8 Remove the screws and detach the metal frame from the hard disk drive.

9 Attach the metal frame to a new hard disk drive; then tighten the screws.

10 Put the hard disk drive gently into the hard disk drive bay with the tab facing upwards and the connectors facing each other; then push it firmly into space.

11 Reinstall the cover of Wireless LAN/Hard Disk Drive(HDD) compartment.

12 Reinstall the screws.

13 Reinstall the battery pack.

14 Turn the computer over again. Connect the AC adapter and the cables to the computer pack.

Chapter 3. Upgrading and Replacing Devices

Replacing memory

Increasing memory capacity is an effective way to make programs run faster. You can increase the amount of memory in your computer by replacing a double data rate (DDR) 2 synchronous dynamic random access memory (DRAM) unbuffered small outline dual inline memory module (SO-DIMM), available as an option, in the memory slot of your computer. SO-DIMMs with different capacities are available.

Note: Use only the memory types supported by your computer. If you incorrectly install the optional memory or install an unsupported memory type, a warning beep will sound when you try to start the computer.

To install an SO-DIMM, do the following:

① Touch a metal table or a grounded metal object to reduce any static electricity in your body, which could damage the SO-DIMM. Do not touch the contact edge of the SO-DIMM.

② Turn off the computer; then disconnect the AC adapter and all cables from the computer.

③ Close the computer display, and turn the computer over.

④ Remove the battery pack.

5 Remove the Memory (RAM) compartment cover.

a. Remove the screws that secure the compartment cover **1**.

b. Remove the compartment cover **2**.
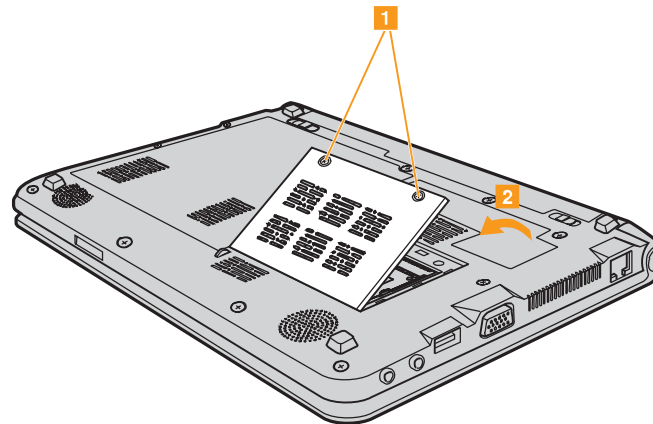
6 Pressing out on the latches on both edges of the socket at the same time and remove the SO-DIMM. Be sure to save the old SO-DIMM for future use.

7 Insert the notched end of the DIMM into the socket.

Press the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and does not move easily.
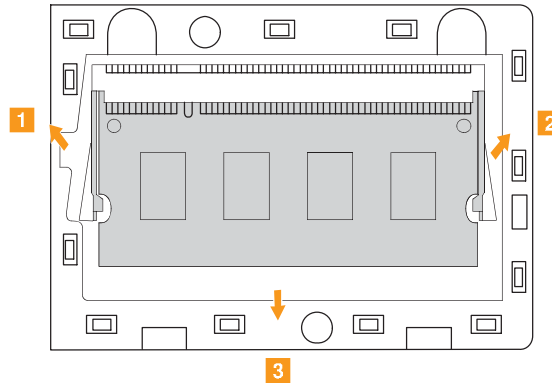
8 Reinstall the thermal slot cover.

9 Reinstall the battery.

10 Turn the computer over, and reconnect the AC adapter and the cables to the computer.

To make sure that the SO-DIMM is installed correctly, do as follows:

1 Turn the computer on.

2 Hold F2 during startup, and the **BIOS setup utility** screen opens. The **System Memory** item shows the total amount of memory installed in your computer.

Chapter 3. Upgrading and Replacing Devices

The following table provides a list of CRUs (Customer Replaceable Units) for your computer and tells where to find the replacement instructions.

	Setup Poster	Supple-ment	Online Hardware Main-tenance Manual	Online Video
Self-service CRUs				
AC adapter	X			
Power cord for AC adapter	X			
Battery	X	X		X
Bottom access doors		X	X	X
Hard disk drive		X	X	X
Memory		X	X	X
Optical drive		X	X	X
Optional-service CRUs				
PCI Express Mini Card for wireless LAN			X	X

Chapter 4. Using the Computer Network

A computer network is a collection of interconnected computers and devices, which allows the connected computers to communicate with each other to share resources and information.

As a global network, the Internet connects computers worldwide providing service as E-mails, information search, electronic commerce, web browse and entertainment.

You can connect the computer to the Internet in the following ways:
Ethernet: uses physical wiring to connect.
Wireless network technology: connect without wiring.

