherboard resources x2D70 - x2D77 Alias of ALi M5229 PCI Bus Master IDE Controller x2D70 - x2D77 Alias of Secondary IDE controller (dual fifo) x2DF0 - x2DF7 Alias of ALi M5229 PCI Bus Master IDE Controller x2DF0 - x2DF7 Alias of Primary IDE controller (dual fifo) x2F76 - x2F76 Alias of ALi M5229 PCI Bus Master IDE |Controller x2F76 - x2F76 Alias of Secondary IDE controller (dual fifo) x2FB0 - x2FBB Alias of RAGE LT PRO AGP 2X (English) x2FC0 - x2FDF Alias of RAGE LT PRO AGP 2X (English) x2FF6 - x2FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x2FF6 - x2FF6 Alias of Primary IDE controller (dual fifo) x3100 - x310F Alias of Motherboard resources x3170 - x3177 Alias of ALi M5229 PCI Bus Master IDE Controller x3170 - x3177 Alias of Secondary IDE controller (dual fifo) x31F0 - x31F7 Alias of ALi M5229 PCI Bus Master IDE |Controller x31F0 - x31F7 Alias of Primary IDE controller (dual fifo) x3376 - x3376 Alias of ALi M5229 PCI Bus Master IDE Controller x3376 - x3376 Alias of Secondary IDE controller (dual fifo) x33B0 - x33BB Alias of RAGE LT PRO AGP 2X (English) x33C0 - x33DF Alias of RAGE LT PRO AGP 2X (English) x33F6 - x33F6 Alias of ALi M5229 PCI Bus Master IDE |Controller x33F6 - x33F6 Alias of Primary IDE controller (dual fifo) x3500 - x350F Alias of Motherboard resources x3570 - x3577 Alias of ALi M5229 PCI Bus Master IDE |Controller x3570 - x3577 Alias of Secondary IDE controller (dual fifo) x35F0 - x35F7 Alias of ALi M5229 PCI Bus Master IDE Controller x35F0 - x35F7 Alias of Primary IDE controller (dual fifo) x3776 - x3776 Alias of ALi M5229 PCI Bus Master IDE Controller x3776 - x3776 Alias of Secondary IDE controller (dual fifo) x37B0 - x37BB Alias of RAGE LT PRO AGP 2X (English) x37C0 - x37DF Alias of RAGE LT PRO AGP 2X (English) x37F6 - x37F6 Alias of ALi M5229 PCI Bus Master IDE Controller x37F6 - x37F6 Alias of Primary IDE controller (dual fifo) x3900 - x390F Alias of Motherboard resources x3970 - x3977 Alias of ALi M5229 PCI Bus Master IDE Controller x3970 - x3977 Alias of Secondary IDE controller (dual fifo) x39F0 - x39F7 Alias of ALi M5229 PCI Bus Master IDE Controller x39F0 - x39F7 Alias of Primary IDE controller (dual fifo) x3B76 - x3B76 Alias of ALi M5229 PCI Bus Master IDE Controller x3B76 - x3B76 Alias of Secondary IDE controller (dual fifo) x3BB0 - x3BBB Alias of RAGE LT PRO AGP 2X (English) x3BC0 - x3BDF Alias of RAGE LT PRO AGP 2X (English) x3BF6 - x3BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x3BF6 - x3BF6 Alias of Primary IDE controller (dual fifo) x3D00 - x3D0F Alias of Motherboard resources x3D70 - x3D77 Alias of ALi M5229 PCI Bus Master IDE Controller x3D70 - x3D77 Alias of Secondary IDE controller (dual fifo) x3DF0 - x3DF7 Alias of ALi M5229 PCI Bus Master IDE Controller x3DF0 - x3DF7 Alias of Primary IDE controller (dual fifo) x3F76 - x3F76 Alias of ALi M5229 PCI Bus Master IDE |Controller x3F76 - x3F76 Alias of Secondary IDE controller (dual fifo) x3FB0 - x3FBB Alias of RAGE LT PRO AGP 2X (English) x3FC0 - x3FDF Alias of RAGE LT PRO AGP 2X (English) x3FF6 - x3FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x3FF6 - x3FF6 Alias of Primary IDE controller (dual fifo) x4100 - x410F Alias of Motherboard resources x4170 - x4177 Alias of ALi M5229 PCI Bus Master IDE Controller x4170 - x4177 Alias of Secondary IDE controller (dual fifo) x41F0 - x41F7 Alias of ALi M5229 PCI Bus Master IDE Controller x41F0 - x41F7 Alias of Primary IDE controller (dual fifo) x4376 - x4376 Alias of ALi M5229 PCI Bus Master IDE Controller x4376 - x4376 Alias of Secondary IDE controller (dual fifo) x43B0 - x43BB Alias of RAGE LT PRO AGP 2X (English) x43C0 - x43DF Alias of RAGE LT PRO AGP 2X (English) x43F6 - x43F6 Alias of ALi M5229 PCI Bus Master IDE |Controller x43F6 - x43F6 Alias of Primary IDE controller (dual fifo) x4500 - x450F Alias of Motherboard resources x4570 - x4577 Alias of ALi M5229 PCI Bus Master IDE |Controller x4570 - x4577 Alias of Secondary IDE controller (dual fifo) x45F0 - x45F7 Alias of ALi M5229 PCI Bus Master IDE Controller x45F0 - x45F7 Alias of Primary IDE controller (dual fifo) x4776 - x4776 Alias of ALi M5229 PCI Bus Master IDE Controller x4776 - x4776 Alias of Secondary IDE controller (dual fifo) x47B0 - x47BB Alias of RAGE LT PRO AGP 2X (English) x47C0 - x47DF Alias of RAGE LT PRO AGP 2X (English) x47F6 - x47F6 Alias of ALi M5229 PCI Bus Master IDE Controller x47F6 - x47F6 Alias of Primary IDE controller (dual fifo) x4900 - x490F Alias of Motherboard resources x4970 - x4977 Alias of ALi M5229 PCI Bus Master IDE Controller x4970 - x4977 Alias of Secondary IDE controller (dual fifo) x49F0 - x49F7 Alias of ALi M5229 PCI Bus Master IDE Controller x49F0 - x49F7 Alias of Primary IDE controller (dual fifo) x4B76 - x4B76 Alias of ALi M5229 PCI Bus Master IDE Controller x4B76 - x4B76 Alias of Secondary IDE controller (dual fifo) x4BBO - x4BBB Alias of RAGE LT PRO AGP 2X (English) x4BC0 - x4BDF Alias of RAGE LT PRO AGP 2X (English) x4BF6 - x4BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x4BF6 - x4BF6 Alias of Primary IDE controller (dual fifo) x4D00 - x4D0F Alias of Motherboard resources x4D70 - x4D77 Alias of ALi M5229 PCI Bus Master IDE Controller x4D70 - x4D77 Alias of Secondary IDE controller (dual fifo) x4DF0 - x4DF7 Alias of ALi M5229 PCI Bus Master IDE x4DF0 - x4DF7 Alias of Primary IDE controller (dual fifo) x4F76 - x4F76 Alias of ALi M5229 PCI Bus Master IDE |Controller x4F76 - x4F76 Alias of Secondary IDE controller (dual fifo) x4FB0 - x4FBB Alias of RAGE LT PRO AGP 2X (English) x4FC0 - x4FDF Alias of RAGE LT PRO AGP 2X (English) x4FF6 - x4FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x4FF6 - x4FF6 Alias of Primary IDE controller (dual fifo) x5100 - x510F Alias of Motherboard resources x5170 - x5177 Alias of ALi M5229 PCI Bus Master IDE Controller x5170 - x5177 Alias of Secondary IDE controller (dual fifo) x51F0 - x51F7 Alias of ALi M5229 PCI Bus Master IDE |Controller x51F0 - x51F7 Alias of Primary IDE controller (dual fifo) x5376 - x5376 Alias of ALi M5229 PCI Bus Master IDE Controller x5376 - x5376 Alias of Secondary IDE controller (dual fifo) x53B0 - x53BB Alias of RAGE LT PRO AGP 2X (English) x53C0 - x53DF Alias of RAGE LT PRO AGP 2X (English) x53F6 - x53F6 Alias of ALi M5229 PCI Bus Master IDE |Controller x53F6 - x53F6 Alias of Primary IDE controller (dual fifo) x5500 - x550F Alias of Motherboard resources x5570 - x5577 Alias of ALi M5229 PCI Bus Master IDE Controller x5570 - x5577 Alias of Secondary IDE controller (dual fifo) x55F0 - x55F7 Alias of ALi M5229 PCI Bus Master IDE Controller x55F0 - x55F7 Alias of Primary IDE controller (dual fifo) x5776 - x5776 Alias of ALi M5229 PCI Bus Master IDE Controller x5776 - x5776 Alias of Secondary IDE controller (dual fifo) x57B0 - x57BB Alias of RAGE LT PRO AGP 2X (English) x57C0 - x57DF Alias of RAGE LT PRO AGP 2X (English) x57F6 - x57F6 Alias of ALi M5229 PCI Bus Master IDE Controller

> x6DF0 - x6DF7 Alias of Primary IDE controller (dual fifo) x6F76 - x6F76 Alias of ALi M5229 PCI Bus Master IDE x6F76 - x6F76 Alias of Secondary IDE controller (dual fifo)

