

# Lenovo 3000 N500

## Supplement for User Guide

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## ■ ■ Using PC-Doctor

### ■ Diagnosing problems

If you have a problem with your computer, you can test it by using PC-Doctor® for Windows.

To run PC-Doctor for Windows, do as follows:

- ❶ Click **Start**.
- ❷ Move the pointer to **All Programs** and then to **PC-Doctor for Windows**.
- ❸ Click **PC-Doctor for Windows**.

For more information about PC-Doctor for Windows, see the Help for the program.

#### ⦿ **Attention:**

- If you need help or further information about the problem, choose any of the following:
  - Lenovo Troubleshooting Center.
  - Update System Drivers.
  - System Information
- Running any tests may take up to several minutes or longer. Make sure you have time to run the entire test; do not interrupt the test while it is running.

When preparing to contact the Customer Support Center, be sure to print the test log so that you can rapidly provide information to the help technician.

## ■ Diagnosing problems using PC-Doctor from the service partition

By using PC-Doctor from the Rescue and Recovery workspace in the service partition of the hard disk drive, you can diagnose your system without starting up the operating system.

To run PC-Doctor, do as follows:

- 1 Turn off the computer, and then turn it on again.
- 2 When the Lenovo logo comes up, immediately press the Lenovo Care button, F11, or Enter key. The Rescue and Recovery workspace opens.
- 3 Click **Launch advanced Rescue and Recovery**.
- 4 Click **Diagnose hardware**.

For more information about PC-Doctor, see the Help for the program.

## ■ ■ Using Rescue and Recovery

### ■ Introducing Rescue and Recovery

If Windows is not running properly, use the Rescue and Recovery workspace to help solve or identify your problem.

- ❶ Turn off the computer, and then turn it on again.
- ❷ When the Lenovo logo comes up, immediately press the Lenovo Care button, F11, or Enter key.
- ❸ After the Rescue and Recovery workspace opens, you can do the following:
  - Rescue and Restore your files, folders, or backups.
  - Configure your system settings and passwords.
  - Communicate using the Internet and link to the support site.
  - Troubleshoot and diagnose problems using diagnostics.

### ■ Restoring the factory contents

The complete backup of all the files and programs that Lenovo preinstalled on your computer may have shipped on recovery discs with your computer or resides in a hidden protected area, or partition, of the hard disk. Although hidden, the backups in the partition consume the drive space. Therefore, when checking the capacity of your hard disk according to Windows, you might note that the total capacity of the storage drive appears to be smaller than anticipated. This discrepancy is explained by “Explanation of Hard Disk Capacity” in the *User Guide*.

The Product Recovery Program contained within this area enables you to restore the complete contents of your hard disk to the same state as it was when originally shipped from the factory.

If you are using the recovery discs that are shipped with your computer, the Product Recovery Program will be restored to your computer in addition to all other content originally shipped from the factory. This will take up additional capacity on your hard disk if your computer did not initially ship with the Product Recovery Program.

● **Attention:**

- All files on the primary storage drive partition (usually drive C) will be deleted in the recovery process. However, before any data is overwritten, you will be given the opportunity to save one or more files to other media.
- If your optical drive is not attached to your Lenovo computer during recovery, DVD software and CD-recording software will not be installed. To ensure that they will be installed correctly, install the optical drive before performing a recovery operation.
- Recovery takes several hours. The length of time depends on the method you use. If you use recovery discs which you have created or purchased, recovery takes at least five hours.

**Before restoring the system, initialize the settings of the BIOS Setup Utility:**

- ❶ Enter BIOS Setup Utility.
- ❷ Press F9 to restore the default system settings. Select **Yes** and press **Enter**.
- ❸ Press F10 to save the system settings. Select **Yes** and press **Enter**. The computer will restart.

**Restoring the factory contents from the service partition**

- ❶ If possible, save all your files and shut down your operating system.
- ❷ Turn off the computer, and then turn it on again.
- ❸ When the Lenovo logo comes up, immediately press the Lenovo Care button, F11, or Enter key. The Rescue and Recovery workspace opens.
- ❹ Click **Full Restore** and follow the instructions on the screen.

**Restoring the factory contents using the recovery discs**

If a set of recovery discs is enclosed with your computer, or you have created or purchased recovery discs, you can restore the factory contents by using the discs in the following procedure:

- ❶ Make sure that in the BIOS Setup Utility the startup sequence is set so that the system starts up from the recovery discs.
- ❷ Insert the Rescue and Recovery disc into the DVD drive.

- 3 Restart the computer. After a short wait, the Rescue and Recovery workspace opens.
- 4 Click **Full Restore** and follow the instructions on the screen.

❖ **Notes:**

- To boot from the recovery disk, select Boot menu from the BIOS Setup Utility, press F6 after selecting your optical drive until the optical drive to be the first item in the Boot priority order.
- To enter Setup Utility, hold F1 key during startup.

