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About this Guide

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

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

For More Information

For more information about the Packard Bell EasyNote SL, visit Packard Bell's support web site at . The support web site also has links to additional Packard Bell documentation and detailed product 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 to the system and all peripherals using the power button.
- Unplug the AC adapter and all power and signal cables from the system.
- Remove any SD/MMC card, ExpressCard or dummy card from the computer.
- 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.
- The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components.

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

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge.
- Small Phillips screwdriver.
- Small flat 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. Slide the battery lock/unlock latch to the unlock position.

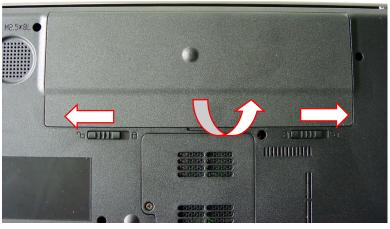


Fig. 1 Removing the battery.

- 4. Slide and hold the battery release latch to the release position and, at the same time, lift the battery upwards. There are three tabs holding the battery in place at the back (see Fig. 1).
- 5. Take the battery out of the compartment (see Fig. 1).

Hard Disk Drive 1

To remove the left hard disk drive, first remove the battery (see <u>Battery</u> on page 4) and then perform the following steps:

1. Remove the screw securing the left hard disk drive compartment cover.



Fig. 2 Removing hard disk drive compartment cover.

2. Lift the cover upwards from the left. There are two tabs holding the cover in place on the right. Raise the cover until you can remove it from the casing (see Fig. 2).

3. Remove the two screws securing the hard disk drive in the compartment.



Fig. 3 Release hard disk drive.

4. Pull the plastic tab on the hard disk drive towards the left to disconnect the drive.

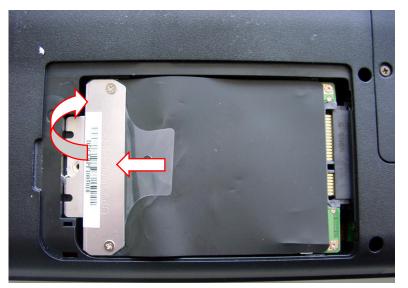


Fig. 4 Disconnecting and removing hard disk drive.

5. Take the drive out of its compartment as shown in Fig. 4.

6. Remove the two screws on the metal bracket to separate it from the hard disk drive.

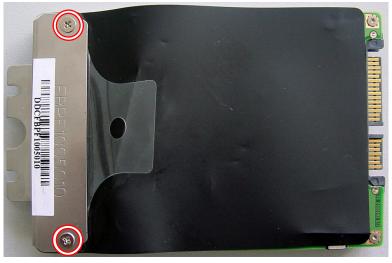


Fig. 5 Location of hard disk drive bracket screws.

Hard Disk Drive 2

To remove the right hard disk drive, first remove the battery (see <u>Battery</u> on page 4) and then perform the following steps:

1. Remove the screw securing the right hard disk drive compartment cover.



Fig. 6 Removing hard disk drive compartment cover.

2. Lift the cover upwards from the right. There are two tabs holding the cover in place on the left. Raise the cover until you can remove it from the casing (see Fig. 6).

3. Remove the two screws securing the hard disk drive in the compartment.



Fig. 7 Disconnecting and removing hard disk drive.

4. Pull the plastic tab on the hard disk drive towards the right to disconnect the drive.

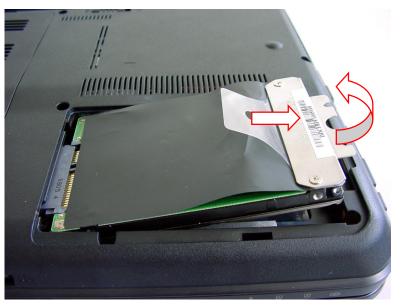


Fig. 8 Disconnecting and removing hard disk drive.

- 5. Take the drive out of its compartment as shown in Fig. 8.
- Remove the two screws on the metal bracket to separate it from the hard disk drive (see <u>Fig. 5</u>).

Memory

To remove the memory installed, first remove the battery (see <u>Battery</u> on page 4) and then perform the following steps:

1. Remove the two screws securing the memory compartment.

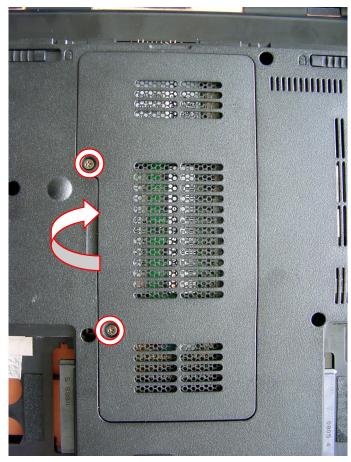


Fig. 9 Removing memory compartment cover.

