5 Downloading update-items online.
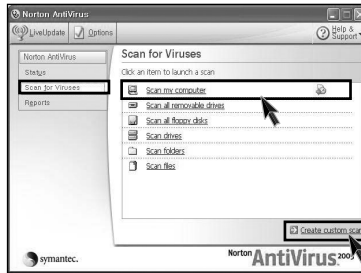

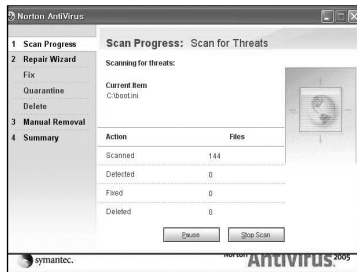**6** Click **[Finish]** . Norton Antivirus Update is complete.

● Running Norton Antivirus

1 Click **[Start]→[All programs]→[Norton Antivirus]→[Norton AntiVirus2005]**.

2 Click **[Scan for virus]** and select an item to scan.

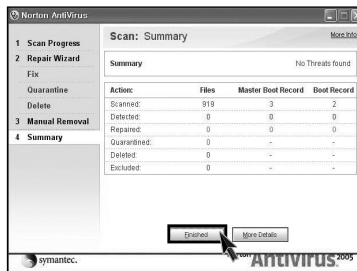**3** Norton AntiVirus is scanning virus.

Note

■ If any virus is detected, click **[Fix]** to repair.

4 Click **[Finish]**. Virus scanning is complete.

3. System setup

System setup means storing hardware configuration information of the computer in CMOS RAM. Through the System Setup, the computer gets various information -date of the day, time, memory capacity, H/D capacity and its type.

System Setup is to set passwords, to change booting orders, and to add new peripheral devices.

3-1. Entering System Setup

- ■ Booting with a USB device (Page 48).
- ■ Setting a password (Page 49).
- ■ Deleting or changing a password (Page 50).
- ■ Initializing system setup (Page 52).
- ■ Deciding the temporary booting orders (Page 53).

⚠ Caution

Wrong system setup may cause errors during system operation. Therefore, be careful when changing the System Setup, and it is recommended not to change the setup unless it is necessary.

For performance improvement, CMOS setup menu configuration and the initial setup status may be changed and may become different from images included in the user manual.

● Keys Used in System Setup

Keys	Funtion
[Enter]	Select the current item.
[Esc]	Closes the current task or goes back to the previous screen.
[↑],[↓],[←],[→]	Moves up, down, right, and left.
+/-	Increases or decreases the item values.
[Page Up]	Goes to the beginning of the screen.
[Page Down]	Goes to the end of the screen.
[F10]	Saves changes and exits System Setup.

Note

■ **Cursor Pad**

These keys are used to move the cursors on the monitor screen up, down, right, and left.

When the Num Lock button is off on the numeric keypad, the numeric keypad functions the same as the cursor keypad.
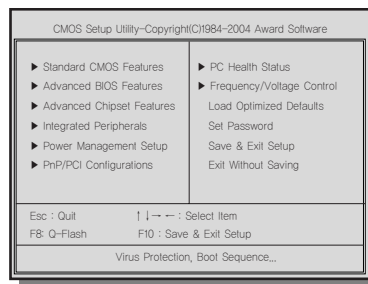
\<Cursor Keypad\>

\<Numeric Keypad\>
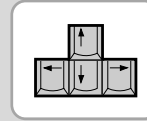
1 Turn on the computer and the monitor.

2 While the LG logo screen is on, press **[Delete]** key.
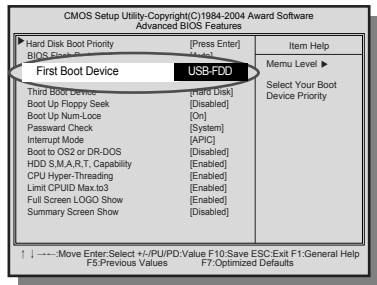
3 The initial setup screen will appear.

3-2. Booting with a USB Drive

A booting with a USB device (USB-FDD, USB-ZIP, USB-CD-ROM, or USB-HDD) proceeds as follows.

