enovo

Lenovo B71-80 User Guide

Notes

- Before using the product, be sure to read *Lenovo Safety and General Information Guide* first.
- Some instructions in this guide may assume that you are using Windows[®] 7 or Windows 10. If you are using another Windows operating system, some operations may be slightly different. If you are using other operating systems, some operations may not apply to you.
- The features described in this guide are common to most models. Some features may not be available on your computer or your computer may include features that are not described in this user guide.
- The illustrations in this manual may differ from the actual product. Please refer to the actual product.

Regulatory Notice

• For details, refer to **Guides & Manuals** at http://support.lenovo.com.

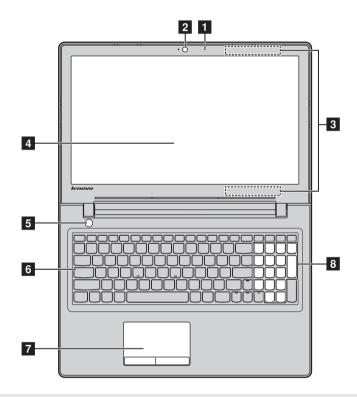
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■ Top view



Note: The dashed areas indicate parts that are not visible externally.

Attention:

• When closing the display panel, be careful *not* to leave pens or any other objects in between the display panel and the keyboard. Otherwise, the display panel may be damaged.

1	Built-in microphone	Capture sound which can be used for video conferencing, voice narration, or audio recording.
2	Integrated camera	Use the camera for video communication.
3	Wireless LAN antennas	Connect to a wireless LAN adapter to send and receive wireless radio signals.
4	Computer display	The LCD display with LED backlight provides brilliant visual output.
5	Power button	Press this button to turn on the computer.
6	Caps lock indicator	
7	Touch pad	The touch pad functions as a conventional mouse.

Touch pad: To move the pointer on the screen, slide your fingertip over the pad in the direction in which you want the pointer to move.

Touch pad buttons: The functions of the left/right side correspond to those of the left/right mouse button on a

conventional mouse.

Note: You can enable/disable the touch pad by pressing F6 (\square _n).

Numeric keypad For details, see "Using the keyboard" on page 3. 8

Using the keyboard

Your computer has number keys and function keys and may also have a numeric keypad incorporated into its standard keyboard.

Numeric keypad

The keyboard has a separate numeric keypad. To enable or disable the numeric keypad, press the **Num Lock** key.



Using the keyboard

Hotkeys

You can access certain system settings quickly by pressing the appropriate hotkeys.



₩ _{F1}	Mutes/unmutes the sound.	÷ _{F7} :	Enables/disables airplane mode.
□ - F2	Decreases the volume level.	F8 •	Displays all currently active apps.
△ + _{F3} :	Increases the volume level.	EX F9	Turns on/off the backlight of the LCD screen.
⊠ _{F4} :	Closes the currently active window.	F10	Toggles the display between the computer and an external device.
47 F5 :	Refreshes the desktop or the currently active window.	\$- F11	Decreases display brightness.
<u> </u>	Enables/disables the touch pad.	*+ F12	Increases display brightness.

Note: If you changed the **Hotkey Mode** from **Enabled** to **Disabled** in the BIOS setup utility, you will need to press the Fn key in combination with the appropriate hotkey.

Function key combinations

Through the use of the function keys, you can change operational features instantly. To use this function, press and hold **Fn** 1; then press one of the function keys 2.



The following describes the features of each function key.

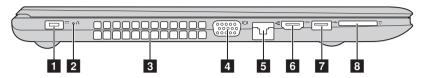
Fn + Home: Activate the pause function.

Fn + End: Activate the break function.

Fn + PgUp: Enable/Disable the scroll lock.

Fn + PgDn: Activate the system request.

■■ Left-side view



AC power adapter Connects to the AC power adapter.

jack

2 Novo button When the computer is off, press this button to start the

Lenovo OneKey Recovery system or the BIOS setup

utility, or to enter the boot menu.

Ventilation slots Dissipate internal heat.

