



# IBM ThinkPad SuperDisk (LS-120) UltralimBay Drive

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*User's Guide*

OPTIONS  
*by IBM*

**Note:** If you are using this product in the United States, Canada, or Puerto Rico, be sure to read the information under Appendix B, “Warranty and Notices” on page 3-3 before using this information and the product it supports.

*For all other countries, the warranty terms and conditions applicable in the country of purchase are available from IBM or your reseller.*

### **First Edition (August 1998)**

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## ***Safety: Read First***

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## ***About This Book***

This manual contains information on the ThinkPad SuperDisk (LS-120) UltralimBay Drive. It is divided into the following parts:

**Part 1:** Quick Installation instructions, in the following languages:

- English
- German
- French
- Spanish
- Italian
- Brazilian Portuguese
- Japanese

**Part 2:** Product description, with detailed installation and usage instructions

**Part 3:** Help and service information, warranty, and notices

You can find information on how to get help, technical support, and warranty service in Appendix A, "Help and Service Information" on page 3-1.

**Note:** The illustrations in this manual might be slightly different from your hardware.

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## Part 1: Quick Installation Guide

### Installing the BIOS Upgrade

**Attention!**

**You must install the included BIOS upgrade *before* installing the SuperDisk drive. Use the original floppy drive included with your ThinkPad to install the BIOS, and follow these instructions.**

Prior to installing the ThinkPad SuperDisk (LS-120) UltralimBay Drive, you must check the level of the BIOS installed in your ThinkPad, to determine if you need the required System Program Service (BIOS) Diskette which is included with this option. This option will not work unless the proper level of BIOS is installed on your computer. To check the level of System BIOS currently in your ThinkPad, do the following.

1. Turn off your computer, and remove any diskette from the floppy drive.
2. Press and hold the **F1** key, then turn on the computer. Hold the F1 key down until the **Easy-Setup** menu appears. The BIOS date is shown on the Easy-Setup main screen.

If the BIOS date on your computer is more recent than the date on the BIOS diskette included with this option, you **do not** need to install the

update to your BIOS. If the date on the System Program Diskette is more recent than the date shown on the Easy-Setup main screen, then you need to install the BIOS upgrade. To do so:

1. Make sure you have an AC adapter and a charged battery pack. If your computer is attached to a docking station or port replicator, turn off your computer and detach it before updating the BIOS.
2. Firmly connect the AC adapter to the computer.
3. Insert the System Program Service Diskette into the original floppy diskette drive and turn on the computer.
4. A simple menu will appear. The first option on this menu will be **Read this first**. Choose that option, read through the instructions, then go back to the menu and choose the second option, **Update system program**.

**Attention!**

Do not turn off or suspend the computer until the update is complete. **IF YOU TURN OFF OR SUSPEND YOUR COMPUTER WHILE THE UPDATE IS IN PROGRESS, YOU CAN DAMAGE THE SYSTEM BOARD AND IT WILL HAVE TO BE REPLACED.**

## ***Installing the Device Driver for the SuperDisk Drive***

If your ThinkPad is running DOS, Windows 95 OSR0 or OSR1, you need a device driver in order to use the SuperDisk drive. Refer to "Locating and Installing Device Drivers" on page 2-3 for more information.

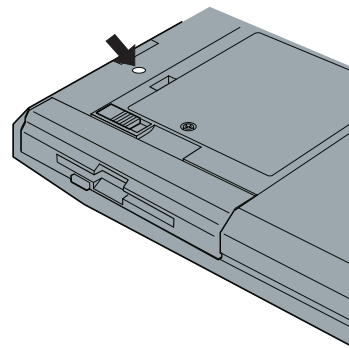
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To install the SuperDisk Drive, follow these instructions.

- 1** Turn off your computer, and remove the AC Adapter and cables; then turn the computer upside down.

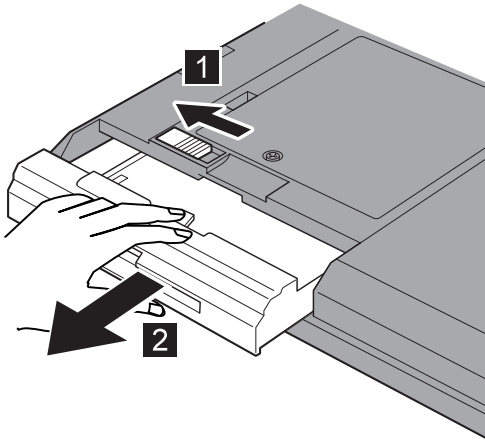
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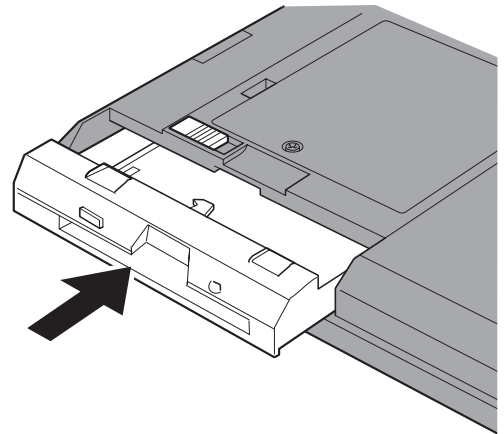




**2** Slide the UltralimBay device lock to the unlock position **1**; then remove the diskette drive **2**.

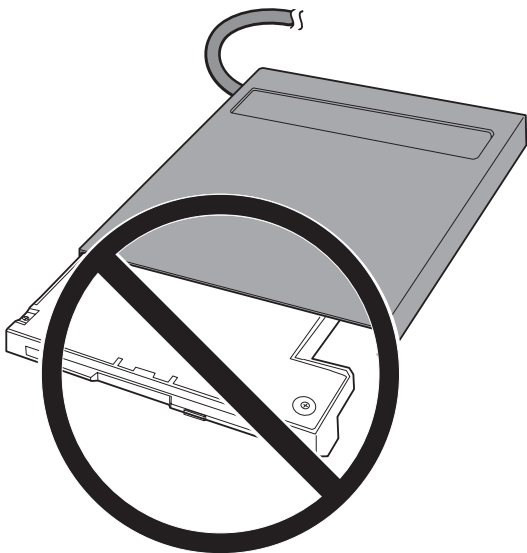


**3** Insert the SuperDisk Drive:



Your SuperDisk Drive is now installed and ready for use.

