Packard Bell.

EasyNote R Series

Disassembly Manual

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Overview

This document contains step-by-steps disassembly instructions for the EasyNote R series 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 R7 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:

- n   Do not disassemble the system into parts that are smaller than those specified in the instructions.
- n   Label all removed connectors. Note where the connector goes and in what position it was installed.
- n   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 are properly installed and tightened.

Required Tools

All disassembly procedures can be perform using the following tools:

- n   PH 0x60 Philips screwdriver
- n   PH 0x40 Philips screwdriver
- n   4.0 x 60 Flat screwdriver
- n   2.0 x 30 Flat screwdriver
- n   SW5.0 Spacer screwdriver
- n   Small tweezers
- n   Pin

Hazardous Voltage

There is hazardous voltage present inside the computer when it is connect 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 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
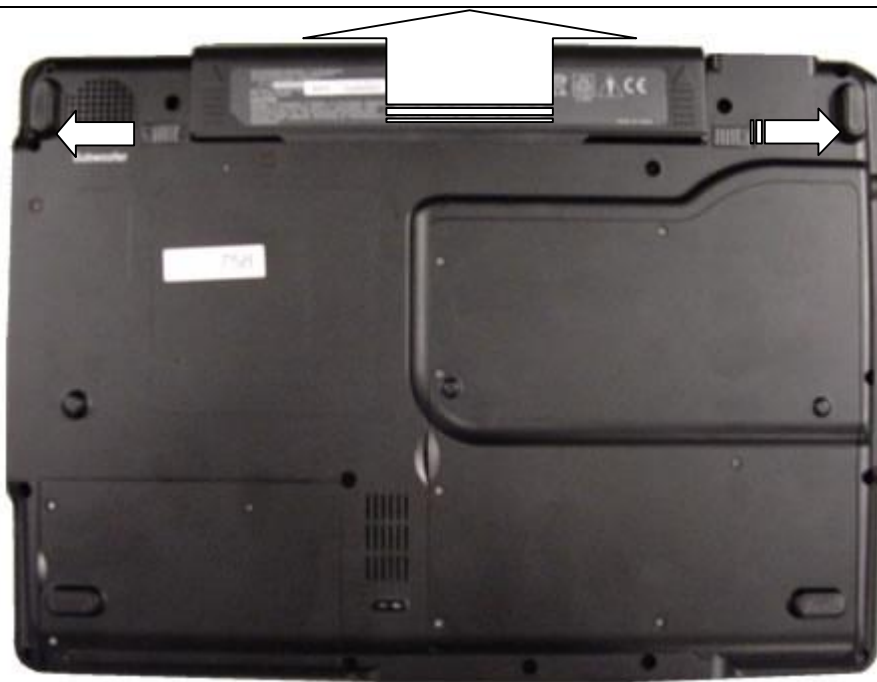
Removing the Battery

Perform the following steps to remove the battery:

1. Make sure to power off the unit.
2. Turn the unit upside down.
3. Unlock the left battery lock
   Pushing battery lock on right outward and slide the battery out of its place as the arrow shows below

Fig. 1 Removing the battery

Fig. 2 Removing the battery

Removing the Hard Disk Drive

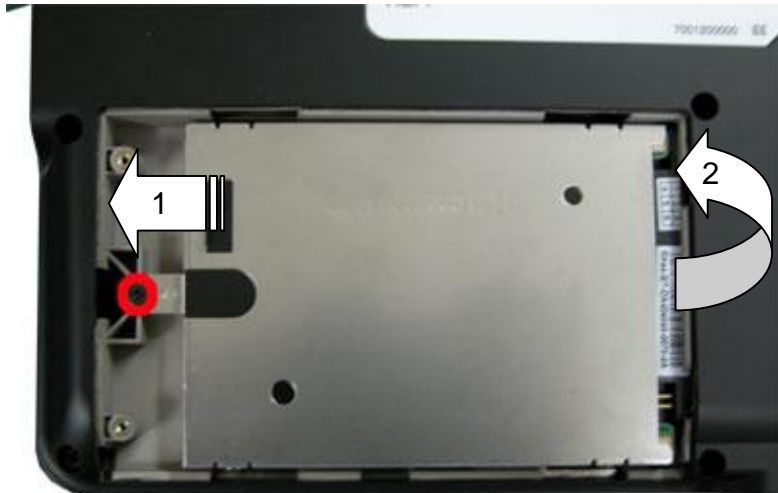To remove the hard disk drive, first remove the battery (see *Removing the Battery*), then perform the following steps:

1. Remove the screws on HDD cover and carefully open up as shown below

M2x3.5 Black

Fig. 3 Removing the Hard disk drive cover

2. Unscrew the HDD module and disconnect it as shown below

Fig. 4 Disconnecting the hard disk drive

M2.5x7 Black

3. Unscrew the four screws on both sides of the hard disk drive as shown below

Fig. 5 Unscrewing the hard disk drive shield screws

M3x4 Sliver

Removing the Optical Disk Drive

To remove the ODD, first remove the battery then the HDD Cover. Then do as follows:
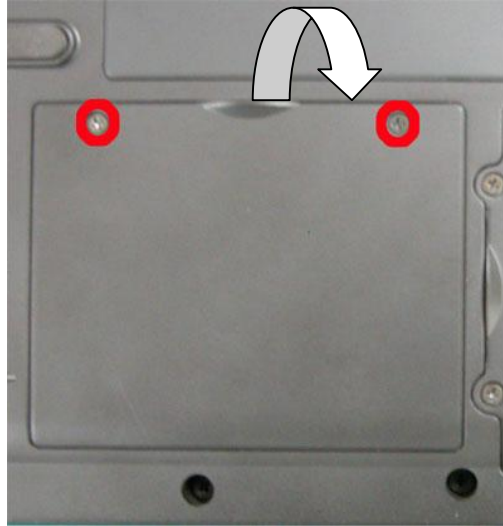
1. Release screw as shown below and pull out ODD module.

Fig. 6 Removing the optical drive

M2.5x5 Black

Removing the Memory Module

To remove the Memory Module, first remove the Battery then perform the following steps:

1. Release the screws retaining the memory module slot cover. There are several different designs for the bottom base, as shown in the images below
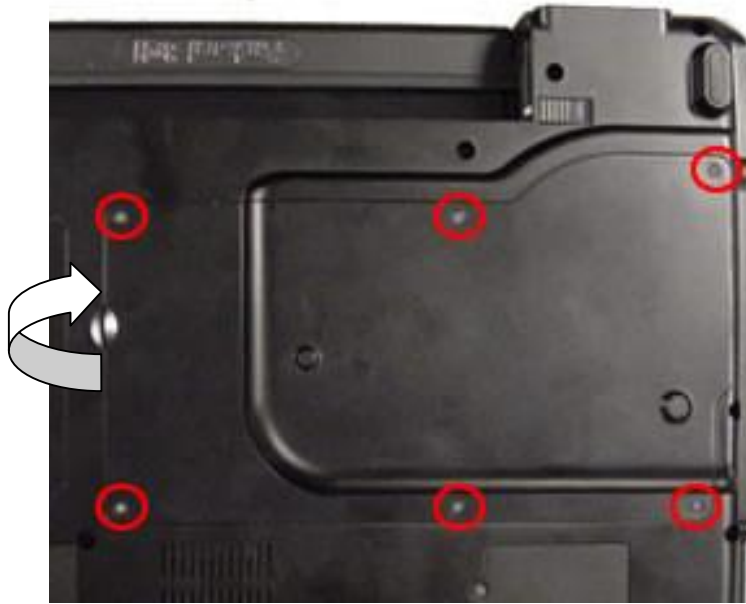

M2x3.5 Black

Fig. 7 Removing the screw retaining the memory module slot cover

Fig. 8 Removing the screws retaining the memory module slot cover

Fig. 9 Removing the screw retaining the memory module slot cover
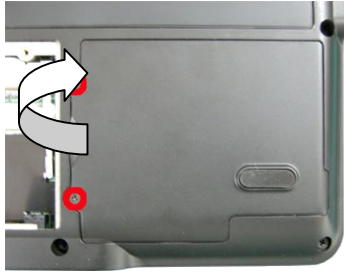
2. Unclip the memory module as shown below

Fig. 10 Removing the memory module

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

Removing the WLAN Module and MDC Modem Module

To remove the WLAN Module and MDC modem Module, first remove the Battery then perform the following steps. Note that on some models de MDC module can only be removed by completely disassembling the mainboard.

1. Release the screws retaining the WLAN/MDC cover.

M2x3.5 Black

Fig. 11 Removing WLAN/MDC cover

2. Disconnect Wireless Antenna(s) and unclip the memory module as shown below

Fig. 12 Removing the WLAN module

3. Unscrew MDC modem and disconnect the MDC modem cable before remove it.

M2x3.5 Black

Fig. 13 Removing the MDC Modem module

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Removing the CPU

To remove the CPU, first remove the battery (see *Removing the Battery*), then perform the following steps (actual steps depend on bottom base design):