Note: Make sure that none of the ventilation slots are blocked, or else overheating of the computer may occur.

VGA port Connects to external display devices.

5 RJ-45 port Connects the computer to an Ethernet network.

6 **HDMI port** Connects to devices with HDMI input such as a TV or a

display.

7 USB 3.0 port Connects to USB devices.

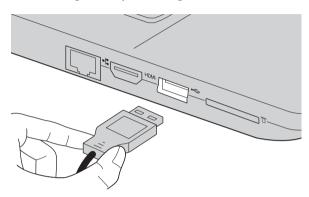
Note: For details, see "Connecting USB devices" on page 7.

Memory card slot Insert memory cards (not supplied) here.

Note: For details, see "Using memory cards (not supplied)" on page 8.

■ Connecting USB devices

You can connect a USB device to your computer by inserting its USB plug (Type A) into the USB port on your computer.



The first time you plug a USB device into a particular USB port on your computer, Windows automatically installs a driver for that device. After the driver has been installed, you can disconnect and reconnect the device without performing any additional steps.

Note: Typically, Windows detects a new device after it has been connected, and then installs the driver automatically. However, some devices may require you to install the driver before connecting. Check the documentation provided by the device's manufacturer before connecting the device.

Before disconnecting a USB storage device, make sure your computer has finished transferring data to that device. Click the **Safely Remove Hardware and Eject Media** icon in the Windows notification area to remove the device before disconnecting.

Note: If your USB device uses a power cord, connect the device to a power source before connecting it. Otherwise, the device may not be recognized.

Using memory cards (not supplied)

Your computer supports the following types of memory cards:

- Secure Digital (SD) card
- Secure Digital High Capacity (SDHC) card
- SD eXtended Capacity (SDXC) card
- MultiMediaCard (MMC)

Notes:

- Insert only one card in the slot at a time.
- This card reader does not support SDIO devices (e.g., SDIO Bluetooth, etc.).

Inserting a memory card

Insert the memory card until it touches the bottom of the slot.

Removing a memory card

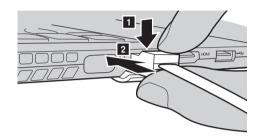
Gently pull the memory card out of the memory card slot.

Note: Before removing the memory card, disable it by using the Windows safely remove hardware and eject media utility to avoid data corruption.

Connecting network cables

To insert a network cable, do the following:

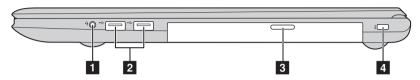
- Hold one connector of the network cable to press the RJ-45 cover down gently ■.
- 2 Insert the connector into the RJ-45 port 2.



■ Software configuration

Consult your Internet Service Provider (ISP) for details on how to configure your computer.

■■ Right-side view



Combo audio jack

Connects to headsets.

Notes:

- The combo audio jack does not support conventional microphones.
- The recording function may not be supported if third-party headphones or headsets are connected, due to different industry standards.
- **2 USB 2.0 port** Connects to USB devices.

Note: For details, see "Connecting USB devices" on page 7.

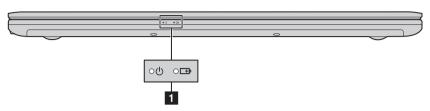
Optical drive Reads/Burns optical discs.

Note: Some models are supplied with a dummy optical drive.

4 Kensington slot

Attach a security lock (not supplied) here to help protect your computer from theft and unauthorized use. You can attach a security lock to your computer to help prevent it from being removed without your permission. For details on installing the security lock, please refer to the instructions shipped with the security lock that you have purchased.

■ Front view

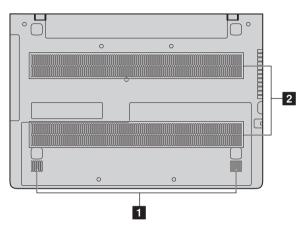


System statusindicators

Battery status indicator □
Power status indicator ∪

Indicator	Indicator status	Meaning	
	On (solid white)	The battery has more than 20% charge.	
	Solid amber	The battery has between 5% and 20% charge.	
	Fast blinking amber	The battery has less than 5% charge.	
Battery status indicator	Slow blinking amber	The battery is being charged. When battery charge reaches 20%, the blinking color changes to white.	
	Slow blinking white	The battery has between 20% and 80% charge and is still charging. When the battery reaches 80% charge the light will stop blinking, but charging will continue until the battery is fully charged.	
Dower status	On (solid white)	The computer is powered on.	
Power status indicator	Blinking	The computer is in sleep mode.	
	Off	The computer is powered off.	

