

Service Manual

(LW60/70)

LG Electronics

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Chapter 1. Service information

1-1. Important service information

■ Strategy for replacing parts (FRU-Field Replaceable Units)

Before replacing parts

Make sure that latest BIOS and drivers are installed before replacing any parts (FRUs) listed in this

Use the following strategy to prevent unnecessary expense for replacing and servicing parts

1. If you are instructed to replacing a part but the replacement does not correct the problem, reinstall the original part before you continue.
2. Some computers have both a processor board and system board. If you are instructed to replace either the processor board or the system board, and replacing one of them does not correct the problem, reinstall that board, and then replace the other one.
3. If an adapter or device consists of more than one part, any of the parts (FRUs) may be the cause of the error. Before replacing the adapter or device, remove the parts (FRUs), one by one, to see if the symptoms change. Replace only the part that changed the symptoms.

Caution



The BIOS configuration on the computer you are servicing may have been customized. Running Automatic Configuration may alter the settings. Note the current configuration settings; then, when service has been completed, verify that those settings remain in effect.

■ Strategy for replacing a hard-disk drive

You have to get a User's approval before formatting or replacing a hard-disk drive. You must let the User know that the user is responsible for the loss data

Caution



The drive startup sequence in the computer you are servicing may have been changed. Be extremely careful during write operations such as copying, saving, or formatting. If you select an incorrect drive, data or programs can be overwritten.

1-2. Safety notices

**Warning**

Before the computer is powered-on after part (FRU) replacement, make sure all screws, springs, and other small parts are in place and are not left loose inside the computer. Verify this by shaking the computer and listening for rattling sounds. Metallic parts or metal flakes can cause electrical shorts.

**Warning**

some standby batteries contain a small amount of nickel and cadmium. Do not disassemble a standby battery, recharge it, throw it into fire or water, or short-circuit it. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery

**Warning**

The battery pack contains small amounts of nickel. Do not disassemble it, throw it into fire or water, or short-circuit it. Dispose of the battery pack as required by local ordinances or regulations. Use only the battery in the appropriate parts listing when replacing the battery pack. Use of an incorrect battery can result in ignition or explosion of the battery.

**Warning**

If the LCD breaks and the fluid from inside the LCD gets into your eyes or on your hands, immediately wash the affected areas with water for at least 15 minutes. Seek medical care if any symptoms from the fluid are present after washing.

**Warning**

To avoid shock, do not remove the plastic cover that protects the lower part of the inverter card.

**Warning**

Though the main batteries have low voltage, a shorted or grounded battery can produce enough current to burn personnel or combustible materials.

**Warning**

Before removing any part (FRU), turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.

1-3. Safety information

■ General safety

Follow these rules to ensure general safety

- Observe good housekeeping in the area of the machines during and after maintenance.
- When lifting any heavy object
 1. Ensure you can stand safely without slipping.
 2. Distribute the weight of the object equally between your feet.
 3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift.
 4. Lift by standing or by pushing up with your leg muscles
(This action removes the strain from the muscles in your back.)
- Do not attempt to lift any object weights more than 16kg(35lb) or object that you think are too heavy for you.
- Do not perform any action that causes hazards to the customer, or that makes the equipment unsafe.
- Before you start the machine, ensure that other service representatives and the customer's personnel are not in a hazardous position.
- Place removed covers and other parts in a safe place, away from all personnel, while you are servicing the machine.
- Keep your tool box away from walk areas so that other people will not trip over it.
- Do not wear loose clothing that can be trapped in the moving parts of a machine. Make sure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with a nonconductive clip, approximately 8 centimeters(3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for you clothing.
- Wear safety glasses when you are hammering, drilling, soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that might be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.



Caution

Metal objects are good electrical conductors.

■ Electrical safety

Observe the following rules when working on electrical equipment.



Important

Use only approved tools and test equipment. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have, near their equipment, rubber floor mats that contain small conductive fibers to decrease electrostatic discharges. Do not use this type of mat to protect yourself from electrical shock.

- Find the room emergency power-off switch, disconnecting switch, or electrical outlet. If an electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near equipment that has hazardous voltages.
- Disconnect all power before
 1. Performing a mechanical inspection
 2. Working near power supplies
 3. Removing or installing main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions : Ensure that another person, familiar with the power-off controls, is near you.



Caution

Another person must be there to switch off the power, if necessary.

- Use only one hand when working with powered-on electrical equipment. Keep the other hand in your pocket or behind your back



Caution

An electrical shock can occur only when there is a complete circuit. By observing the above rule, you may prevent a current from through your body.

- When using testers, set the controls correctly and use the approved probe leads and accessories for that tester

Ch1. Service information

- Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.
- Observe the special safety precautions when you work with very high voltages. These instructions are in the safety sections of maintenance information. Use extreme care when measuring high voltages.
- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- Never assume that power has been disconnected from a circuit. First check that it has been powered off.
- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, non-grounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive such touching can cause personal injury and machine damage.
- Do not service the following parts with the power on when they are removed from their normal operating places in a machine.
 1. Power supply units
 2. Pumps
 3. Blowers and fans
 4. Motorgeneratorsand similar units. (This practice ensure correct grounding of the units.)
- If an electrical accident occurs
 1. Use caution ; do not become a victim of yourself.
 2. Switch off power.
 3. Send another person to get medical aid.

■ Safety inspection guide

The purpose of this inspection guide is to assist you in identifying potentially unsafe conditions.

As each machine was designed and built, required safety items were installed to protect users and service personnel from injury. This guide addresses only those items. You should use good judgment to identify potential safety hazards due to attachment of non-LG features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

· Consider these conditions and the safety hazards they present

1. Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock)
2. Mechanical hazards, such as loose or missing hardware

Refer to the following checklist and begin the checks with the power off, and the power cord disconnected.

· Checklist

1. Check exterior covers for damage (loose, broken, or sharp edges)
2. Power off the computer. Disconnect the power cord.
3. Check the power cord for :
 - a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 Ω or less between the external ground pin and frame ground.
 - b. The power cord should be the type specified in the parts list.
 - c. Insulation must not be frayed or worn.
4. Remove the cover.
5. Check for any obvious non-LG alterations. Use good judgment as to the safety of any non-LG alterations.
6. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
7. Check for worn, frayed, or pinched cables.
8. Check that the power-supply cover fasteners (screw or rivets) have not been removed or tampered with.

■ Handling devices that are sensitive to electrostatic discharge

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD). ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

Note

Use product-specific ESD procedures when they exceed the requirements noted here.

Make sure that the ESD protective devices you use have been certified (ISO9000) as fully effective.

· When handling ESD-sensitive parts :

1. Keep the parts in protective packages until they are inserted into the product.
2. Wear a grounded wrist strap against your skin to eliminate static on your body.
3. Prevent the part from touching your clothing. Most clothing retains a charge even when you are wearing a wrist strap.
4. Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
5. Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

Note

The use of a grounding system is desirable but not required to protect against ESD damage.

- a. Attach the ESD ground clip too any frame ground, ground braid, or green-wire ground.
- b. Use an ESD ground or reference point when working on a double-insulated or battery-operated system. You can use coax or connector-outside shells on these systems.
- c. Use the round ground-prong of the AC plug on AC-operated computers.

■ Grounding requirements

Electrical grounding of the computers is required for operator safety and correct system function.

Proper grounding of the electrical outlet can be verified by a certified electrician.

1-4. Laser compliance statement

When a CD-ROM drive, DVD drive or the other laser product is installed, note the following :



Caution

Use of controls or adjustments or performance of procedures other than those specified here in might result in hazardous radiation exposure.

Opening the CD-ROM drive, DVD-ROM drive or the other optical storage device could result in exposure to hazardous laser radiation.

There are no serviceable parts inside those drives. Do not open



Danger

Emits visible and invisible laser radiation when open. Do not stare into the beam , do not view directly with optical instruments, and avoid direct exposure to the beam.

1-5. Backup (Standby) RTC battery safety information

When replacing or disposing of the backup (standby) RTC battery, note the following :



Caution

There is the risk of explosion if the backup (standby) RTC battery is replaced by an incorrect type. Dispose of used backup (standby) RTC battery according to your local ordinances or regulation.

Для замены, используйте соответствующий тип батареек.

Существует опасность воспламенения.

Удаляйте отработанные батарейки согласно местным правилам или нормам.

Неправильное удаление батареек может привести к их взрыву или пожару.

باتری ذخیره (یدکی) را با نوع درست آن عوض کنید.

خطر انفجار وجود دارد.

باتری های ذخیره های (یدکی) استفاده شده را بر اساس دستورالعمل داخلی مصرف کنید.

مصرف باتریهای نادرست منجر به انفجار یا آتش سوزی میشود.

غير البطارية البديلة على الطراز المناسب.

وهناك احتمال الانفجار.

تخلص من البطاريات البديلة المستعملة حسب القوانين والأنظمة المحلية.

البطاريات المتخلص منها بصورة غير مناسبة قد تؤدي الى انفجار او احتراق.

1-6. Read this first

Before you go to the checkout guide, be sure to read this section.

Important Notes

- Only trained personnel certified by LG should service the computer.
- Read the entire FRU removal and replacement page before replacing any FRU.
- Use new nylon-coated screws when you replace FRUs.
- Be extremely careful during such write operations as copying, saving, formatting.
Drives in the computer that you are servicing sequence might have been altered. If you selected an incorrect drive, data or programs might be overwritten.
- Replace FRUs only for the correct mode.
- When you replace a FRU, make sure the model of the machine and the FRU part number are correct by referring to the FRU parts list.
- A FRU should not be replaced because of a single, irreproducible failure. Single failures can occur for a variety of reasons that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors.
- Consider replacing a FRU only when a problem recurs. If you suspect that a FRU is defective, clear the error log and run the test again. If the error does not recur, do not replace the FRU.
- Be careful not to replace a non-defective FRU.

■ What to do first

You must fill out the record form first.

During the warranty period, the customer may be responsible for repair costs if the computer damage was caused by misuse, accident, modification, unsuitable physical or operating environment, or improper maintenance by the customer. The following list provides some common items that are not covered under warranty and some symptoms that might indicate that the system was subjected to stress beyond normal use. Before checking problems with computer, determine whether the damage is covered under the warranty by referring to the following :

The followings are not covered under warranty :

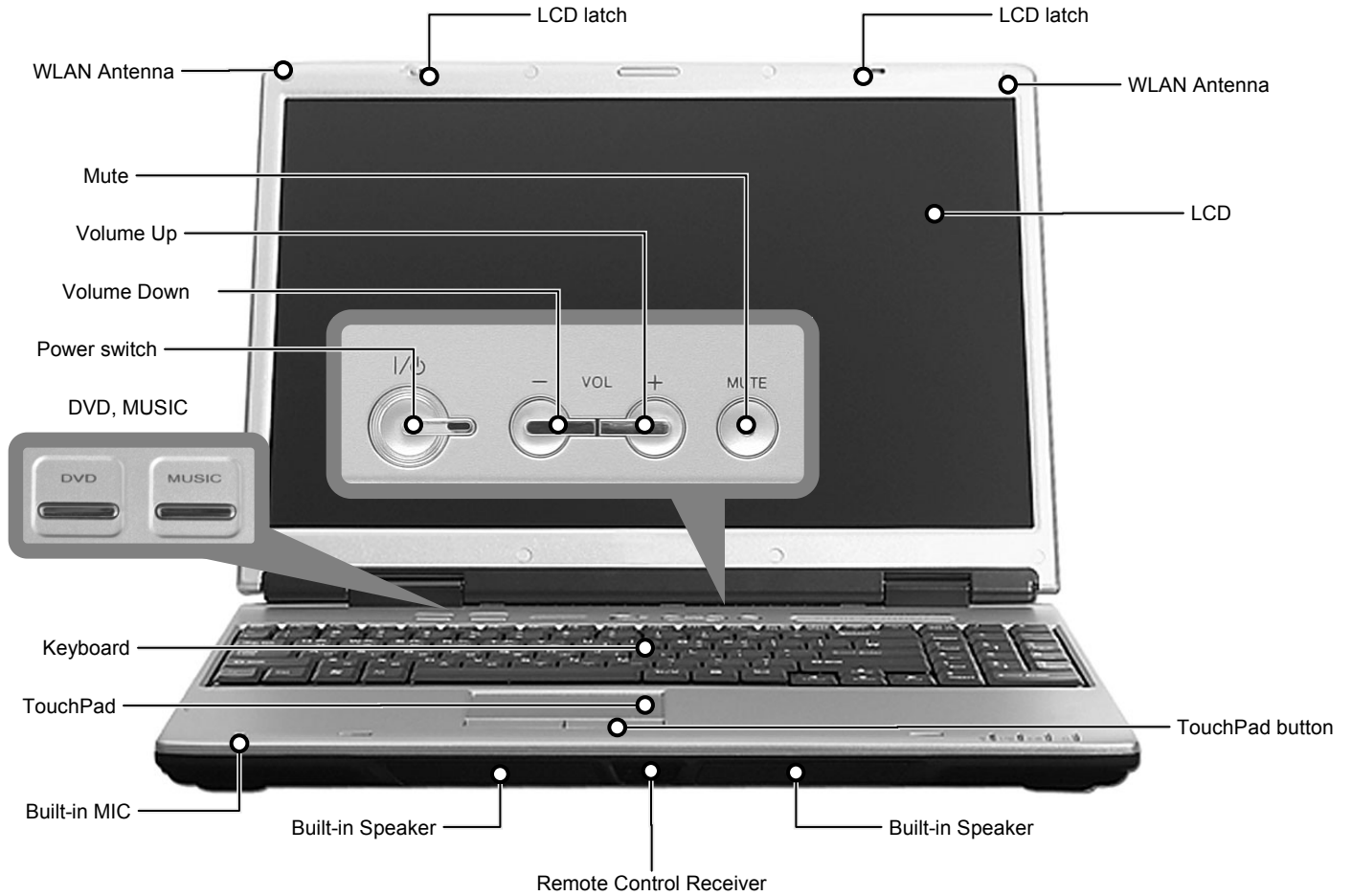
- CD panel cracked from the application of excessive force or from being dropped
- Scratched (cosmetic) parts
- Distortion, deformation, or discoloration of the cosmetic parts
- Cracked or broken plastic parts, broken latches, broken pins, or broken connectors caused by excessive force
- Damage caused by liquid spilled into system
- Damage caused by improper insertion of a PC Card or the installation of an incompatible card
- Damage caused foreign material in the diskette drive
- Diskette drive damage caused by pressure on the diskette drive cover or by the insertion of a diskette with multiple labels
- Damaged or bent diskette eject button
- Fusses blown by attachment of a non-supported device
- Forgotten computer password (making the computer unusable)
- Sticky keys caused by spilling a liquid onto the keyboard

The following symptoms might indicate damage caused by non-warranted activities :

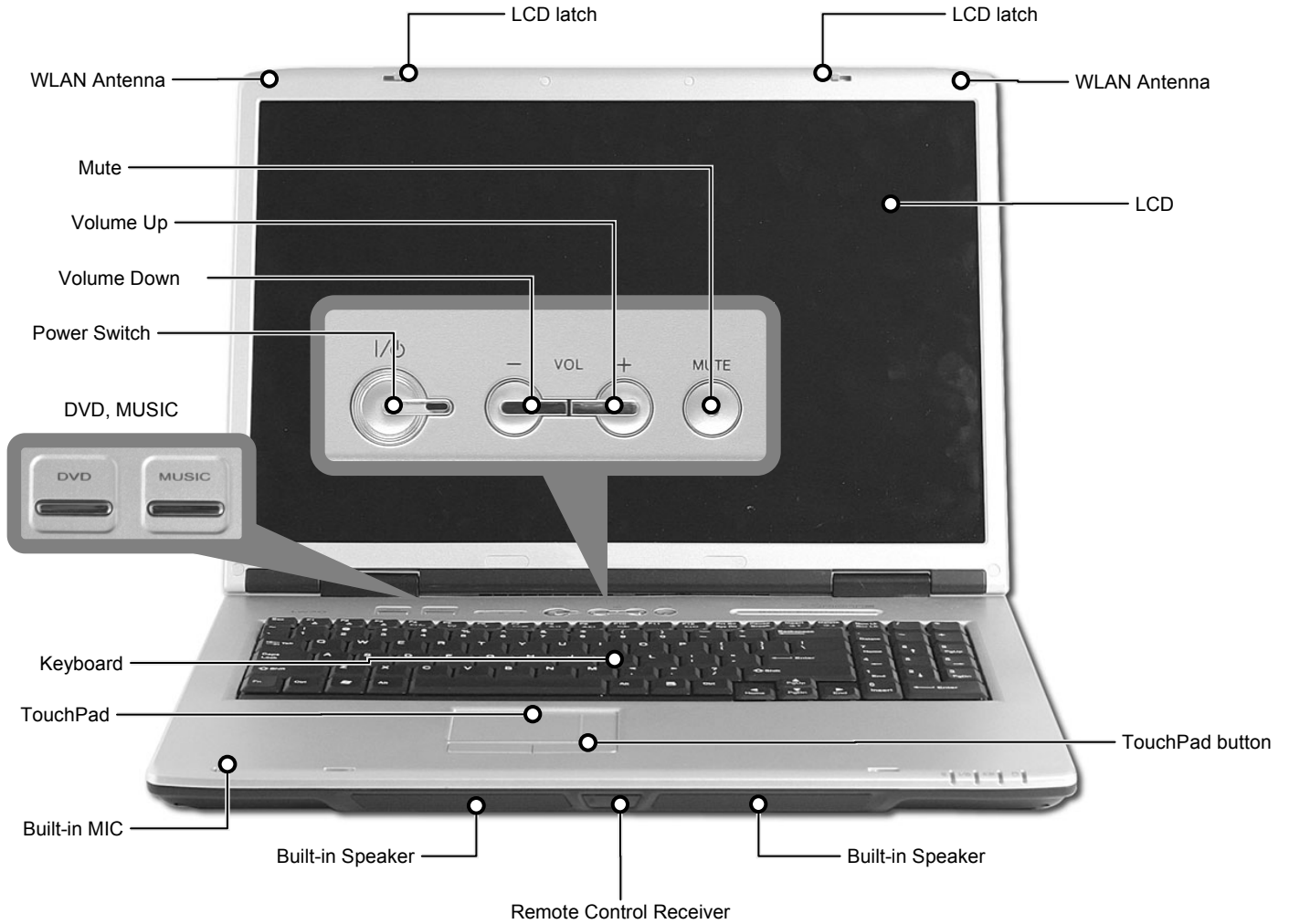
- Missing parts might be a symptom of unauthorized service or modification.
- If the spindle of a hard-disk drive becomes noisy, it may have been subjected to excessive force, or dropped.

Chapter 2. Locations

■ Front view (15.4")



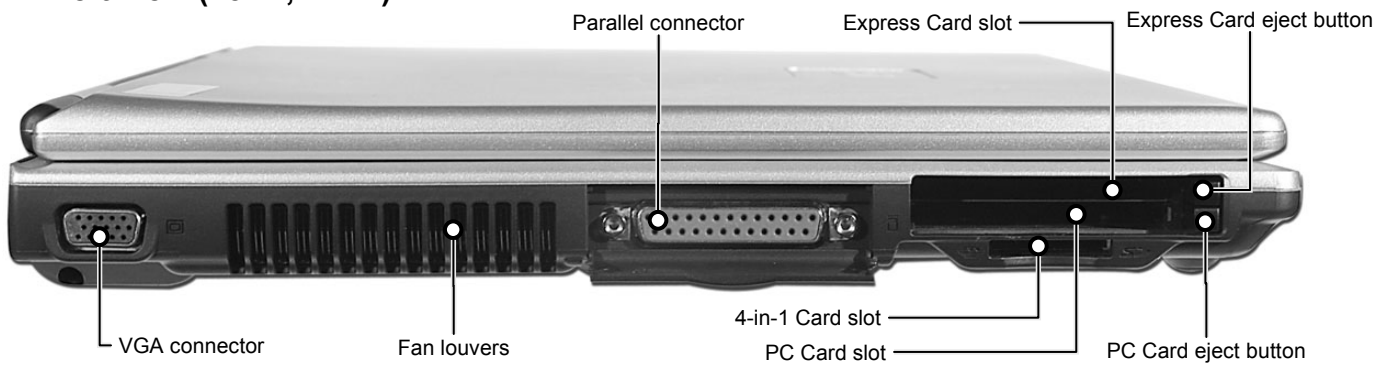
■ Front view (17.1")



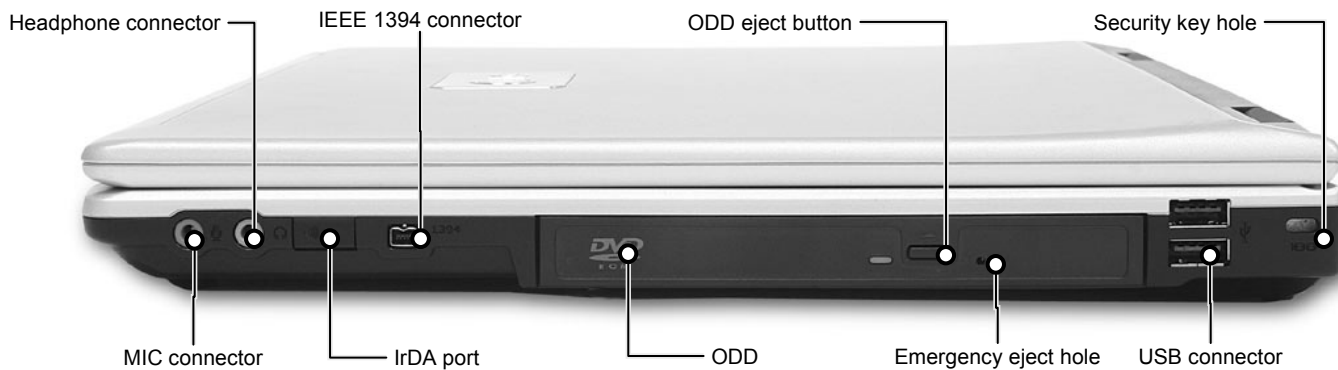
■ Rear view (15.4", 17.1")



■ Left view (15.4", 17.1")



■ Right view (15.4", 17.1")



Security key hole (Kensington Lock)

User can attach a separately purchased chain lock into the security keyhole and connect it to a fixed object to prevent a notebook theft

Emergency eject hole

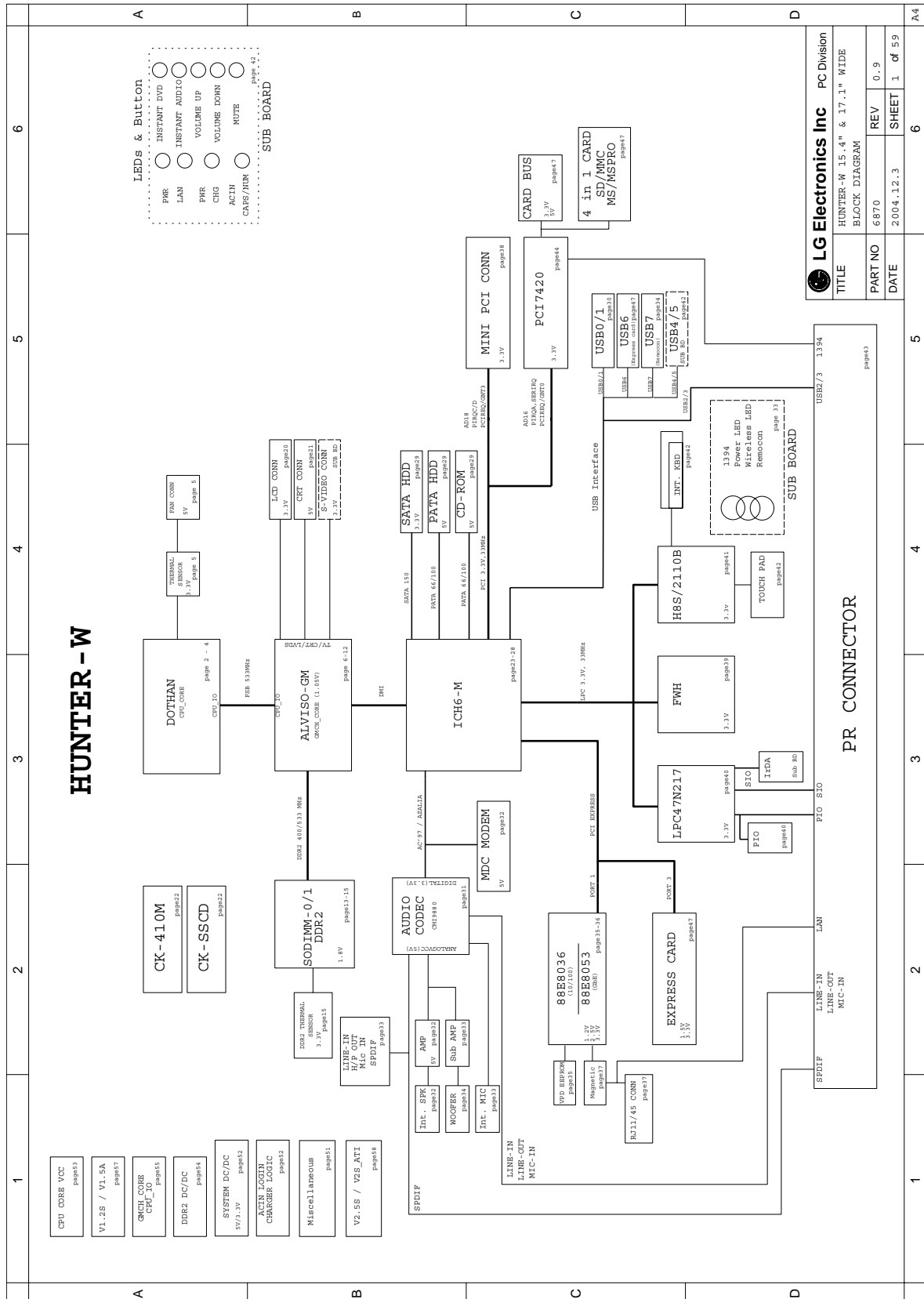
Insert a thin and hard pin into this hole, and you can open the disc tray manually.

Chapter 3. System information

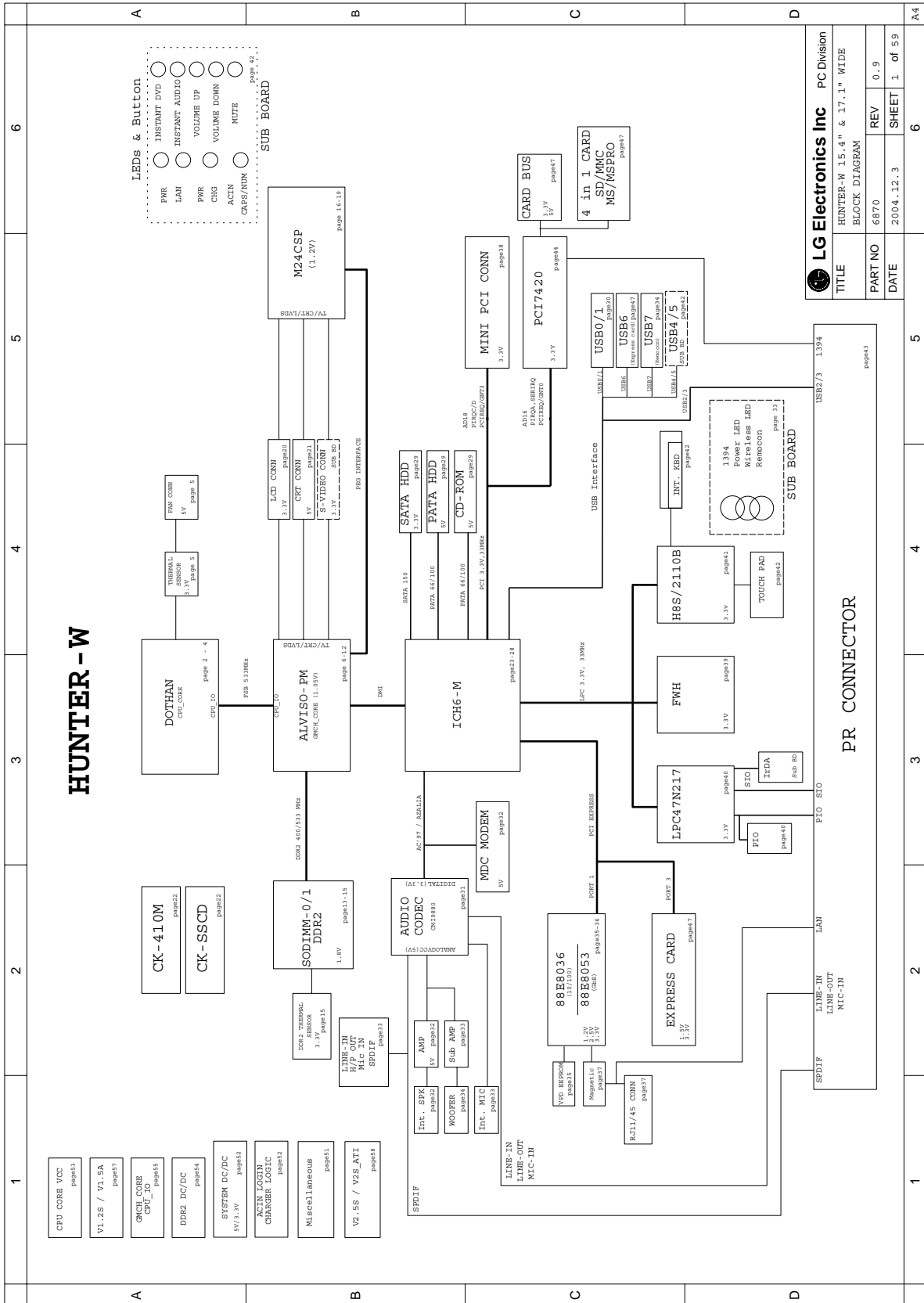
■ Specification

- CPU
 - Dothan 1.6 ~ 2.1 GHz
 - μ FCBGA
- Main Chipset & Graphic
 - Intel 915GM, ICH6-M
 - Intel 915PM, ICH6-M, ATI Mobility Radeon X600 VGA Controller
- Memory
 - 2SODIMM – Up to 2GB
 - DDR2 PC2-3200S/4200S Capable (400/533MHz)
- HDD
 - 2.5" 9.5mm 40/60/80GB PATA Type
- Communication
 - Modem, Daughter Card Type
 - Marvell Yukon PCI-E 10/100 Ethernet Controller on Board
- Wireless LAN Solution
 - 802.11bg/abg Mini PCI Type, Quad-band Antenna
- Card Slot
 - Express Card Slot
 - 4-in-1 Card Slot (Memory Stick, Memory Stick Pro, Multi Media Card, SD Card)
- ODD
 - Fixed Optical Storage
 - DVD-COMBO, Super-Multi Drive
- Port
 - VGA, 4X USB(2.0), RJ11, RJ45, Headphone-out/SPDIF, Mic-in, AC-in, IEEE1394, S-Video
- Input Devices
 - Keyboard : 99Key Keyboard
 - Touchpad
- Buttons
 - Power, Volume Down, Volume Up, Mute, DVD, MUSIC
- Indicator (LED)
 - AC-in, Power On, Charge, HDD, Caps Lock, Num Lock, Wireless
- Power
 - 90 Watt 19V 4.74A Adapter
- Audio
 - C-Media Azalia Audio Codec, Stereo speakers 1.2W - LW60, 1.8W+2W(Woofer) - LW70
- Battery
 - 6 Cell 4.8AHr, CYLINDRICAL (Li-Ion)
 - 9 Cell 7.2AHr, CYLINDRICAL (Li-Ion)

System Block Diagram (GM)







System Block Diagram (PM)



■ Fn key combinations

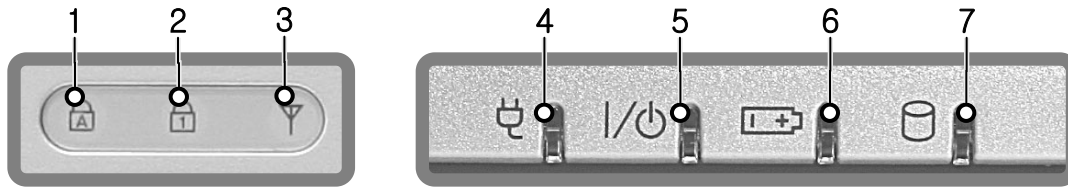
The following table shows the function of each combination of Fn with a function key.

Function of Fn keys has nothing to do with Operating System.

[Fn] +	Description
[F1]	User-defined Hot key. (Setting is available at OSD)
[F2]	User-defined Hot key. (Setting is available at OSD)
[F3]	User-defined Hot key. (Setting is available at OSD)
[F4]	Force the computer to enter power-saving mode. (ex: system standby and hibernation)
[F5]	TouchPad Disable (Impossible to use TouchPad) / TouchPad Enable (Possible to use TouchPad) / TouchPad Auto-Disable (When connecting USB mouse to the computer, TouchPad is disable) The TouchPad initialization takes 1~2 seconds, so wait for the Initialization to end before using the TouchPad.
[F6]	Wireless LAN on / off
[F7]	When the computer is attached to an external monitor, you can changed the display output location with [Fn] + [F7] combination. You can switch to and from the three types of display modes, LCD display only, the external monitor only, or both at the same time.
[F8]	Enable/Disable Auto Sound power management (battery mode only).
[F9]	Enable/Disable Auto Brightness control.
[F10]	System information
[ESC]	Maximum power-saving mode. (when OSD is installed)
[ScrLk]	Number lock
[Delete]	Brightness up
[Insert]	Brightness down
	PgUp
	PgDn
	Home
	End
[F12]	Maximum power-saving mode.

■ Status indicators

The system status indicators show the status of the computer



1. Caps lock

Caps lock indicator lights up when the Caps lock key is pressed.
When this indicator lights up, you can type capital letters without pressing the Shift key.

2. Num lock

Num lock indicator lights up when the combination of the Fn and Num lock key is pressed.
When this indicator lights up, you can use the embedded numeric keys.
(To use the numeric keys, you must enable the Internal Keypad setting under the Advanced menu in the BIOS Setup Utility.)

3. Wireless activity indicator

Wireless activity indicator indicates the following.

Off: Wireless LAN is off.

Blinking(3-4 Seconds): Searching for Access point for Wireless LAN Connection.

Blinking (short interval): Data is transferring with Wireless LAN is on.

4. AC Power

Power indicator lights up when the power cord is connected to the computer.

5. Power

Power status indicator indicates the following status of the computer.

Green: The computer is turned on.

Off: The computer is turned off or is in hibernation mode.

Blinking: The computer is in standby mode.

6. Battery

Battery status indicator indicates the following status of the battery.

Green: The computer is connected to an AC adaptor and is being charged.

Off: The battery is fully charged OR the computer is not connected to an AC Adapter.

Blinking: The battery power is under 10% of its maximum capacity or battery occurs.

Battery tribe warning blinks as user defined from 'Battery Miser'.

7. Drive in use

Drive in use indicator lights up when data is being written to or read from the hard disk or optical disk drive.

■ BIOS Flash

You can update BIOS using a floppy disk drive.

Because this system is not equipped with any floppy disk drive, you have to use an external USB drive for a BIOS update. In order to boot up with an USB drive, please set Removable Device as the first boot up drive in the boot menu of BIOS setup.

· How to update flash ROM in DOS

1. Create 'boot up' flash update diskette.
2. Copy a ROM image file (*.wph) into the root of the flash update diskette.
3. Copy phlash16.exe to the flash update diskette.
4. Insert the diskette into the FDD of your computer.
5. Boot your computer with the diskette, and type 'plash16*.wph/mode=n'.
6. Cold boot and follow the instruction displayed on the screen.

· Flash options /mode=n

0 – Default mode. Keep the current DMI information and update BIOS image only.

1 – Update DMI information only.

If new DMI information is not specified, the current DMI information is left unchanged.

2 – Update BIOS and DMI information.

If new DMI information is not specified, the current DMI information is left unchanged.

3 – Update BIOS and DMI information.

DMI information is updated to the DMI string and options specified in the new BIOS image.

Note

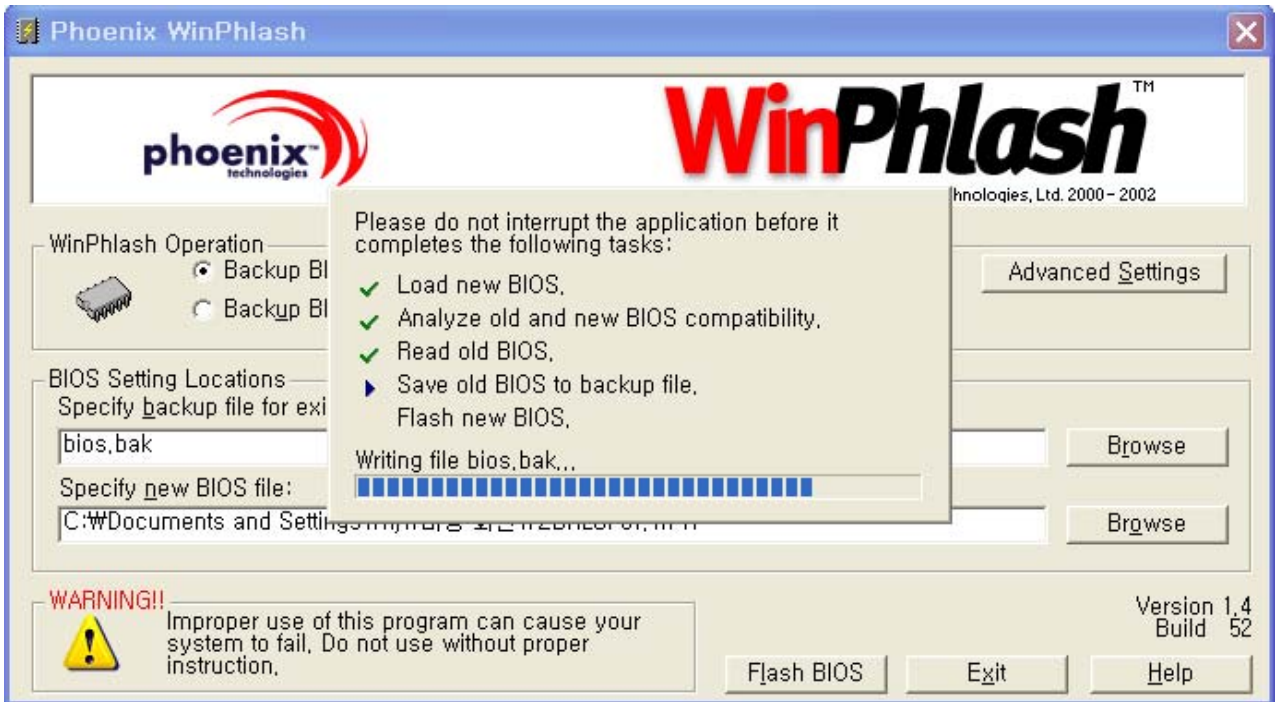
DMI is Desktop Management Interface

■ How to update flash ROM in Windows

1. Quit all running programs.
2. Start WINPHLASH.EXE.



3. Select the procedure you want :
 - a. Backup BIOS and Flash BIOS with new settings
 - b. Backup BIOS Only
4. Specify the locations for backup and new BIOS files in BIOS Setting Locations.
 - a. Enter the name of the backup file for existing BIOS or click Browse to locate the file.
 - b. Enter the name of the new BIOS file or click Browse to locate the file.
5. Click Advanced Settings button to access the advanced settings
6. Click Flash BIOS button to start flash BIOS.
7. Wait for the operation to complete. WinPhlash may take one or two minutes to complete flash BIOS operation.



8. After the completion, 'System BIOS was successfully updated' appears on the screen, then the computer restarts.
9. After the restart, make sure the system BIOS is updated.
10. If your computer does not restart automatically, turn off your computer and then turn it back on by pressing power button.

■ BIOS Setup

BIOS (Basic Input and Output System) Setup saves the system configuration in **CMOS RAM**, and check the configurations during startup. Use the **BIOS Setup Utility** to change and save the system environment, hardware configurations, power saving mode, etc.

· Open the BIOS Setup Utility in the following situations :

1. to change the BIOS setup
2. to replace the backup battery
3. system configuration error occurs
4. to change the boot order
5. to set/change a password

Press the power button.



When the **LG** logo appears on the screen, press **F2** and enter the **BIOS Setup Utility**.

■ Using the keys



The keys used in the BIOS Setup Utility and their functions are described at the bottom.

- ,  +  : General Help




Display the descriptions of the keys used in the setup utility.

- ,  : Select Item


Navigate and select items in the setup utility. The selected item becomes highlighted.

- ,  : Select Menu

Move to another menu.

-  / ,  : Change Values

Change the value of a selected item.

-  : Load Default Configuration


Display Setup Confirmation window. Press Enter to load default configuration.

-  : Select Sub-Menu

Some items have sub-menus. Display the sub-menu for a selected item.

-  : Save and Exit

Display Setup Confirmation window. Press **Enter** to save and exit.

