

Packard Bell
EasyNote L
Disassembly Manual



Packard Bell®

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Overview

This document contains step-by-step service instructions for the EasyNote L. 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 L 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:

- Turn off the power and disconnect all cables and peripherals.
- Label all removed connectors. Note where the connector goes and in what position it was installed.
- 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 casing. Check that everything is properly installed and tightened.

Required Tools

All disassembly procedures can be performed using the following tools:

- PH 0 x 40 Philips screwdriver
- 4.0 x 60 Flat-bladed screwdriver
- 2.0 x 30 Flat-bladed screwdriver
- SW 5.0 Spacer screwdriver
- Small tweezers

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 anti-static wrist wrap (available at electronic supply stores). Be sure to connect the wrist wrap to an unpainted metal portion of the computer casing. As an alternative, you can dissipate electrostatic build-up by touching an unpainted metal portion of the computer 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 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 casing 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 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 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 Battery

Perform the following steps to remove the battery:

- i. Make sure to power off the EasyNote L.
- ii. Disconnect the AC adapter and all peripherals.
- iii. Turn the unit over.
- iv. Unlock the battery and slide it out.



Fig. 1 Releasing the battery.

Removing the Memory Module

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

1. Remove the screw securing the memory compartment cover.



Fig. 2 Memory compartment cover screw location.

- ii. Release with your fingers the side locks located on the memory slot. As you release the locks, the module will automatically pop up and stay in a 45° angle position.

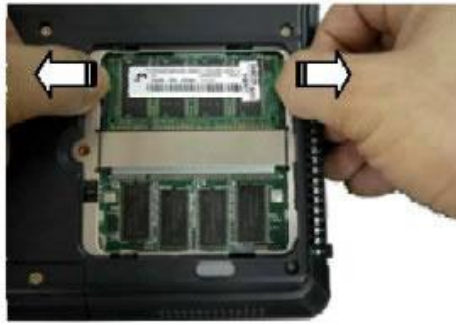


Fig. 3 Releasing the memory side locks.

- iii. Pull out the memory module from its slot.

Removing the Hard Disk Drive

To remove the hard disk drive, first remove the battery (see [Removing the Battery](#)), then perform the following steps:

1. Remove the 2 screws securing the hard disk drive compartment cover.



Fig. 4 Removing the hard disk drive cover.

2. Remove the 2 screws that secure the hard disk drive.
3. Carefully pull the Mylar to slide the hard disk drive assembly out of the bay.

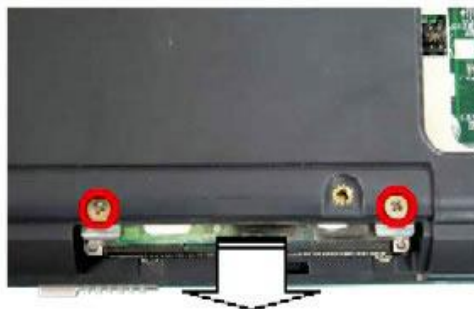


Fig. 5 Removing the HDD assembly.

Removing the Keyboard

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

1. Release the keyboard cover from the rear of the notebook.



Fig. 6 Releasing the keyboard cover.

2. Open the notebook and tilt the LCD module entirely backward.
3. Carefully remove the keyboard cover.



Fig. 7 Lifting the keyboard.

4. Pull the keyboard up with your fingertips. Be careful not to break the keyboard locks. Since the keyboard is connected to the computer through a flat cable, you have to be careful not to break this cable.
5. With the keyboard lying on top of the palm rest, disconnect the keyboard flat cable from the unit (see [Fig. 8](#)). To do so:
 - i. Set the flat cable connector on the main board in the unlocked position (#1, [Fig. 9](#)).
 - ii. Remove the keyboard cable from the keyboard connector on the main board (#2, [Fig. 9](#)).



Fig. 8 Disconnecting the keyboard flat cable.

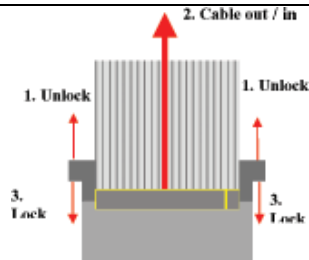


Fig. 9 Disconnecting the flat cable.

Removing the Optical Disk Drive

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

1. Remove the 2 screws securing the optical disk drive.



Fig. 10 Releasing the optical disk drive.