■■ Bottom view



- 1 Speakers
- Provide audio output.
- 2 Louvers

Allow air to enter the computer for cooling.

Configuring the operating system for the first time

You may need to configure the operating system when it is first used. The configuration process may include the procedures below:

- Accepting the end user license agreement
- Configuring the Internet connection
- Registering the operating system
- Creating a user account

■ Power-saving modes

When you have finished working with your computer, you can set it to shut down, sleep or hibernate.

Shutting down the computer

If you are not going to use your computer for a long time, shut it down. To shut down the computer, do one of the following:

- Windows 10:
 - Open the start menu, and then select **Power** \bigcirc \rightarrow **Shut down**.



- Right-click the **Start** button in the lower-left corner and select **Shut down** or **sign out** → **Shut down**.



Putting your computer to sleep

If you will be away from your computer for only a short time, put the computer to sleep. When the computer is in sleep mode, you can quickly wake it to resume use, bypassing the startup process.

To put the computer to sleep, do one of the following:

- Close the display lid.
- Press the Power button.
- Do the proper operations in the operating system.

Windows 7:

Click **Start** $\bullet \rightarrow$ **Sleep**.

Windows 10:

Open the start menu, and then select **Power** \bigcirc \rightarrow **Sleep**.

Note: Wait until the power indicator light starts blinking (indicating that the computer is in sleep mode) before you move your computer. Moving your computer while the hard disk is spinning can damage the hard disk, causing loss of data.

To wake the computer, do one of the following:

- Press any key on the keyboard.
- Press the Power button.

■ Connecting to a wireless network

Enabling wireless connection

To enable wireless functions, do one of the following:

• Windows 10: Press F7 () to disable airplane mode.

Connecting to a wireless network

To connect to a wireless network, do the following:

- **1** Press **F7** (→ □) to turn on the wireless feature.
- View the available wireless networks. Click the wireless network connection status icon in the Windows notification area. A list of available wireless networks will be displayed.
- **3** Click a network name in the list, and then click **Connect**.

Note: Some networks require a network security key or passphrase for connection. To connect to one of those networks, ask the network administrator or the Internet service provider (ISP) for the security key or passphrase.

■■ Help and support-

If you have a problem with the operating system, see the Windows Help and Support file. To open the Windows Help and Support file, do the following:

• Windows 7:

You can read the Windows Help and Support file on your computer. You can also get online help and support by clicking on one of the two links listed under **More to explore**.

Operating system interface (for the Windows 10 operating system)

Windows 10 comes with a powerful and useful start menu. To open the start menu, do one of the following:

- Press the Windows key 🔳 on the keyboard.
- Select **Start =** on the lower-left corner of the desktop.



- Get Started app
- Settings button
- Power button
- 4 All apps button

- Start button
- 6 Search box
- **Task view button**

Settings

Settings lets you perform basic tasks. You can also search for more settings with the settings search box in the upper-right corner. To open the settings, do the following:

ullet Open the start menu, and then select **Settings** ullet .



Personalize the start menu

You can personalize the start menu with your favorite apps. To personalize the start menu, do the following:

- Open the start menu, and then select **All apps** to display the apps list.
- 2 Right click the app you want to add to the start menu, and then select **Pin** to **Start**.



Note: You can also drag apps from the **Most used** or **All apps** columns to add them to the start menu.

■ Task and desktop management (for the Windows 10 operating system)

Task view

To open the task view, do one of the following:

- Select the Task view button on the task bar.
- Press the Windows key 🔳 + Tab.



