Packard Bell Stella (iXtreme) Disassembly Manual







Table of Contents

Overview	2
Technician Notes	2
Disassembly Instructions	2
Reassembly Instructions	2
Required Tools	2
Hazardous Voltage	3
Avoid Electrostatic Discharge	3
Power Supply Unit	3
Removing the Rear Bezel	4
Removing the Left Side Cover	4
Removing the Right Side Cover	5
Removing the Front Bezel	5
Removing the Drive Bracket	6
Removing the DVD/CD-ROM Drive	7
Removing the Floppy Disk Drive	7
Removing the Hard Disk Drive	8
Removing Add-In Cards	9
Removing the Front USB Port	9
Removing the Switch/LED Assembly	10
Removing the CPU	10
Removing the Pentium 4 CPU	11
Removing the System Fan	11
Removing the Motherboard	12
Removing the Power Supply	13
Notice	14

Overview

This document contains step-by-step disassembly instructions for the Stella (iXtreme) chassis. The instructions are illustrated where necessary with images of the part that is being removed or disassembled. Furthermore, the screws that are removed are shown next to the image of the parts themselves.

Packard Bell reserves the right to make changes to the Stella (iXtreme) chassis without notice.

Technician Notes

Only technicians authorized by NEC Computers International BV should attempt to 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, no one should attempt to make repairs at the component level or to make modifications to any printed wiring board. Improper repairs can create a safety hazard. Any indication of component replacement or printed wiring board modifications may void any warranty or exchange allowances.

Disassembly Instructions

When disassembling the system unit, follow these general rules:

- Turn off the power and disconnect all cables and peripherals.
- Do not disassemble the system into parts that are smaller than those specified in the instructions.
- Label all removed connectors; note where the connector goes and in what position it was installed.

Reassembly Instructions

Reassembly is the reverse of the disassembly process. Use care to ensure that all cables and screws are returned to their proper positions. Check that no tools or any loose parts have been left inside the chassis. Check that everything is properly installed and tightened.

Required Tools

All disassembly procedures can be performed using the following tools:

■ Philips (#2 bit) screwdriver



Hazardous Voltage

There is hazardous voltage present inside the computer when it is connected to an AC supply, even when the computer's power switch is off. Exposure to hazardous voltage could cause personal injury. To avoid risk of injury, contact an Authorized Service Provider for proper (un)installation of optional hardware devices.

Avoid Electrostatic Discharge

Electrostatic electricity can easily damage circuit cards and integrated circuits (ICs). To reduce risk of damage, store them in protective packaging whenever they are not installed in your system.

Add-in cards can be extremely sensitive to ESD and always require careful handling. After removing the card from the computer, place the card flat on a grounded, static-free surface, component-side up. Use a conductive foam pad if available, but not the card wrapper. Do not slide the card over any surface.

Before you install or remove memory modules, video memory, disk drives, circuit cards or other devices, protect them from static electricity. To do so, make sure your computer's power switch is OFF. Then, unplug the computer's AC power cord. Before picking up the device you (un)install, you should wear an antistatic wrist wrap (available at electronic supply stores). Be sure to connect the wrist wrap to an unpainted metal portion of the computer chassis. As an alternative, you can dissipate electrostatic build-up by touching an unpainted metal portion of the computer chassis with one hand. Then touch the device you are (un)installing with the other hand, and maintain continuous contact with it until it is (un)installed in the computer.

Power Supply Unit

Under no circumstances should you attempt to disassemble the power supply. The power supply contains no user-serviceable parts. Inside the power supply are hazardous voltages that can cause serious personal injury. Always return a defective power supply to your dealer.

WARNING

Ensure that the computer is disconnected from its power source and from all telecommunications links, networks, or modem lines whenever the chassis cover is removed. Do not operate the computer with the cover removed.

AVERTISSEMENT

Assurez-vous que le système est débranché de son alimentation ainsi que de toutes les liaisons de télécommunication, des réseaux, et des lignes de modem avant d'enlever le capot. Ne pas utiliser le système quand le capot est enlevé.

WARNUNG

Das System darf weder an eine Stromquelle angeschlossen sein noch eine Verbindung mit einer Telekommunikationseinrichtung, einem Netzwerk oder einer Modem-Leitung haben, wenn die Gehäuseabdeckung entfernt wird. Nehmen Sie das System nicht ohne die Abdeckung in Betrieb.

ADVERTENCIA

Asegúrese de que cada vez que se quite la cubierta del chasis, el sistema haya sido desconectado de la red de alimentación y de todos lo enlaces de telecomunicaciones, de red y de líneas de módem. No ponga en funcionamiento el sistema mientras la cubierta esté quitada.

WAARSCHUWING

Zorg er voor dat alle verbindingen van en naar de computer (stroom, modem, netwerk, etc) verbroken worden voordat de behuizing geopend wordt. Zet de computer nooit aan als de behuizing geopend is.