- 2. Lift the cover upwards from the left. There are three tabs holding the cover in place on the right. Raise the cover until you can remove it from the casing (see <u>Fig. 9</u>).
- 3. Release the metal clip on each side securing the memory module; the module will eject upwards.



Fig. 10 Removing memory module.

4. Carefully remove the module.



Fig. 11 Removing memory module.

Note: In case two memory modules have been installed, you 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> on page 4) and then perform the following steps:

- 1. Remove the two screws securing the wireless LAN compartment cover (see Fig. 9).
- 2. Lift the cover upwards from the left. There are three tabs holding the cover in place on the right. Raise the cover until you can remove it from the casing (see Fig. 9).
- 3. Carefully disconnect the two wireless antenna cables.



Fig. 12 Location of antenna cable connectors.

Note: There are two antenna cables connected to the wireless LAN adapter. The black antenna cable is connected to MAIN (1) connector and the white antenna cable is connected to AUX (2) connector.

4. Remove the screw securing the wireless LAN; the adapter will eject upwards.



Fig. 13 Removing screw securing WLAN adapter.

5. Take out the wireless LAN adapter from the socket.

Optical Disk Drive

To remove the optical disk drive, first remove the battery (see <u>Battery</u> on page 4) and then perform the following steps:

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

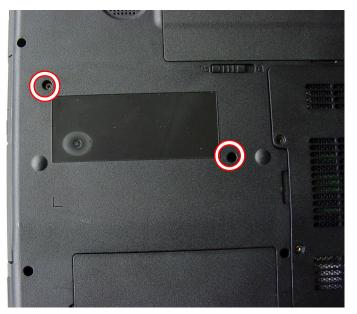


Fig. 14 Removing screws securing optical disk drive.

- 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 two screws securing the metal bracket and remove it from the drive.



Fig. 15 Removing metal bracket.

TV Tuner (Optional)

To remove the optional TV tuner, first remove the battery (see <u>Battery</u> on page 4), and then perform the following steps:

- 1. Remove the two screws securing the TV tuner compartment cover (see Fig. 9).
- Lift the cover upwards from the left. There are three tabs holding the cover in place on the right. Raise the cover until you can remove it from the casing (see <u>Fig. 9</u>).
- 3. Carefully disconnect the TV antenna cable.



Fig. 16 Location of antenna cable connector and screw.

4. Remove the screw securing the TV tuner (see Fig. 16); the card will eject upwards.

5. Take out the TV tuner card from the socket.



Fig. 17 Removing TV tuner card.

Intel Turbo Memory (Optional)

To remove the optional Intel Turbo Memory module, first remove the battery (see <u>Battery</u> on page 4), and then perform the following steps:

- 1. Remove the two screws securing the Intel Turbo Memory compartment cover (see Fig. 9).
- 2. Lift the cover upwards from the left. There are three tabs holding the cover in place on the right. Raise the cover until you can remove it from the casing (see Fig. 9).
- 3. Remove the screw securing the Intel Turbo Memory module; the card will eject upwards.



Fig. 18 Location of screw securing Intel Turbo Memory module.

4. Take out the Intel Turbo Memory module from the socket.

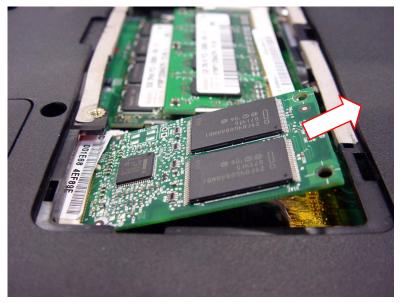


Fig. 19 Removing Intel Turbo Memory module.

CMOS Battery

To remove the CMOS battery, first remove the battery (see <u>Battery</u> on page 4), remove either the TV tuner card (see <u>TV Tuner (Optional)</u> on page 11) or the Intel Turbo Memory module (see <u>Intel</u> <u>Turbo Memory (Optional)</u> on page 12), and then perform the following steps:

1. Disconnect the white CMOS battery header from the main board.



Fig. 20 Disconnecting CMOS battery cable.

2. Take out the CMOS battery.

Keyboard

To remove the keyboard, first remove the battery (see <u>Battery</u> on page 4) 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 keyboard by prying it up along the top side of the keyboard, particularly at the following keys: <Esc>, <F5>, <F10>, <Pause> and <*>.



