EUROCOM

PANTHER 2.0

System Manual

www.EUROCOM.com

Chapter 2: Disassembly

Overview

This chapter provides step-by-step instructions for disassembling the ***X7200*** series notebook's parts and subsystems. When it comes to reassembly, reverse the procedures (unless otherwise indicated).

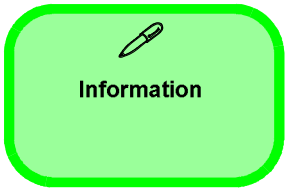
We suggest you completely review any procedure before you take the computer apart.

Procedures such as upgrading/replacing the RAM, optical device and hard disk are included in the User's Manual but are repeated here for your convenience.

To make the disassembly process easier each section may have a box in the page margin. Information contained under the figure # will give a synopsis of the sequence of procedures involved in the disassembly procedure. A box with a lists the relevant parts you will have after the disassembly process is complete. **Note**: The parts listed will be for the disassembly procedure listed ONLY, and not any previous disassembly step(s) required. Refer to the part list for the previous disassembly procedure. The amount of screws you should be left with will be listed here also.

A box with a will also provide any possible helpful information. A box with a contains warnings.

An example of these types of boxes are shown in the sidebar.



NOTE: All disassembly procedures assume that the system is turned **OFF**, and disconnected from any power supply (the battery is removed too).

Maintenance Tools

The following tools are recommended when working on the notebook PC:

- M3 Philips-head screwdriver
- M2.5 Philips-head screwdriver (magnetized)
- M2 Philips-head screwdriver
- Small flat-head screwdriver
- Pair of needle-nose pliers
- Anti-static wrist-strap

Connections

Connections within the computer are one of four types:

Locking collar sockets for ribbon connectors	To release these connectors, use a small flat-head screwdriver to gently pry the locking collar away from its base. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.
Pressure sockets for multi-wire connectors	To release this connector type, grasp it at its head and gently rock it from side to side as you pull it out. Do not pull on the wires themselves. When replacing the connection, do not try to force it. The socket only fits one way.
Pressure sockets for ribbon connectors	To release these connectors, use a small pair of needle-nose pliers to gently lift the connector away from its socket. When replacing the connection, make sure the connector is oriented in the same way. The pin1 side is usually not indicated.
Board-to-board or multi-pin sockets	To separate the boards, gently rock them from side to side as you pull them apart. If the connection is very tight, use a small flat-head screwdriver - use just enough force to start.

Maintenance Precautions

The following precautions are a reminder. To avoid personal injury or damage to the computer while performing a removal and/or replacement job, take the following precautions:

1. **Don't drop it**. Perform your repairs and/or upgrades on a stable surface. If the computer falls, the case and other components could be damaged.
2. **Don't overheat it**. Note the proximity of any heating elements. Keep the computer out of direct sunlight.
3. **Avoid interference**. Note the proximity of any high capacity transformers, electric motors, and other strong magnetic fields. These can hinder proper performance and damage components and/or data. You should also monitor the position of magnetized tools (i.e. screwdrivers).
4. **Keep it dry**. This is an electrical appliance. If water or any other liquid gets into it, the computer could be badly damaged.
5. **Be careful with power**. Avoid accidental shocks, discharges or explosions.
   - Before removing or servicing any part from the computer, turn the computer off and detach any power supplies.
   - When you want to unplug the power cord or any cable/wire, be sure to disconnect it by the plug head. Do not pull on the wire.
6. **Peripherals** – Turn off and detach any peripherals.
7. **Beware of static discharge**. ICs, such as the CPU and main support chips, are vulnerable to static electricity. Before handling any part in the computer, discharge any static electricity inside the computer. When handling a printed circuit board, do not use gloves or other materials which allow static electricity buildup. We suggest that you use an anti-static wrist strap instead.
8. **Beware of corrosion**. As you perform your job, avoid touching any connector leads. Even the cleanest hands produce oils which can attract corrosive elements.
9. **Keep your work environment clean**. Tobacco smoke, dust or other air-born particulate matter is often attracted to charged surfaces, reducing performance.
10. **Keep track of the components**. When removing or replacing any part, be careful not to leave small parts, such as screws, loose inside the computer.