-  : Exit

In a sub-menu, press **Esc** to move to the previous window. In Main menu, click **Esc** to move to Exit menu.

■ Main menu

System Time

Current time. Use <Tab>, <Shift-Tab>, or <Enter> keys to move around these fields. To change the value, press <+> or <-> key.

System Date

Today date. Use <Tab>, <Shift-Tab>, or <Enter> keys to move around these fields. To change the value, press <+> or <-> key. Set any date from year 1981 to 2079. It will automatically keep track of leap years. The system date can also be set from the operating system.

Product Name

This shows the name of PC.

Processor Type

This shows the type of CPU.

Processor Spd

This shows the speed CPU.

BIOS Version

This shows the Version of BIOS.

KBC Version

This shows the Version of KBD firm ware.

UUID

This is for display only. This shows the UUID.

Pri Master

Enter its submenu by pressing <Enter>. In this submenu, it would show the device of Primary IDE Master is HDD and its parameters.

Pri Slave

Enter its submenu by pressing <Enter>. In this submenu, it would show the device of Primary IDE Slave is HDD and its parameters.

Sec Master

Enter its submenu by pressing <Enter>. In this submenu, it would show the device of Secondary IDE Master is optical drive and its parameters.

Sec Slave

Enter its submenu by pressing <Enter>. In this submenu, it would show the device of Secondary IDE Slave is optical drive and its parameters.

System Memory

This is for display only. This shows size of system memory.

Ext. Memory

This is for display only. This shows size of extended memory.

■ Advanced menu

Legacy USB Support

There are two options to this field: **Enabled**, and **Disabled**. This field allows you to **enable** or **disable** the legacy USB support.

Boot-time Diagnostic Screen

Enables the Boot-time Diagnostic Screen.

SATA Controller Mode

Set SATA (Serial ATA) Controller Mode.

AHCI Configuration

Enables the AHCI (Advanced Host Controller Interface).

Battery Charge Stop Percentage

Set Battery Charge Stop Percentage.

Fan Mode Control

Set Fan Mode Control.

Fn Key Setup

Set Sticky fn key function.

Wake On Lan

Enables Wake On Lan.

PXE/Remote Boot

Enables PXE/Remote Boot.

Execute-Disable Bit Capability

Enables Execute-Disable Bit Capability.

■ Security menu

Supervisor Password Is

This shows the system's supervisor password has been set, or not.

Set Supervisor Password

Set Supervisor Password.

User Password Is

This shows the system's User Password has been set, or not.

Set User Password

Set User Password.

Password on boot

Enables Password on boot.

HDD Password Is

This shows the system's HDD Password has been set, or not.

Set HDD Password

Set HDD Password.

■ Boot menu

Boot menu enables you to set the boot order for the CD-ROM drive, Removable devices Hard drive, and Network boot as shown below.

CD-ROM Drive

Removable Devices

Hard Drive

B2 D0 Yukon PXE

■ Exit menu

Exit Saving Changes

Select Exit Saving Changes to save new setup information in CMOS RAM. CMOS RAM stores the information using the backup battery; therefore, the information will not be lost when the computer is turned off.

Exit Discarding Changes

Select Exit Discarding Changes to discard new setup information. If you made changes to items other than date, time, and passwords, the Setup Warning asks you to save the new configurations. Select Yes and press Enter to save the new configuration.

Load Setup Defaults

Select Load Setup Defaults to change the setup information to the factory default settings. If you select Load Setup Defaults or press F9, Setup Confirmation asks you to confirm your selection. Press Yes to load setup defaults.

Discard Changes

Discard change value.

Save Changes

Save change value.

Chapter 4. Symptom-to-part index

The symptom-to-part index in this section lists symptoms and errors and their possible causes.

The most likely cause is listed first.

Note

If replacing a part (FRU) does not solve the problem, put the original part back in the computer.

Do not replace a non-defective FRU.

■ Power system checkout

· To verify a symptom, do the following :

1. Power off the computer.
2. Remove the battery pack.
3. Connect the AC adapter.
4. Check that power is supplied when you power on the computer.
5. Power off the computer.
6. Disconnect the AC adapter and install the charged battery pack.
7. Check that the battery pack supplies power when you power on the computer.

· If you suspect a power problem, see the appropriate one of the following power supply checkouts :

1. Checking the AC adapter
2. Checking the operational charging
3. Checking the battery pack
4. Checking the backup battery

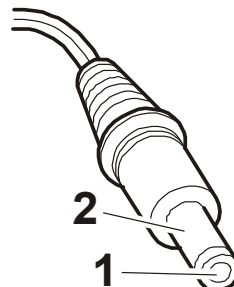
· Checking the AC adapter

If the power-on indicator does not turn on, check the power cord of the AC adapter for correct continuity and installation.

If the computer does not charge during operation, go to “Checking operational charging.”

To check the AC adapter, do the following :

1. Unplug the AC adapter cable from the computer.
2. Measure the output voltage at the plug of the AC adapter cable. See the following figure :



Pin	Voltage (V dc)
1	+18.05 ~ +19.95
2	Ground

Ch4. Symptom-to-part index

- If the voltage is not correct, replace the AC adapter.
- If the voltage is acceptable, do the following :
 1. Replace the system board.
 2. If the problem persists, check the AC adapter whether it is correct product or not.

Note

Noise from the AC adapter does not always indicate a defect.

- Checking operational charging
 1. To check whether the battery charges properly during operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.
Perform operational charging. If the battery status indicator or icon does not turn on, remove the battery does not turn on, replace the battery pack.
 2. If the charge indicator still does not turn on, replace the system board.
Then reinstall the battery pack.

Note

Do not charge battery pack, when its temperature is below 0°C or above 75°C.

- Checking the battery pack
 1. Open the Power Meter window by clicking **Start** → **Control Panel** → **Power Options** and then; check the total power remains. Battery charging does not start until the power Meter shows that less than 95% of the total power remains; under this condition the battery pack can charge to 100% of its capacity. This protects the battery pack from being overcharged or from having a shortened life.
 2. To check the status of your batter, move your cursor to the Power Meter icon in the icon tray of the Windows taskbar and wait for a moment (but do not click), and the percentage of battery power remaining is displayed. To get detailed information about the battery, double-click the Power Meter icon.

Note

If the battery pack becomes hot, it may not be able to charge. Remove it from the computer and Leave it at room temperature for a while. After it cools down, reinstall and recharge it.

- The Characteristics of the battery pack

1. Self-discharge

The battery gradually loses its power over time without ever being used.

2. Periodic full discharge / charge

Frequent recharge of the battery pack can reduce the capacity of the battery pack. When this happens, you can perform the full discharge / charge to improve the capacity. You should perform periodic full discharge /charge once every 30~60 days.

You should always use the battery until its power is low; then fully charge the battery.

3. Trickle charge

If the temperature of the battery pack drops below 10℃ , the trickle charging begins.

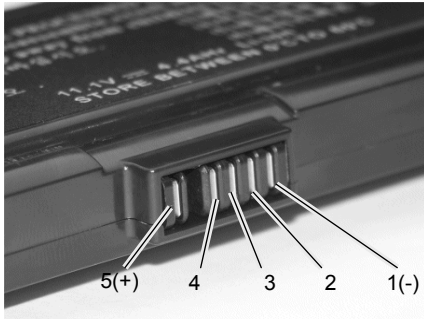
The trickle charging may take 32 hours for the battery pack to be fully charged.

Ch4. Symptom-to-part index

· To check the battery pack, do the following :

1. Power off the computer.
2. Remove the battery pack and measure the voltage between battery terminals 1(-) and 5(+).

See the following figure :



Terminal	Voltage (V dc)
1	Ground(-)
5	+0V ~ +12.6V (6 cell)

3. If the voltage is still less than +11.1 V DC after recharging, replace the battery.
4. If the voltage is more than +11.1 V DC, measure the resistance between battery terminals 1 and 2.
The resistance must be 2 to 4k Ω (typically 3k Ω).
5. If the resistance is not correct, replace the battery pack. If the resistance is correct, replace the system board.

Note

Charging will take at least 3 hours.

Note

Battery is an expendable supplier, so its capacity and used time can be reduced by using the computer.

■ Numeric error codes

Symptom / Error	FRU or action, in sequence
0200 Fixed disk failure (The hard disk is not working)	1.Reset the hard-disk drive. 2.Load Setup Defaults in BIOS Setup Utility. 3.Hard-disk drive. 4.System board.
0210 Stuck Key error	1.Check the keyboard if it is pressed. 2.Replace the keyboard.
0211 Keyboard error	Run interactive tests of the keyboard and the auxiliary input device.
0212 Keyboard Controller Failed	System board.
0220 Monitor type error - Monitor type does not match the one specified in CMOS.	Load Setup Defaults in BIOS Setup Utility.
0230 System RAM error - System RAM Failed at offset.	1.DIMM 2.System board
0231 Shadow RAM error - Shadow RAM failed at offset	System board
0232 Extended RAM error - Extended RAM Failed at address line	1. DIMM 2. System board
0250 System battery error – System battery is dead	Replace the backup battery and run BIOS Setup Utility to reset the time and date.

Ch4. Symptom-to-part index

Symptom / Error	FRU or action, in sequence
0251 System CMOS checksum bad – System CMOS checksum is not correct. – Default configuration used.	Replace the backup battery and run BIOS Setup Utility to reset the time and date.
0252 Password checksum bad – The password is cleared.	Reset the password by running BIOS Setup Utility.
0260 System timer error	1. Replace the backup battery and run BIOS Setup Utility to reset the time and date. 2. System board.
0271 Check date and time settings – Date and time error.	Run BIOS Setup Utility to reset the time and date.
0280 Previous boot incomplete - Default configuration used	1. Load “Setup Default” in BIOS Setup Utility. 2. DIMM. 3. System board.
0281: Memory Size found by POST differed from EISA CMOS	Load Setup Defaults in BIOS Setup Utility.
02B0 Diskette drive A error	Set up the diskette type in BIOS Setup Utility.
02B1 Diskette drive B error	Set up the diskette type in BIOS Setup Utility.
02B2 Incorrect drive A type – Floppy diskette drive error	1. Floppy diskette drive. 2. External FDD cable. 3. I/O card.
02B3 Incorrect Drive B type	1. Floppy diskette drive. 2. External FDD cable. 3. I/O card.
02D0 System cache error – Cache disabled (RAM cache failed and BIOS disabled)	1. Load “Setup Default” in BIOS Setup Utility. 2. System board.
02F4 EISA CMOS not writable	1. Load “Setup Default” in BIOS Setup Utility. 2. Replace the backup battery. 3. System board.
02F5 DMA test failed	1. DIMM 2. System board
02F6 Software NMI failed	1. DIMM 2. System board

Ch4. Symptom-to-part index

Symptom / Error	FRU or action, in sequence
02F7 Fail – Safe timer NMI failed	1. DIMM 2. System board
0611 IDE configuration changed	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0612 IDE configuration error	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0613 Com A configuration changed	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0614 Com A configuration error	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0615 Com B configuration changed	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0616 Com B configuration error	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0617 Floppy configuration changed	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0618 Floppy configuration error	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
0619 Parallel port configuration changed	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.
061A Parallel port configuration error	1. Load Setup Defaults in BIOS Setup Utility. 2. System board.

■ Error message

Symptom / Error	FRU or action, in sequence
Device address conflict.	<ol style="list-style-type: none"> 1. Load Setup Defaults in BIOS Setup Utility. 2. Backup battery. 3. System board.
Allocation error for device.	<ol style="list-style-type: none"> 1. Load Setup Defaults in BIOS Setup Utility. 2. Backup battery. 3. System board.
Failing bits: nnnn.	<ol style="list-style-type: none"> 1. DIMM. 2. System board.
Invalid System Configuration Data.	<ol style="list-style-type: none"> 1. DIMM. 2. System board.
I/O Device IRQ Conflict.	<ol style="list-style-type: none"> 1. Load Setup Defaults in BIOS Setup Utility. 2. Backup battery. 3. System board.
Operating System not found.	<ol style="list-style-type: none"> 1. Check that the operating system has no failure and is installed correctly. 2. Enter BIOS Setup Utility and see whether the hard-disk drive and the diskette drive are properly identified. 3. Reset the hard-disk drive. 4. Reinstall the operating system. 5. Diskette drive. 6. Hard-disk drive. 7. System board.
Hibernation error.	<ol style="list-style-type: none"> 1. Restore the system configuration to what it was before the computer entered hibernation mode. 2. If memory size has been changed, re-create the hibernation file.
FAN error.	Fan.
Thermal sensing error.	System board.

■ LCD-related symptoms

Note

Before removing or disassembling LCD, power off the computer, unplug all power cords from electrical outlets, remove the battery pack also.

Symptom / Error	FRU or action, in sequence
LCD screen becomes dark suddenly.	Check out Battery Miser.
Nothing displayed on LCD screen.	<ol style="list-style-type: none">1. Check out Battery Miser.2. Choose Never in the Turn off Monitor item on Power Options Properties.3. Check the power save mode switch if it is pressed by something.4. Check the System is in standby or hibernation mode.
LCD backlight not working. LCD too dark. LCD brightness cannot be adjusted.	<ol style="list-style-type: none">1. Reconnect inverter to the board connector.2. Replace inverter.3. LCD assembly.4. System board.
LCD color cannot be adjusted. LCD screen abnormal. Characters missing pixels. LCD screen unreadable. Wrong color displayed.	<ol style="list-style-type: none">1. Reset all LCD connectors.2. Replace LCD cable.3. LCD assembly.4. System board.
Horizontal or vertical lines displayed on LCD	LCD assembly.
Power-on indicator on, and a blank LCD during POST.	LCD assembly. System board.

■ Indeterminate problems

- You are here because the diagnostic tests did not identify which adapter or device failed, wrong devices are installed, a short circuit is suspected, or the system is inoperative.
Follow these procedures to isolate the failing FRU (do not isolate FRUs that have no defects).
- Verify that all attached devices are supported by the computer.
- Verify that the power supply being used at the time of the failure is operating correctly.
 1. Power off the computer
 2. Visually check each FRU for damage. Replace any damaged FRU.
 3. Remove or disconnected all of the following devices :
 - a. Non-LG devices.
 - b. Printer, mouse, and other external devices.
 - c. Battery pack.
 - d. PC cards.
 - e. ODD (CD-ROM, Combo) drive or FDD drive in the Bay.
 - f. Hard-disk drive.

Note

Use the other memory card because it needs when operating computer.

4. Power on the computer.
5. Determine whether the problem has changed.
6. If the problem does not recur, reconnect the removed devices one at a time until you find the failing FRU.
7. If the problem remains, replace the following FRUs one at a time.
(do not replace a non-defective FRU)
 - a. LCD assembly (Check external monitor whether the same problem recurs or not).
 - b. Keyboard.
 - c. Keydeck (TouchPad and Scroll Button assembly).
 - d. System board.

Chapter 5. Removing and replacing a part (FRU)



Danger

Before removing any FRU, power off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.



Caution

Before the computer is powered on after FRU replacement, make sure that all screws, springs, and other small parts are in place and are not loose inside the computer. Verify metal flakes can cause electrical short circuits.

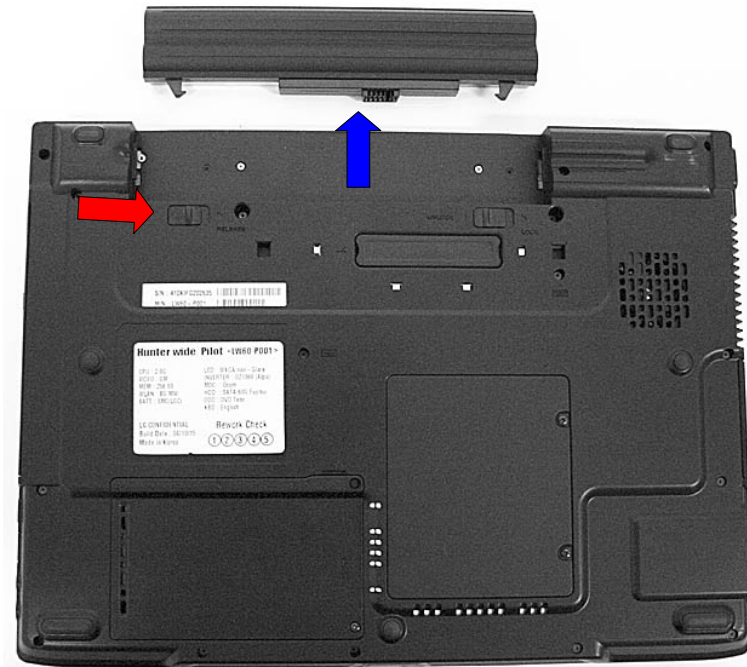
Note

As for the screw, every Torque $3 \pm 0.2 \text{ Kgfc}\cdot\text{cm}$ (0.196Nm)

Ch5. Removing and replacing a part

■ Battery Pack

1. Push the battery latch in the direction shown below; then slide the battery pack out of the slot.



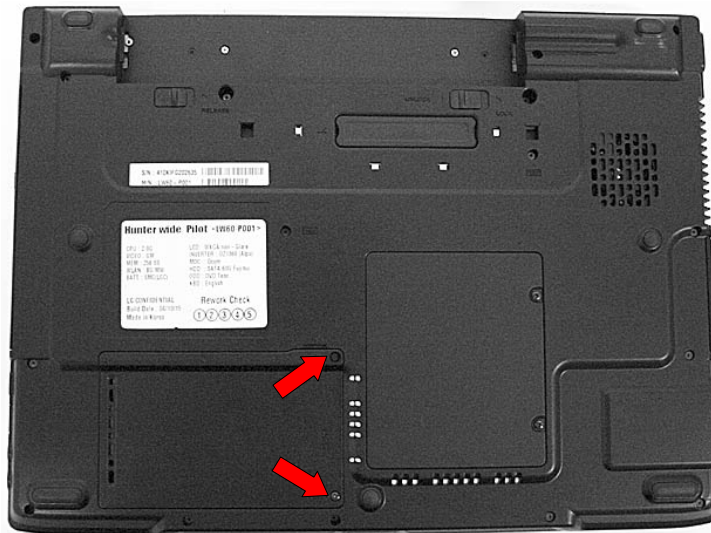
Ch5. Removing and replacing a part

■ Hard Disk Drive

Remove the following parts in order before replacing this part.

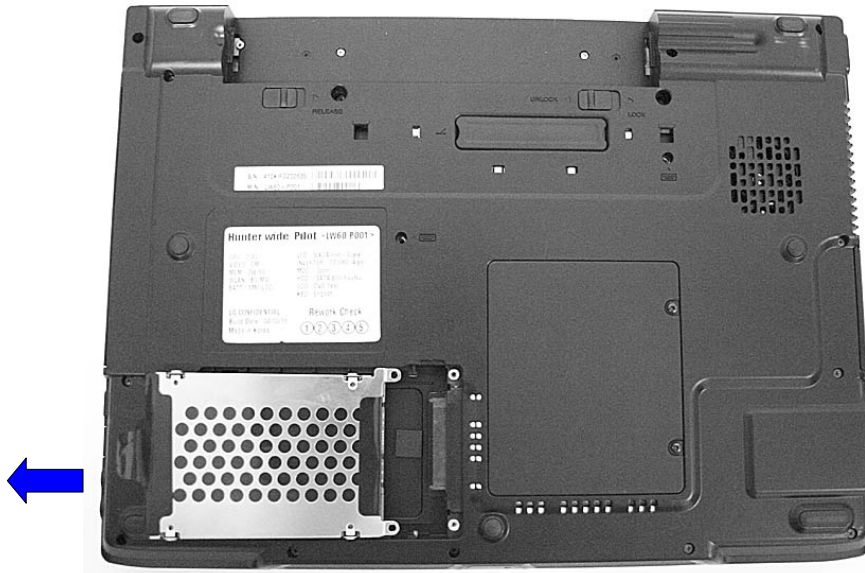
1. Battery Pack

1. Remove two screws as indicated in the picture.



Ch5. Removing and replacing a part

2. Then pull the HDD assembly out in the direction shown below.



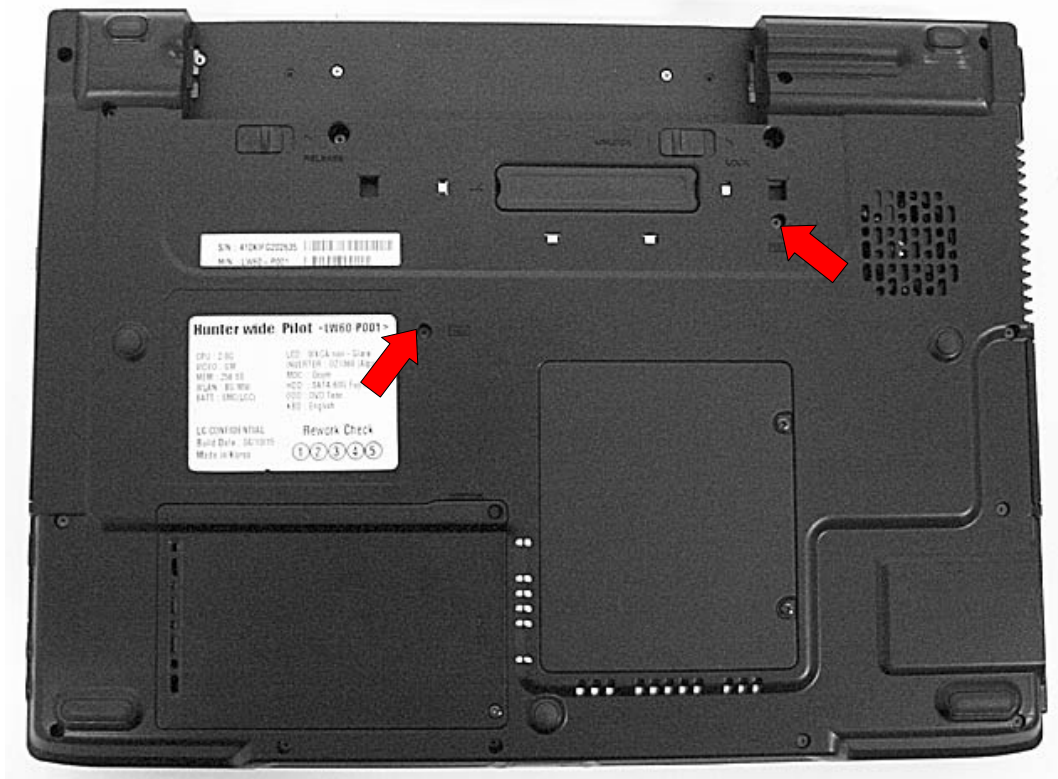
Ch5. Removing and replacing a part

■ Keyboard

Remove the following parts in order before replacing this part.

1. Battery Pack

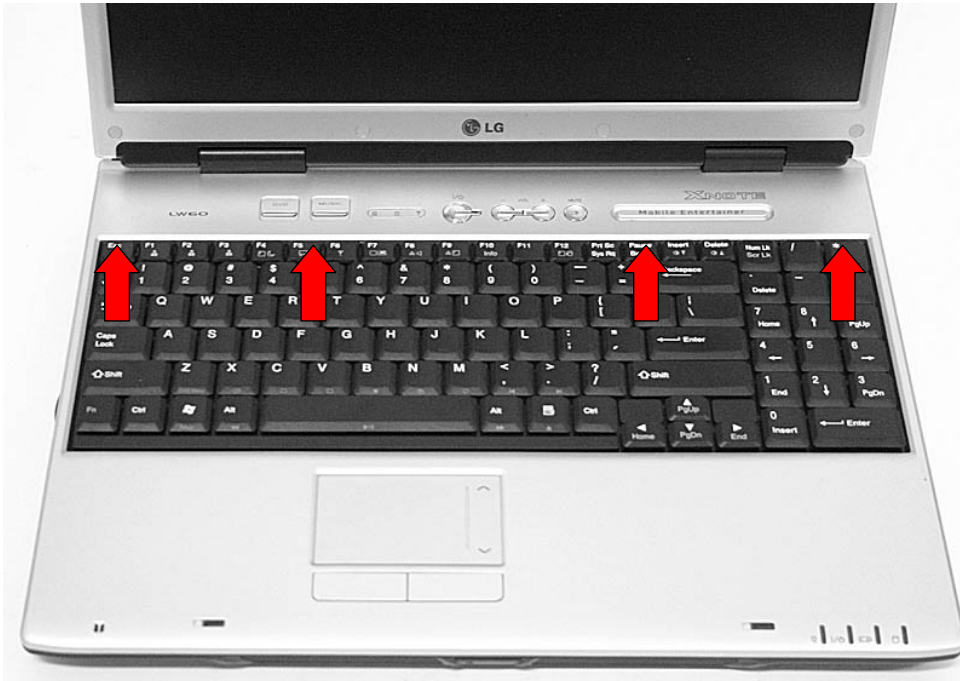
1. Remove 2 screws.



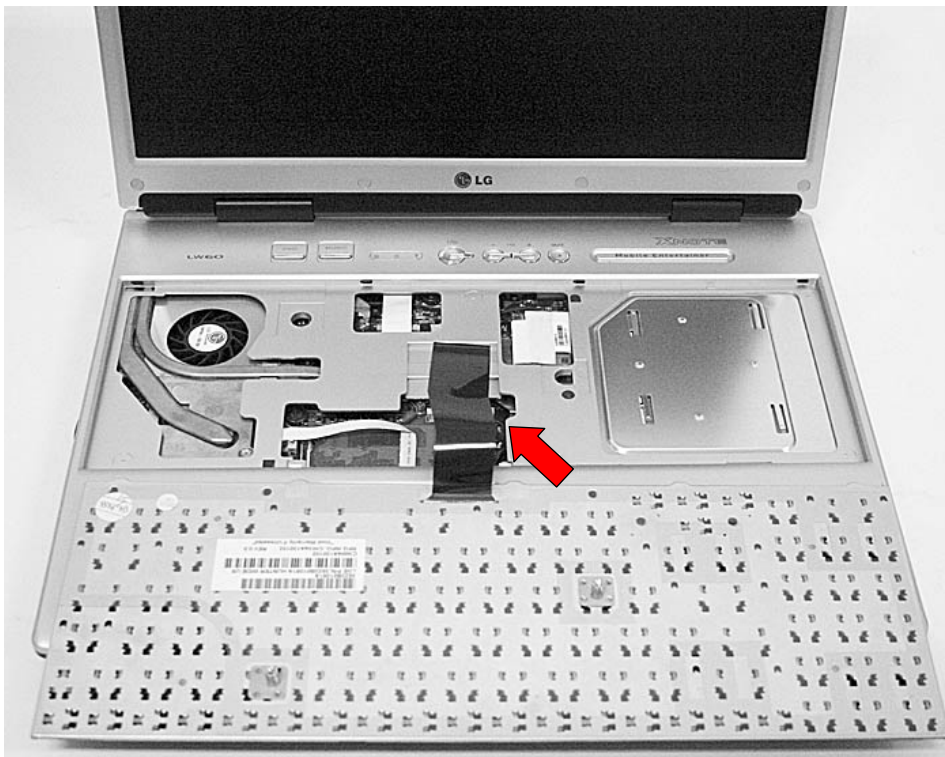
No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 x L6.5	2

Ch5. Removing and replacing a part

2. To remove 4 hooks, insert a (-) type screwdriver into a hook located at the lower end of keyboard, and pull it up.



3. Remove keyboard and disconnect Keyboard cable.



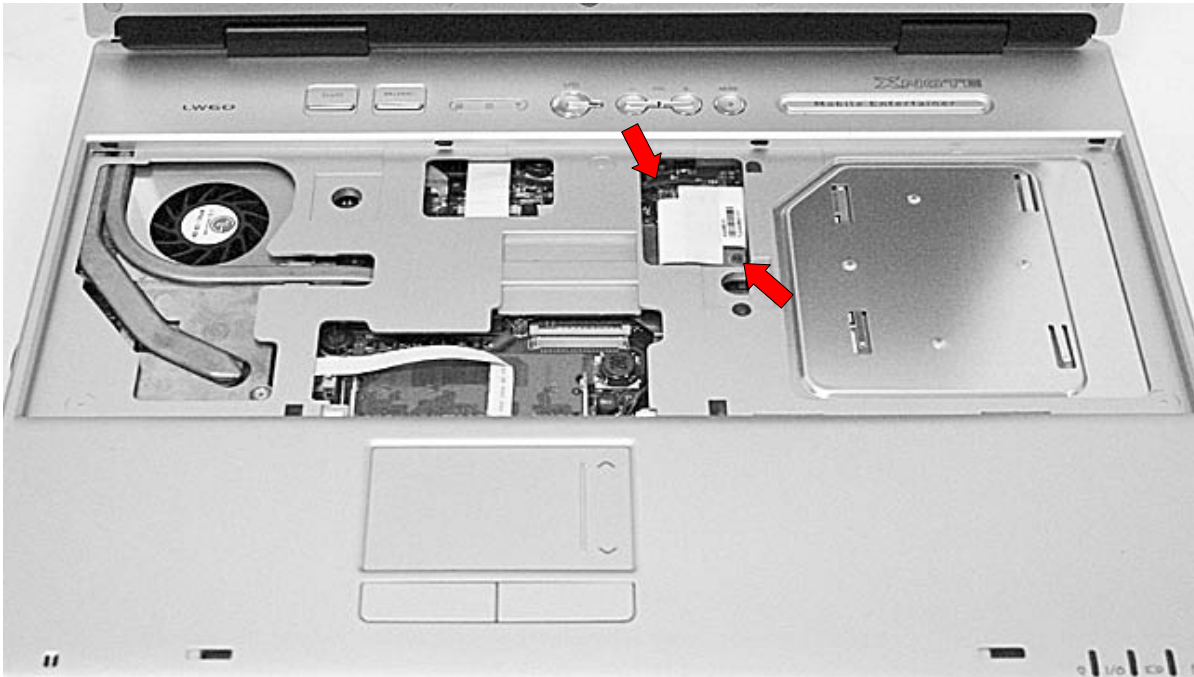
Ch5. Removing and replacing a part

■ BMDC(MDC) Modem Card

Remove the following parts in order before replacing this part.

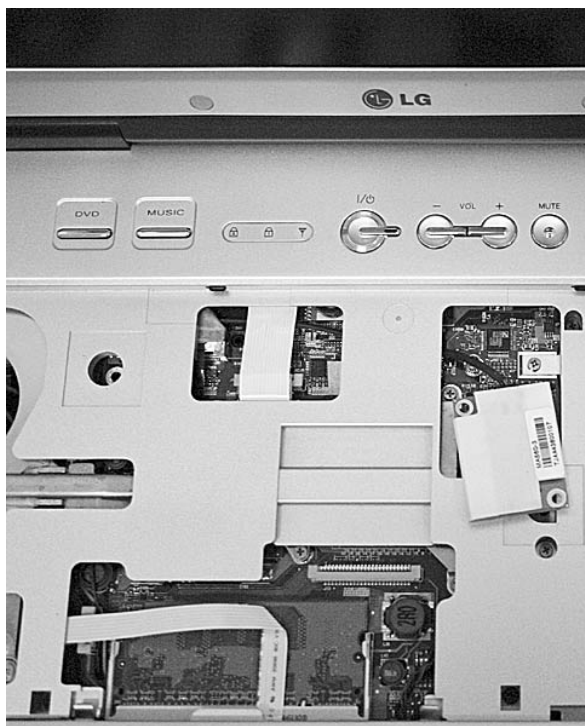
1. Battery Pack

1. Remove 2 MDC Board Screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4023A	M2.0 X L3.5	2

2. Remove MDC card and disconnect cable.



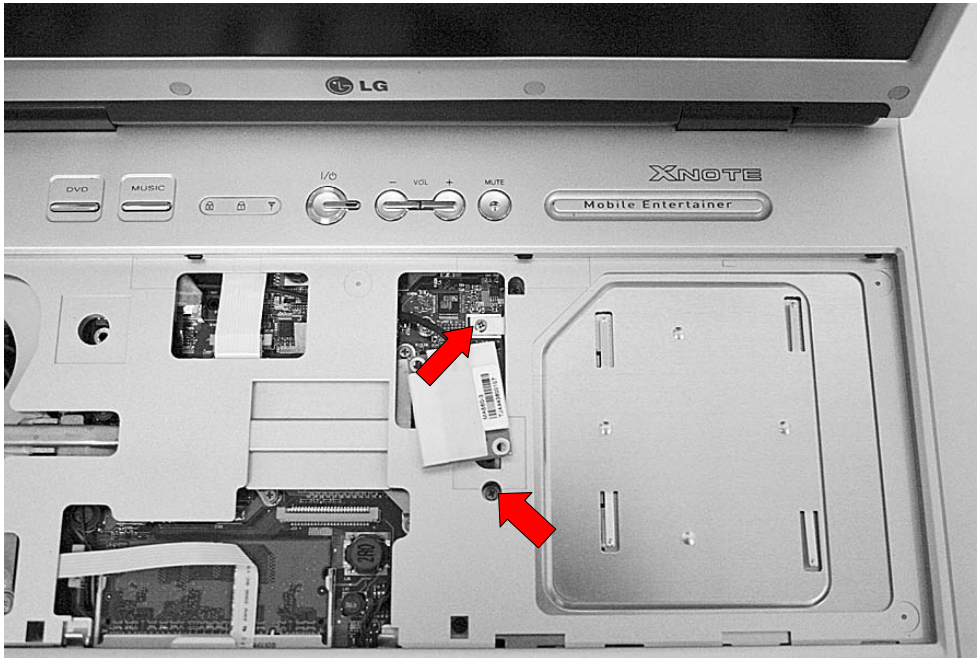
Ch5. Removing and replacing a part

■ Optical Disk Drive

Remove the following parts in order before replacing this part.

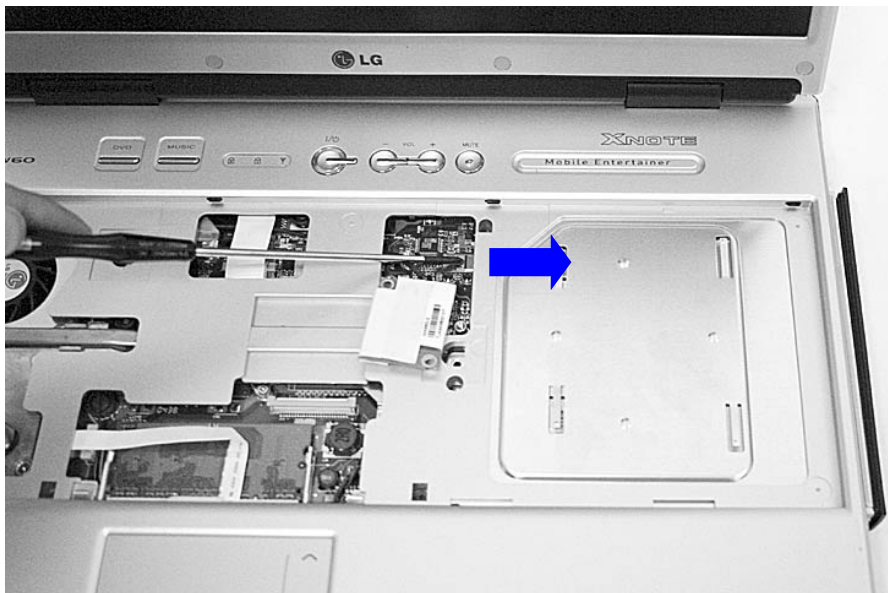
1. Battery Pack 2. Keyboard 3. BMDC(MDC) Modem Card

1. Remove 2 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4019F	M2.0 X L4.5	2

2. Remove a screw, insert a screwdriver into the hole located at the rear of ODD and push it out.



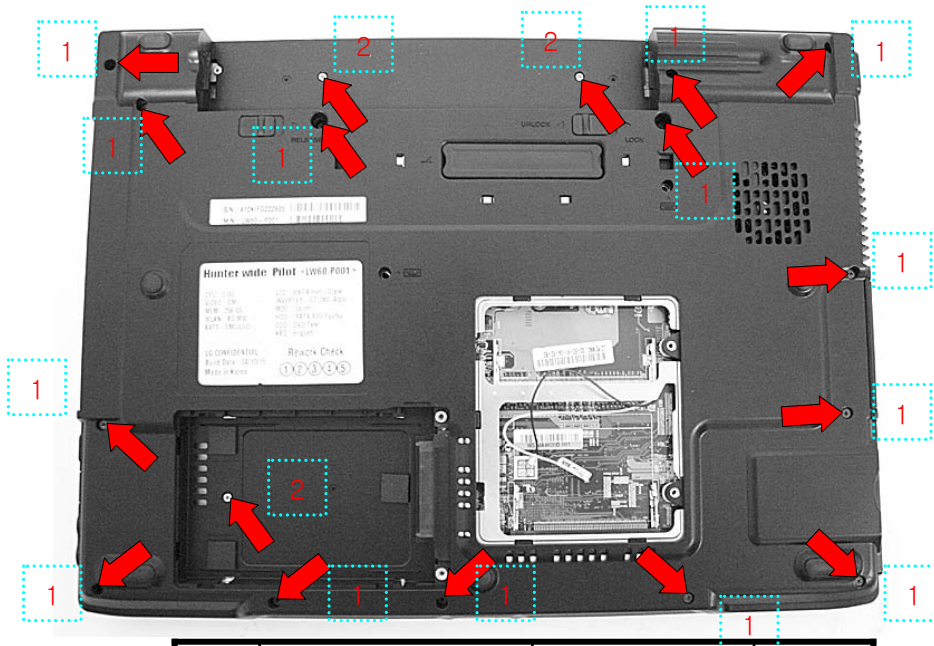
Ch5. Removing and replacing a part

Keyboard Deck

Remove the following parts in order before replacing this part.

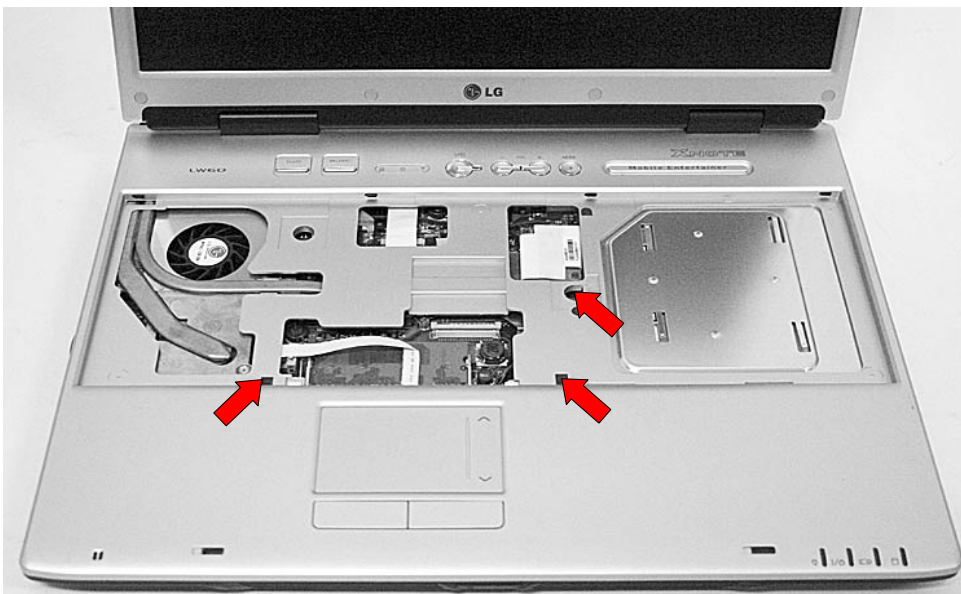
1. Battery Pack 2. Hard Disk Drive

1. Remove 17 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	14
2	1SZZBA4017A	M2.0 X L3.0	3

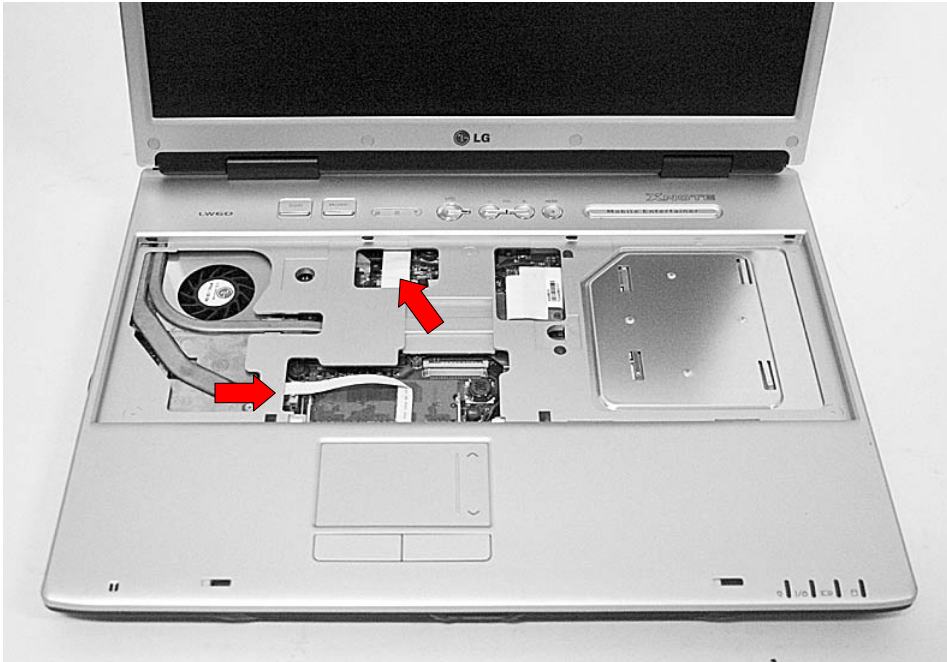
2. Remove 3 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	3

Ch5. Removing and replacing a part

3. Disconnect cable.



4. Disassemble the KBD Deck Assy.



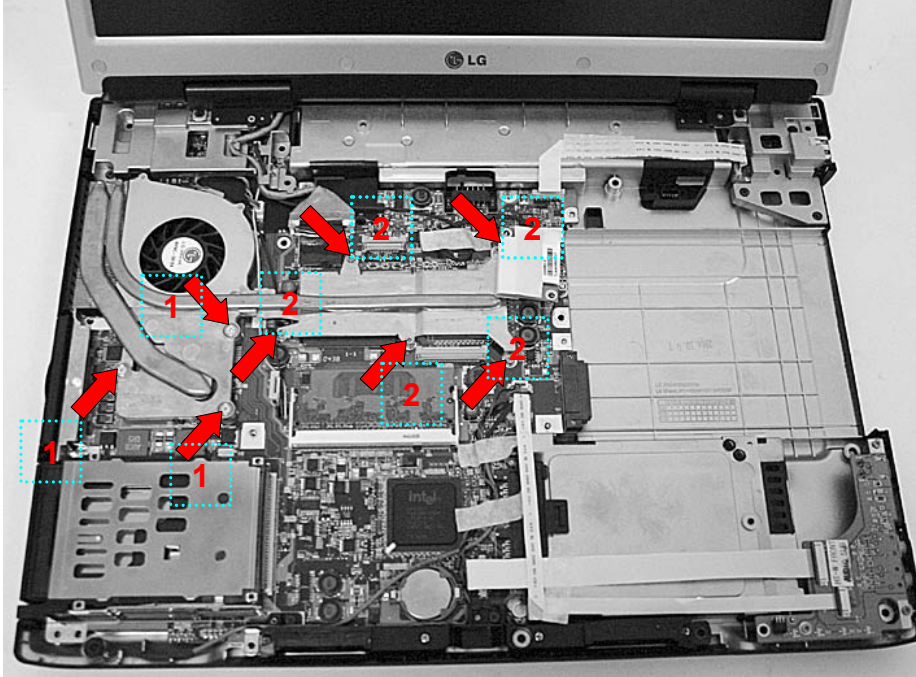
Ch5. Removing and replacing a part

■ Fan Assembly

Remove the following parts in order before replacing this part.