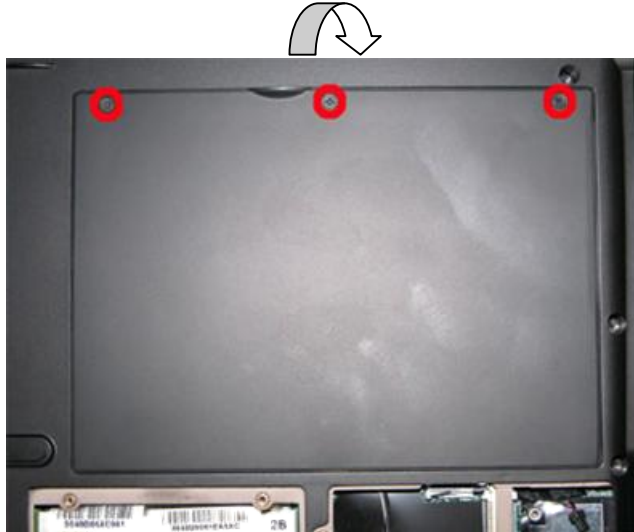1. Remove the screw retaining the CPU Cover as shown below, and as shown in Fig 8 and Fig 9

M2x3.5 Black

Fig. 14 CPU Cover

2. Release all screws on the heat sink, disconnect the Fan connector and carefully remove the heat sink as shown in the images below.
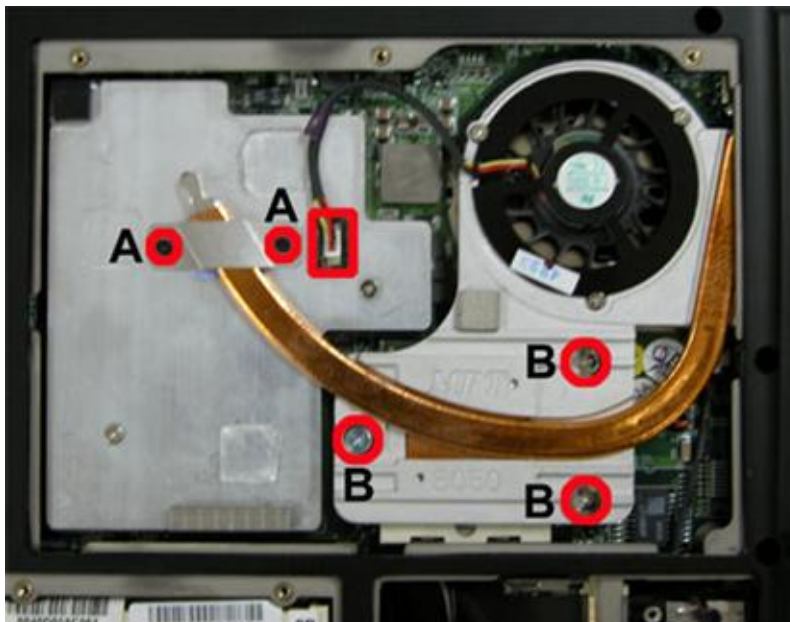

