

Packard Bell
EasyNote MX
Disassembly Manual



Packard Bell®

Table of Contents

Overview	2
Technician Notes	2
Disassembly	2
Reassembly	2
Required Tools	2
Hazardous Voltage	3
Avoid Electrostatic Discharge	3
Power Supply Unit	3
Battery	4
Hard Disk Drive	4
Optical Disk Drive	5
WLAN Card	5
Memory	6
Processor	7
Keyboard	8
LCD Screen Assembly	9
Main Board	11
Modem	12
Bluetooth (Optional)	13
Touchpad	13
Speakers	14
Subwoofer (Optional)	14
LCD Panel	15
Inverter Board	16
Webcam	16
Webcam Microphone/USB Cable	17
WLAN Antenna	17
Notice	18

Overview

This document contains step-by-step disassembly instructions for the Packard Bell EasyNote MX. The instructions are illustrated where necessary with images of the part that is being removed or disassembled.

Packard Bell reserves the right to make changes to the EasyNote MX without notice.

Technician Notes

Only technicians authorized by Packard Bell 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

When disassembling the system unit, follow these general rules:

- Turn off the power using the power button.
- Disconnect the adapter.
- Remove any SD/MMC card, ExpressCard or dummy card from the device.
- 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

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 casing. Check that everything is properly installed and tightened.

Required Tools

All disassembly procedures can be performed using the following tools:

- Small Phillips and flat-blade screwdriver.

Hazardous Voltage

There is hazardous voltage present inside the notebook when it is connected to an AC supply, even when the notebook'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 the system.

Add-in cards can be extremely sensitive to ESD and always require careful handling. After removing the card from the notebook, 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 the notebook's power switch is OFF. Then, unplug the notebook's AC power cord. Before picking up the device you (un)install, you should wear an anti-static wrist wrap (available at electronic supply stores). Be sure to connect the wrist wrap to an unpainted metal portion of the notebook casing. As an alternative, you can dissipate electrostatic build-up by touching an unpainted metal portion of the notebook casing 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 notebook.

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 the dealer.

WARNING

Ensure that the notebook is disconnected from its power source and from all telecommunications links, networks, or modem lines whenever the casing cover is removed. Do not operate the notebook 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 portátil, el sistema haya sido desconectado de la red de alimentación y de todos los 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 notebook (stroom, modem, netwerk, etc) verbroken worden voordat de behuizing geopend wordt. Zet de notebook 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.

Battery

Perform the following steps to remove the battery:

1. Make sure the power is off.
2. Turn the notebook upside down.

Note: Use an anti-static mat or something soft like a piece of cloth underneath the notebook to prevent damage to the exterior of the notebook.

3. Push the 2 locks in the direction of the arrows to release the battery compartment cover and remove the cover.
4. Take the battery out of the compartment.

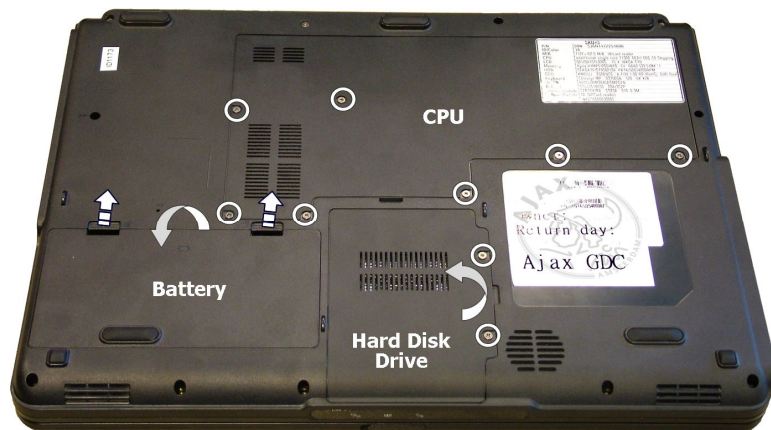


Fig. 1 Removing battery.

Hard Disk Drive

To remove the HDD, first remove the battery (see [Battery](#)) and then perform the following steps:

1. Remove the 2 screws on the hard disk drive cover and remove the cover (see [Fig. 1](#)).
2. Pull the plastic tab on the hard disk drive towards you as shown in [Fig. 2](#) to disconnect the drive.



Fig. 2 Removing hard disk drive.

