# Packard Bell EasyNote MB Series

# Disassembly Guide



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#### **Overview**

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

Packard Bell reserves the right to make changes to the EasyNote MB series 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 Instructions**

When disassembling the unit, follow these general rules:

- n Turn off the power and disconnect all cables.
- n Label all removed connectors. Note where the connector goes and in what position it was installed.
- n Do not disassemble the unit 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 product. Check that everything is properly installed and tightened.

## **Required Tools**

All disassembly procedures can be performed using the following tools:

- n Phillips (#1 bit) screwdriver
- n Hex bolt (5 bit) screwdriver
- n Small flat blade screwdriver

## **Battery**

1. Push aside the 2 clips securing the battery.



Fig. 1 Removing the battery.

2. Pull out the battery

## Hard disk

- 1. Remove the battery
- 2. Remove the screw securing the hard disk cover.



Fig. 2 The bottom of the notebook.

Note: the screw does NOT stay attached to the cover.

- 3. Take away the HDD cover
- 4. Pull the hard disk to the left and lift it out.

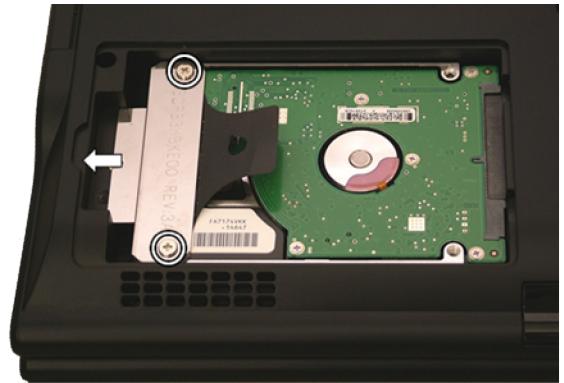


Fig. 3 The HDD compartment..

5. Remove the 2 screws of the HDD bracket and take away the bracket.



Fig. 4 The HDD and its bracket.

**Note:** The EasyNote MB series use S-ATA hard disks. S-ATA hard disks have no master/slave settings (so no jumpers needed).

## **Optical Drive**

- 1. Remove the battery
- 2. Remove the 2 screws securing the optical drive.



Fig. 5 The optical drive screws.

3. Use the emergency-eject to open the drive tray. Pull the drive out. Close the tray again.

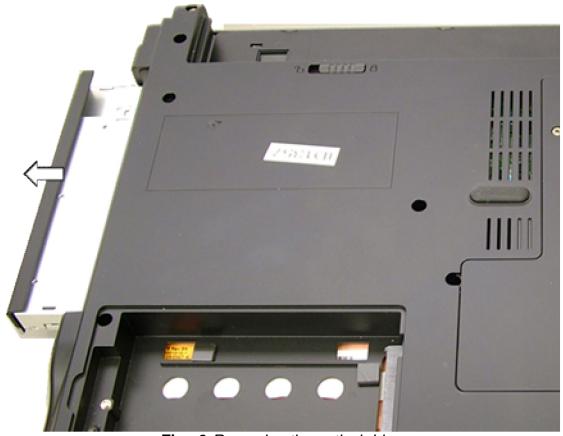


Fig. 6 Removing the optical drive.

4. Remove the 2 brackets from the optical drive (1x 2 and 1x 1 screws).

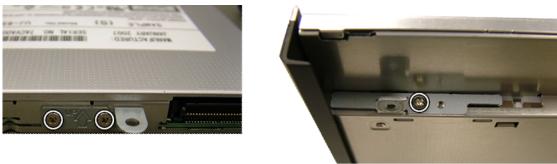


Fig. 7 The optical drive brackets.

5. Remove the bezel: push the 2 clips to push the bezel loose

Fig. 8 Removing the optical drive bezel.

## **Memory Modules**

- 1. Remove the battery.
- 2. Remove the 4 screws for the large cover on the bottom of the unit.