Virtual desktop management

Windows 10 supports the ability to create, manage and switch between virtual desktops.

To create a new virtual desktop, do one of the following:

- Open the task view, and then select **New desktop**.
- Press the Windows key 🔳 + Ctrl + D.

To switch between different desktops, do one of the following:

- Open the task view and select the desktop you want active.
- Press the Windows key + Ctrl + + / → to scroll through the desktops you've created.

Get Started app (for the Windows 10 operating system)

Windows 10 also provides the **Get Started** app to explain the new features of Windows 10. You can find it on the start menu.

To open the Get Started app, do one of the following:

- Open the start menu and select **Get Started** 🔨 .
- Press **Fn** + **F1** (depending on your keyboard layout).

Chapter 3. Lenovo OneKey Recovery system

The Lenovo OneKey Recovery system is software designed to back up and restore your computer. You can use it to restore the system partition to its original status in case of a system failure. You can also create user backups for easy restoration as required.

Notes:

- If your computer is preinstalled with a GNU/Linux operating system, OneKey Recovery system is not available.
- To utilize the features of the OneKey Recovery system, your hard disk already includes a
 hidden partition by default to store the system image file and the OneKey Recovery
 system program files. This default partition is hidden for security reasons, which explains
 why the available disk space is less than the stated capacity.

Backing up the system partition

You can back up the system partition to an image file. This image file can be used to restore the system partition. To back up the system partition:

- In Windows, press the Novo button or double-click OneKey Recovery icon to start the Lenovo OneKey Recovery system.
- 2 Click System Backup.
- 3 Select a back-up location and click **Next** to start the backup.

Notes:

- You can choose a back-up location on the local hard disk drive or an external storage device.
- Remove the removable hard disk drive before starting the Lenovo OneKey Recovery system. Otherwise, data from the removable hard disk drive might be lost.
- The back-up process may take a while.
- The back-up process is only available when Windows can be started normally.

Chapter 3. Lenovo OneKey Recovery system

Restoring

You can choose to restore the system partition to its original status or to a previously created back-up point. To restore the system partition:

- In Windows, press the Novo button or double-click OneKey Recovery icon to start the Lenovo OneKey Recovery system.
- 2 Click System Recovery. The computer will restart to the recovery environment.
- **3** Follow the on-screen instructions to restore the system partition to its original status or to a previously created back-up point.

Notes:

- The recovery process is irreversible. Make sure to back up any data you wish to save on the system partition before starting the recovery process.
- The recovery process may take a while. So be sure to connect the AC power adapter to your computer during the recovery process.
- The above instructions should be followed when Windows can be started normally.

If Windows cannot be started, then follow the steps below to start the Lenovo OneKey Recovery system:

- Shut down the computer.
- Press the Novo button. From the Novo Button Menu, select System Recovery and press Enter.

■ Frequently asked questions

This section lists frequently asked questions by category.

Finding information

What safety precautions should I follow when using my computer?

The *Lenovo Safety and General Information Guide* which came with your computer contains safety precautions for using your computer. Read and follow all the precautions when using your computer.

Where can I find the hardware specifications for my computer?

You can find hardware specification for your computer on the printed flyers which came with your computer.

Where can I find warranty information?

For detailed warranty information on this machine, please visit below website to check out: support.lenovo.com/warrantystatus.

Drivers and preinstalled software

Where are the installation discs for Lenovo preinstalled software (desktop software)?

Your computer did not come with installation discs for Lenovo preinstalled software. If you need to reinstall any preinstalled software, you can find the installation program on the C partition of your hard disk. If you cannot find the installation program there, you can also download it from the Lenovo consumer support website.

Where can I find drivers for the various hardware devices of my computer?

If your computer is preinstalled with a Windows operating system, Lenovo provides drivers for all the hardware devices that you need on the C partition of your hard disk. You can also download the latest device drivers from the Lenovo consumer support website.

■ Lenovo OneKey Recovery system

Where are the recovery discs?

Your computer did not come with recovery discs. Use the Lenovo OneKey Recovery system if you need to restore the system to its factory status.

What can I do if the back-up process fails?

