



# ThinkPad Hard Disk Drive

## User's Guide

**Note:** Before using this information and the product it supports, read the information in Appendix A, "Warranty information", Appendix B, "European Union warranty information", and Appendix C, "Notices".

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## Preface

You can increase the storage capacity of your ThinkPad® computer by replacing the ThinkPad Hard Disk Drive with one of greater capacity.

Your option package contains the following:

- ThinkPad Hard Disk Drive
- *ThinkPad Hard Disk Drive User's Guide*

If any of the items listed above are missing or damaged, contact your place of purchase. Be sure to retain your proof of purchase; it might be required to receive warranty service.

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## Registering your option

Thank you for purchasing this IBM® product. 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 <http://www.ibm.com/pc/register/> IBM Web site.

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.



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## About your ThinkPad Hard Disk Drive

This section provides information on handling and replacing your ThinkPad Hard Disk Drive.

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### Handling the hard disk drive

To protect your hard disk drive, observe the following precautions:

- Keep the drive in its static-protective bag until you are ready to install the drive in your ThinkPad computer. If you must put the drive down, place the static-protective bag on a flat, padded surface, and place the drive on the bag with the component side facing up.
- Handle the drive with care. Dropping or jarring the drive can damage the components inside the drive housing.
- Limit your movement. Movement can cause static electricity buildup.
- Do not subject the drive to physical shocks.
- Handle the drive by the edges.
- Do not touch any exposed components on the drive.
- Do not apply pressure to the cover of the drive.

**Attention:**

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 standby mode, or in hibernation mode.

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### Replacing the hard disk drive

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.

**Note:** The following procedure may vary depending on the model of your ThinkPad computer. For more detailed instructions, refer to your system documentation.

To replace the hard disk drive, complete the following procedure:

1. Turn off your ThinkPad computer.
2. Disconnect the ac adapter and all cables from the computer.

3. Close the display and turn the computer over.
4. Remove the battery.
5. Remove the screw that secures the hard disk drive.
6. Remove the hard disk drive by pulling the cover away from the computer.
7. Remove the cover of the hard disk drive.
8. Unpack the new hard disk drive.

**Attention**

Before you unpack the hard disk drive, be sure to read "Handling the hard disk drive" on page 1-1.

9. Attach the cover to the new hard disk drive.
10. Insert the hard disk drive and its cover into the hard disk drive bay; then firmly install them. Make sure the label on the hard disk drive is facing the top of the computer.
11. Reinstall the screw.

**Note:** You can replace the screw with a security screw to prevent the hard disk drive from being easily removed. The security screw may not be included in your ship group. However, you can purchase screws directly from NABS at [www.nabsnet.com](http://www.nabsnet.com).

12. Reinstall the battery.
13. Connect the ac adapter and cables to the computer.



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## Sobre a Unidade de Disco Rígido do ThinkPad

Esta seção fornece informações sobre o manuseio e a substituição da Unidade de Disco Rígido do ThinkPad.

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### Manuseando a Unidade de Disco Rígido

Para proteger a unidade de disco rígido, observe as seguintes precauções:

- Mantenha a unidade em sua embalagem protetora antiestática até o momento da instalação da unidade no computador ThinkPad. Se você precisar abaixar a unidade, coloque a embalagem protetora antiestática sobre uma superfície plana e revestida e coloque a unidade sobre a embalagem com o lado do componente voltado para cima.
- Manuseie a unidade com cuidado. Derrubar ou sacudir a unidade pode danificar os componentes dentro de seu compartimento.
- Limite seus movimentos. Eles podem causar acúmulo de eletricidade estática.
- Não submeta a unidade a choques físicos.
- Manuseie a unidade pelas bordas.
- Não encoste em nenhum componente exposto da unidade.
- Não faça pressão na tampa da unidade.

#### **Atenção:**

A unidade é muito sensível. O manuseio incorreto pode causar danos e perda permanente de dados no disco rígido. Antes de remover a unidade de disco rígido, faça backup de todas as informações do disco rígido e, em seguida, desligue o computador. Nunca remova a unidade enquanto o sistema estiver operando, em modo de espera ou modo de hibernação.

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### Substituindo a Unidade de Disco Rígido

Somente substitua a unidade de disco rígido para fazer o upgrade ou para consertá-la. Os conectores e o compartimento da unidade de disco rígido não foram projetados para alterações freqüentes ou troca de unidade.

**Nota:** O procedimento a seguir pode variar, dependendo do modelo do seu computador ThinkPad. Para obter instruções mais detalhadas, consulte a documentação do sistema.

Para substituir a unidade de disco rígido, conclua o seguinte procedimento:

1. Desligue o computador ThinkPad.
2. Desconecte o adaptador ac e todos os cabos do computador.
3. Feche a tampa (visor) do computador e vire-o.
4. Remova a bateria.
5. Remova o parafuso que prende a unidade de disco rígido.
6. Remova a unidade de disco rígido, puxando a tampa para fora do computador.
7. Remova a tampa da unidade de disco rígido.
8. Retire a nova unidade de disco rígido da embalagem.

**Atenção**

Antes de retirar a unidade de disco rígido da embalagem, certifique-se de ter lido “Manuseando a Unidade de Disco Rígido” na página 1-3.

9. Anexe a tampa à nova unidade de disco rígido.
10. Insira a unidade de disco rígido e a tampa no compartimento da unidade de disco rígido e instale-os com firmeza. Certifique-se de que a etiqueta na unidade de disco rígido está virada para cima no computador.
11. Reinstale o parafuso.

**Nota:** Você pode substituir o parafuso com um parafuso de segurança para evitar que a unidade de disco rígido seja facilmente removida. O parafuso de segurança pode não estar incluído no seu grupo de envio. No entanto, você pode comprar parafusos diretamente da NABS no endereço [www.nabsnet.com](http://www.nabsnet.com).

12. Instale novamente a bateria.
13. Conecte o adaptador ac e os cabos ao computador.

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## Jednotka pevného disku ThinkPad

Tato část obsahuje informace o zacházení s jednotkou pevného disku a její výměně.

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### Zacházení s jednotkou pevného disku

Abyste jednotku pevného disku nepoškodili, dodržujte následující pokyny:

- Ponechejte jednotku v antistatickém obalu, dokud ji nebudete instalovat do počítače ThinkPad. Potřebujete-li jednotku odložit, položte antistatický obal na plochý polstrovaný povrch a jednotku položte na obal stranou se součástkami nahoru.
- Zacházejte s jednotkou opatrně. Pád jednotky nebo prudký náraz může poškodit součástky uvnitř jednotky.
- Omezte svůj pohyb. Pohyb může vytvářet elektrostatický náboj.
- Nevystavujte jednotku fyzickým šokům.
- Jednotku berte za okraje.
- Nedotýkejte se nezakrytých součástí jednotky.
- Netlačte na povrch jednotky.

#### **Upozornění:**

Jednotka je velmi citlivá. Nesprávné zacházení může způsobit poškození a trvalou ztrátu dat na pevném disku. Před vyjmutím jednotky pevného disku zálohujte všechna data na pevném disku a pak počítač vypněte. Jednotku pevného disku nikdy nevyjímejte, pokud je počítač v provozu, v pohotovostním režimu nebo režimu spánku.