**ATTENTION:** The floppy diskette drive can be installed in an external enclosure, so you can use another device in the ThinkPad UltralimBay. **The SuperDisk drive is not compatible with this enclosure. If you try to insert the SuperDisk drive into the enclosure, you might damage the drive or the enclosure.**



## ***Quick Installation (German)***

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1. Make sure you have an AC adapter and a charged battery pack. If your computer is attached to a docking station or port replicator, turn off your computer and detach it before updating the BIOS.
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3. Insert the System Program Service Diskette into the original floppy diskette drive and turn on the computer.
4. A simple menu will appear. The first option on this menu will be **Read this first**. Choose that option, read through the instructions, then go back to the menu and choose the second option, **Update system program**.

### Attention!

Do not turn off or suspend the computer until the update is complete. **IF YOU TURN OFF OR SUSPEND YOUR COMPUTER WHILE THE UPDATE IS IN PROGRESS, YOU CAN DAMAGE THE SYSTEM BOARD AND IT WILL HAVE TO BE REPLACED.**

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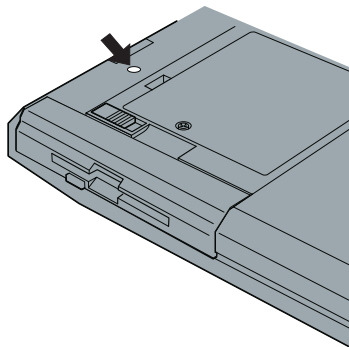
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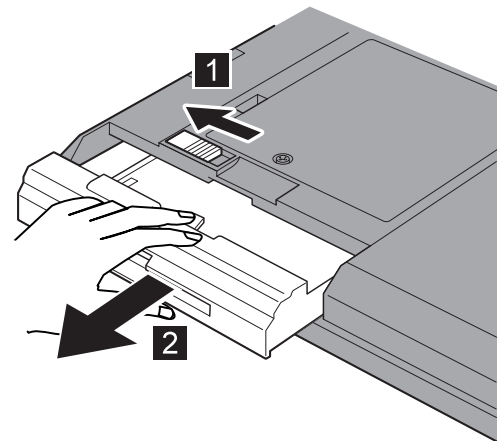
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### **Attention**

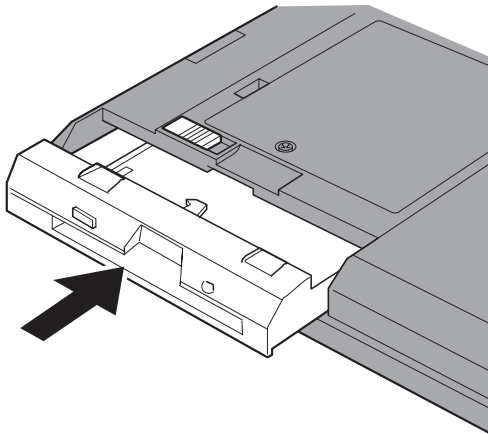
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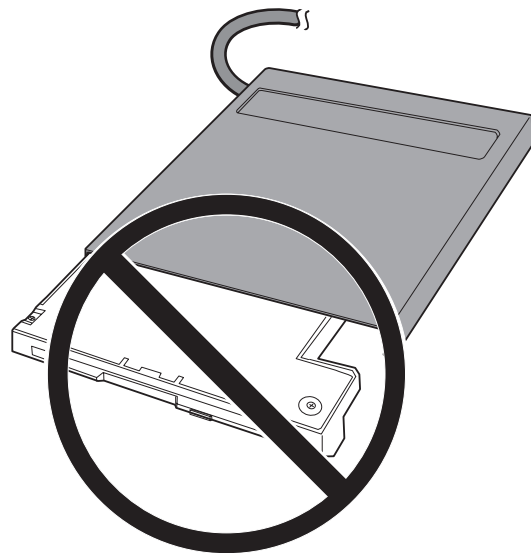


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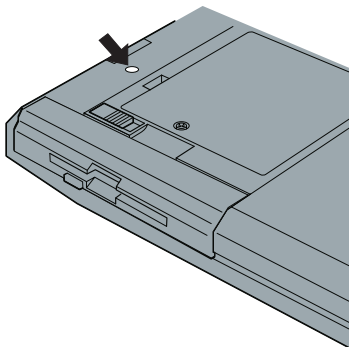
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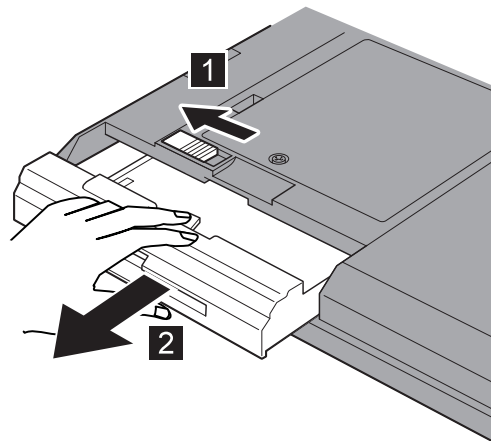
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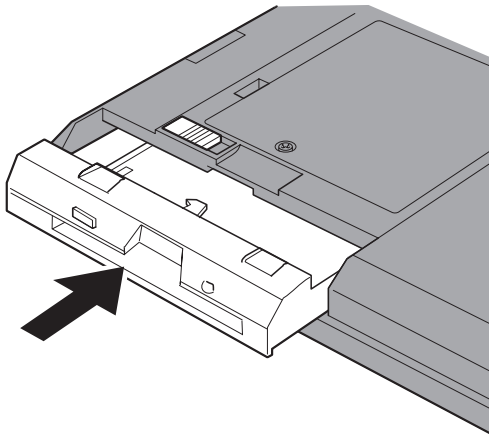
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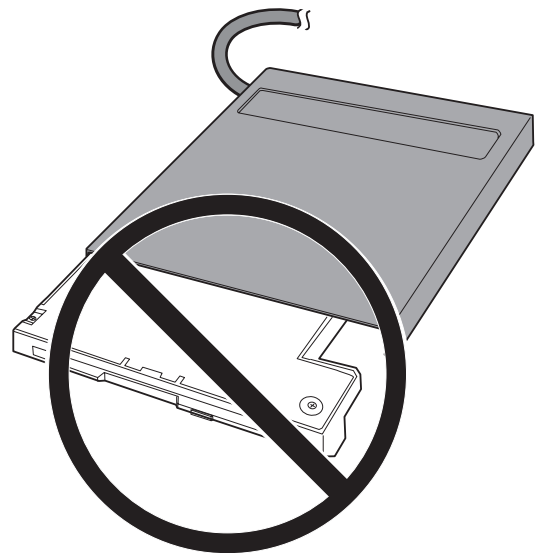