3. Take the drive out of its compartment.

-
- Remove the 4 screws on the metal bracket to separate it from the hard disk drive.

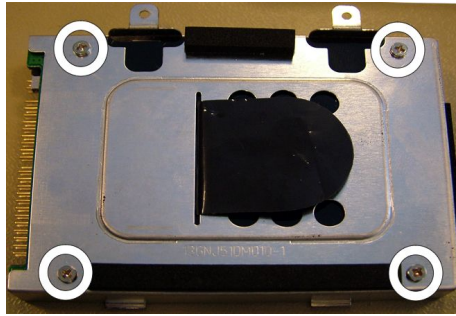


Fig. 3 Location of hard disk drive bracket screws.

Optical Disk Drive

To remove the CD-ROM or DVD drive, first remove the battery (see [Battery](#)), remove the HDD cover (see [Hard Disk Drive](#)) and then perform the following steps:

- Locate and remove the screw securing the optical disk drive in the hard disk drive compartment.



Fig. 4 Location of optical disk drive screw.

- Use the emergency eject hole to open the optical disk drive.
- Take out the optical disk drive from the drive bay.

WLAN Card

To remove the WLAN card, first remove the battery (see [Battery](#)) and then perform the following steps:

- Remove the 7 screws retaining the CPU cover (see [Fig. 1](#)).

2. Disconnect the wireless antenna cables.



Fig. 5 Location of WLAN antenna cable connectors.

3. Release the 2 metal clips securing the WLAN card.

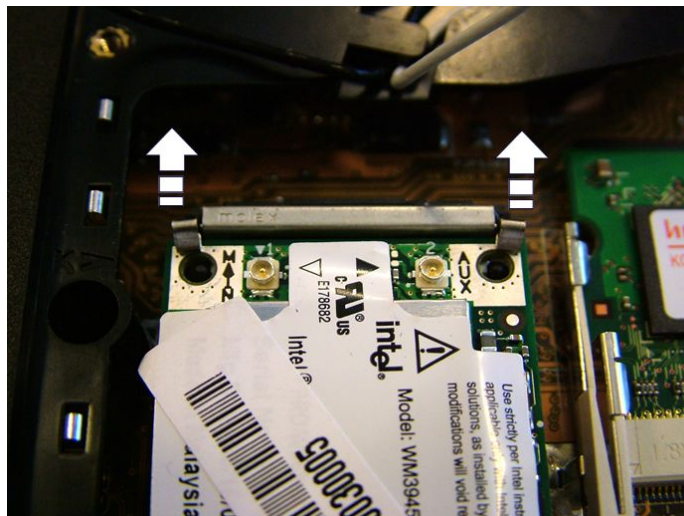


Fig. 6 Releasing metal clips.

4. Take out the WLAN card from the slot.

Memory

To remove the memory installed, first remove the battery (see [Battery](#)) and then perform the following steps:

1. Remove the 7 screws retaining the CPU cover (see [Fig. 1](#)).

-
2. Release the metal clips securing the memory module(s) and remove the module(s).

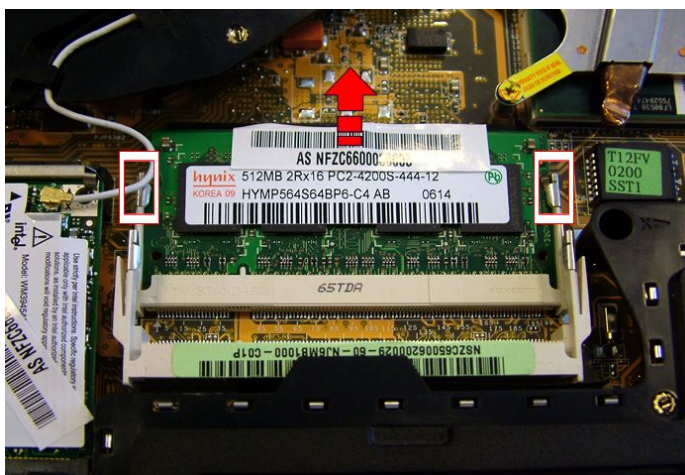


Fig. 7 Removing memory module.