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### Výměna jednotky pevného disku

Jednotku pevného disku vyměňte pouze tehdy, pokud provádíte upgrade, nebo při opravě jednotky. Konektory a pozice jednotky pevného disku nebyly navrženy pro časté výměny disku.

**Poznámka:** Uvedený postup se může lišit podle modelu vašeho počítače ThinkPad. Podrobné instrukce naleznete v dokumentaci k vašemu systému.

Jednotku pevného disku vyměníte následujícím postupem:

1. Vypněte počítač ThinkPad.
2. Odpojte od počítače adaptér napájení a všechny kabely.
3. Zavřete displej počítače a počítač otočte.
4. Vyjměte baterii.

5. Vyšroubujte šroub, který zajišťuje jednotku pevného disku.
6. Vytáhněte jednotku pevného disku tahem za kryt směrem od počítače.
7. Oddělte kryt od jednotky pevného disku.
8. Vybalete novou jednotku pevného disku.

#### **Upozornění**

Před vybalením jednotky si přečtěte část “Zacházení s jednotkou pevného disku” na stránce 1-5.

9. Kryt přiřadíte k nové jednotce pevného disku.
10. Vložte jednotku pevného disku a její kryt do pozice jednotky pevného disku, pak je pevně namontujte. Ověřte, že je štítek na jednotce pevného disku otočen směrem k horní části počítače.
11. Šroub našroubujte zpět.

**Poznámka:** Šroub lze nahradit bezpečnostním šroubem, který znemožňuje snadné vyjmutí jednotky pevného disku. Bezpečnostní šroub nemusí být obsažen ve vaší dodávce. Tento šroub lze však objednat u firmy NABS na webové stránce [www.nabsnet.com](http://www.nabsnet.com).

12. Vložte zpět baterii.
13. Připojte k počítači adaptér napájení a kabely.

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## A propos de votre unité de disque dur ThinkPad

La présente section fournit des informations sur la manipulation et le remplacement de l'unité de disque dur ThinkPad.

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### Manipulation de l'unité de disque dur

Pour protéger l'unité de disque dur, observez les précautions suivantes :

- Laissez l'unité dans son emballage antistatique jusqu'à ce que vous soyez prêt à l'installer dans l'ordinateur ThinkPad. Si vous devez poser l'unité, placez l'emballage antistatique sur une surface plane rembourrée et posez l'unité sur l'emballage, côté composants vers le haut.
- Manipulez l'unité avec précaution. Si vous la laissez tomber ou si vous la cognez, vous risquez d'endommager ses composants internes.
- Limitez vos mouvements. Les mouvements contribuent en effet à générer de l'électricité statique.
- Evitez de faire subir des chocs physiques à l'unité.
- Manipulez l'unité en la tenant par ses bords.
- Ne touchez pas les composants exposés de l'unité.
- N'exercez aucune pression sur le cache de l'unité.

#### **Attention :**

L'unité est extrêmement sensible. Toute manipulation incorrecte risque d'entraîner des dommages et la perte permanente des données stockées sur le disque dur. Avant de retirer l'unité de disque dur, faites une copie de sauvegarde de toutes les informations stockées sur le disque dur, puis mettez l'ordinateur hors tension. Ne retirez jamais l'unité pendant que le système est actif, en mode veille ou en mode hibernation.

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### Remplacement de l'unité de disque dur

Ne remplacez l'unité de disque dur que si vous effectuez une mise à niveau ou si vous devez la faire réparer. Les connecteurs et la baie de l'unité de disque dur n'ont pas été conçus pour des changements fréquents ou pour des échanges d'unité.

**Remarque :** La procédure suivante peut varier en fonction du modèle d'ordinateur ThinkPad. Pour obtenir des instructions plus détaillées, reportez-vous à la documentation fournie avec votre système.

Pour remplacer l'unité de disque dur, procédez comme suit :

1. Mettez l'ordinateur ThinkPad hors tension.
2. Débranchez le boîtier d'alimentation et tous les câbles de l'ordinateur.
3. Fermez l'écran et retournez l'ordinateur.
4. Retirez la batterie.
5. Retirez la vis qui permet de fixer l'unité de disque dur.
6. Retirez l'unité de disque dur en tirant sur le cache pour le sortir de l'ordinateur.
7. Retirez le cache de l'unité de disque dur.
8. Déballez la nouvelle unité de disque dur.

**Attention**

Avant de déballez l'unité de disque dur, lisez attentivement la section «Manipulation de l'unité de disque dur» à la page 1-7.

9. Fixez le cache sur la nouvelle unité de disque dur.
10. Insérez l'unité de disque dur et son cache dans la baie d'unité de disque dur, puis installez-les correctement. Vérifiez que l'étiquette apposée sur l'unité de disque dur est orientée vers le haut de l'ordinateur.
11. Réinstallez la vis.

**Remarque :** Vous pouvez remplacer la vis par une vis de sécurité pour que l'unité de disque dur ne puisse pas être retirée facilement. La vis de sécurité peut ne pas être incluse dans les accessoires livrés. Vous pouvez néanmoins vous en procurer une directement auprès de NABS, à l'adresse [www.nabsnet.com](http://www.nabsnet.com).

12. Réinstallez la batterie.
13. Rebranchez le boîtier d'alimentation et les câbles sur l'ordinateur.

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## Produktinformation zum ThinkPad-Festplattenlaufwerk

Dieser Abschnitt enthält Informationen zur Behandlung und zum Austausch des ThinkPad-Festplattenlaufwerks.

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### Behandlung des Festplattenlaufwerks

Beachten Sie die folgenden Vorsichtsmaßnahmen, um das Festplattenlaufwerk zu schützen:

- Bewahren Sie das Laufwerk in der antistatischen Schutzhülle auf, bis Sie es im ThinkPad installieren. Wenn Sie das Laufwerk absetzen müssen, legen Sie die antistatische Schutzhülle auf eine ebene, gepolsterte Oberfläche, und setzen Sie das Laufwerk auf der Schutzhülle mit der Seite der Komponente nach oben ab.
- Behandeln Sie das Laufwerk vorsichtig. Wenn Sie das Laufwerk fallen lassen oder damit anstoßen, können Komponenten innerhalb des Laufwerkgehäuses beschädigt werden.
- Reduzieren Sie Ihre Bewegungen. Durch Bewegung kann sich das Laufwerk statisch aufladen.
- Setzen Sie das Laufwerk keinen physischen Erschütterungen aus.
- Fassen Sie das Laufwerk an den Rändern an.
- Berühren Sie keine ungeschützten Komponenten im Laufwerk.
- Drücken Sie nicht auf die Abdeckung des Laufwerks.

#### **Achtung:**

Das Laufwerk ist sehr empfindlich. Durch unsachgemäße Behandlung können Beschädigungen und dauerhafter Datenverlust auf der Festplatte verursacht werden. Erstellen Sie vor dem Entfernen des Festplattenlaufwerks eine Sicherungskopie aller Daten auf der Festplatte, und schalten Sie dann den Computer aus. Entfernen Sie das Laufwerk nie in laufendem Betrieb, im Bereitschaftsmodus oder im Hibernationsmodus.