If you can start the backup but it fails during the back-up process, try the following steps:

- 1 Close all open programs, and then restart the back-up process.
- **2** Check to see if the destination media is damaged. Select another path and then try again.

When do I need to restore the system to its factory status?

Use this feature when the operating system fails to start up. If there is critical data on the system partition, back it up before starting recovery.

BIOS setup utility

What is the BIOS setup utility?

The BIOS setup utility is ROM-based software. It displays basic computer information and provides options for setting boot devices, security, hardware mode, and other preferences.

How can I start the BIOS setup utility?

To start the BIOS setup utility:

- Shut down the computer.
- 2 Press the Novo button and then select **BIOS Setup**.

How can I change the boot mode?

There are two boot modes: **UEFI** and **Legacy Support**. To change the boot mode, start the BIOS setup utility and set boot mode to **UEFI** or **Legacy Support** on the boot menu.

When do I need to change the boot mode?

The default boot mode for your computer is **UEFI** mode. If you need to install a legacy operating system, such as Windows, Linux or Dos, etc (that is, any operating system before Windows 8) on your computer, you must change the boot mode to **Legacy Support**. The legacy operating system, such as Windows, Linux or Dos, etc cannot be installed if you don't change the boot mode.

Getting help

How can I contact the customer support center?

See "Chapter 3. Getting help and service" of *Lenovo Safety and General Information Guide*.

Troubleshooting

Display problems

When I turn on the computer, nothing appears on the screen.

- If the screen is blank, make sure that:
 - The AC power adapter is connected to the computer, and the power cord is plugged into a working electrical outlet.
 - The computer power is on. Press the Power button again for confirmation.
- If these items are set correctly, and the screen remains blank, have the computer serviced.

When I turn on the computer, only a white cursor appears on a blank screen.

Restore backed-up files to your Windows
environment or the entire contents of your hard disk
to its original factory contents using the Lenovo
OneKey Recovery system. If you still see only the
cursor on the screen, have the computer serviced.

The screen goes blank while the computer is on.

- Your power management is enabled. Do one of the following to resume from sleep mode:
 - Press any key on the keyboard.
 - Press the Power button.
 - Press **F9** (, to confirm whether the backlight of the LCD screen has been turned off.

Sleep problems

The critical low-battery error message appears, and the computer immediately turns off.

The battery power is getting low. Connect the AC power adapter to the computer.

The computer enters sleep mode immediately after Power-on.

- Make sure that:
 - The battery is charged.
 - The operating temperature is within the acceptable range. See "Chapter 2. Use and care Information" in the *Lenovo Safety and General Information Guide*.

Note: If the battery is charged and the temperature is within range, have the computer serviced.

The computer does not return from sleep mode and the computer does not work.

- If your computer is in sleep mode, connect the AC power adapter to the computer, then press the Windows button or the Power button.
- If the system still does not return from sleep mode, your system has stopped responding, and you cannot turn off the computer; reset the computer. Unsaved data may be lost. To reset the computer, press and hold the Power button for eight seconds or more. If the computer still does not reset, remove the AC power adapter.

Display panel problems

The screen is blank.

- Do the following:
 - If you are using the AC power adapter or the battery, and the battery status indicator is on, press
 F12 () to make the screen brighter.
 - If the power indicator is blinking, press the Power button to resume from sleep mode.
 - Press **F9** ([DX]) to confirm whether the backlight of the LCD screen has been turned off.
 - If the problem persists, follow the solution in the next problem "The screen is unreadable or distorted"

The screen is unreadable or distorted.

- Make sure that:
 - The screen resolution and color quality are correctly set
 - The monitor type is correct.

Incorrect characters appear on the screen.

 Is the operating system or programs installed correctly? If they are installed and configured correctly, have the computer serviced.

Sound problems

No sound can be heard from the speakers even when the volume is turned up.

- Make sure that:
 - The Mute function is off.
 - The combo audio jack is not being used.
 - Speakers are selected as the playback device.

Battery problems

Your computer shuts down before the battery status indicator shows empty.

