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About this Guide

This guide contains systematic disassembly instructions for the Packard Bell EasyNote ME. The instructions are illustrated where necessary with images of the part that is being removed or disassembled.

Packard Bell B.V. reserves the right to make changes to the EasyNote ME without notice.

For More Information

For more information about the Packard Bell EasyNote ME, visit Packard Bell's support web site at <u>www.packardbell.com</u>. The support web site also has links to additional Packard Bell documentation and detailed specifications.

Technician Notes

Only technicians authorized by Packard Bell 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

When disassembling the system unit, follow these general rules:

- Turn OFF the power using the power button.
- Disconnect the AC adapter.
- Remove any SD/MMC card, ExpressCard or dummy card from the device.
- 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.
- Use something to hold the small screws (trays, jars, or cups). Label each cup with the disassembly step number. This can reduce questions about where each screw came from during re-assembly.

Reassembly

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:

- Small Phillips screwdriver.
- Small flat-blade screwdriver.

Hazardous Voltage

There is hazardous voltage present inside the notebook when it is connected to an AC supply, even when the notebook'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 the system.

Add-in cards can be extremely sensitive to ESD and always require careful handling. After removing the card from the notebook, 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 the notebook's power switch is OFF. Then, unplug the notebook'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 notebook casing. As an alternative, you can dissipate electrostatic build-up by touching an unpainted metal portion of the notebook 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 notebook.

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 the dealer.

WARNING

Ensure that the notebook 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 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.

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 portátil, 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 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

Perform the following steps to remove the battery:

- 1. Make sure the power is off.
- 2. Turn the notebook upside down.

Note: Use an anti-static mat or something soft like a piece of cloth underneath the notebook to prevent damage to the exterior of the notebook.

- 3. Push the right latch outwards to unlock the battery.
- 4. Push the left latch outwards to release the battery and slide the battery out of the compartment.



Fig. 1 Removing the battery.

Hard Disk Drive

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

1. Remove the screw securing the hard disk drive cover and remove the cover.



Fig. 2 Removing hard disk drive cover.

2. Pull the hard disk drive towards the right to disconnect the drive.



Fig. 3 Disconnecting and removing hard disk drive(s).

- Take the drive out of its compartment as shown in <u>Fig. 3</u>.
 Remove the 2 screws on the metal bracket to separate it from the hard disk drive.

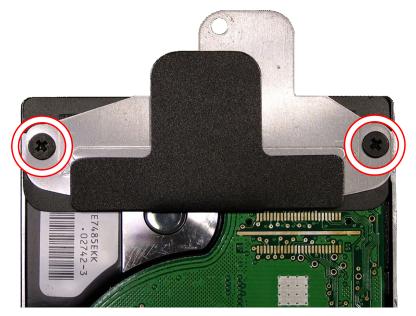


Fig. 4 Location of hard disk drive bracket screws.

Memory

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

1. Remove the 8 screws securing the memory compartment cover and remove the cover.



Fig. 5 Removing memory compartment cover.

2. Release the metal clip on each side securing the memory module; the module will eject upwards. Carefully remove the module.



Fig. 6 Removing memory module.

Note: In case two memory modules have been installed, you always have to remove the top module first before you can remove the one underneath.

Wireless LAN Adapter

To remove the wireless LAN adapter, first remove the battery (see <u>Battery</u>) and then perform the following steps:

1. Remove the 8 screws securing the wireless LAN compartment cover and remove the cover (see Fig. 5).

2. Carefully disconnect the 2 wireless antenna cables. Take note of which coloured wire is connected to which connector on the adapter.



Fig. 7 Location of antenna cable connectors and screws.

- 3. Remove the 2 screws securing the adapter (see Fig. 7); the adapter will eject upwards.
- 4. Take out the wireless LAN adapter from the slot.

CPU Fan, Heat Sink and CPU

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

- 1. Remove the 8 screws securing the CPU compartment cover (see Fig. 5).
- 2. Remove the 2 screws holding the CPU fan.