> > Continue with I/O Address

x57F6 - x57F6 Alias of Primary IDE controller (dual fifo)

x5970 - x5977 Alias of ALi M5229 PCI Bus Master IDE

x5970 - x5977 Alias of Secondary IDE controller (dual fifo) x59F0 - x59F7 Alias of ALi M5229 PCI Bus Master IDE

x5B76 - x5B76 Alias of Secondary IDE controller (dual fifo) x5BBO - x5BBB Alias of RAGE LT PRO AGP 2X (English) x5BC0 - x5BDF Alias of RAGE LT PRO AGP 2X (English) x5BF6 - x5BF6 Alias of ALi M5229 PCI Bus Master IDE

x5BF6 - x5BF6 Alias of Primary IDE controller (dual fifo)

x5D70 - x5D77 Alias of ALi M5229 PCI Bus Master IDE

x5D70 - x5D77 Alias of Secondary IDE controller (dual fifo) x5DF0 - x5DF7 Alias of ALi M5229 PCI Bus Master IDE

x5DF0 - x5DF7 Alias of Primary IDE controller (dual fifo) x5F76 - x5F76 Alias of ALi M5229 PCI Bus Master IDE

x5F76 - x5F76 Alias of Secondary IDE controller (dual fifo) x5FB0 - x5FBB Alias of RAGE LT PRO AGP 2X (English) x5FC0 - x5FDF Alias of RAGE LT PRO AGP 2X (English) x5FF6 - x5FF6 Alias of ALi M5229 PCI Bus Master IDE

x5FF6 - x5FF6 Alias of Primary IDE controller (dual fifo)

x6170 - x6177 Alias of ALi M5229 PCI Bus Master IDE

x6170 - x6177 Alias of Secondary IDE controller (dual fifo) x61F0 - x61F7 Alias of ALi M5229 PCI Bus Master IDE

x6376 - x6376 Alias of Secondary IDE controller (dual fifo) x63B0 - x63BB Alias of RAGE LT PRO AGP 2X (English) x63C0 - x63DF Alias of RAGE LT PRO AGP 2X (English) x63F6 - x63F6 Alias of ALi M5229 PCI Bus Master IDE

x61F0 - x61F7 Alias of Primary IDE controller (dual fifo) x6376 - x6376 Alias of ALi M5229 PCI Bus Master IDE

x63F6 - x63F6 Alias of Primary IDE controller (dual fifo)

x6570 - x6577 Alias of ALi M5229 PCI Bus Master IDE

x6570 - x6577 Alias of Secondary IDE controller (dual fifo) x65F0 - x65F7 Alias of ALi M5229 PCI Bus Master IDE

x6776 - x6776 Alias of Secondary IDE controller (dual fifo) x67B0 - x67BB Alias of RAGE LT PRO AGP 2X (English) x67C0 - x67DF Alias of RAGE LT PRO AGP 2X (English) x67F6 - x67F6 Alias of ALi M5229 PCI Bus Master IDE

x65F0 - x65F7 Alias of Primary IDE controller (dual fifo) x6776 - x6776 Alias of ALi M5229 PCI Bus Master IDE

x67F6 - x67F6 Alias of Primary IDE controller (dual fifo)

x6970 - x6977 Alias of ALi M5229 PCI Bus Master IDE

x6970 - x6977 Alias of Secondary IDE controller (dual fifo) x69F0 - x69F7 Alias of ALi M5229 PCI Bus Master IDE

x6B76 - x6B76 Alias of Secondary IDE controller (dual fifo) x6BB0 - x6BBB Alias of RAGE LT PRO AGP 2X (English) x6BC0 - x6BDF Alias of RAGE LT PRO AGP 2X (English) x6BF6 - x6BF6 Alias of ALi M5229 PCI Bus Master IDE

x69F0 - x69F7 Alias of Primary IDE controller (dual fifo) x6B76 - x6B76 Alias of ALi M5229 PCI Bus Master IDE

x6BF6 - x6BF6 Alias of Primary IDE controller (dual fifo)

x6D70 - x6D77 Alias of ALi M5229 PCI Bus Master IDE

x6FB0 - x6FBB Alias of RAGE LT PRO AGP 2X (English) x6FC0 - x6FDF Alias of RAGE LT PRO AGP 2X (English) x6FF6 - x6FF6 Alias of ALi M5229 PCI Bus Master IDE

x6FF6 - x6FF6 Alias of Primary IDE controller (dual fifo)

x6D70 - x6D77 Alias of Secondary IDE controller (dual fifo) x6DF0 - x6DF7 Alias of ALi M5229 PCI Bus Master IDE

x6D00 - x6D0F Alias of Motherboard resources

x6900 - x690F Alias of Motherboard resources

x6500 - x650F Alias of Motherboard resources

x6100 - x610F Alias of Motherboard resources

x5D00 - x5D0F Alias of Motherboard resources

x59F0 - x59F7 Alias of Primary IDE controller (dual fifo) x5B76 - x5B76 Alias of ALi M5229 PCI Bus Master IDE

x5900 - x590F Alias of Motherboard resources

Controller

Controller

Controller

Controller

Controller

|Controller

Controller

Controller

Controller

|Controller

|Controller

Controller

Controller

Controller

Controller

|Controller

Controller

Controller

|Controller

Controller

Controller

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Specifications**

## **System Memory Catalog**

*
>System Unit
>System
<u>Interrupts</u>
>System DMA
>System I/O
>System Memory
<u>&gt;Display</u>
>Memory
<b>Expansion</b>
>Battery Pack
>Diskette
<u>Drive</u>
>Hard Drives
>CD/DVD
<u>Drives</u>
<u>&gt;Modem</u>
>AC Adapter
>Pin
<u>Assignments</u>
*

Memory Address	System Function
x00000000 - x0009FFFF	System board extension for PnP BIOS
x000A0000 - x000AFFFF	RAGE LT PRO AGP 2X (English)
x000B0000 - x000BFFFF	RAGE LT PRO AGP 2X (English)
x000C0000 - x000CBFFF	RAGE LT PRO AGP 2X (English)
x000E0000 - x000FFFFF	System board extension for PnP BIOS
x00100000 - x03FFFFFF	System board extension for PnP BIOS
x04000000 - x04000FFF	Generic CardBus Controller
xE0000000 - xE3FFFFFF	ALi M1541 AGP System Controller
xFD000000 - xFDFFFFFF	RAGE LT PRO AGP 2X (English)
xFD000000 - xFECFFFFF	PCI standard PCI-to-PCI bridge
xFE000000 - xFE01FFFF	RAGE LT PRO AGP 2X (English)
xFECFF000 - xFECFFFFF	RAGE LT PRO AGP 2X (English)
xFEDFE000 - xFEDFEFFF	ALi PCI to USB Open Host Controller
xFEDFFC00 - xFEDFFCFF	Lucent 56K V.90 PCI DF Modem
xFFFC0000 - xFFFFFFF	Motherboard resources

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

5.4 W (max)

## **Specifications**

## **Display**

*	12.1" Fast Response Color STN SVGA TFT Dsiplay		
>System Unit		U.S.	Metric
>System		0.5.	Metric
<u>Interrupts</u>	Dimensions:		
>System DMA	Height Width	7.83" 10.8"	19.9 cm 25.7 cm
>System I/O	Width	10.8	25.7 Cm
>System			
Memory	Diagonal Size	12.1 "	30.7 cm
>Display			
>Memory Expansion	Mounting	inte	rnal
>Battery Pack	Number of Colors	16	M
>Diskette	Number of Colors	10	171
<u>Drive</u>		,	
>Hard Drives	Contrast Ratio	Typical	150:1
>CD/DVD			
<u>Drives</u>			
<u>&gt;Modem</u>	Brightness	Over 120	cd/m~3
>AC Adapter	_		
>Pin	Pixel Resolution:		
<u>Assignments</u>	Pitch	0.30 x 0	.30 mm
*	Format	800 2	
	Configuration	RGB S	
	Comgutation	TVGD N	
	Backlight	Edge	Light
	Character Display	80 x 25,	80 x 50

**Total Power Consumption** 

14.1" Color TFT 1024 x 768 Display		
	U.S.	Metric
Dimensions: Height Width	8.43 " 11.2 "	21.42 cm 28.56 cm
Diagonal Size	14.1 "	35.8 cm
Mounting	internal	
Number of Colors	64 K	
Contrast Ratio	Typical 150:1	
Brightness	Over 120 cd/m~3	
Pixel R	esolution:	
Pitch Format Configuration	0.279 x 0.279 mm 1024 x 768 RGB Stripe	
Backlight	Edge Light	
Character Display	80 x 25	
Total Power Consumption	6.6 W (max)	

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

**Preface** -or- Notice **Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

## **Specifications**

#### **Memory Expansion**

<u>&gt;System Unit</u>
>System
<u>Interrupts</u>
>System DMA
>System I/O
>System
Memory
>Display
>Memory Expansion
>Battery Pack
>Diskette Drive
>Hard Drives
>CD/DVD

Memory Expansion for 32-MB Memory on System Board		
System Board Memory (standard)	With Optional Expansion Memory	Total Memory
32-MB	32-MB	64-MB
32-MB	64-MB	96-MB
32-MB	128-MB	160-MB

>Memory Expansion
>Battery Pack
>Diskette Drive
>Hard Drives
>CD/DVD
<u>Drives</u>
<u>&gt;Modem</u>
>AC Adapter
<u>&gt;Pin</u>
<u>Assignments</u>
l

Memory Expansion for 64-MB Memory on System Board		
System Board Memory (standard)	With Optional Expansion Memory	Total Memory
64-MB	32-MB	96-MB
64-MB	64-MB	128-MB
64-MB	128-MB	192-MB