Fig. 9 The bottom base screws.

Note: the screws stay attached to the cover.

3. Lift the door out.

4. The memory module(s) are located in the bottom middle of the compartment. To release the modules, push the metal clips aside. This will release the module

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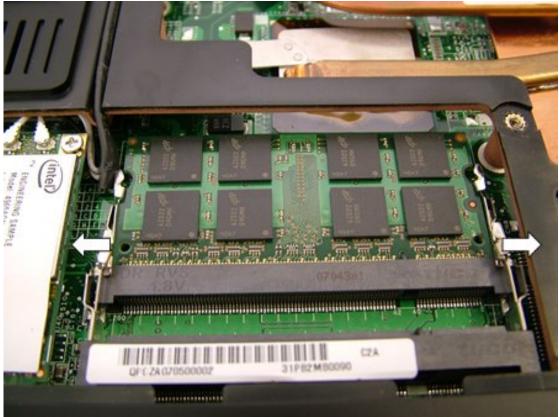


Fig. 10 Removing the memory modules.

**Note:** it may be necessary to push the WLAN antenna aside to have enough clearance for the left-side clip of the bottom SO-DIMM slot.

5. Lift the memory module out.

**Note:** In case you have 2 memory modules installed, you will need to remove the top memory module before you can remove the module in the bottom memory slot.

#### Wireless LAN card

- 1. Remove the battery.
- 2. Remove the 4 screws for the large cover on the bottom of the unit.



Fig. 11 The bottom base screws.

Note: the screws stay attached to the cover.

- 3. Lift the door out.
- 4. The Wireless LAN adapter is located to the left side. Remove the two screws securing the card and lift the card up.



Fig. 12 Removing the wireless card..

- Now disconnect the WLAN antenna. Note the colour of each wire that is attached to each connector, to ensure proper reconnection during reassembly.
- 6. Remove the card from its slot.

**Note:** dependent on the model there may be 2 or 3 antennas. Some cards use 'main' and 'aux' instead of numbers to indicate the antenna connectors.

## **TV-Card (optional)**

- 1. Remove the battery.
- 2. Remove the 4 screws of the cover on the bottom base (see Fig 9).

Note: the screws stay attached to the cover.

- 3. Lift the door out.
- 4. The TV-Card is located to the right bottom. Remove the screws securing the card and lift it up.



Fig. 13 The TV card.

- 5. Disconnect the antenna cable.
- 6. Lift out the card.

## **Intel Turbo Memory Module (optional)**

1. An Intel Turbo Memory module can be used instead of a TV-card. Disassembly instructions are therefore identical, except that there is no antenna on a Turbo Memory Module.

#### **CPU**

- 1. Remove the battery.
- 2. Remove the 4 screws of the cover on the bottom base (see



Fig. 9Fig 9).

Note: the screws stay attached to the cover.

- 3. Lift the door out.
- 4. Remove the 2 screws securing the fan.
- 5. Disconnect the fan power cable.
- 6. Lift out the fan.
- 7. Remove the 6 screws of the heatsink in the order engraved on the metal of the heatsink (1 through 6).

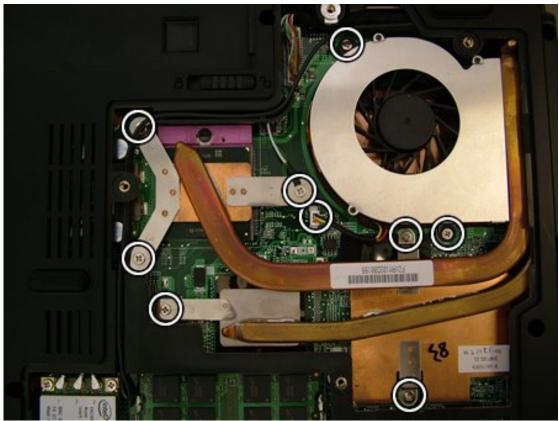


Fig. 14 The heatsink.