❶ Execute the initial screen of System Setup, and select **Advance Bios Features** by pressing [↑],[↓],[←], and [→] keys. Then, press **[Enter]** key.

❷ When the following screen appears, select **First Boot Device** by pressing [↑],[↓],[←], and [→] keys. Then, select the device and press **[Enter]** key.

```
CMOS Setup Utility-Copyright(C)1984-2004 Award Software
                 Advanced BIOS Features
 Hard Disk Boot Priority          [Press Enter]      Item Help
 BIOS Flash                       [Auto]
                                                  Memu Level ▶
   First Boot Device              USB-FDD
                                                  Select Your Boot
 Third Boot Device                [Hard Disk]      Device Priority
 Boot Up Floppy Seek              [Disabled]
 Boot Up Num-Loce                 [On]
 Password Check                   [System]
 Interrupt Mode                   [APIC]
 Boot to OS2 or DR-DOS            [Disabled]
 HDD S,M,A,R,T, Capability        [Enabled]
 CPU Hyper-Threading              [Enabled]
 Limit CPUID Max.to3              [Enabled]
 Full Screen LOGO Show            [Enabled]
 Summary Screen Show              [Disabled]

↑ ↓ ←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
     F5:Previous Values         F7:Optimized Defaults
```

Note

Bootable devices will be displayed only when bootable devices are equipped.

❸ To save changes in System Setup, press the **[F10]** key.

❹ When the following message appears on the screen, press the **[Enter]** key to restart the screen.

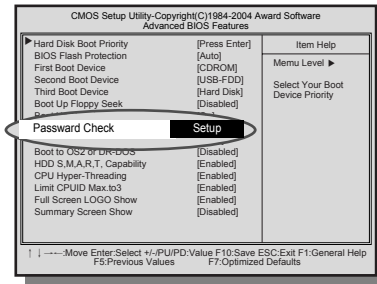SAVE to CMOS and EXIT(Y/N)? Y

3-3. Setting a Password

To prevent other users from changing computer settings, you can register a password. A password can be registered during booting or System Setup.

⚠ Caution

Without the registered password, if any, access to the system will be denied. Write down and keep your password in a safe place.

1 Execute the initial screen of System Setup and select **Advanced Bios Features** by pressing [↑],[↓],[←], and [→] keys. Then, press **[Enter]** key.

2 When the next screen appears, select **Password Check** by pressing [↑],[↓],[←], and [→] keys and the **Setup** or **System** by pressing the **[Page Up]** and **[Page Down]** keys. Then, press **[Enter]** key.

```
               CMOS Setup Utility-Copyright(C)1984-2004 Award Software
                           Advanced BIOS Features
► Hard Disk Boot Priority        [Press Enter]         Item Help
  BIOS Flash Protection          [Auto]
  First Boot Device              [CDROM]           Menu Level ►
  Second Boot Device             [USB-FDD]
  Third Boot Device              [Hard Disk]       Select Your Boot
  Boot Up Floppy Seek            [Disabled]        Device Priority

  Passward Check                 Setup

  Boot to OS2 or DR-DOS          [Disabled]
  HDD S,M,A,R,T, Capability      [Enabled]
  CPU Hyper-Threading            [Enabled]
  Limit CPUID Max.to3            [Enabled]
  Full Screen LOGO Show          [Enabled]
  Summary Screen Show            [Disabled]

↑ ↓ ←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
          F5:Previous Values        F7:Optimized Defaults
```

Note

■ You will be asked to input the password only when you select "Setup" in Security Option or when you select "Setup" by pressing [Delete] key on the initial screen. The password protects the computer by stopping others from changing computer settings and system setup.

3 Select Set Password by pressing [↑],[↓],[←], and [→] keys on the initial setup screen, and press **[Enter]**.

4 When the following message appears on the screen, input the password and press **[Enter]** key. The password must be alphanumeric and not exceed eight digits.

Enter Password :

5 When asked to confirm the password, input the password again and press **[Enter]** key.

Confirm Password :
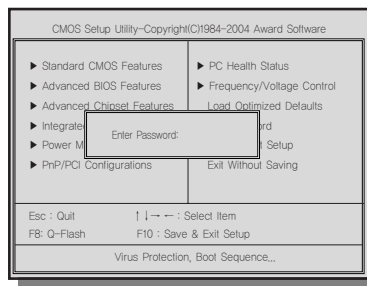
6 To save changes in System Setup, press **[F10]**.