Ethernet connection

Ethernet connection is a reliable and safe way to connect the computer to the Internet. Generally, these two accessing methods are widely used.
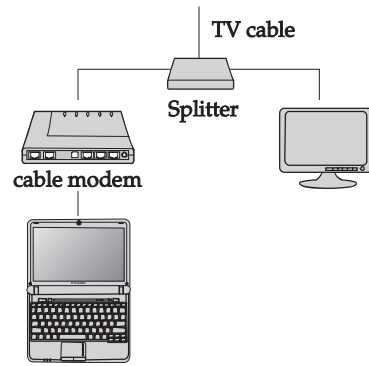
Cable	Cable Internet service uses a cable modem connected to the residential cable TV line.
DSL	DSL is a family of related technologies that bring high-speed network access to homes and small businesses over ordinary telephone lines.

Cable boasts faster speed than DSL in theory, while DSL is popular with a better reliability.
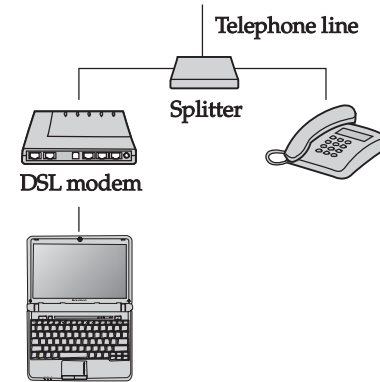
■ **Hardware connection:**

Cable   **DSL**

■ **Software configuration**

Ask your Internet Service Provider (ISP) to configure your computer.

Wireless network connection

Wireless connection provides a mobile access to the Internet, allowing you to stay online anywhere the wireless signal covers.
Dividing by the signal scale, you can connect your computer to the Internet wirelessly by the following two methods.

Wi-Fi WLAN	Wi-Fi WLAN covers a small physical area, like a home, office, or small group of buildings. An access point (ex. wireless router) is necessary for the connection.
3G WWAN	The 3G WWAN also known as a Mobile Broadband network provides Internet access to computers, cell phones and other devices over a large geographic area. Mobile networks are used for data transmission, and access is usually provided by a mobile network operator. A 3G WWAN SIM card is necessary for the connection.

Notes:
- Various standards are in use by mobile operators to provide Mobile Broadband service. Depending on the model, your Mobile Broadband module may support one or more of the following standards:
  - GSM (Global System for Mobile Communications)
  - TD-SCDMA (Time Division-Synchronous Code Division Multiple Access)
  - SCDMA (Synchronous Code Division Multiple Access)
  - EV-DO (Evolution Data Optimized)
  - HSPA (High Speed Packet Access)
- Mobile Broadband is a subscription service. Refer to your local mobile network operator for availability, cost and other information.

■ **Getting started with Mobile Broadband**

Before getting started with Mobile Broadband, you first need to choose a mobile network operator and make sure you are in the coverage area of the network. After that, you also need:

• To activate Mobile Broadband service through your local mobile network operator. You will get a Subscriber Identity Module (SIM) card after activation. For instructions on inserting the SIM card, refer to the "Inserting the SIM card" on page 46.

Note: A SIM card is a type of smart card used by mobile network operators to identify their service subscribers on the mobile network. You will get the SIM card from your mobile network operator after you have activated the Mobile Broadband service.

• A connection management utility to connect/disconnect to your Mobile Broadband network.

Note: In general, your mobile service provider provides this utility.

Chapter 4. Using the Computer Network

Inserting the SIM card

To insert the SIM card:

❶ Turn off the computer; then disconnect the AC adapter and all cables from the computer.

❷ Close the computer display and turn it over.

❸ Remove the battery.

❹ Insert the SIM card to the card slot until it clicks into place as shown in the drawing.

❖ **Note:**

Insert the SIM card in the direction shown below. Inserting the SIM card in the wrong direction may damage the SIM card slot.

❺ Put the battery back in place, turn the computer over again, and reconnect the cables.

Chapter 4. Using the Computer Network

Notes:
- Never insert or remove the SIM card while the computer is on. Doing so may cause permanent damage to the SIM card as well as the SIM card reader.
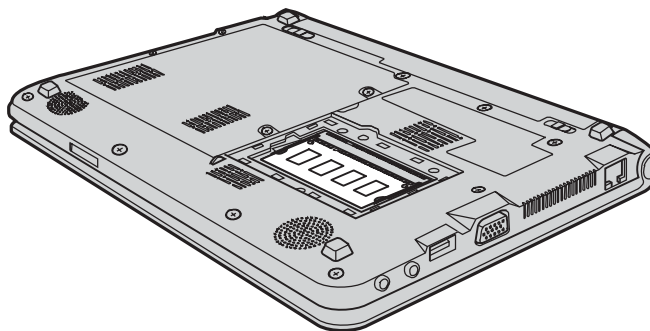- Be sure to lock the card holder when the SIM card is inserted.

Removing the SIM card

To remove the SIM card:

① Turn off the computer; then disconnect the AC adapter and all cables from the computer.

② Close the computer display and turn it over.

③ Remove the battery.