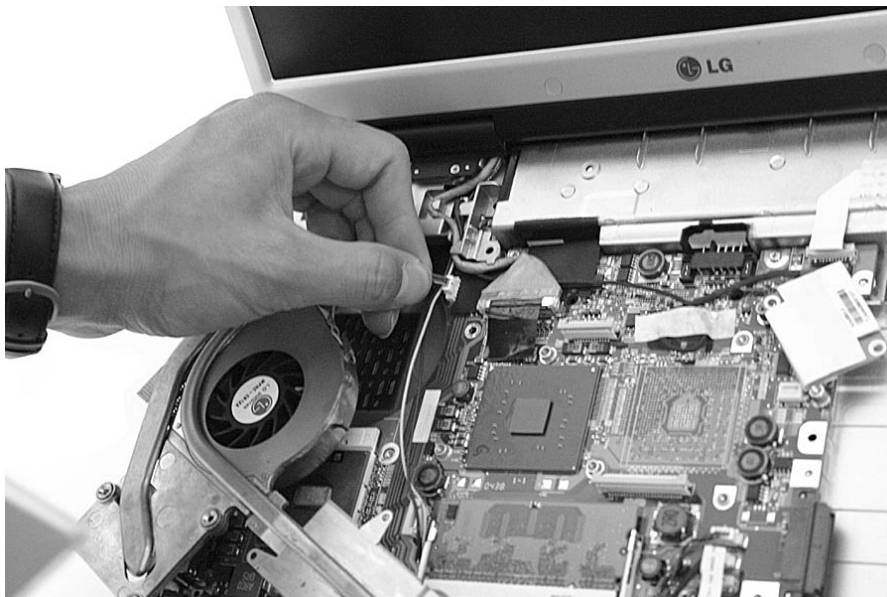
1. Battery Pack 2. Hard Disk Drive 3. Keyboard 4. Keyboard Deck

1. Remove 8 screws and then remove FAN Assembly.



No.	FRU No.	Specification	Qty
1	1SZZBZ4022A	M2.0 X L12.0	3
2	1SZZBA4023A	M2.0 X L3.5	5

2. Disconnect connector and pull it up.



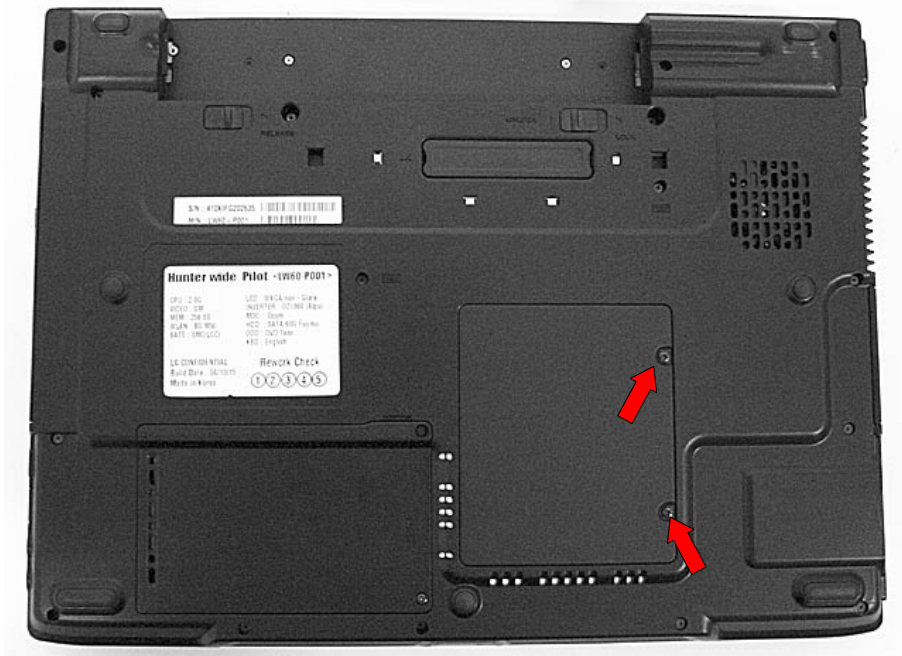
Ch5. Removing and replacing a part

■ Wireless LAN Card

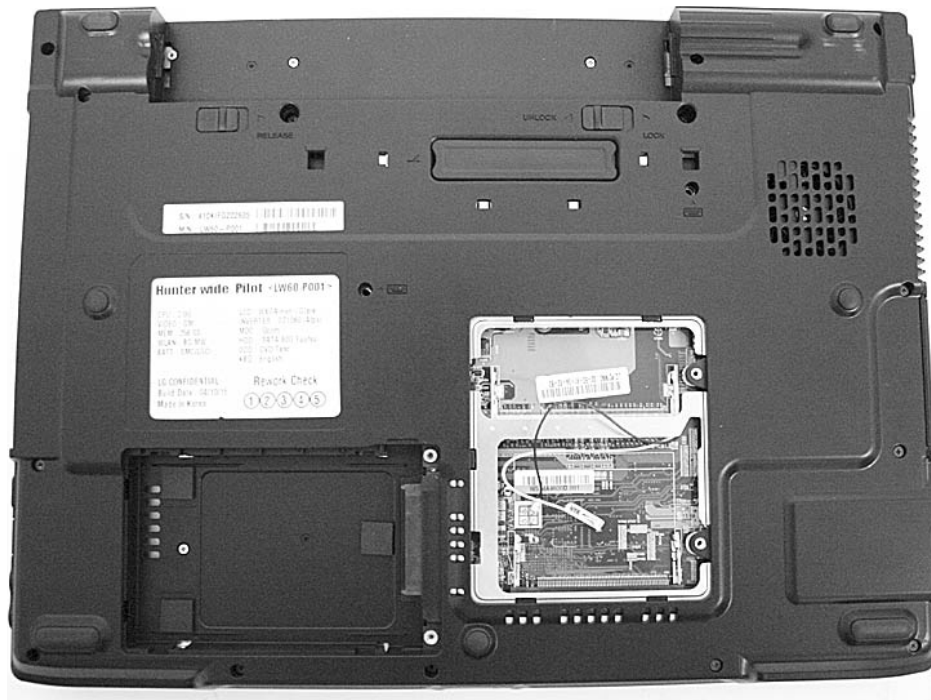
Remove the following parts in order before replacing this part.

1. Battery Pack

1. Remove Cover Mini PCI screws.



2. Disconnect WLAN antenna cable and remove WLAN card.



Ch5. Removing and replacing a part

■ Display Module

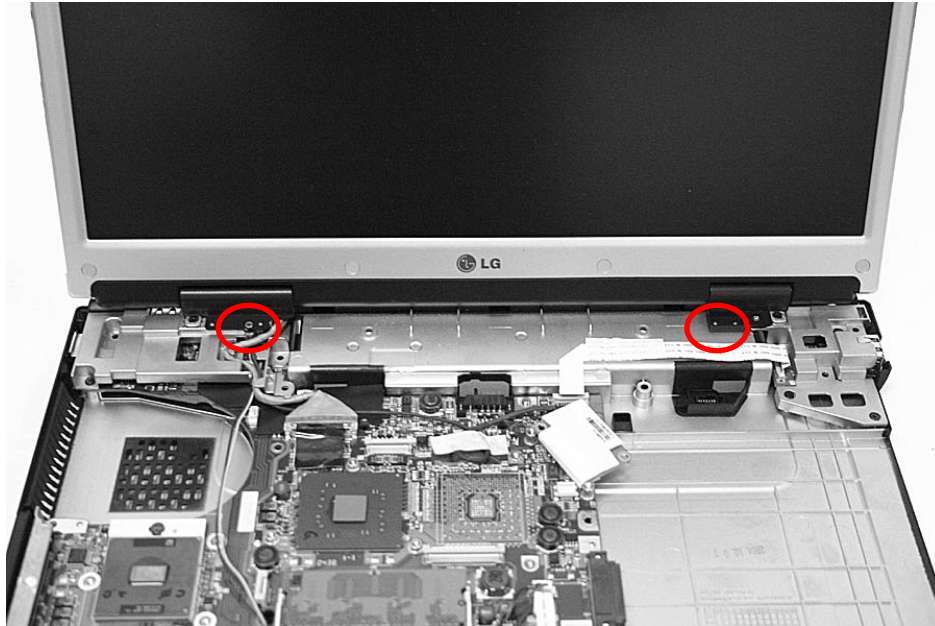
Remove the following parts in order before replacing this part.

1. Battery Pack 2. Hard Disk Drive 3. Mini PCI Cover Antenna 4. Keyboard 5. Keyboard Deck

1. Remove Wireless cable from hole.

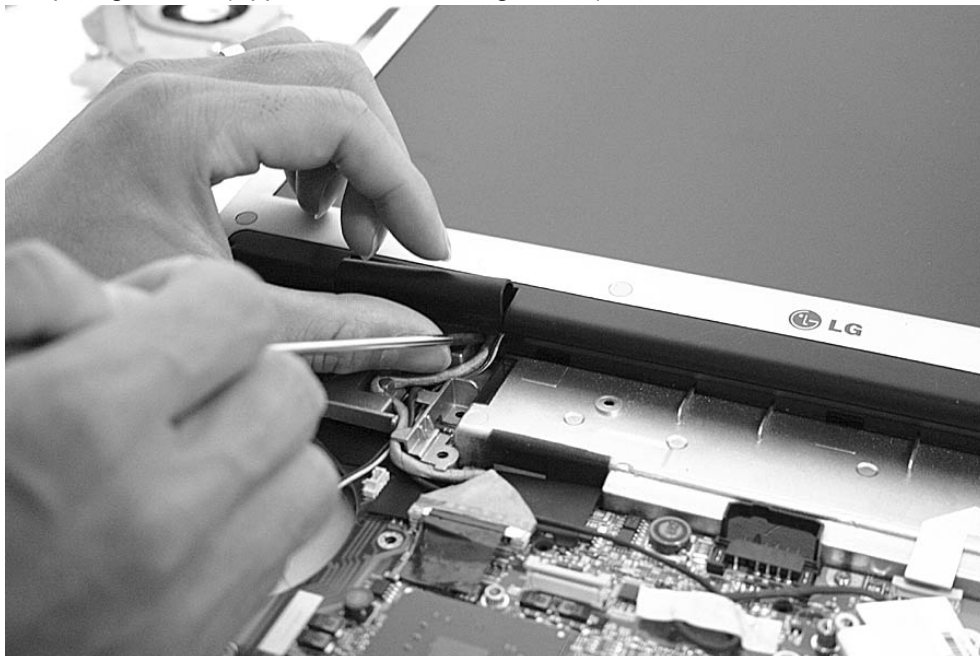
Remove LCD connector. You will see a tag designed to make the work easier. Pull out the tag.

2. Remove 2 Hinge cover screws.



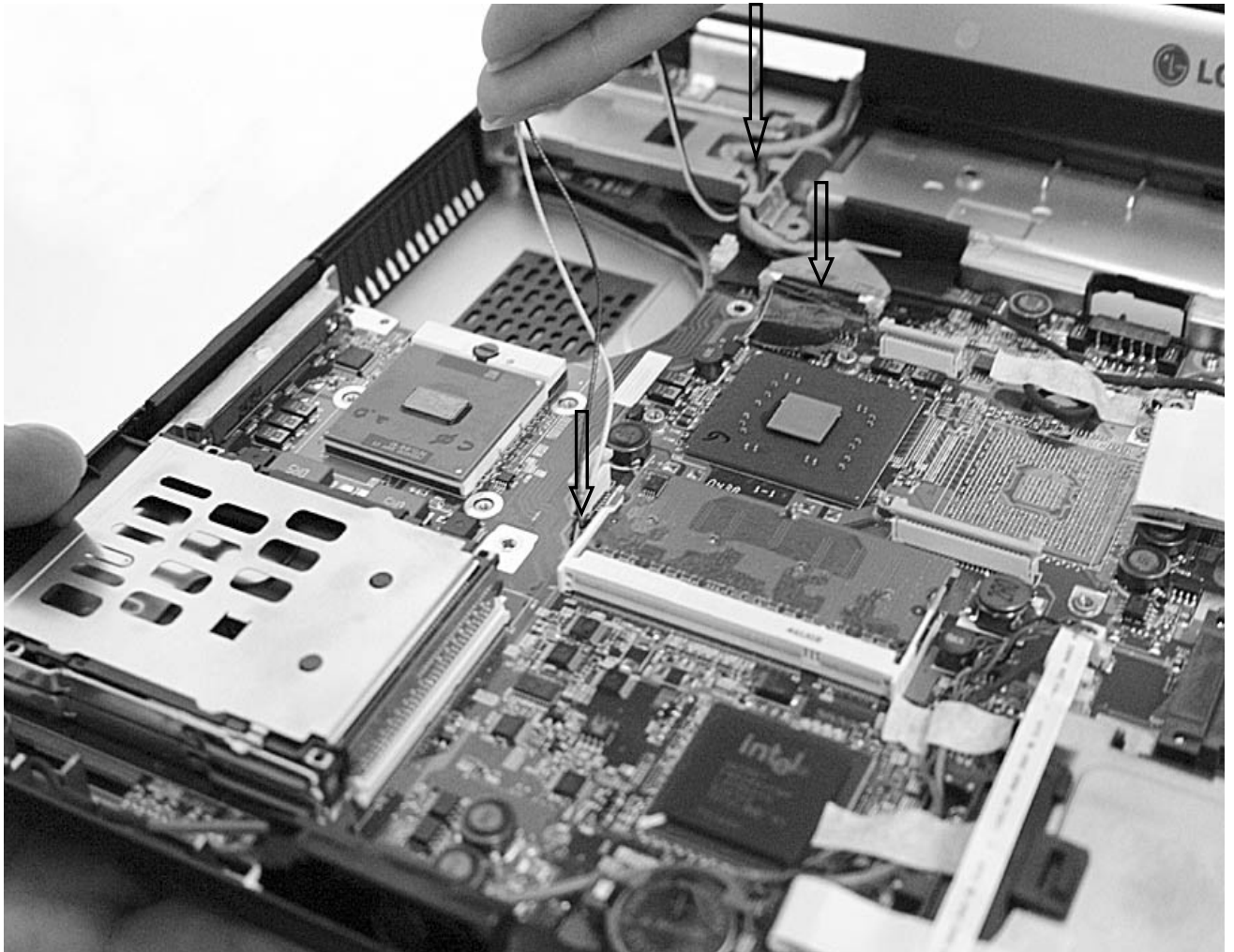
No.	FRU No.	Specification	Qty
1	1SZZBA4023A	M2 X L3.5	2

3. Remove cap hinge small. (Applied both left and right side.)



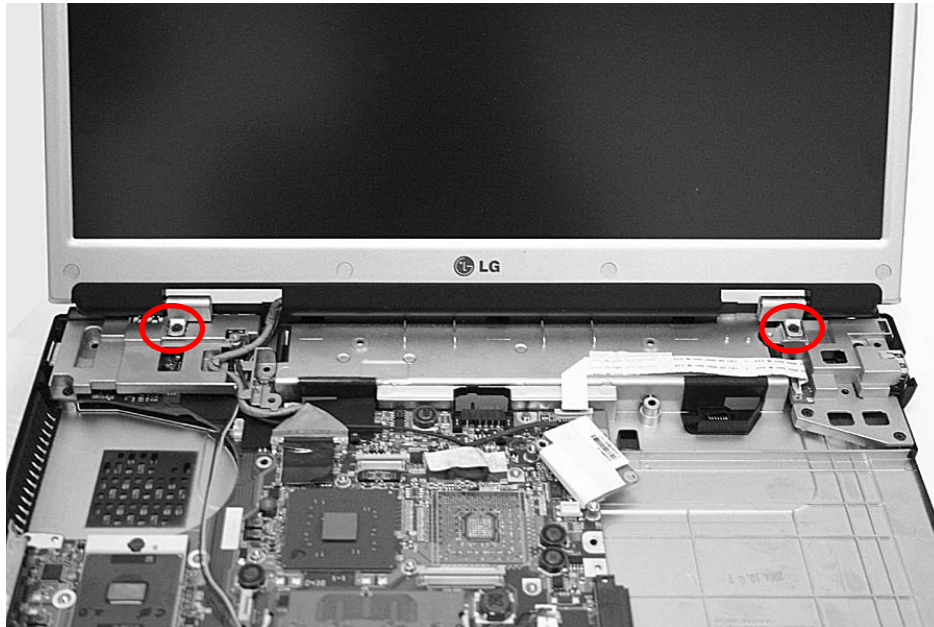
4. Disconnect LCD connector and Modem connector.

Remove WLAN antenna.



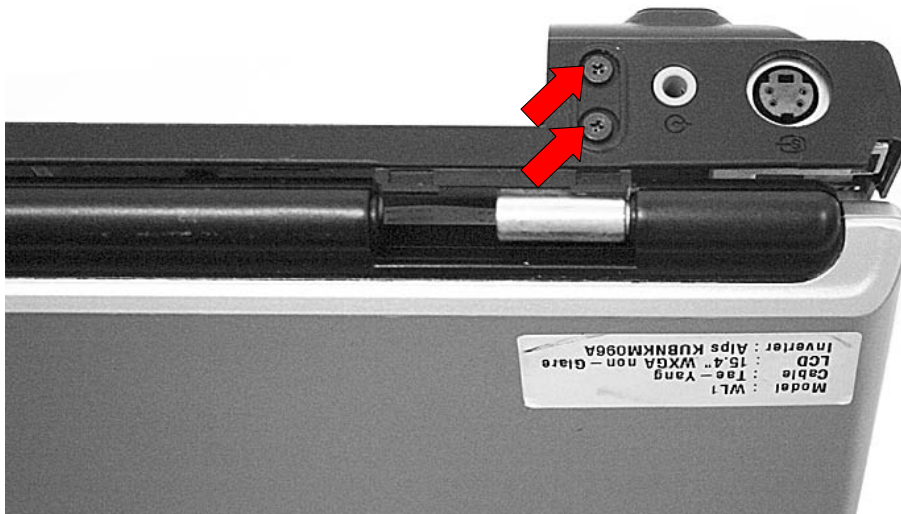
Ch5. Removing and replacing a part

5. Remove 2 Hinge Screws and remove Hinge.

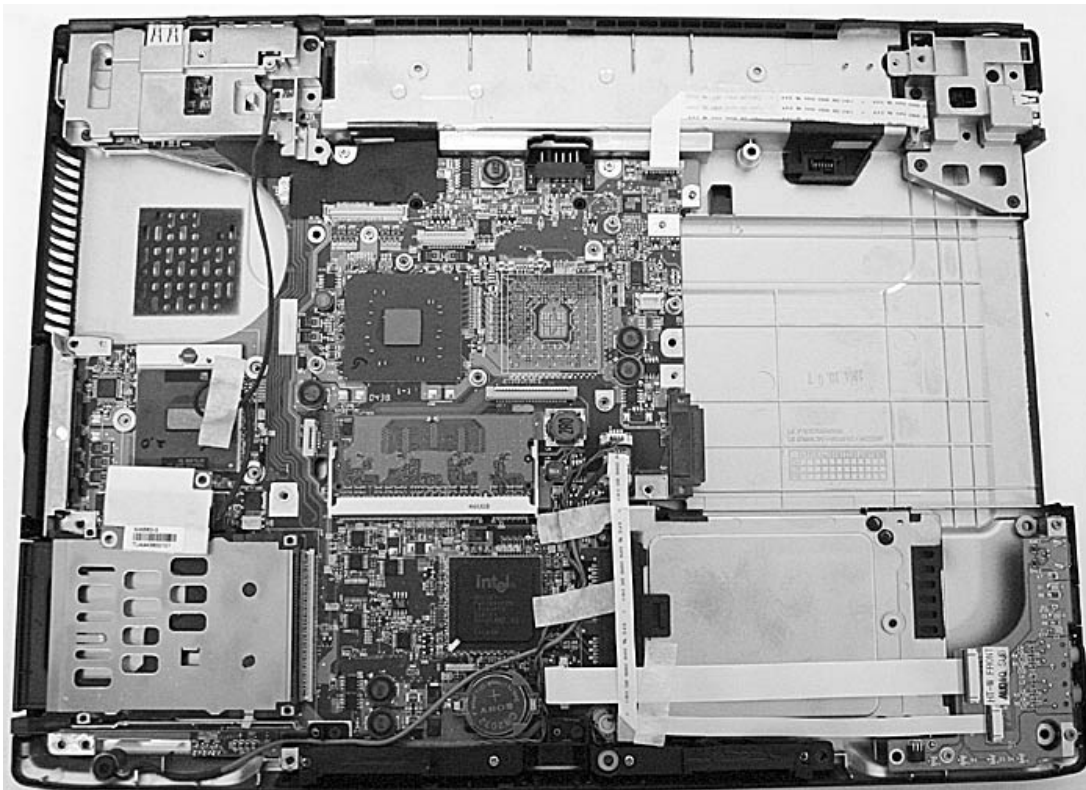


No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	2

6. Remove screw cover and remove 2 Hinge screws. (Applied both left and right side.)



No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	4

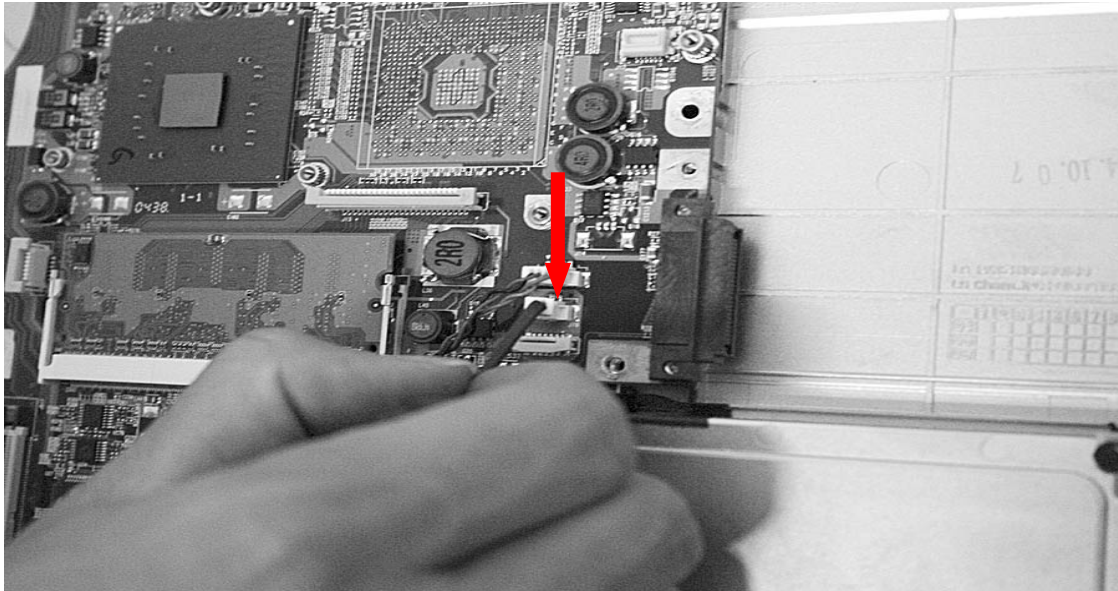


■ Speaker

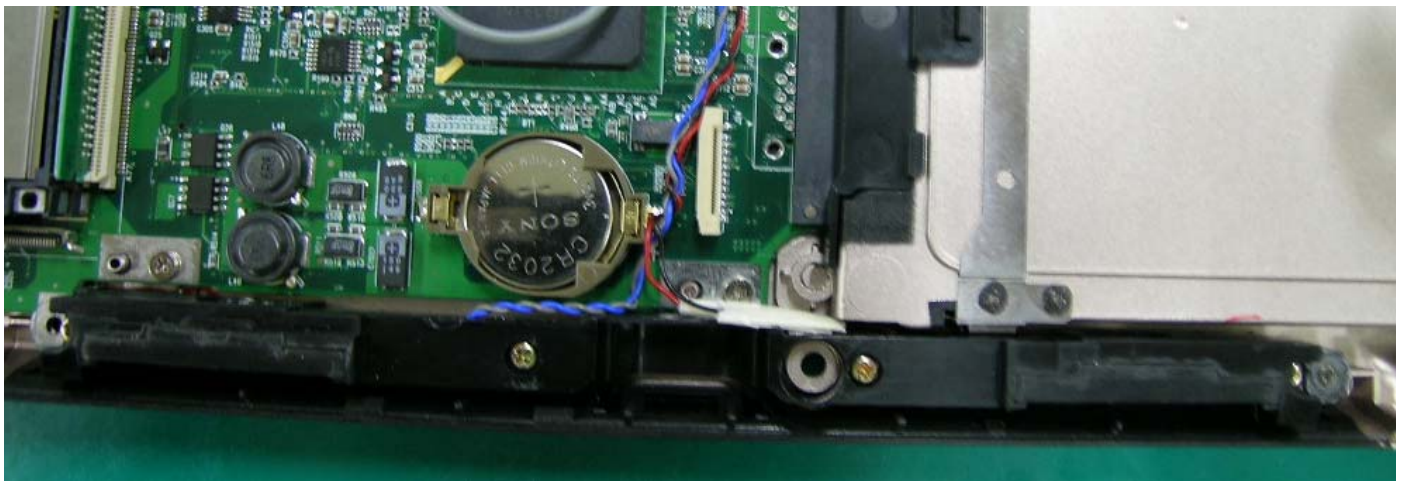
Remove the following parts in order before replacing this part.

1. Battery Pack 2. Hard Disk Drive 3. Keyboard 4. Keyboard Deck

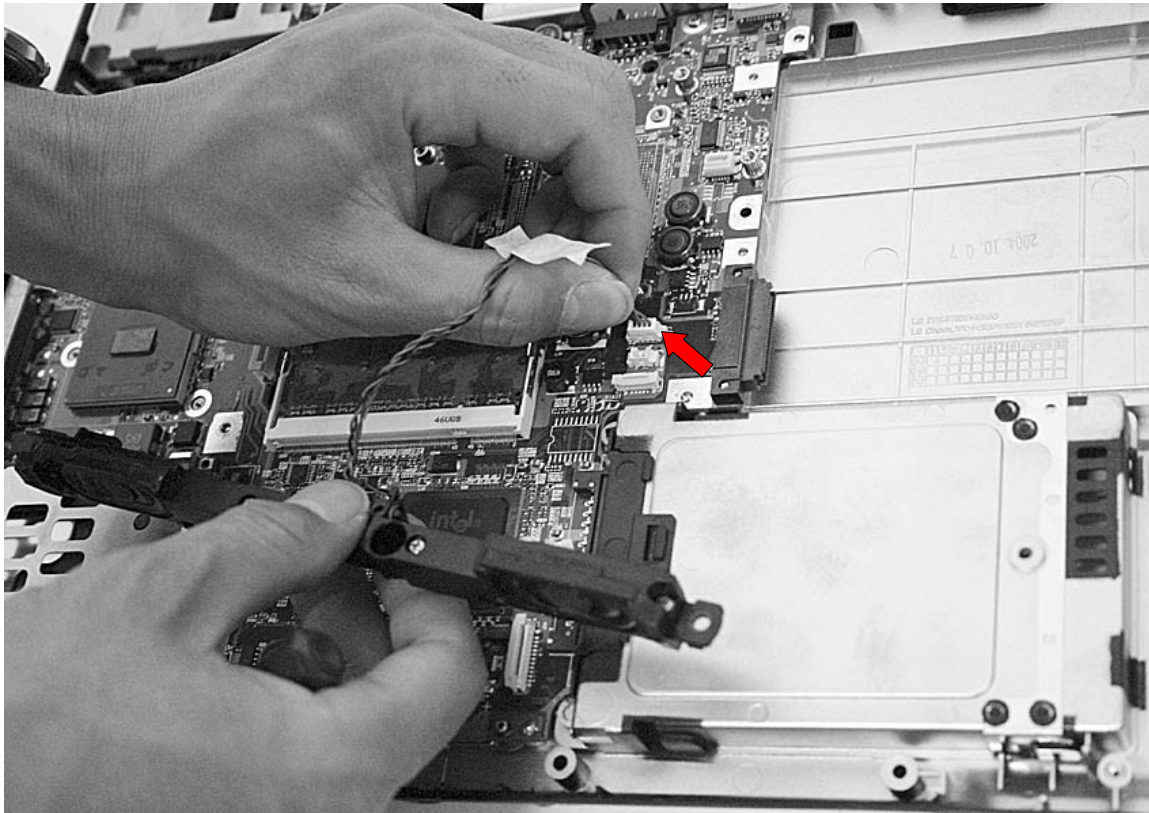
1. Disconnect MIC cable.



2. Remove Speaker from Guide Boss.



3. Disconnect connector and remove Speaker.



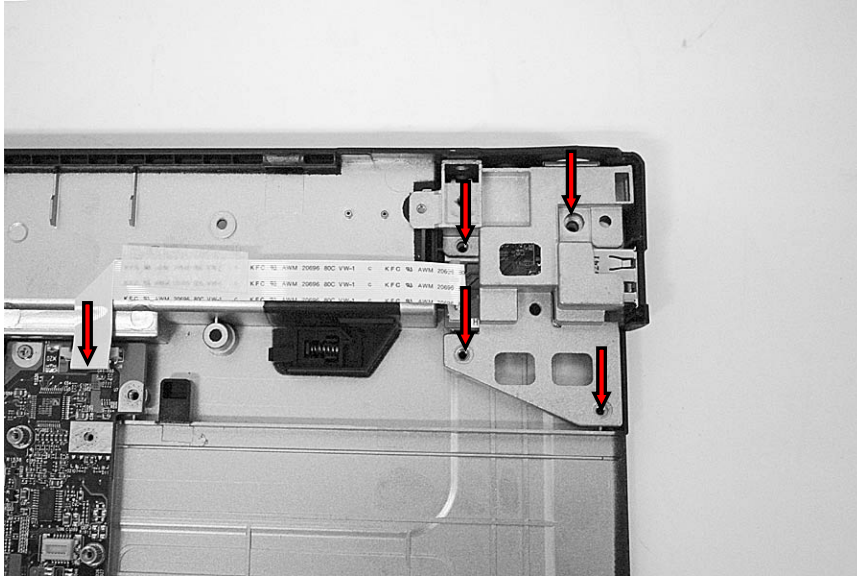
Ch5. Removing and replacing a part

■ Sub Board

Remove the following parts in order before replacing this part.

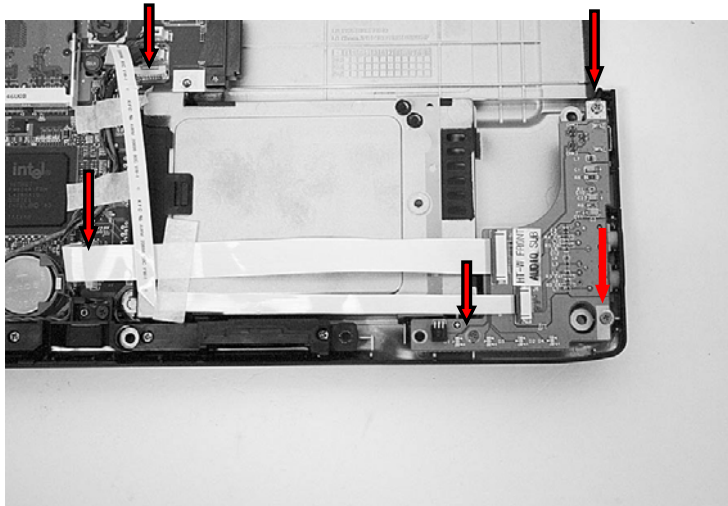
1. Battery Pack
2. Hard Disk Drive
3. Keyboard
4. Keyboard Deck
5. Optical Disk Drive
6. Display Module

1. Remove 4 screws and remove Sub B/D.



No.	FRU No.	Specification	Qty
1	1SZZBA4080G	M2.5 x L6.0	4

2. Remove 2 screws and remove Audio Sub B/D.



No.	FRU No.	Specification	Qty
1	1SZZBA4019F	M2 x L4.5	3

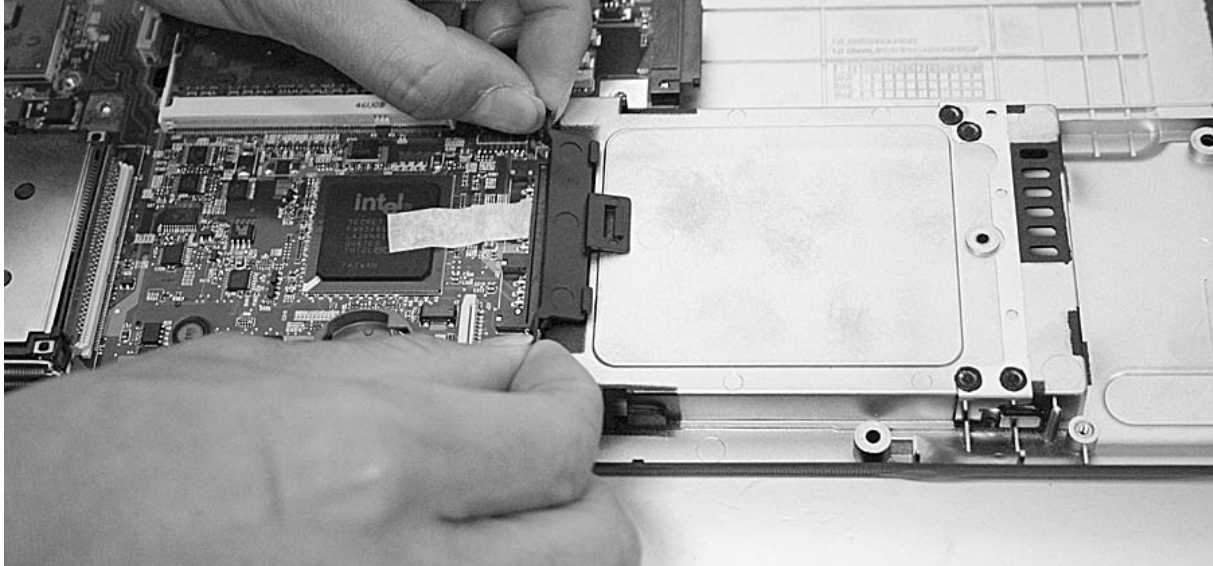
Ch5. Removing and replacing a part

■ Main Board

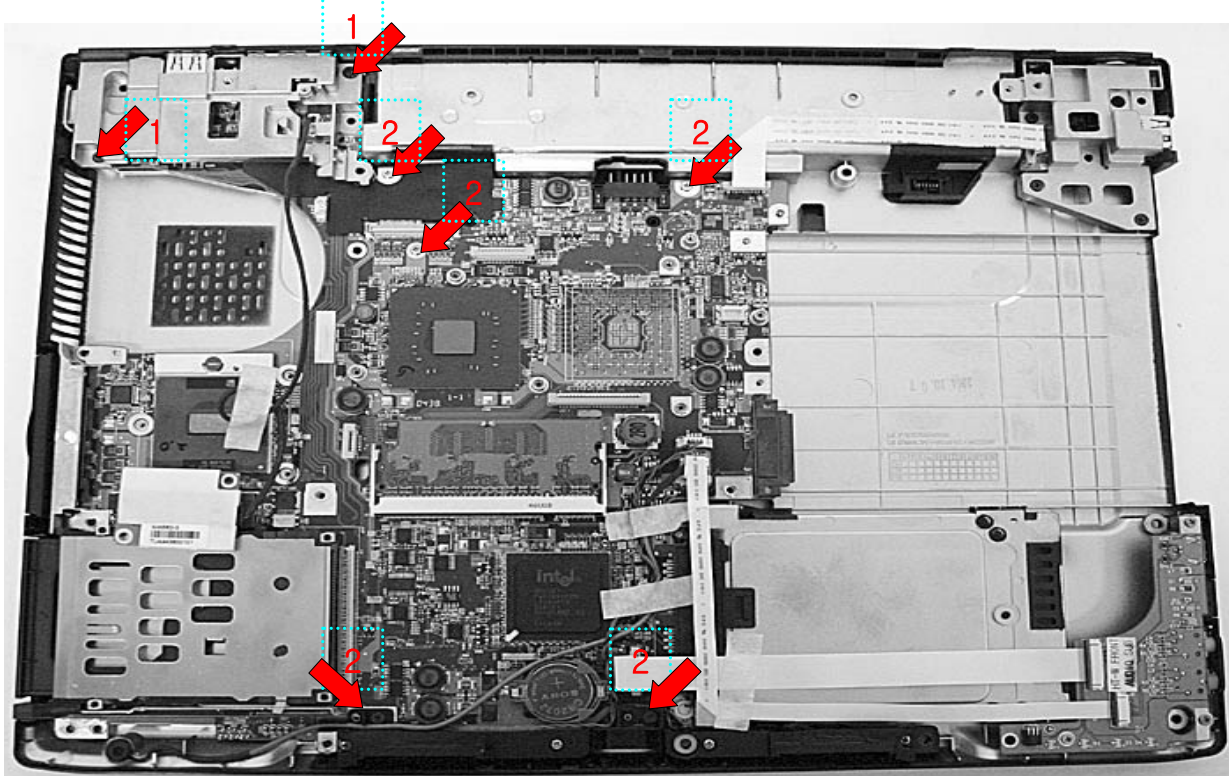
Remove the following parts in order before replacing this part.