A = M2x3.5 Black

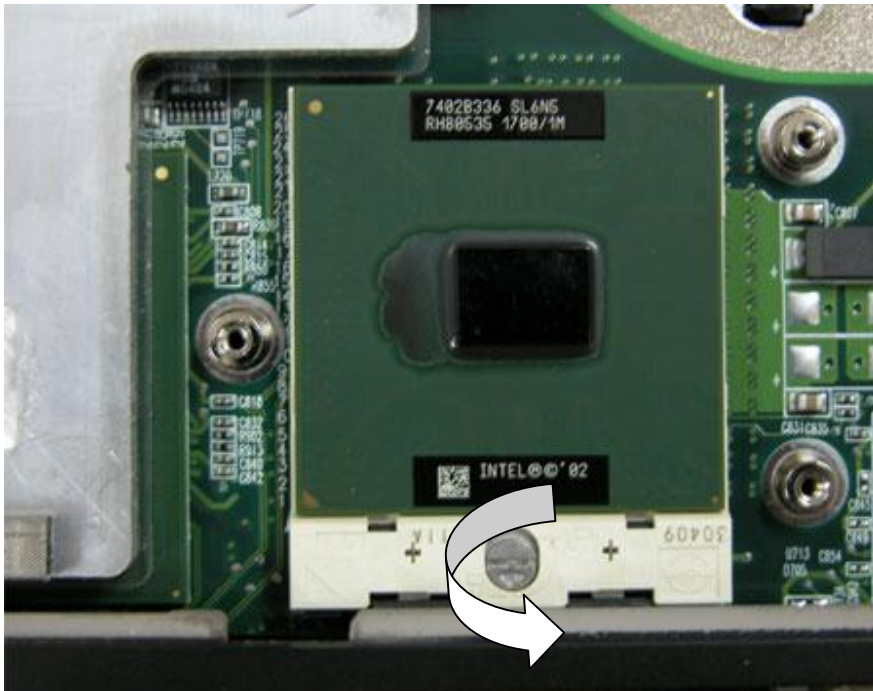**B = M2x11 Silver**

Fig. 15 Removing the heat sink

Fig. 16 Removing the heat sink

Fig. 17 Removing the heat sink

3. Unlock the CPU and carefully remove it from the CPU socket as shown below

Fig. 18 Unlocking the CPU

Note: Some models use a lever to lock/unlock the CPU.
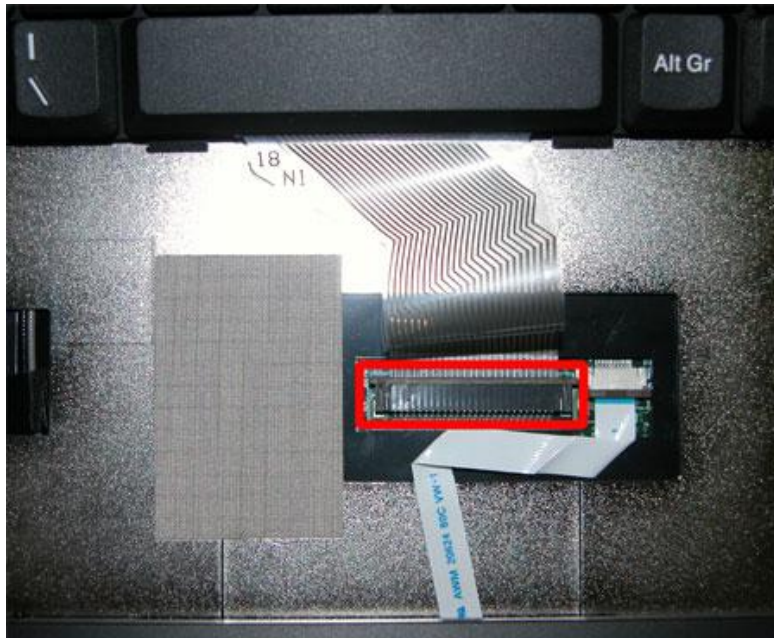
Removing the Keyboard

To remove the Keyboard, first remove the battery (see *Removing the Battery*), then perform the following steps:

1. Use flat screw driver to unlock Keyboard as shown below

Fig. 19 Unlock Keyboard

2. Lift up the keyboard and disconnect it from the system as shown below

Fig. 20 Removing the keyboard flat cable

Removing the Top Cover

To remove the Top Cover, first remove the battery (see *Removing the Battery*), remove the keyboard (see *Removing the keyboard*), remove the CPU (see *Removing the CPU*), then perform the following steps:

1. Remove GPU Heat Sink by unscrew screw on it and put it aside. Note that the actual steps may vary depending on the design (some do not even have a heatsink).
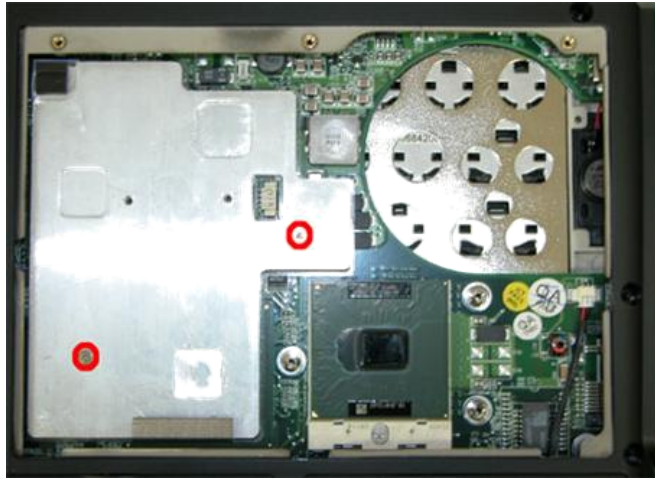