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 **DANGER**

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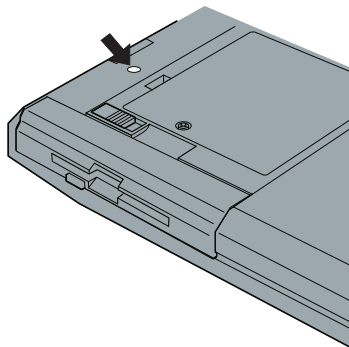
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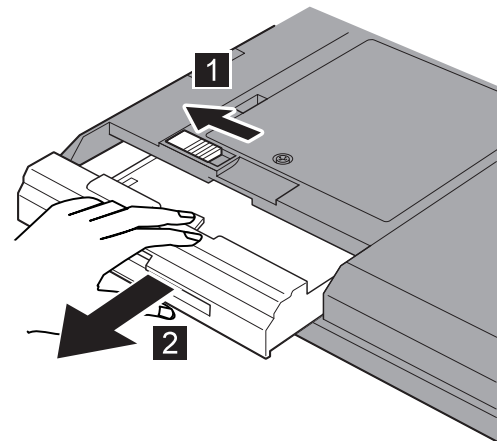
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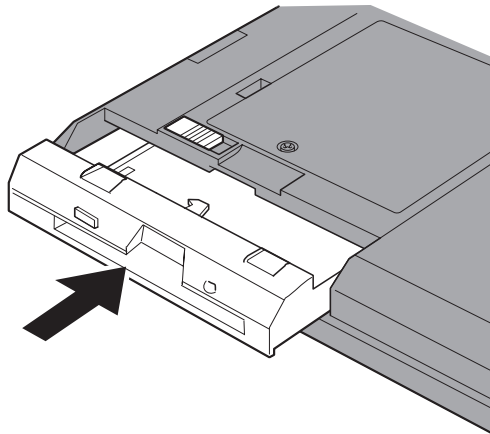
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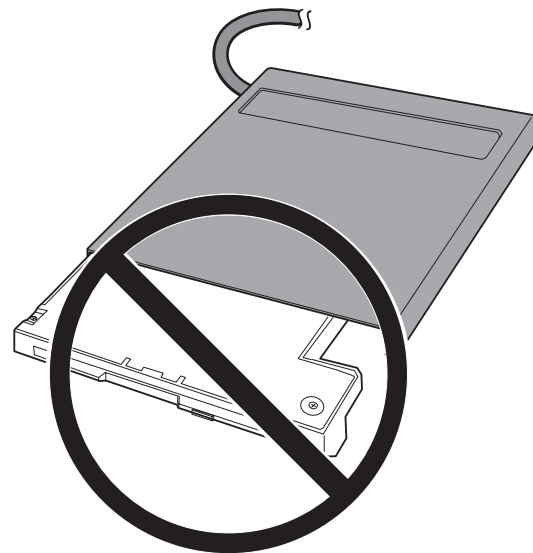


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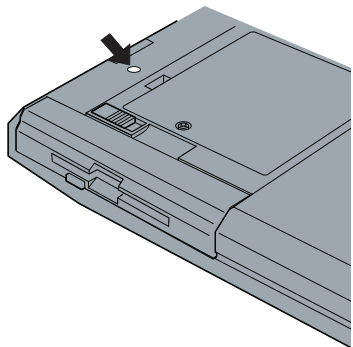
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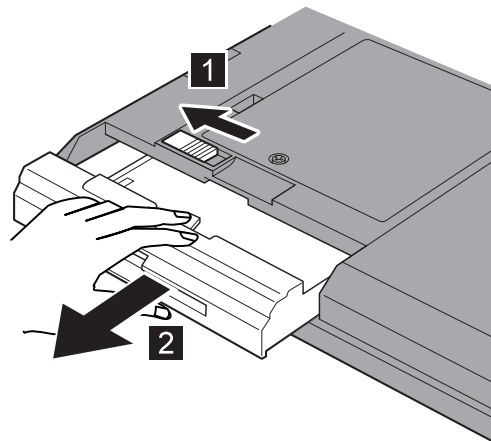
- 1 Turn off your computer, and remove the AC Adapter and cables; then turn the computer upside down.

### Attention

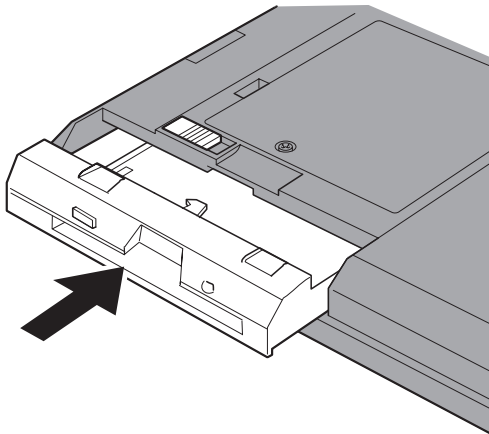
Make sure that the bay LED is off. Never remove an UltralimBay device if the bay LED is on.



- 2 Slide the UltralimBay device lock to the unlock position **1**; then remove the diskette drive **2**.



**3** Insert the SuperDisk Drive:



Your SuperDisk Drive is now installed and ready for use.

**ATTENTION:** The floppy diskette drive can be installed in an external enclosure, so you can use another device in the ThinkPad UltraSlimBay. **The SuperDisk drive is not compatible with this enclosure. If you try to insert the SuperDisk drive into the enclosure, you might damage the drive or the enclosure.**



## **Product Registration**

Thank you for purchasing OPTIONS by IBM. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at:

<http://www.pc.ibm.com/register>

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

## **Product Service and Warranty Information**

For technical support, support hours, and warranty terms and conditions, see the enclosed inserts, or contact your IBM reseller or IBM marketing representative.

## ***Quick Installation (B. Portuguese)***

### **Laser Compliance Statement**

This drive is a laser product. The drive is certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, the drive is certified to conform to the requirements of the International Electrotechnical Commission (IEC) 825 and CENELEC EN 60 825 for Class 1 laser products.

Before the drive is installed, note the following.

**CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

Opening the drive might result in exposure to hazardous laser radiation. There are no serviceable parts inside the drive. **DO NOT OPEN!**

Some drives contain an embedded Class 3A laser diode. Note the following.



**Laser radiation when open. Avoid direct eye exposure. Do not stare into beam or view directly with optical instruments.**

## Installing the BIOS Upgrade

### Attention!

**You must install the included BIOS upgrade *before* installing the SuperDisk drive. Use the original floppy drive included with your ThinkPad to install the BIOS, and follow these instructions.**

Prior to installing the ThinkPad SuperDisk (LS-120) UltralimBay Drive, you must check the level of the BIOS installed in your ThinkPad, to determine if you need the required System Program Service (BIOS) Diskette which is included with this option. This option will not work unless the proper level of BIOS is installed on your computer. To check the level of System BIOS currently in your ThinkPad, do the following.

1. Turn off your computer, and remove any diskette from the floppy drive.
2. Press and hold the **F1** key, then turn on the computer. Hold the F1 key down until the **Easy-Setup** menu appears. The BIOS date is shown on the Easy-Setup main screen.

If the BIOS date on your computer is more recent than the date on the BIOS diskette included with this option, you **do not** need to install the update to your BIOS. If the date on the System Program Diskette is more recent than the date shown on the Easy-Setup main screen, then you need to install the BIOS upgrade. To do so:

1. Make sure you have an AC adapter and a charged battery pack. If your computer is attached to a docking station or port replicator, turn off your computer and detach it before updating the BIOS.
2. Firmly connect the AC adapter to the computer.
3. Insert the System Program Service Diskette into the original floppy diskette drive and turn on the computer.
4. A simple menu will appear. The first option on this menu will be **Read this first**. Choose that option, read through the instructions, then go back to the menu and choose the second option, **Update system program**.

### Attention!

Do not turn off or suspend the computer until the update is complete. **IF YOU TURN OFF OR SUSPEND YOUR COMPUTER WHILE THE UPDATE IS IN PROGRESS, YOU CAN DAMAGE THE SYSTEM BOARD AND IT WILL HAVE TO BE REPLACED.**

## Installing the Device Driver for the SuperDisk Drive

If your ThinkPad is running DOS, Windows 95 OSR0 or OSR1, you need a device driver in order to use the SuperDisk drive. Refer to "Locating and Installing Device Drivers" on page 2-3 for more information.



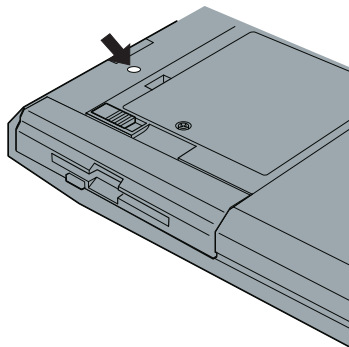
## *Installing the SuperDisk Drive Into Your Computer*

To install the SuperDisk Drive, follow these instructions.

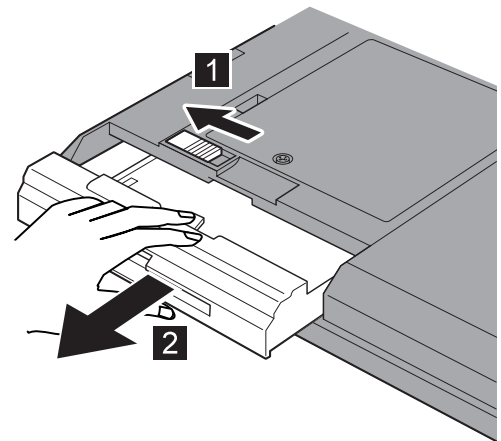
- 1** Turn off your computer, and remove the AC Adapter and cables; then turn the computer upside down.

### **Attention**

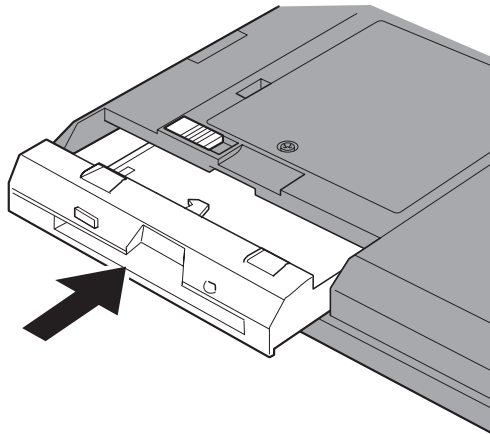
Make sure that the bay LED is off. Never remove an UltralimBay device if the bay LED is on.



- 2** Slide the UltralimBay device lock to the unlock position **1**; then remove the diskette drive **2**.



**3** Insert the SuperDisk Drive:



Your SuperDisk Drive is now installed and ready for use.

**ATTENTION:** The floppy diskette drive can be installed in an external enclosure, so you can use another device in the ThinkPad UltralimBay. **The SuperDisk drive is not compatible with this enclosure. If you try to insert the SuperDisk drive into the enclosure, you might damage the drive or the enclosure.**



## **Product Registration**

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IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

## **Product Service and Warranty Information**

For technical support, support hours, and warranty terms and conditions, see the enclosed inserts, or contact your IBM reseller or IBM marketing representative.

## ***Quick Installation (Japanese)***

### **Laser Compliance Statement**

This drive is a laser product. The drive is certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, the drive is certified to conform to the requirements of the International Electrotechnical Commission (IEC) 825 and CENELEC EN 60 825 for Class 1 laser products.

Before the drive is installed, note the following.

**CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

Opening the drive might result in exposure to hazardous laser radiation. There are no serviceable parts inside the drive. **DO NOT OPEN!**

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## Installing the BIOS Upgrade

### Attention!

**You must install the included BIOS upgrade *before* installing the SuperDisk drive. Use the original floppy drive included with your ThinkPad to install the BIOS, and follow these instructions.**

Prior to installing the ThinkPad SuperDisk (LS-120) UltralimBay Drive, you must check the level of the BIOS installed in your ThinkPad, to determine if you need the required System Program Service (BIOS) Diskette which is included with this option. This option will not work unless the proper level of BIOS is installed on your computer. To check the level of System BIOS currently in your ThinkPad, do the following.

1. Turn off your computer, and remove any diskette from the floppy drive.
2. Press and hold the **F1** key, then turn on the computer. Hold the F1 key down until the **Easy-Setup** menu appears. The BIOS date is shown on the Easy-Setup main screen.