Power Safety Warning

Before you undertake any upgrade procedures, make sure that you have turned off the power, and disconnected all peripherals and cables (including telephone lines). It is advisable to also remove your battery in order to prevent accidentally turning the machine on.

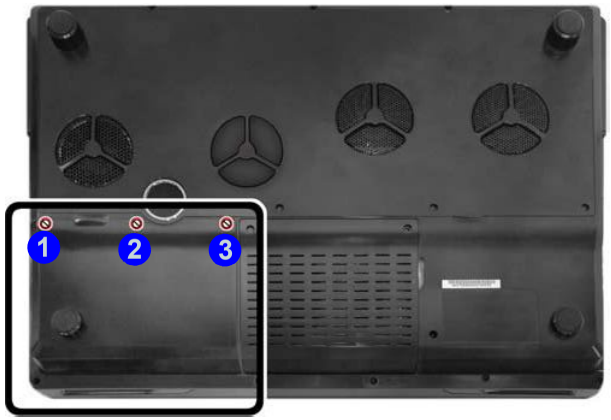
Cleaning

Do not apply cleaner directly to the computer, use a soft clean cloth.
Do not use volatile (petroleum distillates) or abrasive cleaners on any part of the computer.

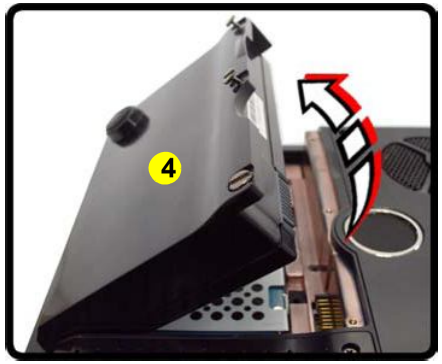
Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Loosen screws 1 - 3 (*Figure 1a*) and carefully lift the battery 4 up (*Figure 1b*).
3. Remove the battery 4 from the battery bay (*Figure 1c*).

a.



b.



c.

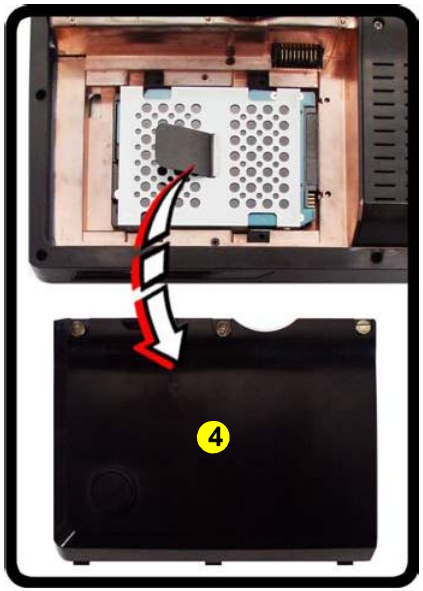


Figure 1
Battery Removal

a. Loosen screws.
b. Carefully lift the battery up.
c. Remove the battery from the battery bay.

4. Battery

- 3 Screws

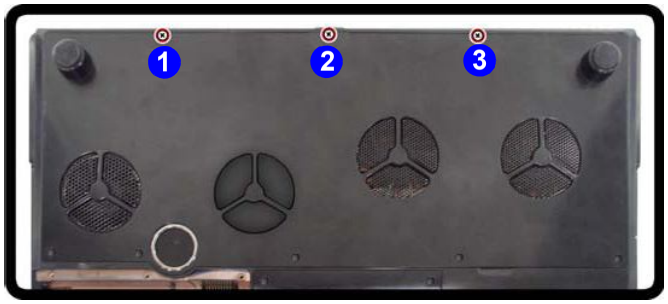
Figure 8
Keyboard Removal

a. Remove screws from the bottom of the computer.
b. Turn the computer over, open the Lid/LCD, and carefully (a cable is connected to the underside of the LED cover module) unsnap up the LED cover module from point 4 on the right .
c. Disconnect cable and remove the LED cover module .