Chapter 4. Using the Computer Network

④ Push the SIM card in until you hear a click, and then pull the SIM card out.
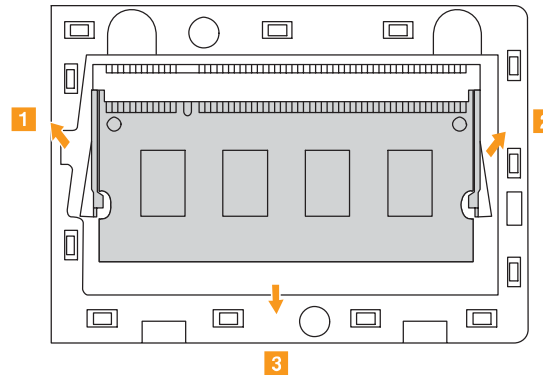
⑤ Put the battery back in place, turn the computer over again, and reconnect the cables.

Note: Be sure to lock the card holder when the SIM card is removed.

Hardware connection:

Wi-Fi WLAM   **3G WWAN**

ISP

modem

access point

- **Software configuration**

Ask your Internet Service Provider (ISP) to configure your computer.

Chapter 5. OneKey Rescue System

OneKey Rescue System

■ **Introduction**

Lenovo OneKey Recovery is an easy-to-use application that can be used to back up the data on your system partition (C drive) and then easily restored when required. You can run Lenovo OneKey Recovery under both Windows and WinPE.

■ **Important Notes**

▪ In order to utilize the features of OneKey Recovery, your hard disk already includes a hidden partition by default to store a system mirror image file and OneKey Recovery program files. This default partition is hidden for security reasons and is the reason the available disk space is less than it claims. The exact available hard disk space depends on the file size of the mirror image file (based on the size of operating system and pre-installed software.)

▪ You can use Restore to Factory Default feature to restore the system partition (C drive) back to the factory default, i.e. the state your computer was when you purchased it. However, once you restore to this status, you will not be able to restore the system to another previously backed up state. Therefore, make sure you back up your critical data on the system partition (C drive) to other media, such as a another disk partition, CD/DVD discs or removable storage devices.

■ **Using Lenovo OneKey Recovery in Windows**

In Windows, you can create a backup of an entire system partition, saving it your local hard disk. You can back up your data to a CD, DVD, network drive or other removable disk. In addition, you can also create Windows recovery disc(s) to boot and recover your system.

Create Full Backup

There are two backup types that can be created: full backup and incremental backup. Selecting Full backup backs up your system partition to a folder on the hard disk in order to recover it in the future. The program will save the backed up data to the default location. For example to D:\Lenovo\OneKey App\OneKey Recovery. You may also select another destination, such as removable storage devices, network drives or a CD/DVD.

If you choose to back up system partition to a disc (CD/DVD), the created discs can be used to recover your system to the current status.

We suggest you do the following before you create recovery discs:

▪ Use the latest version of your system's anti-virus software to scan your computer and make sure it is virus-free.

▪ Optimize your system, including scanning and defragmenting your hard disk drive.

Chapter 5. OneKey Rescue System

Notes:
- For the computers without an optical drive, an external optical drive is needed to backup or to create a recovery disc.
- A full backup needs considerable storage space, be sure to have enough CDs/DVDs in hand.
- The backup process takes a long time, connect the AC adapter to your computer.

Create Incremental Backup

An incremental backup is a backup of your data based on previous backed up fi le located in the default path. This backup includes different data than the full backup, such as application variations and user data.

Incremental backup can only be saved to the default path; it cannot be backed up to another location.

Create Recovery Disc

You can burn the backup image to a CD/DVD as recovery discs. The recovery discs can be used to boot up your computer automatically and restore your system back to previously backed up status. If your hard disk fails and you are unable to use Lenovo OneKey Recovery on your computer, you can use these discs to recover your system on a reformatted hard drive.

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Notes:
- Please make sure to create recovery discs, so that you can recover your system, even when replacing the hard drive.
- After the recovery discs are burned, please number them so that you can use them in order.
- When burning the recovery discs, please use good quality discs with to ensure the burning process and backed up data is complete and correct.

■ **Using Lenovo OneKey Recovery in WinPE**

When the operating system can not be loaded, you need to recover your system with OneKey Rescue System, which includes several applications to help you detect and remove viruses, and recover Windows system and data. You can press OneKey Rescue System key ⌒ to activate Lenovo OneKey Rescue when your PC is turned off. Within the program, you can restore your system partition to the original factory status or to a previously generated backup. You may also transfer critical data or documents to other storage devices. All these features make Lenovo OneKey Recovery an important utility to secure your data.

Restore of Factory Default

In order to save application files and the initial backed up files of the system, the hard disk in a Lenovo PC includes a hidden partition when it is shipped. If you need to restore the system to the point of your first boot up, just enter Lenovo OneKey Rescue System and run Restore to Factory Default . This will delete all the new data on the system partition

(C partition), which is not recoverable. Make sure to back up your critical data before you run this feature.

Restore from Backup

If you want to recover the system to a previous status, you just need to enter Lenovo OneKey Rescue, and select Restore from User's Backup. Select the appropriate image file or, if you have run incremental backup before, you can use the incremental file to restore your system.

The process above will remove all data on the current system partition (C partition), which is not recoverable. Please back up all important data before restoring to a previous backup.

Using Recovery Discs

When you replace a hard disk drive in your computer, you are unable to use the pre-installed Lenovo OneKey Recovery and OneKey Rescue. However, you can use the recovery discs that store your backed up data to restore your new hard drive to a previous backup status.