Fig. 21 Removing the GPU Heat sink

2. Release all screws as shown in below

Fig. 22 Removing the top cover screws

M2x7 Silver

A = M2.5x7 Black

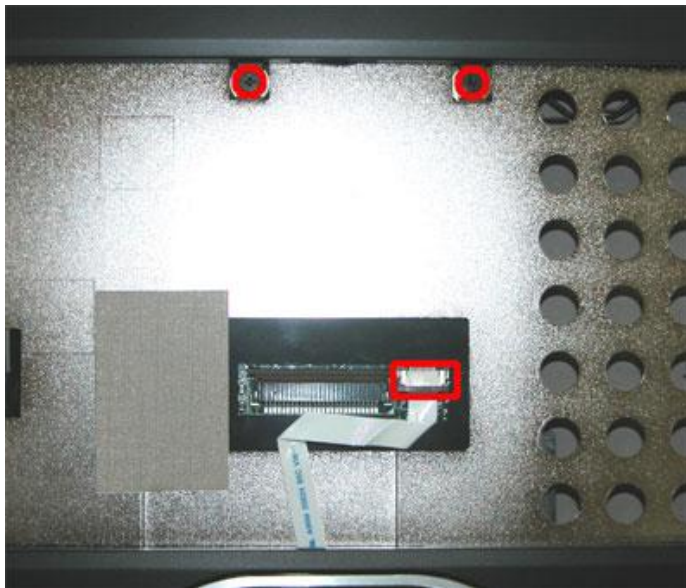**B = M2.5x17 Black**

C = M2x3.5 Black

3. Flip over the unit and remove the screws then disconnect touch pad flat cable as shown below

Fig. 23 Disconnect Touch Pad Flat Cable

4. Carefully lift up the top cover, release it and put it aside.

Fig. 24 Removing the Top Cover

M2.5x7 Black

Removing the LCD Module

To remove the LCD Module, first remove the Battery (see *Removing the Battery*), remove the Top Cover (see *Removing the Top Cover*) then perform the following steps:

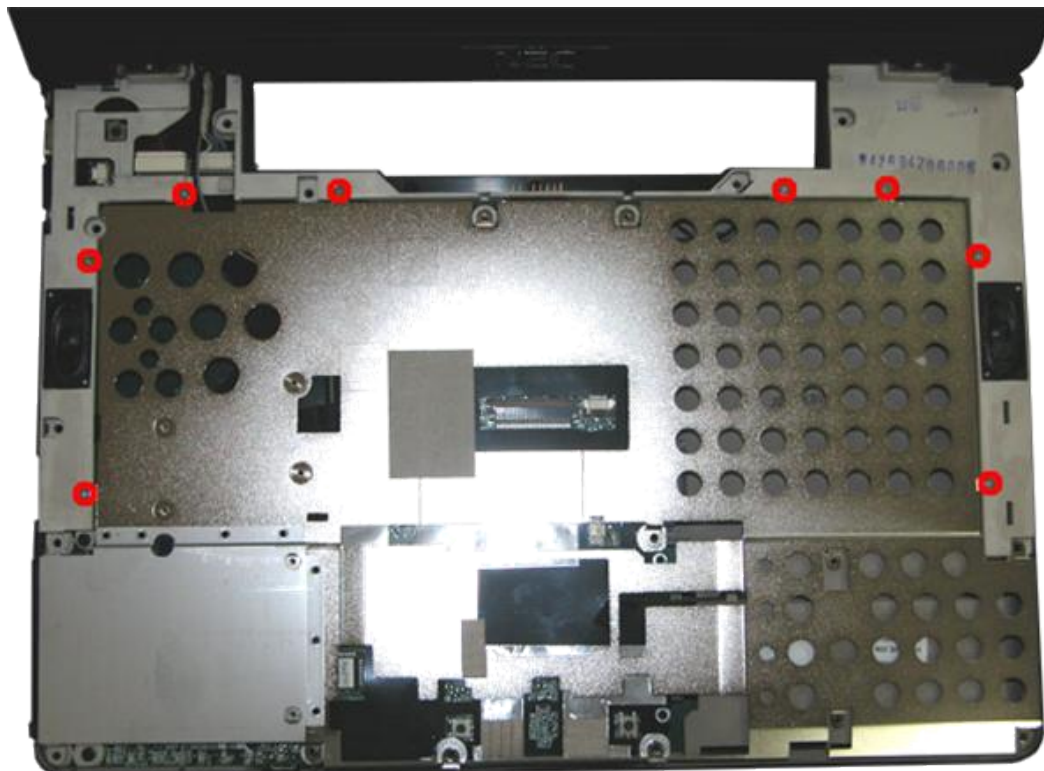1. Release LCD hinge cover by release screw on it as shown in below

Fig. 25 Releasing LCD hinge cover

M2x3.5 Black

2. Unscrew all screw encircle on Heat Plate as shown in below and carefully separate it from base unit.
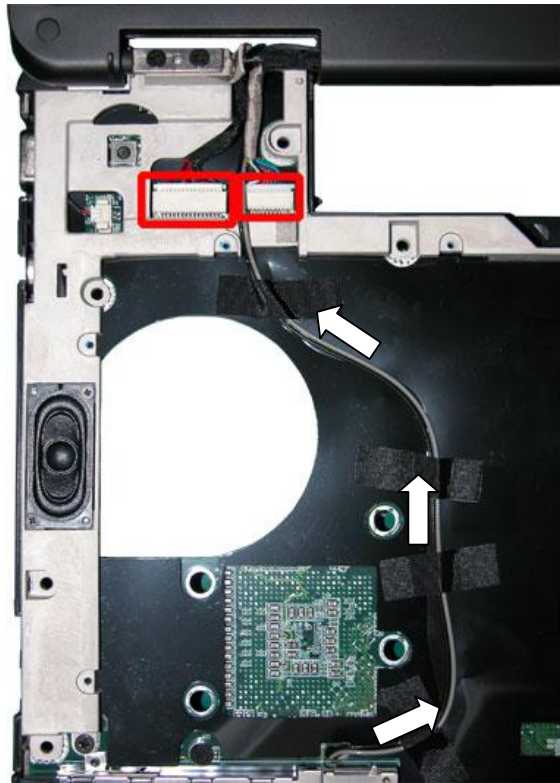