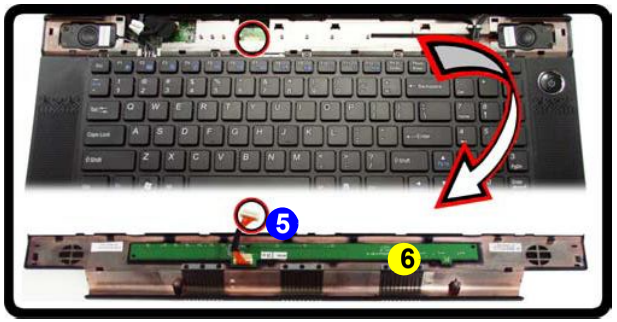
Removing the Keyboard

1. Turn **off** the computer and remove the battery (*page 2 - 5*).
2. Remove screws 1 - 3 from the bottom of the computer (*Figure 8a*).
3. Turn the computer over, open the Lid/LCD, and carefully (a cable is connected to the underside of the LED cover module) unsnap up the LED cover module from point 4 on the right (*Figure 8b*).
4. Disconnect cable 5 and remove the LED cover module 6 (*Figure 8c*).

a.



c.



b.

6. LED Cover Module

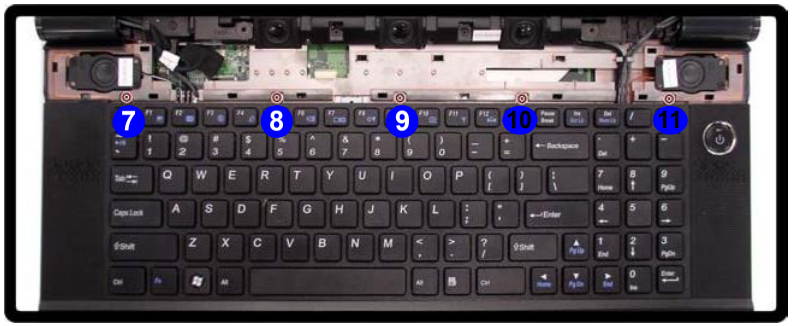
- 3 Screws

5. Remove screws 7 - 11 from the keyboard (*Figure 9d*).
6. Carefully lift the keyboard up, being careful not to bend the keyboard ribbon cable 12. Disconnect the keyboard ribbon cable 12 from the locking collar socket 13 (*Figure 9e*).
7. Remove the keyboard 14 (*Figure 9f*).

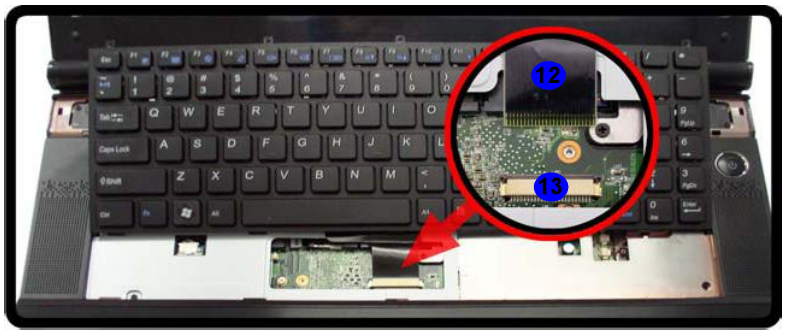
Figure 9
Keyboard Removal (cont'd.)

d. Remove screws from the keyboard.
e. Carefully lift the keyboard up, being careful not to bend the keyboard ribbon cable . Disconnect the keyboard ribbon cable from the locking collar socket .
f. Remove the keyboard.

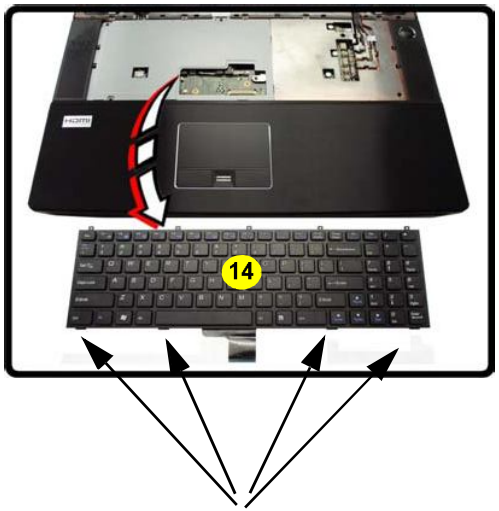
d.



e.



f.