8. Lift out the heatsink.



Fig. 15 The CPU.

- 9. Turn the screw in the CPU socket 180 degrees.
- 10. Lift the CPU out.

**Note:** The socket used on the EasyNote MB65, MB66, MB85 and MB86 resembles the CPU socket used for older Celeron M, Pentium M, Core Duo and Core 2 Duo systems a lot. However, it is not pin-compatible! Only "Socket P" CPUs can be used.

## **Keyboard**

1. Remove the battery

2. Push back the 4 clips securing the keyboard.



Fig. 16 The keyboard clips.

- 3. Lift up the keyboard.
- 4. Disconnect the flatcable

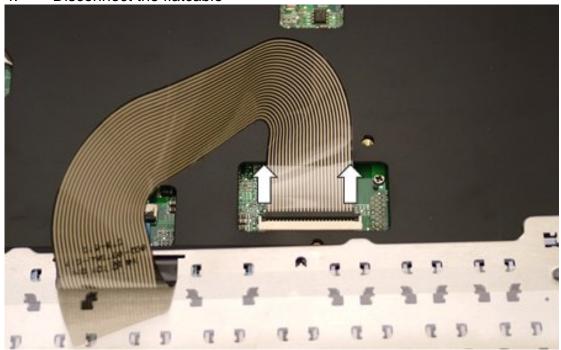


Fig. 17 The keyboard flatcable.

5. Lift out the keyboard.

## **LCD Assembly**

- 1. Remove the battery.
- 2. Disconnect the WLAN antenna as described above.
- 3. Remove screw '3' from the heatsink to loosen the grounding cable.
- 4. Disconnect the LCD Cable.

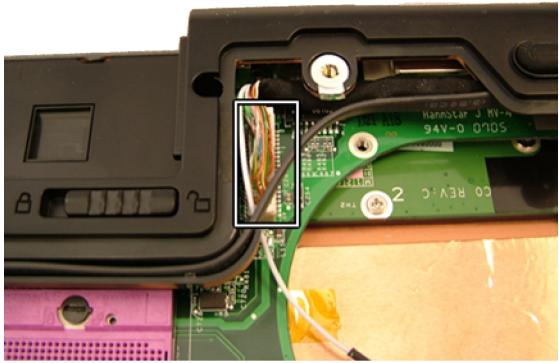


Fig. 18 The LCD cable.

- 5. Remove two screws located near the edges on the rear side bottom of the unit.
- 6. Remove the two screws from the rear side of the unit.





Fig. 19 The bottom of the notebook.

- 7. Remove the 2 hinge covers. You can leverage them loose with a small flathead screwdriver.
- 8. Open the LCD panel to an upright position (90 degree angle with the base unit) and lift the panel out.

**Note:** Pull the WLAN antenna and LCD cable through the hole in the top cover one by one (there is no room to pull them through at the same time). During disassembly, it is easiest to first put the LCD cable back and the WLAN antenna second to ensure the WLAN antenna is guided to the right place.

#### **LCD Panel**

- 1. Remove the LCD Assembly as described above
- 2. Remove the 6 rubber stoppers in the LCD bezel.

Note: the 2 rubber stoppers used on the upper corners are different from the other 4 rubbers.

3. Remove the screws in the bezel.



Fig. 20 The LCD panel.

- 4. Remove the LCD bezel; it is clicked in place.
- 5. Disconnect both cables from the inverterboard, and the cable connected to the webcam.
- 6. Lift out the LCD panel.
- 7. Remove the 6 screws (3 at each side) to remove the LCD brackets.

