

***Packard Bell
EasyNote M3
Disassembly Manual***



Packard Bell®

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Overview

This document contains step-by-step disassembly instructions for the EasyNote M3 notebook. 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.

Packard Bell reserves the right to make changes to the EasyNote M3 notebook 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 remove the battery.
- Disconnect all cables and peripherals.
- Label all removed cables. Note where the cable 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 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
- A small flat bed 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 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 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 notebook is disconnected from its power source and from all telecommunications links, networks, or modem lines whenever the notebook 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.

WARNING

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 Pack

1. Turn the notebook upside down.
2. Slide the 2 battery release latches to unlock the battery pack.

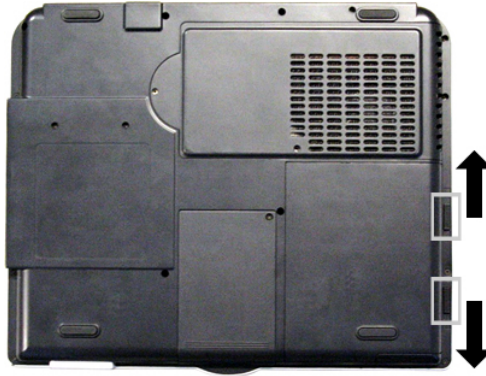


Fig. 1: Unlocking the battery.

3. Use the notch in the battery pack to lift one side of the battery pack.
4. Remove the battery pack.

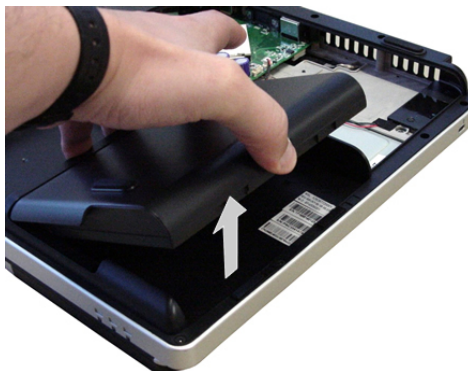


Fig. 2: Removing the battery pack

Heat Sink

1. Remove the long (A) and the short (B) screw from the heat sink cover.
2. Slide the cover out a bit.
3. Lift one edge of the heat sink cover up.
4. Remove the heat sink cover.

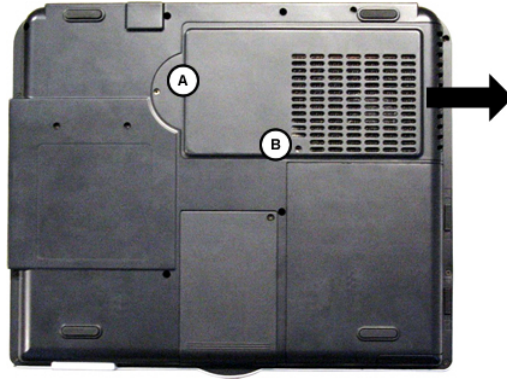


Fig. 3: Removing the heat sink cover



(A)



(B)

5. Disconnect the CPU fan cable.
6. Unscrew the 4 lock screws (C) securing the heat sink.

Note Loosen the screws one by one a little at the time to avoid too much pressure on one single corner of the CPU.

7. Take out the heat sink.

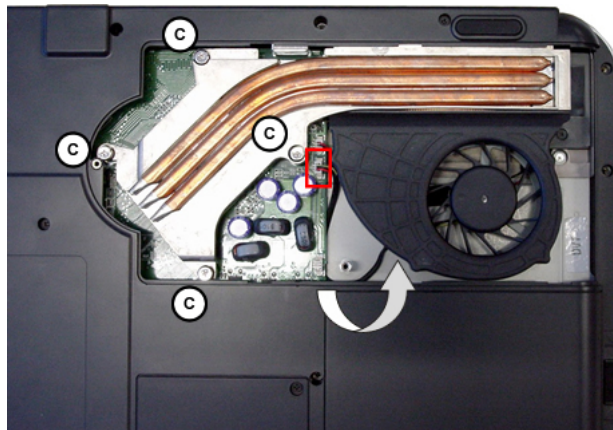


Fig. 4: Removing the heat sink



(C)