Fig. 21 Removing keyboard.

- 3. Tilt the keyboard gently forward and let it rest upside down on the touchpad.
- 4. Before removing the keyboard entirely, carefully release the black clip securing the flat cable and disconnect the cable from the main board.

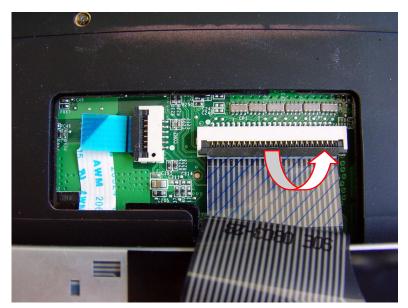


Fig. 22 Releasing keyboard flat cable.

Top Cover

To remove the top cover, remove the battery (see <u>Battery</u> on page 4), remove both hard disk drives (see <u>Hard Disk Drive1</u> on page 4 and <u>Hard Disk Drive 2</u> on page 6), remove the memory (see <u>Memory</u> on page 7), remove the wireless LAN adapter (see <u>Wireless LAN Adapter</u> on page 9), remove the optical disk drive (see <u>Optical Disk Drive</u> on page 10), remove either the TV tuner (see <u>TV Tuner (Optional)</u> on page 11) or the Intel Turbo memory (see <u>Intel Turbo Memory</u> (<u>Optional</u>) on page 12), remove the CMOS battery (see <u>CMOS Battery</u> on page 13), remove the keyboard (see <u>Keyboard</u> on page 13), and then perform the following steps:

1. Release the black clip securing the touchpad flat cable and disconnect the cable.



Fig. 23 Location of touchpad connector.

2. Remove the four screws securing the top cover.

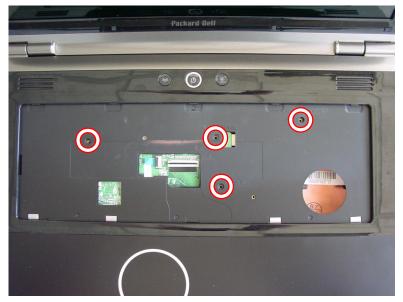


Fig. 24 Location of cover screws.

3. Turn the notebook upside down

4. Remove the twenty screws securing the top cover.



Fig. 25 Location of top cover screws.

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

Touchpad

To remove the touchpad module, first remove the top cover (see <u>Top Cover</u> on page 14), and then do the following:

1. Disconnect both flat cables from the headers on the touchpad module.

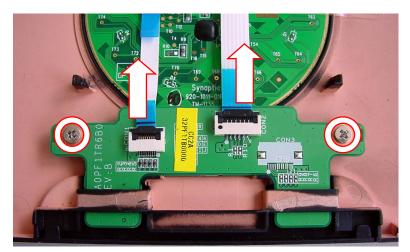


Fig. 26 Disconnecting touchpad cables.

- 2. Remove the two screws securing the touchpad module to the top cover (see Fig. 26).
- 3. Remove the touchpad module.

LCD Assembly

To disassemble the LCD assembly, first remove the top cover (see <u>Top Cover</u> on page 14), and then perform the following steps:

1. Remove the screws from the hinges, one on the left side and two on the right side.

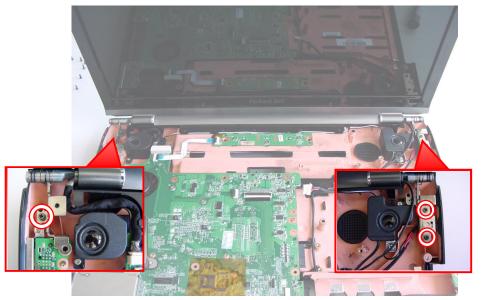


Fig. 27 Location of hinge screws.

2. Disconnect the white internal video header.

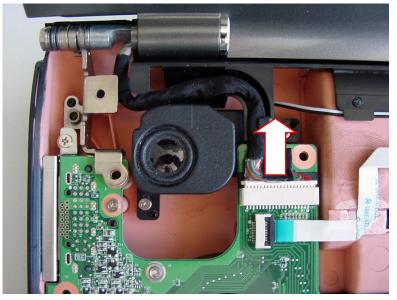


Fig. 28 Location internal video connector.