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Specifications**

#### **Li Ion Battery Pack**

* > System Unit		US	Metric
>System			Wethe
Interrupts	Dimensions		
>System DMA	Height	.81"	2.05 cm
>System I/O	Length	3.05"	7.75 cm
>System	Width	5.69"	14.45 cm
Memory			
> Display > Memory			
Expansion	Weight	.85 lb	.39 kg
>Battery Pack			
> <u>Diskette</u> <u>Drive</u>	Energy		
>Hard Drives	Voltage	14.8	2 V
>CD/DVD	Amp-hour capacity 3.0 Ah		-
<u>Drives</u>	Watt-hour capacity 44.4 Wh		Wh
>Modem	Tempature		
>AC Adapter			
>Pin Assignments	Operating Non-operating	32 to 113 F -4 to 140 F	0 to 45 C -20 to 60 C
*			

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> <u>Specifications</u> <u>Troubleshooting</u> Battery Pack
Removal & Replacement

## **Specifications**

#### **Diskette Drive**

*
>System Unit
>System
<u>Interrupts</u>
>System DMA
>System I/O
>System
Memory
<u>&gt;Display</u>
>Memory
Expansion
>Battery Pack
>Diskette Drive
>Hard Drives
>CD/DVD
Drives
>Modem
>AC Adapter
>Pin
Assignments
*

Diskette Size Light	3.5" none .5" / 1.27 cm	
Height	.5 / 1.27 CIII	
Bytes per Sector		
Sectors per Track High density Low density	512 18 (1.44 MB) / 15 (1.2 MB) 9	
Tracks per side		
High Density Low Density	80 (1.44 MB) / 80 (1.2 MB) 80	
Access Times		
Track-to-Track (high/low) Average (ms) Settling Time (ms) Latency Average	3 ms/6 ms 94 ms/174ms 15 ms 100	
Number of Read/Write Heads	2	

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> Specifications

Troubleshooting

<u>Battery Pack</u> <u>Removal & Replacement</u>

## **Specifications**

#### **Hard Drives**

*	4.0 GB Hard Drive		
>System Unit	Capacity	4.3 GB	
>System Interrupts	Туре	65	
>System DMA	Transfer Rate		
>System I/O	Media	60.8 to 107.2 Mb/s	
>System	Interface	33.3 MB/s	
Memory	Sector Interleave	1:1	
> Display	Seek Time	2.5 ms	
>Memory Expansion	Track-to-track	13 ms (read)	
	Average Maximum	23 ms	
>Battery Pack	Rotational Speed	4200 rpm	
>Diskette	(typical reads including	_	
<u>Drive</u>	setting)		
>Hard Drives	Physical Configuration		
>CD/DVD Drives	Cylinders	8647	
>Modem	Heads	6	
>AC Adapter	Sectors per track	240-250	
	Bytes per sector	512	
>Pin Assignments *	Logical Configuration		
	Cylinders	7944	
	Heads	15	
	Sectors per Track	63	
	Bytes per sector	512	
	Buffer Size	512 KB	

6.4 GB H	ard Drive
Capacity	6.4 GB
Туре	65
Transfer Rate:	
Media Interface	60.8 to 107.2 Mb/s 33.3 MB/s
Sector Interleave	1:1
Seek Time Track-to-track Average Maximum Rotational Speed (typical reads including setting)	2.5 ms 13 ms (read) 23 ms 4200 rpm
Physical Configuration	
Cylinders Heads Sectors per track Bytes per sector	8647 6 240-250 512
Logical Configuration	
Cylinders Heads Sectors per Track Bytes per sector	13424 15 63 512
Buffer Size	512 KB

10 GB Hard Drive		
Capacity	10 GB	
Туре	65	
Transfer Rate:		
Media Interface	69 to 118 Mb/s 16.6 MB/s	
Sector Interleave	1:1	
Seek Time Track-to-track Average Maximum Rotational Speed (typical reads including setting)	4 ms 12 ms (read) 23 ms 4200 rpm	
Physical Configuration		
Cylinders Heads Sectors per track Bytes per sector	11,968 6 190-330 512	
Logical Configuration		
Cylinders Heads Sectors per Track Bytes per sector	16,383 15 63 512	
Buffer Size	420 KB	

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> <u>Removal & Replacement</u>

## **Specifications**

**CD/DVD Drives** 

*	24X Max CD-ROM Drive		
>System Unit >System Interrupts >System DMA	Applicable Disk	CD-DA, CD-ROM, CD-ROM XA, CD-1, Photo CD (multisession), Video CD, CD-R, CD-Extra (CD+), CD-G, CD-RW	
>System I/O	Center Hole Diameter	.6" / 15mm	
>System	Disc Diameter	12cm, 8cm	
Memory	Disc Thickness	1.2mm	
>Display	Track Pitch	1.6um	
> Memory Expansion > Battery Pack > Diskette	Access Times (typical, including setting)	110 ms	
> Drive > Hard Drives > CD/DVD	Audio Output Level Line out Headphone	+/- 0.27 Vrms none	
Drives	Cache Buffer	128 KB	
>Modem >AC Adapter >Pin	Data Transfer Rate (typical, including settings)	3600 KB/s 150 KB/s 16.66 MB/sec	
Assignments *	Startup Time	< 8 sec	
	Stop time	< 4 sec	

4x DVD-ROM Drive		
Applicable Disk	DVD-ROM, CD-ROM, CD-XA, CD-I, Photo CD, Multisession, Audio, CD-R, CD-RW	
Center Hole Diameter	.6" / 15mm	
Disc Diameter	120 mm (12cm = 4.72 in.) or 80 mm	
Disc Thickness	4.7", 3.15" / 12cm, 8cm	
Track Pitch	0.74um (DVD)	
Laser Beam Divergence	.05" / 1.2cm	
Access Times (typical, including setting)	< 150 ms (DVD)	
Audio Output Level Line out Headphone	0.8 volts RMS 0 - 0.6 volts RMS	
Cache Buffer	512 KB/s	
Sustained Data Transfer Rate	5400 KB/s	
Startup Time	< 15 sec	
Stop time	< 4 sec	

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> <u>Specifications</u> <u>Troubleshooting</u> Battery Pack
Removal & Replacement

## **Specifications**

**Modem** 

*
>System Unit
>System
<u>Interrupts</u>
>System DMA
>System I/O
>System
Memory
> Display
>Memory Expansion
>Battery Pack
> Diskette
Drive Drive
>Hard Drives
>CD/DVD
<u>Drives</u>
>Modem
>AC Adapter

>Pin

**Assignments** 

Compliance	ITU v.90~6 standard Full ITU-T V.34 compliance Full compliance with: V.21, V.22, V.22bis, V.23, V.32, V.32bis, Bell 03, Bell 212A
Data Compression	V.42bis/MNP 5
Fax Modulation	V. 17 V. 21 (Group III Compatible) V.29 V.27Ter
Command Set	Hayes AT Class 1 Fax
Cable	6 Ft. RJ-11 telephone cable

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Specifications**

#### **AC Adapter**

> System Unit > System	Weight	0.7 lbs/ 0.32 kg
Interrupts DWA	Power Supply (Input)	
>System DMA	Operating Voltage	OO to OCA VAC DMC
>System I/O	Operating Current	90 to 264 VAC RMS
<u>&gt;System</u> <u>Memory</u>	Operating Frequency Range	47 to 63 Hz AC
>Display	Maximum Transient	4 <b>n</b> v
>Memory Expansion		
>Battery Pack		
>Diskette Drive		
>Hard Drives		
>CD/DVD Drives		
>Modem		
>AC Adapter		
>Pin Assignments		
*		

## for Prosignia 150 Series Computer

**Index Page Product Description** 

**Preface** -or- **Notice Illustrated Parts Catalog** 

**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

# **Connector Pin Assignments**

This appendix provides connector pin assignment tables for Compaq Compaq Prosignia 150 Portable Computers. For more information on connectors, refer to the section on **Rear Connectors**.

## Click on a link:

**Parallel Connector** 

**Serial Connector** 

**External VGA Monitor** 

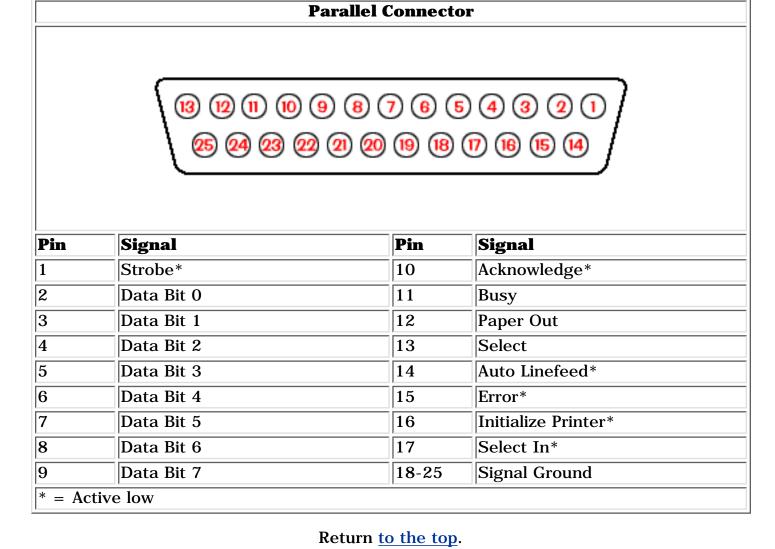
**Keyboard/Mouse** 

## **Universal Serial Bus**

**Modem** 

**NOTE:** The signals in all tables of this appendix are considered active high unless

otherwise indicated by an asterisk (\*).