🔔 **Important:**

F2 key to activate BIOS as instructed in *User Guide* is incorrect. F1 key is the only key to activate BIOS.

■ **Recovering data**

If you performed a backup operation using the Rescue and Recovery program, you also have one or more backups stored that reflect the contents of the hard disk as it existed at various points in time. These backups might be stored on your hard disk, or a network drive, or on removable media, depending on the options you selected during the backup operation.

You can use either the Rescue and Recovery program or the Rescue and Recovery workspace to restore the contents of the hard disk to an earlier state using any of the stored backups. The Rescue and Recovery workspace runs independently of the Windows operating system. Therefore, you can start it by pressing the Lenovo Care button, F11, or Enter key when prompted during startup.

After the Rescue and Recovery workspace opens you can perform a recovery operation, even if you are unable to start Windows.



## ■ ■ Upgrading and replacing devices

### ■ Replacing the battery

#### 🔔 Important:

Read Chapter 6. “Safety, use, and Care Information” in *User Guide* before replacing the battery.

#### \* Danger:

Use only the battery specified in the parts list for your computer. Any other battery could ignite or explode.

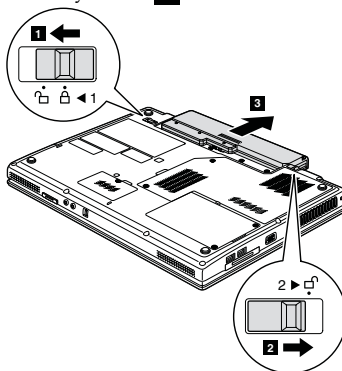
### To replace the battery

- ❶ **Turn off the computer, or enter hibernation mode.** Then disconnect the AC adapter and all cables from the computer.

❖ **Note:**

If you are using a PC Card, the computer might not be able to enter hibernation mode. If this happens, turn off the computer.

- ❷ Close the computer display, and turn the computer over.
- ❸ Unlock the manual battery latch **❶**. Holding the spring-loaded battery latch in the unlocked position **❷**, remove the battery pack in the direction shown by arrow **❸**.



- 4 Install a fully charged battery.
- 5 Slide the manual battery latch to the locked position.
- 6 Turn the computer over again. Connect the AC adapter and the cables to the computer again.

## ■ Upgrading the hard disk drive

### ➤ Important:

Read Chapter 6. "Safety, use, and Care Information" in *User Guide* before 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 if you upgrade it or have it repaired. The connectors and bay of the hard disk drive were not designed for frequent changes, or drive swapping.
- The Rescue and Recovery workspace and the Product Recovery program are not included on an optional hard disk drive.

⦿ **Attention:**

**Handling a hard disk drive**

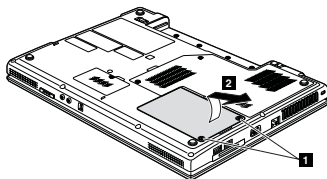
- Do not drop the drive or subject it to physical shocks. Put the drive on a material, such as soft cloth, that absorbs the physical shock.
- Do not apply pressure to the cover of the drive.
- Do not touch the connector.

The 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 drive while the system is operating, in sleep mode, or in hibernation mode.

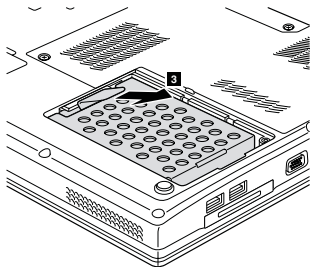
To replace the hard disk drive, do the following:

- ❶ Turn off the computer; then disconnect the AC adapter and all cables from the computer.
- ❷ Close the computer display, and then turn the computer over.
- ❸ Remove the battery.
- ❹ Remove the screws that secure the hard disk drive slot cover **1**.

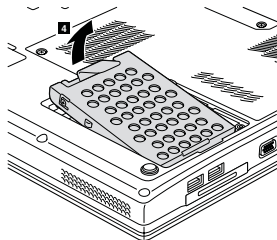
- 5 Remove the cover **2**.



- 6 Pull the tab in the direction shown by arrow **3**.



- 7 Take out the hard disk drive secured in a metal frame.



- 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 the hard disk drive slot.
- 12 Reinstall the screws.
- 13 Reinstall the battery.
- 14 Turn the computer over again. Connect the AC adapter and the cables to the computer.

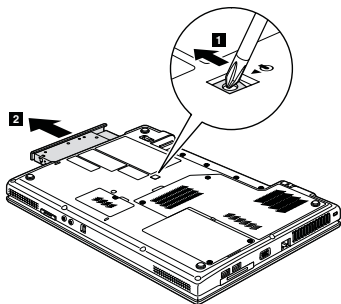
## ■ Removing the optical drive

### 🔄 Important:

Read Chapter 6. “Safety, use, and Care Information” in *User Guide* before removing the optical drive.

To remove the optical drive, do the following:

- ➊ Remove the screw shown in the figure **1**.
- ➋ Gently pull the optical drive out **2**.