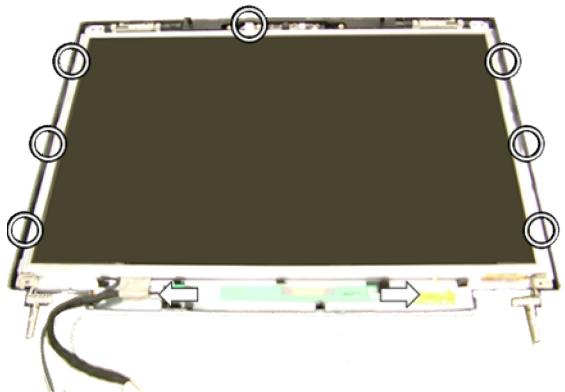


Fig. 21 The LCD brackets and the inverterboard.

## **Webcam**

- 1. Remove the LCD Assembly as described above
- 2. Remove LCD bezel as described above.
- 3. Disconnect the cable from the webcam.

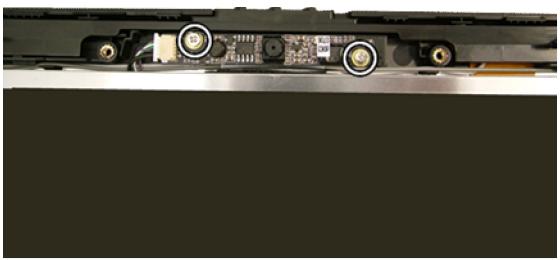


Fig. 22 The webcam.

- 4. Remove the 2 screws from the webcam module.
- 5. Lift out the webcam module.

#### Inverterboard

- 1. Remove the LCD Assembly as described above
- 2. Remove LCD bezel as described above.
- 3. Disconnect the 2 cables from the inverterboard.
- 4. Remove the screw from the inverterboard.
- 5. Remove the inverterboard; it is glued in place.

#### **Wireless Antenna**

- 1. Remove the LCD Assembly and Panel as described above
- 2. Remove the 2 screws of both the wireless antenna clips.



Fig. 23 One of the wireless antenna clips.

2. Peel the optional 3rd antenna loose; it is glued to the metallic foil.



Fig. 24 The LCD back panel.

3. Release the antenna from the metallic foil.

## **Top Cover**

- Remove the battery, hard disk, optical drive, memory modules, Wireless LAN, TV-Card or Intel Turbo Memory, CPU, keyboard and LCD Assembly as described above.
- 2. Remove the remaining screws in the bottom base (8 long screws, 2 shorter screws in the hard disk bay and 2 in the optical drive bay).



Fig. 25 The bottom of the notebook.

3. Remove the 2 screws from the top cover.

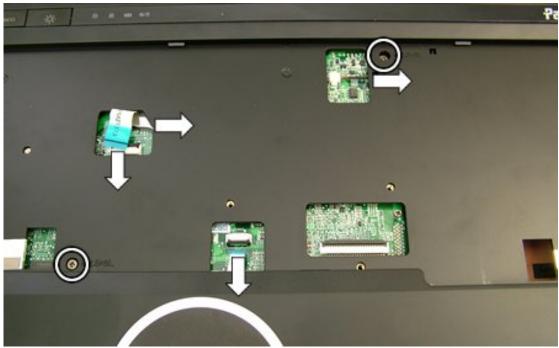


Fig. 26 The keyboard area.

4. Disconnect the three cables accessible from the top cover.

5. Remove the top cover.

## Mainboard

- 1. Remove the top cover, as described above.
- 2. Remove the 2 hex-bolts adjacent to the DVI-I Connector.
- 3. Disconnect all cables from the mainboard.

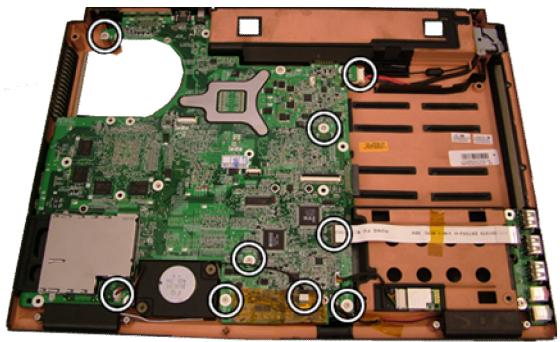


Fig. 27 The bottom base assembly.