onnector	Pin	Signal
	1	Carrier Detect
	2	Receive Data
	3	Transmit Data
1 2 3 4	5 4	Data Terminal Ready
1 2 3 4 ( 6 7 8 9	5	Signal Ground
	<b></b> 6	Data Set Ready
	7	Ready to Send
	8	Clear to Send
	9	Ring Indicator
	Return to the	top.
	Return to the  Keyboard/M	
nnector		
nnector	Keyboard/M	ouse
onnector	Keyboard/M Pin	ouse
onnector	Keyboard/M Pin	ouse Signal Data 1
onnector	Keyboard/M Pin  1 2	Ouse Signal Data 1 Data 2
onnector  G G G G G G G G G G G G G G G G G G G	Keyboard/M Pin  1 2 3	Data 1 Data 2 Ground
onnector   G G G Key 3	Keyboard/M Pin  1 2 3 4	Data 1 Data 2 Ground +5 V Clock 1
onnector 6 5 4 Key 3 2 1	Keyboard/M Pin  1 2 3 4 5	Data 1 Data 2 Ground +5 V
onnector  6 5 4 Key 3	Keyboard/M Pin  1 2 3 4 5	Data 1 Data 2 Ground +5 V Clock 1
onnector 6 5 4 Key 3 2 1	Keyboard/M Pin  1 2 3 4 5	Data 1 Data 2 Ground +5 V Clock 1
onnector 6 5 4 Key 3 2 1	Keyboard/M Pin  1 2 3 4 5	Data 1 Data 2 Ground +5 V Clock 1
onnector 6 5 4 Key 3 2 1	Keyboard/M Pin  1 2 3 4 5	Data 1 Data 2 Ground +5 V Clock 1 Clock 2

2 Green Analog Blue Analog

Pin

1

Connector

**External VGA Monitor** 

Signal

Red Analog

Not connected

	5	Ground
	6	Ground Analog
	7	Ground Analog
	8	Ground Analog
	9	Not connected
	10	Ground
	11	Monitor Detect
	12	DDC2B Data
	13	Horizontal Sync
	14	Vertical Sync
	15	DDC2B Clock
	Return <u>to th</u>	e top.
	Universal Ser	ial Dua
Connector	Pin	Signal
	1	+ 5V
<del>                                   </del>	2	Data -

4

Data +

Ground

Unused

Unused

3

	Return <u>to t</u>	ne top.	
	Mode		
Connector	Pin	Signal	
	1	Unused	
123456	2	Unused	
	3	Tip	