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### Festplattenlaufwerk austauschen

Tauschen Sie das Festplattenlaufwerk nur aus, wenn Sie einen Upgrade ausführen möchten oder wenn das Laufwerk repariert werden muss. Die Anschlüsse und die Position des Festplattenlaufwerks sind nicht für häufige Änderungen oder für häufiges Austauschen des Laufwerks ausgerichtet.

**Anmerkung:** Die folgende Vorgehensweise hängt von Ihrem ThinkPad-Modell ab. Ausführlichere Anweisungen können Sie der Dokumentation zum System entnehmen.

Gehen Sie wie folgt vor, um das Festplattenlaufwerk auszutauschen:

1. Schalten Sie den ThinkPad aus.
2. Trennen Sie das Netzteil und alle Kabel vom Computer.
3. Schließen Sie die Anzeige, und drehen Sie den Computer um.
4. Entnehmen Sie den Akku.
5. Entfernen Sie die Schraube, mit der das Festplattenlaufwerk befestigt ist.
6. Entfernen Sie das Festplattenlaufwerk, indem Sie die Abdeckung vom Computer wegziehen.
7. Entfernen Sie die Abdeckung vom Festplattenlaufwerk.
8. Entnehmen Sie das neue Festplattenlaufwerk aus der Verpackung.

**Achtung**

Lesen Sie Abschnitt „Behandlung des Festplattenlaufwerks“ auf Seite 1-9, bevor Sie das Festplattenlaufwerk aus der Verpackung entnehmen.

9. Bringen Sie die Abdeckung am neuen Festplattenlaufwerk an.
10. Setzen Sie das Festplattenlaufwerk und die Abdeckung in die Position für das Festplattenlaufwerk ein; befestigen Sie anschließend das Laufwerk und die Abdeckung. Das Etikett am Festplattenlaufwerk muss nach der Oberseite des Computers gerichtet sein.
11. Bringen Sie die Schraube wieder an.

**Anmerkung:** Sie können an Stelle der Schraube eine Sicherheitsschraube verwenden, um zu verhindern, dass das Festplattenlaufwerk auf einfache Weise entfernt werden kann. Die Sicherheitsschraube ist möglicherweise nicht in Ihrer Liefergruppe enthalten. Sie können Schrauben jedoch direkt von NABS unter der Adresse [www.nabsnet.com](http://www.nabsnet.com) bestellen.

12. Setzen Sie den Akku wieder ein.
13. Schließen Sie das Netzteil und die Kabel wieder am Computer an.



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## Informazioni sull'unità disco fisso ThinkPad

In questa sezione vengono fornite le informazioni sull'utilizzo e sulla sostituzione dell'unità disco fisso ThinkPad.

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### Utilizzo dell'unità disco fisso

Per proteggere l'unità disco fisso, osservare le seguenti precauzioni:

- Conservare l'unità in un imballo antistatico fino a quando non si è pronti per effettuare l'installazione dell'unità sul computer ThinkPad. Per poggiare l'unità, posizionare l'imballo antistatico su una superficie piana e posizionare l'unità sull'imballo.
- Maneggiare l'unità con cura. Il trasporto o la caduta dell'unità può danneggiare i componenti interni.
- Limitare i movimenti. Il movimento può generare elettricità statica.
- Non sottoporre l'unità a urti.
- Afferrare l'unità dalle estremità.
- Non toccare gli altri componenti esposti sull'unità.
- Non esercitare pressione sul coperchio dell'unità.

#### **Attenzione:**

L'unità è molto sensibile. Eventuali danni potrebbero provocare la perdita permanente dei dati sul disco fisso. Prima di rimuovere l'unità disco fisso, eseguire una copia di backup di tutte le informazioni sul disco fisso e spegnere il computer. Non rimuovere mai l'unità se il sistema è in esecuzione oppure in modalità standby o ibernazione.

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### Sostituzione dell'unità disco fisso

Sostituire l'unità disco fisso solo per aggiornarla o ripararla. I connettori e il vano dell'unità disco fisso non sono stati progettati per sostituzioni frequenti dell'unità.

**Nota:** La seguente procedura può variare a seconda del modello di computer ThinkPad. Per istruzioni dettagliate, fare riferimento alla documentazione relativa al proprio sistema operativo.

Per sostituire l'unità disco fisso, completare la seguente procedura:

1. Spegnere il computer ThinkPad.
2. Scollegare l'adattatore CA e tutti i cavi dal computer.

3. Chiudere il video e capovolgere il computer.
4. Rimuovere la batteria.
5. Rimuovere la vite che fissa l'unità disco fisso.
6. Estrarre l'unità disco fisso dopo aver rimosso il coperchio dal computer.
7. Rimuovere il coperchio dell'unità disco fisso.
8. Disimballare la nuova unità disco fisso.

**Attenzione**

Prima di disimballare l'unità disco fisso, leggere le informazioni contenute nella sezione "Utilizzo dell'unità disco fisso" a pagina 1-11.

9. Fissare il coperchio sulla nuova unità disco fisso.
10. Inserire l'unità disco fisso con il coperchio nell'apposito vano, quindi installarla in modo sicuro. Verificare che l'etichetta dell'unità disco fisso sia rivolta verso l'alto.
11. Fissare la vite.

**Nota:** E' possibile utilizzare una vite di sicurezza per impedire che l'unità venga rimossa facilmente. La vite di sicurezza non è inclusa nel pacchetto. Ma, è possibile acquistarla direttamente sul sito NABS all'indirizzo [www.nabsnet.com](http://www.nabsnet.com).

12. Reinstallare la batteria.
13. Collegare l'adattatore CA e i cavi al computer.

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## Acerca de la unidad de disco duro para ThinkPad

Este apartado proporciona información acerca de cómo manipular y sustituir la unidad de disco duro para ThinkPad.

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### Manipulación de la unidad de disco duro

Para proteger la unidad de disco duro, tenga en cuenta estas precauciones:

- Conserve la unidad en la funda de protección contra electricidad estática hasta el momento de colocar la unidad en el sistema ThinkPad. Si necesita poner la unidad hacia abajo, coloque la funda de protección contra electricidad estática en una superficie lisa y blanda, y coloque la unidad de la funda con la cara de los componentes mirando hacia arriba.
- Manipule la unidad con cuidado. Una sacudida o caída de la unidad podría dañar los componentes internos alojados en la unidad.
- Limite el movimiento. El movimiento puede ocasionar una acumulación de electricidad estática.
- No exponga la unidad a choques físicos.
- Manipule la unidad por los extremos.
- No toque ninguno de los componentes de la unidad que quedan a la vista.
- No presione la cubierta de la unidad.

#### **Atención:**

La unidad es muy sensible. Una manipulación incorrecta podría dañar la unidad de disco duro y hacer que se perdieran datos de forma permanente de ella. Antes de extraer la unidad de disco duro, efectúe una copia de seguridad de toda la información del disco duro y, a continuación, apague el sistema. No extraiga nunca la unidad cuando el sistema está en funcionamiento, en modalidad en espera o en modalidad de hibernación.

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### Sustitución de la unidad de disco duro

Sustituya la unidad de disco duro sólo si la actualiza o si la va a reparar. Los conectores y la bahía de la unidad de disco duro no se han diseñado para que se produzcan cambios frecuentes o intercambios de unidad.