1. Battery Pack
2. Hard Disk Drive
3. Keyboard
4. Keyboard Deck
5. Optical Disk Drive
6. Fan Assembly
7. Speaker
8. Sub Board

1. Remove Cover Block HDD.

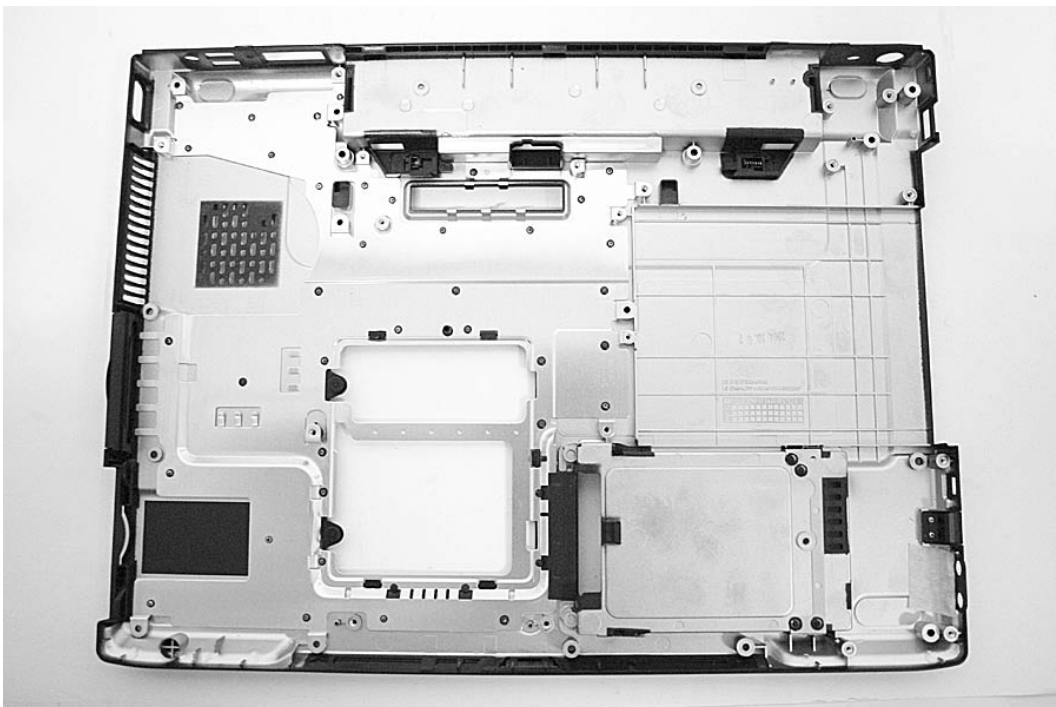
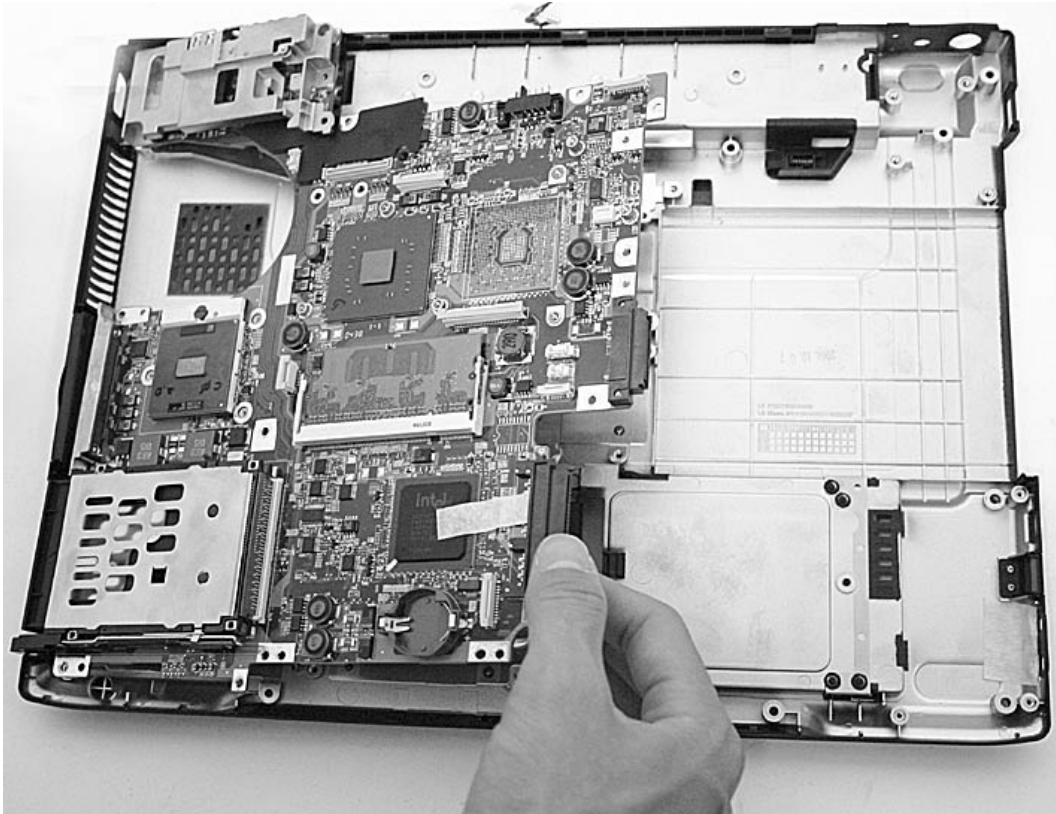


2. Remove 5 Main Board screws and remove 2 Frame Hinge Left screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4080G	M2.5 X L6.0	2
2	1SZZBA4023A	M2 X L3.5	5

3. Remove Main Board.



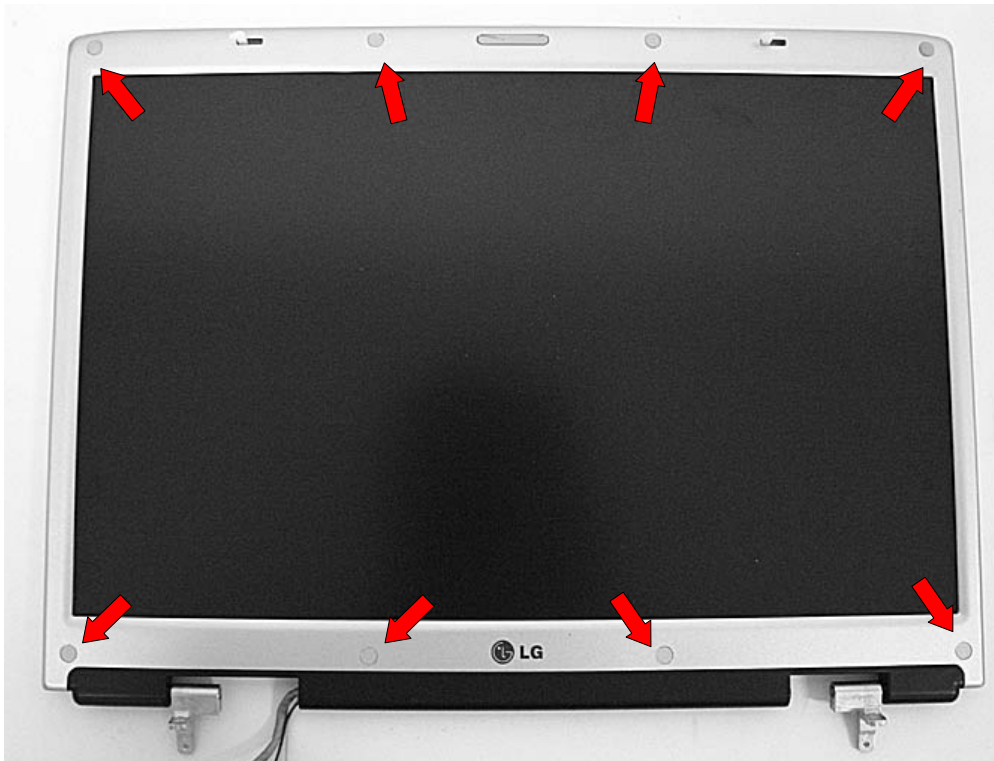
Ch5. Removing and replacing a part

■ Display Module Exploded View

Remove the following parts in order before replacing this part.

1. Battery Pack 2. Hard Disk Drive 3. Keyboard 4. Keyboard Deck

1. Using a knife, remove the logo and rubbers that are covering the screws.
Then remove all 8 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4080G	M2.5 X L6.0	8

2. Remove LCD Hook.



Ch5. Removing and replacing a part

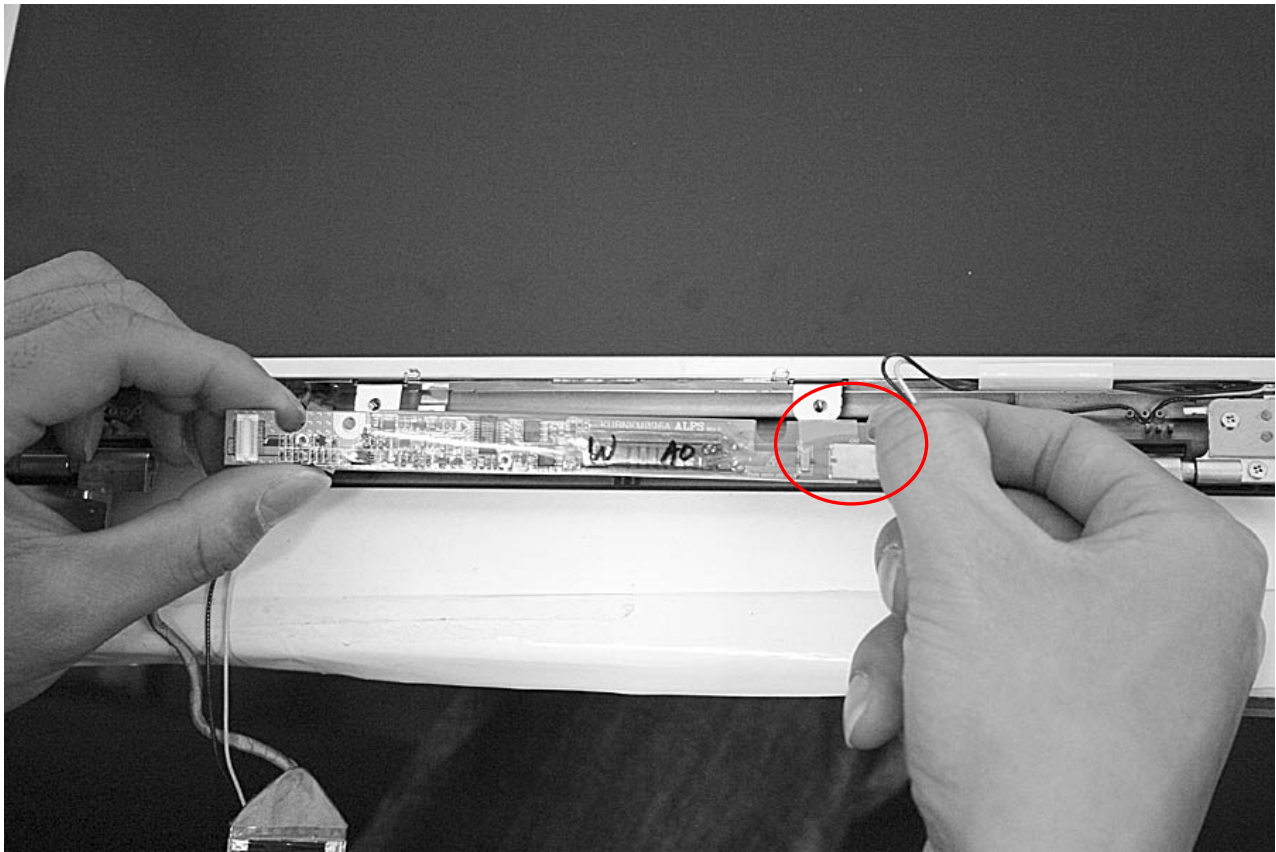
3. Remove 2 screws and remove tape.



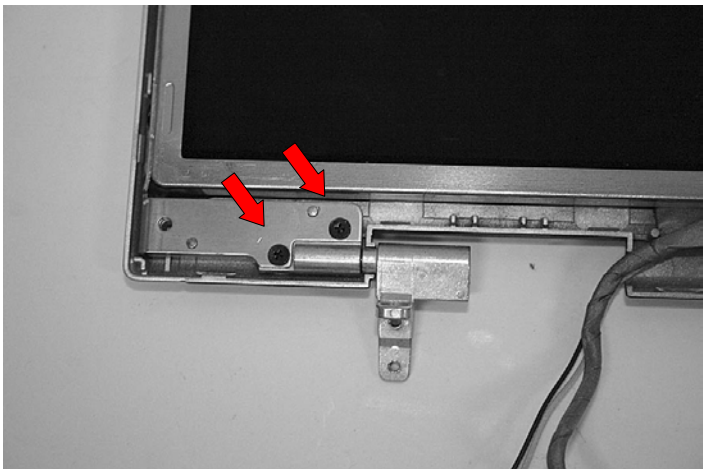
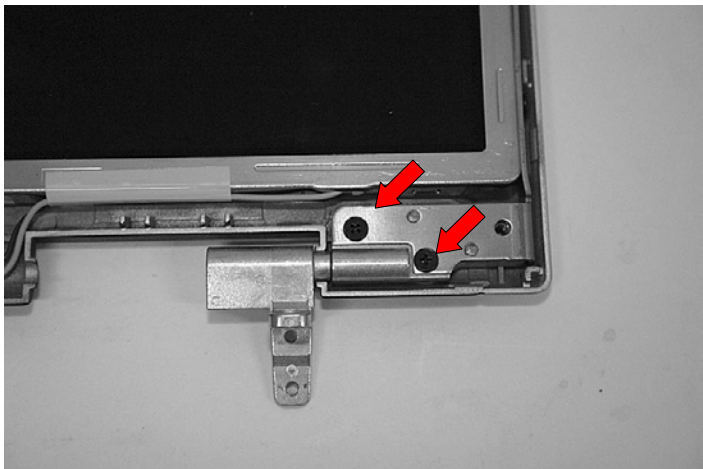
No.	FRU No.	Specification	Qty
1	1SZZBA4080F	M2.5 x L4.5	2

Ch5. Removing and replacing a part

4. Remove LCD power cable and remove Inverter.

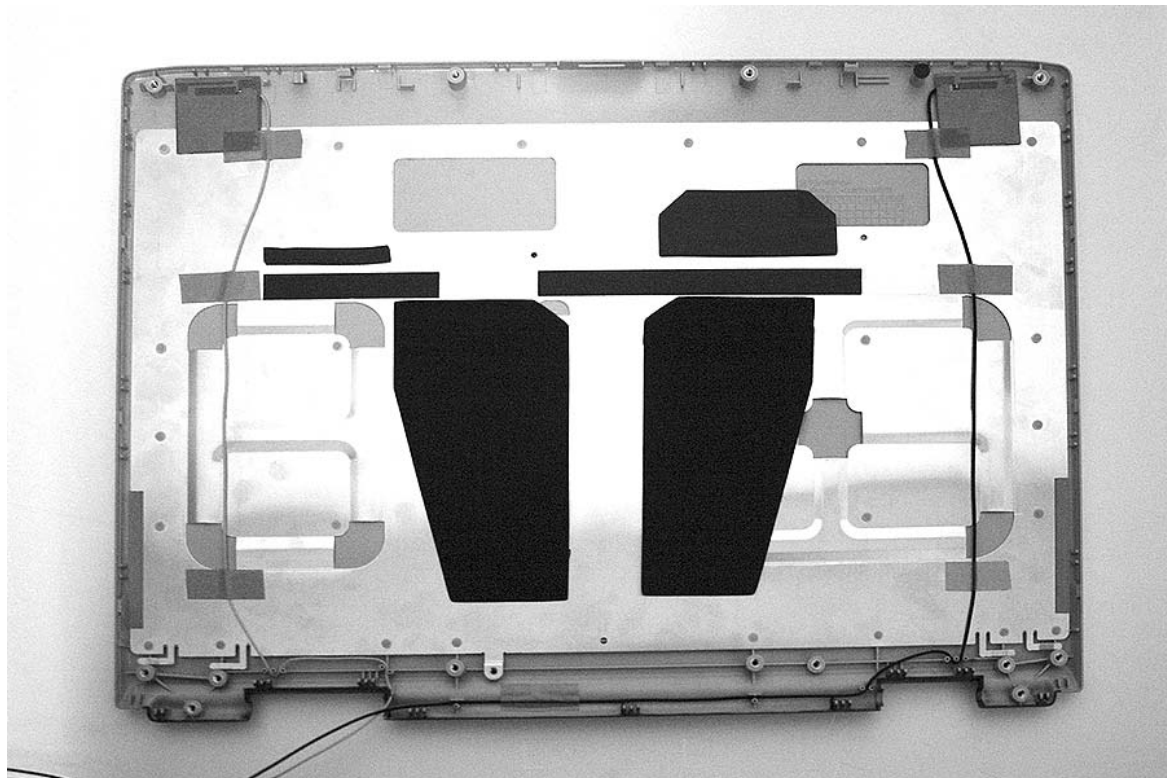
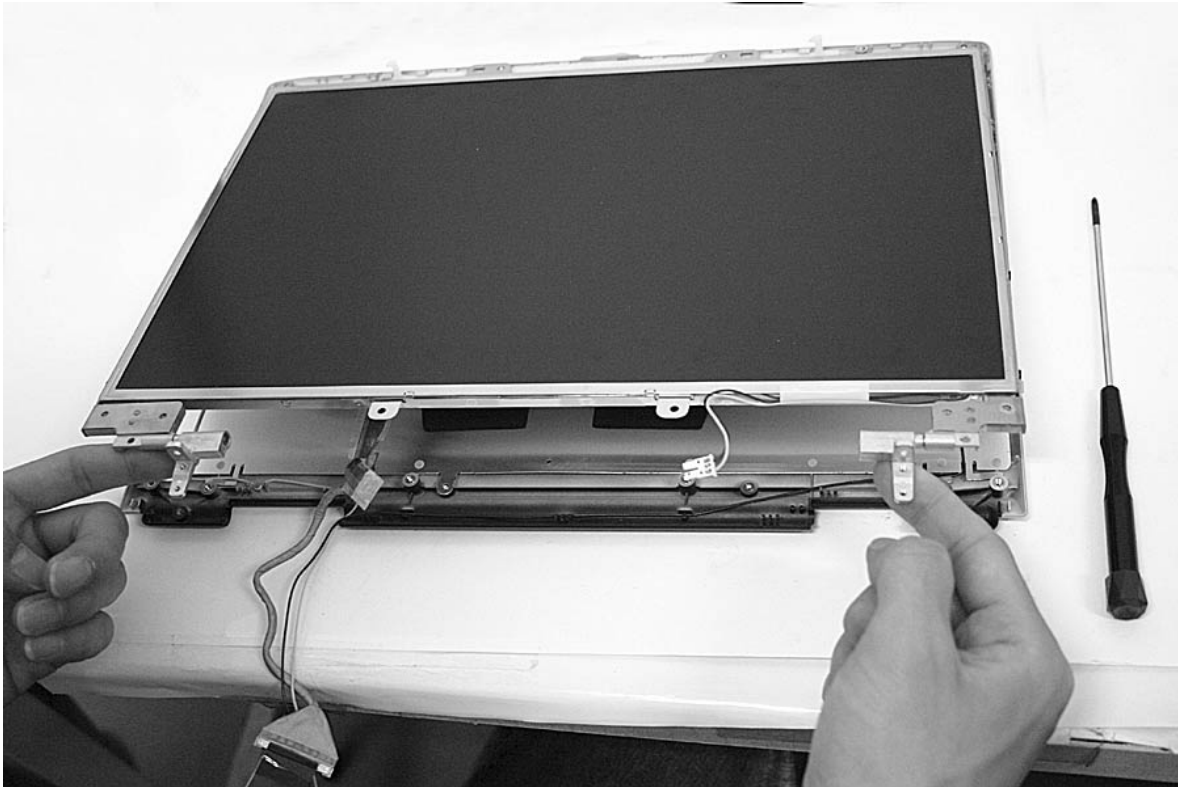


5. (Left, Right) Remove 4 Hinge screws.



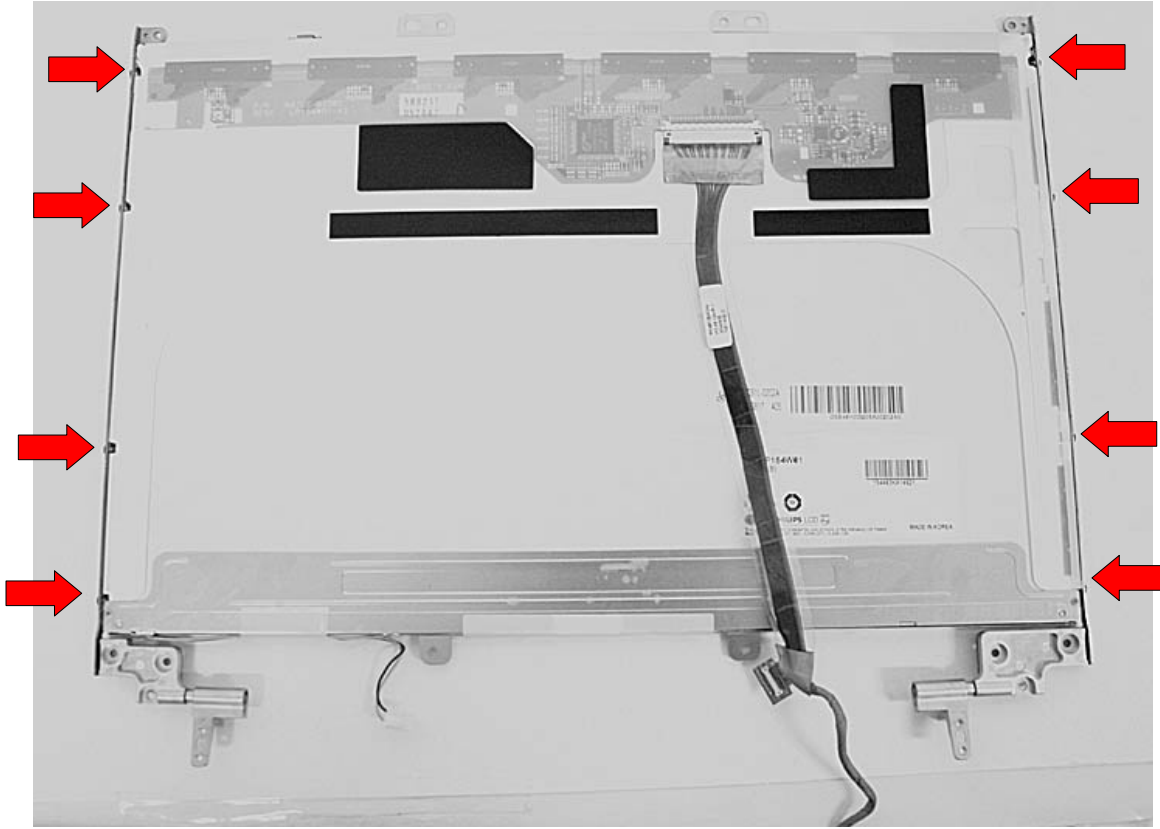
No.	FRU No.	Specification	Qty
1	1SZZBA4080F	M2.5 x L4.5	4

6. Remove LCD panel.

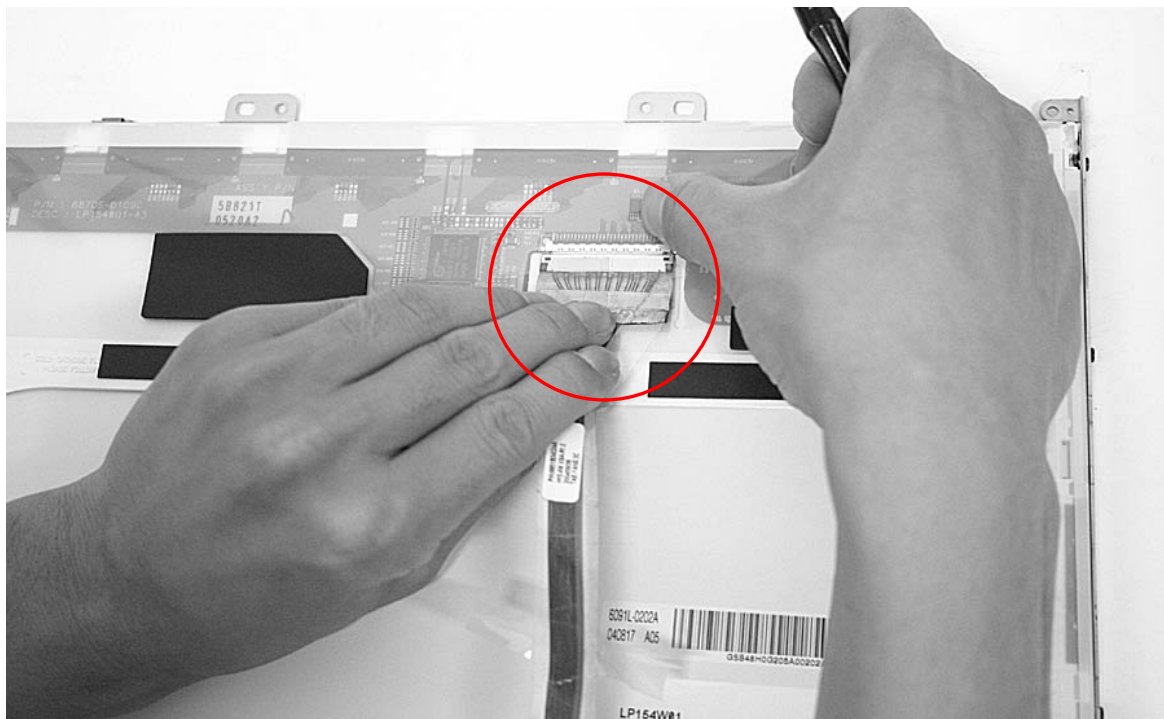


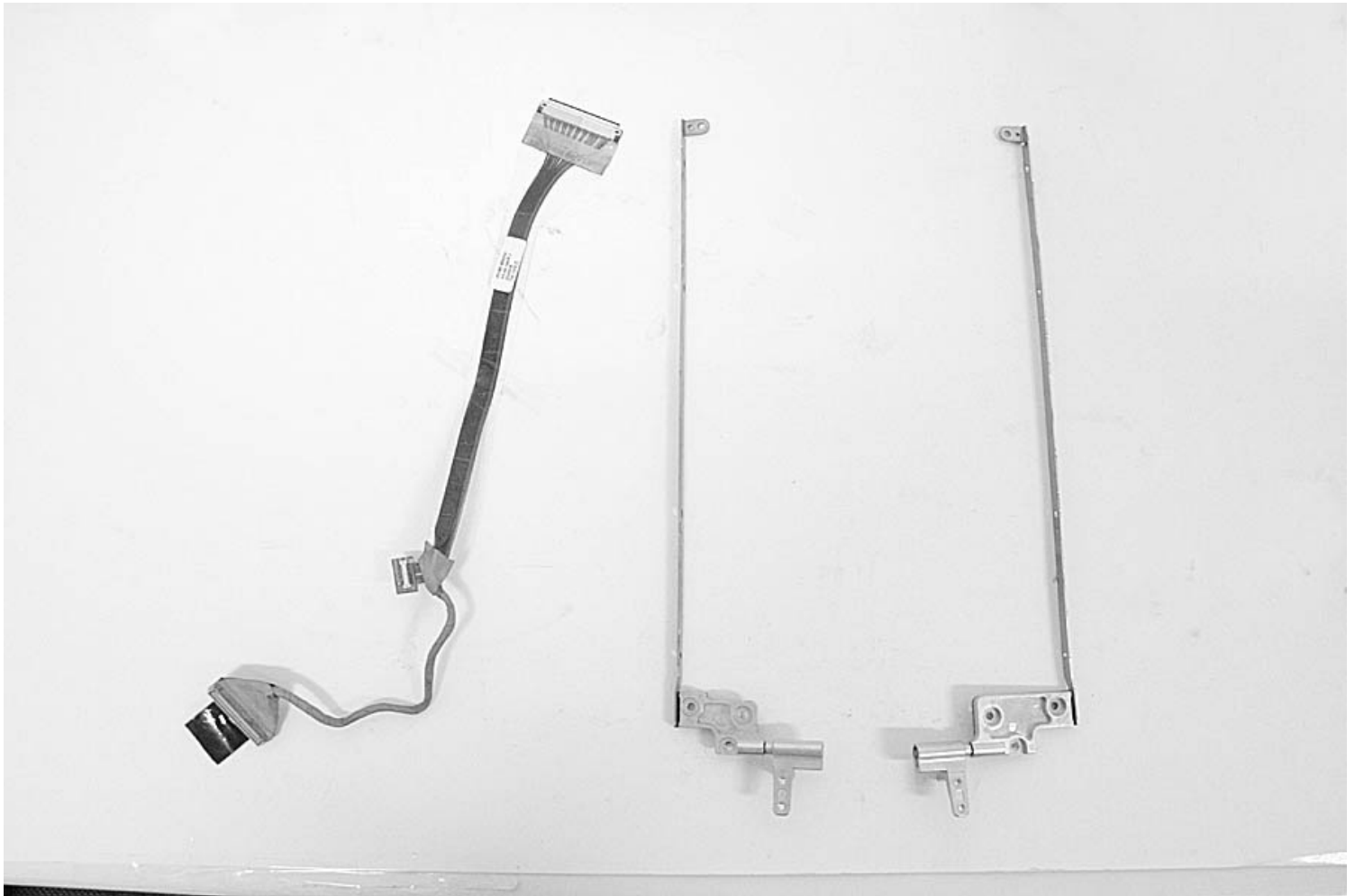
Ch5. Removing and replacing a part

7. Remove 8 Hinge Assembly screws. Remove LCD Cable Tape.

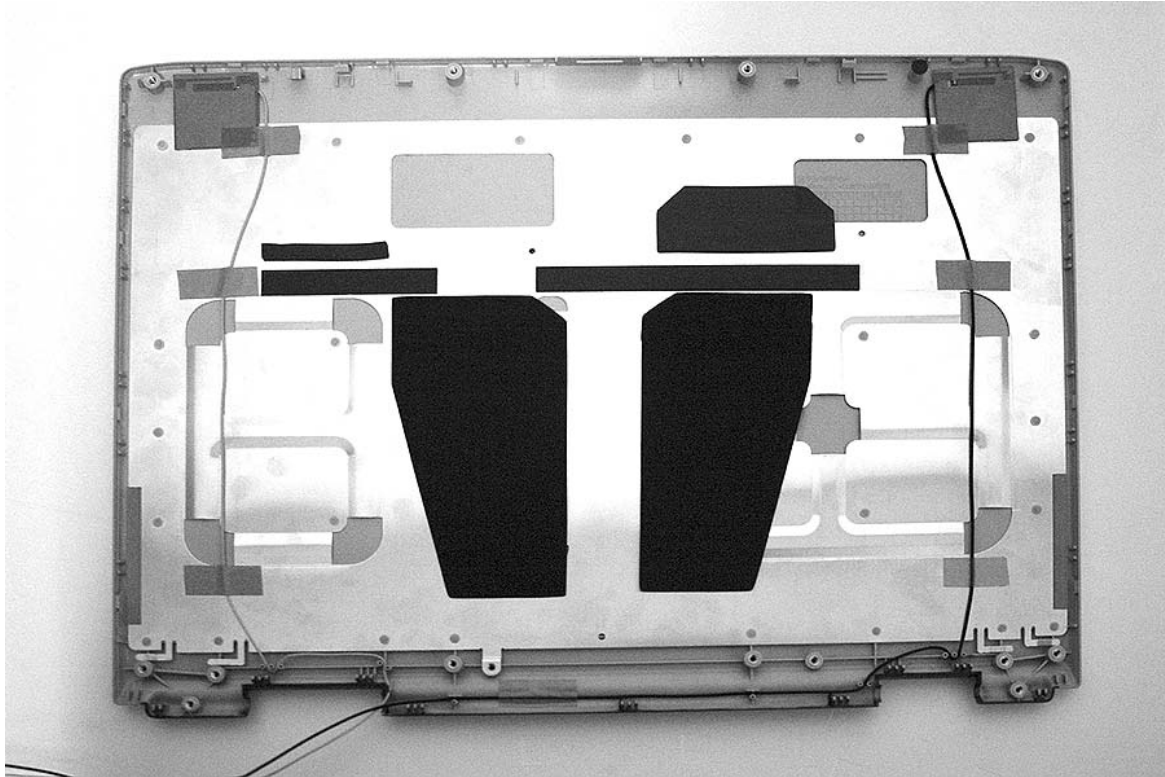


No.	FRU No.	Specification	Qty
1	1SZZBA4017A	M2 x L3.0	8





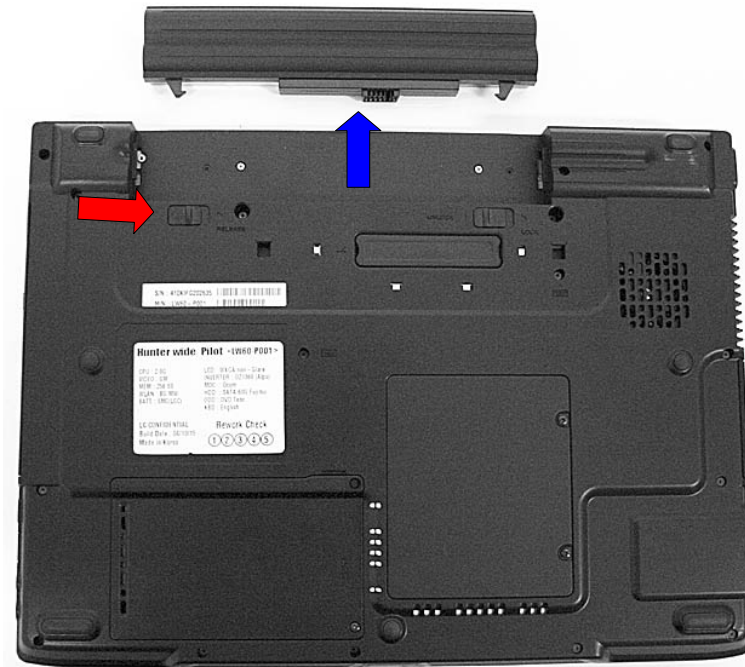
8. Remove WLAN Antenna.



Ch5. Removing and replacing a part

■ Battery Pack

1. Push the battery latch in the direction shown below; then slide the battery pack out of the slot.



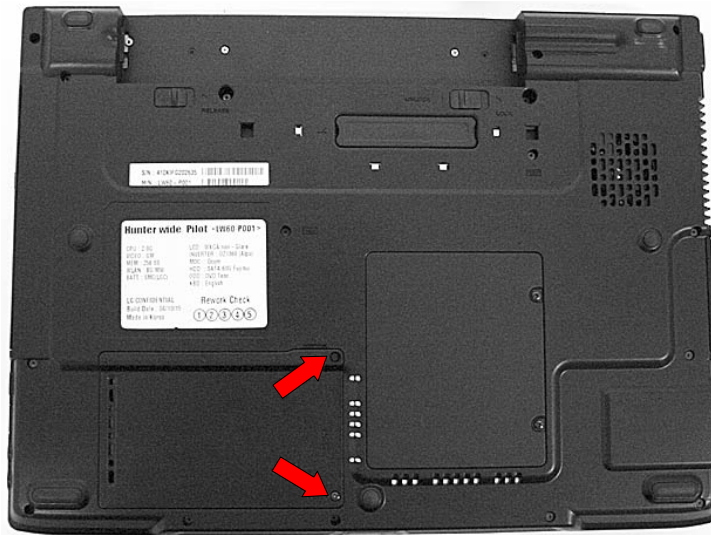
Ch5. Removing and replacing a part

■ Hard Disk Drive

Remove the following parts in order before replacing this part.

1. Battery Pack

1. Remove two screws as indicated in the picture.



Ch5. Removing and replacing a part

2. Then pull the HDD assembly out in the direction shown below.



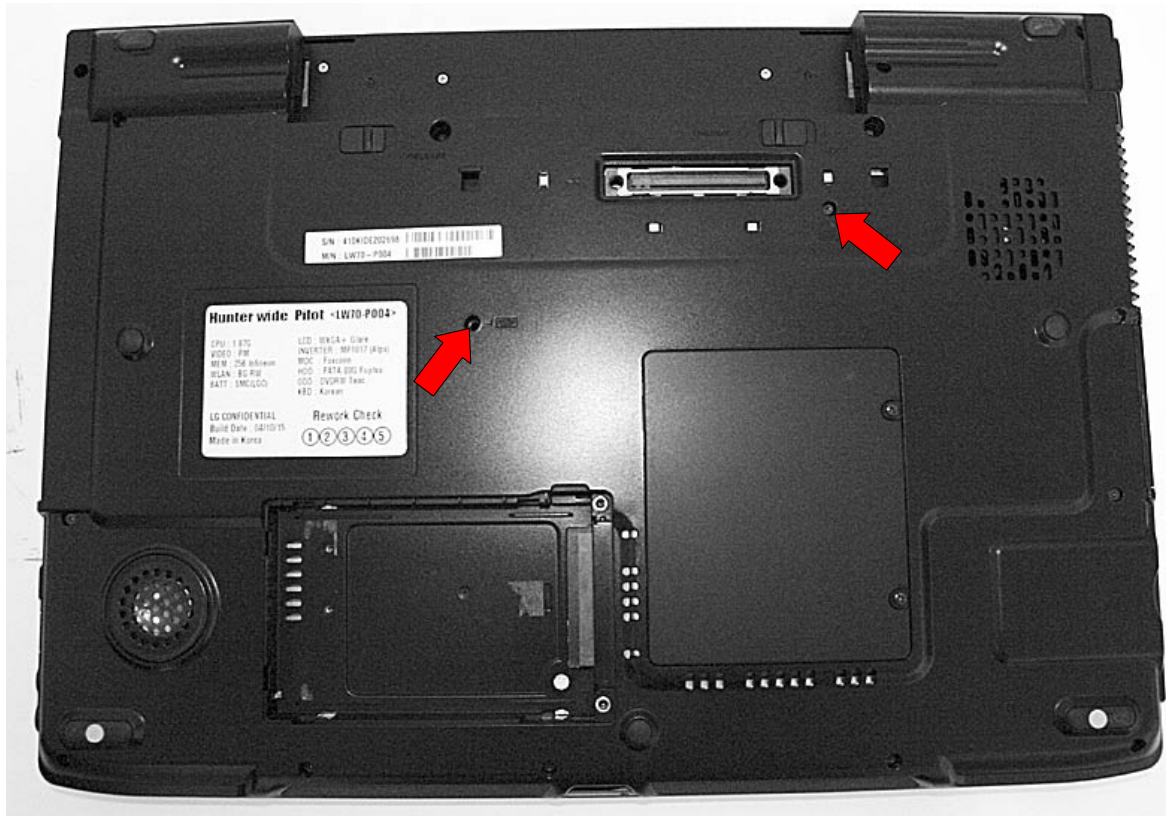
Ch5. Removing and replacing a part

Keyboard

Remove the following parts in order before replacing this part.

1. Battery Pack

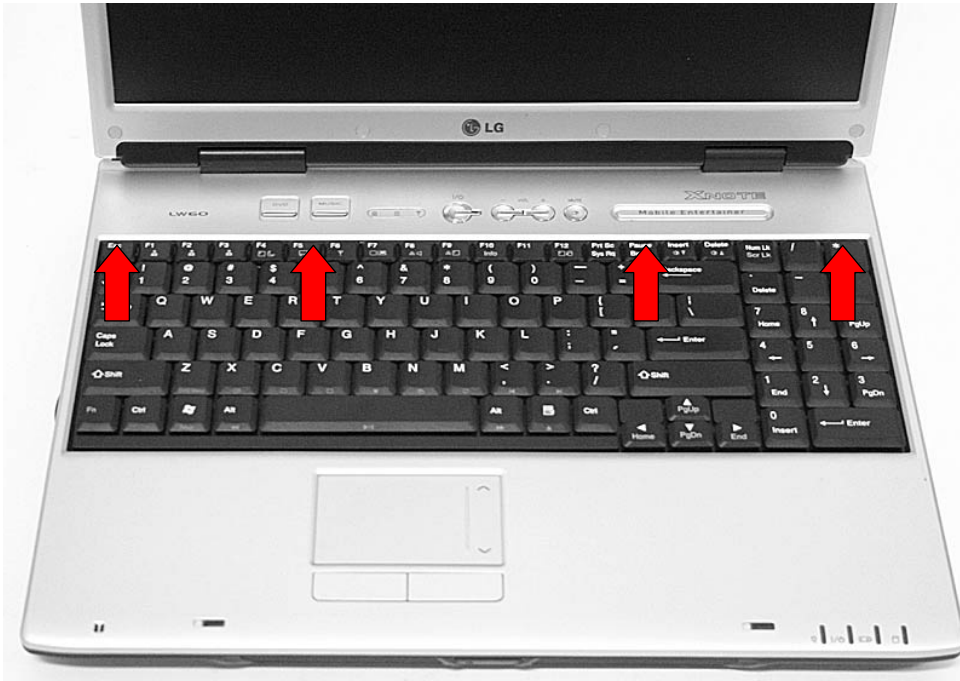
1. Remove 2 screws.