Re-Inserting the Keyboard

When re-inserting the keyboard, align first the **four** keyboard tabs (***Figure 9f***) that are located at the bottom, to the slots in the case.

14. Keyboard

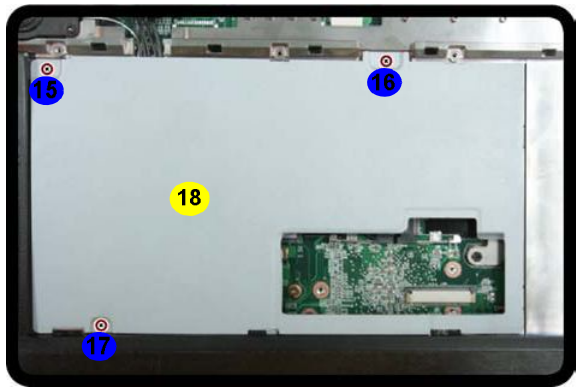
- 5 Screws

Figure 10
Keyboard Removal (cont'd.)

g. Remove screws from the keyboard shielding plate.
h. Lift the keyboard shielding plate up in the direction of the arrow.
i. Remove the keyboard shielding plate.

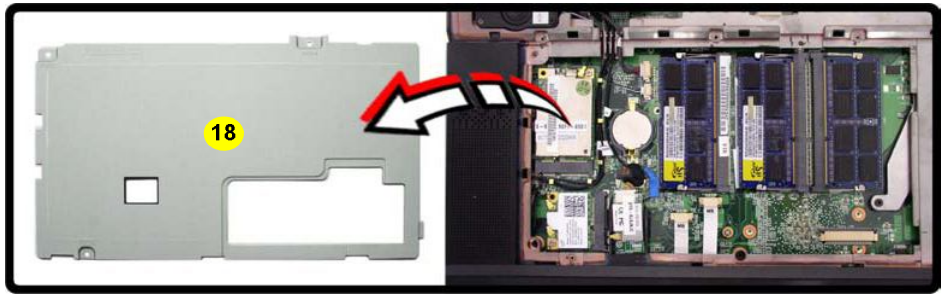
8. Remove screws 15 - 17 from the keyboard shielding plate 18 (*Figure 10g*).
9. Lift the keyboard shielding plate up in the direction of the arrow 19 (*Figure 10h*).
10. Remove the keyboard shielding plate 18 (*Figure 10i*).

g.



h.

i.



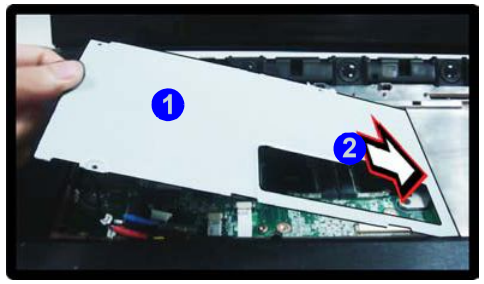
18. Keyboard Shielding Plate

- 3 Screws

Keyboard Shielding Plate Insertion

1. When re-inserting the keyboard shielding plate 1 make sure you insert it by sliding it into position at an angle as illustrated by arrow 2 below, and press it down into position (***Figure 11a***).
2. Secure the plate with screws 3 - 5 (***Figure 11b***).

a.



b.

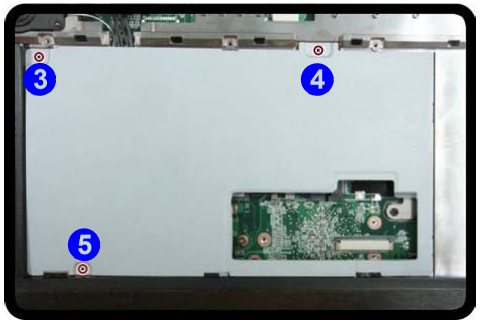


Figure 11
Keyboard Shielding Plate Insertion

a. When re-inserting the keyboard shielding plate make sure you insert it by sliding it into position at an angle as illustrated by arrow below, and press it down into position.
b. Secure the plate with screws.