**Nota:** El procedimiento siguiente puede variar en función del modelo de su sistema ThinkPad. Si desea instrucciones detalladas, consulte la documentación del sistema.

Para sustituir la unidad de disco duro, lleve a cabo el procedimiento siguiente:

1. Apague el sistema ThinkPad.
2. Desconecte el adaptador de CA y todos los cables del sistema.
3. Cierre la pantalla y apague el sistema.
4. Extraiga la batería.
5. Extraiga el tornillo que une la unidad de disco duro.
6. Extraiga la unidad de disco duro tirando de la cubierta y sacándola del sistema.
7. Extraiga la cubierta de la unidad de disco duro.
8. Desempaquete la unidad de disco duro nueva.

**Atención**

Antes de desempaquetar la unidad de disco duro, no olvide leer el apartado "Manipulación de la unidad de disco duro" en la página 1-13.

9. Coloque la cubierta en la unidad de disco duro nueva.
10. Coloque la unidad de disco duro y su cubierta en la bahía de la unidad de disco duro y, a continuación, encájela bien. Asegúrese de que la etiqueta de la unidad de disco duro está mirando hacia la parte superior del sistema.
11. Vuelva a atornillar el tornillo.

**Nota:** Puede sustituir el tornillo por un tornillo de seguridad para evitar que la unidad de disco duro se pueda extraer fácilmente. Puede que el tornillo de seguridad no esté incluido en el material suministrado. Sin embargo, puede adquirir tornillos directamente a NABS en [www.nabsnet.com](http://www.nabsnet.com).

12. Vuelva a colocar la batería.
13. Conecte el adaptador de CA y los cables al sistema.

---

## Informácie o jednotke pevného disku vášho počítača ThinkPad

Táto časť poskytuje informácie o zaobchádzaní s jednotkou pevného disku počítača ThinkPad a jej výmene.

---

### Zaobchádzanie s jednotkou pevného disku

Pre ochranu vašej jednotky pevného disku dodržiavajte nasledujúce opatrenia:

- Ponechajte jednotku v ochrannom antistatickom obale až pokiaľ nebudete pripravený ju nainštalovať do počítača ThinkPad. Ak musíte jednotku položiť, umiestnite antistatický obal na hladkú, mäkkú podložku a položte jednotku na obal stranou súčiastkami smerom hore.
- S jednotkou zaobchádzajte opatrne. Pád alebo otrasy môžu poškodiť komponenty vo vnútri jednotky.
- Obmedzte svoj pohyb. Pohyb môže spôsobiť vytvorenie statickej elektriny.
- Nevystavujte jednotku fyzickým nárazom.
- Pri manipulácii držte jednotku za okraje.
- Nedotýkajte sa žiadnych odokrytých komponentov na jednotke.
- Netlačte na kryt jednotky.

#### **Upozornenie:**

Jednotka je veľmi citlivá. Nesprávna manipulácia môže spôsobiť poškodenie a trvalú stratu údajov na pevnom disku. Pred odstránením jednotky pevného disku urobte záložnú kópiu všetkých informácií na pevnom disku a potom počítač vypnite. Nikdy nevyberajte jednotku, kým je systém v prevádzke, v pohotovostnom režime alebo v režime hibernácie.

---

### Výmena jednotky pevného disku

Jednotku pevného disku vymeňte, len ak je to potrebné na rozšírenie kapacity alebo na opravu pevného disku. Konektory a zásuvka jednotky pevného disku neboli navrhnuté na časté zmeny alebo výmenu jednotky.

**Poznámka:** Nasledujúca procedúra sa môže odlišovať v závislosti od modelu vášho počítača ThinkPad. Podrobnejšie pokyny nájdete v dokumentácii k vášmu systému.

Pri výmene jednotky pevného disku vykonajte nasledujúcu procedúru:

1. Vypnite váš počítač ThinkPad.

2. Odpojte z počítača AC adaptér a všetky káble.
3. Zatvorte obrazovku a počítač otočte.
4. Vyberte batériu.
5. Odstráňte skrutku, ktorá zaisťuje jednotku pevného disku.
6. Vyberte jednotku pevného disku odtiahnutím krytu smerom od počítača.
7. Vyberte kryt jednotky pevného disku.
8. Rozbaľte novú jednotku pevného disku.

#### **Upozornenie**

Pred rozbalením jednotky pevného disku si prečítajte “Zaobchádzanie s jednotkou pevného disku” na strane 1-1.

9. Pripojte kryt k novej jednotke pevného disku.
10. Vložte jednotku pevného disku a jej kryt do zásuvky jednotky pevného disku, potom ich dôkladne pripevnite. Uistite sa, že nálepka na jednotke pevného disku smeruje na vrch počítača.
11. Pripevnite skrutku naspäť.

**Poznámka:** Skrutku môžete nahradiť bezpečnostnou skrutkou, aby ste zabránili jednoduchému odstráneniu jednotky pevného disku. Bezpečnostná skrutka sa nemusí nachádzať vo vašej zásielke. Môžete si ju však zakúpiť priamo od NABS na [www.nabsnet.com](http://www.nabsnet.com).

12. Nainštalujte naspäť batériu.
13. Zapojte do počítača AC adaptér a káble.

---

## 关于 ThinkPad 硬盘驱动器

本节提供了有关操作和更换 ThinkPad 硬盘驱动器的信息。

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### 操作硬盘驱动器

为了保护硬盘驱动器，请遵守下列预防措施：

- 在准备将硬盘驱动器安装到 ThinkPad 计算机之前，请将硬盘驱动器保存在它的静电防护包中。如果必须放下硬盘驱动器，则需先将静电防护包放置到平坦、装有垫子的表面上，然后将硬盘驱动器组件面朝上放置到静电防护包上。
- 小心操作硬盘驱动器。跌落或震动硬盘驱动器会损坏驱动器外壳内的组件。
- 限制您的移动。移动会造成静电累积。
- 请勿使硬盘驱动器遭受物理震动。
- 拿住边缘操作硬盘驱动器。
- 请勿触摸驱动器上暴露在外的组件。
- 请勿对驱动器外盖施加压力。

#### 注意：

驱动器十分敏感。不正确的操作会导致硬盘的损坏和硬盘上数据的永久丢失。在卸下硬盘驱动器前，对硬盘上所有信息做一个备份副本，然后再关闭计算机。切勿在系统正运行、处于待机方式或休眠方式时卸下硬盘驱动器。

---

### 更换硬盘驱动器

仅在升级或维修硬盘驱动器情况下更换它。硬盘驱动器的接口和托架的设计并不适合频繁的更换或驱动器交换。

**注：**取决于 ThinkPad 计算机型号，以下过程可能有所变化。有关更多详细的说明，请参考您的系统文档。

要更换硬盘驱动器，请完成以下过程：

1. 关闭 ThinkPad 计算机。
2. 从计算机上断开交流电源适配器及所有电缆的连接。
3. 关闭显示器并把计算机翻转。
4. 卸下电池。
5. 卸下固定硬盘驱动器的螺钉。
6. 通过从计算机中取出外盖来卸下硬盘驱动器。
7. 卸下硬盘驱动器的外盖。
8. 打开新的硬盘驱动器的包装。