Processor

To remove the CPU, first remove the battery (see [Battery](#)) and then perform the following steps:

1. Remove the 7 screws retaining the CPU cover (see [Fig. 1](#)).
2. Remove the 2 screws holding the CPU fan.

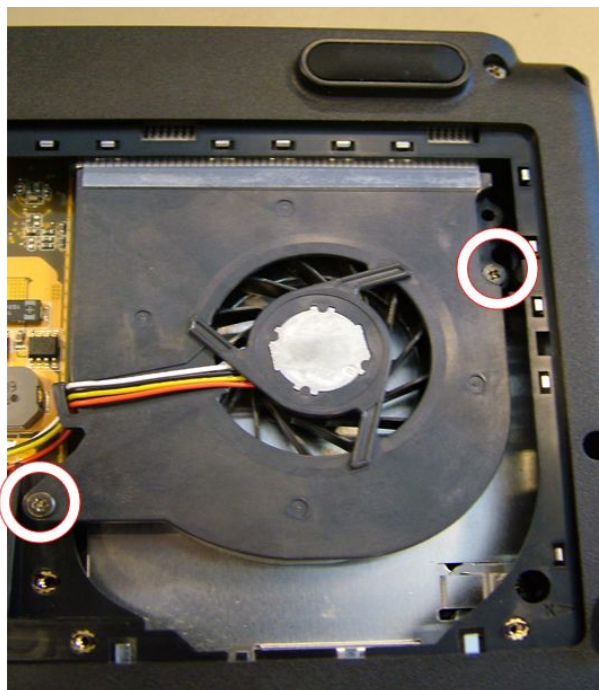


Fig. 8 Location of CPU fan screws.

3. Disconnect the power cable and remove the CPU fan cover.

4. Remove the 4 screws securing the heat sink in designated order.

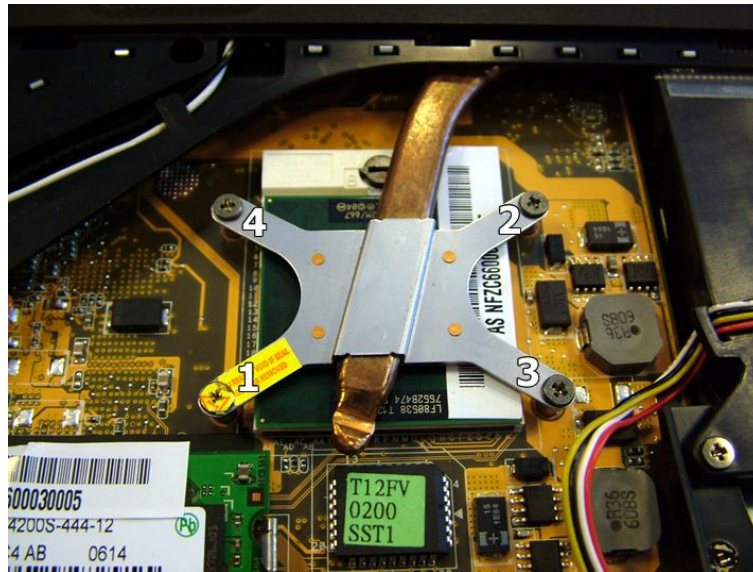


Fig. 9 Location of heat sink screws.

5. Remove the heat sink.
6. Turn the screw in the CPU socket 180 degrees to release the CPU.
7. Take out the CPU.

Keyboard

To remove the keyboard, first remove the battery (see [Battery](#)) and then perform the following steps:

1. Remove the 7 screws retaining the CPU cover (see [Fig. 1](#)).
2. Remove the 4 screws labelled **K>**.



Fig. 10 Location of **K>** screws.

3. Turn the notebook over so the top is facing up.

- There are 4 small slots at the location shown in [Fig. 11](#); insert a small flat-blade screwdriver in each slot to unlatch the keyboard.



Fig. 11 Location of latches securing keyboard cover.

- Tilt the keyboard gently forward.
- Before removing the keyboard entirely, carefully disconnect the keyboard flat cable from the main board.

LCD Screen Assembly

To remove the LCD screen assembly, remove the battery (see [Battery](#)), disconnect the wireless antenna cables (see [WLAN Card](#)), and then perform the following steps:

- Turn the notebook upside down.
- Remove the 4 screws shown in [Fig. 12](#).



Fig. 12 Removing 4 bottom screws.

- Turn the notebook over so the top is facing up.

4. Remove the 4 hinge screws on the back of the notebook securing the LCD screen.



Fig. 13 Location hinge screws.

