Packard Bell
EasyNote B3
Disassembly Manual





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Overview

This document contains step-by-step disassembly instructions for the EasyNote B3 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 EasyNote B3 chassis without notice.

Technician Notes

Only technicians authorized by NEC Computers International B.V. 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:

- n Turn off the power and disconnect the AC adapter, and all cables and peripherals.
- n Remove the battery: Unlock both latches of the battery compartment and slide out the battery.
- n Label all removed connectors. Note where the connector goes and in what position it was installed.
- n Do not disassemble the system into parts that are smaller than those specified in the instructions.

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:

- n Small Philips screwdriver
- n Flat-head screwdriver
- n Hex bolt 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

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

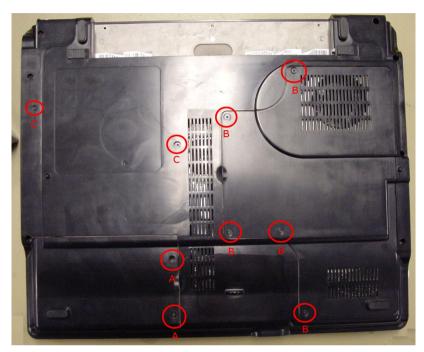
Prima di rimuovere il coperchio del telaio, assicurarsi che il sistema sia scollegato dall'alimentazione, da tutti i collegamenti di comunicazione, reti o linee di modem. Non avviare il sistema senza aver prima messo a posto il coperchio.

System Disassembly

HDD

To remove the HDD, perform the following steps:

- 1. Remove the HDD cover (2 screws marked A on Picture 1).
- 2. Remove the 2 screws holding the HDD bracket.
- 3. Pull back the HDD bracket and gently lift out the HDD.
- 4. Remove the bracket from the HDD (4 screws).



Picture 1. Bottom Base

Memory Module

To remove a memory module, perform the following steps:

- 1. Remove the bottom cover (5 screws marked **B** on Picture 1).
- 2. Push the metal clips holding the SO-DIMM aside.
- 3. Take out the memory module.

Optical Drive

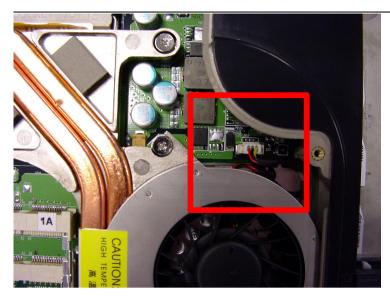
To remove the optical drive, perform the following steps:

- 1. Remove the optical drive bay cover (2 screws marked C on Picture 1).
- 2. Carefully slide out the optical drive.

CPU and Heat Sink Assembly

To remove the CPU and the CPU heat sink assembly, perform the following steps:

- 1. Remove bottom cover (5 screws marked **B** on Picture 1).
- 2. Disconnect the power cable of the fan (Picture 2).
- 3. Loosen the 4 screws for the CPU fan in the order 1 2 3 4 (see <u>Picture 3</u>). Do not loosen the screws completely, just one or two turns of the screwdriver will do.
- 4. Remove the screws in the exact order shown.
- 5. Lift out the heat sink assembly.
- 6. Lift the lever on the CPU socket and lift out the CPU.



Picture 2. Power Cable of Heat Sink Assembly



Picture 3. Heat Sink Assembly Screws

WiFi LAN Adapter (Mini PCI)

To remove the Wireless LAN Adapter (mini PCI), perform the following steps:

- 1. Remove the bottom cover (5 screws marked **B** on Picture 1).
- Push the clips securing the card sideways; the card will 'eject'.
 Disconnect the WLAN antenna (see <u>Picture 4</u>).
 Lift out the mini PCI card.



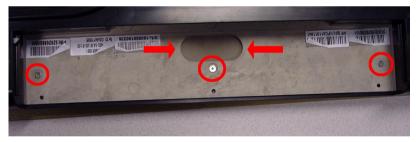
Picture 4. WLAN Mini PCI Adapter and Antenna

Note: The WLAN card has 2 connectors: MAIN and AUX. Please be sure to connect the antenna to the MAIN connector when re-assembling the WLAN card!

Keyboard

To remove the keyboard, perform the following steps:

- 1. Remove the 3 screws located in the battery compartment (Picture 5).
- 2. Push up the keyboard cover in the area indicated with the 2 arrows in Picture 5.
- 3. Remove the 3 screws securing the keyboard shown in Picture 6.
- 4. Gently lift out the keyboard.
- 5. To disconnect the flat cable, loosen the clip and slide out the cable (Picture 7).