CPU

1. Lift up the lever to release the CPU.
2. Remove the CPU.

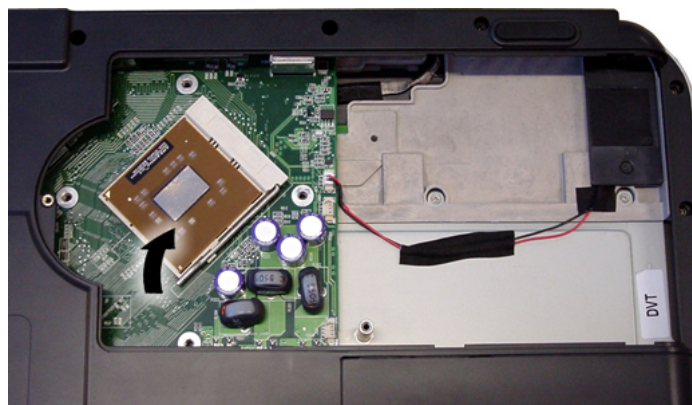


Fig. 5: Removing the CPU

HDD

1. Remove the screw (B) that secures the HDD cover to the notebook.
2. Slide out the cover for an inch.
3. Lift one edge of the cover.
4. Remove the HDD cover.

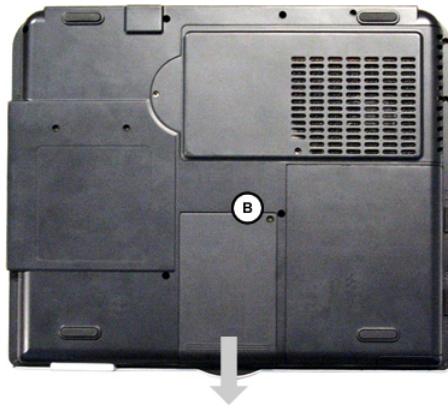


Fig. 6: Removing the HDD cover



(B)

5. Remove the screw (D) securing the HDD assembly.
6. Slide out the HDD assembly.
7. Remove the 4 screws (E) securing the HDD to the HDD bracket.

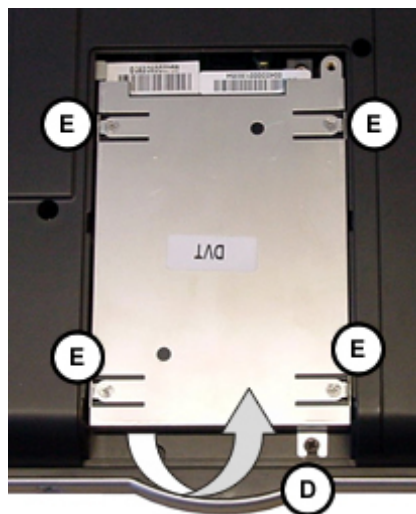


Fig. 7: Removing the HDD



(E)



(D)