When you use the recovery discs to boot your computer, the system will enter system recovery user interface automatically. Please follow the prompt to insert the backup discs in order to complete the entire recovery process.

Chapter 5. OneKey Rescue System

Back Up My Data

Within the Lenovo OneKey Rescue System you can transfer your data from your computer's hard disk to other devices, so you may easily find it if your Windows system ever encountered a critical failure.

System Repair

When you use Lenovo OneKey Rescue System, the program detects whether Windows has been damaged. If the system kernel files are damaged, Lenovo OneKey Rescue System will prompt you to proceed with a system repair. The system will reboot after the repair process is complete. If there are no files damaged, Lenovo OneKey Rescue System starts normally.

- System repair only works for system data files. Using this feature will not affect your own data

Set and Manage User Password

You can set up your user password within Lenovo OneKey Rescue System to ensure other users cannot use the system recovery or Back Up My Data functions.

By default, the user password within the Lenovo OneKey Rescue System is blank and it is recommended that you immediately set a new password to ensure your system is protected.

Chapter 5. OneKey Rescue System

■ **Frequently Asked Questions (on OneKey Recovery)**

Glossary

Term	Definition
Restore to factory default	Restores the system partition (C drive) back to the factory initial status. However, once you do this, you will not be able to restore to a backed up state created after you began using your computer. Therefore, it is recommended that you back up your critical data on the system partition (C drive) before proceeding.
Full backup	A full backup is a backup of the entire system partition. You will need to perform a full back up before you can run incremental back up. The backed up data will be saved in the default location. You can also specify the location to another path.
Incremental backup	An incremental backup is a backup of your data based on previous backed up file, backing up only the new/different data. Incremental backup can save hard disk space and back up time. For ease of management, the incremental backup file can only be saved to the default location.
Create recovery disc	Burn the backed up system partition data to discs and create recoverable disc(s). This allows you to recover your current system status even if you replace your hard disk in the future.
Back up my data	Copies your data to other storage devices, such as a removable drive or a network server, so that you can retrieve the data easily under system failure.

Backing Up Your Data

Why can't I run full back up?

The possible causes are:

- *Case 1* : you are not currently using a Windows operating system (XP/Vista) .
- *Case 2* : there is not enough space to store the backed up data. You will need to free more hard disk space on your system partition (C drive).
- *Case 3* : if you are backing up your data to a CD/DVD, make sure you are using compatible burning devices.
- *Case 4* : if you are burning backed up files to CD/DVD, make sure the burning devices are compatible with the CD/DVD discs.

Why can't I run incremental back up?

The possible causes are:

- *Case 1* : you didn't run full backup in the default path. Please make sure you ran full back up in this path before runing incremental backup.
- *Case 2* : you didn't select the default path for incremental back up. Incremental backed up files can be only saved to the default path. Please do not specify a different location.

Chapter 5. OneKey Rescue System

- *Case 3* : the free disk space for the default location is insufficient. Please free more space on that hard drive.

What can I do if the back up process fails?

If you can start the back up feature without a problem, but it fails during the back up process, please try the following steps:

❶ Close other applications, then restart the backup process.

❷ Check if the destination media is damaged, try to select another path and then try again.

Recovering Your Data

Why can't I run full back up?

The possible causes are:

- *Case 1* : you are not currently using a Windows operating system (XP/Vista).
- *Case 2* : there is not enough space to store the backed up data. You will need to free more hard disk space on your system partition (C drive).
- *Case 3* : if you are backing up your data to a CD/DVD, make sure you are using compatible burning devices.
- *Case 4* : if you are burning backed up files to CD/DVD, make sure the burning devices are compatible with the CD/DVD discs.

Chapter 5. OneKey Rescue System

Why can't I run incremental back up?

The possible causes are:

- *Case 1* : you didn't run full backup in the default path. Please make sure you ran full back up in this path before runing incremental backup.
- *Case 2* : you didn't select the default path for incremental back up. Incremental backed up files can be only saved to the default path. Please do not specify a different location.
- *Case 3* : the free disk space for the default location is insufficient. Please free more space on that hard drive.

What can I do if the back up process fails?

If you can start the back up feature without a problem, but it fails during the back up process, please try the following steps:

❶ Close other applications, then restart the backup process.

❷ Check if the destination media is damaged, try to select another path and then try again.

Recovering Your Data

When do I need to use the Restore to Factory Default feature?

You can use this feature when your system fails or you need to re-install your operating system. This will restore your computer back to the initial status when you first booted up your computer after receiving it from the store. By doing this, the data on your system partition will be restored to the factory default. If there is critical data on your current partition, please back it up before you run this recovery feature.

Why can't I use the Restore to Factory Default feature?

If your system partition was modified, such as the partition size or the drive capacity of C was changed by another partition utility, you will not be able to use the Restore to Factory Default feature. Therefore, we suggest that you don't change the size of that partition to make sure the Restore to Factory Default feature is workable under any circumstance.

What can I do if the recovery process fails?