Picture 5. Battery Compartment



Picture 6. Keyboard Cover Removed



Picture 7. Keyboard Flat Cable

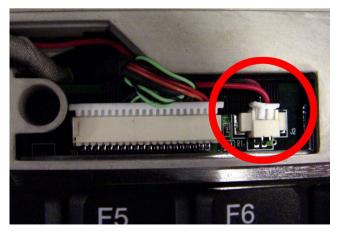
Speakers

To remove the speakers, perform the following steps:

- 1. Remove the keyboard cover as described in the chapter Keyboard.
- 2. Disconnect the speaker cables as shown in <u>Picture 8</u>, <u>Picture 9</u>, and <u>Picture 10</u>.
- 3. Remove the screws securing the speaker (2 screws per speaker).
- 4. Lift out the speakers.



Picture 8. Speaker Cable Connector



Picture 9. Left Speaker Connector



Picture 10. Right Speaker Connector

LCD Screen Assembly

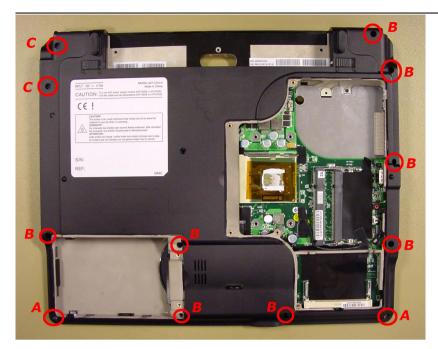
To remove the LCD screen assembly, perform the following steps:

- 1. Remove the keyboard top cover as described in the chapter Keyboard.
- 2. Remove the LCD hinge covers; these are 'clicked' in place on the backside of the notebook. The best way is to leverage them slightly using a flat-head screwdriver.
- 3. Disconnect the LCD cables.
- 4. Disconnect the WLAN antenna. To do so, remove the CPU, the memory, and the mini PCI cover as described in Wifi LAN Adapter (Mini PCI). The antenna is clicked onto the mini PCI card (see Picture 4).
- 5. Note that the antenna might be secured on the main board or CPU fan using tape. Remove the tape temporarily to release the antenna cable.
- 6. Remove the 2*2 screws in the 2 LCD hinges.
- 7. Gently lift the LCD screen assembly, and ensure the WLAN antenna cable is free to move as well.

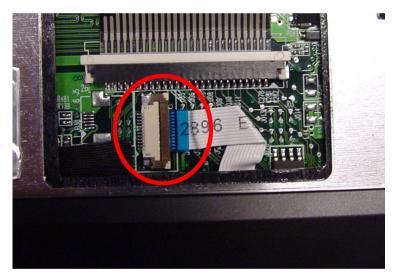
Main Board

To remove the main board, perform the following steps:

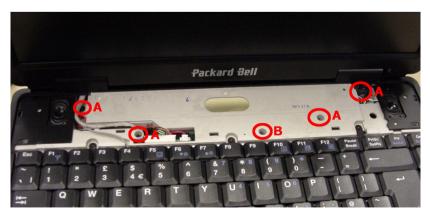
- Follow the steps described in the chapters <u>HDD Optical Drive</u>, <u>CPU and heat Sink Assembly</u>, <u>Keyboard</u>, <u>Speakers</u>, <u>WiFi LAN Adapter (Mini PCI)</u> and <u>Memory Module</u>. Removing the entire LCD lid assembly is not required. However, you will need to disconnect the LCD cables.
- Remove all screws from the bottom base as indicated in <u>Picture 11</u> (screws marked A are long, screws marked B are medium length, and those indicated as C are short).
- 3. Remove the 2 screws located just beneath the LCD hinges.
- 4. Remove the 2 hex bolts of the VGA connector.
- 5. Disconnect the glide pad flat cable: lift the small brown flap holding the flat cable in place and gently pull out the cable. (Picture 12).
- 6. Remove the 5 screws located under the keyboard cover (<u>Picture 13</u>; screw indicated as **B** is longer).
- 7. Remove the top cover.
- 8. Remove the 2 screws securing the main board (see Picture 14).
- 9. Disconnect the translation board.
- 10. Lift out the main board.



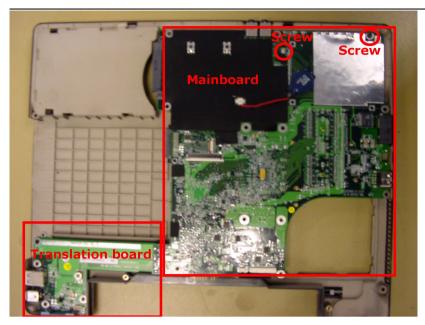
Picture 11. Bottom Base Screws



Picture 12. Glide Pad Flat Cable



Picture 13. Main Board Screws Under Keyboard Cover



Picture 14. Main Board Screws

Translation Board

The translation board is a small PCB with a USB, VGA-Out and AC adapter connector. To remove it, perform the following steps:

- 1. Perform all steps to remove the main board (see chapter Main Board).
- 2. Remove the screw holding the translation board.
- 3. Lift out the translation board.