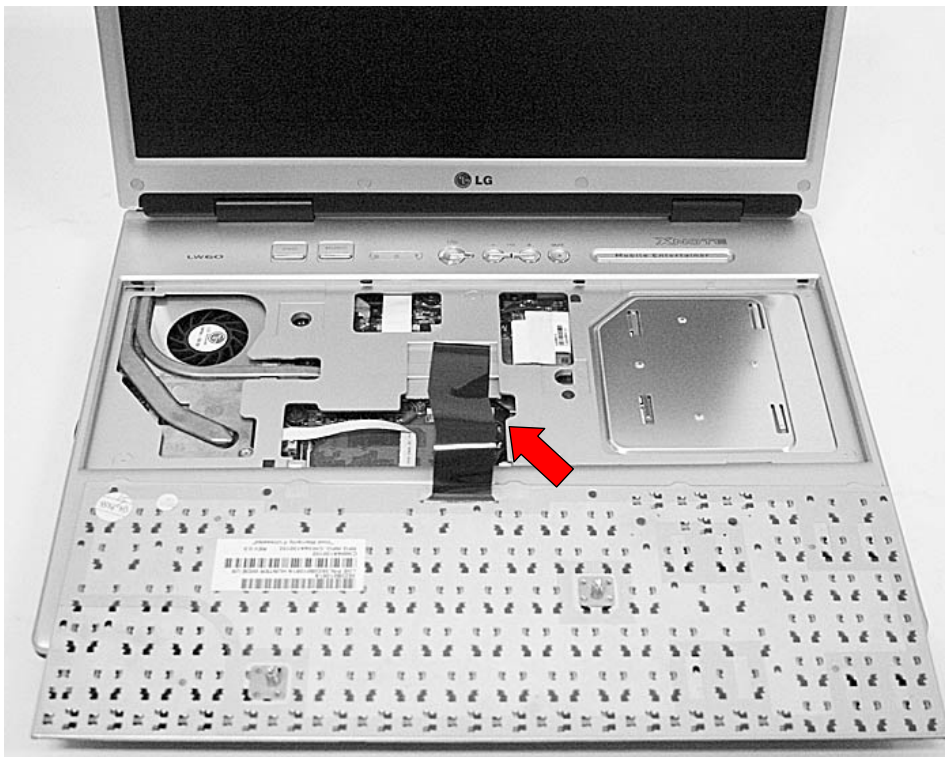
No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 x L6.5	2

Ch5. Removing and replacing a part

2. To remove 4 hooks, insert a (-) type screwdriver into a hook located at the lower end of keyboard, and pull it up.



3. Remove keyboard and disconnect Keyboard cable.



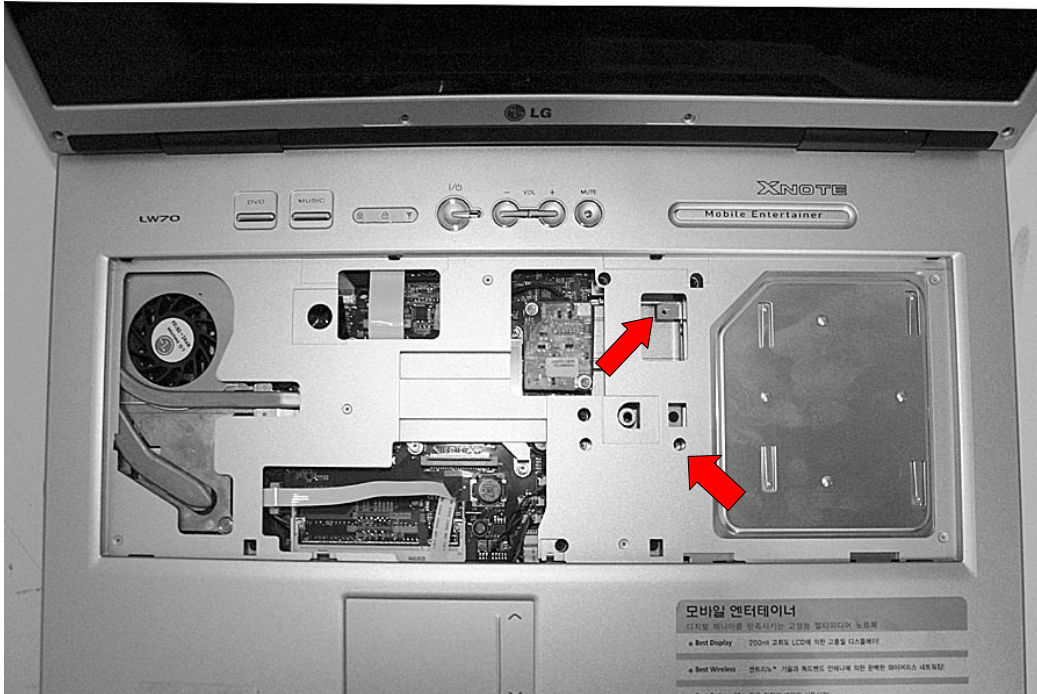
Ch5. Removing and replacing a part

■ Optical Disk Drive

Remove the following parts in order before replacing this part.

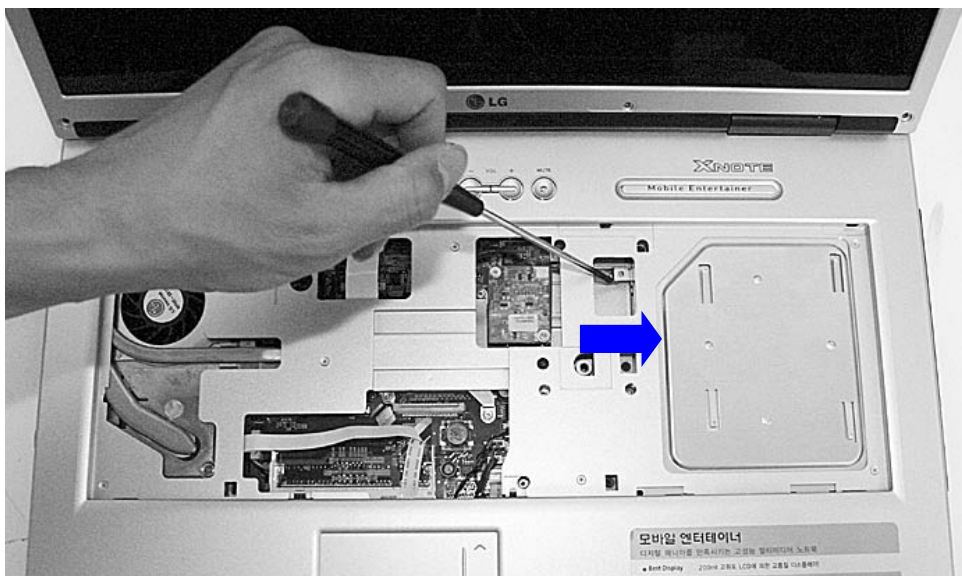
1. Battery Pack 2. Keyboard

1. Remove 2 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4019F	M2.0 X L4.5	2

2. Remove a screw, insert a screwdriver into the hole located at the rear of ODD and push it out.



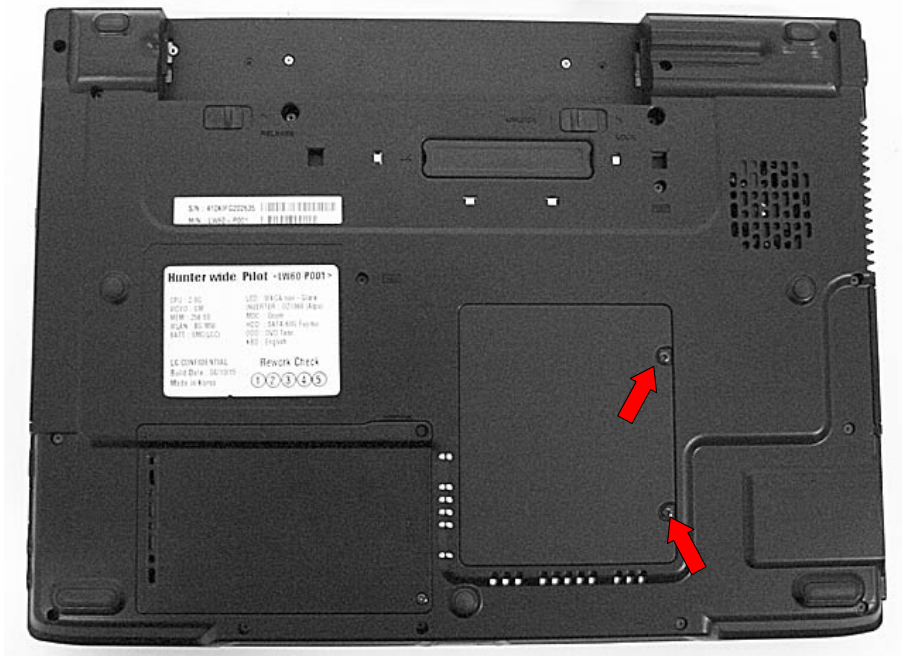
Ch5. Removing and replacing a part

■ Wireless LAN Card

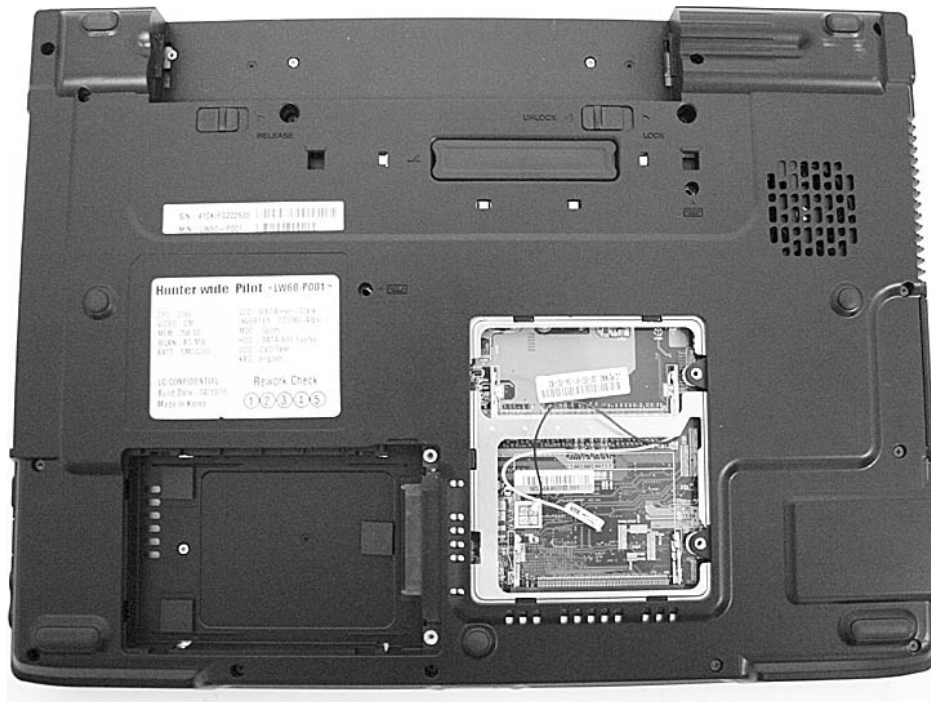
Remove the following parts in order before replacing this part.

1. Battery Pack

1. Remove Cover Mini PCI screws.



2. Disconnect WLAN antenna cable and remove WLAN card.



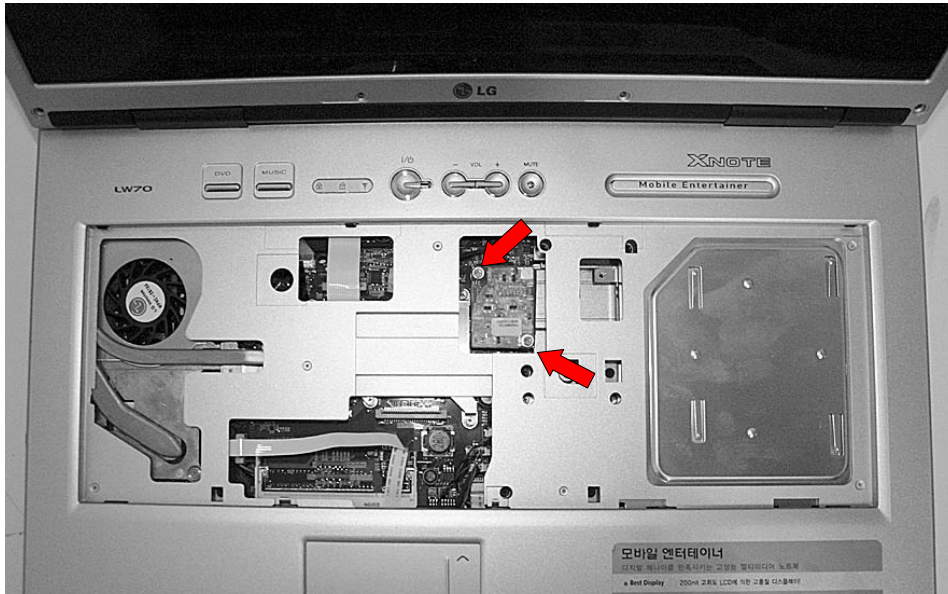
Ch5. Removing and replacing a part

■ BMDC(MDC) Modem Card

Remove the following parts in order before replacing this part.

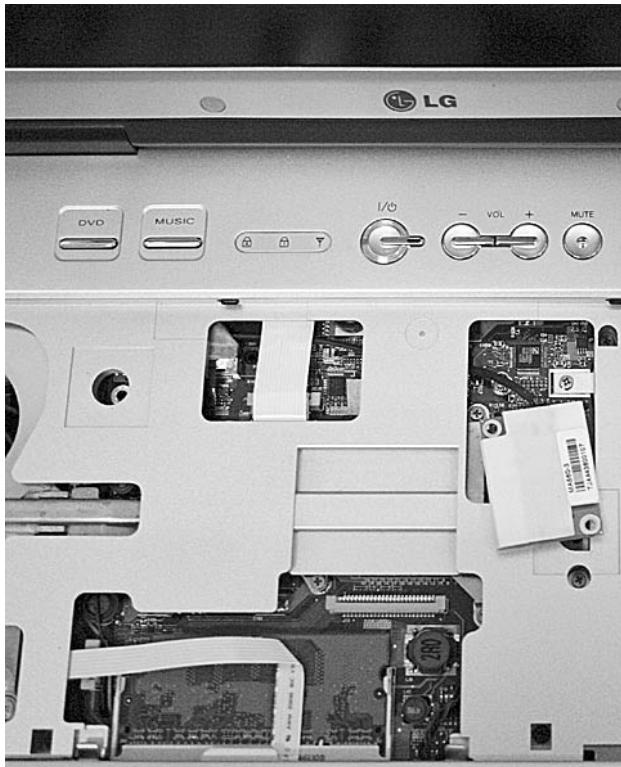
1. Battery Pack

1. Remove 2 MDC Board Screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4023A	M2.0 X L3.5	2

2. Remove MDC card and disconnect cable.



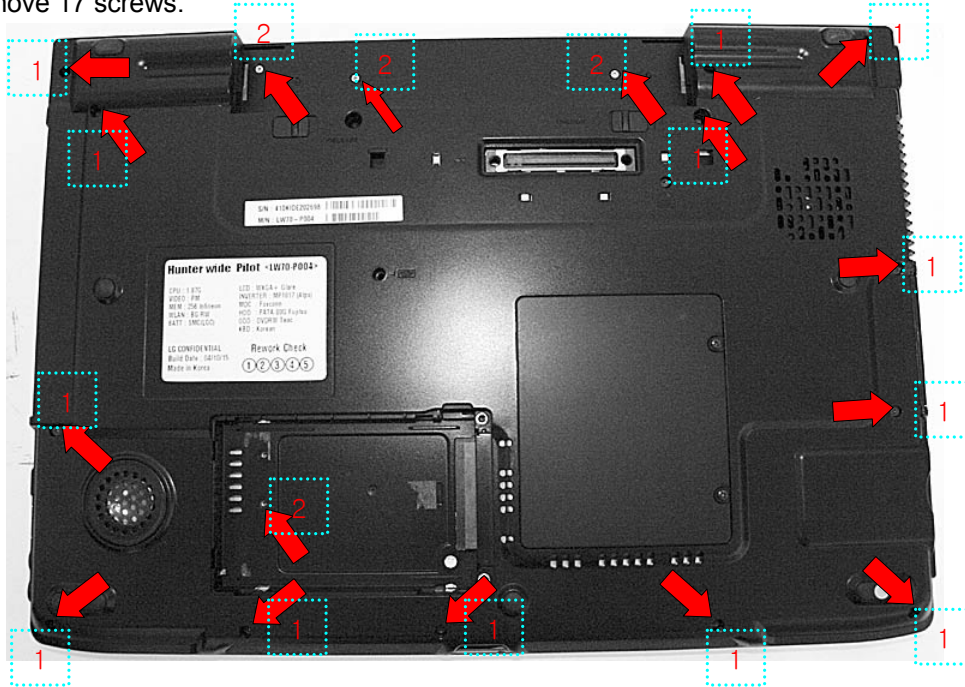
Ch5. Removing and replacing a part

Keyboard Deck

Remove the following parts in order before replacing this part.

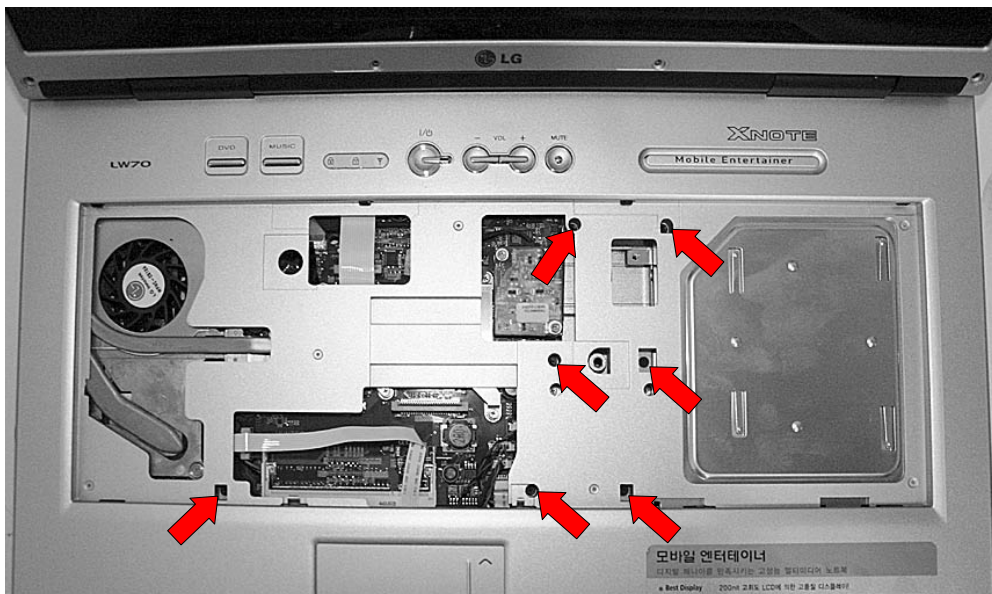
1. Battery Pack 2. Hard Disk Drive

1. Remove 17 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	13
2	1SZZBA4017A	M2.0 X L3.0	4

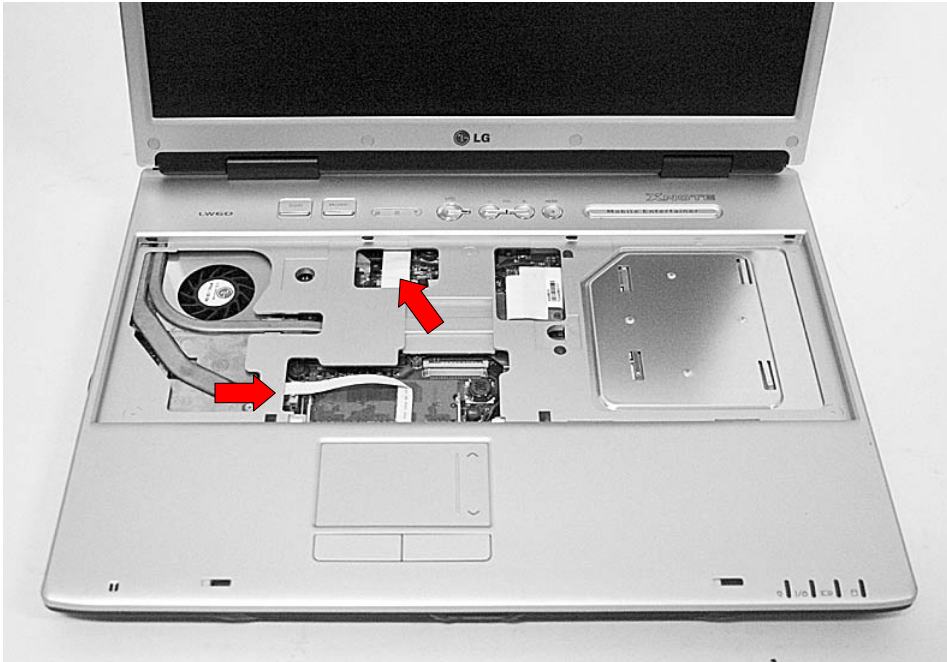
2. Remove 7 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	7

Ch5. Removing and replacing a part

3. Disconnect cable.



4. Disassemble the KBD Deck Assy.



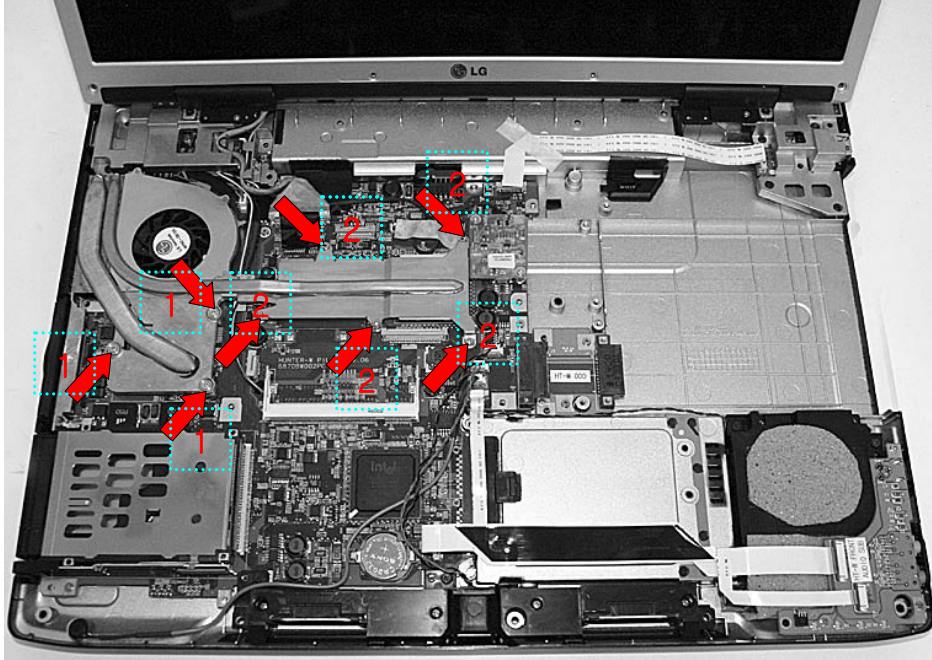
Ch5. Removing and replacing a part

■ Fan Assembly

Remove the following parts in order before replacing this part.

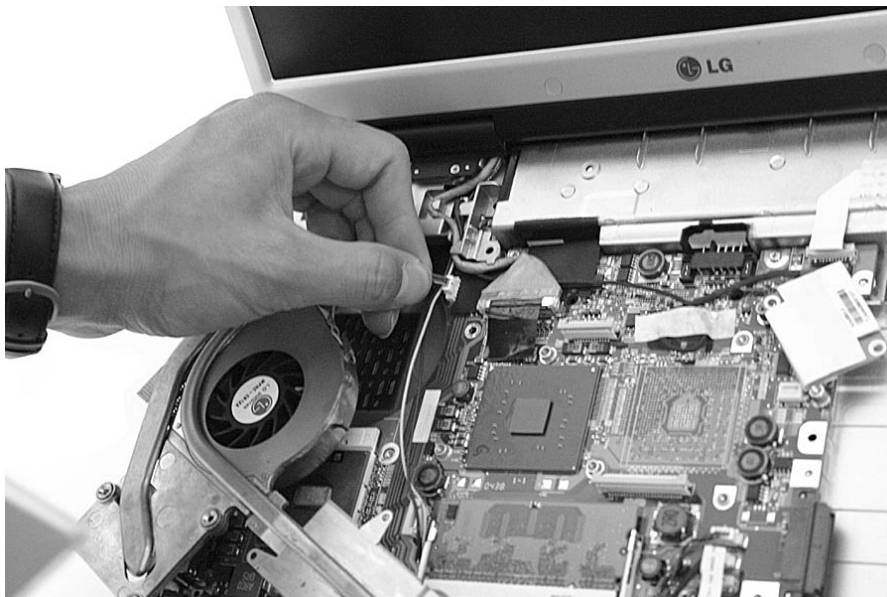
1. Battery Pack 2. Hard Disk Drive 3. Keyboard 4. Keyboard Deck

1. Remove 8 screws and then remove FAN Assembly.



No.	FRU No.	Specification	Qty
1	1SZZBZ4022A	M2.0 X L12.0	3
2	1SZZBA4023A	M2.0 X L3.5	5

2. Disconnect connector and pull it up.



Ch5. Removing and replacing a part

■ Display Module

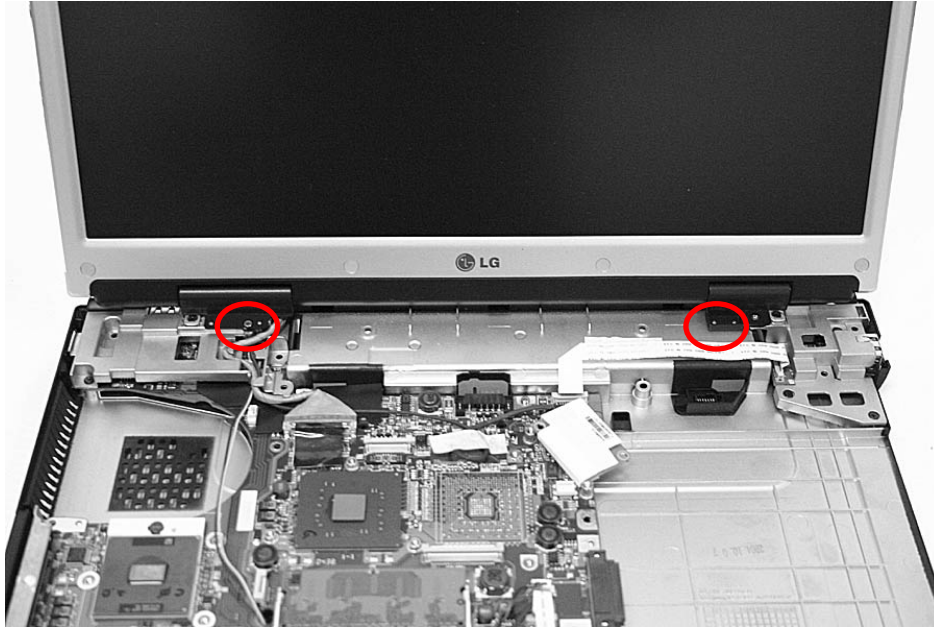
Remove the following parts in order before replacing this part.

1. Battery Pack 2. Hard Disk Drive 3. Mini PCI Cover Antenna 4. Keyboard 5. Keyboard Deck

1. Remove Wireless cable from hole.

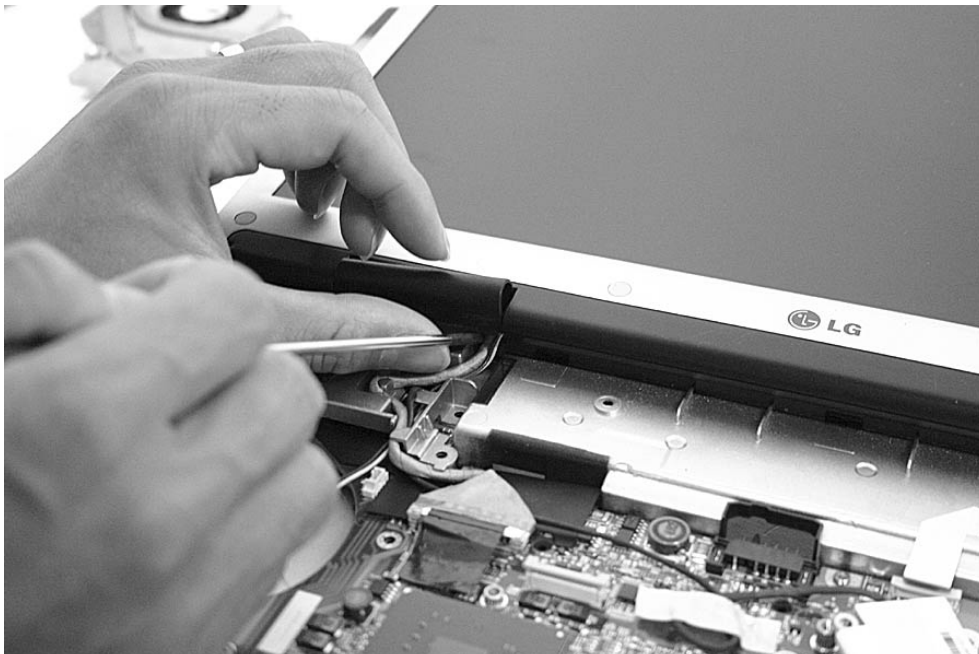
Remove LCD connector. You will see a tag designed to make the work easier. Pull out the tag.

2. Remove 2 Hinge cover screws.



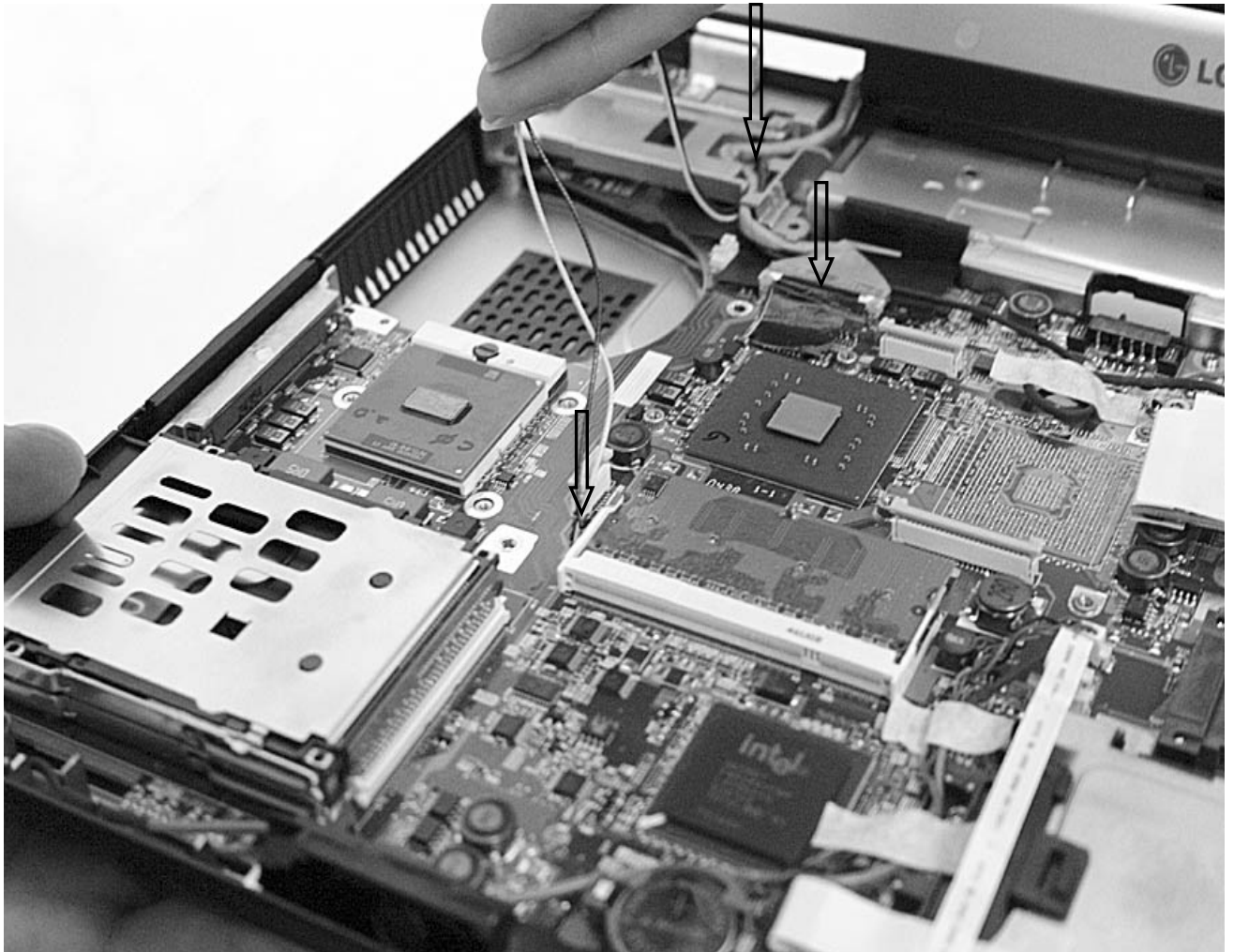
No.	FRU No.	Specification	Qty
1	1SZZBA4023A	M2 X L3.5	2

3. Remove cap hinge small. (Applied both left and right side.)



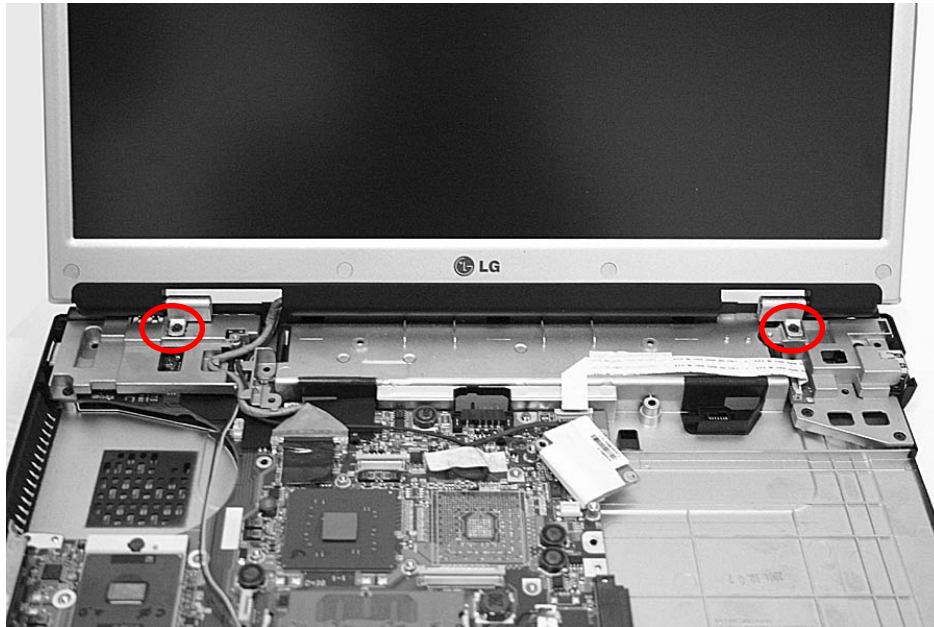
4. Disconnect LCD connector and Modem connector.

Remove WLAN antenna.



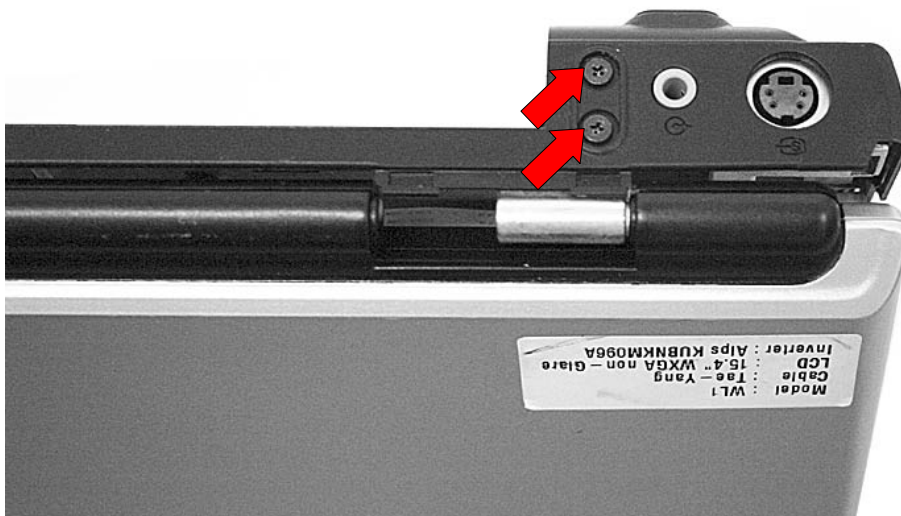
Ch5. Removing and replacing a part

5. Remove 2 Hinge Screws and remove Hinge.

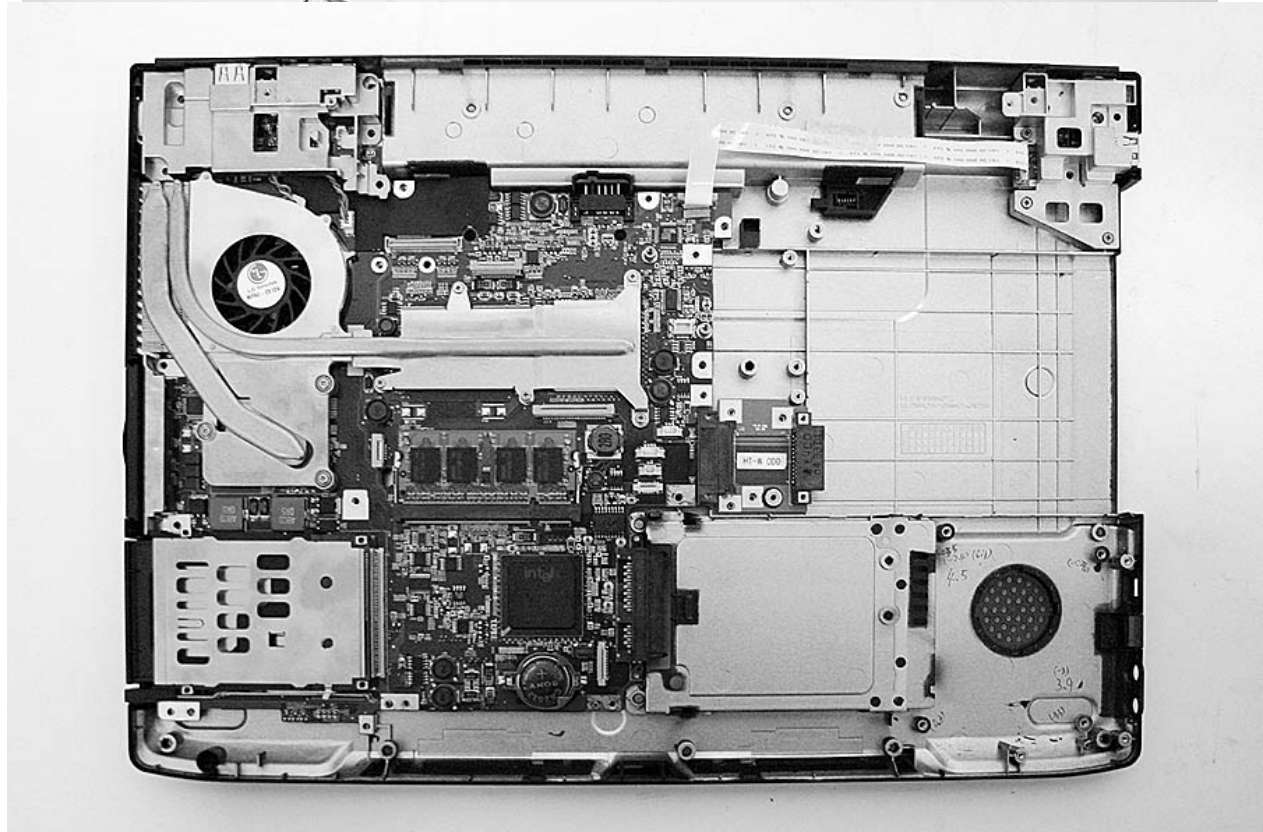


No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	2

6. Remove screw cover and remove 2 Hinge screws. (Applied both left and right side.)



No.	FRU No.	Specification	Qty
1	1SZZBA4097A	M2.5 X L6.5	4



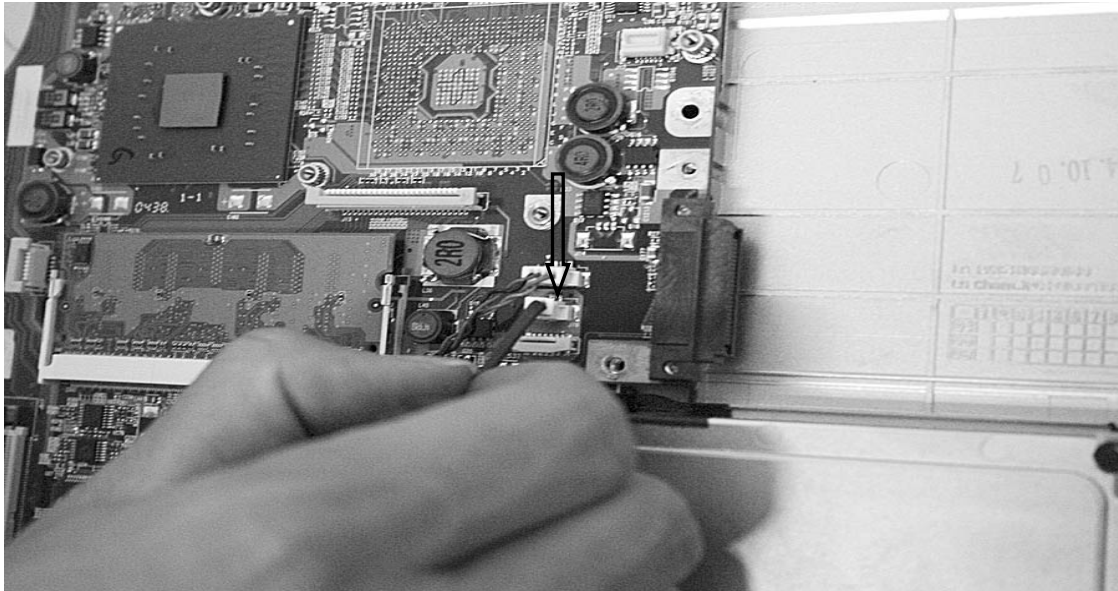
Ch5. Removing and replacing a part

■ Speaker

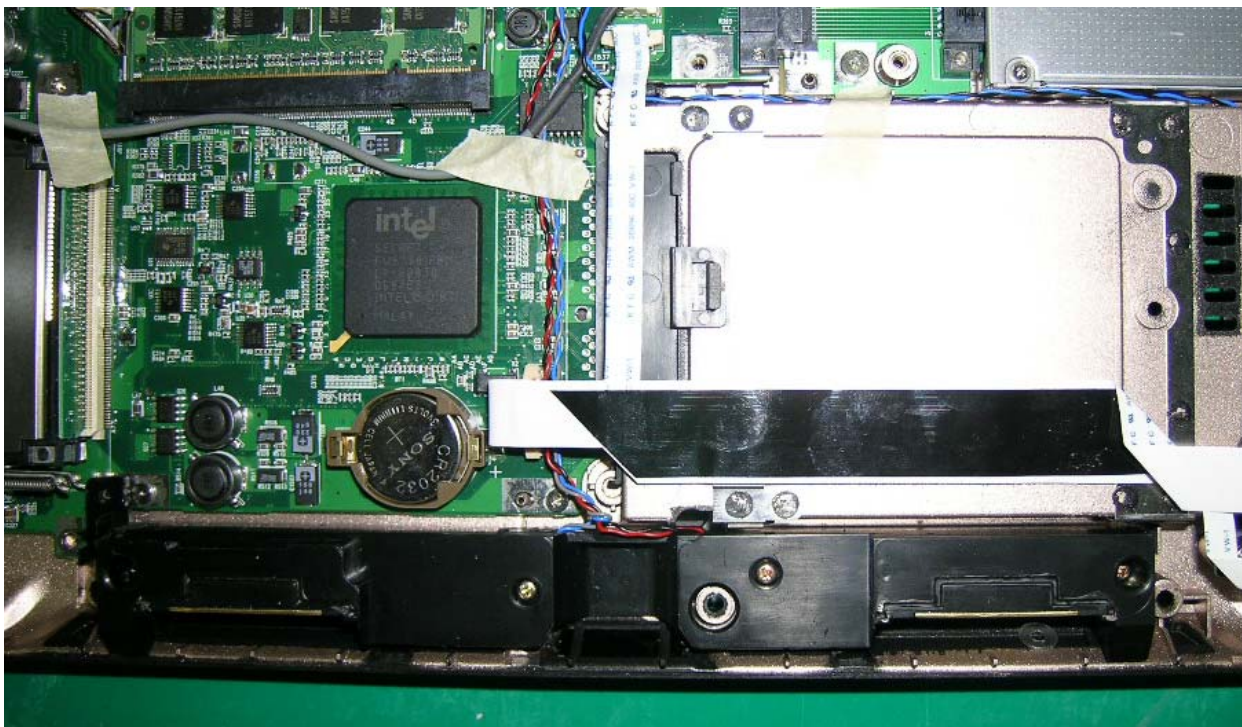
Remove the following parts in order before replacing this part.