Keyboard

1. Push up the keyboard clips to release the keyboard.



Fig. 8: Releasing the keyboard

2. Lift the keyboard and disconnect the flat cable.

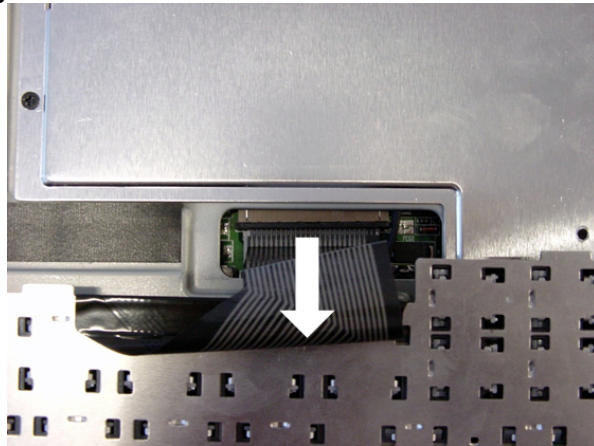


Fig. 9: Disconnecting the flat keyboard cable

CD/DVD

1. Remove the 2 screws (A) from the bottom base.
2. Push the metal pin in the HDD bay to release the optical drive.

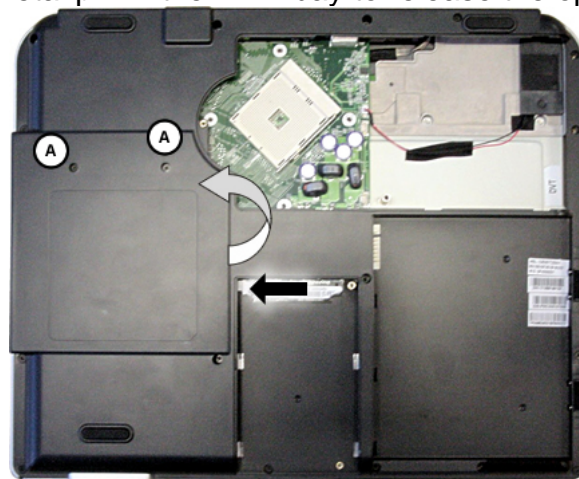


Fig. 10: Removing the CD/DVD drive



(A)

- Remove the 4 screws (F) from the CD-ROM bracket and take away the CD-ROM bracket.

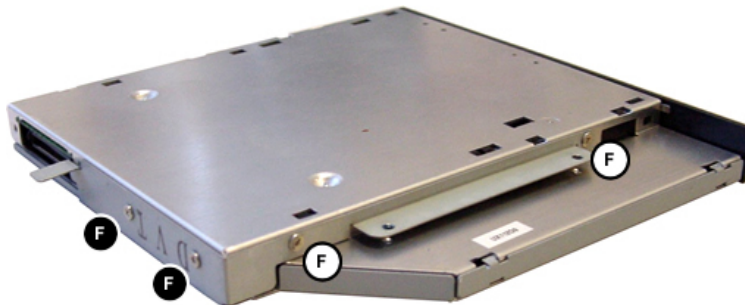


Fig. 11: Removing the CD-ROM bracket



(F)

Memory / Mini PCI

- Remove the 4 screws (G) that secure the memory expansion slot / mini PCI cover to the notebook.
- Lift one edge of the memory expansion slot / mini PCI slot cover up.
- Remove the memory expansion slot / mini PCI slot cover.

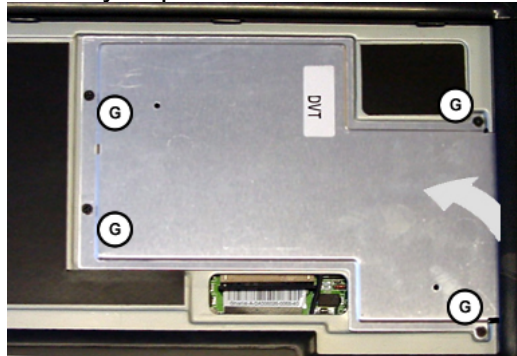


Fig. 12: Removing the memory / mini PCI compartment cover

- Spread the retaining tabs securing the PCI memory expansion module to the system board. The memory module will rise up at a 45-degree angle.
- Pull the memory module away from the SD-DIMM slot at a 45-degree angle.
- Spread the retaining tabs securing the mini PCI to the system board. The mini PCI will rise up at a 45-degree angle.
- Pull the mini PCI away from the mini PCI slot at a 45-degree angle.

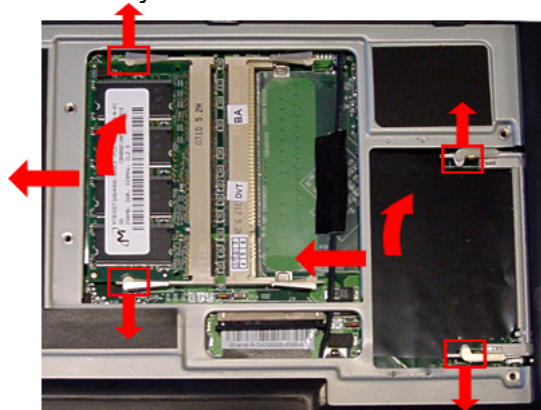


Fig. 13: Removing the memory modules and the mini PCI

LCD Assembly

1. Release the hinge covers at the rear of the unit with a small flat bed screwdriver.



Fig. 14: Releasing the hinge covers

2. Open the LCD and pull away the hinge covers.



Fig. 15: Removing the hinge covers

Keyboard Cover (first remove the LCD hinge covers!)