5. Remove the middle hinge cover.
6. Carefully disconnect the 2 (white) block connectors.

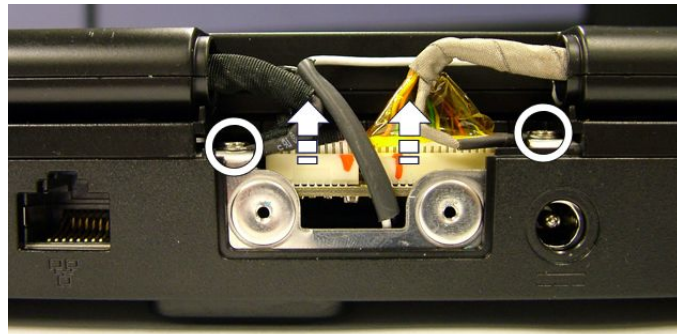


Fig. 14 Location of block connectors and screws.

7. Slide the left and the right hinge cover outward.
8. Remove the screw in the left and the right hinge.

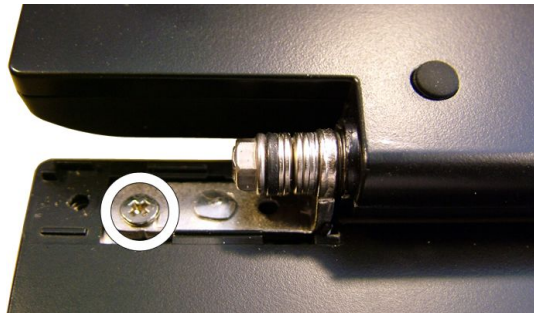


Fig. 15 Location of screw in hinge.

9. Turn the notebook upside down.
10. Remove the tape (if used) securing the WLAN antenna cable and unhook it from the plastic tabs.

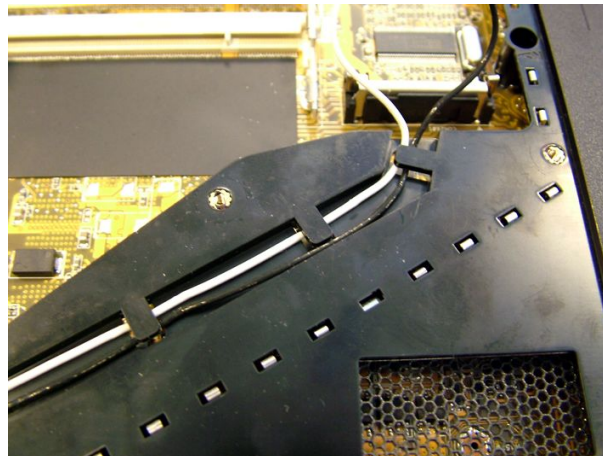


Fig. 16 The wireless antenna cable.

-
11. Lift away the LCD screen assembly.

Main Board

To remove the main board, first remove the battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), and then perform the following steps:

1. Turn the notebook over so the top is facing up.
2. Remove the 4 screws that were covered by the LCD screen and the 4 screws in the heat plate.

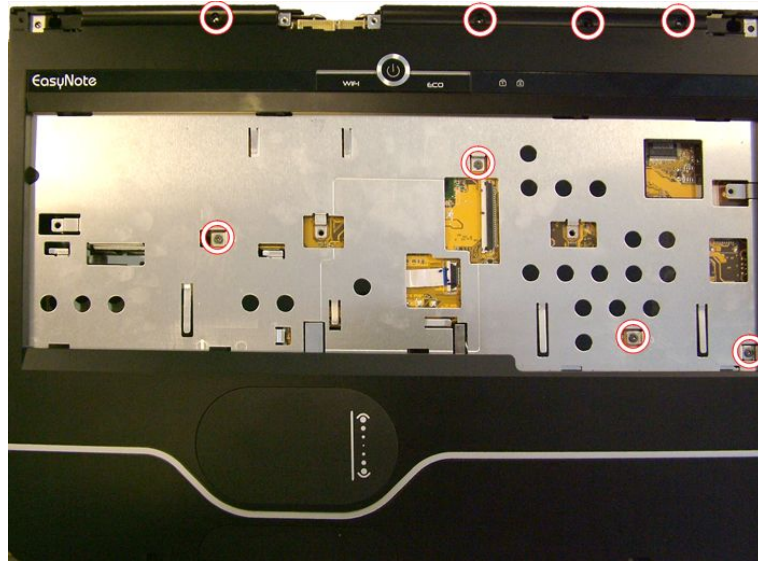


Fig. 17 Location of screws.