3. Lift out the LCD assembly.

Bluetooth

To remove the Bluetooth module, first remove the top cover (see <u>Top Cover</u> on page 14), and then perform the following steps:

1. Disconnect the Bluetooth cable from the main board.

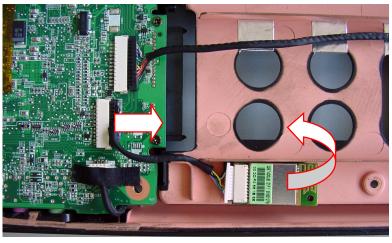


Fig. 29 Location of bluetooth module.

Note: Optionally, you can disconnect the other end of the cable from the Bluetooth module.

2. The Bluetooth module has been glued onto the casing. Carefully remove the Bluetooth module from the casing (see Fig. 29).

Speakers

To remove the speakers, first remove the top cover (see <u>Top Cover</u> on page 14), and then perform the following steps:

- 1. Detach any adhesive tape securing the speaker cable in the header on the main board.
- 2. Disconnect the speaker cable from the header.



Fig. 30 Location of speaker cable header on the main board.

Note: The speaker assembly is integrated in the bottom casing and does not require separate disassembly.

USB Board

To remove the USB board, first remove the top cover (see <u>Top Cover</u> on page 14), and then perform the following steps:

1. Disconnect the black cable from the header on the USB board.



Fig. 31 Location of USB board cable and screw.

Note: Optionally, you can disconnect the other end of the cable from the main board.

- 2. Remove the screw securing the USB board (see Fig. 31).
- 3. Lift out the USB board.

SATA Adapter

To remove the SATA adapter, first remove the top cover (see <u>Top Cover</u> on page 14), and then perform the following steps:

1. Remove the two screws securing the SATA adapter.



Fig. 32 Location of SATA adapter screws.

2. Lift out the SATA adapter.

Power Connector

To remove the power connector, first remove the top cover (see <u>Top Cover</u> on page 14), and then perform the following steps:

1. Carefully disconnect the power cable from the header on the main board.



Fig. 33 Disconnecting power cable.

2. Remove the screw securing the short black cable.

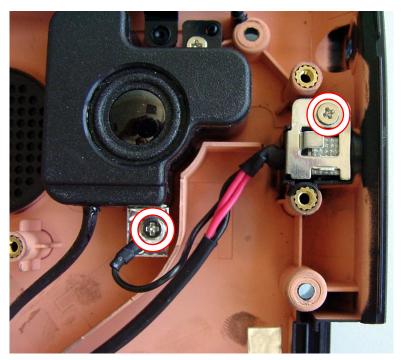


Fig. 34 Location of power connector screws.

- 3. Remove the screw securing the power connector to the casing (see Fig. 34).
- 4. Remove the power connector and the cable.

CPU Fan and Heat Sink

To remove the CPU fan and heat sink, first remove the top cover (see <u>Top Cover</u> on page 14) and then perform the following steps:

1. Disconnect the CPU fan power cable from the header on the main board.

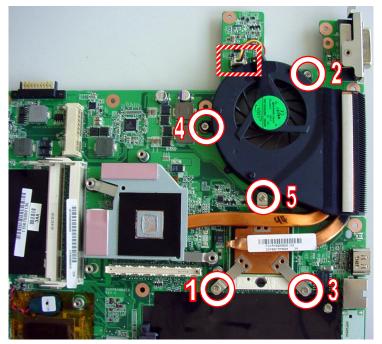


Fig. 35 Location of CPU fan and heat sink.

- 2. Turn the five screws securing the heat sink and CPU fan loose in designated order (see Fig. 35).
- 3. Carefully remove the CPU fan and heat sink.

Main Board

To remove the main board, remove the top cover (see <u>Top Cover</u> on page 14), remove the LCD assembly (see <u>LCD Assembly</u> on page16), remove the Bluetooth module (see <u>Bluetooth</u> on page 17), remove the speakers (see <u>Speakers</u> on page 18), remove the USB board (see <u>USB Board</u> on page 19), remove the SATA adapter (see <u>SATA Adapter</u> on page 19), remove the power connector (see <u>Power Connector</u> on page 20), remove the CPU fan and heat sink (see <u>CPU Fan and Heat</u> <u>Sink</u> on page 20), and then perform the following steps:

1. Carefully disconnect the flat cable from the header on the main board.



Fig. 36 Location of switch board flat cable.

Note: Optionally, you can disconnect the other end of the flat cable from the switch board.

2. Remove the eight screws securing the main board.

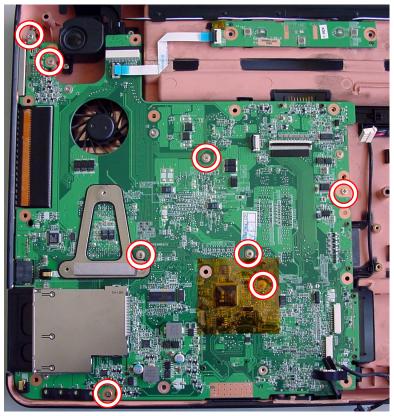


Fig. 37 Location of main board screws.