**注意**

在打开硬盘驱动器的包装之前，请务必阅读第 1-17 页的『操作硬盘驱动器』。

9. 把外盖连接到新的硬盘驱动器上。
10. 把硬盘驱动器和它的外盖插入硬盘驱动器托架；然后牢固地安装它们。请确保硬盘驱动器上的标签面向计算机的顶端。
11. 重新安装螺钉。

**注：**您可以用安全螺钉更换原来的螺钉以防止轻易卸下硬盘驱动器。装运的组件中可能不包含安全螺钉。然而，您可访问 [www.nabsnet.com](http://www.nabsnet.com)，直接从 NABS 购买螺钉。

12. 重新安装电池。
13. 把交流电源适配器及电缆连接到计算机。



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## 關於 ThinkPad 硬碟機

本章節提供處理和更換 ThinkPad 硬碟機。

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### 處理硬碟機

要保護您的硬碟機，請詳讀下列預防措施：

- 將硬碟機保存在其靜電保護袋中，直到準備好要安裝您的 ThinkPad 電腦時才拿出。如果要放置硬碟機，請將靜電保護袋放在平面、有襯墊的表面，然後將硬碟機以元件面朝上的方式，放在袋子上。
- 請小心處理硬碟機。掉落或振動硬碟機會損壞硬碟機機槽內部的元件。
- 盡量不要移動。移動會造成靜電的產生。
- 請勿讓硬碟機遭受實體衝擊。
- 處理硬碟機時請以邊緣開始。
- 請不要觸碰任何硬碟機外曝的元件。
- 請不要在硬碟機外殼施壓。

#### 請注意：

硬碟機非常敏感。不正確的處理會導致損壞以及硬碟資料的永久遺失。當取出硬碟機之前，請先對硬碟上所有的資料做一備份，然後關閉電腦。決不要在系統正在執行時、在待命模式下或休眠模式中取出硬碟。

---

### 更換硬碟機

僅在需要升級或是維修時才更換硬碟機。接頭和硬碟機機槽不是設計成可以經常更換或是磁碟交換。

**註：**下列程序可能會因為您 ThinkPad 電腦的型號而有所不同。如需其他詳細說明，請參照系統說明文件。

要更換硬碟機，請完成下列程序：

1. 關閉 ThinkPad 電腦。
2. 從電腦上拔除 AC 整流器及所有的接線。
3. 關閉顯示器並將電腦反轉。
4. 取下電池。
5. 移除鎖住硬碟機的螺絲。
6. 將外殼拉出電腦來取出硬碟機。
7. 移開硬碟機的外殼。
8. 打開新的硬碟機包裝。

**請注意**

在打開硬碟機包裝之前，請確定您已閱讀 第 1-1 頁的『處理硬碟機』。

9. 將新的硬碟機裝上外殼
10. 插入硬碟機和其外殼至硬碟機機槽；然後緊密的安裝它們。請確定硬碟機上的標籤是面朝電腦的頂端。
11. 重新鎖緊螺絲。

**註：** 您可以用安全螺絲來更換螺絲，以防止硬碟機輕易地被取出。安全螺絲可能不會與電腦一起出貨。不過，您可以在 [www.nabsnet.com](http://www.nabsnet.com) 直接向 NABS 購買螺絲。

12. 重新安裝電池。
13. 連接 AC 整流器和接線至電腦。

---

## ThinkPad ハードディスクについて

ここでは、ご使用の ThinkPad ハードディスクの取り扱いおよび交換方法について説明します。

---

### ハードディスクの取り扱い方法

ハードディスク保護のため、以下の注意を順守してください。

- ThinkPad にドライブを取り付ける準備ができるまで、ドライブは帯電防止バッグに入れておきます。ドライブを下に置く必要がある場合は、平らなパッドを敷いた表面に帯電防止バッグを置き、その上に上向きに置いてください。
- ドライブは注意して取り扱ってください。ドライブを落としたり、ぶつけたりとすると、ドライブの中の部品が損傷するおそれがあります。
- 移動は最小限にします。移動により静電気が蓄積されることがあります。
- ドライブに物理的な衝撃を与えないでください。
- ドライブの端を持って取り扱います。
- 露出した部品に触れないでください。
- カバーに圧力をかけないでください。

#### 重要:

このドライブは、慎重に取り扱ってください。取り扱いを誤ると、重大な損傷やハードディスク内のデータの損失の原因となります。ハードディスクを取り外す前に、ハードディスク内のすべての情報のバックアップ・コピーを作成し、その後にコンピューターの電源をオフにします。システムの作動中やスタンバイ・モード中、あるいはハイバネーション・モード中には、ハードディスクを絶対に取り外さないでください。

---

### ハードディスクの交換方法

ハードディスクの交換は、アップグレードまたは修理が必要な場合のみ行ってください。ハードディスクのコネクターおよびベイは、頻繁な変更やスワッピング用には設計されていません。

**注:** 以下の手順は ThinkPad のモデルにより異なることがあります。詳細な手順はご使用のシステムの文書を参照してください。

ハードディスクの交換は、以下の手順を完了してください。

1. ThinkPad の電源をオフにします。
2. AC アダプターとすべてのケーブルを外します。

3. ディスプレイを閉じてから本体を裏返しにします。
4. バッテリーを取り外します。
5. ハードディスクを固定しているねじを取り外します。
6. 本体からカバー・ケースと共にハードディスクを取り外します。
7. ハードディスクのカバー・ケースを取り外します。
8. 包装を解いて新しいハードディスクを取り出します。

**重要**

ハードディスクの包装を解く前に、必ず 1-21 ページの『ハードディスクの取り扱い方法』をお読みください。

9. 新しいハードディスクにカバーを取り付けます。
10. ハードディスクとカバーをハードディスクのベイに挿入し、その後しっかりと取り付けます。ハードディスクのラベルが、必ず ThinkPad の上面に来るようにします。
11. ねじを取り付け直します。

**注:** ハードディスクが簡単に外れないように、ねじを保護ねじに取り替えることができます。保護ねじは同梱物に含まれていないことがあります。ねじは [www.nabsnet.com](http://www.nabsnet.com) (英語のサイトです) の NABS で直接お求めになれます。

12. バッテリーを再度取り付けます。
13. AC アダプターとケーブルを本体に接続します。

---

## Appendix A. Warranty information

This section contains the warranty period for your product, information about obtaining warranty service and support, and the IBM Statement of Limited Warranty.

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### Warranty period

Contact your place of purchase for warranty service information.

**Machine:** ThinkPad Hard Disk Drive

Warranty period	Service delivery method
Parts: 1 year, labor: 1 year	CCE (customer exchange)

For information on European Union legal rights under applicable national legislation governing the sale of consumer goods, see Appendix B, "European Union warranty information", on page B-1.

---

### Service and support

The following information describes the technical support that is available for your product, during the warranty period or throughout the life of the product. Refer to your IBM Statement of Limited Warranty for a full explanation of IBM warranty terms.

### Warranty information on the World Wide Web

The IBM Machine Warranties Web site at [http://www.ibm.com/servers/support/machine\\_warranties/](http://www.ibm.com/servers/support/machine_warranties/) contains a worldwide overview of the IBM Limited Warranty for IBM Machines, a glossary of terms used in the Statement of Limited Warranty, Frequently Asked Questions (FAQ), and links to Product Support Web pages. The IBM Statement of Limited Warranty is available from this Web site in 29 languages in Portable Document Format (PDF).