2. Flip over the unit, open the LCD and push the optical disk drive module out from the base unit.

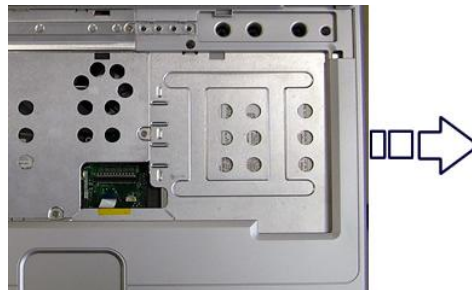


Fig. 11 Pushing the optical disk drive out.

Removing the LCD Module

To remove the LCD module, first remove the battery (see [Removing the Battery](#)), remove the keyboard (see [Removing the Keyboard](#)), then perform the following steps:

1. Remove the 6 screws securing the heat plate.

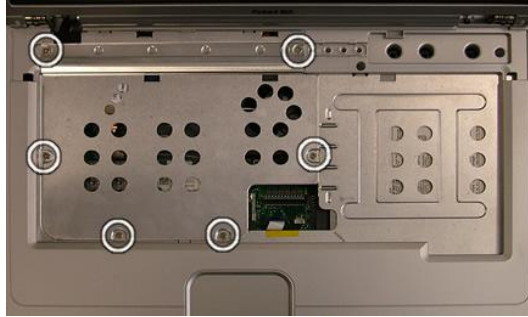


Fig. 12 Removing the heat plate screws.

2. Close the LCD, flip over the notebook and remove the 2 screws securing the LCD module.



Fig. 13 Removing the LCD module screws (bottom).

3. Remove the 2 screws on the back.



Fig. 14 Removing the LCD module screws (rear).

4. Open up the LCD and gently disconnect the LCD power cable and the 2 WLAN antenna cables.



Fig. 15 Location WLAN antenna cables and LCD power cable.

Note

The black WLAN antenna cable is on the MAIN connector, the grey one on the AUX connector.

5. Carefully lift the LCD module away from the unit.

Removing the LCD Panel

To remove the LCD panel, first remove the LCD module (see [Removing the LCD Module](#)), then perform the following steps:

1. Use a pin to remove the rubber covers on the LCD module.



Fig. 16 Location of rubber covers and screws.

2. After removing the rubber covers, remove the screws and release the LCD cover carefully.
3. Remove the inverter board after unscrewing the screw and disconnecting all connectors.



Fig. 17 Removing the inverter board.

4. Carefully lift the LCD panel.
5. Remove the screws on both sides of the LCD panel in order to release the LCD hinges.



Fig. 18 Removing the LCD panel hinges.

Removing the CPU

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

1. Remove the screws securing the heat plate (see [Fig. 12](#)).
2. After taking out the heat plate, remove the 3 CPU fan screws, disconnect the CPU fan connector and remove the CPU fan.



Fig. 19 Location CPU fan screws.

3. Remove the 3 remaining screws on the CPU heat sink and take it out.



Fig. 20 Location remaining CPU heat sink screws.

4. Unlock the CPU socket by turning captured screw head fully counter clockwise with a flat-bladed screwdriver.



Fig. 21 Removing the CPU.

-
5. Take out the CPU very carefully.

Note Beware of the screws you use on the CPU heat sink! Make sure to use the original screws, otherwise it might cause damage to the CPU die.

Note Use extra care when unlocking or locking the CPU socket because the screwdriver might cause damage on CPU's edge each time when unlocking or locking the CPU socket..

Removing the Top Cover

To remove the top cover, first remove the battery (see [Removing the Battery](#)), remove the hard disk drive (see [Removing the Hard Disk Drive](#)), remove the optical disk drive (see [Removing the Optical Disk Drive](#)), remove the keyboard (see [Removing the Keyboard](#)) and remove the LCD module (see [Removing the LCD Module](#)), then perform the following steps:

1. Remove all screws (2 small and 8 larger ones) on the bottom of the base unit.



Fig. 22 Location bottom cover screws.

2. Flip over and open up the notebook completely so that the LCD is levelled with the bottom of the casing.
3. Release all screws (2 large and 3 smaller ones) on the top cover.

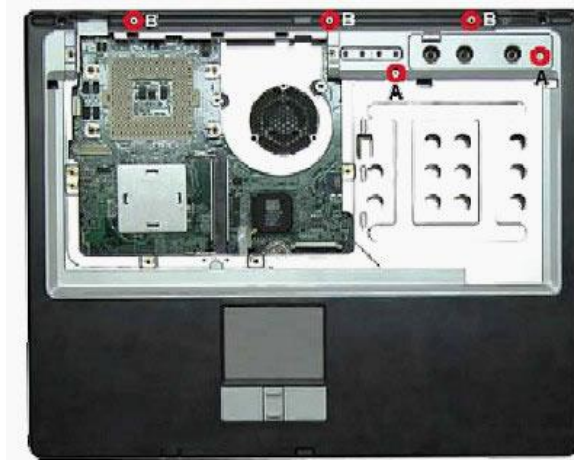


Fig. 23 Location top cover screws.