3. Turn the notebook upside down.
4. Remove the 4 small screws in the hard disk drive compartment.

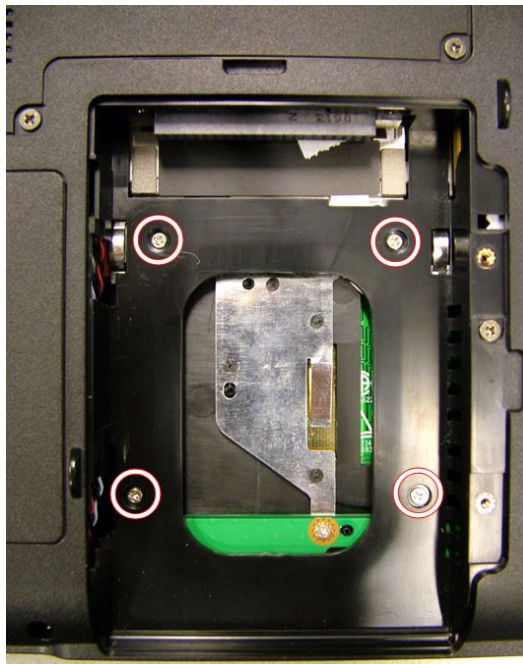


Fig. 18 Location of screws in HDD compartment.

5. Remove the 8 remaining screws from the bottom plate.
6. Remove the dummy card (optional) from the card reader and/or the ExpressCard slot.
7. Carefully remove the top cover.

Note: The top cover has been clicked into place; you might need to use some force to detach it.

8. Disconnect the speaker cable (red/black twisted wires) and the optional subwoofer cable (white/black and red/black twisted wires).

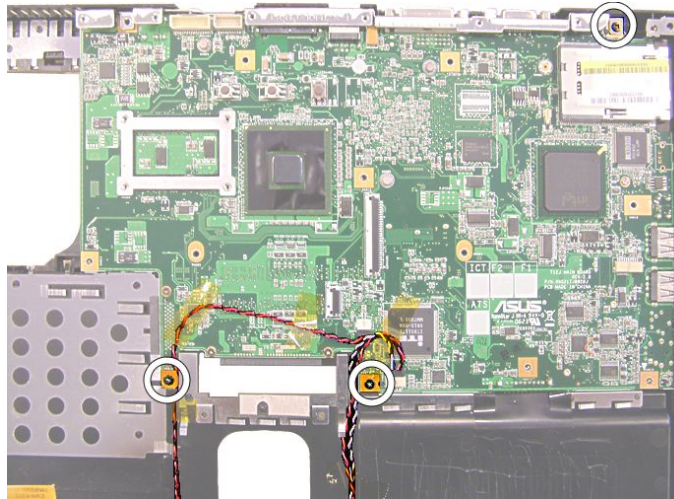


Fig. 19 Location of screws and speakers and subwoofer cables.

9. Carefully disconnect the optional Bluetooth cable from the main board (see [Fig. 21](#)).
10. Remove the 3 screws securing the main board (see [Fig. 19](#))
11. Extract the main board from the casing.
12. Optionally, you might need to remove the modem (see [Modem](#)).

Modem

To remove the modem, first remove the battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), the main board (see [Main Board](#)), and then perform the following steps:

1. Disconnect the modem cable from the modem.
2. Remove the 2 screws securing the modem and take out the modem.

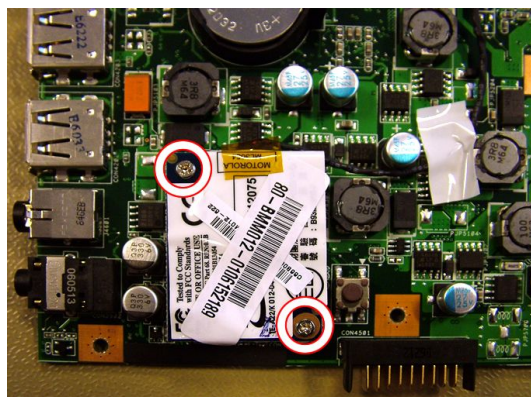


Fig. 20 Location of modem screws.

Bluetooth (Optional)

To remove the optional Bluetooth module, first remove the battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), the main board **up to step 8** (see [Main Board](#)), and then perform the following steps:

1. Carefully disconnect the Bluetooth cable.



Fig. 21 Location of Bluetooth module and connector.