- 3 Screws

Figure 14
RAM Module Removal

a. The RAM modules will be visible at points 1 - 3.
b. Gently pull the two release latches on the sides of the memory socket in the direction indicated by the arrows.
c. The RAM module will pop-up, and you can then remove it.

Contact Warning

Be careful not to touch the metal pins on the module's connecting edge. Even the cleanest hands have oils which can attract particles, and degrade the module's performance.

10. RAM Module

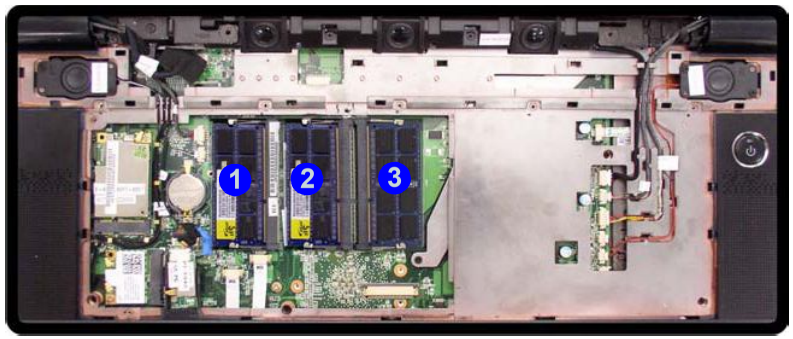
Removing the System Memory (RAM)

The computer has three memory sockets for 204 pin Small Outline Dual In-line Memory Modules (SO-DIMM) supporting DDR3 1066/1333MHz. The main memory can be expanded up to 12GB. The SO-DIMM modules supported are 1024MB, and 2048MB and **DDRIII** Modules. The total memory size is automatically detected by the POST routine once you turn on your computer.

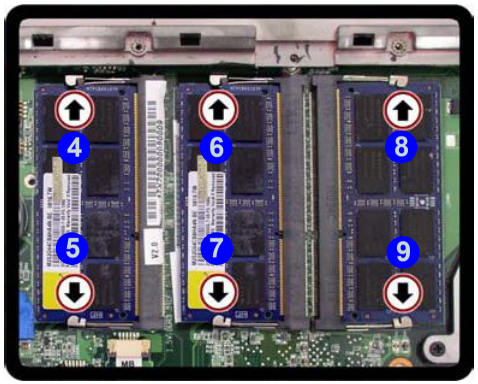
Memory Upgrade Process

1. Turn **off** the computer, remove the battery (*page 2 - 5*) and the keyboard (*page 2 - 9*).
2. The RAM modules will be visible at points 1 - 3 (*Figure 14a*).
3. Gently pull the two release latches (4 - 9) on the sides of the memory socket in the direction indicated by the arrows (*Figure 14b*).
4. The RAM module 10 will pop-up (*Figure 14c*), and you can then remove it.

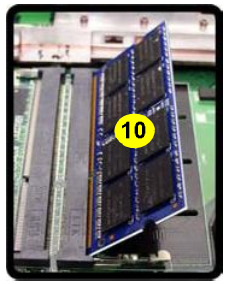
a.



b.



c.



5. Pull the latches to release the second and third modules if necessary.
6. Insert a new module holding it at about a 30° angle and fit the connectors firmly into the memory slot.
7. The module's pin alignment will allow it to only fit one way. Make sure the module is seated as far into the slot as it will go. DO NOT FORCE the module; it should fit without much pressure.
8. Press the module in and down towards the mainboard until the slot levers click into place to secure the module.
9. Replace the bay cover and screws (**make sure you reconnect the fan cable before screwing down the bay cover**).
10. Restart the computer to allow the BIOS to register the new memory configuration as it starts up.