If you can start the recovery feature without a problem, but it fails during the recovery process, this may be caused by one of the following reasons:

- The backed up files were damaged
- The disc(s) were physically damaged
- Other unknown issues

Chapter 5. OneKey Rescue System

In this case, please select other backed up files and try to recover them. If it still doesn't work, you can use Restore to Factory Default feature to restore your system partition to factory default. Please note your data on system partition will be lost during this restore process.

Why can't I find the backed up files during recovery process?

In OneKey Rescue System, the disk partition structure is different from Windows system. Therefore you may not be able to find the backed up data in the Windows backup path. In this case, you can change to another disk partition and try to locate backed up data in the folders of other partitions, then continue to complete the recovery process.

Chapter 5. OneKey Rescue System

Using Recovery Disc(s)

How can I create the recovery discs for my current system?

You can use Create Full Backup feature in OneKey Recovery's Backup section, then choose back up to discs.

Why can't the recovery disc(s) recover the entire hard disk drive?

The recovery discs include the backed up fi les of the system partition (c partition), instead of the backed up fi les of entire hard disk drive. Therefore you can't recover the entire hard disk with the recovery discs you created.

Why can't I use the recovery disc(s)?

- When you create recovery discs, please use reliable discs, or the backed up data may be damaged.
- When you use the recovery discs, please follow the instructions to insert backup discs.

Back Up My Data Feature

When do I need to use the Back Up My Data feature?

When your system fails or is unable to boot up, you can use Back Up My Data feature to retrieve the data you need immediately from your PC.

Chapter 5. OneKey Rescue System

Others

How do I access the Lenovo OneKey Rescue System?

You can press OneKey Rescue System key ⤴ to activate Lenovo OneKey Rescue when your PC is turned off. You cannot only use system recovery features, but also use other applications like system recovery, virus detection and cleaning to protect your computer.

Why can't System Repair fix system partition data completely?

System Repair feature can only fix important system kernel files to ensure the system can boot up normally. It will not repair all data files.

Why does System Repair always prompt me that system kernel files need to be repaired when using OneKey Rescue System?

Please make sure you have installed Windows Vista SP1 or Windows XP SP2 on your system.

Chapter 6. Troubleshooting

■■ Frequently Asked Questions ─────────────

This section lists frequently asked questions and tells where you can find detailed answers. For details about each publication included in the package with your computer, see Lenovo IdeaPad S10-2 Setup Poster.

What safety precautions should I follow when using my computer?

See "Appendix B. Use, and Care Information" for detailed information about safety.

How can I prevent problems with my computer?

See "Appendix B. Use, and Care Information" on page 80 of this guide. More tips can be found in Chapter 1 and 2.

What are the main hardware features of my new computer?

More information can be found in Chapter 1 and 2.

Where can I find the detailed specifications for my computer?

See http://consumersupport.lenovo.com.

I need to upgrade a device *or* I need to replace one of the following: the hard disk drive, memory, or the keyboard.

See "Appendix D. Customer Replaceable Units (CRUs)" on page 106 of this guide.

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Chapter 6. Troubleshooting

My computer is not operating properly.

Study the relevant information in Chapter 2.

Where are the recovery discs?

Your computer did not come with a recovery disc. For an explanation of the alternative recovery methods offered by Lenovo, see "Chapter 5. OneKey Rescue System" on page 50.

How can I contact the Customer Support Center?

See "Appendix A. Getting Help and Service" on page 73 of this Guide.

Where can I find warranty information?

For the warranty applicable to your computer, including the warranty period and type of warranty service, see "Appendix C. Lenovo Limited Warranty" on page 93.

How can I install the device drivers?

A compatible device driver is a requirement to ensure correct operation and performance of each component in your computer. If your computer is pre-installed with an operating system, Lenovo provides all drivers that you need in your hard disk.

Chapter 6. Troubleshooting

Troubleshooting

If you do not find your problem here, see Chapter 2. The following section only describes problems that might prevent you from accessing the comprehensive information in Chapter 2.

Display problems

When I turn on the computer, nothing appears on the screen.	• If the screen is blank, make sure that:
	  - The battery is installed correctly.
	  - The AC 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.)
	  - The memory is installed correctly.
	• If these items are properly set, 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 the original factory contents using OneKey Recovery. If you still see only the cursor on the screen, have the computer serviced.

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Chapter 6. Troubleshooting

My screen goes blank while the computer is on.

- Your screen saver or power management may be enabled. Do one of the following to exit from the screen saver or to resume from standby or hibernation mode:
  - Touch the touch pad.
  - Press any key on the keyboard.
  - Press the **power** button.

Note: If you are using an external monitor, see "Computer screen problems" on page 37.

A Password problem

I forgot my password.

- If you forgot your user password, you must take your computer to a Lenovo authorized servicer or a marketing representative to have the password canceled.
- If you forgot your HDD password, a Lenovo authorized servicer cannot reset your password or recover data from the hard disk. You must take your computer to a Lenovo authorized servicer or a marketing representative to have the hard disk drive replaced. Proof of purchase is required, and a fee will be charged for parts and service.
- If you forget your supervisor password, a Lenovo authorized servicer cannot reset your password. You must take your computer to a Lenovo authorized servicer or a marketing representative to have the system board replaced. Proof of purchase is required, and a fee will be charged for parts and service.