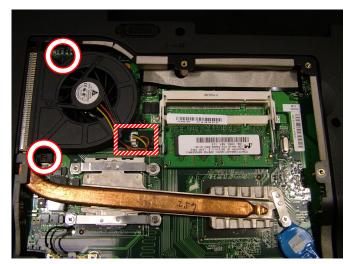


Fig. 8 Location of CPU fan screws.

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- 3. Disconnect the power cable and remove the CPU fan (see Fig. 8).
- 4. Turn the 5 screws securing the heat sink halfway loose in designated order.



Fig. 9 Location of heat sink screws.

- 5. Now the 5 screws completely loose, again in designated order, and remove them.
- 6. Carefully remove the heat sink.
- 7. Turn the screw in the CPU socket 180 degrees to release the CPU.

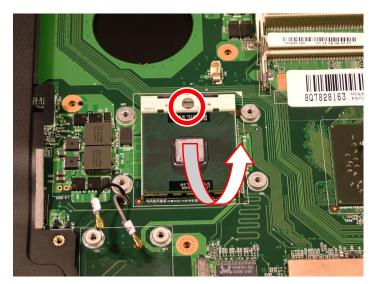


Fig. 10 Removing CPU.

8. Take out the CPU (see Fig. 10).

Optical Disk Drive

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

1. Remove the screw securing the optical disk drive.



Fig. 11 Removing screw securing optical disk drive.



- 2. Use the emergency eject hole to open the optical disk drive.
- 3. Pull the tray and take out the optical disk drive from the drive bay.
- 4. Remove the 2 screws securing the metal bracket and remove it from the drive.



Fig. 12 Removing metal bracket.

5. Release the tray cover on one side of the tray.



Fig. 13 Releasing tray cover (side).

6. Next release the tray cover on the bottom of the drive.

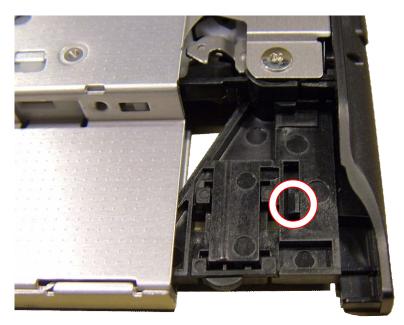


Fig. 14 Releasing tray cover (bottom).

7. Remove the cover and close the tray!

Note: When assembling the tray cover, first insert the left side (see Fig. 13) and then the right side.

Note: Pay close attention to the DC jack cable after replacing the main board for example. You should tape the cable firmly to the bottom cover and guide it underneath the optical disk drive connector on the main board. Otherwise, the optical disk drive will not fit properly when inserting it.

Keyboard

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

- 1. Turn the notebook over so the top is facing up and open the LCD completely.
- 2. Release the cover by prying it up on the left side of the notebook.

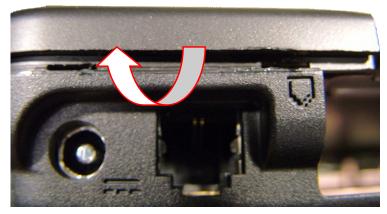


Fig. 15 Removing keyboard cover.

- 3. Tilt the cover from the left to the right and lift it out.
- 4. Remove the 4 screws securing the keyboard.

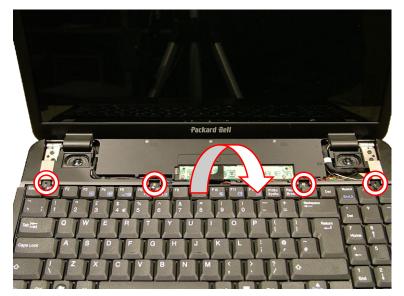


Fig. 16 Location of keyboard screws.

5. Tilt the keyboard gently forward (see Fig. 16).

6. Before removing the keyboard entirely, carefully release the black clip securing the flat cable and disconnect the cable from the main board.