1. Use a small flat bed screwdriver to release the keyboard cover.



Fig. 16: Releasing the keyboard cover

2. Remove the keyboard cover.



Fig. 17: Removing the keyboard cover

3. Disconnect the left LCD cable.
4. Disconnect the right LCD cable.
5. Remove the 2 screws (H) securing the left hinge.
6. Remove the 2 screws (H) securing the right hinge.
7. Take away the LCD assembly.

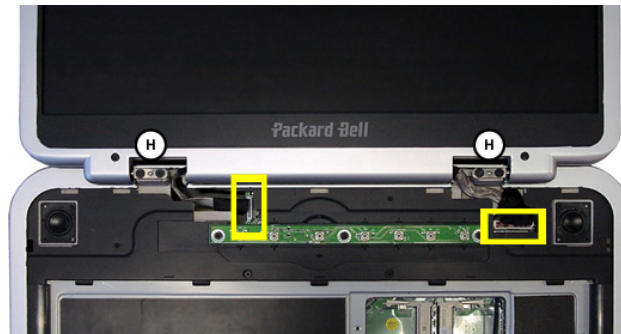


Fig. 18: Removing the LCD assembly

LCD Disassembly

1. Remove the 2 rubber screw covers
2. Remove the 2 screws (A).
3. Remove the 2 rubber screw / LCD bumpers.
4. Remove the 2 screws (I).
5. Remove the LCD front bezel.



Fig. 19: Removing the LCD front cover

Inverter Board

1. Remove the 2 screws (J) securing the inverter board.
2. Disconnect the LCD power cable.
3. Lift the inverter board and remove it from the system.
4. Remove the tape securing the inverter board cable to the back of the display panel.

5. Remove the inverter board cable.

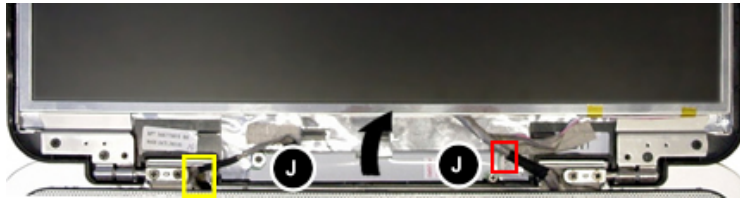


Fig. 20: Removing the inverter board

LCD Panel

1. Remove the 2 screws (A) securing the left hinge.
2. Remove the 2 screws (A) securing the right hinge.
3. Slide out the left and right hinge from under the LCD bracket.

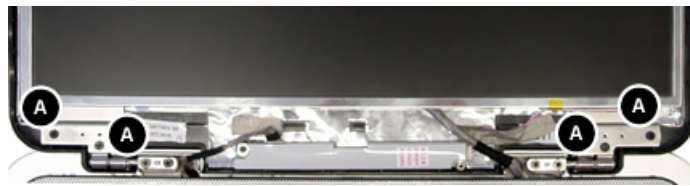


Fig. 21: Releasing the hinges

Note Mark the left and right hinge for position.

4. Remove the 2 screws (G) securing the LCD cover on the left.
5. Remove the 2 screws (G) from the LCD cover on the right.
6. Lift the LCD and the LCD bracket assembly away from the LCD back cover.



Fig. 22: Removing the LCD panel

7. Turn the LCD panel upside down (use foam to protect the screen).
8. Remove the 3 screws (G) securing the right bracket.
9. Remove the 3 screws (G) securing the left bracket.
10. Remove both brackets.
11. Disconnect the LCD cable and remove the tape securing the LCD cable.
12. Remove the LCD cable.

