# EasyNote V / MV

# **Disassembly Manual**

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#### Overview

This document contains step-by-step disassembly instructions for the EasyNote V / MV chassis. 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 chassis without notice.

#### **Disassembly Instructions**

When disassembling the system unit, follow these general rules:

- Turn off the power.
- Disconnect the AC adapter.
- Remove the battery.
- 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.

## **Base Assembly**

### Battery

1. Slide aside the two latches and slide out the battery.



### Hard Disk Drive

- 1. Remove the battery as described in chapter <u>Battery</u>.
- 2. Remove the 2 screws and lift the HDD cover.





3. Pull the hard disk bracket leftwards.



- 4. Lift out the hard disk.
- The hard disk is mounted inside the bracket. 5.
- 6. To remove the bracket, remove the 4 screws (2 on each side).



## **Optical Disc Drive**

- Remove the battery as described in chapter <u>Battery</u>.
  Remove the two screws indicated below.



3. Pull out the optical disk drive.

### **Memory Modules**

- Remove the battery as described in chapter <u>Battery</u>.
  Remove the 4 screws of the CPU cover.



- Note: The CPU cover on the EasyNote MV35, MV51 and MV61 is secured with 7 screws.
- 3. The memory modules can be found under a flap of EMI protection material.



Note: The EasyNote MV35, MV51 and MV61 do not have the EMI shielding material. The location of the SO-DIMM modules is identical, however.

4. Lift the flap to access the SO-DIMM slots.

5. Push the metal clips aside to eject the memory modules.



- **Note:** The EasyNote V / MV series use DDR2 SO-DIMMs. These cannot be mixed or interchanged with DDR SO-DIMMs.

- **Note:** On the EasyNote V5/MV45, V7/MV85, MV46, MV51 and MV61 series, memory modules are often placed in pairs to improve performance (Dual Channel memory).

### **Bluetooth Module (Optional)**

- 1. Remove the battery as described in chapter <u>Battery</u>.
- 2. Remove the HDD cover (2 screws).



3. Remove the screw holding the Bluetooth module.



4. Lift the Bluetooth module and disconnect the flat cable.



### CPU

- Remove the battery as described in chapter <u>Battery</u>.
  Remove the CPU cover (see chapter <u>CPU</u>).
  Remove the wireless antenna taped on top of the heatsink.
  Remove the heatsink assembly screws.



- **Note:** Heatsink design and screw location differs on EasyNote MV51 / MV61 and the EasyNote MV35. However, the way to disassemble the heatsink is the same.





- 5. Lift out the heatsink assembly.
- 6. Disconnect the power cable of the heatsink assembly.
- 7. To release the CPU from the CPU socket, rotate the screw half a twist.



8. Now take out the CPU from the socket.

- **Note:** Please make sure to release and tighten the screws for the heatsink in the order designated in the image. This helps even out the pressure.

- **Note:** First release all screws in the indicated order halfway. Remove the screws completely in the second pass.

- **Note:** For the EasyNote V5/MV45, V7/MV85, MV46, and MV35 series, the CPU socket is identical to earlier Intel Pentium M or Celeron M designs. However, it is **not** pin-compatible. It is not possible to run Intel Pentium M or Celeron M CPUs in these notebooks.

### Wireless LAN Card

- 1. Remove the battery as described in chapter <u>Battery</u>.
- 2. Remove the CPU cover as described in <u>CPU</u>.

3. Remove the 2 screws that secure the Wireless LAN card (mini-PCI Express).



- 4. Disconnect the WLAN antenna.
- 5. Lift out the card.

- **Note:** Some models have been equipped with a double antenna. Sometimes there can also be a second wire which is NOT a secondary WLAN antenna, but the connection cable (usually black) for the optional TV card. Note down how the cables are connected to make the reassembly easier.

- Note: Please make sure to connect the WLAN antenna to the 'main' connector.

## **TV Card (optional)**

This is identical to the Wireless LAN card. The TV card, if supplied, is located adjacent to the WLAN card in the second mini-PCI Express slot.

## Keyboard

There are two ways to remove the keyboard. Try them in the order below.

- 1. Remove the battery as described in chapter Battery.
- 2. Slide out the keyboard cover; slide it towards the right-hand side of the notebook (the power button is located on the right).

3. Lift up the keyboard and disconnect the flat cable. Push the brown holder to release the cable from the connector.



It can be that there is too little clearance for step 1. In that case, you can use the following method:

- 1. Remove the battery as described in chapter <u>Battery</u>.
- 2. There are 6 clips on the top of the keyboard holding it in place. Leverage them using a flat blade screwdriver to release the keyboard.



3. Lift up the keyboard and disconnect the flat cable.

### **Speakers**

- **Note:** Some models of this notebook have an optional subwoofer. Instructions for replacing the subwoofer can be found below.

- 1. Remove the battery as described in chapter Battery.
- 2. Remove the keyboard cover as described in chapter Keyboard.
- 3. Remove the two screws of the speaker (left or right).