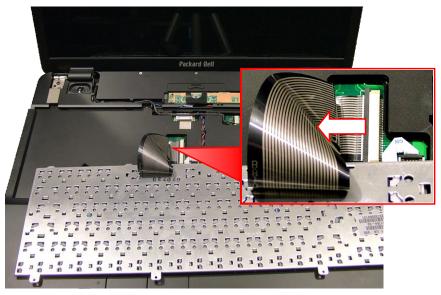


Fig. 17 Disconnecting keyboard flat cable.

Button Board

The button board contains the power button, the ECO and WiFi button, and the status LEDs. To remove the button board, remove the keyboard cover (see steps 1 to 3 in <u>Keyboard</u>), and then perform the following steps:

1. Remove the 2 screws securing the button board

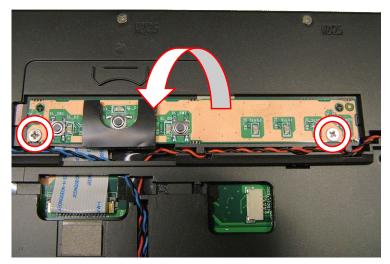


Fig. 18 Location button board screws.

2. Lift the button board and turn it around towards you.

3. Carefully release the brown clip securing the flat cable.

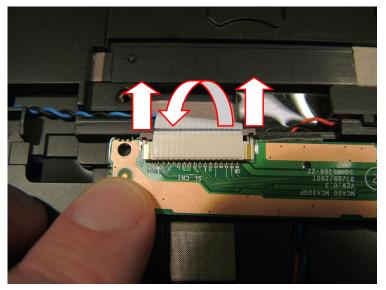


Fig. 19 Releasing button board flat cable.

4. Disconnect the flat cable from the button board (see Fig. 19).

LCD Assembly

To disassemble the LCD assembly, first remove the keyboard (see <u>Keyboard</u>), disconnect the wireless LAN antenna (see step 1 to 3 in <u>Wireless LAN Adapter</u>), and then perform the following steps:

1. Disconnect the webcam cable.

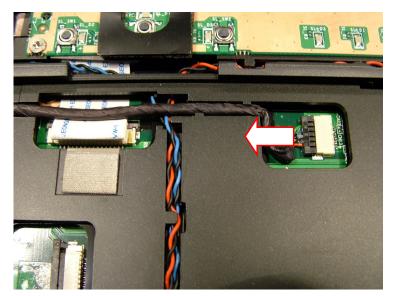


Fig. 20 Disconnecting webcam cable.

2. Disconnect the 2 LCD cable connectors.

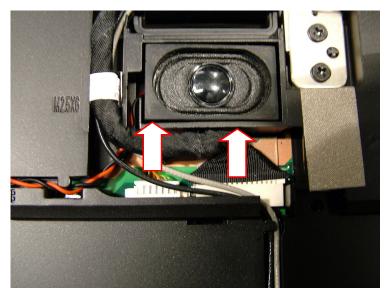


Fig. 21 Disconnecting LCD cable connectors.

3. Pull the wireless LAN antenna cables through the base and clear them from the clips.

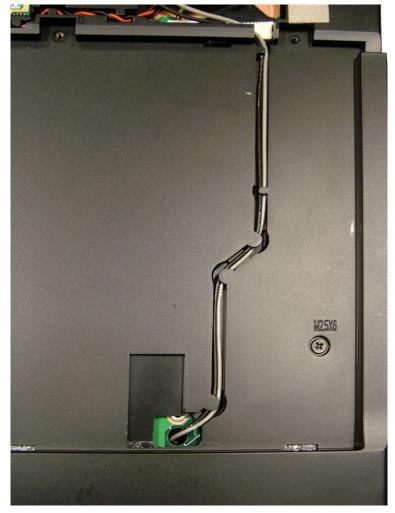


Fig. 22 Clearing wireless LAN antenna cables.