2. Extract the Bluetooth module; the module has been clicked into place (see [Fig. 21](#)).

Touchpad

To remove the touchpad, first remove the battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), the main board top cover **up to step 7** (see [Main Board](#)), and then perform the following steps:

1. Remove the 2 screws securing the touchpad buttons board to the top cover.

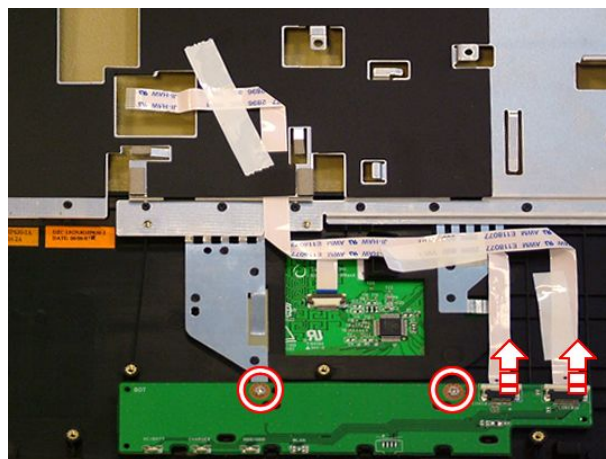


Fig. 22 Location of touchpad buttons board.

2. Disconnect the 2 flat cables and separate the part from the top cover (see [Fig. 22](#)).

Note: The touchpad area and the buttons are separate parts: the touchpad area is part of the top cover. To replace the touchpad area, disconnect all flat cables on the top cover and replace the entire top cover.

Speakers

To remove the speakers, first remove the battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), the main board top cover **up to step 7** (see [Main Board](#)), and then perform the following steps:

1. Disconnect the speaker cable from the main board (see [Fig. 19](#)).
2. Remove the 2 screws on both speakers and remove the speakers.



Fig. 23 Location of speaker assembly screws.

Subwoofer (Optional)

To remove the optional subwoofer, first remove battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), the main board top cover **up to step 7** (see [Main Board](#)), and then perform the following steps:

1. Disconnect the subwoofer cable from the main board.

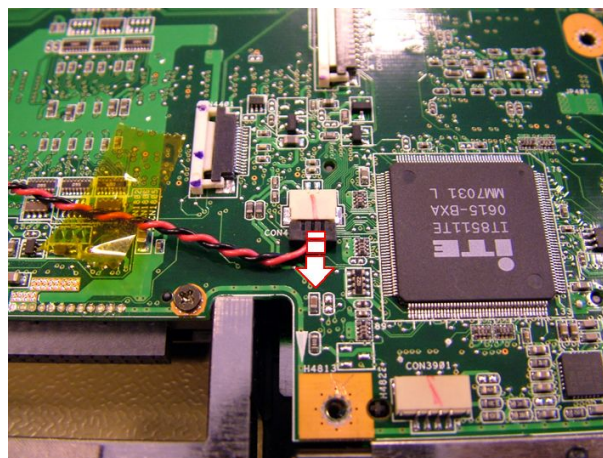


Fig. 24 Disconnecting the subwoofer cable.

2. Remove the 3 screws securing the subwoofer (one of the screws is not visible in [Fig. 25](#)).

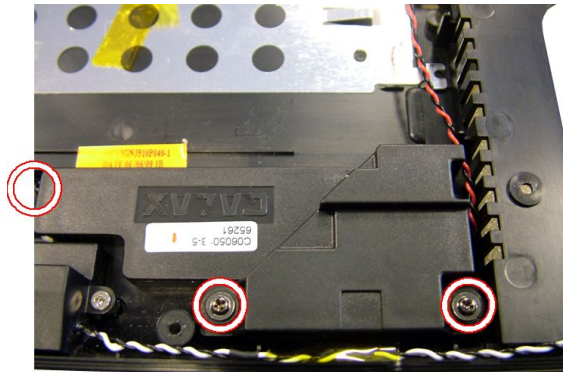


Fig. 25 Location of subwoofer screws.

3. Remove the subwoofer assembly.

LCD Panel

To disassembly the LCD panel, first remove battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), and then perform the following steps:

1. Remove the 5 rubber stoppers.



Fig. 26 Location of rubber stoppers.