### Online technical support

Online technical support is available during the life of your product through the Personal Computing Support Web site at <http://www.ibm.com/pc/support/>.

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.

## Telephone technical support

Installation and configuration support through the IBM 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.

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

- Option name
- Option number
- Proof of purchase
- Computer manufacturer, model, serial number (if IBM), and manual
- Exact wording of the error message (if any)
- Description of the problem
- 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.

For the support telephone number and support hours by country, refer to the following table. If the number for your country or region is not listed, contact your IBM reseller or IBM marketing representative. Response time may vary depending on the number and nature of the calls received.

Support 24 hours a day, 7 days a week	
Canada (Toronto only)	416-383-3344
Canada (all other)	1-800-565-3344
U.S.A. and Puerto Rico	1-800-772-2227
All other countries and regions	Go to <a href="http://www.ibm.com/pc/support/">http://www.ibm.com/pc/support/</a> , and click <b>Support Phone List</b> .

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## IBM Statement of Limited Warranty Z125-4753-06 8/2000

### Part 1 - General Terms

This Statement of Limited Warranty includes Part 1 - General Terms and Part 2 - Country-unique Terms. The terms of Part 2 replace or modify those of Part 1. The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you 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. The term "Machine" does not include any software programs, whether pre-loaded with the Machine, installed subsequently or otherwise. Unless IBM specifies otherwise, the following warranties apply only in the country where you acquire the Machine. Nothing in this Statement of Limited Warranty affects any statutory rights of consumers that cannot be waived or limited by contract. If you have any questions, contact IBM or your reseller.

**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 ("Specifications"). The warranty period for a Machine is a specified, fixed period commencing on its Date of Installation. The date on your sales receipt is the Date of Installation unless IBM or your reseller informs you otherwise.

If a Machine does not function as warranted during the warranty period, and IBM or your reseller are unable to either 1) make it do so or 2) replace it with one that is at least functionally equivalent, you may return it to your place of purchase and your money will be refunded.

**Extent of Warranty:** The warranty does not cover the repair or exchange of a Machine resulting from misuse, accident, modification, unsuitable physical or operating environment, improper maintenance by you, or failure caused by a product for which IBM is not responsible. The warranty is voided by removal or alteration of Machine or parts identification labels.

**THESE WARRANTIES ARE YOUR EXCLUSIVE WARRANTIES AND REPLACE ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF EXPRESS OR IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO YOU. IN THAT EVENT, SUCH WARRANTIES ARE LIMITED IN DURATION TO THE WARRANTY PERIOD. NO WARRANTIES APPLY AFTER THAT PERIOD.**

**Items Not Covered by Warranty:** IBM does not warrant uninterrupted or error-free operation of a Machine. Any technical or other support provided for a Machine under warranty, such as assistance via telephone with “how-to” questions and those regarding Machine set-up and installation, will be provided **WITHOUT WARRANTIES OF ANY KIND.**

**Warranty Service:** To obtain warranty service for a Machine, contact IBM or your reseller. If you do not register your Machine with IBM, you may be required to present proof of purchase.

During the warranty period, IBM or your reseller, if approved by IBM to provide warranty service, provides without charge certain types of repair and exchange service to keep Machines in, or restore them to, conformance with their Specifications. IBM or your reseller will inform you of the available types of service for a Machine based on its country of installation. At its discretion, IBM or your reseller will 1) either repair or exchange the failing Machine and 2) provide the service either at your location or a service center. IBM or your reseller will also manage and install selected engineering changes that apply to the Machine.

Some parts of IBM Machines are designated as Customer Replaceable Units (called “CRUs”), e.g., keyboards, memory, or hard disk drives. IBM ships CRUs to you for replacement by you. You must return all defective CRUs to IBM within 30 days of your receipt of the replacement CRU. You are responsible for downloading designated Machine Code and Licensed Internal Code updates from an IBM Internet Web site or from other electronic media, and following the instructions that IBM provides.

When warranty 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. Many features, conversions, or upgrades involve the removal of parts and their return to IBM. A part that replaces a removed part will assume the warranty service status of the removed part.

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

1. ensure that the Machine is free of any legal obligations or restrictions that prevent its exchange;



2. obtain authorization from the owner to have IBM or your reseller service a Machine that you do not own; and
3. where applicable, before service is provided:
  - a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provides;
  - b. secure all programs, data, and funds contained in a Machine;
  - c. provide IBM or your reseller with sufficient, free, and safe access to your facilities to permit them to fulfill their obligations; and
  - d. 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.

Neither IBM nor your reseller is responsible for any of your confidential, proprietary or personal information contained in a Machine which you return to IBM or your reseller for any reason. You should remove all such information from the Machine prior to its return.

**Limitation of Liability:** Circumstances may arise where, because of a default on IBM's part or other liability, you are entitled to recover damages from IBM. In each such instance, regardless of the basis on which you are entitled to claim damages from IBM (including fundamental breach, negligence, misrepresentation, or other contract or tort claim), except for any liability that cannot be waived or limited by applicable laws, IBM is liable for no more than

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, up to the charges (if recurring, 12 months' charges apply) for the Machine that is subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code.

This limit also applies to IBM's suppliers and your reseller. It is the maximum for which IBM, its suppliers, and your reseller are collectively responsible.

**UNDER NO CIRCUMSTANCES IS IBM LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN THOSE UNDER THE FIRST ITEM LISTED ABOVE); 2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES, LOST PROFITS OR LOST SAVINGS, EVEN IF IBM, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

## Governing Law

**Governing Law:** Both you and IBM consent to the application of the laws of the country in which you acquired the Machine to govern, interpret, and enforce all of your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

## Part 2 - Country-unique Terms

### AMERICAS

#### BRAZIL

**Governing Law:** *The following is added after the first sentence:*

Any litigation arising from this Agreement will be settled exclusively by the court of Rio de Janeiro.

#### NORTH AMERICA

**Warranty Service:** *The following is added to this Section:*

To obtain warranty service from IBM in Canada or the United States, call 1-800-IBM-SERV (426-7378).

#### CANADA

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws in the Province of Ontario.

#### UNITED STATES

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York.

### ASIA PACIFIC

#### AUSTRALIA

**The IBM Warranty for Machines:** *The following paragraph is added to this Section:*

The warranties specified in this Section are in addition to any rights you may have under the Trade Practices Act 1974 or other similar legislation and are only limited to the extent permitted by the applicable legislation.

**Limitation of Liability:** *The following is added to this Section:*

Where IBM is in breach of a condition or warranty implied by the Trade Practices Act 1974 or other similar legislation, IBM's liability is limited to the repair or replacement of the goods or the supply of equivalent goods. Where that condition or warranty relates to right to sell, quiet possession or clear title, or the goods are of a kind ordinarily acquired for personal, domestic or household use or consumption, then none of the limitations in this paragraph apply.

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State or Territory.

## **CAMBODIA, LAOS, AND VIETNAM**

**Governing Law:** *The following replaces "laws of the country in which you acquired the Machine" in the first sentence:*

laws of the State of New York.