4. Remove the screws from the hinges, 2 on each side.

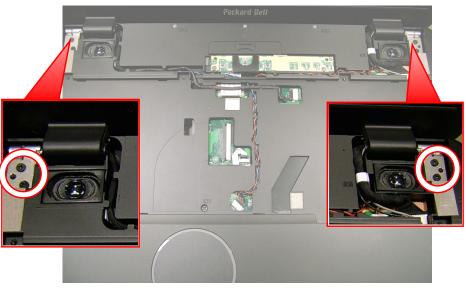


Fig. 23 Location of hinge screws.

5. Lift out the LCD assembly.

Top Cover

To remove the top cover, remove the hard disk drive (see <u>Hard Disk Drive</u>), remove the optical disk drive (see <u>Optical Disk Drive</u>), remove the keyboard (see <u>Keyboard</u>), remove the LCD assembly (see <u>LCD</u> <u>Assembly</u>), and then perform the following steps:

1. Carefully disconnect the speaker cable connector.

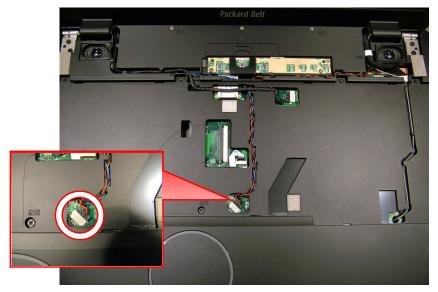


Fig. 24 Location of speaker connector.

2. Release the black clip and disconnect the touchpad flat cable.

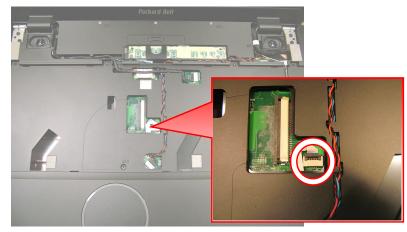


Fig. 25 Location of touchpad connector.

3. Remove the 6 screws securing the cover.

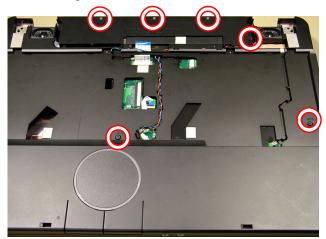


Fig. 26 Location of cover screws.

- 4. Turn the notebook upside down
- 5. Remove the 16 screws securing the top cover.



Fig. 27 Location of top cover screws.

Note: One screw is located inside the hard disk drive compartment.

6. Turn the notebook upside down again and remove the top cover.

Note: The touchpad is part of the top cover and does not require a separate disassembly.

Speakers

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

1. Release the speaker cables from the clips.

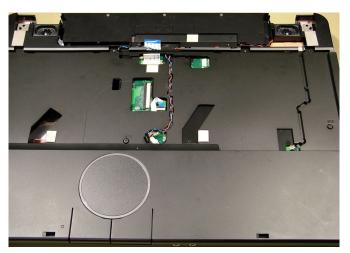


Fig. 28 Clearing the speaker cables.

2. Pull the speaker cables to remove the speakers.

Note: Guide the speaker cable underneath the top cover during assembly.

Modem (Optional)

To remove the optional modem, first remove the top cover (see <u>Top Cover</u>), and then perform the following steps:

1. Remove the 2 screws securing the modem.

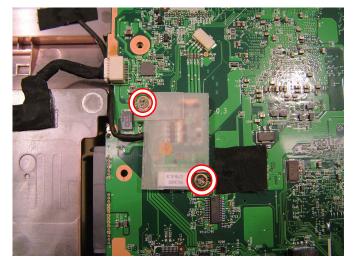


Fig. 29 Location of screws securing modem.

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- 2. Take out the modem.
- 3. Carefully disconnect the cable from the modem.

RJ11 Connector (Optional) To remove the optional RJ11 connector, first remove the modem (see <u>Modem (Optional)</u>), and then perform the following steps:

1. Clear the modem cable from the tape and clips securing the cable to the bottom cover.

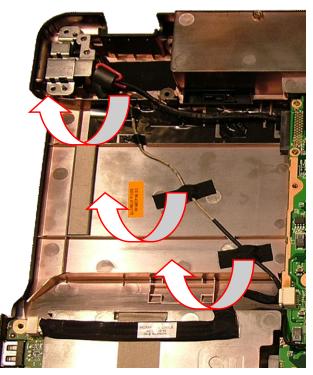


Fig. 30 Clearing modem cable.