2. Remove the 5 screws that appeared after removing the rubber stoppers (see [Fig. 26](#)).
3. Carefully remove the LCD cover which has been clicked into place.
4. Disconnect the power cable from the inverter board.



Fig. 27 Location of inverter board.

-
- Remove the 8 screws securing the LCD and lift out the LCD panel.



Fig. 28 Location of screws securing LCD module.

- Remove the 4 screws on each side of the bracket.
- Remove the top support bracket (usually held in place by the left and the right brackets).
- Disconnect the LCD cable from the back of the panel.

Inverter Board

To remove the inverter board, first remove battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), disassemble the LCD panel **up to step 3** (see [LCD Panel](#)), and then do the following:

- Disconnect all cables from the inverter board (see [Fig. 27](#)).
- Remove the screw securing the inverter board (see [Fig. 27](#)) and extract the board.

Note: The protective Mylar around the inverter board is a separate service part.

Webcam

To remove the webcam, first remove battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), disassemble the LCD panel **up to step 3** (see [LCD Panel](#)), and then do the following:

- Disconnect the cable from the webcam.

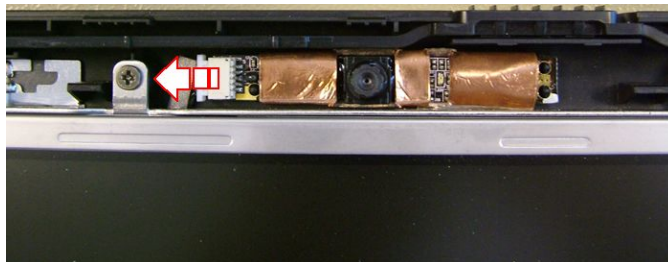


Fig. 29 Location of webcam connector.

- Lift out the webcam.

Webcam Microphone/USB Cable

To remove the webcam microphone and the webcam USB cable, first remove battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), disassemble the LCD panel **up to step 5** (see [LCD Panel](#)), and then do the following:

1. Disconnect the cable from the webcam (see [Fig. 29](#)).
2. Remove the USB cable; the microphone cable is attached to the same cable.

WLAN Antenna

To remove the wireless antenna, first remove battery (see [Battery](#)), the HDD (see [Hard Disk Drive](#)), the CD-ROM or DVD drive (see [Optical Disk Drive](#)), the wireless network card (see [WLAN Card](#)), the installed memory (see [Memory](#)), the CPU (see [Processor](#)), the keyboard (see [Keyboard](#)), remove the LCD screen (see [LCD Screen Assembly](#)), disassemble the LCD panel **up to step 5** (see [LCD Panel](#)), and then do the following:

1. Remove the wireless antenna from the shielding foil in the LCD cover.

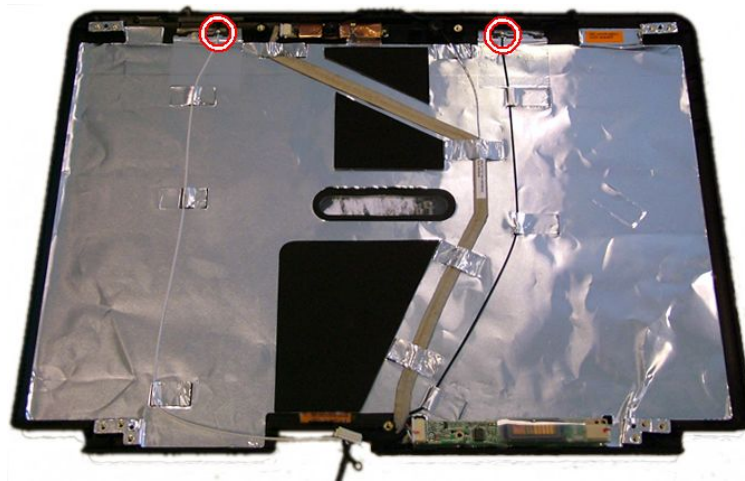


Fig. 30 Location WLAN antenna cables.

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 Packard Bell B.V.

PACKARD BELL B.V. SHALL NOT BE HELD 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 © 2006 Packard Bell B.V. All rights reserved.

Packard Bell is a trademark of Packard Bell B.V.

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.

EasyNote MX Disassembly Manual

Author: Wouter Willemse & Juan M. Calviño

First Edition: August 2006

Version: 1.0

Part Number: 7417600000

Packard Bell B.V.

www.packardbell.com