*The following is added to this Section:*

Disputes and differences arising out of or in connection with this Agreement shall be finally settled by arbitration which shall be held in Singapore in accordance with the rules of the International Chamber of Commerce (ICC). The arbitrator or arbitrators designated in conformity with those rules shall have the power to rule on their own competence and on the validity of the Agreement to submit to arbitration. The arbitration award shall be final and binding for the parties without appeal and the arbitral award shall be in writing and set forth the findings of fact and the conclusions of law.

All proceedings shall be conducted, including all documents presented in such proceedings, in the English language. The number of arbitrators shall be three, with each side to the dispute being entitled to appoint one arbitrator.

The two arbitrators appointed by the parties shall appoint a third arbitrator before proceeding upon the reference. The third arbitrator shall act as chairman of the proceedings. Vacancies in the post of chairman shall be filled by the president of the ICC. Other vacancies shall be filled by the respective nominating party. Proceedings shall continue from the stage they were at when the vacancy occurred.

If one of the parties refuses or otherwise fails to appoint an arbitrator within 30 days of the date the other party appoints its, the first appointed arbitrator shall be the sole arbitrator, provided that the arbitrator was validly and properly appointed.

The English language version of this Agreement prevails over any other language version.

## HONG KONG AND MACAU

**Governing Law:** *The following replaces “laws of the country in which you acquired the Machine” in the first sentence:*

laws of Hong Kong Special Administrative Region.

## INDIA

**Limitation of Liability:** *The following replaces items 1 and 2 of this Section:*

1. liability for bodily injury (including death) or damage to real property and tangible personal property will be limited to that caused by IBM’s negligence;
2. as to any other actual damage arising in any situation involving nonperformance by IBM pursuant to, or in any way related to the subject of this Statement of Limited Warranty, IBM’s liability will be limited to the charge paid by you for the individual Machine that is the subject of the claim.

## JAPAN

**Governing Law:** *The following sentence is added to this Section:*

Any doubts concerning this Agreement will be initially resolved between us in good faith and in accordance with the principle of mutual trust.

## NEW ZEALAND

**The IBM Warranty for Machines:** *The following paragraph is added to this Section:*

The warranties specified in this Section are in addition to any rights you may have under the Consumer Guarantees Act 1993 or other legislation which cannot be excluded or limited. The Consumer Guarantees Act 1993 will not apply in respect of any goods which IBM provides, if you require the goods for the purposes of a business as defined in that Act.

**Limitation of Liability:** *The following is added to this Section:*

Where Machines are not acquired for the purposes of a business as defined in the Consumer Guarantees Act 1993, the limitations in this Section are subject to the limitations in that Act.

## PEOPLE’S REPUBLIC OF CHINA (PRC)

**Governing Law:** *The following replaces this Section:*

Both you and IBM consent to the application of the laws of the State of New York (except when local law requires otherwise) to govern, interpret, and

enforce all your and IBM's rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Agreement, without regard to conflict of law principles.

Any disputes arising from or in connection with this Agreement will first be resolved by friendly negotiations, failing which either of us has the right to submit the dispute to the China International Economic and Trade Arbitration Commission in Beijing, the PRC, for arbitration in accordance with its arbitration rules in force at the time. The arbitration tribunal will consist of three arbitrators. The language to be used therein will be English and Chinese. An arbitral award will be final and binding on all the parties, and will be enforceable under the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (1958).

The arbitration fee will be borne by the losing party unless otherwise determined by the arbitral award.

During the course of arbitration, this Agreement will continue to be performed except for the part which the parties are disputing and which is undergoing arbitration.

#### **EUROPE, MIDDLE EAST, AFRICA (EMEA)**

##### ***THE FOLLOWING TERMS APPLY TO ALL EMEA COUNTRIES:***

The terms of this Statement of Limited Warranty apply to Machines purchased from IBM or an IBM reseller.

**Warranty Service:** If you purchase an IBM Machine in Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland or United Kingdom, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM. If you purchase an IBM Personal Computer Machine in Albania, Armenia, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Georgia, Hungary, Kazakhstan, Kirghizia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia (FYROM), Moldova, Poland, Romania, Russia, Slovak Republic, Slovenia, or Ukraine, you may obtain warranty service for that Machine in any of those countries from either (1) an IBM reseller approved to perform warranty service or (2) from IBM.

If you purchase an IBM Machine in a Middle Eastern or African country, you may obtain warranty service for that Machine from the IBM entity within the country of purchase, if that IBM entity provides warranty service in that country, or from an IBM reseller, approved by IBM to perform warranty service on that Machine in that country. Warranty service in Africa is available within

50 kilometers of an IBM authorized service provider. You are responsible for transportation costs for Machines located outside 50 kilometers of an IBM authorized service provider.

**Governing Law:** The applicable laws that govern, interpret and enforce rights, duties, and obligations of each of us arising from, or relating in any manner to, the subject matter of this Statement, without regard to conflict of laws principles, as well as Country-unique terms and competent court for this Statement are those of the country in which the warranty service is being provided, except that in 1) Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Hungary, Former Yugoslav Republic of Macedonia, Romania, Slovakia, Slovenia, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan, the laws of Austria apply; 2) Estonia, Latvia, and Lithuania, the laws of Finland apply; 3) Algeria, Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chad, Congo, Djibouti, Democratic Republic of Congo, Equatorial Guinea, France, Gabon, Gambia, Guinea, Guinea-Bissau, Ivory Coast, Lebanon, Mali, Mauritania, Morocco, Niger, Senegal, Togo, and Tunisia, this Agreement will be construed and the legal relations between the parties will be determined in accordance with the French laws and all disputes arising out of this Agreement or related to its violation or execution, including summary proceedings, will be settled exclusively by the Commercial Court of Paris; 4) Angola, Bahrain, Botswana, Burundi, Egypt, Eritrea, Ethiopia, Ghana, Jordan, Kenya, Kuwait, Liberia, Malawi, Malta, Mozambique, Nigeria, Oman, Pakistan, Qatar, Rwanda, Sao Tome, Saudi Arabia, Sierra Leone, Somalia, Tanzania, Uganda, United Arab Emirates, United Kingdom, West Bank/Gaza, Yemen, Zambia, and Zimbabwe, this Agreement will be governed by English Law and disputes relating to it will be submitted to the exclusive jurisdiction of the English courts; and 5) in Greece, Israel, Italy, Portugal, and Spain any legal claim arising out of this Statement will be brought before, and finally settled by, the competent court of Athens, Tel Aviv, Milan, Lisbon, and Madrid, respectively.

**THE FOLLOWING TERMS APPLY TO THE COUNTRY SPECIFIED:**

**AUSTRIA AND GERMANY**

**The IBM Warranty for Machines:** *The following replaces the first sentence of the first paragraph of this Section:*

The warranty for an IBM Machine covers the functionality of the Machine for its normal use and the Machine's conformity to its Specifications.

*The following paragraphs are added to this Section:*

The minimum warranty period for Machines is six months. In case IBM or your reseller is unable to repair an IBM Machine, you can alternatively ask for

a partial refund as far as justified by the reduced value of the unrepaired Machine or ask for a cancellation of the respective agreement for such Machine and get your money refunded.

**Extent of Warranty:** *The second paragraph does not apply.*

**Warranty Service:** *The following is added to this Section:*

During the warranty period, transportation for delivery of the failing Machine to IBM will be at IBM's expense.