2. Take out the RJ11 connector bracket and cable.

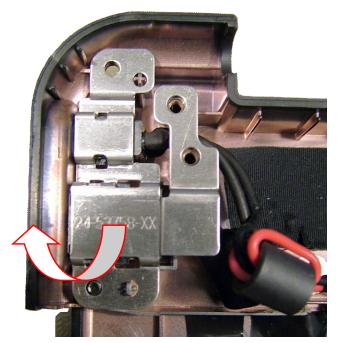


Fig. 31 Location of RJ11 connector bracket.

Note: Ensure that you secure the modem cable tightly to the bottom cover to prevent damage or obstructing the optical disk drive when inserting the drive.

Note: Keep the area next to the RJ11 connector (and DC jack) free, otherwise the top cover will not fit properly. The area is meant for a speaker and the ferrites in the modem and DC jack cables (see Fig 30).

USB Board

To remove the USB board, first remove the top cover (see <u>Top Cover</u>), and then perform the following steps:

1. Remove the 2 screws securing the HDD board.

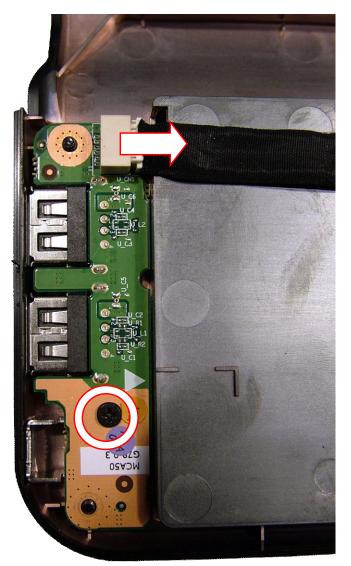


Fig. 32 Location of USB board cable and screw.

- 2. Disconnect the cable from the USB board (see Fig 32).
- 3. Lift out the USB board.

Main Board

To remove the main board, remove the CPU (see <u>CPU Fan, Heat Sink and CPU</u>), remove the memory (see <u>Memory</u>), remove the wireless LAN adapter (see <u>Wireless LAN Adapter</u>), remove the modem board (see <u>Modem (Optional)</u>), and then perform the following steps:

- 1. Disconnect the cable from the USB board (see Fig 32).
- 2. Release the brown clip to disconnect the button board flat cable from the main board.

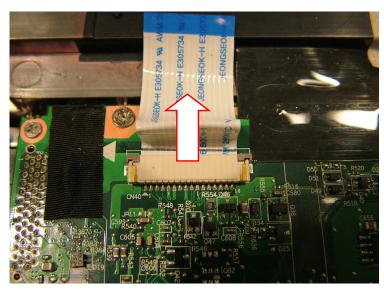


Fig. 33 Location of button board flat cable.

- 3. Lift the metal RJ11 connector bracket aside and take out the DC jack.
- 4. Remove the tape securing the DC jack cable.
- 5. Remove the 2 screws marked with a white \blacktriangle on the main board.

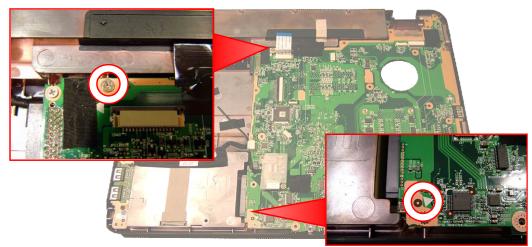


Fig. 34 Location of markings on main board.