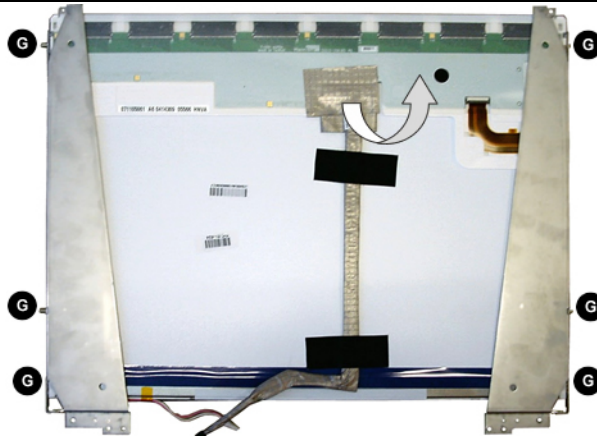


Fig. 23: Removing the brackets and the LCD cable

Base Assembly

1. Remove the 3 screws (D) and the 2 hex bolts (K) from the rear of the base assembly.



Fig. 24: Releasing the base assembly



(D)



(K)

2. Remove the 14 screws (A) and 2 screws (B) from the bottom of the base assembly.
3. Lift away the bottom base assembly.

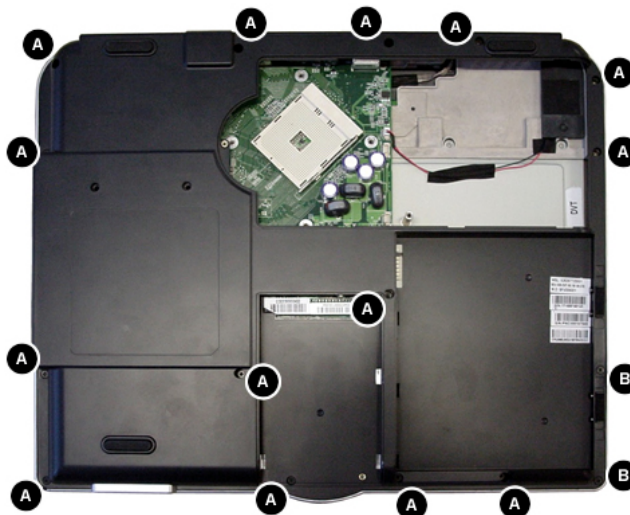


Fig. 25: Removing the base assembly



(A)



(B)

CMOS Battery

1. Disconnect the CMOS battery cable from the system board.
2. Remove the CMOS battery.

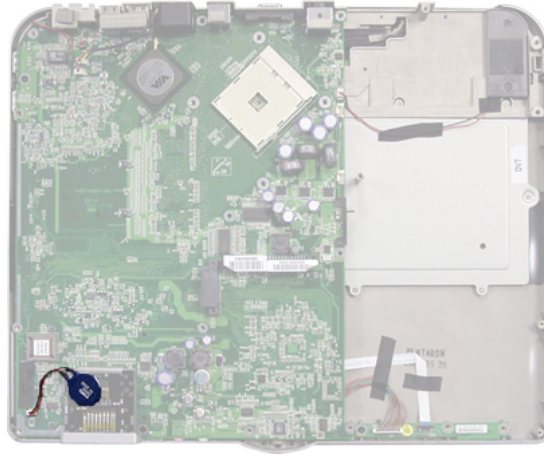


Fig. 26: Removing the CMOS battery

Top Cover

1. Disconnect the touchpad flat cable from the LED board assembly
2. Disconnect the I/O cable from the LED board assembly
3. Remove the screw (B) securing the LED board assembly.
4. Remove the LED board assembly.