1. Battery Pack 2. Hard Disk Drive 3. Keyboard 4. Keyboard Deck

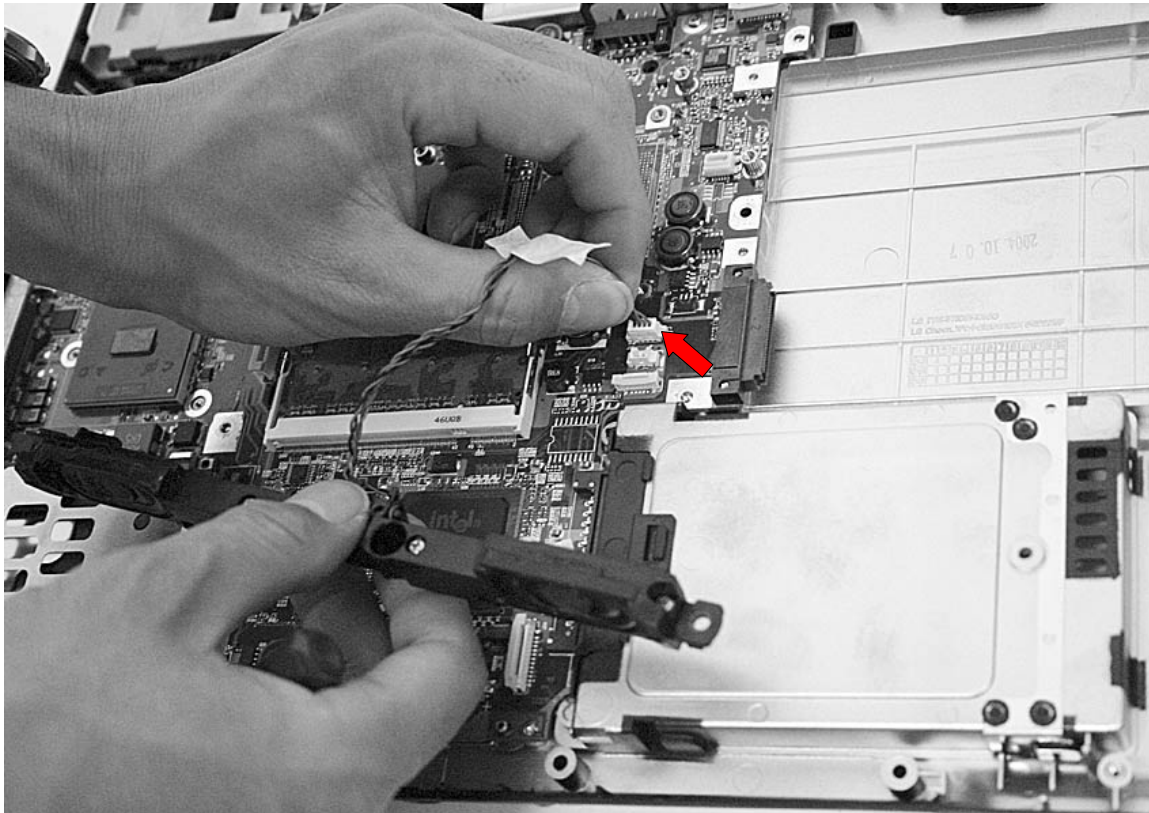
1. Disconnect MIC cable.



2. Remove Speaker from Guide Boss.



3. Disconnect connector and remove Speaker.



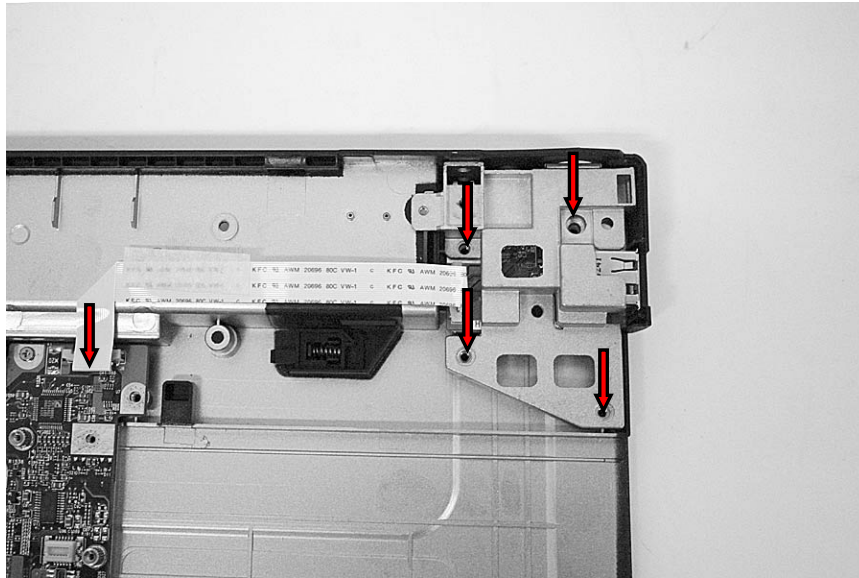
Ch5. Removing and replacing a part

■ Sub Board

Remove the following parts in order before replacing this part.

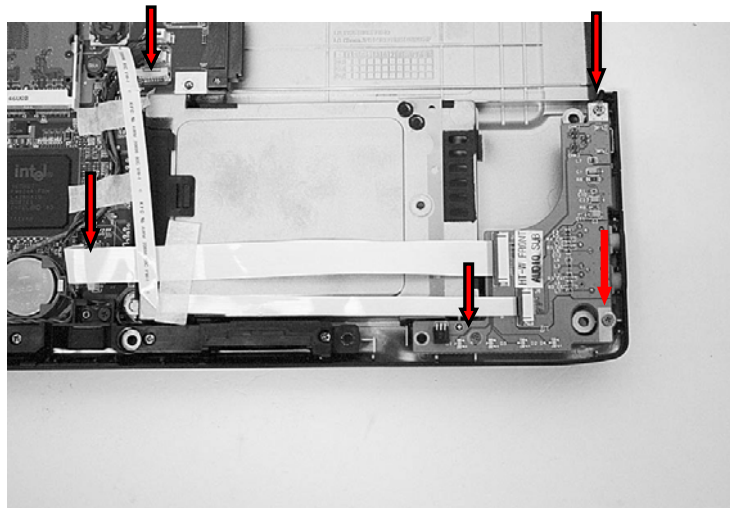
1. Battery Pack
2. Hard Disk Drive
3. Keyboard
4. Keyboard Deck
5. Optical Disk Drive
6. Display Module

1. Remove 4 screws and remove Sub B/D.



No.	FRU No.	Specification	Qty
1	1SZZBA4080G	M2.5 x L6.0	4

2. Remove 2 screws and remove Audio Sub B/D.



No.	FRU No.	Specification	Qty
1	1SZZBA4019F	M2 x L4.5	3

Ch5. Removing and replacing a part

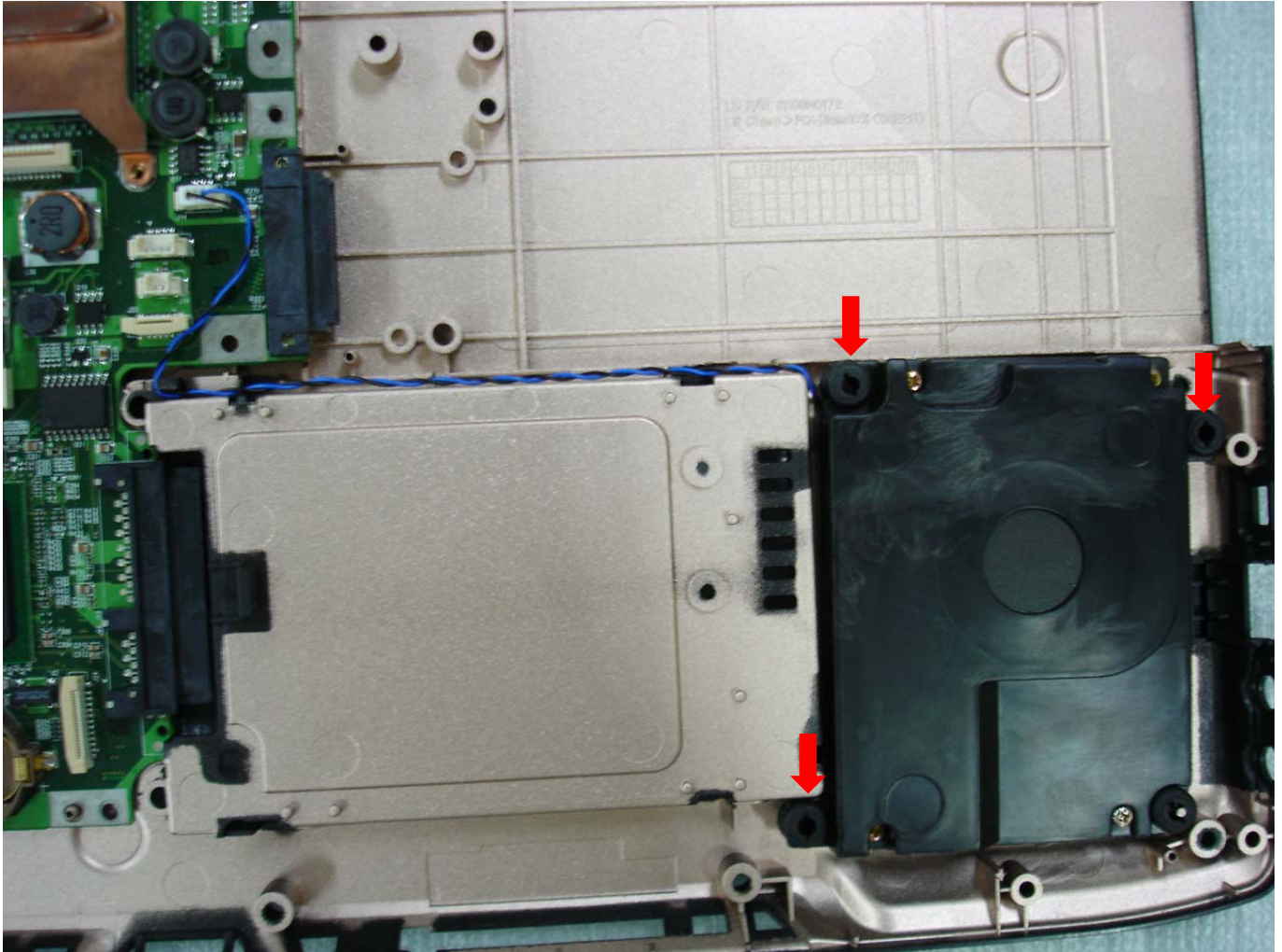
■ Woofer

Remove the following parts in order before replacing this part.

1. Battery Pack
2. Hard Disk Drive
3. Keyboard
4. Keyboard Deck
5. Optical Disk Drive
6. Fan Assembly
7. Speaker

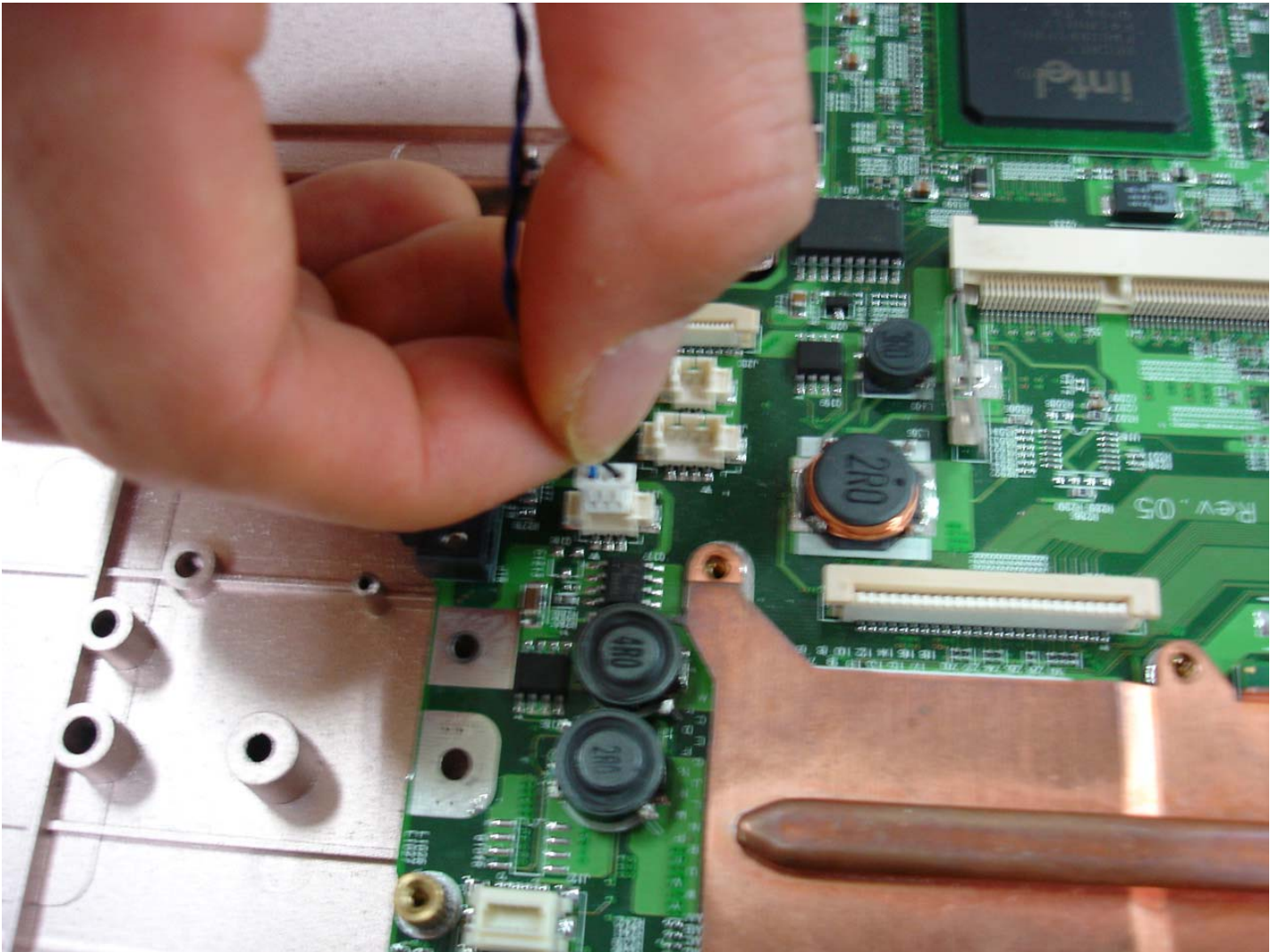
1. Remove Audio Sub Board.

Remove 3 Screws.



No.	FRU No.	Specification	Qty
1	1SZZBZ4023A	M2.5xL11, D7(3.5)	3

2. Disconnect connector and remove Woofer.



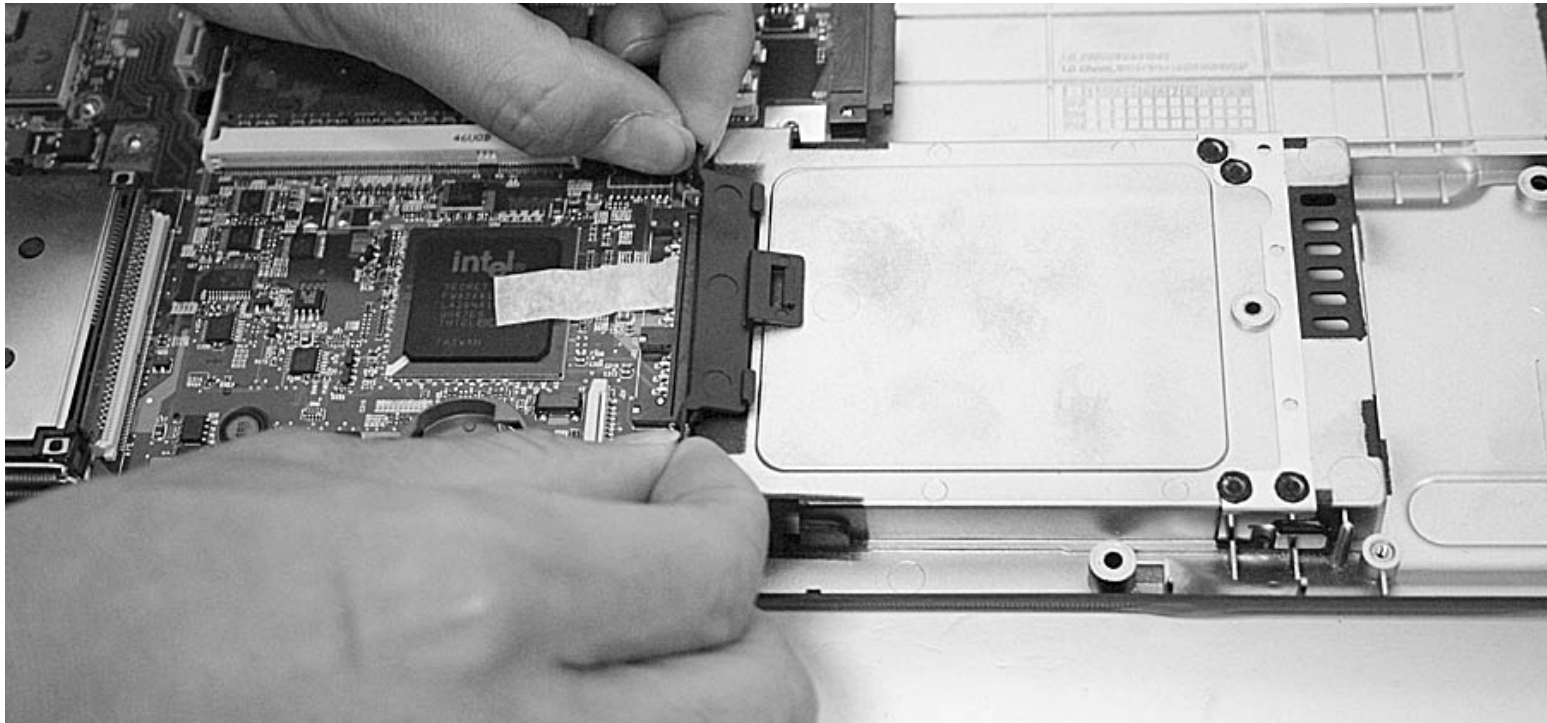
Ch5. Removing and replacing a part

■ Main Board

Remove the following parts in order before replacing this part.

1. Battery Pack
2. Hard Disk Drive
3. Keyboard
4. Keyboard Deck
5. Optical Disk Drive
6. Fan Assembly
7. Speaker
8. Woofer
9. Sub Board

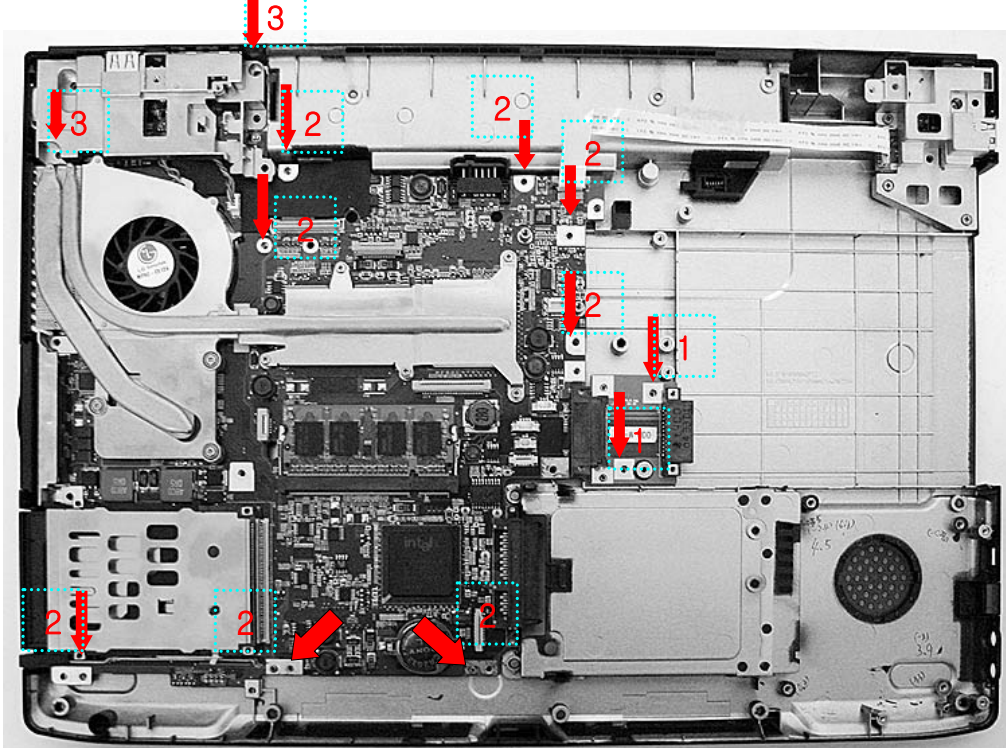
1. Remove Cover Block HDD.



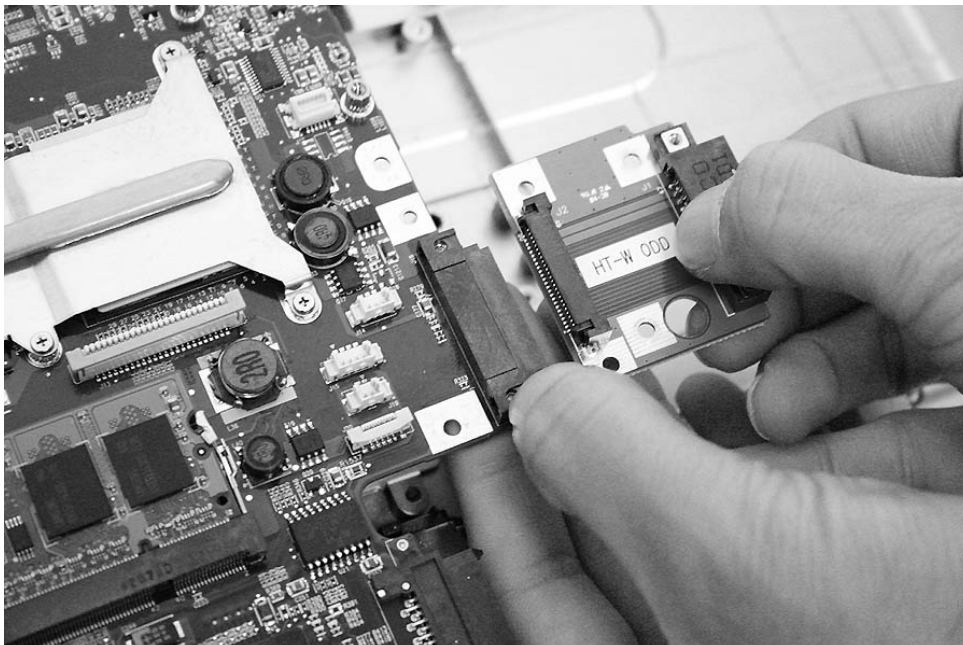
Ch5. Removing and replacing a part

2. Remove 6 Main Board screws. Remove 2 ODD interface Board screws.

Remove Main board and ODD board.



No.	FRU No.	Specification	Qty
1	1SZZBZ4002B	M2.0 X L2.7	2
2	1SZZBA4023A	M2.0 X L3.5	8
3	1SZZBA4080G	M2.0 X L6.0	2



Ch5. Removing and replacing a part

■ Display Module Exploded View

Remove the following parts in order before replacing this part.

1. Battery Pack 2. Hard Disk Drive 3. Keyboard 4. Keyboard Deck

1. Using a knife, remove the logo and rubbers that are covering the screws.
Then remove all 8 screws.



No.	FRU No.	Specification	Qty
1	1SZZBA4080G	M2.5 X L6.0	8

2. Remove LCD Hook.



Ch5. Removing and replacing a part

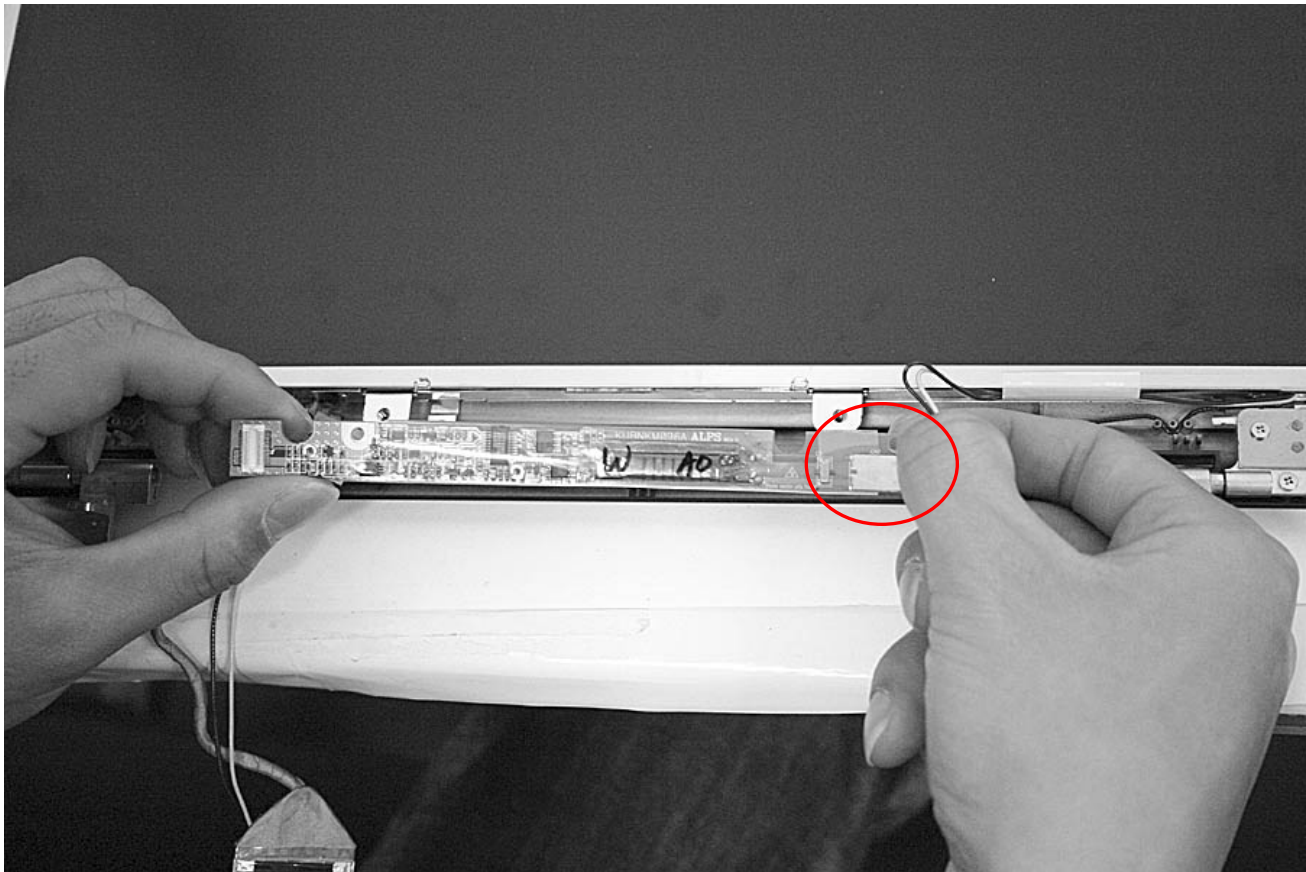
3. Remove 2 screws and remove tape.



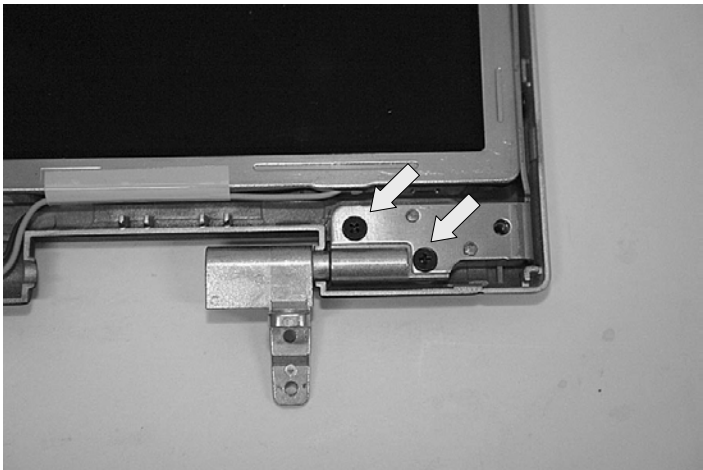
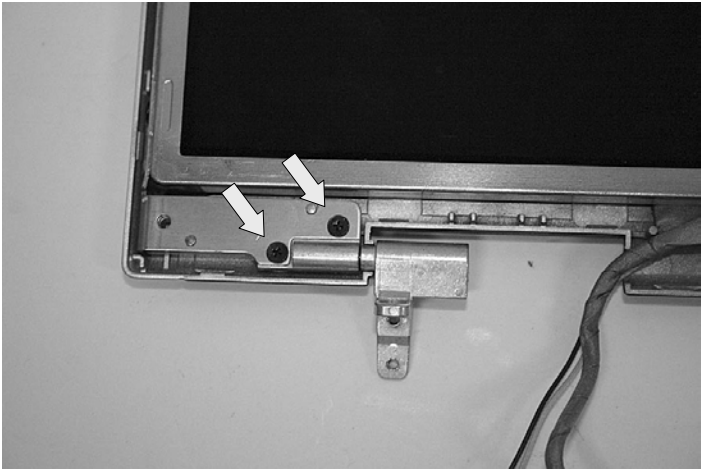
No.	FRU No.	Specification	Qty
1	1SZZBA4017A	M2.0 X L3.0	2

Ch5. Removing and replacing a part

4. Remove LCD power cable and remove Inverter.

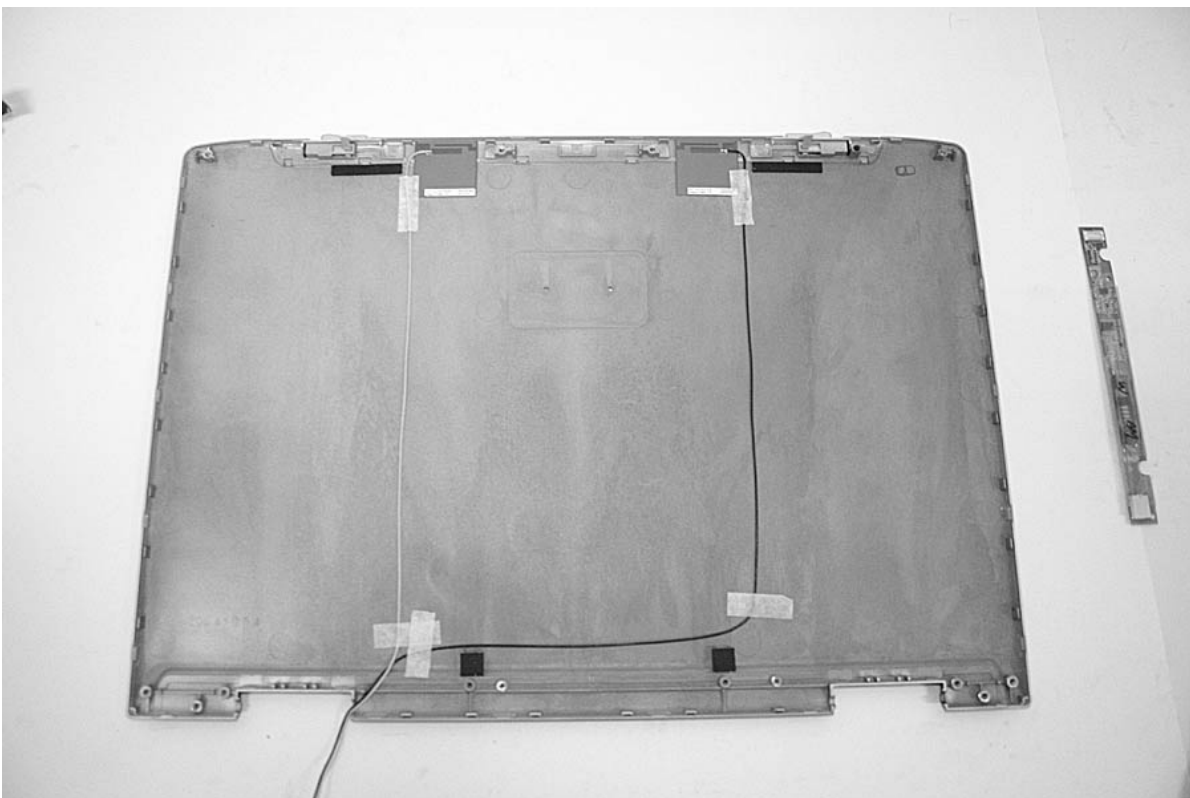
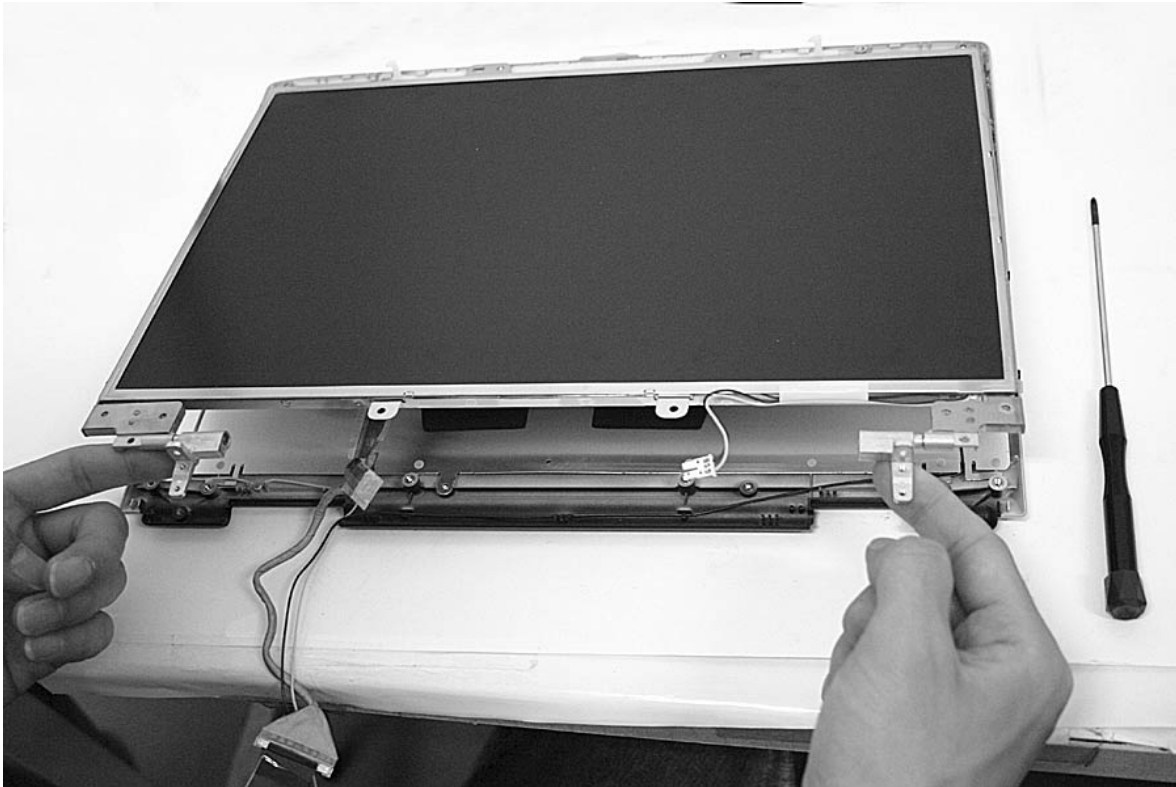


5. (Left, Right) Remove 4 Hinge screws.