If the BIOS date on your computer is more recent than the date on the BIOS diskette included with this option, you **do not** need to install the update to your BIOS. If the date on the System Program Diskette is more recent than the date shown on the Easy-Setup main screen, then you need to install the BIOS upgrade. To do so:

1. Make sure you have an AC adapter and a charged battery pack. If your computer is attached to a docking station or port replicator, turn off your computer and detach it before updating the BIOS.
2. Firmly connect the AC adapter to the computer.
3. Insert the System Program Service Diskette into the original floppy diskette drive and turn on the computer.
4. A simple menu will appear. The first option on this menu will be **Read this first**. Choose that option, read through the instructions, then go back to the menu and choose the second option, **Update system program**.

### Attention!

Do not turn off or suspend the computer until the update is complete. **IF YOU TURN OFF OR SUSPEND YOUR COMPUTER WHILE THE UPDATE IS IN PROGRESS, YOU CAN DAMAGE THE SYSTEM BOARD AND IT WILL HAVE TO BE REPLACED.**

## Installing the Device Driver for the SuperDisk Drive

If your ThinkPad is running DOS, Windows 95 OSR0 or OSR1, you need a device driver in order to use the SuperDisk drive. Refer to "Locating and Installing Device Drivers" on page 2-3 for more information.

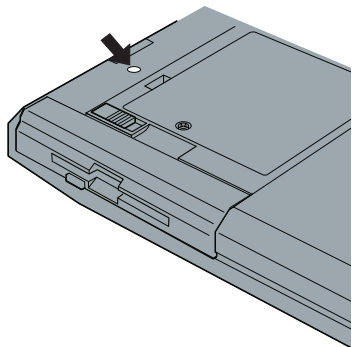
## Installing the SuperDisk Drive Into Your Computer

To install the SuperDisk Drive, follow these instructions.

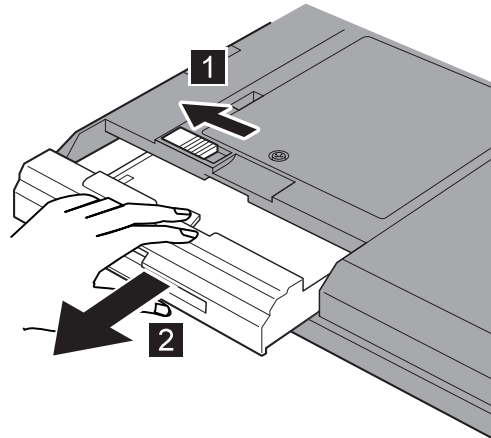
- 1 Turn off your computer, and remove the AC Adapter and cables; then turn the computer upside down.

### Attention

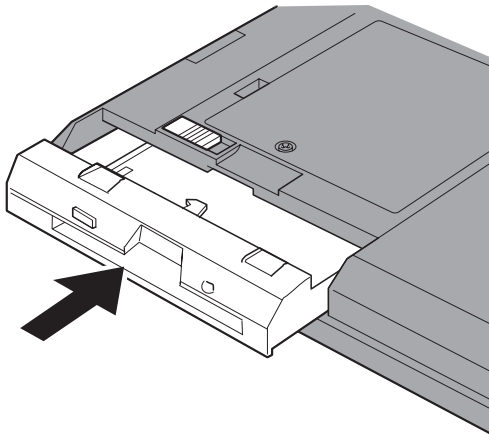
Make sure that the bay LED is off. Never remove an UltralimBay device if the bay LED is on.



- 2 Slide the UltralimBay device lock to the unlock position **1**; then remove the diskette drive **2**.

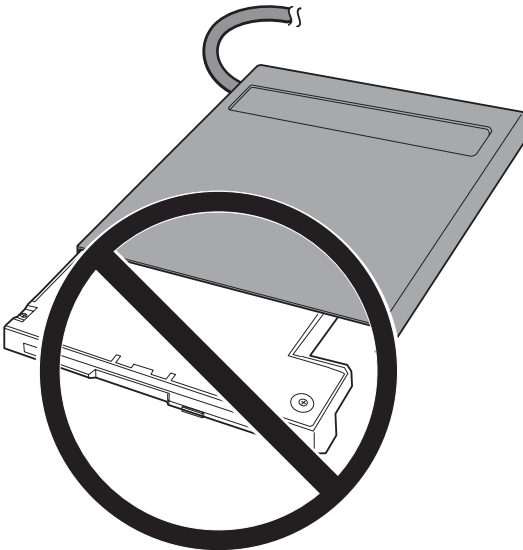


**3** Insert the SuperDisk Drive:



Your SuperDisk Drive is now installed and ready for use.

**ATTENTION:** The floppy diskette drive can be installed in an external enclosure, so you can use another device in the ThinkPad UltraSlimBay. **The SuperDisk drive is not compatible with this enclosure. If you try to insert the SuperDisk drive into the enclosure, you might damage the drive or the enclosure.**



## **Product Registration**

Thank you for purchasing OPTIONS by IBM. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at:

<http://www.pc.ibm.com/register>

IBM will send you information and updates on your registered product unless you indicate on the Web site questionnaire that you do not want to receive further information.

## **Product Service and Warranty Information**

For technical support, support hours, and warranty terms and conditions, see the enclosed inserts, or contact your IBM reseller or IBM marketing representative.



### *Product Description*

The IBM ThinkPad SuperDisk (LS-120) UltralimBay Drive allows you to save and store larger files than a 1.44MB<sup>1</sup> floppy diskette, while still allowing you to read and write to standard sized diskettes.

In addition to this manual, this option package contains:

- ThinkPad SuperDisk (LS-120) UltralimBay Drive
- Diagnostics Diskette
- System Program Service (BIOS) Diskette
- Program License Agreement

Contact your place of purchase if any item is missing or damaged.

**Important:** Be sure to retain your proof of purchase because it might be required to receive warranty service.

### **Before You Begin**

To install this drive, you must have the following:

- A ThinkPad 600 computer with UltralimBay
- The documentation that comes with your ThinkPad

You can find information on how to get help, technical support, and warranty service in Appendix A, "Help and Service Information" on page 3-1.

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<sup>1</sup> The formatted capacity of 1 MB is approximately 1 000 000 bytes of data.