AVVERTENZA

Prima di rimuovere il coperchio del telaio, assicurarsi che il sistema sia scollegato dall'alimentazione, da tutti i collegamenti di comunicazione, reti o linee di modem. Non avviare il sistema senza aver prima messo a posto il coperchio.



Removing the Rear Bezel

To remove the rear bezel, do as follows:

- 1. Turn off the computer, the monitor and all peripheral devices.
- 2. Disconnect all power and data cables connected to the computer.
- 3. Face the back of the unit.
- 4. Locate a handhold under the chassis.
- 5. Gently push the latch that fixes the rear bezel to the chassis and carefully pull the bezel away from the chassis.



Fig. 1: Removing the rear bezel

Removing the Left Side Cover

To remove the left side cover, first remove the rear bezel (see section *Removing the Rear Bezel*) and then perform the following steps:

1. Remove the two screws that hold the left side cover.





Fig. 2: Removing the left side cover screws

- 2. Carefully slide the side cover towards the back of the chassis.
- 3. Lift the side cover out and away from the chassis.



Fig. 3: Removing the left side cover

Removing the Right Side Cover

To remove the right side cover, first remove the rear bezel (see section *Removing the Rear Bezel*) and then perform the following steps:

- 1. Remove the two screws that hold the right side cover.
- 2. Carefully slide the side cover two centimetres towards the front of the chassis.
- 3. Lift the side cover out and away from the chassis.

Removing the Front Bezel

To remove the front bezel, first remove the rear bezel (see section *Removing the Rear Bezel*), remove the left side cover (see section *Removing the Left Side Cover*), and follow the steps below:

1. Gently unlock the three lateral latches that hold the front bezel and pull it away to the opposite side.



Fig. 4: Removing the front bezel



Removing the Drive Bracket

To remove the drive bracket containing the DVD/CD-ROM drive and the floppy disk drive, first remove the rear bezel (see section *Removing the Rear Bezel*), remove the left side cover (see section *Removing the Left Side Cover*), remove the front bezel (see section *Removing the Front Bezel*); then follow the steps below:

1. Disconnect all power and data cables from the drives installed.



Fig. 5: Disconnecting power and data cables

2. Remove the screw that holds the drive bracket to the hard disk drive bracket underneath.



Fig. 6: Removing the drive bracket screw

3. Unlock the drive bracket by pressing the upper and lower latch and slide the bracket out of the chassis.





Fig. 7: Removing the drive bracket

Removing the DVD/CD-ROM Drive

To remove the DVD or CD-ROM drive, first remove the rear bezel (see section *Removing the Rear Bezel*), remove the left side cover (see section *Removing the Left Side Cover*), remove the right side cover (see section *Removing the Right Side Cover*), remove the drive bracket (see section *Removing the Drive Bracket*); then follow the steps below:

- 1. Disconnect all cables from the DVD or CD-ROM drive.
- 2. Remove the screws holding the 5.25-inch drive in the bay.



Fig. 8: Removing the DVD/CD-ROM drive screws

- 3. If required, remove the screws on the right side as well.
- 4. Slide the drive towards the front out of the bay.

Removing the Floppy Disk Drive

To remove the floppy disk drive, first remove the rear bezel (see section *Removing the Rear Bezel*), remove the left side cover (see section *Removing the Left Side Cover*), remove the right side cover (see section *Removing the Right Side Cover*), remove the drive bracket (see section *Removing the Drive Bracket*); then follow the steps below:

- 1. Disconnect all cables from the 3.5-inch floppy disk drive.
- 2. Remove the screws holding the floppy disk drive in the bay.







Fig. 9: Removing the floppy disk drive screws

- 3. If required, remove the screws on the right side as well.
- 4. Slide the floppy disk drive towards the front out of the bay.

Removing the Hard Disk Drive

To remove the hard disk drive, first remove the rear bezel (see section *Removing the Rear Bezel*) and remove the left side cover (see section *Removing the Left Side Cover*), remove the front bezel (see section *Removing the Front Bezel*); then follow the steps below:

1. Carefully disconnect the four-wire power cable and the flat data interface cable from the hard disk drive.



Fig. 10: Disconnecting cables from the hard disk drive

2. Remove the screws in the front of the chassis holding the hard disk drive bracket to the chassis.





Fig. 11: Removing the screws of the hard disk drive bracket



- 3. Remove the screw on the side of the hard disk drive bracket holding it to the drive bracket above (see Fig 6 in section *Removing the Drive Bracket*).
- 4. Slide the hard disk drive bracket backwards out of the chassis.





Fig. 12: Removing the hard disk drive bracket

5. Remove the screws that hold the hard disk drive in the bracket and slide it out.

Removing Add-In Cards

To remove add-in cards, first remove the rear bezel (see section *Removing the Rear Bezel*) and remove the left side cover (see section *Removing the Left Side Cover*); then follow the steps below:

- 1. Disconnect all cables from the add-in card to be removed.
- Press the two metal clips until the retention bracket unlocks and remove the bracket.