Modem

To remove the modem, perform the following steps:

- 1. Perform all steps to remove the main board (see chapter Main Board).
- 2. On the main board, the modem is located next to the mini PCI slot.
- 3. Disconnect the modem cable.
- 4. Remove the 2 small screws of the modem board.
- 5. Remove the modem board.

Touchpad Assembly

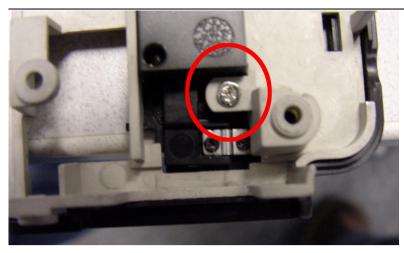
To remove the touchpad assembly, perform the following steps:

- 1. Remove the top cover as described in steps 1 7 in chapter Main Board.
- 2. Remove the 12 screws securing the metal shield to the top cover. Note that 3 screws are covered with foil.
- 3. Remove the metal shield from the top cover.
- Gently push out the touchpad board. Keep in mind that this is glued to the top cover.

LCD Switch

To remove the LCD switch, perform the following steps:

- 1. Remove the top cover as described in steps 1 7 in chapter Main Board.
- 2. Remove the screw of the LCD switch (Picture 15).



Picture 15. LCD Switch

LCD Screen Disassembly

LCD Lid Assembly

To remove the LCD lid assembly, perform the following steps:

- 1. Remove the keyboard top cover as described above.
- Remove the LCD hinge covers; these are 'clicked' in place on the backside of the notebook. The easiest way is to leverage them slightly using a flat-head screwdriver.
- 3. Disconnect the LCD cables.
- 4. Disconnect the WLAN antenna. To do so, remove the CPU, the memory, and the mini PCI cover as described in <u>WiFi LAN Adapter (Mini PCI)</u>. The antenna is clicked onto the mini PCI card (see <u>Picture 4</u>).
- 5. Note that the antenna might be secured on the main board or CPU fan using tape. Remove the tape temporarily to release the antenna cable.
- 6. Remove the 2*2 screws in the 2 LCD hinges.
- 7. Gently lift the LCD screen assembly and ensure the WLAN antenna cable is free to move as well.

LCD Bezel

To remove the LCD bezel, perform the following steps:

- 1. Remove the 2 mylars near the hinges.
- 2. Remove the 2 outer rubber stoppers, located on the top of the screen; the middle rubber does not need to be removed.
- 3. Remove the 4 screws (Picture 16).
- 4. Remove the LCD bezel.

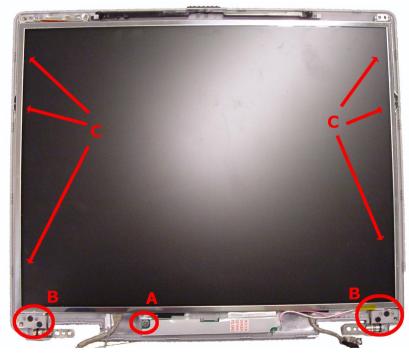


Picture 16. LCD Bezel

Inverter Board

To remove the inverter board, perform the following steps:

- 1. Unplug the cable on the inverter board.
- 2. Remove the screw (screw A in Picture 17).
- 3. Take away the inverter board.



Picture 17. LCD Assembly Without Bezel

LCD Panel

To remove the LCD panel, perform the following steps:

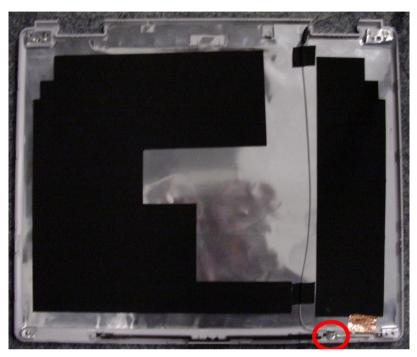
- 1. Remove the 4 screws holding the hinges (marked **B** in Picture 17).
- 2. Remove 2 screws holding the LCD panel brackets (indicated with **C** in <u>Picture 17</u>, you only need to remove the screws in the middle).

- 3. Gently lift out the LCD panel.
- 4. Remove the remaining 2 screws on each side of the LCD panel to remove the brackets.

Wireless Antenna

To remove the wireless antenna, perform the following steps:

- 1. After removing the LCD panel, remove the tape holding the antenna.
- 2. Remove the screw (see Picture 18).



Picture 18. Wireless Antenna Screw

LCD Lid Hook

To remove the LCD lid hook, perform the following steps:

1. After removing the LCD panel, you can take out the hook.



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