Your computer operates after the battery status indicator shows empty.

• Recharge the battery.

Other problems

Your computer does not respond.

- To turn off your computer, press and hold the Power button for eight seconds or more. If the computer still does not respond, remove the AC power adapter.
- Your computer might lock when it enters sleep mode during a communication operation. Disable the sleep timer when you are working on the network.

The connected external device does not work.

- Do not connect or disconnect any external device cables other than USB while the computer power is on. Otherwise, you might damage your computer.
- When using high power consumption external devices, such as an external USB optical drive, use an external device power adapter. Otherwise, the device may not be recognized, or the system may shut down as a result.

Customer Replaceable Units (CRUs) are parts that can be upgraded or replaced by the customer. If a CRU is determined to be defective during the warranty period, a replacement CRU will be provided to the customer. Customers are responsible for installing the self-service CRUs for this product. Customers also can install optional-service CRUs, which might require some technical skills or tools, or request that a technician install the optional-service CRU under the terms of the applicable warranty service type for your country or region.

Note: The illustrations in this manual might differ from the actual product. Please refer to the actual product.

CAUTION:

Set the built-in battery in Ship Mode before replacing a CRU or sending your computer for service.

- 1 Turn off the computer and disconnect the AC power adapter.
- 2 Press Fn + S + V.
- **3** Press the Power button to verify if Ship Mode has been set.

Note: When set in Ship Mode, the battery does not supply power to the computer. To awake the battery from Ship Mode, connect the AC power adapter to your computer.

■■ Replacing the hard disk drive

You can increase the storage capacity of your computer by replacing the hard disk drive with one of greater capacity. You can purchase a new hard disk drive from your reseller or Lenovo marketing representative.

Notes:

- Replace the hard disk drive only for upgrading or repair. The connectors and bay of the hard disk drive were not designed for frequent changes or drive swapping.
- The preinstalled software are not included on an optional hard disk drive.
- Make sure the computer is turned off and all the cables disconnected from the computer before you replace the hard disk drive.
- Make sure the computer display is closed to avoid being damaged.

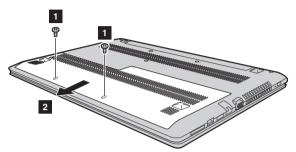
Handling a hard disk drive

- Do not drop the drive or subject it to physical shock. Put the drive on a material, such as soft cloth, that absorbs any physical shock.
- Do not apply pressure to the cover of the drive.
- Do not touch the connector of the drive.

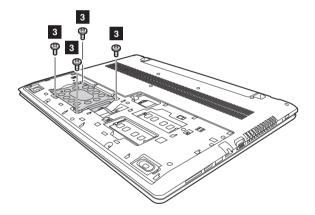
The hard disk drive is very sensitive. Incorrect handling can cause damage and permanent loss of data on the hard disk. Before removing the hard disk drive, make a backup copy of all the information on the hard disk, and then turn the computer off. Never remove the hard disk drive while the system is operating or in sleep mode.

To replace the hard disk drive, do the following:

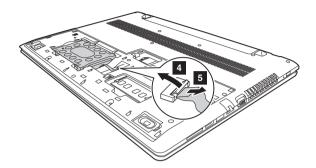
1 Remove the screws 1, and then remove the bottom slot cover 2.



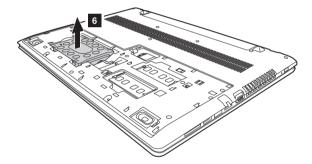
2 Remove the frame fixing screws **3**.



3 Detach the hard disk drive connector shown by arrows 4 and 5.



4 Take out the hard disk drive secured in a metal frame 6.



- **5** Remove the screws and detach the metal frame from the hard disk drive.
- **6** Attach the metal frame to a new hard disk drive and tighten the screws.
- Reconnect the hard disk drive connector. Slide the new hard disk drive firmly into place, and then reinstall the frame fixing screws to secure the drive.
- **8** Reinstall the bottom slot cover and tighten the screws.

