Packard Bell EasyNote C3 Disassembly Manual





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#### Overview

This document contains step-by-step disassembly instructions for the EasyNote C3 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.

NEC reserves the right to make changes to the EasyNote C3 chassis without notice.

#### **Technician Notes**

Only technicians authorized by NEC Computers International BV 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:

- 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.
- Turn off the power and disconnect all power and all options.

#### **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:

- PH 0x40 Philips screwdriver
- 4.0 x 60 Flat screwdriver
- 2.0 x 30 Flat screwdriver
- SW5,0 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 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 userserviceable 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

### **Removing the Battery**

Perform the following steps to remove the battery:

- 1. Make sure to power off the EasyNote C3.
- 2. Turn the unit upside down.
- 3. Unlock the battery and slide it out of its place as the arrow shows in Fig. 1



Fig. 1 Releasing the battery

#### **Removing the Memory Module**

To remove the Memory Module, first remove the battery (see <u>Removing the Battery</u>), then perform the following steps:

1. Release the one screw retaining the memory module cover.



Fig. 2 Removing the screw retaining the memory cover



M2x4.5 silver

2. Unclip the memory module as shown in Fig. 3

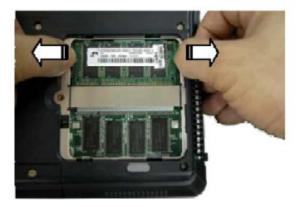


Fig. 3 Removing the memory module

3. Remove the memory module from its slot and put it aside.

### **Removing the Hard Disk Drive**

To remove the hard disk drive, first remove the battery (see <u>Removing the Battery</u>), then perform the following steps:

1. Unscrew the screws as shown in Fig. 4 to remove the HDD cover.



Fig. 4 Removing the hard disk drive cover

2. Release the screws that secure the HDD as shown in Fig. 5, and carefully pull out the HDD assembly.



M3x6 silver



Fig. 5 Screws retaining the HDD assembly

# **Removing the Keyboard**

To remove the Keyboard, first remove the battery (see <u>Removing the Battery</u>), then perform the following steps:

1. Release the keyboard cover from the rear of the system as shown in Fig. 6



Fig. 6 Releasing the keyboard cover

2. Lift up the keyboard cover carefully as shown in Fig. 7



Fig. 7 Lifting up the keyboard cover



M3x6 silver

3. Lift up the keyboard and disconnect it from the system as shown in Fig. 8

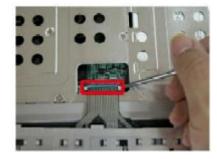


Fig. 8 Disconnecting the keyboard flat cable

### **Removing the Optical Disk Drive**

To remove the ODD, first remove the battery (see <u>Removing the Battery</u>) and remove the keyboard (see Removing the Keyboard) then perform the following steps:

1. Remove the screws retaining the optical disk drive as shown in Fig. 9



Fig. 9 Releasing the optical disk drive

2. Flip over the unit, and push the ODD module out from the base unit as shown in Fig. 10



Fig. 10 Pushing the optical drive out



M2.5x9 silver

# **Removing the LCD Module**

To remove the LCD Module first remove the battery (see <u>Removing the Battery</u>) and remove the keyboard (see <u>Removing the Keyboard</u>), then perform the following steps:

1. Remove the screws retaining the Heat Plate as shown in Fig. 11

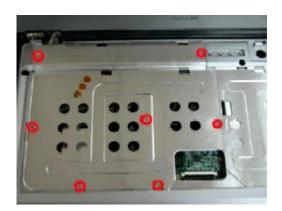


Fig. 11 Removing the screws retaining the Heat Plate

2. Flip over the base unit and release the screws retaining the LCD Module.



Fig. 12 Bottom screws retaining the LCD Module

3. Release the screws on the system rear side as shown in Fig. 13



Fig. 13 Rear screws retaining the LCD Module







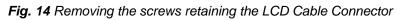
M2.5x9 silver



M2.5x9 silver

4. Open up the LCD lid, release the screws and the LCD cable connector.





5. Carefully lift up the LCD Module.



M2.5x7 silver

#### **Removing the LCD Panel**

To remove the LCD panel, first remove the LCD module (see <u>Removing the LCD Module</u>), then perform the following steps:

- 1. Use a pin to remove the rubber covers on the LCD module as shown in Fig. 15
- 2. Unscrew all screws as shown in Fig. 15 and release carefully the LCD cover.



Fig. 15 Removing the rubber covers & screws on the LCD Module

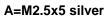
3. Remove the inverter board after unscrewing the screw and disconnecting all connectors as shown in Fig. 16.



Fig. 16 Removing the Inverter Board

- 4. Carefully lift up the LCD panel.
- 5. Remove the screws on both sides of the LCD panel in order to release the LCD hinges as shown in Fig. 17







B=M2.5x6 black



M2x3 copper

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Fig. 17 Removing the LCD Panel hinges

### **Removing the CPU**

To remove the CPU first remove the battery (see <u>Removing the Battery</u>) and remove the Keyboard (see <u>Removing the Keyboard</u>), then perform the following steps:

1. Remove the screws retaining the Heat Plate as shown in Fig. 18

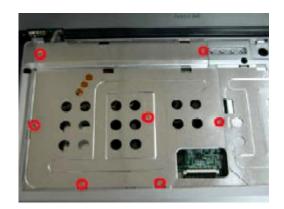


Fig. 18 Removing the screws retaining Heat Plate

2. After taking out the heat plate, remove the CPU Fan screws, disconnect the CPU Fan connector and remove the CPU Fan as shown in Fig. 19



Fig. 19 The CPU Fan



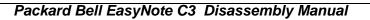
M2x3 copper



M2.5x7 silver



M2.5x7 silver



3. Unscrew the screws on the CPU Heat Sink as shown in Fig. 20, and take out the CPU heat sink.



Fig. 20 Removing the CPU heat sink screws

**Note:** Beware of screws use on the CPU heat sink! Make sure to use the screw size M2.5x7, otherwise it might cause damage to the CPU die.