Chapter 6. Troubleshooting

Keyboard problems

A number appears when you enter a letter.	• The numeric lock function is on. To disable it, press **Fn + Insert**.
All or some of the keys on the external numeric keypad do not work.	• Make sure that the external numeric keypad is correctly connected to the computer.

Standby or hibernation problems

The computer enters standby mode unexpectedly.	• If the processor overheats, the computer automatically enters standby mode to allow the computer to cool and to protect the processor and other internal components. Check the settings for standby mode.
The computer enters standby mode immediately after Power-on self-test (POST).	• Make sure that: - The battery is charged. - The operating temperature is within the acceptable range. See "Appendix B. Use, and Care Information" on page 80.

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

The critical low-battery error message appears, and the computer immediately turns off.	• The battery power is getting low. Connect the AC adapter to the computer, or replace the battery with a fully charged one.

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Chapter 6. Troubleshooting

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

- If the computer does not return from standby mode, it may have entered hibernation mode automatically because the battery is depleted. Check the standby indicator.
- If your computer is in standby mode connect the AC adapter to the computer, then press any key or the **power** button.
- If your computer is in hibernation mode or power-off state. Connect the AC adapter to the computer, then press the **power** button to resume operation.

Note: If the system still does not return from standby 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 4 seconds or more. If the computer is still not reset, remove the AC adapter and the battery.

Chapter 6. Troubleshooting

Computer screen problems

The screen is blank.	• Do the following:
	  - If you are using the AC adapter, or using the battery, and the battery status indicator is on, press **Fn** + up arrow to make the screen brighter.
	  - If the Power indicator is in blinking, press the **power** button to resume from the standby mode.
	  - If the problem persist, follow the Solution in the following problem "The screen is unreadable or distorted."
	• Make sure that:
	  - The display device driver is installed correctly.
	  - The screen resolution and color quality are correctly set.
	  - The monitor type is correct.

Incorrect characters appear on the screen.	• Did you install the operating system or application program correctly? If they are installed and configured correctly, have the computer serviced.

A message, "Unable to create overlay window," appears when you try to start DVD playback.
-or-
You get poor or no playback of video, DVD or game applications.
	• Do either of the following:
	  - If you are using 32-bit color mode, change the color depth to 16-bit mode.
	  - If you are using a desktop resolution over the optimum, reduce the desktop size and the color depth.

Chapter 6. Troubleshooting

Sound problems

No sound can be heard from the speaker even when the volume is turned up.	• Make sure that: - The Mute function is off. - The headphone jack is not used. - Speakers is selected as a playback device.

Battery problems

Your computer shuts down before the battery status indicator shows empty. *-or-* Your computer operates after the battery status indicator shows empty.	• Discharge and recharge the battery.
The operating time for a fully charged battery is short.	• For details, see "Handling the battery" in Chapter 2.
The computer does not operate with a fully charged battery.	• The surge protector in the battery might be active. Turn off the computer for one minute to reset the protector; then turn on the computer again.
The battery does not charge.	• For details, see "Handling the battery" in Chapter 2.

A hard disk drive problem

The hard disk drive does not work.	• In the **Boot** menu in **BIOS Setup Utility,** make sure that the hard disk drive is included in the **Boot priority order** correctly.

Chapter 6. Troubleshooting

A startup problem	
The Microsoft® Windows operating system does not start.	• Use the OneKey Recovery to help solve or identify your problem. For details about OneKey Recovery, see "Chapter 5. OneKey Rescue System" on page 50.

Other problems	
Your computer does not respond.	• To turn off your computer, press and hold the **power** button for 4 seconds or more. If the computer still does not respond, remove the AC adapter and the battery. • Your computer might lock when it enters standby mode during a communication operation. Disable the standby timer when you are working on the network.
The computer does not start from a device you want.	• See the **Boot** menu of the **BIOS Setup Utility**. Make sure that the **Boot priority order** in the **BIOS Setup Utility** is set so that the computer starts from the device you want. • Also make sure that the device from which the computer starts is enabled. In the **Boot** menu in the **BIOS Setup Utility**, make sure that the device is included in the **Boot priority order** list.
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 a high power consumption external devices such as USB ODD, use external device power adapter. Otherwise, the device may not be recognized, or system shut down may result.

Appendix A. Getting Help and Service

If you need help, service, technical assistance, or just want more information about Lenovo computers, you will find a wide variety of sources available from Lenovo to assist you. This section contains information about where to go for additional information about Lenovo computers, what to do if you experience a problem with your computer, and whom to call for service should it be necessary.

Microsoft Service Packs are the latest software source for Windows product updates. They are available by means of a Web download (connection charges may apply) or from a disc. For more specific information and links, go to the Microsoft Web site at http://www.microsoft.com . Lenovo offers Up and Running technical assistance with installation of, or questions related to, Service Packs for your Lenovo-preinstalled Microsoft Windows product.

Getting help on the Web

The Lenovo Web site on the World Wide Web has up-to-date information about Lenovo computers and support. The address for the Lenovo home page is http://consumersupport.lenovo.com.