7 When the following message appears, press **[Enter]** key to restart the computer.

SAVE to CMOS and EXIT(Y/N)? Y

3-4. Deleting or Changing a Password

You can delete or change the password only after inputting the current password.

1 Execute the initial screen of System Setup, enter the password, and press the **[Enter]** key.

CMOS Setup Utility-Copyright(C)1984-2004 Award Software

▶ Standard CMOS Features   ▶ PC Health Status
▶ Advanced BIOS Features   ▶ Frequency/Voltage Control
▶ Advanced Chipset Features   Load Optimized Defaults
▶ Integrate   rd
▶ Power M   Enter Password: Setup
▶ PnP/PCI Configurations   Exit Without Saving

Esc : Quit   ↑ ↓ → ← : Select Item
F8: Q-Flash   F10 : Save & Exit Setup
Virus Protection, Boot Sequence,..
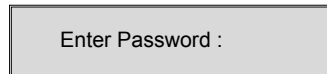
▶ **Changing the Password**

Change the password in the same procedure as that of password setting.

▶ **Deleting the Password**

2 Select **Set Password** by pressing [↑],[↓],[←], and [→] keys on the initial screen of the Setup menu, and press the **[Enter]** key.

```
CMOS Setup Utility-Copyright(C)1984-2004 Award Software

▶ Standard CMOS Features        ▶ PC Health Status
▶ Advanced BIOS Features        ▶ Frequency/Voltage Control
▶ Advanced Chipset Features      Load Optimized Defaults
▶ Integrated Peripherals         Set Password
▶ Power Management Setup         Save & Exit Setup
▶ PnP/PCI Configurations         Exit Without Saving

Esc : Quit          ↑ ↓ → ← : Select Item
F8: Q-Flash         F10 : Save & Exit Setup
            Virus Protection, Boot Sequence...
```

3 When the following message appears, press the **[Enter]** key.

```
Enter Password :
```
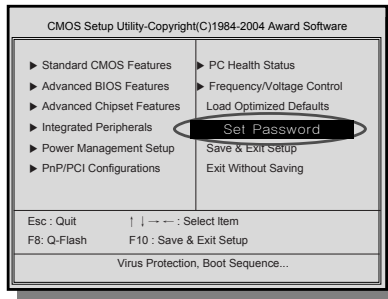
4 A message will appear saying that the password has been deleted.
Press the **[Enter]** key.

```
PASSWORD DISABLD!!!
Press any key to continue...
```
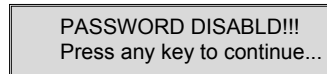
5 To save the change in System Setup, press the **[F10]**.

6 When the following message appears on the screen, press the **[Y]** key and the **[Enter]** key. Then, the computer will restart.

```
SAVE to CMOS and EXIT(Y/N)? Y
```
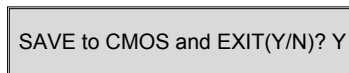
3-5. Initializing System Setup

If you changed the system setup by mistake, it can be recovered to the default setting.

1 Execute the initial screen of System Setup, and select the **Load Optimized Defaults** item by pressing arrow keys. Then, press **[Enter]**.

2 When the following message appears on the screen, press **[Y]** and **[Enter]**. System setup will be return to the factory setting.

> Load Optimized Defaults (Y/N) ? Y

3 To save the change in System Setup, press **[F10]**.

4 When the following message appears, press the **[Enter]** key to restart the computer.

> SAVE to CMOS and EXIT(Y/N)? Y

3-6. Deciding the Temporary Booting Orders

The following instruction explains a way to decide the temporary booting orders without affecting CMO setup.

❶ Turn on the computer and the monitor.

❷ While LG logo screen is on, press **[F12]**.

❸ Select **USB-FDD** from the **Boot Menu** to restart the computer.

Note

■The menus may differ by product model : USB-FDD, USB-ZIP, USB-HDD, and USB-CD-ROM. Bootable devices will be displayed only when they are equipped in before turning the computer on

3-7. Setting the Power Saver Mode

Regardless of BIOS setup, you can use the Power Saver mode in Windows as fol-
lows.