3. Lift the main board out of the bottom casing.

CPU

To remove the CPU, first remove the main board (see <u>Main Board</u> on page 21), and then perform the following steps:

1. Turn the screw in the CPU socket counter-clockwise into the unlock position to release the CPU.



Fig. 38 Location of screw securing CPU.

2. Carefully take out the CPU from the socket.

Video Board

To remove the video board, first remove the main board (see <u>Main Board</u> on page 21), and then perform the following steps:

1. Remove the five screws securing the video board.

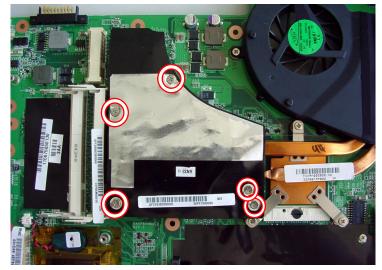


Fig. 39 Location of screws securing video board.

2. Carefully separate the video board from the main board.

LCD Bezel

To remove the LCD bezel, first remove the LCD assembly (see <u>LCD Assembly</u> on page 16), and then perform the following steps:

- 1. Remove the six screw covers on the LCD bezel (one in each corner and two on either side of the webcam).
- 2. Remove the six screws that became accessible after removing the covers.
- 3. Carefully pry open the LCD bezel.

Inverter Board

To remove the inverter board, first remove the LCD bezel (see <u>LCD Bezel</u> on page 23), and then do the following:

1. Disconnect the cables from the inverter board.



Fig. 40 Location of inverter board.

- 2. Remove the screw securing the inverter board.
- 3. Extract the inverter board.

Webcam

To remove the webcam, first remove the LCD bezel (see <u>LCD Bezel</u> on page 23), and then do the following:

1. Disconnect the cable from the header on the webcam.



Fig. 41 Location of webcam connector.

- 2. Remove the two screws securing the webcam module (see Fig. 41).
- 3. Extract the webcam.

LCD Panel

To disassembly the LCD panel, first remove the LCD assembly (see <u>LCD Assembly</u> on page 16), remove the LCD bezel (see <u>LCD Bezel</u> on page 23), and then perform the following steps:

1. Remove the four screws securing the LCD.

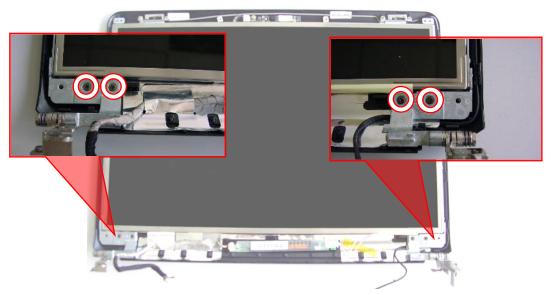


Fig. 42 Location of bracket screws.

2. Separate the LCD panel with the brackets from the back cover.

LCD Cable

To remove the LCD cable, first remove the LCD panel (see <u>LCD Panel</u> on page 24), and then do the following:

1. Detach any adhesive tape glued to the LCD panel.



Fig. 43 Location of protective tape.

2. Disconnect the flexible LCD cable from the LCD panel (see Fig. 43).

Wireless LAN Antenna

To remove the wireless antenna, first remove the LCD panel (see <u>LCD Panel</u> on page 24), and then do the following:

1. Remove the screw securing the wireless LAN antenna cable on the left and right upper part of the LCD housing.

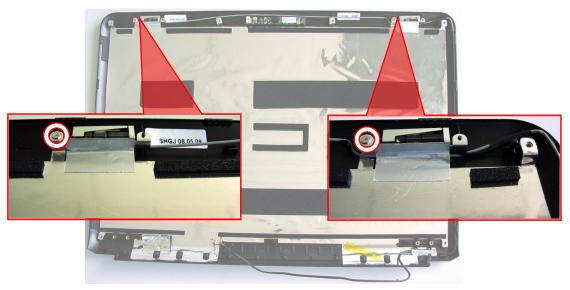


Fig. 44 Location of wireless LAN antenna screws.

- 2. Clear the antenna cable from the shielding foil in the LCD housing.
- 3. Remove the wireless LAN antenna cable.

Notice

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EasyNote SL Disassembly Manual

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