Fig. 26 Removing the Heat Plate

M2x3 Silver

3. Release the LCD cable and WLAN antenna cable as shown below

Fig. 27   *Releasing the LCD cable and WLAN antenna cable*

4. Release the screws on the LCD Hinges as shown below

Fig. 28   Releasing the LCD Hinges

M2.5x5 Black

5. Carefully lift up the LCD module and place it in a safe place.

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 as shown below
2. Unscrew all screws shown below

M2.5x7 Black

Fig. 29 Screws on the LCD Module

3. Release the LCD Bezel from the side carefully and put it aside as shown below

Fig. 30 Removing the LCD Bezel

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4. Unscrew all screws encircled below

A = M2.5x5 Black

B = M2.5x5 Silver

C = M2x3.5 Black

D = M2.5x7 Black

Fig. 31 Removing the LCD panel screws

5. Release all four screws at the side of LCD Back Cover.
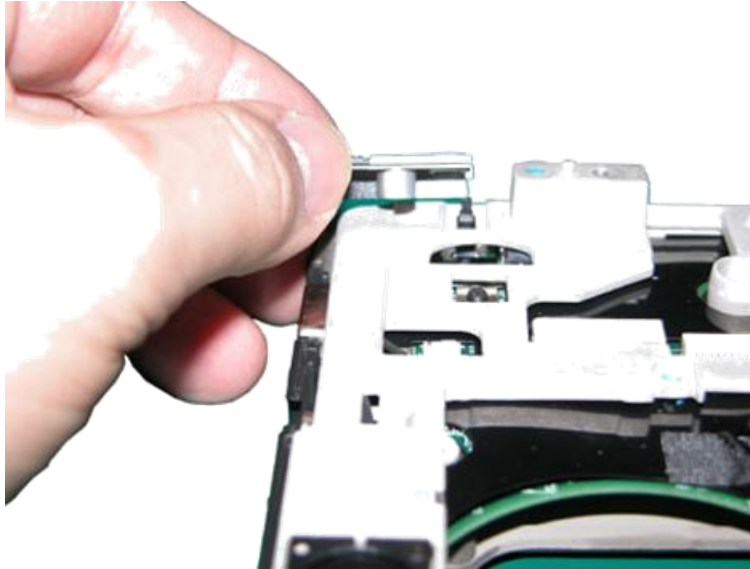

M2x3.5 Black

Fig. 32 Remove Side screws

6. Carefully lift up LCD panel together with the Inverter board and disconnect the power cable from the Inverter board. Disconnect the inverter connector remaining on the left side of the inverter board. Put a side the inverter board.

7. Remove the screws on both sides of the LCD panel in order to release the LCD hinges.
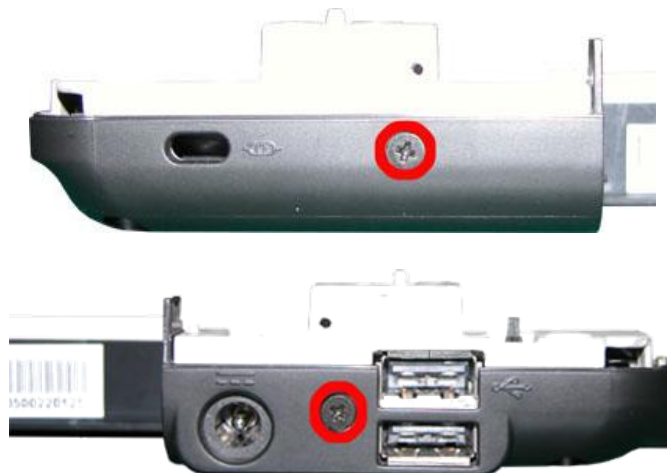
Removing the Main Board

To remove the main board, first remove the Bottom Cover (See *Removing the Bottom Cover*) then perform the following steps:

1. Remove side cover at both corner of the base unit as shown below
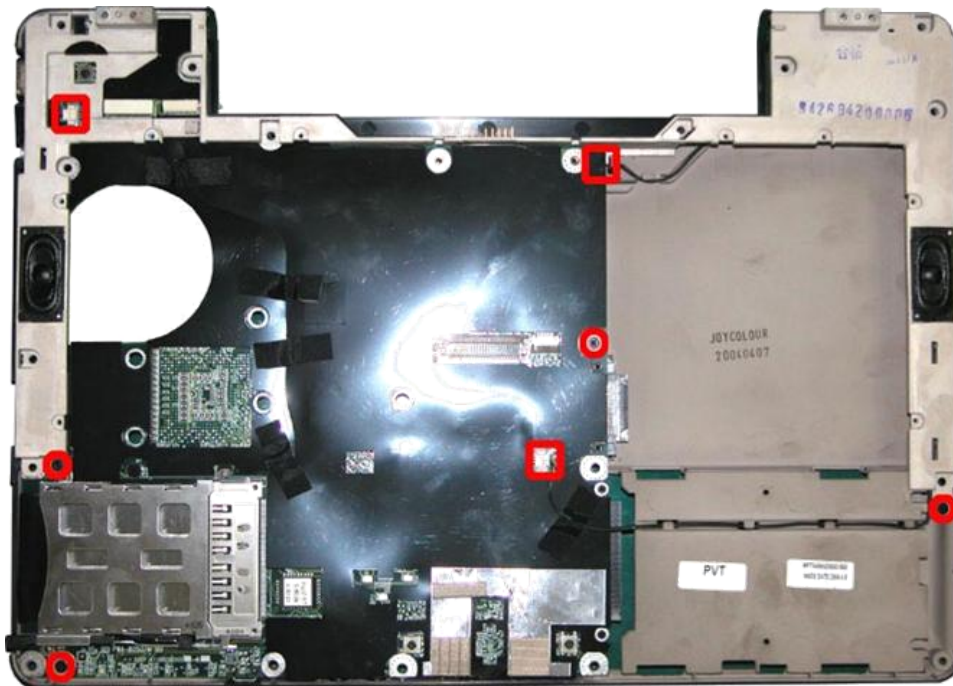

Fig. 33 Removing side cover

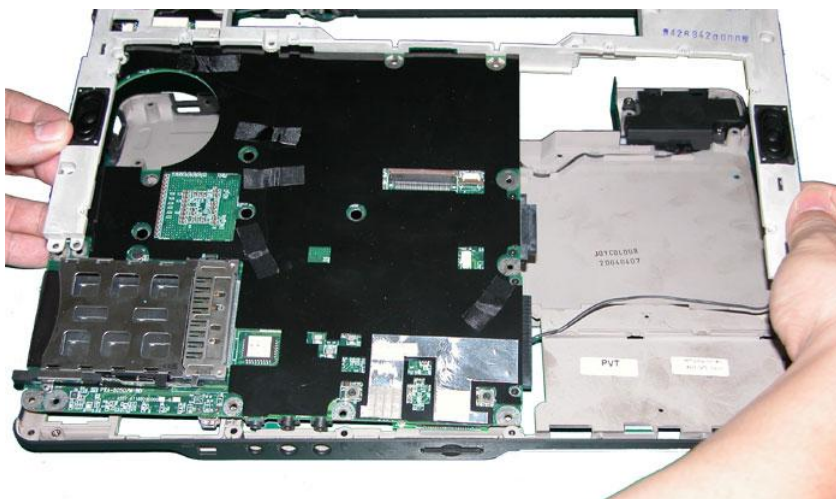2. Release two screws at rear of the base unit as shown below

Fig. 34 Rear view of Base unit

M2.5x5 Black

3. Release all screws as shown below and disconnect all speaker connection to Main Board. Actual mainboard layout may very per model.

Fig. 35 Lifting up the Main Board assembly

M2.5x5 Black

4. Carefully lift up the Main Board together with System Bracket.

Fig. 36 Lifting up Main board

5. Remove two screws at the VGA port to separate Main Board from System Bracket.
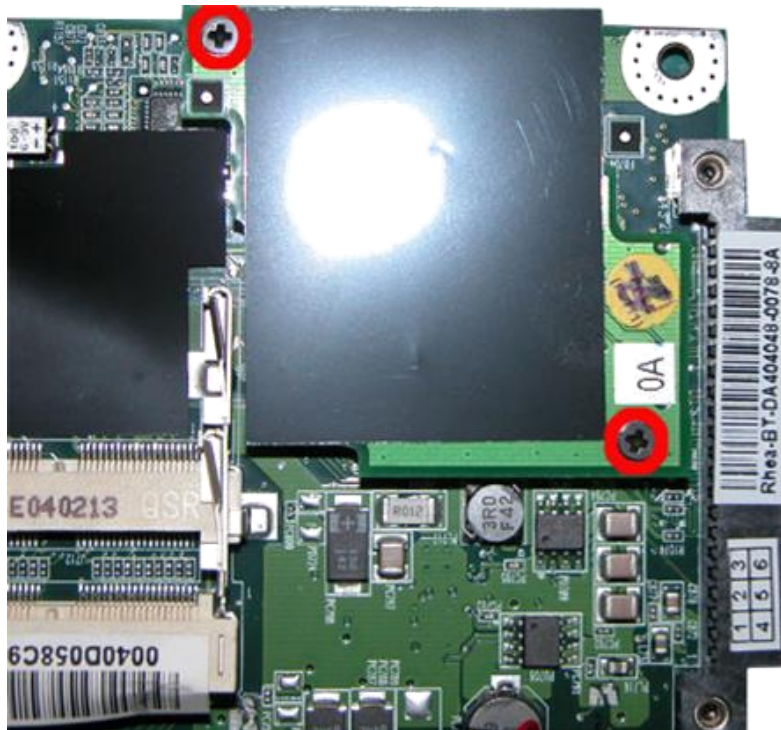