Replacing the memory

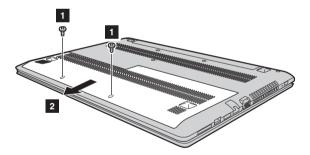
You can increase the amount of memory in your computer by installing double data rate three synchronous dynamic random access memory (DDR3L SDRAM)-available as an option-in the memory slot of your computer. DDR3L SDRAM modules are available in various capacities.

Notes:

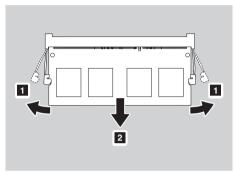
- Use only the memory types supported by your computer. If you incorrectly install
 optional memory, or install an unsupported memory type, a warning beep will sound
 when you try to start the computer.
- Make sure the computer is turned off and all the cables disconnected from the computer before you replace the memory.
- Make sure the computer display is closed to avoid being damaged.

To install a DDR3L SDRAM module, do the following:

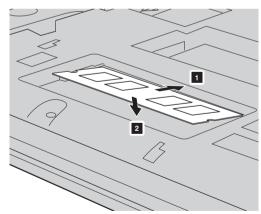
- Touch a metal table or a grounded metal object to reduce any static electricity in your body, which could damage the DDR3L SDRAM. Do not touch the contact edge of the DDR3L SDRAM module.
- **2** Remove the screws **1**, and then remove the bottom slot cover **2**.



3 If two DDR3L SDRAM modules are already installed in the memory slot, remove one of them to make room for the new one by pulling out on the latches on both edges of the socket at the same time. Be sure to save the old DDR3L SDRAM for future use.



- 4 Align the notch of the DDR3L SDRAM module with the protrusion of the socket and gently insert the new module at a 30-45° angle.
- **6** Push the DDR3L SDRAM module down until the latches on both sides of the socket lock into its position.



6 After aligning the attachment clips with their matching gaps, reinstall the bottom slot cover.

To make sure that the DDR3L SDRAM module is installed correctly, do as follows:

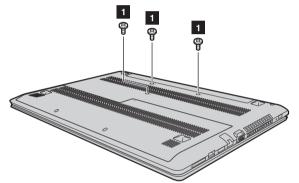
- 1 Press the Novo button to open the Novo button menu.
- **2** Select the **BIOS Setup**. The **System Memory** item shows the total amount of memory installed in your computer.

■■ Replacing the keyboard

To replace the keyboard, do the following:

Notes:

- Make sure the computer is turned off and all the cables disconnected from the computer before you replace the keyboard.
- Make sure the computer display is closed to avoid being damaged.
- **1** Remove the screws **1**.

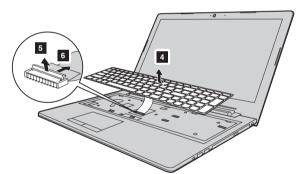


2 Turn the computer over and open the display panel.

3 Pull to unsnap the keyboard in the direction as shown by the arrows 2



4 Lift up the keyboard 4 and detach the connector in the direction shown by the arrows 5 6.



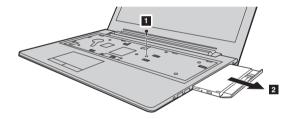
6 Reinstall the new keyboard and tighten the screws.

■ Replacing the optical drive

To replace the optical drive, do the following:

Notes:

- Make sure the computer is turned off and all the cables disconnected from the computer before you replace the optical drive.
- Make sure the computer display is closed to avoid being damaged.
- Remove the keyboard. For details, see "Replacing the keyboard" on page 34.
- 2 Remove the screw shown in the illustration 1. Gently pull the optical drive out from its cavity 2.



3 Insert a new optical drive and tighten the screw to secure the drive.

The following table provides a list of CRUs for your computer, and informs you of where to find replacement instructions.

Self-service CRUs

	Safety, Warranty, and Setup Guide	User Guide
AC power adapter	×	
Power cord	×	
Bottom access doors		×
Memory		×
Hard disk drive		×

Optional-service CRUs

	Safety, Warranty, and Setup Guide	User Guide
Keyboard		×
Optical drive		×

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