Fig. 13: Remove the retention bracket

3. Carefully take out the card from the slot.

Removing the Front USB Port

To remove the front USB port, first remove the rear bezel (see section *Removing the Rear Bezel*) and remove the left side cover (see section *Removing the Left Side Cover*), remove the front bezel (see section *Removing the Front Bezel*); then follow the steps below:

- 1. Disconnect the USB port cable on the motherboard and/or on the USB port itself.
- 2. Remove the screws holding the USB port to the chassis.





Fig. 14: Removing the front USB port screws

Removing the Switch/LED Assembly

To remove the switch/LED assembly and the cable, first remove the rear bezel (see section Removing the Rear Bezel) and remove the left side cover (see section Removing the Left Side Cover), remove the front bezel (see section Removing the Front Bezel); then follow the steps below:

- 1. Disconnect the cable from the motherboard.
- 2. Unlock the housing by applying pressure on the latches on both sides of the switch/LED assembly.



Fig. 15: Removing the switch/LED assembly

3. Gently pull away the cable and the switch/LED assembly from the chassis.

Note: When reassembling the switch/LED assembly, take care that you return it to its original position, i.e. with the switch at the top and the LEDs at the bottom.

Removing the CPU

To remove the CPU, first remove the rear bezel (see section *Removing the Rear Bezel*) and remove the side cover (see section *Removing the Left Side Cover*); then follow the steps below:

- 1. Disconnect CPU fan cable connected to the motherboard.
- Remove the CPU fan and heat sink by pressing the metal clip on both sides of the heat sink until unlocks.



Fig. 16: Removing the CPU fan and heat sink

3. Lift the lever to unlock the CPU from its socket.

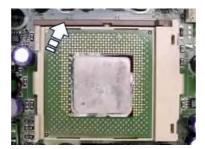


Fig. 17: Removing the CPU

4. Take out the CPU. Be very careful not to remove any of the heat paste on the CPU surface!

Removing the Pentium 4 CPU

If the CPU installed is a Pentium IV, please perform this additional step:

1. Remove the CPU heat bracket by removing the four screws.

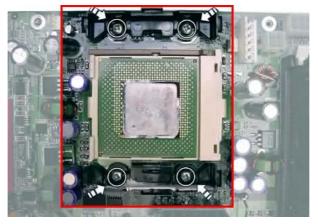


Fig. 18: Removing the CPU heat bracket.

Removing the System Fan

To remove the optional system fan, first remove the rear bezel (see section *Removing the Rear Bezel*), remove the left side cover (see section *Removing the Left Side Cover*); then follow the steps below:

1. Disconnect the cable connecting the system fan to the motherboard.





Fig. 19: Removing the system fan

2. Take out the system fan by removing the screws, located on the back of the chassis, holding the system fan to the chassis.



Fig. 20: Removing system fan screws



Removing the Motherboard

To remove the power supply unit, first remove the rear bezel (see section *Removing the Rear Bezel*), remove the left side cover (see section *Removing the Left Side Cover*), remove all add-in cards (see section *Removing Add-In Cards*), remove the CPU (see section *Removing the CPU* and/or the section *Removing the Pentium 4 CPU*), remove the optional system fan (see section *Removing the System Fan*); then follow the steps below:

1. Disconnect all power cables connected to the motherboard.



Fig. 21: Disconnecting power cables from the motherboard

2. Remove any memory module installed (refer to the motherboard documentation for

instructions on how to remove this component).

3. Remove the screws that hold the motherboard in place and carefully take out the motherboard from the chassis.





Fig. 22: Removing the screws of the motherboard

Removing the Power Supply

To remove the power supply unit, first remove the rear bezel (see section *Removing the Rear Bezel*) and remove the side cover (see section *Removing the Left Side Cover*); then follow the steps below:

- 1. Place the chassis on its side, with the motherboard at the bottom.
- 2. Disconnect the power supply cables from all peripherals and the motherboard.
- 3. Remove the screws that secure the power supply unit to the back of the chassis.





Fig. 23: Removing the power supply unit screws

4. Carefully lift the power supply out of the chassis.

Note: When reassembling the power supply unit, make sure that the voltage selector switch is set correctly before connecting the system to a power strip (surge protector) or grounded AC electrical outlet. If the switch is set incorrectly, the system could become seriously damaged.



Notice

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

This guide contains information protected by copyright. No part of this guide may be photocopied or reproduced in any form or by any means without prior written consent from NEC Computers International BV.

NEC COMPUTERS INTERNATIONAL BV 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.

Copyright © 2002 NEC Computers International BV. All rights reserved.

Packard Bell is a trademark of NEC Computers International BV.

The names of actual companies and products mentioned herein may be trademarks and/or registered trademarks of their respective owners.

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.

Stella (iXtreme) Disassembly Manual

Author: Juan M. Calviño Alonso First Edition: December 2002

Document Part Number: REFDOCS02420200

Version: 1.1

Packard Bell

A division of NEC Computers International BV