1 Select **[Start]** → **[Control Panel]** → **[Switch to Classic View].**

2 Double-click the **Power option icon** on the Control Panel window.

3 After setting Power Scheme items in the **Power Schemes** tab, click the **[OK]**
button.
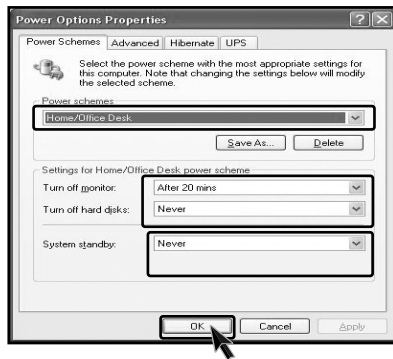
⚠ **Warning**

TWhen the device connected to
the computer does not support
Power Saver functions, the
Standby mode or Hibernate
mode may not be properly func-
tion.

In this case, deactivate Power
Saver feature.

4 Press the **advanced tab** and set options appropriately. Then, click the **[OK]** button.
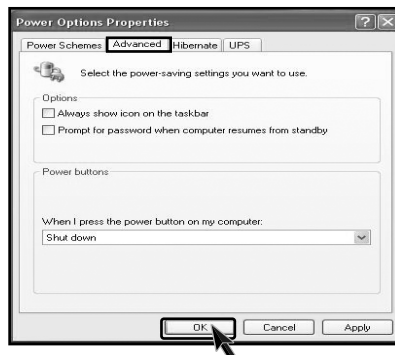
Note

■**Hibernate Mode** :The current
work states are saved intact on the
H/D before the power goes off.
The states will be recovered as
they were when the power is on
later.

3-8. Using Hyper-Threading Feature

The Hyper-threading feature improves the performance of the CPU greatly as if two CPUs were running. This feature is especially efficient for multimedia tasks such as games and graphic jobs. Hyper-threading is supported only by the CPU with Hyper-Threading (HT) feature. Check the "Intel" sticker on the side of the computer to see if the CPU supports hyper-threading.

1 Execute the initial screen of System Setup, and select **Advanced Bios Features** by pressing [↑],[↓],[←], and [→] keys. Then, press the **[Enter]** key.

2 When the following screen appears, select **Hyper-Threading Technology** and **Enabled.**

```
          CMOS Setup Utility-Copyright(C)1984-2004 Award Software
                        Advanced BIOS Features
  ► Hard Disk Boot Priority        [Press Enter]         Item Help
    BIOS Flash Protection          [Auto]
    First Boot Device              [CDROM]          Memu Level ►
    Second Boot Device             [USB-FDD]
    Third Boot Device              [Hard Disk]      Select Your Boot
    Boot Up Floppy Seek            [Disabled]       Device Priority
    Boot Up Num-Loce               [On]
    Password Check                 [System]
    Interrupt Mode                 [APIC]
    Boot to OS2 or DR-DOS          [Disabled]
    HDD S.M.A.R.T.
    Hyper-Threading Technology     Enabled
    Full Screen LOGO Show          [Enabled]
    Summary Screen Show            [Disabled]

  ↑ ↓ ←→:Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
           F5:Previous Values       F7:Optimized Defaults
```

3 To save changes in System Setup, press **[F10]**.

4 When the following message appears, press the **[Enter]** key to restart the computer.

```
SAVE to CMOS  and EXIT(Y/N)? Y
```

Note

■ Hyper-threading is supported only by Windows XP. If you execute software or games that does not support hyper-threading, an error may occur. When this happens, disable the "Hyper-Threading Technology" featuree.

4.System Recovery

You can restore the system in two ways depending on the current status of the system. However, to restore the hard disk, you need to back up necessary software and data files in advance. After completing Windows installation, you need to register the User Properties when booting the system as if you did your new computer.

● Installation with Recovery CD

Installation

1 Back up the data stored in the computer.

2 Insert the Restore CD in the CD-ROM drive. When **"Press any key to boot from CD..."** message appears on the screen, press the [Enter] key.