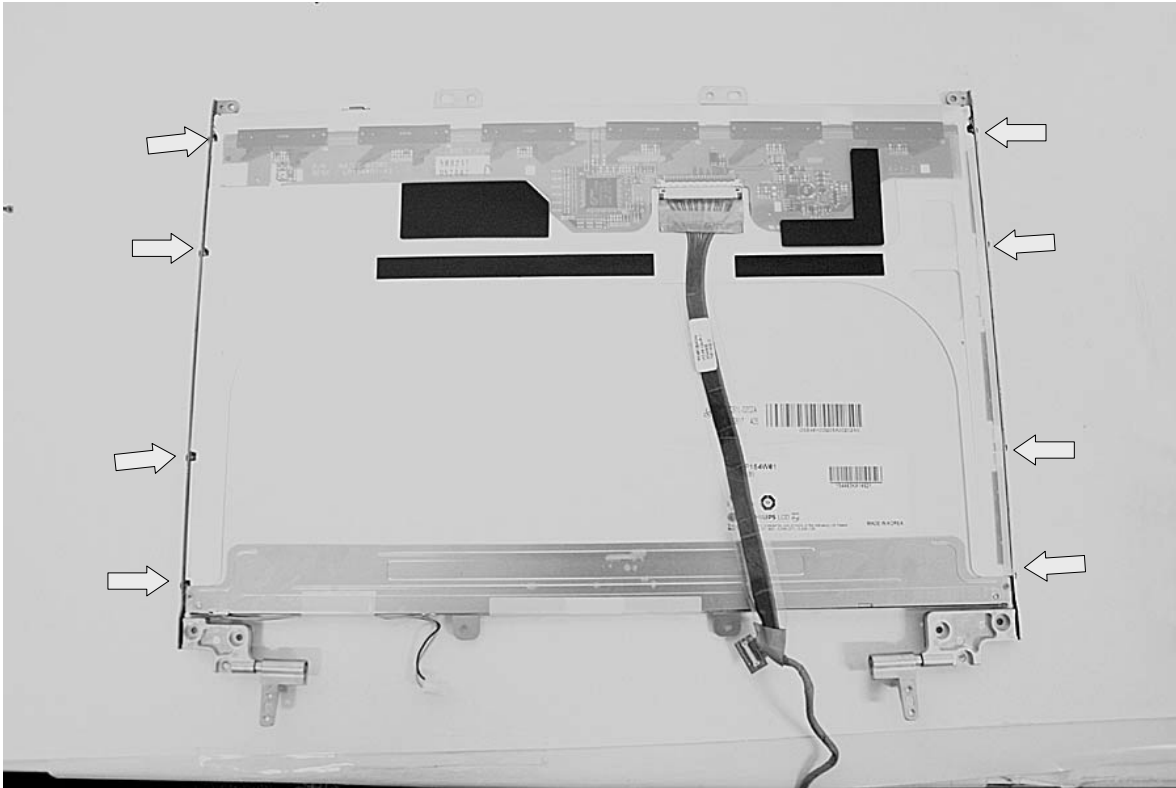
No.	FRU No.	Specification	Qty
1	1SZZBA4080G	M2.5 X L6.0	4

6. Remove LCD panel.

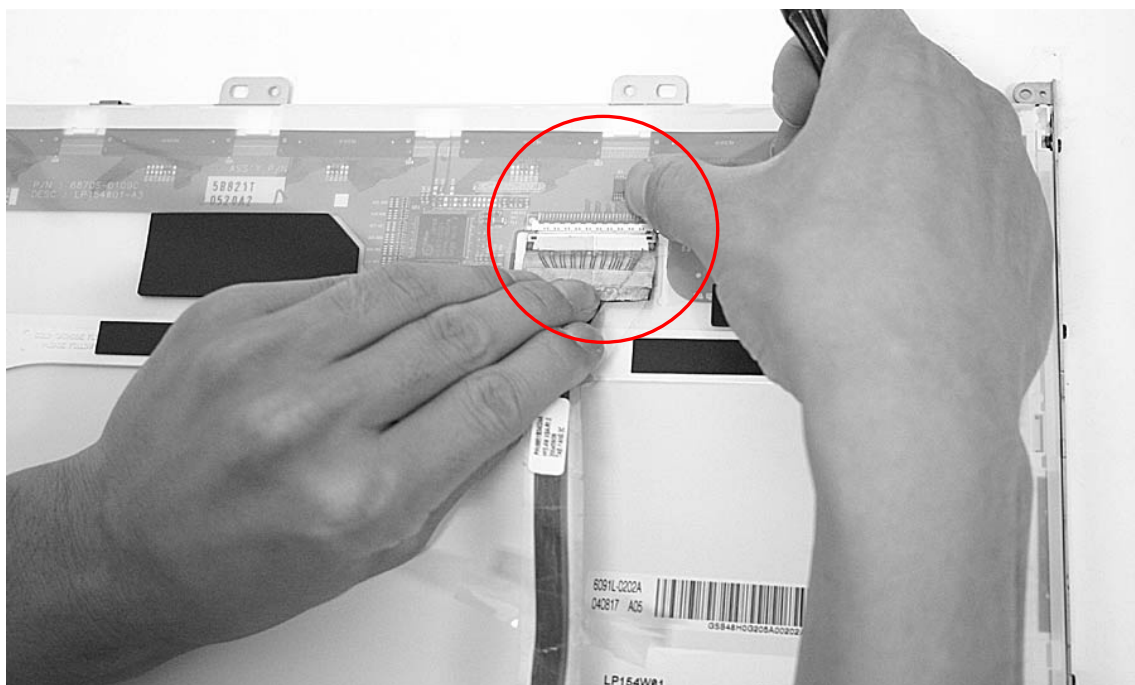


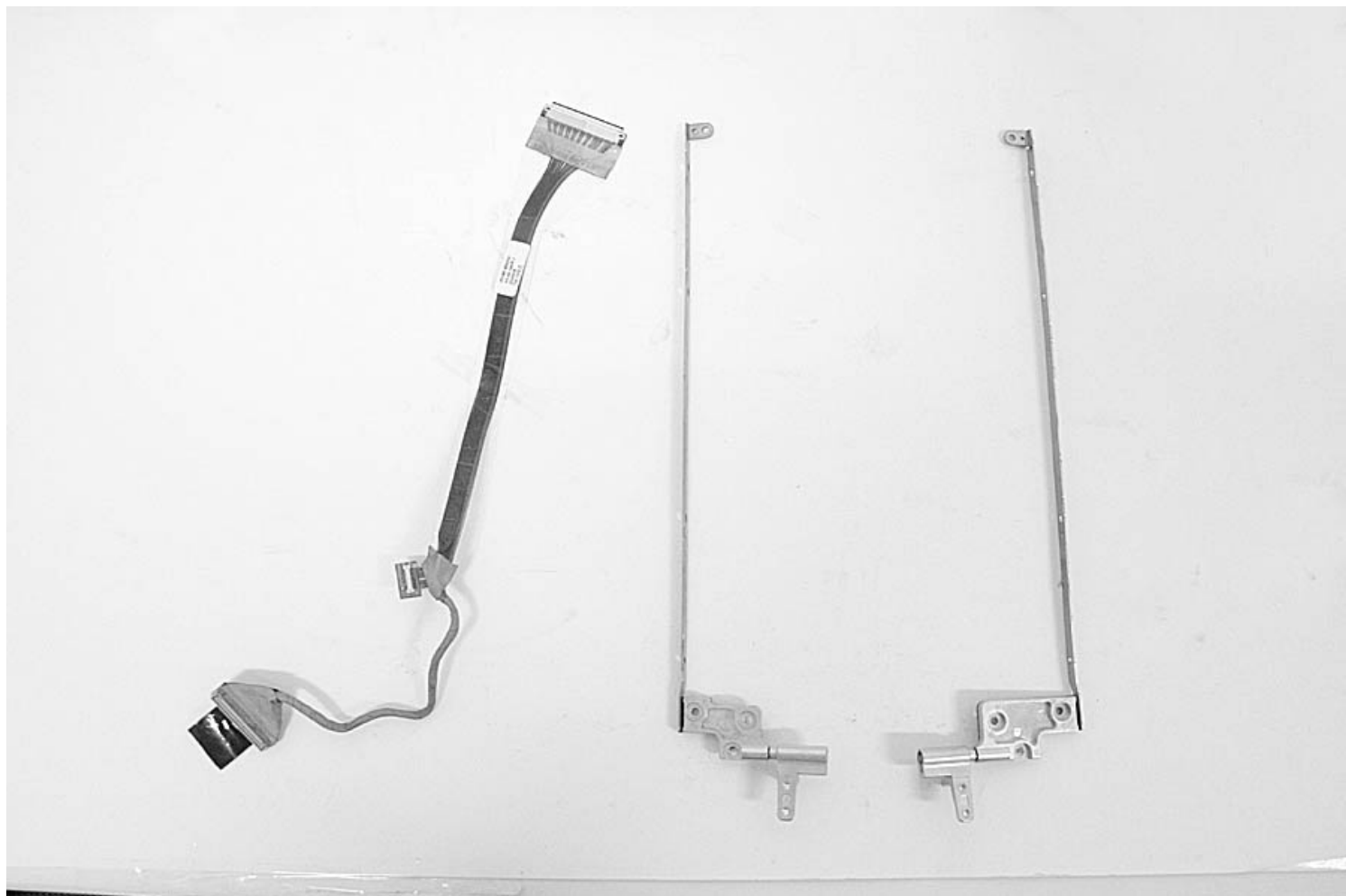
Ch5. Removing and replacing a part

7. Remove 8 Hinge Assembly screws. Remove LCD Cable Tape.

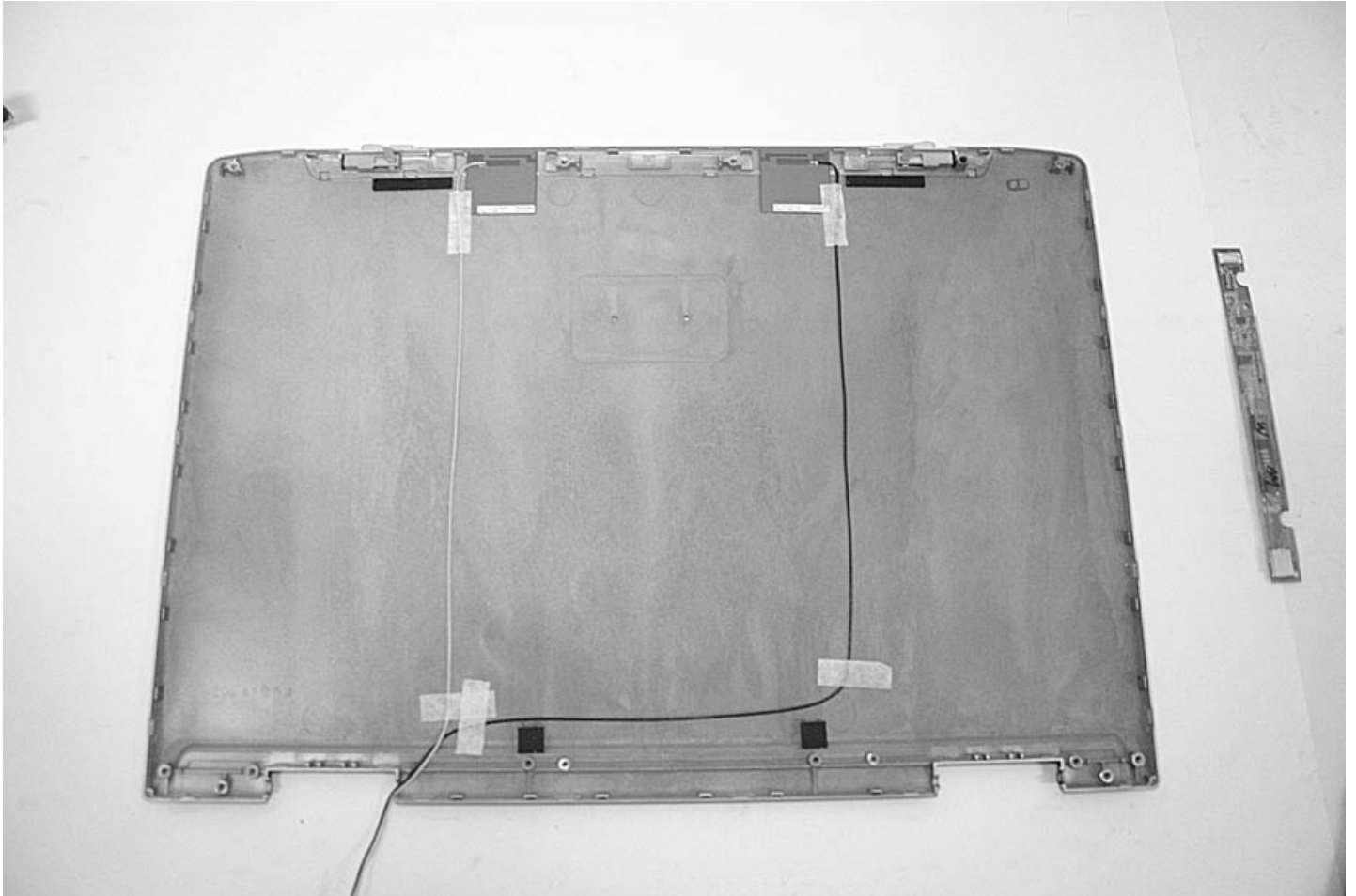


No.	FRU No.	Specification	Qty
1	1SZZBA4017A	M2.0 X L3.0	8





8. Remove WLAN Antenna.



Chapter 6. Part lists

2005-01-31

HTW09

Location	Part Number	Specification	Remarks
HWL01	6304FLP155A	LP154W01-A3 LG PHILPS TFT COLOR 15.4 INCH WXGA(1280X800) 185NITS NON GLARE	LCD단품
HWL01	6304FLP155B	LP154W01-A3K3 LG PHILPS TFT COLOR 15.4 INCH WXGA(1280X800) 185NITS GLARE	LCD단품
HWL02	3111B97116A	15.4" Case A'y, Front with Tape 154W	LCD Front case
HWL03	3111B09831A	15.4" Case A'y, Rear 154W	LCD Rear case
HWL04	6851B34024A	15.4" LCD cable SXGA(Taeyang)	LCD Cable
HWL04	6851B34024B	15.4" LCD cable XGA(Taeyang)	LCD Cable
HWL04	6851B34034A	15.4" LCD cable SXGA(Wanshih)	LCD Cable
HWL04	6851B34034B	15.4" LCD cable XGA(Wanshih)	LCD Cable
HWL05	4774BD2002A	15.4" Hinge, Left BKT154W	LCD plate left
HWL06	4774BD2001A	15.4" Hinge, Right with BKT 154W	LCD plate right
HWL07	4850BA4009A	15.4" Cushion LCD Rear Left	Cushion rear left
HWL08	4850BA4010A	15.4" Cushion LCD Rear Right	Cushion rear right
HWL09	4850BA4011A	15.4" Cushion, wide LCD mid R	Cushion LCD mid right
HWL10	4850BA4012A	15.4" Cushion, wide LCD mid L	Cushion LCD mid left
HWL11	4850BA4013A	15.4" Cushion, wide LCD top R	Cushion LCD top right
HWL12	4850BA4014A	15.4" Cushion, wide LCD top L	Cushion LCD top left
HWL13	4940BM4165A	15.4" Knob, LCD Latch	Knob
HWL14	4026BM3017A	15.4" Latch, display 154W	Latch
HWL15	4970BW4559A	15.4" Spring, Latch	Spring
HWL16	6304FLP166B	LP171WX2-A4K1 LG PHILPS TFT COLOR WXGA+ 1440X900 LVDS 200NITS GLARE	LCD단품
HWL16	6304FLP165A	LP171W02-A4 LG PHILPS TFT COLOR WSXGA+ 1680X1050 LVDS 170NITS GLARE	LCD단품
HWL17	3111B97115A	17.1" Case Assy Front with Tape	LCD Front case

Ch6. Part lists

Location	Part Number	Specification	Remarks
HWL18	3111B97117A	17.1" (rear case, anternna cover, spring, knob l/r)	LCD Rear case assy
HWL19	6851B34025A	17.1" LCD cable 17.1" SXGA(Taeyang)	LCD Cable
HWL19	6851B34035A	17.1" LCD cable 17.1" SXGA(Whashih)	LCD Cable
HWL20	4774BD2003A	17.1" Hinge, Left with BKT 171W	LCD plate left
HWL21	4774BD2004A	17.1" Hinge, Right BKT171W	LCD plate right
HWL22	4850BP4043A	17.1" Cushion, rubber supporter LCD Upper	Cushion rear upper
HWL23	4850BP4047A	17.1" Cushion, rubber supporter LCD Lower	Cushion rear lower
HWL24	4850BP4052A	17.1" Cushion, rubber supporter LCD side	Cushion rear side
HWL25	4850BP4042A	17.1" Cushion, rubber cover screw	cover screw top
HWL26	3858BP4260A	17.1" Sheet, Cover screw mid	cover screw bottom mid
HWL27	5016BZ9100B	15.4" / 17.1" Magnetic, LID(H5mm)	Magnetic
HWL28	3858BZ4100A	15.4" / 17.1" Sheet, Cover Magnetic	Magnetic cover
HWL29	5011B00017A	15.4" / 17.1" W/L Antenna LEFT	Antenna left
HWL30	5011B00018A	15.4" / 17.1" W/L Antenna RIGHT	Antenna right
HWL31	3940BP4011A	15.4" / 17.1" cushion antenna	Antenna cushion
HWL32	3858BZ4466A	15.4" / 17.1" Sheet, Cover screw(silver)	cover screw (154top, 171 bottom side)
HWL33	6708BI0089A	DAC-08B073 DELTA GENERAL GENERAL GENERAL HUNTER-TL 15 INCH HUNTER-FULL ALL, HUNTER-TL ALL, OZ1060S	LCD Inverter
HWL33	6708BI0088B	KUBNKM095A ALPS GENERAL GENERAL GENERAL HUNTER-FULL 15 INCH HUNTER-FULL ALL, HUNTER-TL ALL, MP1017	LCD Inverter
HWL34	3858BP4273A	N HUNTER-TL 14.1 INCH BADGE "X-NOTE"	Logo badge
HWL34	3858BZ4462A	N HUNTER-TL 14.1 INCH BADGE "LG"	Logo badge
HWB01	6871BWG11AA	HUNTER-W MAIN B/D ASSY LGE 10 LAYERS REV 0.9 GM 15.4 PP	M/B Assy
HWB01	6871BWP11AA	HUNTER-W MAIN B/D ASSY LGE 10 LAYERS REV 0.9 PM ATI 64M 15.4 PP	M/B Assy

Ch6. Part lists

Location	Part Number	Specification	Remarks
HWB01	6871BW711AA	HUNTER-W MAIN B/D ASSY LGE 10 LAYERS REV 0.9 PM ATI 64M 17.1 PP	M/B Assy
HWB01	6871BWP21AA	HUNTER-W MAIN B/D ASSY LGE 10 LAYERS REV 0.9 PM ATI 128M 15.4 PP	M/B Assy
HWB01	6871BW721AA	HUNTER-W MAIN B/D ASSY LGE 10 LAYERS REV 0.9 PM ATI 128M 17.1 PP	M/B Assy
NMEM1	0IMMRIH046A	HYS64T32000HDL-5-A INFINEON 200P SODIMM BK 256MB 32MX64 400MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMRHY061A	HYMP532S646-E3 HYNIX 200P SODIMM BK 256MB 32MX64 400MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMRSS113A	M470T3354BG0-CCC SAMSUNG ELECTRONICS 200P SODIMM BK 256MB 32MX64 400MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMRIH047A	HYS64T64020HDL-5-A INFINEON 200P SODIMM BK 512MB 64MX64 400MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMRHY062A	HYMP564S646-E3 HYNIX 200P SODIMM BK 512MB 64MX64 400MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMRSS114A	M470T6554BG0-CCC SAMSUNG ELECTRONICS 200P SODIMM BK 512MB 64MX64 400MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	GIMMR00007A	HYS64T32000HDL-3.7-A INFINEON 200P SODIMM BK 256MB 32MX64 533MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMR00005A	M470T3354BZ0-LD5 SAMSUNG ELECTRONICS 200P SODIMM BK 256MB 32MX64 533MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMR00008A	HYS64T64020HDL-3.7-A INFINEON 200P SODIMM BK 512MB 64MX64 533MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	GIMMR00008A	HYS64T64020HDL-3.7-A INFINEON 200P SODIMM BK 512MB 64MX64 533MHZ DDR2 SDRAM WITH 32MX16	Memory
NMEM1	0IMMR00006A	M470T6554BZ0-LD5 SAMSUNG ELECTRONICS 200P SODIMM BK 512MB 64MX64 533MHZ DDR2 SDRAM WITH 32MX16	Memory
HTA04	2020B00030A	GCC-4243N HLDS 8X 24X 24X 24X 12.7MM W/COMMON BEZEL FOR BRAND	ODD 단품
HTA04	2026B00007A	GSA-4080N HLDS 8X 24X 2X 2X 4X 4X 4X 16X 10X 24X NOTE BOOK 12.7MM COMMON TYPE FOR BRAND	ODD 단품
HTA04	2090B20001A	DV-28E-C88 TEAC 8X 24X NOTE BOOK 12.7MM W-COMMON BEZEL FOR BRAND NB-PC	ODD 단품
HTA04	2020B00033A	DW-224E-B88 TEAC 8X 24X 24X 24X 12.7MM W-COMMON BEZEL FOR BRAND NB-PC	ODD 단품
HTA04	2026B00009A	DV-W28E-588 TEAC 8X 24X 2X 2X 4X 4X 4X 16X 10X 24X NOTE BOOK 12.7MM W/COMMON BEZEL FOR BRAND NB-PC	ODD 단품

Ch6. Part lists

Location	Part Number	Specification	Remarks
HTA05	3300BP4459A	PLATE, ODD SUPPORT HUNTER 15.4 WIDE .	ODD SUPPORT PLATE
HTA06	1SZZBA4041A	+ D3.5 L3.0MM SWRH4 DUMMY COVER FIX SILVER MAGELLAN DISPLAY	PLATE SCREW
HTA03	6744C00085A	MHT2040AT PL FUJITSU 40GB EIDE INNER ZEBRA/MACKINLEY/K2	HDD 단품
HTA03	6744C00122A	HTS424040M9AT00 HGST 40GB EIDE INNER MCKINLY 4200RPM	HDD 단품
HTA03	6744C00086A	MHT2060AT PL FUJITSU 60GB EIDE INNER ZEBRA/MCKINLEY/K2	HDD 단품
HTA03	6744C00106A	IC25N060ATMR04-0 HGST 60GB EIDE INNER MCKINLEY/K2 4200RPM	HDD 단품
HTA03	6744C00087A	MHT2080AT PL FUJITSU 80GB EIDE INNER ZEBRA/MCKINLEY/K2	HDD 단품
HTA03	6744C00107A	IC25N080ATMR04-0 HGST 80GB EIDE INNER MCKINLEY/K2 4200RPM	HDD 단품
HTA03	6744C00123A	MHV2100AT FUJITSU 100GB EIDE INNER HUNTER-S 4200RPM	HDD 단품
HTA01	4811B00605A	HUNTER-WIDE 15.4 INCH HDD SUS 17.1W, 15F	HDD PLATE ASSY
HTA02	1SZZBA4011A	+ D3.0 L 3.0 SWRH4 HDD WH [S-PJT] #1 TIP	HDD SCREW
HWC04	6871BZT14AC	WM3B2200BGMW2 INTEL 4 LAYERS REV 1.2 PRO/WIRELESS 2200BG LAN MINI-PCI TYPE CH 1-11 NETWORK CONNECTIO	Wireless LAN b/g
HWC04	6871BZT14AD	WM3B2200BGRW3 INTEL 4 LAYERS REV 1.2 PRO/WIRELESS 2200BG LAN MINI-PCI TYPE CH 1-14 NETWORK CONNECTIO	Wireless LAN b/g
HWC04	6871BZT14AE	WM3B2915ABGNA INTEL 4 LAYERS REV 2.0 CH 1-11 NETWORK CONNECTION MINIPCI TYPE IIIB STANDARD	Wireless LAN a/b/g
HWC04	6871BZT14AF	WM3B2915ABGEU INTEL 4 LAYERS REV 2.0 CH 1-13 NETWORK CONNECTION MINIPCI TYPE IIIB STANDARD	Wireless LAN a/b/g
HWC04	6871BZT14AG	WM3B2915ABGRW INTEL 4 LAYERS REV 2.0 CH 1-13 NETWORK CONNECTION MINIPCI TYPE IIIB STANDARD	Wireless LAN a/b/g
HTC05	6871BG867ZB	T60M893T00 FOXCONN 2 LAYERS REV 0.0 MDC1.5 FORM FACTOR INTERNAL 56K MDC MODEM	MDC Assy
HTC05	6871BG869ZB	MA560-3 QCOM 2 LAYERS 1A MDC1.5 FORM FACTOR V.92 MODEM CARD	MDC Assy
HTA07	6911B00092A	4800MAH 3S-2P LGC LI-ION CYLINDERICAL HUNTER-ALL CELL LGC	Battery
HTA07	6911B00119A	4800 mAh 3S-2P Simplo Li-Ion Cylindrical Hunter All SDI cell	Battery
HTA07	6911B00121A	4800 mAh 3S-2P Simplo Li-Ion Cylindrical Hunter All LGC cell	Battery
HWC07	5901B09279A	15.4" /17.1" Thermal Module A'y with Gasket	FAN Assy
HWC08	0IMCR00011A	RH80536GE0252M LG INTEL 478P UFCPGA TRAY NT CPU PENTIUM-M 730 1.60GHZ/600MHZ C0-STEPPING(SL86G)	CPU

Ch6. Part lists

Location	Part Number	Specification	Remarks
HWC08	0IMCR00009A	RH80536GE0302M LG INTEL 478P UFCPGA TRAY NT CPU PENTIUM-M 740 1.73GHZ/600MHZ C0-STEPPING(SL7SA)	CPU
HWC08	0IMCR00007A	RH80536GE0362M LG INTEL 478P UFCPGA TRAY NT CPU PENTIUM-M 750 1.86GHZ/600MHZ C0-STEPPING(SL7S9)	CPU
HWC08	0IMCR00005A	RH80536GE0412M LG INTEL 478P UFCPGA TRAY NT CPU PENTIUM-M 760 2.00GHZ/600MHZ C0-STEPPING(SL7SM)	CPU
HWC08	0IMCR00003A	RH80536GE0462M LG INTEL 478P UFCPGA TRAY NT CPU PENTIUM-M 770 2.13GHZ/600MHZ C0-STEPPING(SL7SL)	CPU
HWC09	3823B01080A	15.4" /17.1" HUNTER-W LG-IBM CHICONY KOREA HUNTER W 99KEY PM	KBD
HWC09	3823B01080B	15.4" /17.1" HUNTER-W LG-IBM CHICONY KOREA HUNTER W 99KEY GM	KBD
HWC09	3823B01081A	15.4" /17.1" HUNTER-W LG-IBM CHICONY ENGLISH HUNTER W 99KEY PM	KBD
HWC09	3823B01081B	15.4" /17.1" HUNTER-W LG-IBM CHICONY ENGLISH HUNTER W 99KEY GM	KBD
HWC11	6708BA0056A	PA-1900-08LK LITEON 90W 19V/4.74A 3PIN WITH PFC HUNTER-ALL FOR KOREA	Adapter
HWC11	6708BA0057A	HP-AP091F13P1 HIPRO 90W 19V/4.74A 3PIN WITH PFC HUNTER-ALL ,FOR KOREA, SLIM TYPE.	Adapter
HWC11	6708BA0056B	PA-1900-08LG LITEON 90W 19V/4.74A 3PIN WITH PFC HUNTER-ALL ,FOR EXPORT, SLIM TYPE	Adapter
HWC11	6708BA0057B	HP-AP091F13P HIPRO 90W 19V/4.74A 3PIN WITH PFC HUNTER-ALL ,FOR EXPORT, SLIM TYPE.	Adapter
HWC12	6910BLC3201	CR2032 SONY 3V 220MA/H COIN	RTC
HWC12	6910C00005A	CR2032 SONY 3.0 VOLT 200MA D2.0MM H3.2MM	RTC
HWC13	6410BM21002	PT8XXK9KB0A-033 LONGWELL KS 1000MM 3P CONN W/VELCRO TIE BLACK	Powercode
HWC13	6410BM21601	SP-022+IS-034 H05VV-F I-SHENG KS 1000MM 3P CONN W/VELCRO TIE BLACK	Powercode
HWC13	6410BX21602	PF8B1CIJ10A-060 LONGWELL GOST 1830MM 3PIN CONN. BLACK	Powercode
HWC13	6410BX21601	SP-022+IS-034+H05VV-F3G I-SHENG GOST 1800MM 3P CONN. BLACK	Powercode
HWC13	6410BK21005	PL8B1S3J10A-060 LONGWELL SAA 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BK21007	SP-502B+H05VV-F+IS-034 I-SHENG SAA 1830MM 3PIN CONN. BLACK	Powercode
HWC13	6410BK21006	AU10S3+H03VV-F+VAC5S VOLEX SAA 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BD21003	PF8B1CIJ10A-060 LONGWELL CEU 1830MM 3P CONN. BLACK	Powercode
HWC13	6410BV21002	PF8B1L1J10A-060 LONGWELL SII 1830MM 3PIN CONN. BLACK	Powercode
HWC13	6410BV21003	SP-86+IS-034 I-SHENG SII 1830MM 3PIN CONN. BLACK	Powercode
HWC13	6410BV21602	SI16S3+H03VV-F+VAC5S VOLEX SII 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BQ21003	SP-305+H05VV-F+IS-034 I-SHENG INMETRO 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BQ21002	BR10S3+H03VV-F+VAC5S VOLEX INMETRO 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BO20603	P48F1SAJ30A-060 LONGWELL CCC 1830MM 3P CONN BLACK	Powercode

Ch6. Part lists

Location	Part Number	Specification	Remarks
HWC13	6410BO20602	SP-506+RVV 3CX0.75MM2+IS-034 I-SHENG CCC 1830MM 3P CONN BLACK	Powercode
HWC13	6410BO21008	GB10S3+RW300_300+VAC5S VOLEX CCC 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BU21602	SP-80A+H05VV-F+IS-034 I-SHENG SABS 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BU21603	SA16A+H03VV-F+VAC5S VOLEX SABS 1830MM 3PIN CONN BLACK	Powercode
HWC13	6410BW21001	X-LGPC0415-001 VOLEX ISI 1830MM 3PIN CONN. BLACK	Powercode
HWC14	6401B02537A	15.4" Speaker Estec	SPEAKER ASSY
HWC15	6401B02541A	17.1" Speaker Estec	SPEAKER ASSY
HWC16	6400WESX06A	17.1" Woofer Assy with cushion Rubber woofer	WOOFER ASSY
HWC17	6513B00006A	SKB-2744T-C1033 SEO KWANG-WIM TEK 2V 500MA 1KHZ -44DB 230MM AWG 28 BK WH FOR HUNTER-WIDE 15.4 / 17.1	MIC ASSY
HWC17	6513B00008A	OB-27L BO SUNG-WIM TEK 2V 500MA 1KHZ -44DB HUNTER-WIDE	MIC ASSY
HWC18	6710B00009A	RC-501 HTC LG LOGO FOR HUNTER-W W/O BATTERY	REMOCON ASSY
HWC20	3301B00549A	10036875-AB00RRS HUNTER-F/W FCI COMBO EXPRESS CARD SLOT	PCMCIA SOCKET
HWS01	6871BWS01PC	HUNTER-W WIMTEC 4 LAYERS REV 0.5 FRONT AUDIO FFC SUB B/D MAIN ASSY	Sub BD Audio
HWS02	6871BWS02PB	HUNTER-W WIMTEC 4 LAYERS REV 0.4 REAR S-VIDEO SUB B/D MAIN ASSY	Sub BD S video
HWS03	6871BWS06PA	HUNTER-W WIMTEC 2 LAYERS REV 0.1 ODD SUB B/D MAIN ASSY FOR 17.1	Sub BD ODD I/F
HWD01	3111B09801A	HUNTER-WIDE 15.4 INCH KBD DECK WITH REMOTE-CON.	KBD DECK ASSY 15.4"
HWD01	3111B09801B	HUNTER-WIDE 15.4 INCH KBD DECK WITHOUT REMOTE-CON.	KBD DECK ASSY 15.4"
HWD01	3111B09803A	HUNTER-WIDE 15.4 INCH KBD DECK PM MODEL EXPORT	KBD DECK ASSY 15.4"
HWD01	3111B09803B	HUNTER-WIDE 15.4 INCH KBD DECK GM MODEL EXPORT	KBD DECK ASSY 15.4"
HWD01	3111B09701A	HUNTER-WIDE 17.1 INCH KBD DECK .	KBD DECK ASSY 17.1"

Ch6. Part lists

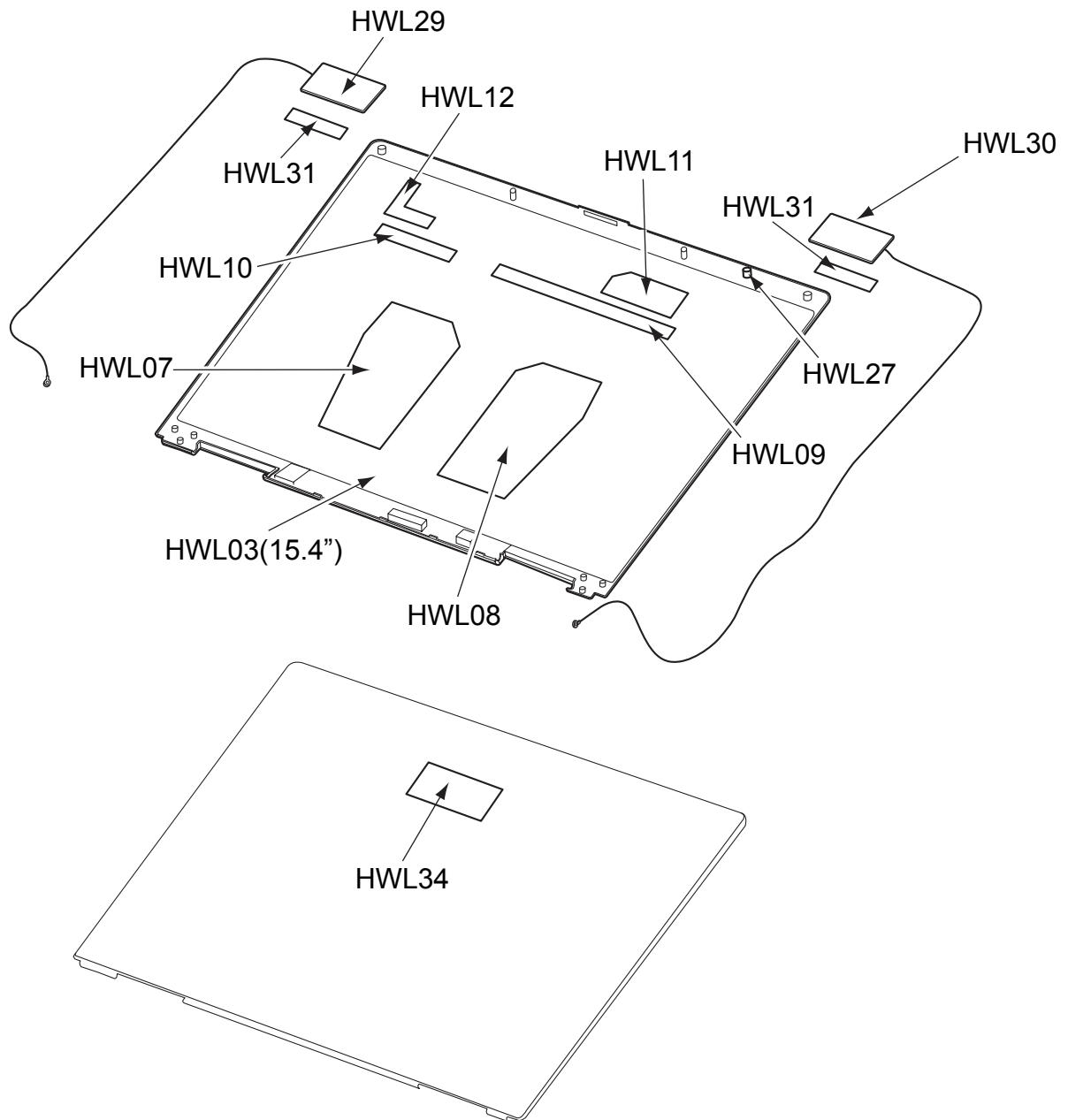
Location	Part Number	Specification	Remarks
HWD01	3111B09701B	HUNTER-WIDE 17.1 INCH KBD DECK FOR EXPORT	KBD DECK ASSY 17.1"
HWD02	5022BZ9023A	TOUCH PWB 79.7*47.7 HUNTER WIDE WITH SCROLL FUNCTION SYNAPTICS TM41PUZ307-1	Sub BD T-pad
HWD03	6871BWS04PA	HUNTER-W WIMTEC 2 LAYERS REV 0.6 TOUCH PAD SUB B/D MAIN ASSY W/ IR FOR 15.4 PM	Sub BD T-pad button 15.4"
HWD03	6871BWS05PA	UNTER-W WIMTEC 2 LAYERS REV 0.6 TOUCH PAD SUB B/D MAIN ASSY W/O IR FOR 15.4 GM	Sub BD T-pad button 15.4"
HWD04	6871BWS07PA	HUNTER-W WIMTEC 2 LAYERS REV 0.1 TOUCH PAD SUB B/D MAIN ASSY W/ IR 17.1 PM	Sub BD T-pad button 17.1"
HWD04	6871BWS03PB	HUNTER-W WIMTEC 2 LAYERS REV 0.4 POWER-BUTTON SUB B/D MAIN ASSY	Sub BD power button
HWM01	3111B09811A	15.4" Case A'y, Bottom 154W with Remote con. (only PM)	BOTTOM ASSY
HWM01	3111B09811B	15.4" Case A'y, Bottom 154W without Remote con. (only GM)	BOTTOM ASSY
HWM01	3111B09711A	17.1" Case A'y, Bottom 171W	BOTTOM ASSY
HWM02	3210BD2018A	HUNTER-WIDE 15.4 / 17.1 INCH ZN HINGE FRAME RIGHT	HINGE FRAME RIGHT
HWM03	3550BM3202A	HUNTER-WIDE 15.4 / 17.1 INCH PCABS HDD BLOCK	HDD BLOCK
HWM04	3550BM3207A	HUNTER-WIDE 15.4 / 17.1 INCH PCABS CARDBUS DUMMY EXPRESS	EXPRESS CARD DUMMY
HWM05	3550BM3208A	HUNTER-WIDE 15.4 / 17.1 INCH PCABS CARDBUS DUMMY	CARDBUS DUMMY
HWM06	3550BM3210A	HUNTER-WIDE 15.4 / 17.1 INCH RUBBER DUMMY DOCKING	RUBBER DOCKING DUMMY
HWM07	3550BM4047D	ME 14 PCABS DUMMY SD MEMORYCARD 15.4 / 17.1	SD DUMMY
HWM08	3551B00400A	HUNTER-WIDE 15.4 / 17.1 INCH MEMORY .	MEMORY COVER
HWM09	3551B00500A	HUNTER-WIDE 15.4 / 17.1 INCH HDD .	HDD COVER
HWM10	5006BM3028A	CAP,HINGE RIGHT HUNTER 15.4 WIDE PCABS	HINGE CAP RIGHT