4. Remove the 6 screws marked with a screw-sign on the mainboard.

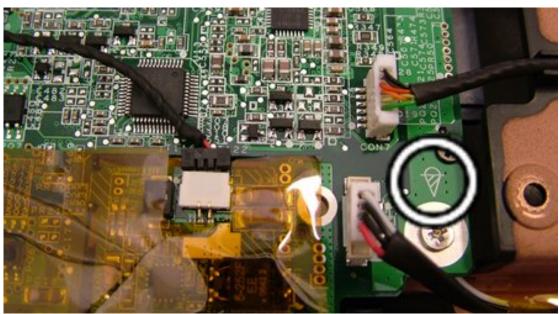


Fig. 28 The screw-sign icon.

#### **Bluetooth Module**

- 1. Remove the top cover as described above.
- 2. Disconnect the Bluetooth cable from the Bluetooth module.

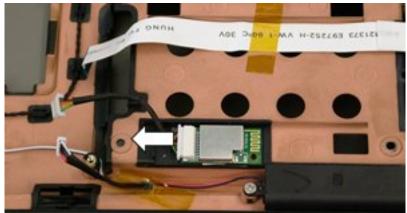


Fig. 29 The Bluetooth cable.

3. Take out the Bluetooth module; it is glued in place.

#### **USB** and Audio board

- 1. Remove the top cover as described above.
- 2. Disconnect the flatcable from the USB/Audio board.
- 3. Remove the USB/Audio board screw and lift out the board.



Fig. 30 The audio board.

## **DC Jack**

- 1. Remove the top cover as described above.
- 2. Disconnect the DC jack connector from the mainboard.

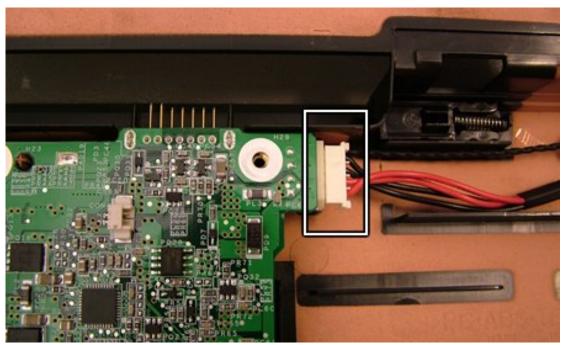


Fig. 31 The DC jack connector.

3. Remove the metal shield covering the DC Jack and modem connector.

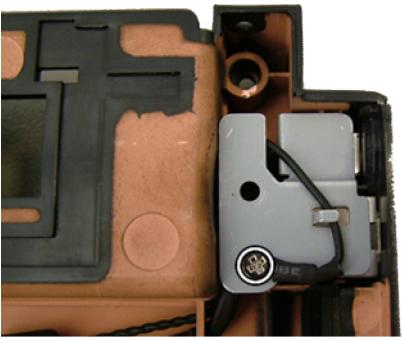


Fig. 32 The small metal shield.

4. Lift the DC Jack from its bracket.

#### **Modem Connector**

- 1. Remove the mainboard as described as above.
- 2. Remove the metal shield covering the DC Jack and modem connector.
- 3. Lift the modem connector from its bracket.
- 4. Remove the modem cable from the clips securing it in place.

## **Speakers and Subwoofer**

The speakers and subwoofer are shipped as part of the bottom base and do not require further disassembly.

## **Button and LED Board and Touchpad**

The button/LED board and touchpad are shipped as part of the top cover and do not require further disassembly.



#### **Reassembly Notes**

When reassembling the device, please take notice of the order in which the parts can be put back and reattached.

### **Notice**

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