4. Disconnect the touchpad connector and remove the flat cable (same principle as described in [Fig 9](#)).



Fig. 24 Disconnecting the touchpad cable.

5. Carefully lift the top cover.

Removing the Touchpad

To remove the touchpad, first remove the top cover (see [Removing the Top Cover](#)), then perform the following steps:

1. Remove the screws securing the touchpad to the top cover.

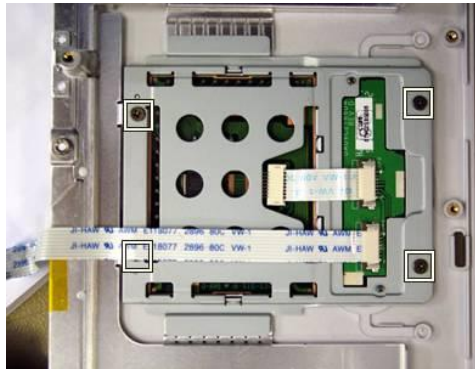


Fig. 25 Location touchpad screws.

2. Carefully separate the touchpad module from the top cover.

Removing the Chipset Heat Sink

To remove the chipset heat sink, first remove the top cover (see [Removing the Top Cover](#)), then perform the following steps:

1. Remove the 2 screws securing the chipset heat sink to the main board.



Fig. 26 Location chipset heat sink screws.

Removing the WLAN Card

To remove the WLAN card, first remove the LCD module (see [Removing the LCD Module](#)) and then perform the following steps:

1. Release with your fingers the side locks securing the WLAN card. As you release the locks, the card will automatically pop up and stay in a 45° angle position.



Fig. 27 Releasing the WLAN side locks.

2. Carefully take out the WLAN card from the slot.

Removing the MDC Modem

To remove the modem, first remove the top cover (see [Removing the Top Cover](#)), then perform the following steps:

1. Remove the 2 screws securing the modem to the main board.



Fig. 28 Location modem card screws.

2. Turn over the modem and gently disconnect the MDC cable.

Removing the Main Board

To remove the main board, first remove the top cover (see [Removing the Top Cover](#)) and then perform the following steps:

1. Remove the hex screws from the VGA port.
2. Remove all screws on the HDD holder and separate it carefully from the main board.



Fig. 29 Screw location on the HDD holder.

3. Disconnect the speaker and Lid switch connectors from the main board and remove the screws encircled in the following picture.

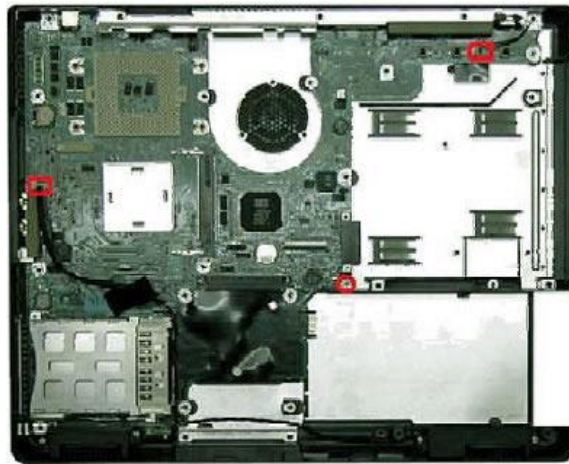


Fig. 30 Screws and connectors on main board.

4. Lift the main board and remove it away from the unit.

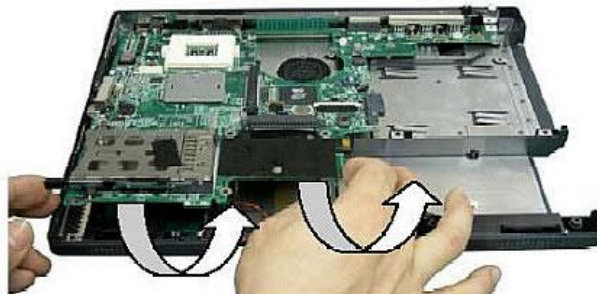


Fig. 31 Removing the main board.

Notice

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