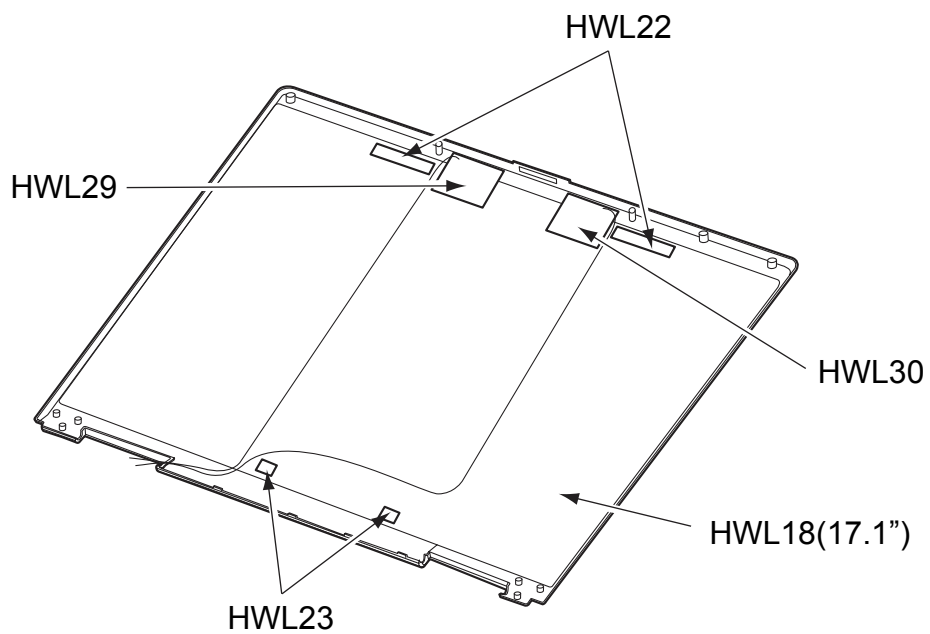
Ch6. Part lists

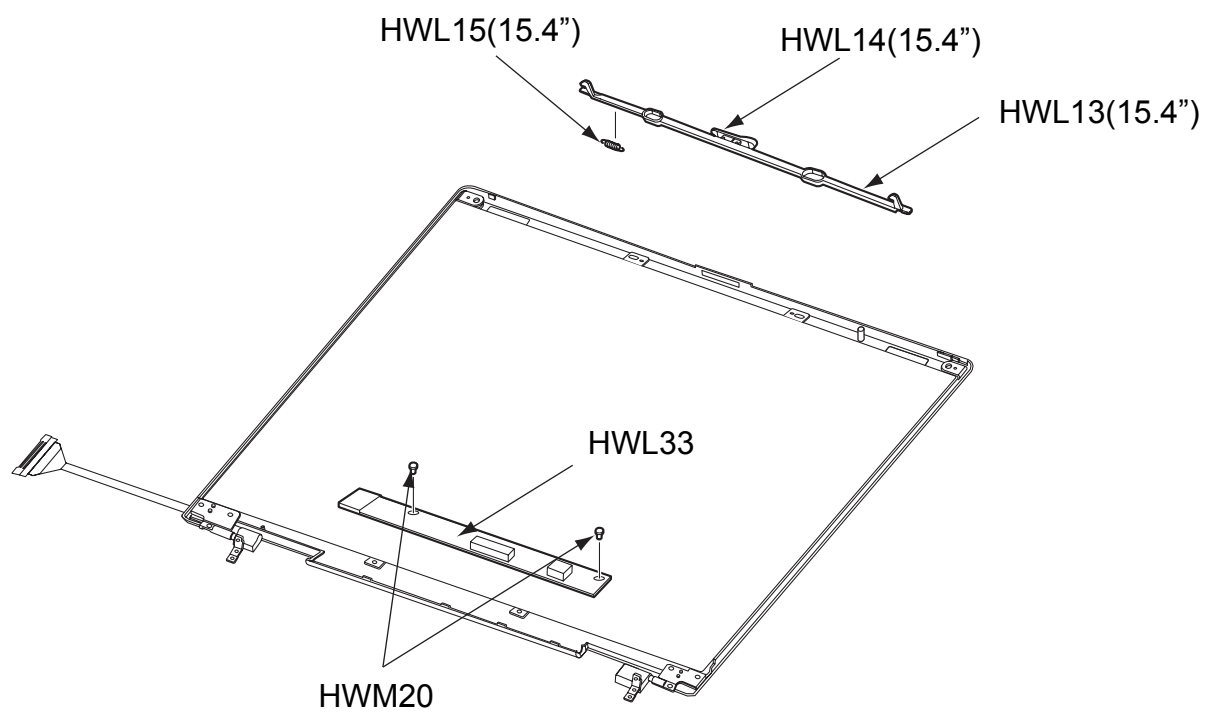
Location	Part Number	Specification	Remarks
HWM11	5006BM3029A	CAP,HINGE LIGHT HUNTER 15.4 / 17.1 WIDE PCABS	HINGE CAP LEFT
HWM12	5006BM3030A	CAP, HINGE RIGHT HUNTER 17.1 WIDE PCABS	HINGE CAP RIGHT
HWM13	6850B11002A	UL20696 11P AWM 80C VW-1 200MM KFC HUNTER-W154	AUDIO CABLE 11P
HWM14	6850B19001A	UL20696 19P AWM 80C VW-1 125MM 0.5MM KFC H154W(S-VIDEO BOARD)	S-VIDEO CABLE
HWM15	6850B22003A	UL20696 22P AWM 80C VW-1 100MM KFC HUNTER-W154	AUDIO CABLE 22P
HWM16	6851B09239A	17.1" Cable Ass'y, Audio board H171W	AUDIO CABLE ASSY
HWM17	6850B19002A	UL20696 19PIN AWM 80C VW-1 175MM 0.5MM KFC H171W(S-VIDEO BOARD)	S-VIDEO CABLE
HWM18	3858BZ4472A	N N N N HUNTER-WIDE 15.4 INCH COVER SCREW FOR FRAME	COVER SCREW I/O PORT
HTM05	6851B76020C	HUNTER-T N MDC INTERFACE WIM TEK 210MM 2P HUNTER-TL	MDC CABLE
HWM20	1SZZBA4080F	15.4" Screw M2.5xL4.5(Silver)	SCREW A
HWM21	1SZZBZ4002B	17.1" M2xL2.7, D5.5 H0.8, ODD I/F	SCREW B
HWM22	1SZZBZ4023A	17.1" M2.5xL11, D7(3.5) , Special Woofer	SCREW C
HWM23	1SZZBA4097A	15.4" /17.1"Screw M2.5xL6.5 (BK)	SCREW D
HWM24	1SZZBA4080G	15.4" /17.1"Screw M2.5xL6.0(Yellow)	SCREW E
HWM25	1SZZBZ4022A	15.4" /17.1"Screw, M2.0xL.12 Silver	SCREW F
HWM26	1SZZBA4023A	15.4" /17.1"Screw,M2xL3.5 Silver	SCREW G
HWM27	1SZZBA4017A	15.4" /17.1"Screw M2xL3 BK	SCREW H
HWM28	1SZZBA4019F	15.4" /17.1"Screw M2.0xL4.5 Yellow	SCREW I
HWM29	3850BB9110A	INTEL GRYPHON BANIAS LOGO 252352-001 INTEL CENTRINO LABEL N N	INTEL LABEL
HWM29	3850BB9110C	CENTRINO LABEL NT 252352-002 INTEL	INTEL LABEL
HWM30	3850BZ9A15A	MS WIN XP U2 BEZEL 15.4 / 17.1	MS LABEL
HWM30	3850BB4125A	MS WIN XP U2 BEZEL 15.4 / 17.1	MS LABEL
HWM31	3850BZ9A87A	ATI Label, X600	ATI LABEL
HWM33	3850BF9045A	POP LABEL LW60 GM FOR DOMESTIC	POP LABEL
HWM33	3850BF9045B	POP LABEL LW60 GM FOR EXPORT	POP LABEL

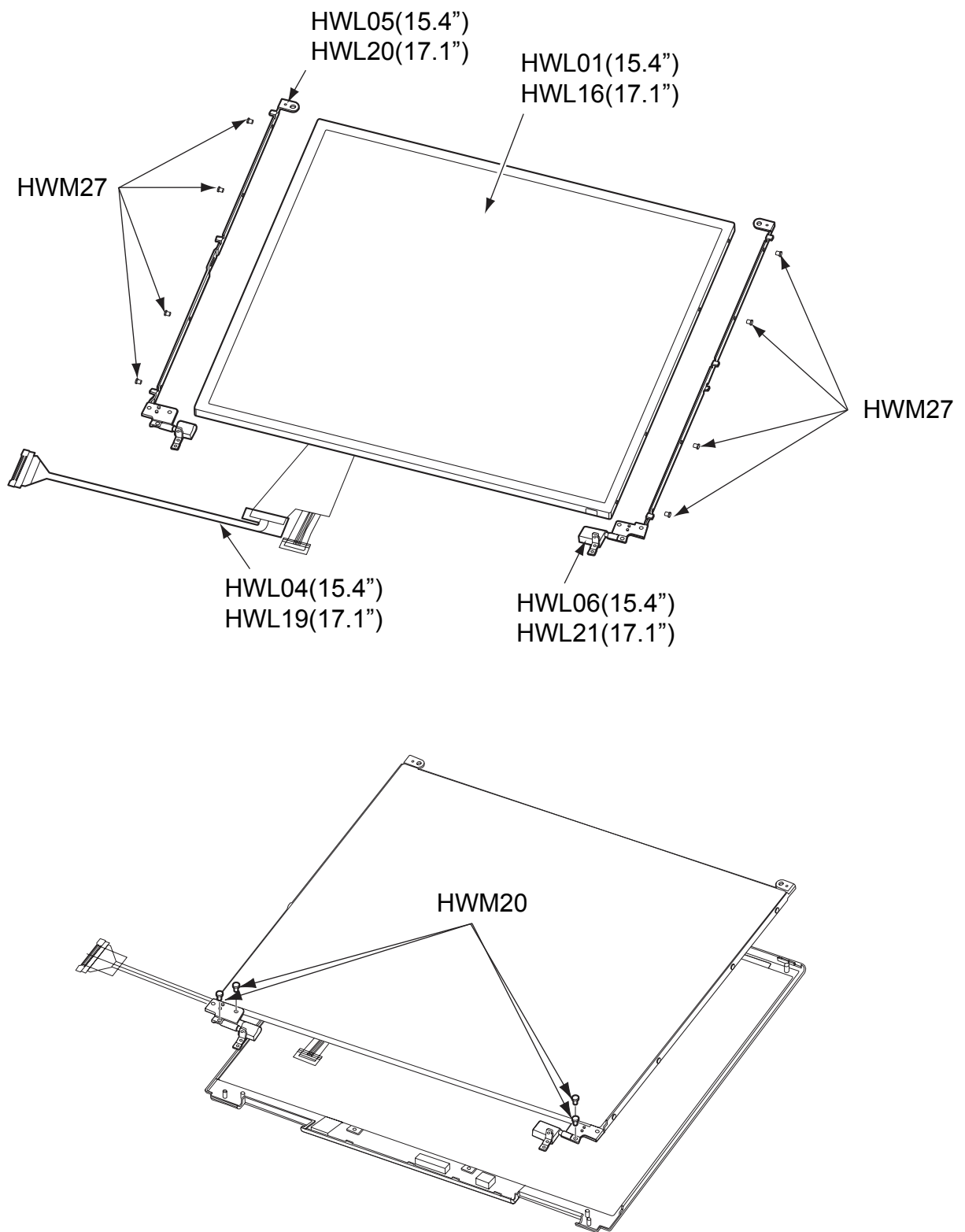
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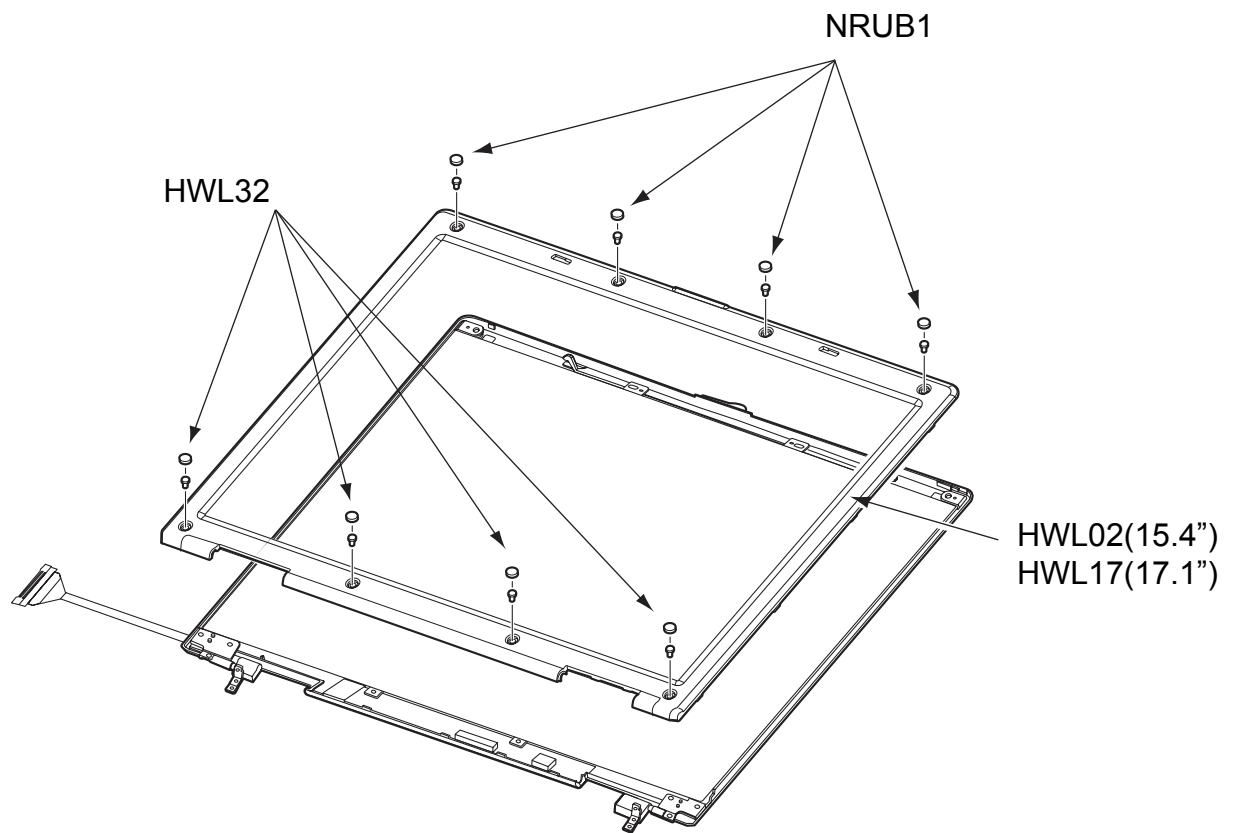
Location	Part Number	Specification	Remarks
HWM33	3850BF9046A	POP LABEL LW60, 70 PM FOR DOMESTIC	POP LABEL
HWM33	3850BF9046B	POP LABEL LW60, 70 PM FOR EXPORT	POP LABEL
HWM34	3850BB9196A	LABEL HUNTER 17.1 WIDE SYSTEM	ID LABEL
HWM34	3850BB9196B	ID SYSTEM HUNTER WIDE 17.1 FOR EXPORT	ID LABEL

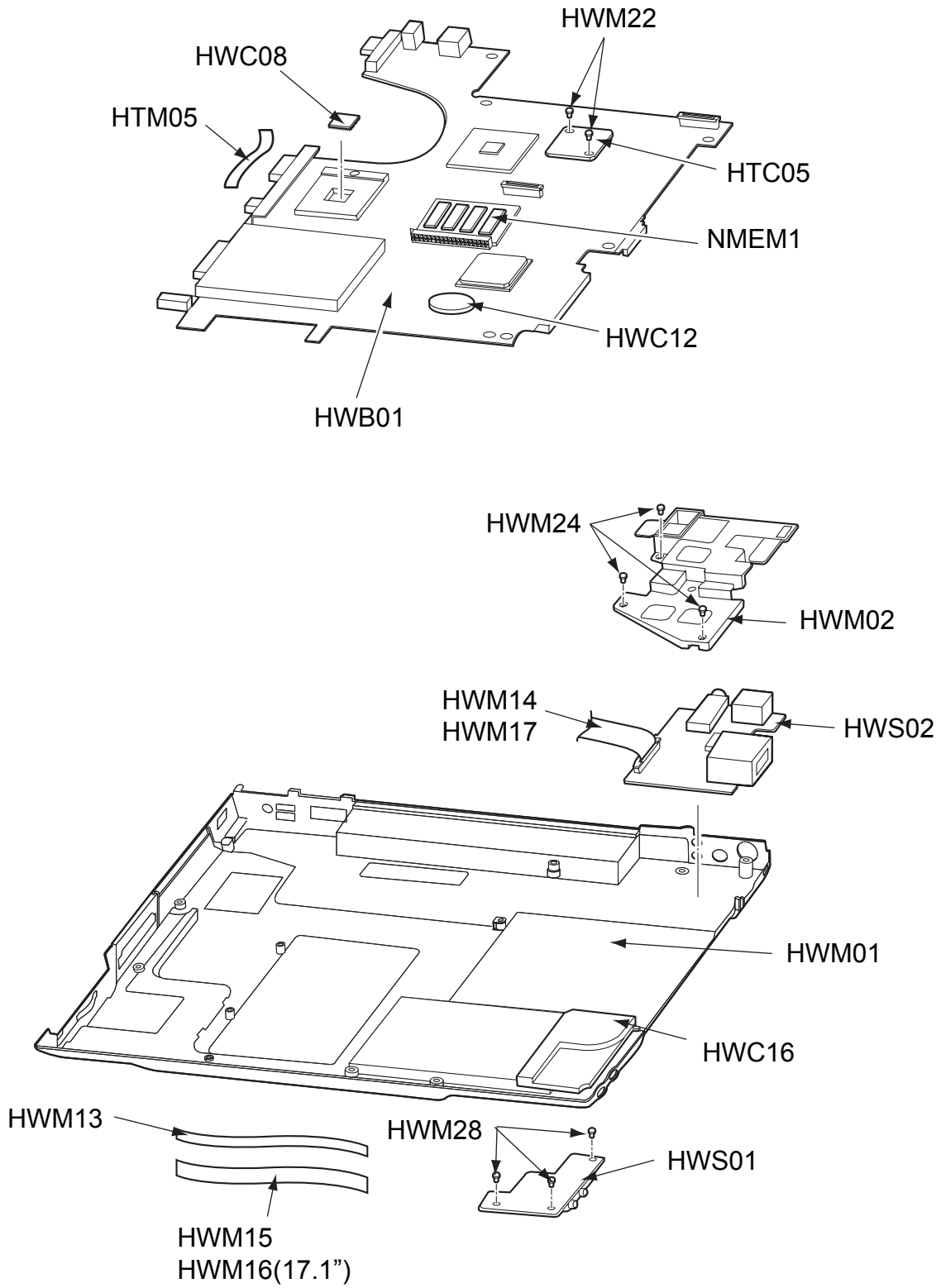


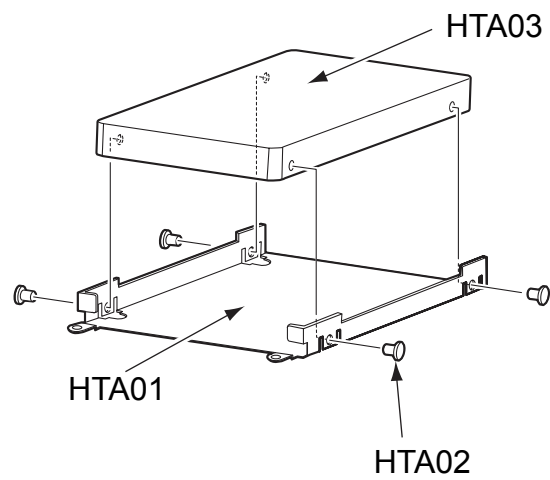
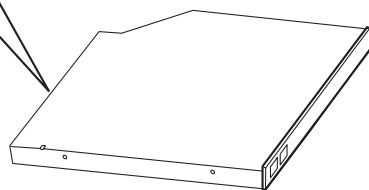
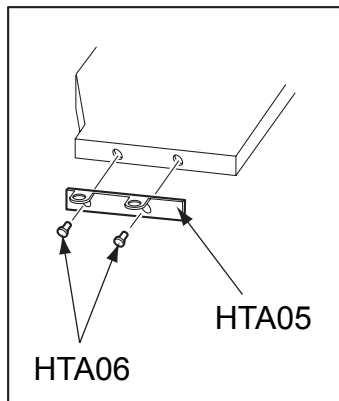
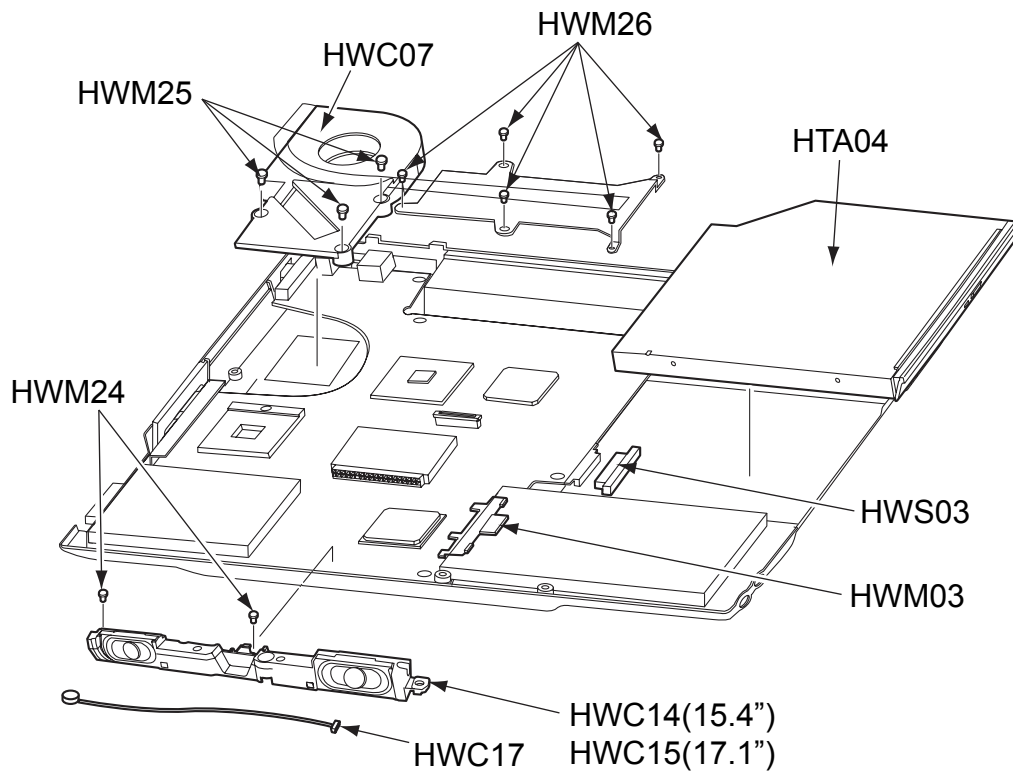


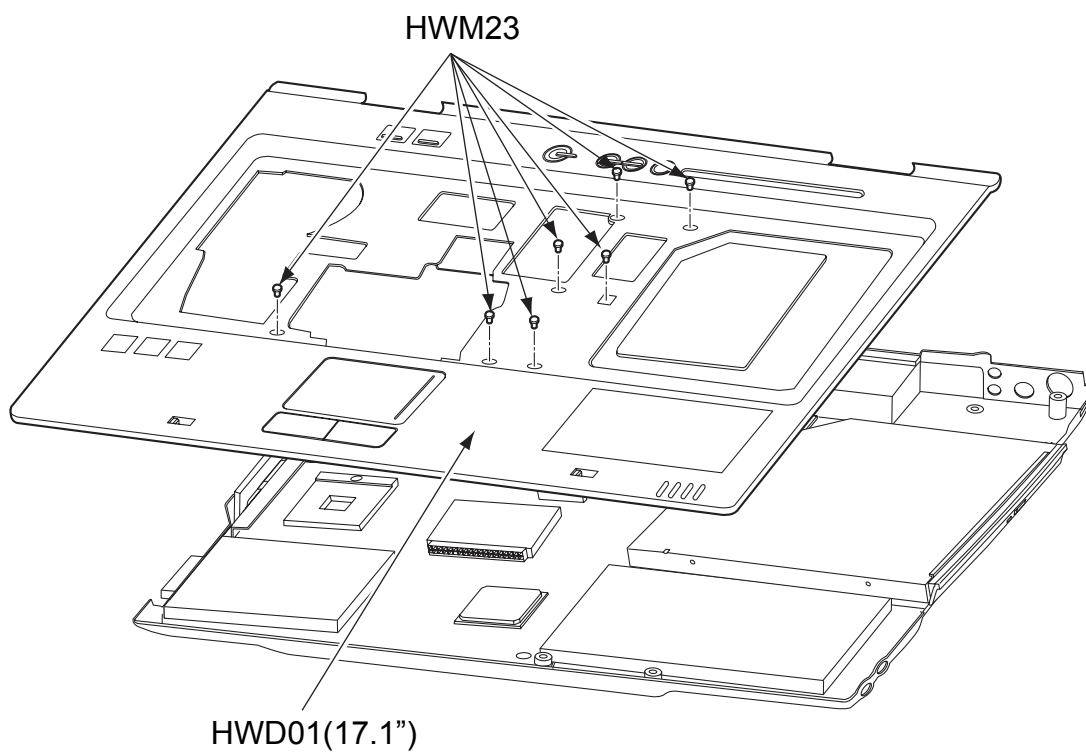
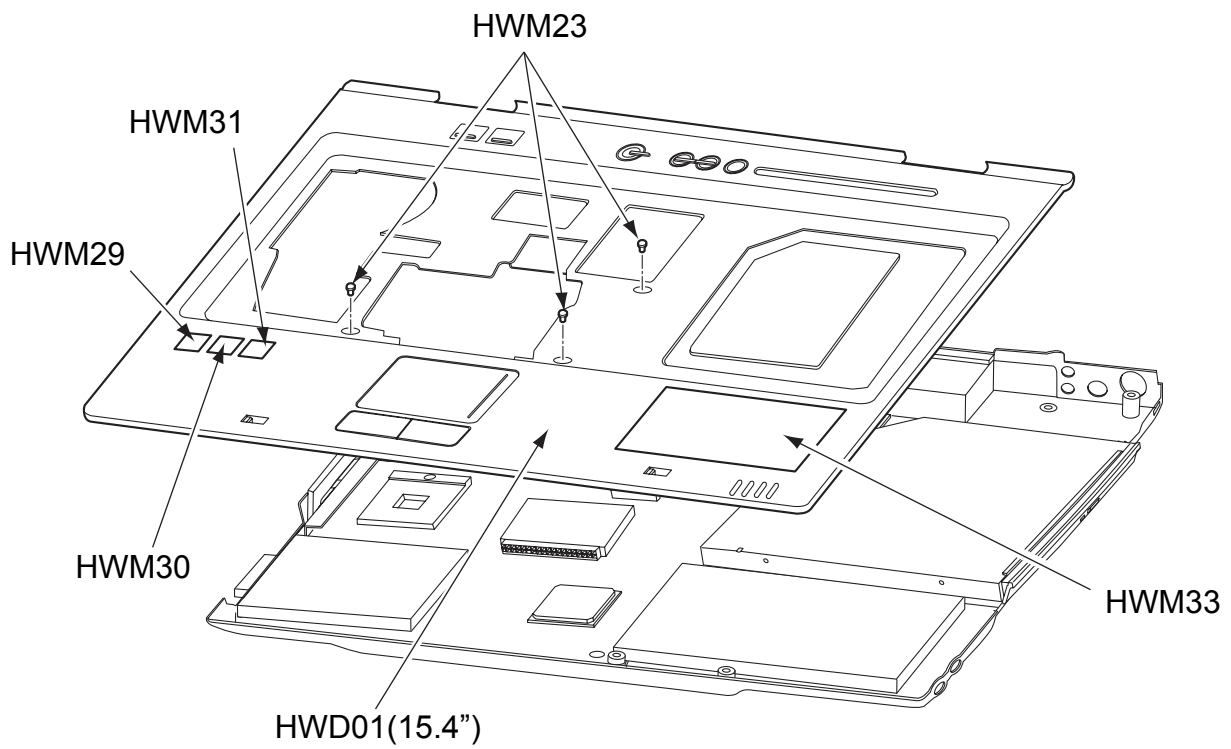


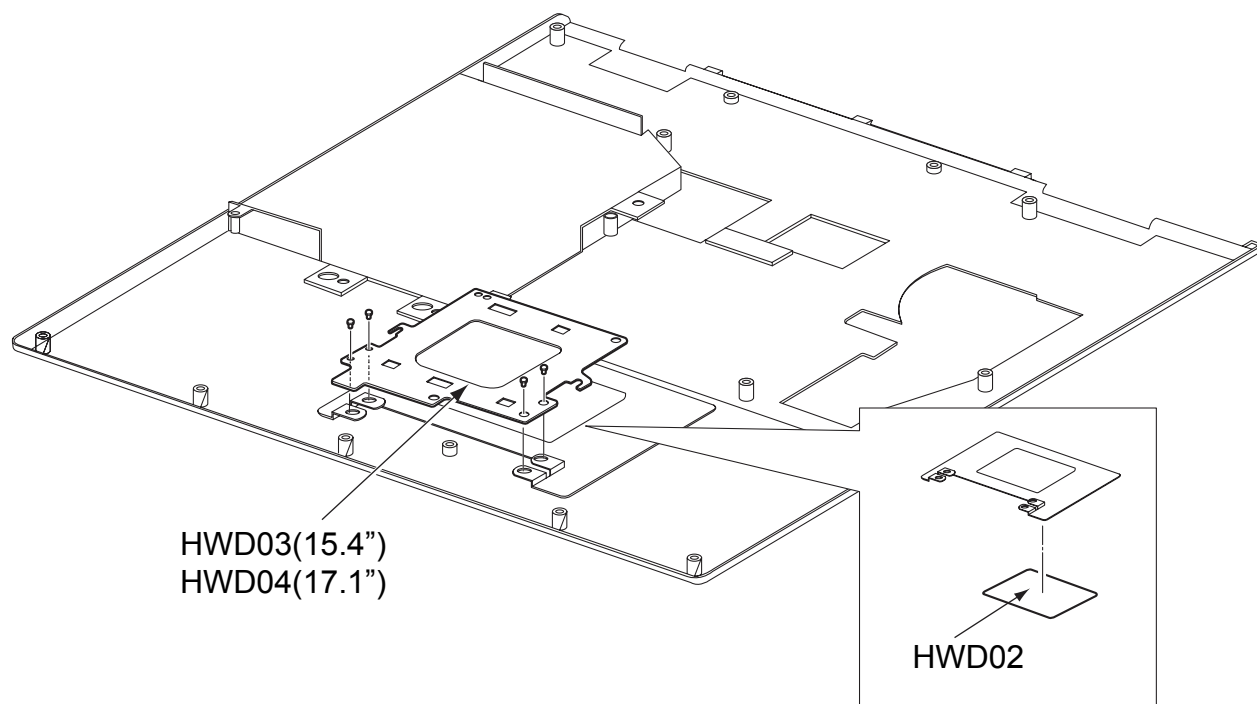


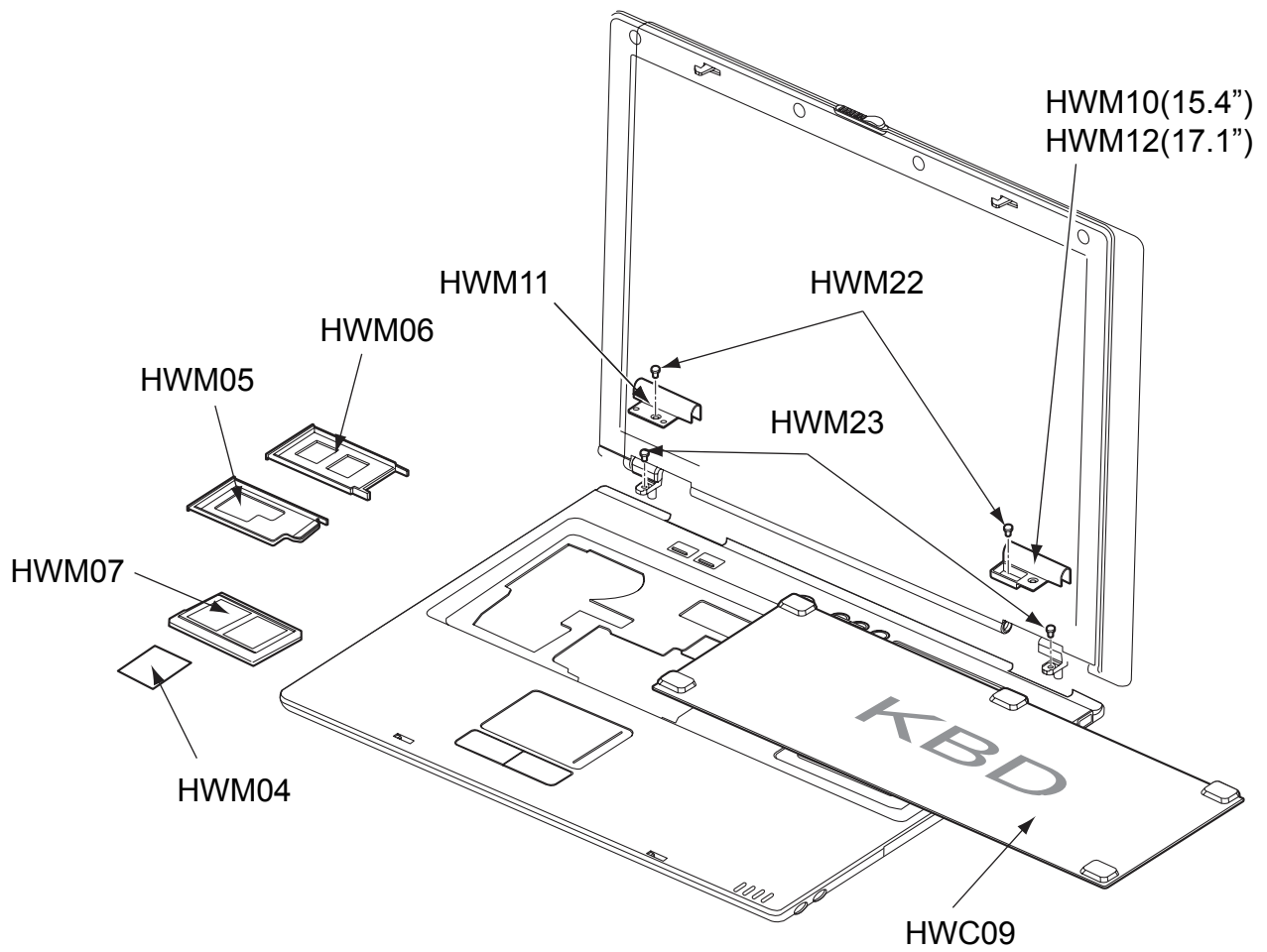


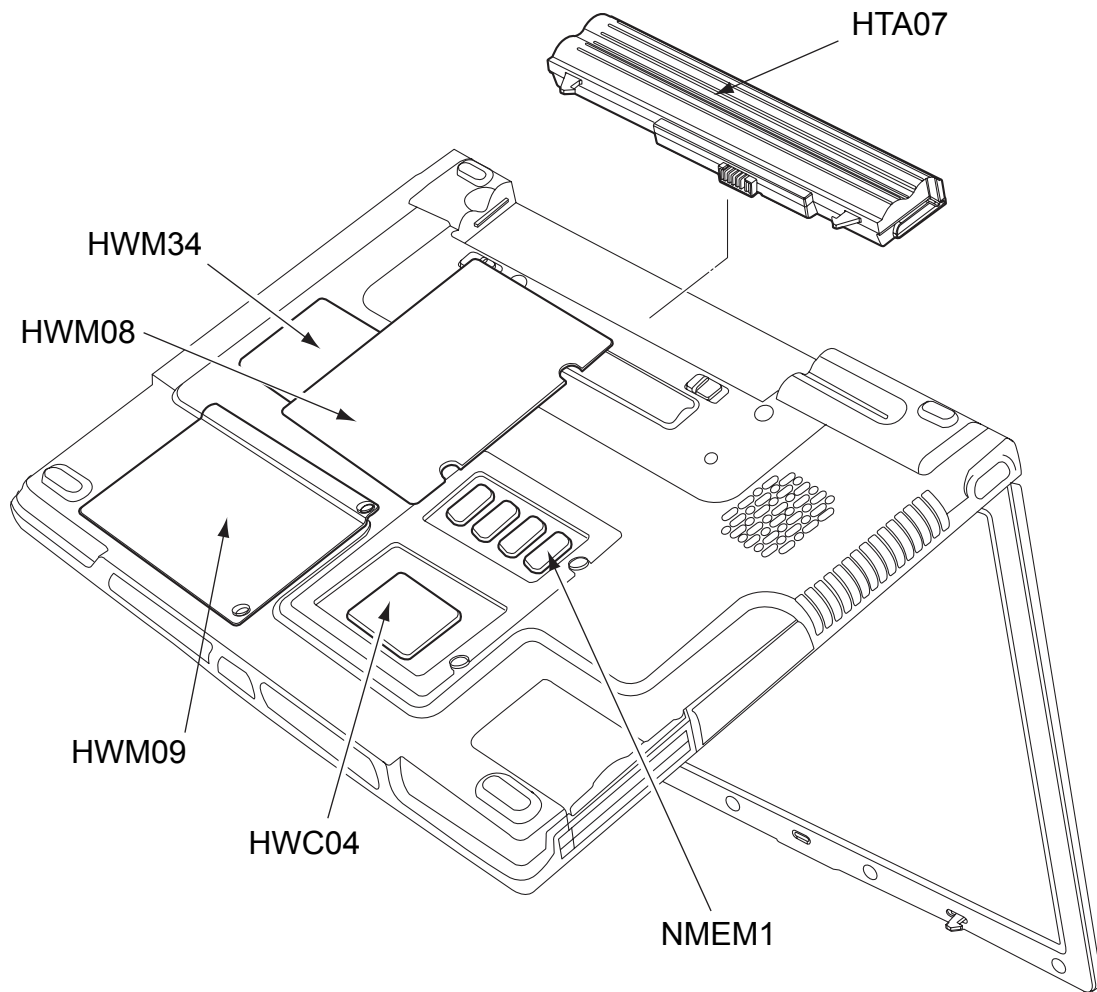


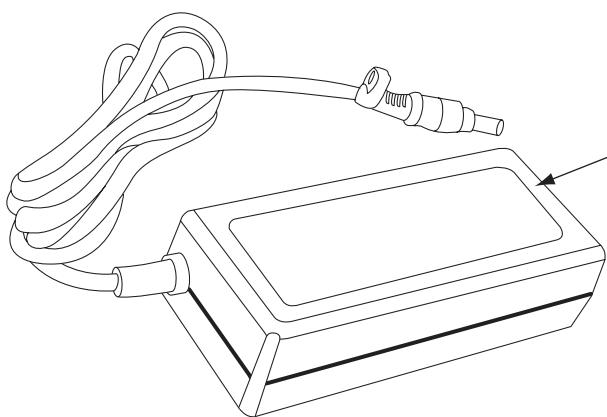
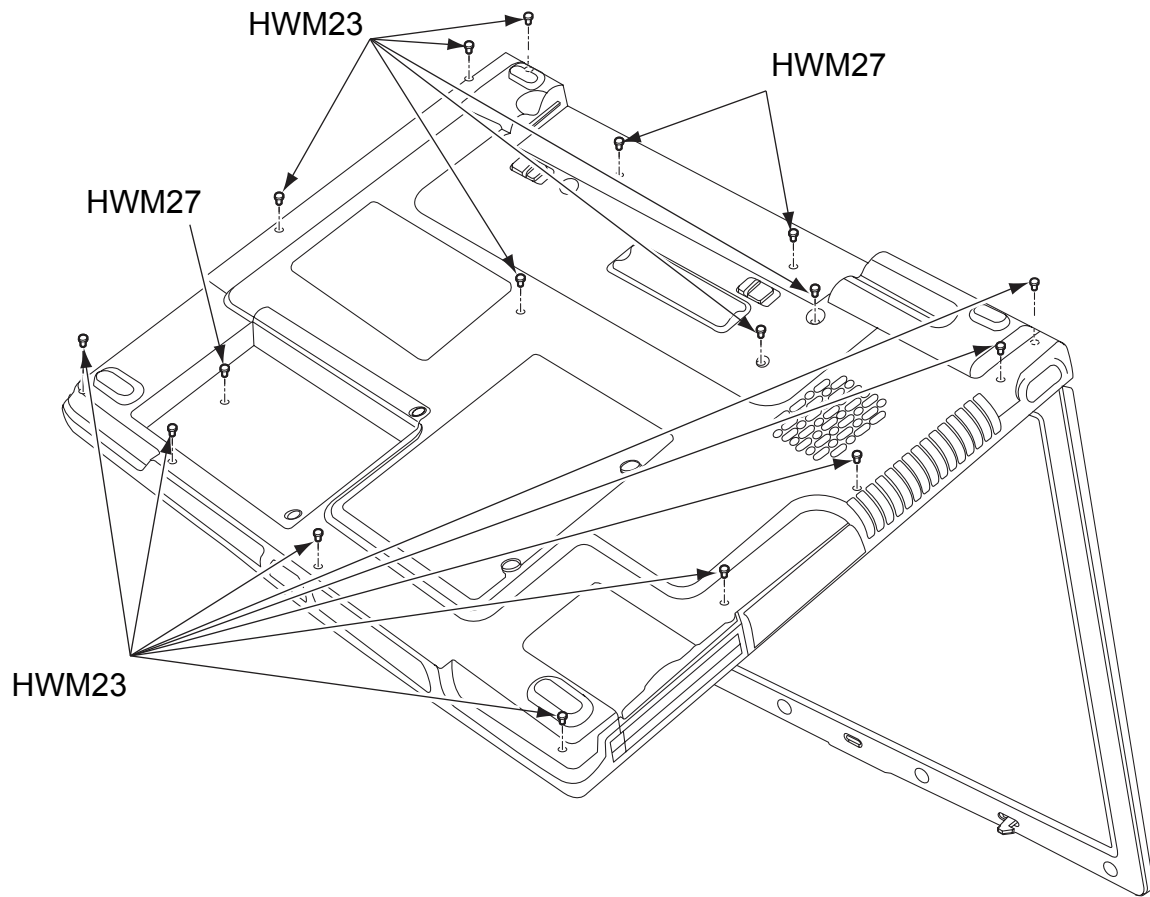




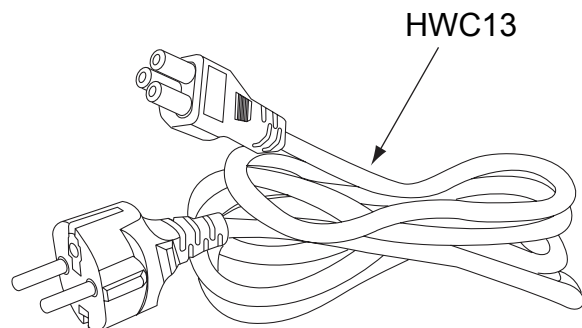








HWC11



HWC13