M3x7 Silver

Fig. 37 Releasing System Bracket

Removing the Multi Card Reader (optional)

To remove the Multi Card Slot, first remove the Main Board (see *Removing the Main Board*), then perform the following steps:

1. Unscrew the screws on the Multi Card Slot assembly as shown below and remove the Multi Card Slot from the Main Board.

M2x3.5 Black

Fig. 38 Multi Card Slot

Removing the Touch Pad

To remove the touch pad, first remove the Top Cover (see *Removing the Top Cover*), then perform the following steps:

1. Unscrew the screws on the Touch Pad assembly as shown below and remove the touch pad assembly from the Top cover. Note that in some models the Touch Pad is glued to the top cover. In that case, push to remove the pad.
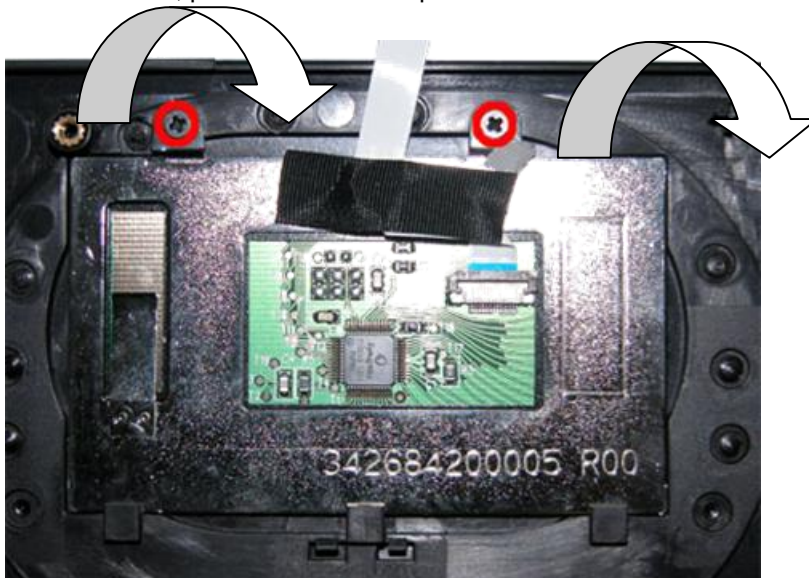

M2x3.5 Black

Fig. 39 Touch Pad

Removing the Speaker Assembly

To remove the Speaker assembly, first remove the Main Board (see *Removing the Main Board*), then perform the following steps:

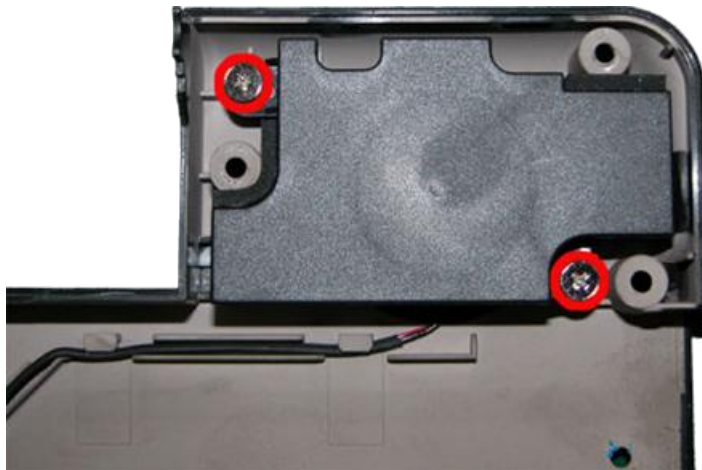1. Remove the screws holding speaker on System Bracket as shown below

M2x4 Black

Fig. 40 Speaker

2. Carefully remove the Speaker assembly from System Bracket and place it aside.
3. Removing screws on Woofer as shown below (design of part may vary).

M2.5x7 Silver

Fig. 41 Woofer

4. Carefully separate it from Bottom Cover.

DIP Switch Setting

No DIP Switch settings are available for the EasyNote R.

Screws

M2x3.5 Black	M2.5x7 Black	M2x11 Silver	M2x7 Silver
M2.5x17 Black	M2x3 Silver	M2.5x5 Black	M2.5x5 Silver
M3x7 Silver	M2x4 Black	M2.5x7 Silver	

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