## ■ Replacing memory

### 🔔 Important:

Read Chapter 6. “Safety, use, and Care Information” in *User Guide* before 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 installing 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:

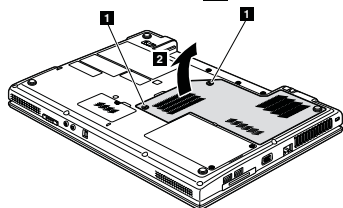
Use only the memory types supported by your computer. If you incorrectly install the optional memory or install an unsupported memory type, a warning beep will sound when you try to start the computer.

To install an SO-DIMM, do the following:

- ❶ Touch a metal table or a grounded metal object. This action reduces any static electricity in your body, which could damage the SO-DIMM. Do not touch the contact edge of the SO-DIMM.
- ❷ Turn off the computer; then disconnect the AC adapter and all cables from the computer.
- ❸ Close the computer display, and turn the computer over.



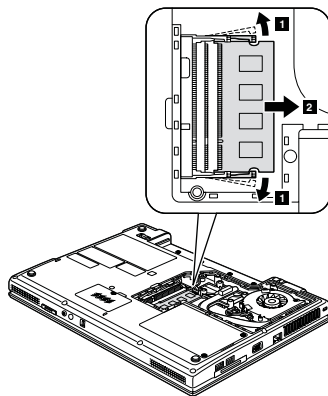
- 4 Remove the battery.
- 5 Remove the thermal slot cover.
  - a. Remove the screws that secure the thermal slot cover **1**.
  - b. Remove the thermal slot cover **2**.



- 6 If two SO-DIMMs are already installed in the memory slot, remove one of them to make room for the new one by pressing out on the latches on both edges of the socket at the same time. Be sure to save the old SO-DIMM for future use.

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

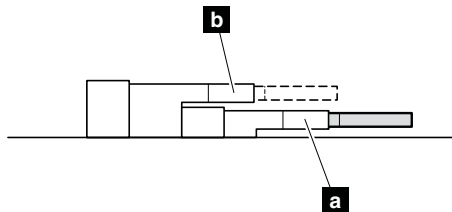
Press the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and does not move easily.



- 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.

❖ **Note:**

If only one DIMM is used on the computer you are servicing, the card must be installed in SLOT-0 (**a**: lower slot), but not in SLOT-1 (**b**: upper slot).



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

- ❶ Turn the computer on.
- ❷ Hold F1 key during startup, and the BIOS Setup Utility screen opens. The “Total Memory” item shows the total amount of memory installed in your computer.

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

	Setup Poster	Supplement	Online Hardware Maintenance 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

## ■ Warranty Information

Product or Machine Type	Country or Region of Purchase	Warranty Period	Type of Warranty Service
Notebook: 4233	Latin America	Parts and Labor - 1 year Battery pack - 1 year	1, 4
	Mexico		1, 3

### ❖ Note:

This warranty information supplements the one in the Appendix A Lenovo Limited Warranty of the Lenovo 3000 N500 User Guide.

If required, your Service Provider will provide repair or exchange service depending on the type of warranty service specified for your product and the available service. Scheduling of service will depend upon the time of your call, parts availability, and other factors.

A warranty period of three (3) years on parts and one (1) year on labor means that Lenovo will provide warranty service without charge for:

- parts and labor during the first year of the warranty period (or a longer period as required by law); and
- parts only, on an exchange basis, in the second and third years of the warranty period. Your Service Provider will charge you for any labor provided in performance of the repair or replacement in the second and third years of the warranty period.

## ■ ■ Lenovo Warranty Service Telephone Numbers

The phone numbers provided below are correct as of the time of printing and are subject to changes without notice.

For the latest warranty service contact telephone number in a country please contact Lenovo, or your reseller in your country. For the most current phone numbers, go to <http://www.lenovo.com/support/phone>.

Country or Region	Language	Telephone number	Hours of operation
Argentina	Spanish	0800-666-0011	9AM - 7PM Monday - Friday
Bolivia	Spanish	0800-10-0189	8AM - 6PM Monday - Friday
Chile	Spanish	800-361-213 or 188-800-442-488 Toll Free	9AM - 7PM Monday - Friday
Colombia	Spanish	1-800-912-3021	8AM - 6PM Monday - Friday
Honduras	Spanish	Tegucigalpa: 232-4222 San Pedro Sula: 552-2234	9AM - 6PM Monday - Friday
Mexico	Spanish	001-866-434-2080	8AM - 6PM Monday - Friday
Peru	Spanish	0-800-50-866	8AM - 6PM Monday - Friday
Uruguay	Spanish	000-411-005-6649	9AM - 7PM Monday - Friday
Venezuela	Spanish	0-800-100-2011	8AM - 6PM Monday - Friday



❖ **Note:**

The above list supplements the warranty telephone number list in the Appendix A Lenovo Limited Warranty of the Lenovo 3000 N500 User Guide