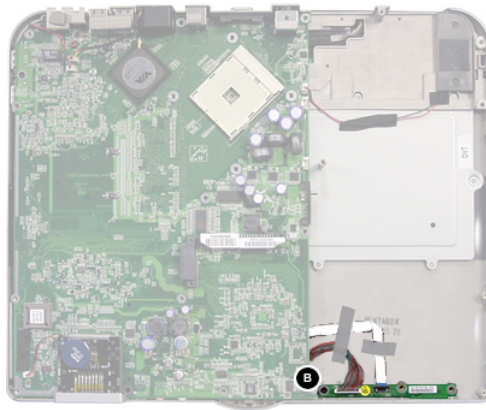


Fig. 27: Removing the LED board assembly

5. Remove the 3 screws (B) securing the ESB board to the top cover.
6. Lift the ESB board away from the top cover.

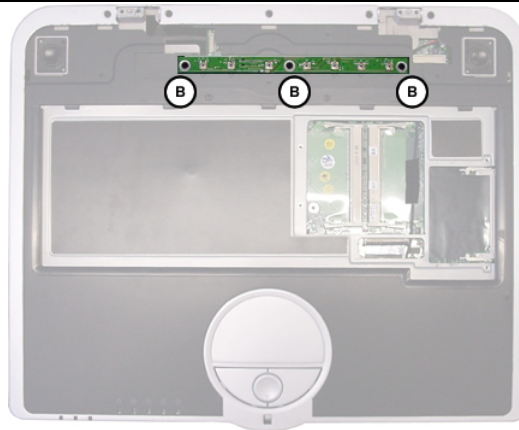


Fig. 28: Removing the ESB board

7. Remove the 5 screws (B) and 2 screws (G) securing the top cover.
8. Lift away the top cover away from the system board.

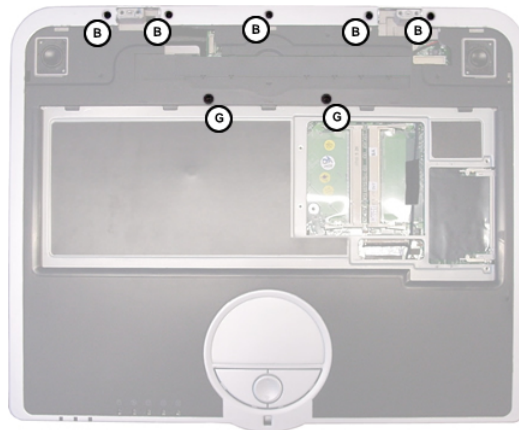


Fig. 29: Removing the top cover

Touchpad

1. Remove the 9 screws (L) securing the keyboard plate to the top cover.
2. Lift away the keyboard plate from the top cover.

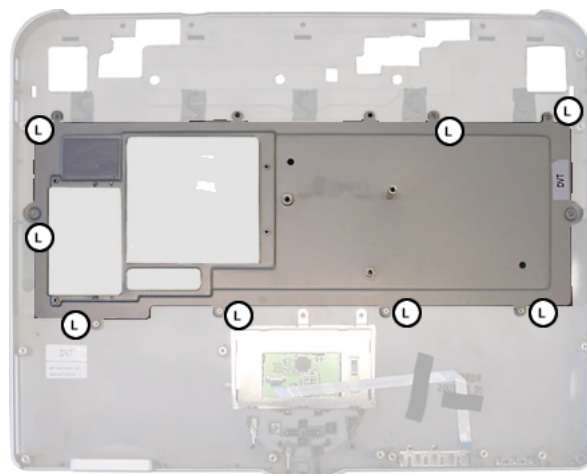


Fig. 30: Removing the keyboard plate

3. Remove the 3 screws (G) securing the touchpad assembly.
4. Remove the touchpad assembly.

Note When re-assembling, slide the touchpad under the clip and then slide the touchpad bracket under the clip.

5. Separate the touchpad from the touchpad bracket.
6. Disconnect the touchpad cable from the touchpad assembly.

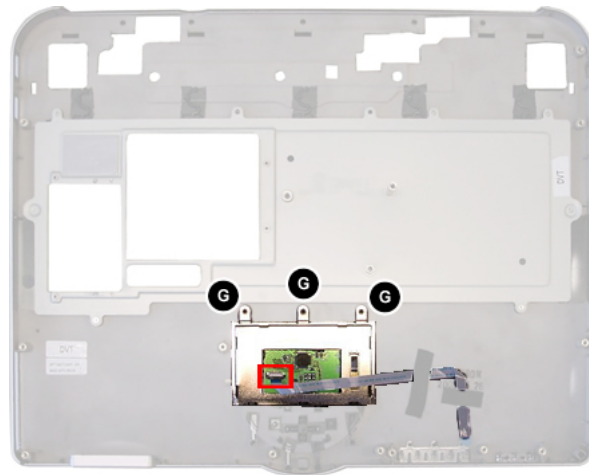


Fig. 31: Removing the touchpad assembly

System Board

1. Disconnect the case fan cable.
2. Disconnect the left speaker cable.
3. Disconnect the right speaker cable.
4. Remove the screw (B) securing the system board.
5. Lift away the system board from the speaker assembly (I/O plate).