Ring

Revised: September 16, 1999

6

**Index Page** 

**Product Description** 

>System Unit

>System DMA

>System I/O

>System

>System

<u>Memory</u>

<u>>Display</u>

>Memory

**Expansion** 

>Diskette

>CD/DVD

<u>>Modem</u>

>AC Adapter

<u>Assignments</u>

**Drive** 

<u>Drives</u>

>Pin

>Battery Pack

>Hard Drives

<u>Interrupts</u>

for Prosignia 150 Series Computer **Preface** -or- Notice **Specifications Battery Pack Illustrated Parts Catalog Troubleshooting Removal & Replacement Specifications** System I/O Address **Continued** I/O Address (xxxxx-xxxxx) - System Function (Shipping Configuration) x7100 - x710F Alias of Motherboard resources x7170 - x7177 Alias of ALi M5229 PCI Bus Master IDE Controller x7170 - x7177 Alias of Secondary IDE controller (dual fifo) x71F0 - x71F7 Alias of ALi M5229 PCI Bus Master IDE Controller x71F0 - x71F7 Alias of Primary IDE controller (dual fifo) x7376 - x7376 Alias of ALi M5229 PCI Bus Master IDE Controller x7376 - x7376 Alias of Secondary IDE controller (dual fifo) x73B0 - x73BB Alias of RAGE LT PRO AGP 2X (English) x73C0 - x73DF Alias of RAGE LT PRO AGP 2X (English) x73F6 - x73F6 Alias of ALi M5229 PCI Bus Master IDE Controller x73F6 - x73F6 Alias of Primary IDE controller (dual fifo) x7500 - x750F Alias of Motherboard resources x7570 - x7577 Alias of ALi M5229 PCI Bus Master IDE Controller x7570 - x7577 Alias of Secondary IDE controller (dual fifo) x75F0 - x75F7 Alias of ALi M5229 PCI Bus Master IDE Controller x75F0 - x75F7 Alias of Primary IDE controller (dual fifo) x7776 - x7776 Alias of ALi M5229 PCI Bus Master IDE Controller x7776 - x7776 Alias of Secondary IDE controller (dual fifo) x77B0 - x77BB Alias of RAGE LT PRO AGP 2X (English) x77C0 - x77DF Alias of RAGE LT PRO AGP 2X (English) x77F6 - x77F6 Alias of ALi M5229 PCI Bus Master IDE Controller x77F6 - x77F6 Alias of Primary IDE controller (dual fifo) x7900 - x790F Alias of Motherboard resources x7970 - x7977 Alias of ALi M5229 PCI Bus Master IDE Controller x7970 - x7977 Alias of Secondary IDE controller (dual fifo) x79F0 - x79F7 Alias of ALi M5229 PCI Bus Master IDE x79F0 - x79F7 Alias of Primary IDE controller (dual fifo) x7B76 - x7B76 Alias of ALi M5229 PCI Bus Master IDE Controller x7B76 - x7B76 Alias of Secondary IDE controller (dual fifo) x7BB0 - x7BBB Alias of RAGE LT PRO AGP 2X (English) x7BCO - x7BDF Alias of RAGE LT PRO AGP 2X (English) x7BF6 - x7BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x7BF6 - x7BF6 Alias of Primary IDE controller (dual fifo) x7D00 - x7D0F Alias of Motherboard resources x7D70 - x7D77 Alias of ALi M5229 PCI Bus Master IDE Controller x7D70 - x7D77 Alias of Secondary IDE controller (dual fifo) x7DF0 - x7DF7 Alias of ALi M5229 PCI Bus Master IDE Controller x7DF0 - x7DF7 Alias of Primary IDE controller (dual fifo) x7F76 - x7F76 Alias of ALi M5229 PCI Bus Master IDE Controller x7F76 - x7F76 Alias of Secondary IDE controller (dual fifo) x7FBO - x7FBB Alias of RAGE LT PRO AGP 2X (English) x7FC0 - x7FDF Alias of RAGE LT PRO AGP 2X (English) x7FF6 - x7FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x7FF6 - x7FF6 Alias of Primary IDE controller (dual fifo) x8100 - x810F Alias of Motherboard resources x8170 - x8177 Alias of ALi M5229 PCI Bus Master IDE Controller x8170 - x8177 Alias of Secondary IDE controller (dual fifo) x81F0 - x81F7 Alias of ALi M5229 PCI Bus Master IDE Controller x81F0 - x81F7 Alias of Primary IDE controller (dual fifo) x8376 - x8376 Alias of ALi M5229 PCI Bus Master IDE Controller x8376 - x8376 Alias of Secondary IDE controller (dual fifo) x83B0 - x83BB Alias of RAGE LT PRO AGP 2X (English) x83C0 - x83DF Alias of RAGE LT PRO AGP 2X (English) x83F6 - x83F6 Alias of ALi M5229 PCI Bus Master IDE Controller x83F6 - x83F6 Alias of Primary IDE controller (dual fifo) x8500 - x850F Alias of Motherboard resources x8570 - x8577 Alias of ALi M5229 PCI Bus Master IDE Controller x8570 - x8577 Alias of Secondary IDE controller (dual fifo) x85F0 - x85F7 Alias of ALi M5229 PCI Bus Master IDE Controller x85F0 - x85F7 Alias of Primary IDE controller (dual fifo) x8776 - x8776 Alias of ALi M5229 PCI Bus Master IDE Controller x8776 - x8776 Alias of Secondary IDE controller (dual fifo) x87B0 - x87BB Alias of RAGE LT PRO AGP 2X (English) x87C0 - x87DF Alias of RAGE LT PRO AGP 2X (English) x87F6 - x87F6 Alias of ALi M5229 PCI Bus Master IDE Controller x87F6 - x87F6 Alias of Primary IDE controller (dual fifo) x8900 - x890F Alias of Motherboard resources x8970 - x8977 Alias of ALi M5229 PCI Bus Master IDE Controller x8970 - x8977 Alias of Secondary IDE controller (dual fifo) x89F0 - x89F7 Alias of ALi M5229 PCI Bus Master IDE x89F0 - x89F7 Alias of Primary IDE controller (dual fifo) x8B76 - x8B76 Alias of ALi M5229 PCI Bus Master IDE Controller x8B76 - x8B76 Alias of Secondary IDE controller (dual fifo) x8BBO - x8BBB Alias of RAGE LT PRO AGP 2X (English) x8BC0 - x8BDF Alias of RAGE LT PRO AGP 2X (English) x8BF6 - x8BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x8BF6 - x8BF6 Alias of Primary IDE controller (dual fifo) x8D00 - x8D0F Alias of Motherboard resources x8D70 - x8D77 Alias of ALi M5229 PCI Bus Master IDE Controller x8D70 - x8D77 Alias of Secondary IDE controller (dual fifo) x8DF0 - x8DF7 Alias of ALi M5229 PCI Bus Master IDE Controller x8DF0 - x8DF7 Alias of Primary IDE controller (dual fifo) x8F76 - x8F76 Alias of ALi M5229 PCI Bus Master IDE Controller x8F76 - x8F76 Alias of Secondary IDE controller (dual fifo) x8FBO - x8FBB Alias of RAGE LT PRO AGP 2X (English) x8FC0 - x8FDF Alias of RAGE LT PRO AGP 2X (English) x8FF6 - x8FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x8FF6 - x8FF6 Alias of Primary IDE controller (dual fifo) x9100 - x910F Alias of Motherboard resources x9170 - x9177 Alias of ALi M5229 PCI Bus Master IDE x9170 - x9177 Alias of Secondary IDE controller (dual fifo) x91F0 - x91F7 Alias of ALi M5229 PCI Bus Master IDE Controller x91F0 - x91F7 Alias of Primary IDE controller (dual fifo) x9376 - x9376 Alias of ALi M5229 PCI Bus Master IDE Controller x9376 - x9376 Alias of Secondary IDE controller (dual fifo) x93B0 - x93BB Alias of RAGE LT PRO AGP 2X (English) x93C0 - x93DF Alias of RAGE LT PRO AGP 2X (English) x93F6 - x93F6 Alias of ALi M5229 PCI Bus Master IDE Controller x93F6 - x93F6 Alias of Primary IDE controller (dual fifo) x9500 - x950F Alias of Motherboard resources x9570 - x9577 Alias of ALi M5229 PCI Bus Master IDE Controller x9570 - x9577 Alias of Secondary IDE controller (dual fifo) x95F0 - x95F7 Alias of ALi M5229 PCI Bus Master IDE Controller x95F0 - x95F7 Alias of Primary IDE controller (dual fifo) x9776 - x9776 Alias of ALi M5229 PCI Bus Master IDE Controller x9776 - x9776 Alias of Secondary IDE controller (dual fifo) x97B0 - x97BB Alias of RAGE LT PRO AGP 2X (English) x97C0 - x97DF Alias of RAGE LT PRO AGP 2X (English) x97F6 - x97F6 Alias of ALi M5229 PCI Bus Master IDE Controller x97F6 - x97F6 Alias of Primary IDE controller (dual fifo) x9900 - x990F Alias of Motherboard resources x9970 - x9977 Alias of ALi M5229 PCI Bus Master IDE Controller x9970 - x9977 Alias of Secondary IDE controller (dual fifo) x99F0 - x99F7 Alias of ALi M5229 PCI Bus Master IDE x99F0 - x99F7 Alias of Primary IDE controller (dual fifo) x9B76 - x9B76 Alias of ALi M5229 PCI Bus Master IDE Controller x9B76 - x9B76 Alias of Secondary IDE controller (dual fifo) x9BB0 - x9BBB Alias of RAGE LT PRO AGP 2X (English) x9BC0 - x9BDF Alias of RAGE LT PRO AGP 2X (English) x9BF6 - x9BF6 Alias of ALi M5229 PCI Bus Master IDE Controller x9BF6 - x9BF6 Alias of Primary IDE controller (dual fifo) x9D00 - x9D0F Alias of Motherboard resources x9D70 - x9D77 Alias of ALi M5229 PCI Bus Master IDE Controller x9D70 - x9D77 Alias of Secondary IDE controller (dual fifo) x9DF0 - x9DF7 Alias of ALi M5229 PCI Bus Master IDE Controller x9DF0 - x9DF7 Alias of Primary IDE controller (dual fifo) x9F76 - x9F76 Alias of ALi M5229 PCI Bus Master IDE Controller x9F76 - x9F76 Alias of Secondary IDE controller (dual fifo) x9FB0 - x9FBB Alias of RAGE LT PRO AGP 2X (English) x9FC0 - x9FDF Alias of RAGE LT PRO AGP 2X (English) x9FF6 - x9FF6 Alias of ALi M5229 PCI Bus Master IDE Controller x9FF6 - x9FF6 Alias of Primary IDE controller (dual fifo) xA100 - xA10F Alias of Motherboard resources xA170 - xA177 Alias of ALi M5229 PCI Bus Master IDE Controller xA170 - xA177 Alias of Secondary IDE controller (dual fifo) xA1F0 - xA1F7 Alias of ALi M5229 PCI Bus Master IDE Controller xA1F0 - xA1F7 Alias of Primary IDE controller (dual fifo) xA376 - xA376 Alias of ALi M5229 PCI Bus Master IDE xA376 - xA376 Alias of Secondary IDE controller (dual fifo) xA3B0 - xA3BB Alias of RAGE LT PRO AGP 2X (English) xA3C0 - xA3DF Alias of RAGE LT PRO AGP 2X (English) xA3F6 - xA3F6 Alias of ALi M5229 PCI Bus Master IDE Controller xA3F6 - xA3F6 Alias of Primary IDE controller (dual fifo) xA500 - xA50F Alias of Motherboard resources xA570 - xA577 Alias of ALi M5229 PCI Bus Master IDE Controller xA570 - xA577 Alias of Secondary IDE controller (dual fifo) xA5F0 - xA5F7 Alias of ALi M5229 PCI Bus Master IDE Controller xA5F0 - xA5F7 Alias of Primary IDE controller (dual fifo) xA776 - xA776 Alias of ALi M5229 PCI Bus Master IDE Controller xA776 - xA776 Alias of Secondary IDE controller (dual fifo) xA7B0 - xA7BB Alias of RAGE LT PRO AGP 2X (English) xA7C0 - xA7DF Alias of RAGE LT PRO AGP 2X (English) xA7F6 - xA7F6 Alias of ALi M5229 PCI Bus Master IDE Controller xA7F6 - xA7F6 Alias of Primary IDE controller (dual fifo) xA900 - xA90F Alias of Motherboard resources xA970 - xA977 Alias of ALi M5229 PCI Bus Master IDE Controller xA970 - xA977 Alias of Secondary IDE controller (dual fifo) xA9F0 - xA9F7 Alias of ALi M5229 PCI Bus Master IDE Controller xA9F0 - xA9F7 Alias of Primary IDE controller (dual fifo) xAB76 - xAB76 Alias of ALi M5229 PCI Bus Master IDE Controller xAB76 - xAB76 Alias of Secondary IDE controller (dual fifo) xABBO - xABBB Alias of RAGE LT PRO AGP 2X (English) xABCO - xABDF Alias of RAGE LT PRO AGP 2X (English) xABF6 - xABF6 Alias of ALi M5229 PCI Bus Master IDE Controller xABF6 - xABF6 Alias of Primary IDE