3 Continue installation by following instructions on the screen.

4 After completing installation of Windows, remove the CD and restart the system. When the following screen appears, register the User Properties according to instructions on the screen.

5 After the Windows operating system installation is complete, install the LG GILJABI CD (software installation CD) on your computer, and then you can use all application programs and device drivers.

LG

● **Installation of Windows XP Upgrade**

1. If Windows XP is already installed on the hard disk, you can upgrade existing Windows XP without formatting the hard disk

2. In the case that Windows XP is already running on the hard disk, upgrade Windows XP as follows.

For Windows users

1 Turn on the system where Windows XP is installed.
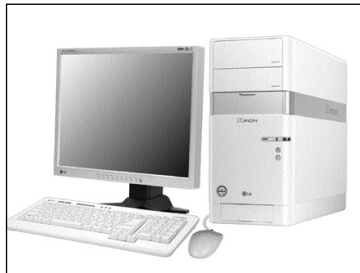
2 Click the **[Start]** and **[Run]** button.

3 Insert the Restore CD, and input **D:\i386\winnt32.exe/unattend**. Then, click the **[OK]** button. (When the CD-ROM drive is D drive.)
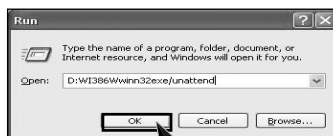
Note

■ To execute "winnt32.exe" without using "Unattend" option, you must input the product key attached on the computer. You also need to have the computer certified within 30 days after this

System Recovery 57

5-1.Reinstalling Printer Driver

You must install the printer driver after connecting the printer. Windows XP can automatically detect printer drivers. However, if Windows XP does not detect your printer driver, install the printer driver as follows.

1 Select **[Start] → [Control Panel] → [Class Desktop].**

2 Double click the **[Printer and Fax]** on the Control Panel window.

3 When the following screen appears, click the **[Add Printer]** button.
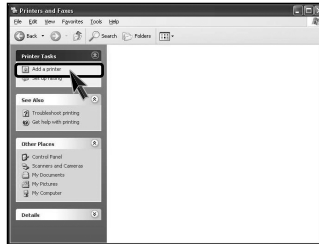
4 When the Add Printer Wizard appears, click the **[Next]** button.

5 When the following screen appears, check the connection type of the printer - local or network. Then, select a printer and click the **[Next]** button.
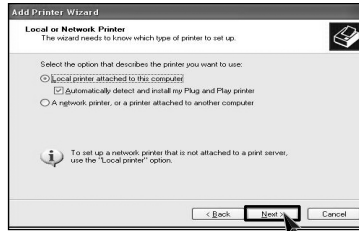
6 **New Printer Detection** screen will appear. Click the **[Next]** button.

7 When Set Printer Port screen appears, select LPT1 or LPT2 before clicking the **[Next]** button.
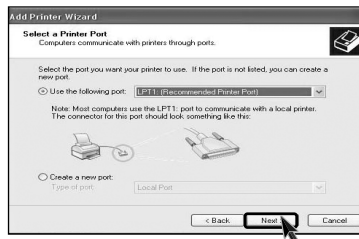
8 Select the manufacturer and model of your printer on the **Select Printer** screen. If your printer came with an installation disk, click **[Have Disk]**. If not, just click the **[Next]** button.
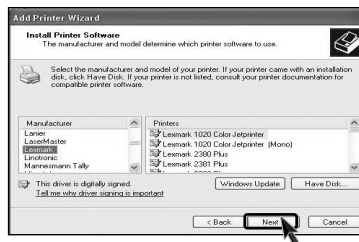
When [Have Disk] is selected.

🗐 Insert the diskette or driver CD in the driver and click the **[OK]** button.
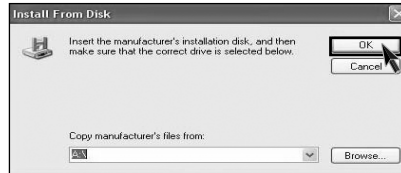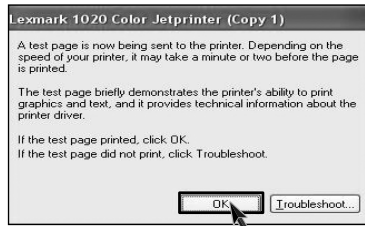