You can find support information for your Lenovo IdeaPad™ computer at http://consumersupport.lenovo.com. Research this Web site to learn how to solve problems, find new ways to use your computer, and learn about options that can make working with your Lenovo computer even easier.

Calling the customer support center

If you have tried to correct the problem yourself and still need help, during the warranty period, you can get help and information by telephone through the Customer Support Center. The following services are available during the warranty period:

- Problem determination - Trained personnel are available to assist you with determining if you have a hardware problem and deciding what action is necessary to fix the problem.
- Lenovo hardware repair - If the problem is determined to be caused by Lenovo hardware under warranty, trained service personnel are available to provide the applicable level of service.

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- Engineering change management - Occasionally, there might be changes that are required after a product has been sold. Lenovo or your reseller, if authorized by Lenovo, will make selected Engineering Changes (ECs) available that apply to your hardware.

The following items are not covered:

- Replacement or use of parts not manufactured for or by Lenovo or non warranted parts
- Identification of software problem sources
- Configuration of BIOS as part of an installation or upgrade
- Changes, modifications, or upgrades to device drivers
- Installation and maintenance of network operating systems (NOS)
- Installation and maintenance of application programs

To determine if your Lenovo hardware product is under warranty and when the warranty expires, go to http://consumersupport.lenovo.com , and click **Warranty**, then follow the instructions on the screen.

Refer to your Lenovo hardware warranty for a full explanation of Lenovo warranty terms. Be sure to retain your proof of purchase to obtain warranty service.

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If possible, be near your computer when you make your call in case the technical assistance representative needs to help you resolve a computer problem. Please ensure that you have downloaded the most current drivers and system updates, and recorded information before you call. When calling for technical assistance, please have the following information available:

- Machine Type and Model
- Serial numbers of your computer, monitor, and other components, or your proof of purchase
- Description of the problem
- Hardware and software configuration information for your system
- The telephone numbers for your Customer Support Center location are located in "Appendix A. Getting Help and Service" on page 73.

Note: Telephone numbers are subject to change without notice. For the latest list of Customer Support Center telephone numbers and hours of operation, visit the Support Web site at http://consumersupport.lenovo.com. If the number for your country or region is not listed, contact your Lenovo reseller or Lenovo marketing representative.

■▫ Getting help around the world

If you travel with your computer or relocate it to a country where your Lenovo machine type is sold, your computer might be eligible for International Warranty Service, which automatically entitles you to obtain warranty service throughout the warranty period. Service will be performed by service providers authorized to perform warranty service.

Service methods and procedures vary by country, and some services might not be available in all countries. Service centers in certain countries might not be able to service all models of a particular machine type. In some countries, fees and restrictions might apply at the time of service.

To determine whether your computer is eligible for International Warranty Service and to view a list of the countries where service is available, go to http://consumersupport.lenovo.com, click **Warranty**, and follow the instructions on the screen.

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Lenovo warranty service telephone numbers

Warranty Service Telephone Numbers

The phone numbers provided below are correct as of the time of printing and are subject to change without notice. For the latest warranty service contact telephone number in a country please contact Lenovo, or your reseller in your country.

Singapore	800 6012 047
Malaysia	1800 18 2388
Thailand	1800 06 0087
Indonesia	001 803 0601 2003
Philippines	1800 111 00724
Vietnam	1800 1528

India Toll free
    Alternate No.
    SMS
	1800 113324
	011-26388288
	9900173324

P.R.China	400-810-8888
Hong Kong	(852) 2516-3919
Taiwan	(886) 0800-000-702
Macau	0800-689
United States	1-877-453-6686

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Canada	1-877-453-6686
Mexico	1-800-92536686
France	0826-536-686
South Africa	0861-536-686
Australia	1300 557 073
New Zealand	0800 446 833
Russia Toll free Alternate No.	8-800-700-7888 +7-(495) 662-7888
Ukraine	+38 044 458-38-70
the Republic of Kazakhstan	+7 (727) 2971150 +7 (727) 2971160
Poland	0800-702-062
Turkey	Refer to http://consumersupport.lenovo.com/tr

Additionally, you can find support information, and updates, including service phone numbers for unlisted countries on the Lenovo Web site located at: http://consumersupport.lenovo.com.

Appendix B. Use, and Care Information

Caring your computer

Though your computer is designed to function reliably in normal work environments, you need to use common sense in handling it. By following these important tips, you will get the most use and enjoyment out of your computer.

■ **Be careful about where and how you work.**

- Do not eat or smoke over your keyboard. Particles that fall into your keyboard can cause damage.
- Store packing materials safely out of the reach of children to prevent the risk of suffocation from plastic bags.
- Keep your computer away from magnets, activated cellular phones, electrical appliances, or speakers (within 13 cm or 5 in).
- Avoid subjecting your computer to extreme temperatures (below 5°C/41°F or above 35°C/95°F).
- Some appliances, such as certain portable desktop fans or air purifiers, can produce negative ions. If a computer is close to such an appliance, and is exposed for an extended time to air containing negative ions, it may become electrostatically charged. Such a charge may be discharged through your hands when you touch the keyboard or other parts of the computer, or through connectors on I/O devices connected to it. Even though this kind of electrostatic discharge (ESD) is the opposite of a

Appendix B. Use, and Care Information

discharge from your body or clothing to the computer, it poses the same risk of a computer malfunction.