## Installing the SuperDisk Drive

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### Installing the BIOS Upgrade

— **Attention!** —

**You must install the included BIOS upgrade *before* installing the SuperDisk drive. Use the original floppy drive included with your ThinkPad to install the BIOS, and follow these instructions.**

Prior to installing the ThinkPad SuperDisk (LS-120) UltralimBay Drive, you must check the level of the BIOS installed in your ThinkPad, to determine if you need the required System Program Service (BIOS) Diskette which is included with this option. This option will not work unless the proper level of BIOS is installed on your computer. To check the level of System BIOS currently in your ThinkPad, do the following.

1. Turn off your computer, and remove any diskette from the floppy drive.
2. Press and hold the **F1** key, then turn on the computer. Hold the F1 key down until the **Easy-Setup** menu appears. The BIOS date is shown on the Easy-Setup main screen.

If the BIOS date on your computer is more recent than the date on the BIOS diskette included with this option, you **do not** need to install the update to your BIOS. If the date on the System Program Diskette is

more recent than the date shown on the Easy-Setup main screen, then you need to install the BIOS upgrade. To do so:

1. Make sure you have an AC adapter and a charged battery pack. If your computer is attached to a docking station or port replicator, turn off your computer and detach it before updating the BIOS.
2. Firmly connect the AC adapter to the computer.
3. Insert the System Program Service Diskette into the original floppy diskette drive and turn on the computer.
4. A simple menu will appear. The first option on this menu will be **Read this first**. Choose that option, read through the instructions, then go back to the menu and choose the second option, **Update system program**.

— **Attention!** —

Do not turn off or suspend the computer until the update is complete. **IF YOU TURN OFF OR SUSPEND YOUR COMPUTER WHILE THE UPDATE IS IN PROGRESS, YOU CAN DAMAGE THE SYSTEM BOARD AND IT WILL HAVE TO BE REPLACED.**

---

## Locating and Installing Device Drivers

If your ThinkPad is running DOS, Windows 95 OSR0 or OSR1, you need a device driver in order to use the SuperDisk drive. The device drivers for the ThinkPad 600 can be downloaded at the support website for the Personal Systems Group. Go to the following URL: <http://www3.pc.ibm.com/support>

On the left of the main page at this website is a list of IBM products. Click on **ThinkPad Support**. From this web page, there are two ways to locate the correct driver for the SuperDisk drive.

1. Click on the hyperlink **Downloadable files**, then choose from the appropriate link to access the driver you need.
2. Go to the scrolling box labeled **Select Family**, and select **ThinkPad 600**. The next page has a scrolling box labeled **Select Model**; select the model of ThinkPad 600 you have. The next page has a list of various kinds of information you can access. Click on **Downloadable Files** to get a list of available files and drivers to choose from.

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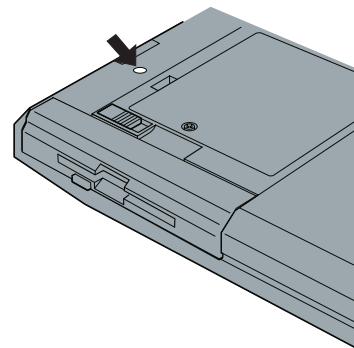
## Installing the SuperDisk Drive Into Your Computer

To install the SuperDisk Drive, follow these instructions.

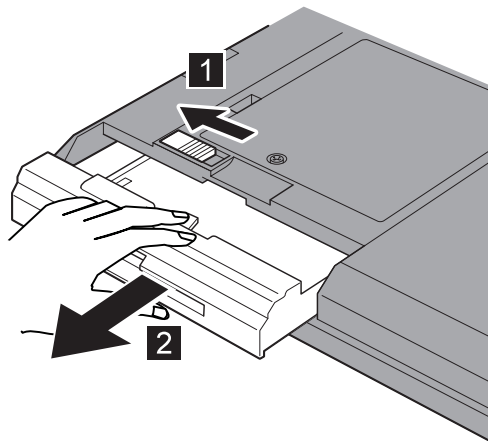
- I** Turn off your computer, and remove the AC Adapter and cables; then turn the computer upside down.

### Attention

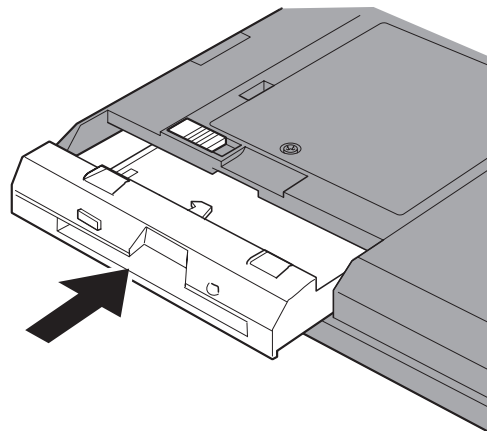
Make sure that the bay LED is off. Never remove an UltralimBay device if the bay LED is on:



**2** Slide the UltralimBay device lock to the unlock position **1**; then remove the diskette drive **2** :

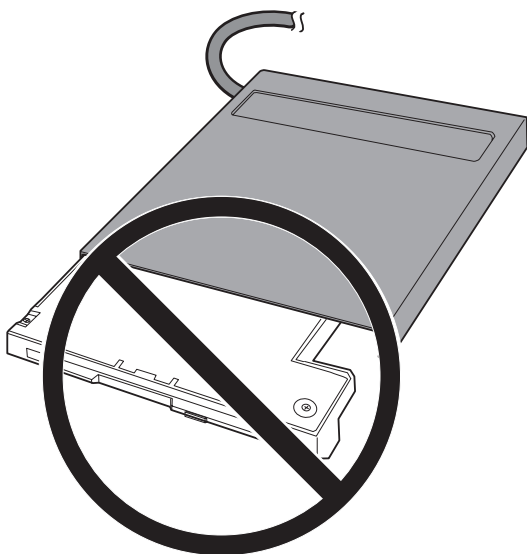


**3** Insert the SuperDisk Drive:



Your SuperDisk Drive is now installed and ready for use.

**ATTENTION:** The Ultralim 1.44 MB diskette drive can also be installed in an external enclosure, so that you can use another device in the ThinkPad UltralimBay. **The SuperDisk drive is not compatible with this enclosure. If you try to insert the SuperDisk drive into the enclosure, you might damage the drive or the enclosure.**



## *Using the SuperDisk Drive*

This section provides information on using the features of the SuperDisk Drive.