When [Next] is selected

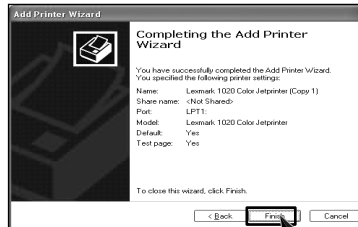🗐 Name the printer, and click the **[Next]** button.
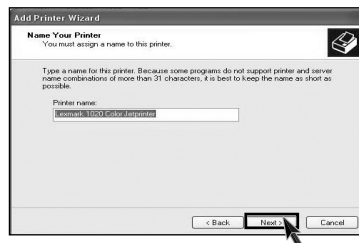
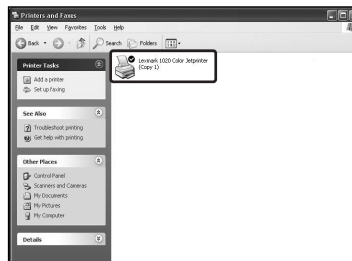🔟 When **Print Test Page** screen appears, click the **[Yes]** and **[Next]**.
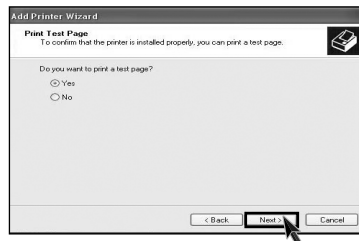
11 After the test page is properly printed out, click the **[OK]** button.

12 When the following screen appears, check the printer and click the **[Finish]** button.

13 Now, the printer has been added. .

5-2.Reinstalling Sound Driver

You must install a sound driver to listen to music files and CDs on the computer. A sound driver basically comes out with the computer. If it has to be reinstalled, however, follow the process below.

1 Turn on the computer and the monitor.

2 Insert LG GILJABI CD in the CD-ROM driver. Select the sound driver to install from the list.

3 The driver installation process will start. Follow instructions on the screen.

5-3.Reinstalling Video Driver

The video driver displays on the monitor data stored on the computer. The video driver is included in basic specification of the computer. However, in the case that it is necessary to reinstall the video driver, carry out the following process.

1 Turn on the computer and the monitor.

2 Insert LG GILJABI CD in the CD-ROM driver. Select the video driver to install from the list.

3 The driver installation process will start. Follow instructions on the screen.

Note

■ When the computer uses the Intel Onboard Video, some games and programs that does not support Screen Rotation may not be executed on the screen. When this happens, disable the Screen Rotation.

LG

6-1. Opening the computer case

Always consult with your service representatives before opening the computer case.

Note the following when opening the computer cover.

- Quit all programs in use.
- Turn off the computer and the monitor before disconnecting the power.
- Keep magnetic tools (for example, drivers) away from the computer since parts inside the computer are electrically charged and sensitive to magnetic force.
- Install the computer in a clean, easily-accessible place.
- A small electric shock inside the computer may cause operational problems. Before touching the computer, put hands on an unpainted metallic surface for two or three seconds to remove static electricity before opening the cover.
- When disassembling the computer, wear gloves to protect internal parts of the computer and slot cards from damage.

Opening the computer cover

Closing the computer cover

Loosen three screws on the computer cover, and pull the cover off.

Adjust the computer cover to the main body, and fasten three screws through the cover.

⚠ Warning

Before assembling the computer cover, check if there is any metallic material left inside the main body. A metallic substance inside the main body can cause an electric shock or fire.

6-2. Main Board

The model name of the computer depends on the main board type. When extending the computer, check the model name on the label attached on the rear panel of the computer and the following. Before extending the computer, check the main board first