Your computer is designed and manufactured to minimize any effects of electrostatic charge. An electrostatic charge above a certain limit, however, can increase the risk of ESD. Therefore, when using the computer close to an appliance that can produce negative ions, give special attention to the following:

- Avoid directly exposing your computer to the air from an appliance that can produce negative ions.
- Keep your computer and peripherals as far as possible from such an appliance.
- Wherever possible, ground your computer to facilitate safe electrostatic discharge.

■ **Notice of static-electricity**

When you handle options or CRUs, or perform any work inside the computer, take the following precautions to avoid static-electricity damage:

- Limit your movement. Movement can cause static electricity to build up around you.
- Always handle components carefully. Handle adapters, memory modules, and other circuit boards by the edges. Never touch exposed circuitry.
- Prevent others from touching components.

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- When you install a static-sensitive option or CRU, touch the static-protective package containing the part to a metal expansion-slot cover or other unpainted metal surface on the computer for at least two seconds. This reduces static electricity in the package and your body.

- Whenever possible, remove the static-sensitive part from the static-protective packaging and install the part without setting it down. When this is not possible, place the static-protective packaging on a smooth, level surface and place the part on it.

- Do not place the part on the computer cover or other metal surface.

■ **Be gentle with your computer**

- Avoid placing any objects (including paper) between the display and the keyboard or under the keyboard.

- Do not drop, bump, scratch, twist, hit, vibrate, push, or place heavy objects on your computer, display, or external devices.

- Avoid turning the display beyond 135°.

■ **Carry your computer properly**

- Before moving your computer, be sure to remove any media, turn off attached devices, and disconnect cords and cables.

- Be sure your computer is in standby or hibernation mode, or turned off, before moving it. This will prevent damage to the hard disk drive and data loss.

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- When picking up your open computer, hold it by the bottom. Do not pick up or hold your computer by the display.
- Use a quality carrying case that provides adequate cushion and protection. Do not pack your computer in a tightly packed suitcase or bag.

■ **For outdoor use**

- Backup your critical data before you take your computer outdoors.
- Ensure that the battery is full.
- Be sure to turn off the power and close the LCD well.
- When you leave the computer in your car, place it on the back seat to avoid being insolated.
- Carry the AC adapter and power cord with the computer.

■ **Handle storage media and drives properly**

- If your computer comes with an optical drive, do not touch the surface of a disc or the lens on the tray.
- Wait until you hear the CD or DVD click into the center pivot of an optical drive before closing the tray.
- When installing your hard disk, follow the instructions shipped with your hardware, and apply pressure only where needed on the device.

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■ **Data safety**

- Do not delete unknown files or change the name of files or directories that were not created by you; otherwise, your computer software might fail to work.
- Be aware that accessing network resources can leave your computer vulnerable to computer viruses, hackers, spyware, and other malicious activities that might damage your computer, software, or data.
- It is your responsibility to ensure that you have adequate protection in the form of firewalls, antivirus software, and anti-spyware software and keep this software up to date.

■ **Take care in setting passwords**

- Remember your passwords. If you forget a supervisor or hard disk password, Lenovo authorized service providers will not reset it, and you might have to replace your system board or hard disk drive.

■ **Other important tips**

- Do not put the battery pack in trash that is disposed of in landfills. When disposing of the battery, comply with local ordinances or regulations and your company's safety standards.
- Your computer might have both an Ethernet connector and a modem connector. If so, be sure to connect your communication cable to the correct one, so your connector is not damaged.

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- Register your Lenovo products with Lenovo (refer to the Web page: http://consumersupport.lenovo.com). This can help authorities return your computer to you if it is lost or stolen. Registering your computer also enables Lenovo to notify you about possible technical information and upgrades.

- Only an authorized Lenovo repair technician should disassemble and repair your computer.

- Do not modify or tape the latches to keep the display open or closed.

- Take care not to turn your computer over while the AC adapter is plugged in. This could break the adapter plug.

- Turn off your computer if you are replacing a device, or else verify that the device is warm- or hot-swappable.

- Before you install any of the following devices, touch a metal table or a grounded metal object. This action reduces any static electricity from your body. The static electricity could damage the device.
  - ExpressCard
  - Memory Card, such as SD Card, Memory Stick, MultiMediaCard, xD-Picture Card, and Memory Stick Pro card.
  - Memory module

- When transferring data to or from a Flash Media Card, such as an SD card, do not put your computer in standby or hibernation mode before the data transfer is complete. To do so might cause damage to your data.

Appendix B. Use, and Care Information

Accessibility and comfort

■ Ergonomic information

Working in the virtual office may mean adapting to frequent changes in your environment. Following some simple rules will make things easier and bring you the maximum benefits of your computer. Keeping in mind such basics as good lighting and proper seating, for example, can help you improve your performance and achieve greater comfort.

Note: This example shows someone in a conventional setting. Even if you work in a casual, less conventional setting, many of the tips in this section still apply. Develop good habits, and they will serve you well.