---

### **Loading and Unloading SuperDisk Diskettes**

To load a SuperDisk diskette, insert it into the drive the same way you would load a standard floppy diskette.

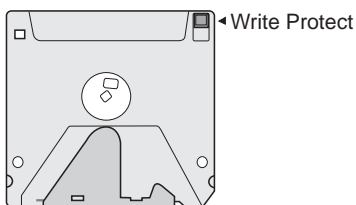
To unload a SuperDisk diskette, wait until the drive activity light is OFF, then push the eject button to remove the diskette.

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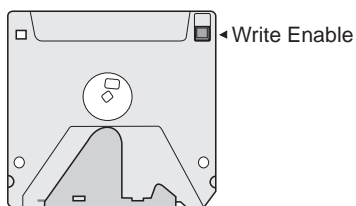
### **Setting the Write-Protect Switch**

SuperDisk diskettes feature a write-protect switch, much like the write-protect switch on a standard floppy diskette. You can set the switch to keep data from being written on the disk. Use this switch when you want to make sure that important data on the disk will not be overwritten.

The illustration below shows the SuperDisk with the switch in the write-protect position.



This illustration shows the switch in the write-enable position.



---

## Drive Letter Assignment

If you have both a SuperDisk Drive and a regular floppy drive, your drive letter assignment could change depending on which drive you are booting from. If you boot your computer from the SuperDisk drive, with a system diskette, the SuperDisk drive will be assigned drive letter **A**. If you boot your computer from any other drive, the SuperDisk will be assigned the next available drive letter.

---

## Warm Swapping

Unlike the CD-ROM drive and standard floppy diskette drive, you cannot remove the SuperDisk drive from the UltralimBay when the computer is in suspend mode in order to install a different device.

**Warm swapping of the SuperDisk drive is not supported.** If the SuperDisk drive is installed in the UltralimBay, and you want to change to another device, **you must turn off your computer before removing the SuperDisk drive and installing the other device.**

---

## Using the Diagnostics Diskette

Included with this option is a Diagnostics Diskette. If you are having difficulty with your SuperDisk drive, you can use this Diagnostics Diskette to help you determine what is causing the problem. Follow these instructions to use the diagnostic program on the diskette.

1. Find the Diagnostics Diskette and insert it into the SuperDisk drive.
2. Restart your computer with the diskette in the SuperDisk drive. At the proper prompt, insert a standard 1.44MB diskette. When the drive is finished checking the standard floppy, it will eject the diskette.
3. At the next prompt, insert a SuperDisk diskette. The drive will again check the spin-up speed and read/write capability. When the drive is finished, it will eject the diskette.
4. Hit **Escape** to restart your system.

Make note of any error messages you see while running the diagnostic program, and mention these when you call the HelpCenter. For more information on help and service, see Appendix A, "Help and Service Information" on page 3-1.





### *Appendix A. Help and Service Information*

If you have questions about your new Options by IBM product, or require technical assistance, visit the IBM Personal Computing Web site at <http://www.pc.ibm.com> for information about IBM, Options by IBM, or IBM Service and Support. Additionally, you can receive information from the IBM Automated Fax system at 1-800-426-3395 (in Canada, 1-800-465-3299), or from the Personal Systems Group Bulletin Board System (PSG BBS) at 1-919-517-0001. You can also get help and information through the IBM PC HelpCenter, 24 hours a day, seven days a week. Response time may vary depending on the number and nature of the calls received.

Marketing, installation, and configuration support through the HelpCenter will be withdrawn or made available for a fee, at IBM's discretion, 90 days after the option has been withdrawn from marketing. Additional support offerings, including step-by-step installation assistance, are available for a nominal fee.

During the warranty period, assistance for replacement or exchange of defective components is available. In addition, if your IBM option is installed in an IBM computer, you might be entitled to service at your location. Your technical support representative can help you determine the best alternative.

#### **Step 1: Problem Solving**

You may be able to solve the problem yourself. Before calling the HelpCenter, please prepare for the call by following these steps:

1. If you are having installation or configuration problems, refer to the detailed sections on installation found in this manual, and review any README.TXT files found on the installation diskettes.
2. Visit the Service and Support section of the Personal Computing Web site specific to the model of option you have purchased. Updated installation instructions, hints and tips, or updated system-specific notes are often published in this section. You might find that later device drivers are available that will improve the performance and compatibility for your new option.

If you are installing this option in an IBM computer, also visit the applicable Web page for that computer model. These pages might also contain useful hints and tips related to installation of this option and might refer to BIOS or device-driver updates required for your computer model. If you are installing the option in a non-IBM computer, refer to the manufacturer's Web site.

3. Uninstall, and then reinstall the option. During the uninstallation process, be sure to remove any files that were installed during the

previous installation. Many IBM options include uninstallation programs.

4. Check all cabling to be sure that it is correct as shown in this manual. When you connect a cable to a cable connector, pay close attention to the colored stripes along the edge of the cable, and ensure that they are matched with PIN 1, on both the computer connector and the option connector.
5. If your option contains jumpers or switches, be sure their positions and orientation match the instructions in this manual.

---

## Step 2: Preparing for the Call

To assist the technical support representative, have available as much of the following information as possible:

1. Option name
2. Option number
3. Proof of purchase
4. Computer manufacturer, model, serial number (if IBM), and manual
5. Exact wording of the error message (if any)
6. Description of the problem
7. Hardware and software configuration information for your system

If possible, be at your computer. Your technical support representative might want to walk you through the problem during the call.

---

## Step 3: Placing the Call to IBM

If you call 90 days or more after the date of withdrawal or after your warranty has expired, you might be charged a fee.

For the support telephone number and support hours by country, refer to the following table or to the enclosed technical support insert. If the number is not provided, contact your IBM reseller or IBM marketing representative.

<i>Support 24 hours a day, 7 days a week</i>	
Canada	1-800-565-3344
U.S.A. / Puerto Rico	1-800-772-2227

## Additional Technical Support Resources

Online technical support is available during the life of your product. Online assistance can be obtained through the IBM Automated Fax System, the Personal Computing Web page, and the PSG Electronic Bulletin Board System.

<i>Online Technical Support</i>	
IBM Personal Computing Web Page	www.pc.ibm.com
IBM PSG BBS	1-919-517-0001
IBM Automated Fax System	1-800-426-3395 1-800-465-3299 (in Canada)

## Appendix B. Warranty and Notices

---

### Product Warranty

The following warranty information applies to products purchased in the United States, Canada, and Puerto Rico. For warranty terms and conditions for products purchased in other countries, see the enclosed Warranty insert, or contact your IBM reseller or IBM marketing representative.