4. Use a flat screw driver to unlock the CPU from the CPU socket and lift up the CPU carefully.



Fig. 21 Unlocking the CPU



M2.5x7 silver

Note: Use extra care when unlocking or locking the CPU because the screw driver might cause damage on CPU's edge each time when unlocking or locking the CPU. **Removing the Top Cover** To remove the Top Cover, first remove the battery (see Removing the Battery), remove the HDD (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 <u>Removing the LCD Module</u>) then perform the following steps: 1. Remove all screws on the bottom of the base unit as shown in Fig. 22 Kinc(#P)Card M2.5x9 silver

Fig. 22 Bottom cover screws

2. Release all screws on the top cover as shown in Fig. 23

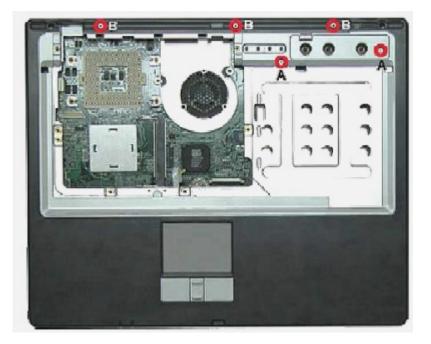


Fig. 23 Top Cover screws

3. Disconnect the Touch Pad Connector as shown in Fig. 24



Fig. 24 Touch Pad connection

4. Carefully lift up the Top Cover.



A=M2.5x9 silver



B=M2.5x7 silver

### **Removing the Touch Pad**

To remove the touch pad, first remove the top cover (see <u>Removing the Top Cover</u>), then perform the following steps:

1. Unscrew the screws on the Top Cover as shown in Fig. 25

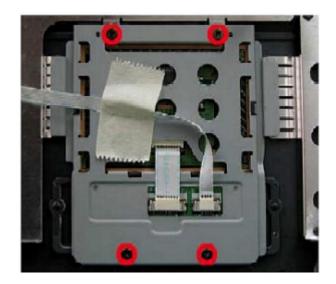


Fig. 25 Touch Pad screws

2. Carefully separate the Touch Pad module from the Top Cover.

#### **Removing the Main Board**

To remove the Main Board, first remove the Top Cover (see <u>Removing Top Cover</u>) then perform the following steps:

1. Remove the Hex screws from the VGA Port as shown in Fig. 26



Fig. 26 VGA Port



M2x3 copper



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2. Unscrew all screws on the HDD holder as shown in Fig. 27 and separate it carefully from the Main Board.



Fig. 27 Screws on the HDD holder

3. Disconnect Speaker and Lid switch connectors from the Main board and unscrew the screws encircled in Fig. 28



Fig. 28 Screws and connectors on Main Board



M2x4 silver



M2x4 silver

4. Lift up the Main Board as shown in Fig. 29 and put it aside.

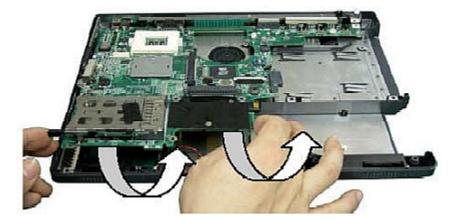


Fig. 29 Lifting up carefully the main board

# **Removing the MDC Modem**

To remove the MDC Modem, first remove the Main Board (see <u>Removing the Main Board</u>) then perform the following steps:

1. Disconnect the MDC cable and remove the two screws retaining the MDC modem as shown in Fig. 30



Fig. 30 The MDC Modem

2. Lift up the MDC modem and put it aside.

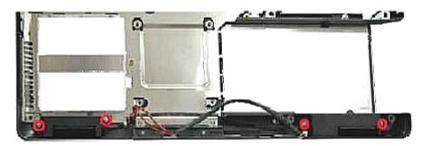


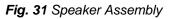
M2x4 silver



To remove the Speaker Assembly, first remove the Main Board (see <u>Removing the Main</u> <u>Board</u>) then perform the following steps:

1. Remove the screws holding the Speaker Assembly as shown in Fig. 31





2. Carefully remove the Speaker assembly from the bottom cover and place it aside.

### **DIP Switch Settings**

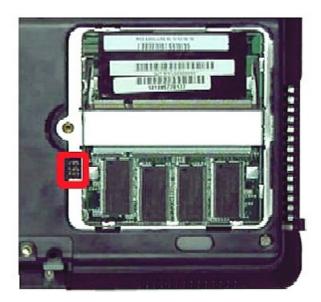
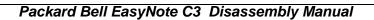


Fig. 32 Dip Switches location





M2x6.5

	_		Jumper			Status		
1		2	1-2	Open	Open	Close	Open	Open
			3-4	Open	Open	Close	Close	Close
			5-6	Open	Close	Close	Close	Open
5		6	Logo	NEC	NEC	NEC	NEC	PB
			Keyboard	JP	JP	US	UK	US

Fig. 33 Dip Switches settings

### Screws

01	LO	•1	•1
M2x4 silver	M2x4.5 silver	M2.5x4 silver	M2.5x5 silver
Lo	•l		•1
M2.5x6 black	M2.5x7 silver	M2.5x9 silver	M3x6 silver
Lo	•	el	w
M2x3 copper	Hex 2.5x10	M2.x6.5 silver	

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Authors: Allen Koay and Bensoussan Daniel Edition: September 2003 Document Part Number: Version: 2.0

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