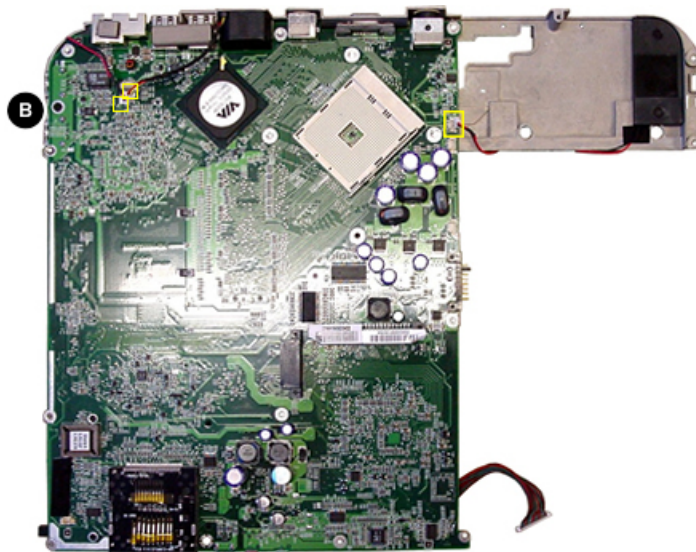


Fig. 32: Releasing the system board

6. Turn over the system board: the PCMCIA slot is now facing away from you.
7. Remove the LED board assembly cable from the system board.



Fig. 33: Disconnecting the LED board assembly cable.

Modem

1. Disconnect the modem cable from the connector on the system board.
2. Remove the tape securing the modem cable to the system board.
3. Remove the 2 screws (G) securing the modem to the system board.
4. Remove the modem from the system board.
5. Remove the modem cable from the modem.

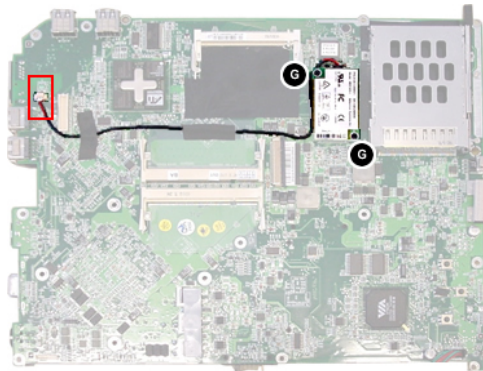


Fig. 34: Removing the modem

Speakers

1. Remove the 2 screws (G) from the left speaker (with the short cable).
2. Remove the speaker cover from the left speaker.
3. Turn over the I/O plate and remove the 2 screws (G) and remove the speaker.
4. Perform the same steps for the right speaker (with the long cable).



Fig. 35: Removing the speakers

Case Fan

1. Remove the 3 screws (M) securing the case fan to the I/O plate.
2. Remove the case fan.

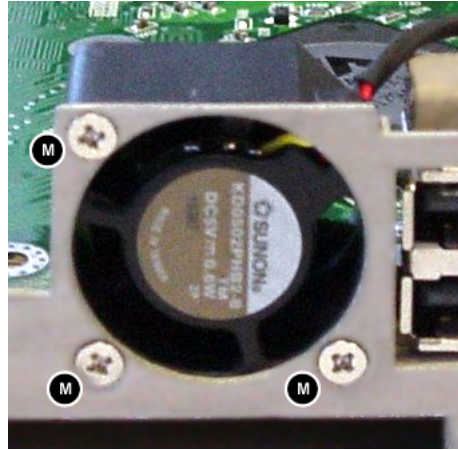


Fig. 36: Removing the case fan

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