International Business Machines Corporation

Armonk, New York, 10504

### Statement of Limited Warranty

*The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you originally purchase for your use, and not for resale, from IBM or your reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. If you have any questions, contact IBM or your reseller.*

**Machine:** ThinkPad SuperDisk (LS-120) UltraSlimBay Drive

**Warranty Period\*:** One Year

*\*Contact your place of purchase for warranty service information.*

### Production Status

Each Machine is manufactured from new parts, or new and used parts. In some cases, the Machine may not be new and may have been previously

installed. Regardless of the Machine's production status, IBM's warranty terms apply.

### The IBM Warranty for Machines

IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period IBM or your reseller, if authorized by IBM, will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine.

For IBM or your reseller to provide warranty service for a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) for certain Machines, the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Many of these transactions involve the removal of parts and their return to IBM. You represent that all removed parts are genuine and unaltered. A part that replaces a removed part will assume the warranty service status of the replaced part.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair it or replace it with one that is at least functionally equivalent, without charge. The replacement may not be new, but will be in good working order. If IBM or your reseller is unable to repair or replace the Machine, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user. However, for Machines which have a life-time warranty, this warranty is not transferable.

## Warranty Service

To obtain warranty service for the Machine, you should contact your reseller or call IBM. In the United States, call IBM at **1-800-772-2227**. In Canada, call IBM at **1-800-565-3344**. You may be required to present proof of purchase.

IBM or your reseller will provide certain types of repair and exchange service, either at your location or at IBM's or your reseller's service center, to restore a Machine to good working order.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. You represent that all removed items are genuine and unaltered. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced. The replacement assumes the warranty service status of the replaced item. Before IBM or your reseller exchanges a Machine or part, you agree to remove all features, parts, options, alterations, and attachments not under warranty service. You also agree to ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange.

You agree to:

1. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
2. where applicable, before service is provided —
  - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
  - b. secure all programs, data, and funds contained in a Machine, and
  - c. inform IBM or your reseller of changes in a Machine's location.

IBM is responsible for loss of, or damage to, your Machine while it is 1) in IBM's possession or 2) in transit in those cases where IBM is responsible for the transportation charges.

## Extent of Warranty

### 3-4 ThinkPad SuperDisk (LS-120) UltralimBay Drive

IBM does not warrant uninterrupted or error-free operation of a Machine.

The warranties may be voided by misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, removal or alteration of Machine or parts identification labels, or failure caused by a product for which IBM is not responsible.

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## Limitation of Liability

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1. damages for bodily injury (including death) and damage to real property and tangible personal property; and
2. the amount of any other actual direct damages or loss, up to the greater of U.S. \$100,000 or the charges (if recurring, 12 months' charges apply) for the Machine that is the subject of the claim.



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## Electronic Emission Notices

ThinkPad SuperDisk (LS-120) UltralimBay Drive

### Federal Communications Commission (FCC) Statement

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an IBM authorized dealer or service representative for help.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. Proper cables and connectors are available from IBM authorized dealers. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:

International Business Machines Corporation  
New Orchard Road  
Armonk, NY 10504  
Telephone: 1-919-543-2193

### Industry Canada Class B Emission Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

### Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### Deutsche EMV-Direktive (electromagnetische Verträglichkeit)

Dieses Gerät ist berechtigt in Übereinstimmung mit dem deutschen EMVG vom 9.Nov.92 das EG-Konformitätszeichen zu führen.

Der Aussteller der Konformitätserklärung ist die IBM UK, Greenock.

Dieses Gerät erfüllt die Bedingungen der EN 55022 Klasse B.

## **European Union - Emission Directive**

This product is in conformity with the protection requirements of EU Council Directive 89/366/ECC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

IBM can not accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class B Information Technology Equipment according to CISPR 22 / European Standard EN 55022. The limits for Class B equipment were derived for typical residential environments to provide reasonable protection against interference with licensed communication devices.

## **Avis de conformité aux exigences du Conseil des Communautés européennes**

Le présent produit satisfait aux exigences de protection énoncées dans la directive 89/336/EEC du Conseil des Communautés européennes, relative à la compatibilité électromagnétique. Le constructeur décline toute responsabilité en cas de non-respect de cette directive résultant d'une modification non recommandée du produit ou de l'ajout de cartes optionnelles non fournies par le constructeur.

Ce produit respecte les limites des caractéristiques d'immunité des appareils de traitement de l'information définies par la classe B de la norme européenne EN 55022 (CISPR 22). La conformité aux spécifications de la classe B offre une garantie acceptable contre les interférences avec les appareils de communication agréés, dans les zones résidentielles.

## **Unione Europea - Direttiva EMC (Conformidad electromagnética)**

Este producto satisface los requisitos de protección del Consejo de la UE, Directiva 89/336/CEE en lo que a la legislatura de los Estados Miembros sobre compatibilidad electromagnética se refiere.

IBM no puede aceptar responsabilidad alguna si este producto deja de satisfacer dichos requisitos de protección como resultado de una modificación no recomendada del producto, incluyendo el ajuste de tarjetas de opción que no sean IBM.

Este producto ha sido probado y satisface los límites para Equipos Informáticos Clase B de conformidad con el Estándar CISPR22 y el Estándar Europeo EN 55022. Los límites para los equipos de Clase B se han establecido para entornos residenciales típicos a fin de proporcionar una protección razonable contra las interferencias con dispositivos de comunicación licenciados.

## Union Europea - Normativa EMC

Questo prodotto è conforme alle normative di protezione ai sensi della Direttiva del Consiglio dell'Unione Europea 89/336/CEE sull'armonizzazione legislativa degli stati membri in materia di compatibilità elettromagnetica.

IBM non accetta responsabilità alcuna per la mancata conformità alle normative di protezione dovuta a modifiche non consigliate al prodotto, compresa l'installazione di schede e componenti di marca diversa da IBM.

Le prove effettuate sul presente prodotto hanno accertato che esso rientra nei limiti stabiliti per le apparecchiature di informatica Classe B ai sensi del CISPR 22 / Norma Europea EN 55022. I limiti delle apparecchiature della Classe B sono stati stabiliti al fine di fornire ragionevole protezione da interferenze mediante dispositivi di comunicazione in concessione in ambienti residenziali tipici.

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