4. Disconnect the left speaker cable.



5. Disconnect the right speaker cable.



6. Lift out the speaker.

- **Note:** Left and right speakers can be removed individually. Each speaker is a separate service part and they are not interchangeable.

#### Mainboard

- 1. Follow the above steps for all, except speakers and Bluetooth.
- 2. Disconnect the speaker cables.
- 3. Remove the LCD assembly as follows:

a. The WLAN antenna is taped on the top cover. Free the antenna cable from the tape.



- b. The WLAN antenna is guided via the opening for the CPU fan. Pull the antenna through the hole. Now the antenna should be entirely cleared.
- c. Remove the LCD hinge covers. Fold the screen backwards completely and push the hinge covers backwards.
- d. Disconnect the LCD connectors.



e. Remove the 4 screws securing the LCD hinges (2 at each side).



- f. You can now lift off the LCD assembly.
- 4. Remove the 15 screws on the bottom and one of the back side above the Kensington lock.



- Note: On the EasyNote MV46, MV51, MV61 and MV35 you have to remove 17 screws.
- 5. Remove 4 screws indicated below.



6. Disconnect the flat cable of the touchpad.



7. You can now remove the bottom base.

8. Disconnect all connectors from mainboard (Bluetooth, subwoofer and USB/TV-Out/DC-board.



9. Remove the three screws securing the mainboard.



- 10. Lift out the mainboard. You can now disconnect the second connector from the USB/TV-Out/DCboard.
- 11. The modem cable is connected to the modem on the top side of the mainboard, adjacent to the SO-DIMM slots. Disconnect the modem cable and remove the screws of the modem.





12. Now lift out the modem.



### Modem

To remove the modem, follow all steps outlined above for the <u>mainboard</u>. The modem in the EasyNote MV51, MV61 and MV35 can be removed much easier:

- 1. Remove the CPU cover (see chapter <u>CPU</u>).
- 2. The modem is located next to the WLAN card; remove the screw that secures the modem.



3. Disconnect the modem cable and take out the modem.

#### Subwoofer

- 1. Follow all steps for the mainboard up to step 8.
- 2. Disconnect the cable for the subwoofer
- 3. You can now lift out the subwoofer.



### USB/TV-Out/DC-Board

- 1. Follow all steps for the mainboard up to step 8.
- 2. Remove the screw holding the USB/TV-Out/DC-Board.



3. Lift the board and disconnect both cables.

### **TV Aerial Connector (Optional)**

- 1. Follow all steps outlined above for the USB/TV-Out/DC-Board.
- 2. Remove the 2 screws holding the aerial connector.



### Touchpad

- 1. Follow all steps for the mainboard up to step 8.
- 2. Push the touchpad from the top cover; it is glued.

- **Note:** The touchpad buttons are not part of the touchpad, but they are integrated on the mainboard. The movable parts are integrated in the top cover.

## LCD Assembly

- 1. Remove the battery as described in chapter <u>Battery</u>.
- 2. Remove the keyboard as described in chapter Keyboard.
- 3. Open the CPU cover and disconnect the WLAN antenna (see Wireless LAN Card)
- 4. The WLAN antenna is taped on the top cover. Free the antenna cable from the tape.



- 5. The WLAN antenna is guided via the opening for the CPU fan; pull the antenna through the hole. Now, the antenna should be entirely cleared.
- 6. Remove the LCD Hinge covers; Fold the screen backwards completely and push the hinge covers backwards.
- 7. Disconnect the LCD connectors.



8. Remove the 4 screws securing the LCD hinges (2 at each side).



9. You can now lift off the LCD assembly

- **Note:** During re-assembly, mind the small grounding flap that is held in place in between the LCD hinge.

## LCD Panel

- 1. Follow the steps described in LCD Assembly.
- 2. Remove the two mylars in the lower corners of the LCD bezel, and remove the screws that are hidden under them.



- 3. Remove the bezel (it is clicked in place and it can require quite some power to remove it).
- 4. The LCD panel is secured with 10 screws (4 top, 4 in the hinges and 2 in the bottom in the inverter board). Remove all screws.
- 5. Disconnect the LCD power cable from the inverter board.
- 6. You can now lift out the LCD panel.
- 7. On each side, a bracket is secured with 4 screws. Remove all screws to remove the bracket.

### **Inverter Board**

- 1. Follow the steps described in <u>LCD Assembly</u>.
- 2. Follow the steps to remove the <u>LCD panel</u> up till step 6.



3. The inverter board is secured with one screw now. Remove this screw and lift out the inverter board.



### **WLAN Antenna**

- 1. Follow the steps described in <u>LCD Assembly</u>.
- 2. Follow the steps to remove the <u>LCD panel</u> up till step 6.
- 3. The WLAN antenna is connected to a metal clip in the top of the LCD lid. Disconnect it, and pull the tape which ties the antenna to the metal shielding in the LCD cover loose.
- 4. You can now remove the WLAN antenna.

### **LCD** Latch

- 1. Follow the steps described in LCD Assembly.
- 2. Follow the steps to remove the <u>LCD panel</u> up till step 6.
- 3. You can now take out the LCD latch.

#### Notice

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