❶ **Expansion slot (PCI-E x1)**

❷ **Expansion slot (PCI)**

❸ **Expansion slot (PCI-E x16)**

❹ **CPU socket (with Pentium4 × 16 LGA 775)**

❺ **Memory socket (DIMM)**

❻ **Floppy disk connector**

❼ **Hard disk/CD-ROM connector**

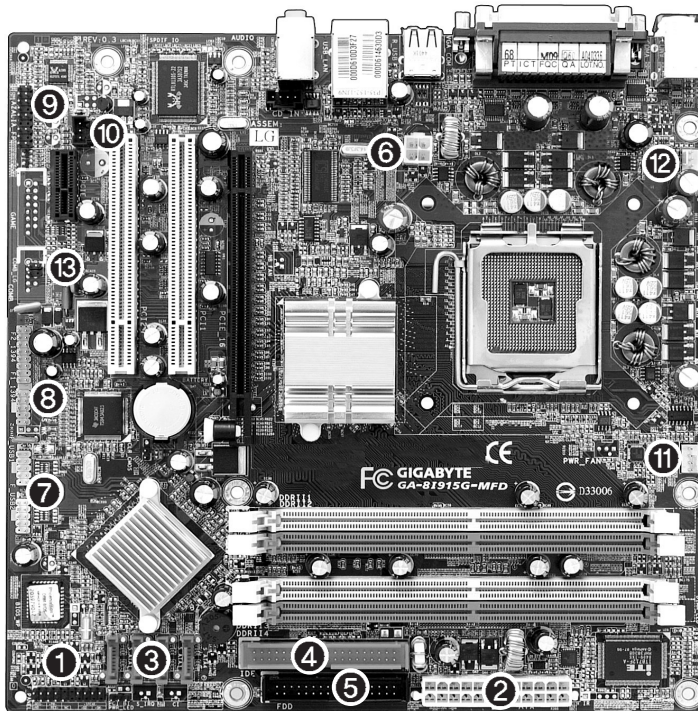❽ **Serial ATA-type hard disk connector**

No
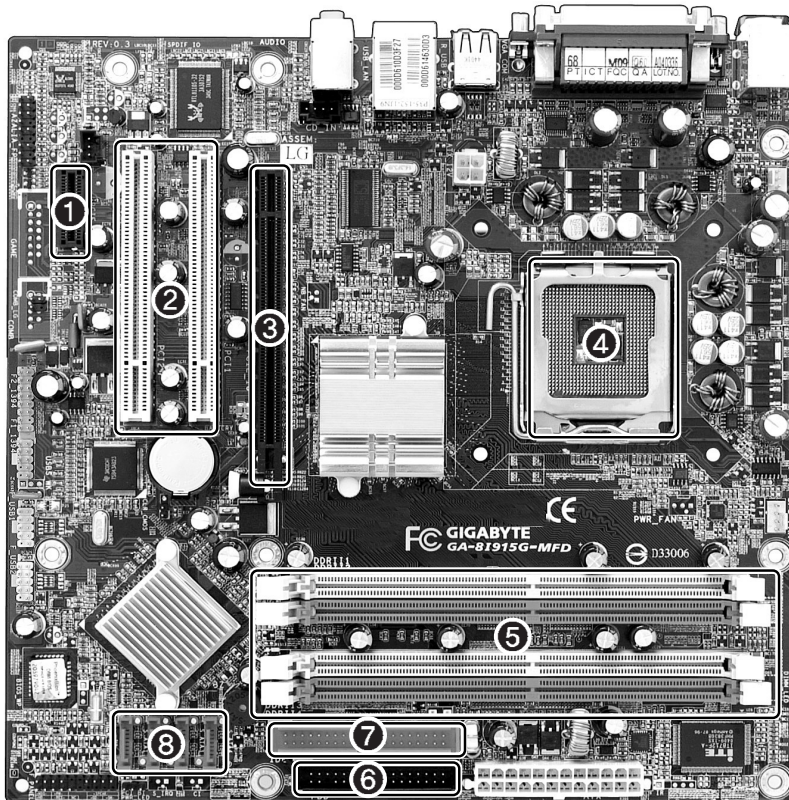
■ The main board in your computer may look different from the picture.

6-3. Internal Connectors

Connectors are configured in a certain way at the factory, and connectors show the connection status between the main board of the computer and peripherals. (Connector configuration depends on product models.)

⚠ Caution

■ Before separating the connector, check the connection state of the connectors and leave a record on the state.

■ Link the floppy disk driver connector and the hard disk/CD-ROM connector in the correct direction.

■ The Pin Number and the color of the connector cable must match. Otherwise, an error may occur in the computer.

■ Risk of explosin if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

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