controller (dual fifo) xAD00 - xAD0F Alias of Motherboard resources xAD70 - xAD77 Alias of ALi M5229 PCI Bus Master IDE Controller xAD70 - xAD77 Alias of Secondary IDE controller (dual fifo) xADF0 - xADF7 Alias of ALi M5229 PCI Bus Master IDE Controller xADFO - xADF7 Alias of Primary IDE controller (dual fifo) xAF76 - xAF76 Alias of ALi M5229 PCI Bus Master IDE Controller xAF76 - xAF76 Alias of Secondary IDE controller (dual fifo) xAFBO - xAFBB Alias of RAGE LT PRO AGP 2X (English) xAFCO - xAFDF Alias of RAGE LT PRO AGP 2X (English) xAFF6 - xAFF6 Alias of ALi M5229 PCI Bus Master IDE Controller xAFF6 - xAFF6 Alias of Primary IDE controller (dual fifo) xB100 - xB10F Alias of Motherboard resources xB170 - xB177 Alias of ALi M5229 PCI Bus Master IDE Controller xB170 - xB177 Alias of Secondary IDE controller (dual fifo) xB1F0 - xB1F7 Alias of ALi M5229 PCI Bus Master IDE Controller xB1F0 - xB1F7 Alias of Primary IDE controller (dual fifo) xB376 - xB376 Alias of ALi M5229 PCI Bus Master IDE Controller xB376 - xB376 Alias of Secondary IDE controller (dual fifo) xB3B0 - xB3BB Alias of RAGE LT PRO AGP 2X (English) xB3C0 - xB3DF Alias of RAGE LT PRO AGP 2X (English) xB3F6 - xB3F6 Alias of ALi M5229 PCI Bus Master IDE Controller xB3F6 - xB3F6 Alias of Primary IDE controller (dual fifo) xB500 - xB50F Alias of Motherboard resources xB570 - xB577 Alias of ALi M5229 PCI Bus Master IDE Controller xB570 - xB577 Alias of Secondary IDE controller (dual fifo) xB5F0 - xB5F7 Alias of ALi M5229 PCI Bus Master IDE Controller xB5F0 - xB5F7 Alias of Primary IDE controller (dual fifo) xB776 - xB776 Alias of ALi M5229 PCI Bus Master IDE Controller xB776 - xB776 Alias of Secondary IDE controller (dual fifo) xB7B0 - xB7BB Alias of RAGE LT PRO AGP 2X (English) xB7C0 - xB7DF Alias of RAGE LT PRO AGP 2X (English) xB7F6 - xB7F6 Alias of ALi M5229 PCI Bus Master IDE Controller xB7F6 - xB7F6 Alias of Primary IDE controller (dual fifo) xB900 - xB90F Alias of Motherboard resources xB970 - xB977 Alias of ALi M5229 PCI Bus Master IDE Controller xB970 - xB977 Alias of Secondary IDE controller (dual fifo) xB9F0 - xB9F7 Alias of ALi M5229 PCI Bus Master IDE xB9F0 - xB9F7 Alias of Primary IDE controller (dual fifo) xBB76 - xBB76 Alias of ALi M5229 PCI Bus Master IDE Controller xBB76 - xBB76 Alias of Secondary IDE controller (dual fifo) xBBBO - xBBBB Alias of RAGE LT PRO AGP 2X (English) xBBC0 - xBBDF Alias of RAGE LT PRO AGP 2X (English) xBBF6 - xBBF6 Alias of ALi M5229 PCI Bus Master IDE Controller xBBF6 - xBBF6 Alias of Primary IDE controller (dual fifo) xBD00 - xBD0F Alias of Motherboard resources xBD70 - xBD77 Alias of ALi M5229 PCI Bus Master IDE Controller xBD70 - xBD77 Alias of Secondary IDE controller (dual fifo) xBDF0 - xBDF7 Alias of ALi M5229 PCI Bus Master IDE Controller xBDF0 - xBDF7 Alias of Primary IDE controller (dual fifo) xBF76 - xBF76 Alias of ALi M5229 PCI Bus Master IDE Controller xBF76 - xBF76 Alias of Secondary IDE controller (dual fifo) xBFBO - xBFBB Alias of RAGE LT PRO AGP 2X (English) xBFC0 - xBFDF Alias of RAGE LT PRO AGP 2X (English) xBFF6 - xBFF6 Alias of ALi M5229 PCI Bus Master IDE Controller xBFF6 - xBFF6 Alias of Primary IDE controller (dual fifo) xC100 - xC10F Alias of Motherboard resources xC170 - xC177 Alias of ALi M5229 PCI Bus Master IDE Controller xC170 - xC177 Alias of Secondary IDE controller (dual fifo) xC1F0 - xC1F7 Alias of ALi M5229 PCI Bus Master IDE Controller xC1F0 - xC1F7 Alias of Primary IDE controller (dual fifo) xC376 - xC376 Alias of ALi M5229 PCI Bus Master IDE Controller xC376 - xC376 Alias of Secondary IDE controller (dual fifo) xC3B0 - xC3BB Alias of RAGE LT PRO AGP 2X (English) xC3C0 - xC3DF Alias of RAGE LT PRO AGP 2X (English) xC3F6 - xC3F6 Alias of ALi M5229 PCI Bus Master IDE Controller xC3F6 - xC3F6 Alias of Primary IDE controller (dual fifo) xC500 - xC50F Alias of Motherboard resources xC570 - xC577 Alias of ALi M5229 PCI Bus Master IDE Controller xC570 - xC577 Alias of Secondary IDE controller (dual fifo) xC5F0 - xC5F7 Alias of ALi M5229 PCI Bus Master IDE Controller xC5F0 - xC5F7 Alias of Primary IDE controller (dual fifo) xC776 - xC776 Alias of ALi M5229 PCI Bus Master IDE xC776 - xC776 Alias of Secondary IDE controller (dual fifo) xC7B0 - xC7BB Alias of RAGE LT PRO AGP 2X (English) xC7C0 - xC7DF Alias of RAGE LT PRO AGP 2X (English) xC7F6 - xC7F6 Alias of ALi M5229 PCI Bus Master IDE Controller xC7F6 - xC7F6 Alias of Primary IDE controller (dual fifo) xC900 - xC90F Alias of Motherboard resources xC970 - xC977 Alias of ALi M5229 PCI Bus Master IDE Controller xC970 - xC977 Alias of Secondary IDE controller (dual fifo) xC9F0 - xC9F7 Alias of ALi M5229 PCI Bus Master IDE xC9F0 - xC9F7 Alias of Primary IDE controller (dual fifo) xCB76 - xCB76 Alias of ALi M5229 PCI Bus Master IDE Controller xCB76 - xCB76 Alias of Secondary IDE controller (dual fifo) xCBBO - xCBBB Alias of RAGE LT PRO AGP 2X (English) xCBC0 - xCBDF Alias of RAGE LT PRO AGP 2X (English) xCBF6 - xCBF6 Alias of ALi M5229 PCI Bus Master IDE Controller xCBF6 - xCBF6 Alias of Primary IDE controller (dual fifo) xCD00 - xCD0F Alias of Motherboard resources xCD70 - xCD77 Alias of ALi M5229 PCI Bus Master IDE Controller xCD70 - xCD77 Alias of Secondary IDE controller (dual fifo) xCDF0 - xCDF7 Alias of ALi M5229 PCI Bus Master IDE xCDF0 - xCDF7 Alias of Primary IDE controller (dual fifo) xCF76 - xCF76 Alias of ALi M5229 PCI Bus Master IDE Controller xCF76 - xCF76 Alias of Secondary IDE controller (dual fifo) xCFB0 - xCFBB Alias of RAGE LT PRO AGP 2X (English) xCFC0 - xCFDF Alias of RAGE LT PRO AGP 2X (English) xCFF6 - xCFF6 Alias of ALi M5229 PCI Bus Master IDE Controller xCFF6 - xCFF6 Alias of Primary IDE controller (dual fifo) xD100 - xD10F Alias of Motherboard resources xD170 - xD177 Alias of ALi M5229 PCI Bus Master IDE Controller xD170 - xD177 Alias of Secondary IDE controller (dual fifo) xD1F0 - xD1F7 Alias of ALi M5229 PCI Bus Master IDE Controller xD1F0 - xD1F7 Alias of Primary IDE controller (dual fifo) xD376 - xD376 Alias of ALi M5229 PCI Bus Master IDE Controller xD376 - xD376 Alias of Secondary IDE controller (dual fifo) xD3B0 - xD3BB Alias of RAGE LT PRO AGP 2X (English) xD3C0 - xD3DF Alias of RAGE LT PRO AGP 2X (English) xD3F6 - xD3F6 Alias of ALi M5229 PCI Bus Master IDE Controller xD3F6 - xD3F6 Alias of Primary IDE controller (dual fifo) xD500 - xD50F Alias of Motherboard resources xD570 - xD577 Alias of ALi M5229 PCI Bus Master IDE Controller xD570 - xD577 Alias of Secondary IDE controller (dual fifo) xD5F0 - xD5F7 Alias of ALi M5229 PCI Bus Master IDE Controller xD5F0 - xD5F7 Alias of Primary IDE controller (dual fifo) xD776 - xD776 Alias of ALi M5229 PCI Bus Master IDE Controller xD776 - xD776 Alias of Secondary IDE controller (dual fifo) xD7B0 - xD7BB Alias of RAGE LT PRO AGP 2X (English) xD7C0 - xD7DF Alias of RAGE LT PRO AGP 2X (English) xD7F6 - xD7F6 Alias of ALi M5229 PCI Bus Master IDE Controller xD7F6 - xD7F6 Alias of Primary IDE controller (dual fifo) xD900 - xD90F Alias of Motherboard resources xD970 - xD977 Alias of ALi M5229 PCI Bus Master IDE Controller xD970 - xD977 Alias of Secondary IDE controller (dual fifo) xD9F0 - xD9F7 Alias of ALi M5229 PCI Bus Master IDE Controller xD9F0 - xD9F7 Alias of Primary IDE controller (dual fifo) xDB76 - xDB76 Alias of ALi M5229 PCI Bus Master IDE Controller xDB76 - xDB76 Alias of Secondary IDE controller (dual fifo) xDBBO - xDBBB Alias of RAGE LT PRO AGP 2X (English) xDBC0 - xDBDF Alias of RAGE LT PRO AGP 2X (English) xDBF6 - xDBF6 Alias of ALi M5229 PCI Bus Master IDE Controller xDBF6 - xDBF6 Alias of Primary IDE controller (dual fifo) xDD00 - xDD0F Alias of Motherboard resources xDD70 - xDD77 Alias of ALi M5229 PCI Bus Master IDE Controller xDD70 - xDD77 Alias of Secondary IDE controller (dual fifo) xDDF0 - xDDF7 Alias of ALi M5229 PCI Bus Master IDE Controller xDDF0 - xDDF7 Alias of Primary IDE controller (dual fifo) xDF76 - xDF76 Alias of ALi M5229 PCI Bus Master IDE Controller xDF76 - xDF76 Alias of Secondary IDE controller (dual fifo) xDFBO - xDFBB Alias of RAGE LT PRO AGP 2X (English) xDFC0 - xDFDF Alias of RAGE LT PRO AGP 2X (English) xDFF6 - xDFF6 Alias of ALi M5229 PCI Bus Master IDE Controller xDFF6 - xDFF6 Alias of Primary IDE controller (dual fifo) xE000 - xEFFF PCI standard PCI-to-PCI bridge xE100 - xE10F Alias of Motherboard resources xE170 - xE177 Alias of ALi M5229 PCI Bus Master IDE xE170 - xE177 Alias of Secondary IDE controller (dual fifo) xE1F0 - xE1F7 Alias of ALi M5229 PCI Bus Master IDE xE1F0 - xE1F7 Alias of Primary IDE controller (dual fifo) xE376 - xE376 Alias of ALi M5229 PCI Bus Master IDE Controller xE376 - xE376 Alias of Secondary IDE controller (dual fifo) xE3B0 - xE3BB Alias of RAGE LT PRO AGP 2X (English) xE3C0 - xE3DF Alias of RAGE LT PRO AGP 2X (English) xE3F6 - xE3F6 Alias of ALi M5229 PCI Bus Master IDE Controller xE3F6 - xE3F6 Alias of Primary IDE controller (dual fifo) xE500 - xE50F Alias of Motherboard resources xE570 - xE577 Alias of ALi M5229 PCI Bus Master IDE Controller xE570 - xE577 Alias of Secondary IDE controller (dual fifo) xE5F0 - xE5F7 Alias of ALi M5229 PCI Bus Master IDE xE5F0 - xE5F7 Alias of Primary IDE controller (dual fifo) xE776 - xE776 Alias of ALi M5229 PCI Bus Master IDE Controller xE776 - xE776 Alias of Secondary IDE controller (dual fifo) xE7B0 - xE7BB Alias of RAGE LT PRO AGP 2X (English) xE7C0 - xE7DF Alias of RAGE LT PRO AGP 2X (English) xE7F6 - xE7F6 Alias of ALi M5229 PCI Bus Master IDE Controller xE7F6 - xE7F6 Alias of Primary IDE controller (dual fifo) xE800 - xE8FF RAGE LT PRO AGP 2X (English) xE900 - xE90F Alias of Motherboard resources xE970 - xE977 Alias of ALi M5229 PCI Bus Master IDE Controller xE970 - xE977 Alias of Secondary IDE controller (dual fifo) xE9F0 - xE9F7 Alias of ALi M5229 PCI Bus Master IDE Controller xE9F0 - xE9F7 Alias of Primary IDE controller (dual fifo) xEB76 - xEB76 Alias of ALi M5229 PCI Bus Master IDE Controller xEB76 - xEB76 Alias of Secondary IDE controller (dual fifo) xEBBO - xEBBB Alias of RAGE LT PRO AGP 2X (English) xEBCO - xEBDF Alias of RAGE LT PRO AGP 2X (English)