6. Lift out the main board and turn it upside down.

7. Disconnect the RTC battery cable and remove the RTC battery.

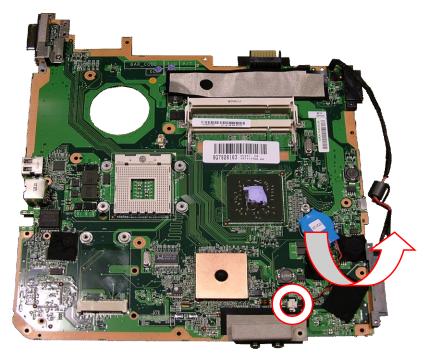


Fig. 35 Location RTC battery and cable connector.

Note: Ensure that you secure the DC jack cable tightly to the bottom cover and guide it underneath the optical disk drive connector on the main board. Otherwise, the optical disk drive will not fit properly when inserting it.

Note: Keep the area next to the RJ11 connector (and DC jack) free, otherwise the top cover will not fit properly. The area is meant for a speaker and the ferrites in the modem and DC jack cables (see Fig 30).

Inverter Board

To remove the inverter board, first remove the LCD assembly (see <u>LCD Assembly</u>), and then do the following:

1. Remove the 4 rubber stoppers on the top of the cover and the 2 covers near the hinges.



Fig. 36 Location of LCD cover screws.

- 2. Removed the 6 screws that became accessible when removing the covers (see Fig. 36).
- 3. Remove the LCD cover.

4. Remove the screw securing the inverter board.

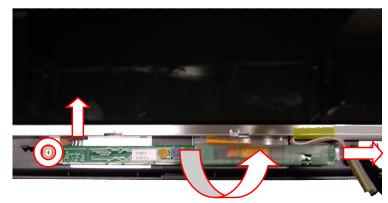


Fig. 37 Location of inverter board screw and connectors.

- 5. Extract the inverter board.
- 6. Disconnect the cables from the inverter board (see Fig 37).

LCD Panel

To disassembly the LCD panel, first remove the LCD assembly (see <u>LCD Assembly</u>), remove the LCD cover (see steps 1 - 3 in <u>Inverter Board</u>), and then perform the following steps:

1. Disconnect the cables from the inverter board (see Fig 37).

Note: It may be easier to remove the inverter board entirely to get better access to the cables (see <u>Inverter</u> <u>Board</u>).

2. Remove the screw securing the grounding cable.

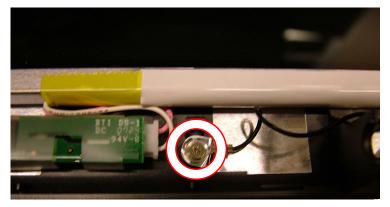


Fig. 38 Location of screw securing grounding cable.

- 3. Lift out the LCD panel.
- 4. Remove the 4 screws on each side of the LCD brackets.

5. Remove the protective tape over the LCD cable.



Fig. 39 Location of protective tape.

6. Disconnect the LCD cable (see Fig 39).

Webcam

To remove the webcam, first remove the LCD assembly (see <u>LCD Assembly</u>), remove the LCD cover (see steps 1 - 3 in <u>Inverter Board</u>), and then do the following:

1. Disconnect the cable from the webcam.



Fig. 40 Location of webcam connector.

2. Extract the webcam; it may be secured with glue and/or tape (see Fig. 40).

Note: You may have to remove the LCD panel if you need to replace the webcam cable.

WLAN Antenna

To remove the wireless antenna, first remove the LCD panel (see LCD Panel), and then do the following:

Packard Bell.

1. The wireless LAN antenna has been glued on the left and right upper part of the LCD housing; loosen it in both locations.

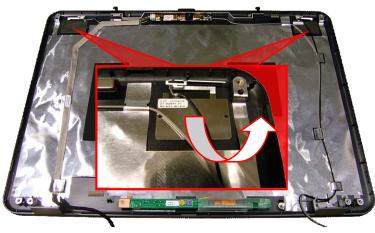


Fig. 41 Location WLAN antenna.

2. Release the antenna from the shielding foil in the LCD housing.

Note: You may have to remove the webcam to clear the light-grey cable.

Notice

The information in this guide is subject to change without notice.

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EasyNote ME Disassembly Manual

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