xFBF6 - xFBF6 Alias of Primary IDE controller (dual fifo) xFC78 - xFC7F Lucent 56K V.90 PCI DF Modem xFC88 - xFC8B ESS SOLO-1 PCI AudioDrive xFC8C - xFC8F ESS SOLO-1 PCI AudioDrive xFC90 - xFC97 Primary IDE controller (dual fifo) xFC90 - xFC9F ALi M5229 PCI Bus Master IDE Controller xFC98 - xFC9F Secondary IDE controller (dual fifo) xFCA0 - xFCAF ESS SOLO-1 PCI AudioDrive xFCB0 - xFCBF ESS SOLO-1 PCI AudioDrive

xFD70 - xFD77 Alias of ALi M5229 PCI Bus Master IDE

xFD70 - xFD77 Alias of Secondary IDE controller (dual fifo) xFDF0 - xFDF7 Alias of ALi M5229 PCI Bus Master IDE

xFDF0 - xFDF7 Alias of Primary IDE controller (dual fifo) xFF76 - xFF76 Alias of ALi M5229 PCI Bus Master IDE

xFF76 - xFF76 Alias of Secondary IDE controller (dual fifo) xFFB0 - xFFBB Alias of RAGE LT PRO AGP 2X (English) xFFC0 - xFFDF Alias of RAGE LT PRO AGP 2X (English) xFFF6 - xFFF6 Alias of ALi M5229 PCI Bus Master IDE

xFFF6 - xFFF6 Alias of Primary IDE controller (dual fifo)

Return to top of the page

xFCC0 - xFCFF ESS SOLO-1 PCI AudioDrive xFD00 - xFD0F Alias of Motherboard resources

xEBF6 - xEBF6 Alias of ALi M5229 PCI Bus Master IDE

xED00 - xED0F Alias of Motherboard resources

xEBF6 - xEBF6 Alias of Primary IDE controller (dual fifo)

xED70 - xED77 Alias of ALi M5229 PCI Bus Master IDE

xED70 - xED77 Alias of Secondary IDE controller (dual fifo) xEDF0 - xEDF7 Alias of ALi M5229 PCI Bus Master IDE

xEDF0 - xEDF7 Alias of Primary IDE controller (dual fifo) xEF76 - xEF76 Alias of ALi M5229 PCI Bus Master IDE

xEF76 - xEF76 Alias of Secondary IDE controller (dual fifo) xEFBO - xEFBB Alias of RAGE LT PRO AGP 2X (English) xEFCO - xEFDF Alias of RAGE LT PRO AGP 2X (English) xEFF6 - xEFF6 Alias of ALi M5229 PCI Bus Master IDE

xEFF6 - xEFF6 Alias of Primary IDE controller (dual fifo)

xF170 - xF177 Alias of Secondary IDE controller (dual fifo) xF1F0 - xF1F7 Alias of ALi M5229 PCI Bus Master IDE

xF376 - xF376 Alias of Secondary IDE controller (dual fifo) xF3B0 - xF3BB Alias of RAGE LT PRO AGP 2X (English) xF3C0 - xF3DF Alias of RAGE LT PRO AGP 2X (English) xF3F6 - xF3F6 Alias of ALi M5229 PCI Bus Master IDE

xF1F0 - xF1F7 Alias of Primary IDE controller (dual fifo) xF376 - xF376 Alias of ALi M5229 PCI Bus Master IDE

xF3F6 - xF3F6 Alias of Primary IDE controller (dual fifo)

xF570 - xF577 Alias of ALi M5229 PCI Bus Master IDE

xF570 - xF577 Alias of Secondary IDE controller (dual fifo) xF5F0 - xF5F7 Alias of ALi M5229 PCI Bus Master IDE

xF776 - xF776 Alias of Secondary IDE controller (dual fifo) xF7B0 - xF7BB Alias of RAGE LT PRO AGP 2X (English) xF7C0 - xF7DF Alias of RAGE LT PRO AGP 2X (English) xF7F6 - xF7F6 Alias of ALi M5229 PCI Bus Master IDE

xF5F0 - xF5F7 Alias of Primary IDE controller (dual fifo) xF776 - xF776 Alias of ALi M5229 PCI Bus Master IDE

xF7F6 - xF7F6 Alias of Primary IDE controller (dual fifo)

xF970 - xF977 Alias of ALi M5229 PCI Bus Master IDE

xF970 - xF977 Alias of Secondary IDE controller (dual fifo) xF9F0 - xF9F7 Alias of ALi M5229 PCI Bus Master IDE

xFB76 - xFB76 Alias of Secondary IDE controller (dual fifo) xFBBO - xFBBB Alias of RAGE LT PRO AGP 2X (English) xFBC0 - xFBDF Alias of RAGE LT PRO AGP 2X (English) xFBF6 - xFBF6 Alias of ALi M5229 PCI Bus Master IDE

xF9F0 - xF9F7 Alias of Primary IDE controller (dual fifo) xFB76 - xFB76 Alias of ALi M5229 PCI Bus Master IDE

xF800 - xF8FF Lucent 56K V.90 PCI DF Modem xF900 - xF90F Alias of Motherboard resources

xF500 - xF50F Alias of Motherboard resources

xF170 - xF177 Alias of ALi M5229 PCI Bus Master IDE

xF100 - xF10F Alias of Motherboard resources

Controller

Controller

Controller

Controller

Controller

Controller

|Controller

Controller

Controller

Controlle

Controller

Controller

Controller

Controller

Controller

|Controller

Controller

Controller

Controller

#### for Prosignia 150 Series Computer

<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Troubleshooting**

#### **Contacting Compaq Support**

.on
>Preliminaries
>Clearing CMOS
>Power-on
Self-test
>Compaq
<b>Diagnostics</b>
<u>&gt; Diagnostic</u> Error codes
>Test Utilities
>Solving
Minor Minor
<u>Problems</u>
> Contacting
Compaq
<u> •</u>

Obtain the following information before 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 being used
- Printed result of Computer Checkup (TEST)
- Printed copies of CONFIG.SYS and AUTOEXEC.BAT files, if possible

## **Shipping Preparation**

To ship the computer, complete the following steps:

- 1. Back up the critical hard drive files. Ensure that backup tapes/diskette are not exposed to electrical or magnetic fields while stored in transit.
- 2. Turn off the computer and external devices.
- 3. Disconnect the external devices from their power sources, then from the computer.

Ensure that there is not a diskette in the **IMPORTANT:** diskette drive and that there are no PC Cards in the PC slots.

- 4. Close the display and all exterior doors of the computer.
- 5. Pack the computer with sufficient packing material to protect it. Use the original packing box or similar packaging.

#### for Prosignia 150 Series Computer

**Index Page Product Description** 

**Preface** -or- Notice **Illustrated Parts Catalog** 

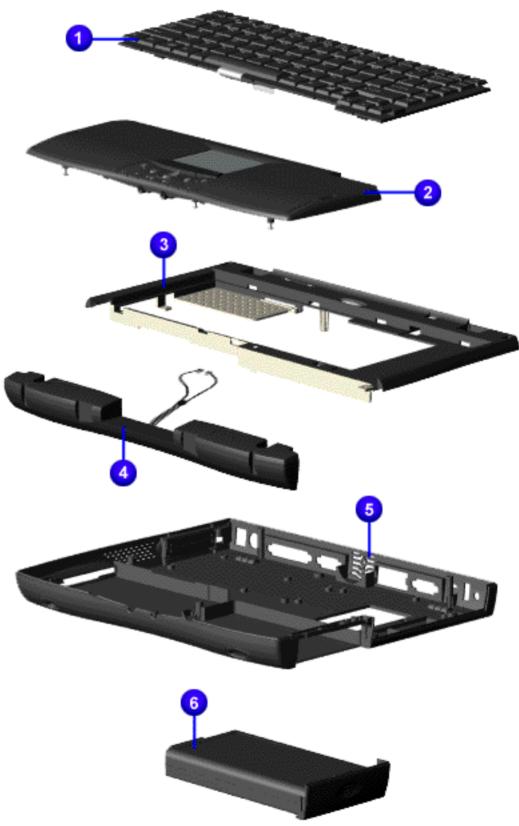
**Specifications Troubleshooting** 

**Battery Pack Removal & Replacement** 

## **Illustrated Parts Catalog**

**System Unit** 





]	Description	Spare Part Number
1	Keyb	oard
	US Int'l UK	134092-001 134092-002 134092-031
	France Japan	134092-051 134092-291
2	Palmrest Cover w/TouchPad and Button Board	134085-001
2	Palmrest Cover w/TouchPad and Button Boardfor 14.1" monitor	134086-001
3	Upper CPU Cover w/Power Switch	134088-001
4	Speaker Assembly w/Enclosures & Cables	352889-001
5	Base Enclosure	134087-001 161065-001
6	Battery Pack Li Ion	388647-001

**Spare Part** 

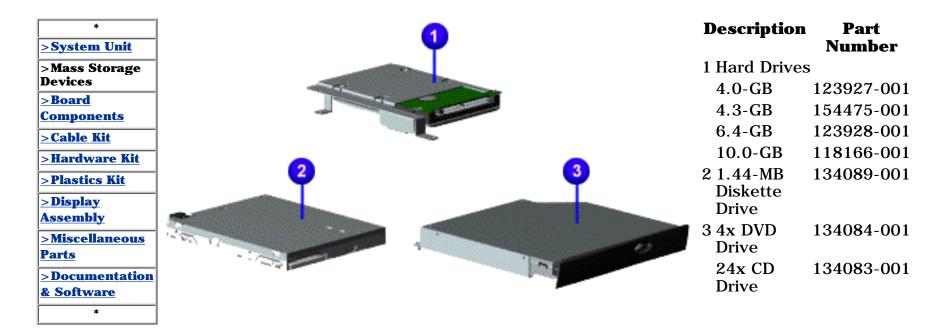
#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

**Mass Storage Devices** 



#### for Prosignia 150 Series Computer

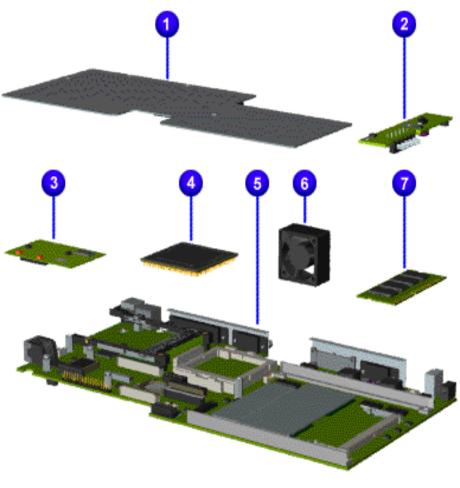
<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

#### **Board Components**





#### **Description Spare Part** Number 1 Heatspreader 152620-001 2 Voltage 352891-001 Convertor Board 3 Modem 56K Data/Fax w/o **SRAM** US 400445-001 International 134136-021 4 AMD K6-2 Processors: 350-Mhz 122698-001 380-Mhz 123923-001 400-MHz 134079-001 433-Mhz 158851-001 475-MHz 161064-001 5 System Boards **System** 400440-001 Board I/O **System** 158849-001 Board I/O with 1MB Cache 6 Fan 400444-001

**Assembly** 

32-MB

64-MB

7 System memory

122699-001

122700-001

#### for Prosignia 150 Series Computer

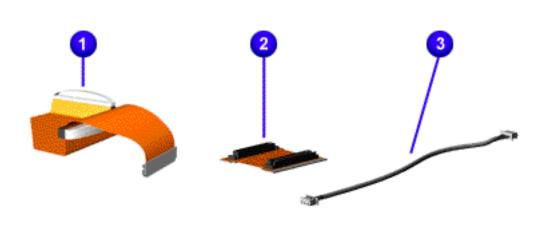
<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

**Miscellaneous Cables Kit** 





Spare Part Number: 330946-001

- 1 Diskette Drive Cable
- 2 CD or DVD Drive Cable
- 3 Modem Cable

#### for Prosignia 150 Series Computer

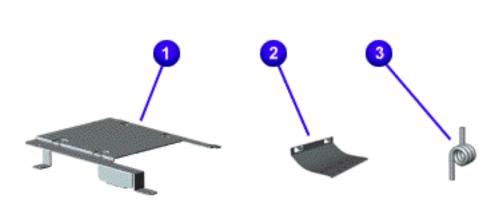
<u>Index Page</u> Product Description <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

**Miscellaneous Hardware Kit** 





# Spare Part Number: 346853-001 Description Quantity

1 Hard Drive 1 each Mounting Bracket

2 LCD Guide 1 each FPC

3 Spring 4 each Torsion PCMCIA

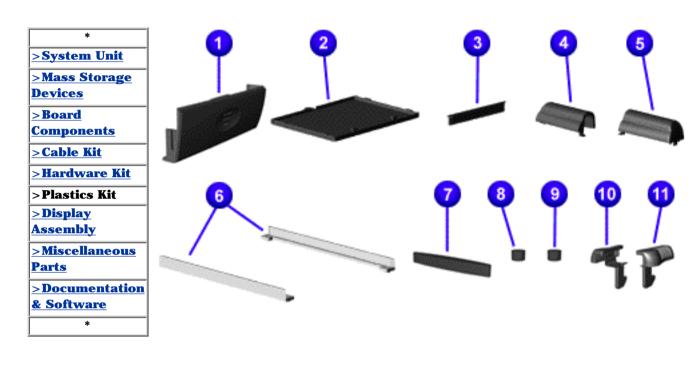
#### for Prosignia 150 Series Computer

<u>Index Page</u> Product <u>Description</u> <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

**Miscellaneous Plastics Kit** 



#### Spare Part Number: 134090-001 Description Quantity

- 1 Door, 1 each Battery Pack
- 2 Cover, 1 each Memory Module
- 3 Door, 1 each PCMCIA
- 4 Display 1 each Hinge Cover, (Left)
- 5 Display 1 each Hinge Cover, (Right)
- 6 CD Drive 1 each Guide
- 7 Rubber 4 each Plug (A)
- 8 Rubber 4 each Plug (B)
- 9 Rubber 8 each Foot
- 10 Latch 2 each (Right)
- 11 Latch 2 each (Left)

#### for Prosignia 150 Series Computer

Index Page
Product Description

<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

**Display Panel Assembly** 

>System Unit
>Mass Storage
<u>Devices</u>
>Board
<u>Components</u>
>Cable Kit
> Hardware Kit
> Plastics Kit

> Display Assembly > Miscellaneous Parts

DocumentationSoftware



## **Description** Spare Part Number

12.1 TFT w/LVDS 134081-001

14.1 TFT w/LVDS 134082-001

#### for Prosignia 150 Series Computer

Index Page
Product Description

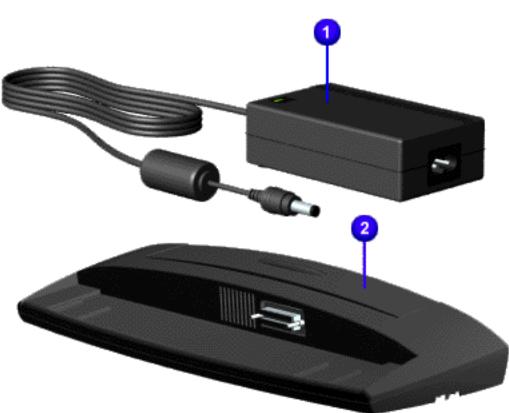
<u>Preface</u> -or- <u>Notice</u> <u>Illustrated Parts Catalog</u> **Specifications Troubleshooting** 

<u>Battery Pack</u> Removal & Replacement

## **Illustrated Parts Catalog**

**Miscellaneous Parts** 





**Description** Part Number 1 AC Adapter 298239-001

2 Port 102270-001 Replicator

Parts Not Shown:

Description	Part Number
Misc. Screw Kit	330959-001
Logo Kit	134091-001
Return Kit	293799-001
AC Powe	er Cord
USA	293831-001
Int'l	293831-002
UK	293831-031
Japan	293831-291

#### for Prosignia 150 Series Computer

<u>Index Page</u> <u>Product Description</u> <u>Preface</u> -or- <u>Notice</u> Illustrated Parts Catalog

**Specifications Troubleshooting** 

Battery Pack
Removal & Replacement

## **Illustrated Parts Catalog**

#### **Documentation & Software**

>System Unit
>Mass Storage
<u>Devices</u>
>Board
Components
>Cable Kit
>Hardware Kit
>Plastics Kit
<u>&gt;Display</u>
Assembly
<u>&gt;Miscellaneous</u> Parts
> Documentation
& Software

Description Spare Part Number Quick Restore, Windows 98

USA **118621-001** 

France **118621-051** 

**Quick Reference Guide** 

(quarterly **184960-001** 

subscription)

QuickFind for **137906-xxx** 

Windows, United

**States** 

\* QuickFind is updated monthly. To complete the QuickFind part number, add the suffix from the table below for the desired month. If you do not specify the 3-digit suffix, the default is the current month in which the order is placed.

#### **QuickFind Part Number Suffix Suffix Month Suffix Month**

-001 January -007 July
 -002 February -008 August
 -003 March -009 September
 -004 April -010 October
 -005 May -011 November
 -006 June -012 December