**Limitation of Liability:** *The following paragraph is added to this Section:*

The limitations and exclusions specified in the Statement of Limited Warranty will not apply to damages caused by IBM with fraud or gross negligence and for express warranty.

*The following sentence is added to the end of item 2:*

IBM's liability under this item is limited to the violation of essential contractual terms in cases of ordinary negligence.

## EGYPT

**Limitation of Liability:** *The following replaces item 2 in this Section:*

as to any other actual direct damages, IBM's liability will be limited to the total amount you paid for the Machine that is the subject of the claim. For purposes of this item, the term "Machine" includes Machine Code and Licensed Internal Code.

*Applicability of suppliers and resellers (unchanged).*

## FRANCE

**Limitation of Liability:** *The following replaces the second sentence of the first paragraph of this Section:*

In such instances, regardless of the basis on which you are entitled to claim damages from IBM, IBM is liable for no more than: *(items 1 and 2 unchanged).*

## IRELAND

**Extent of Warranty:** *The following is added to this Section:*

Except as expressly provided in these terms and conditions, all statutory conditions, including all warranties implied, but without prejudice to the generality of the foregoing all warranties implied by the Sale of Goods Act 1893 or the Sale of Goods and Supply of Services Act 1980 are hereby excluded.

**Limitation of Liability:** *The following replaces items one and two of the first paragraph of this Section:*

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence; and
2. the amount of any other actual direct damages, up to 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim.

*Applicability of suppliers and resellers (unchanged).*

*The following paragraph is added at the end of this Section:*

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.

## ITALY

**Limitation of Liability:** *The following replaces the second sentence in the first paragraph:*

In each such instance unless otherwise provided by mandatory law, IBM is liable for no more than:

1. *(unchanged)*
2. as to any other actual damage arising in all situations involving nonperformance by IBM pursuant to, or in any way related to the subject matter of this Statement of Warranty, IBM's liability, will be limited to the total amount you paid for the Machine that is the subject of the claim.

*Applicability of suppliers and resellers (unchanged).*

*The following replaces the third paragraph of this Section:*

Unless otherwise provided by mandatory law, IBM and your reseller are not liable for any of the following: *(items 1 and 2 unchanged)* 3) indirect damages, even if IBM or your reseller is informed of their possibility.

## SOUTH AFRICA, NAMIBIA, BOTSWANA, LESOTHO AND SWAZILAND

**Limitation of Liability:** *The following is added to this Section:*

IBM's entire liability to you for actual damages arising in all situations involving nonperformance by IBM in respect of the subject matter of this Statement of Warranty will be limited to the charge paid by you for the individual Machine that is the subject of your claim from IBM.

## UNITED KINGDOM

**Limitation of Liability:** *The following replaces items 1 and 2 of the first paragraph of this Section:*

1. death or personal injury or physical damage to your real property solely caused by IBM's negligence;



2. the amount of any other actual direct damages or loss, up to 125 percent of the charges (if recurring, the 12 months' charges apply) for the Machine that is the subject of the claim or which otherwise gives rise to the claim;

*The following item is added to this paragraph:*

3. breach of IBM's obligations implied by Section 12 of the Sale of Goods Act 1979 or Section 2 of the Supply of Goods and Services Act 1982.

*Applicability of suppliers and resellers (unchanged).*

*The following is added to the end of this Section:*

IBM's entire liability and your sole remedy, whether in contract or in tort, in respect of any default shall be limited to damages.



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## Appendix B. European Union warranty information

Consumers in the European Union have legal rights under applicable national legislation governing the sale of consumer goods. This legislation may apply to you if you purchased this product as a consumer (that is, as a natural person, and for personal use which is not related to your trade, business or profession). To obtain warranty service under this legislation, you will need to present the proof of purchase to IBM, together with an indication that you are a consumer.

Dans l'Union européenne, les consommateurs disposent de droits selon la loi en vigueur nationale régissant la vente de biens de consommation. Cette loi peut vous être applicable si vous avez acheté ce produit en tant que consommateur (c'est-à-dire, en tant que personne physique, et pour un usage privé qui n'a aucun rapport avec votre commerce, votre métier ou profession). Pour bénéficier du service prévu par la Garantie dans le cadre de cette loi, vous devez présenter la preuve d'achat correspondante à IBM, en lui indiquant que vous êtes un consommateur.

I consumatori dell'Unione Europea sono tutelati dalla legislazione nazionale che regola la vendita dei beni al consumatore. Tale legislazione può essere applicata se il prodotto è stato acquistato da un consumatore (vale a dire, una persona fisica e per uso personale non legato al commercio, all'azienda o alla professione svolta). Per ottenere il servizio di garanzia con questa legislazione, occorre presentare una prova di acquisto alla IBM, insieme con l'indicazione che il richiedente è un consumatore.

In der Europäischen Union haben die Verbraucher nach der geltenden nationalen Gesetzgebung Rechte hinsichtlich des Verbrauchsgüterkaufs. Diese Gesetzgebung kann für Sie gelten, wenn Sie dieses Produkt als Privatkunde erworben haben (d. h. als natürliche Person und für den persönlichen Gebrauch, der nicht mit Ihrem Gewerbe, Ihrem Unternehmen oder Ihrer beruflichen Tätigkeit zusammenhängt). Um unter dieser Gesetzgebung Garantieservice zu erhalten, müssen Sie IBM den Kaufnachweis zusammen mit einem Nachweis dafür, dass Sie Privatkunde sind, vorlegen.

Los consumidores de la Unión europea tienen derechos legales de acuerdo con la legislación nacional aplicable que regula la venta de bienes de consumo. Esta legislación puede aplicarse en su caso si ha adquirido este producto como un consumidor (es decir, como una persona natural y para uso personal que no esté relacionado con su comercio, negocio o profesión). Para obtener servicio de garantía de acuerdo con esta legislación, tendrá que presentar el justificante de compra a IBM, junto con información indicando que es un consumidor.

Na União Europeia, os consumidores gozam de direitos legais nos termos da legislação nacional aplicável que rege a venda de bens de consumo. Esta legislação poderá ser-lhe aplicável caso tenha adquirido este produto na qualidade de consumidor (ou seja, um indivíduo, para utilização pessoal, não relacionada com a sua actividade profissional, comercial ou negócio). Para obter serviço de garantia nos termos desta legislação, terá que apresentar a prova de compra à IBM, em conjunto com a indicação de que adquiriu o produto na qualidade de consumidor.

Forbrugere i EU har via gældende national lovgivning visse rettigheder i forbindelse med salg af forbrugsvarer. Denne lovgivning gælder muligvis for dig, hvis du har anskaffet dette produkt som forbruger, dvs. som fysisk person og til personlig brug og ikke i forbindelse med dit fag, din forretning eller din profession. For at opnå garantiservice i henhold til denne lovgivning skal du vise kvitteringen for købet af produktet til IBM og angive, at du er forbruger.

Klanten in de Europese Unie hebben wettelijke rechten onder toepasselijke landelijke wetgeving die van toepassing is op de verkoop van consumptiegoederen. Deze wetgeving is mogelijk op u van toepassing als u dit product als consument hebt aangeschaft (dat is als natuurlijk persoon en voor persoonlijk gebruik dat niet in verband staat tot uw handel, zaken of beroep). Voor het verkrijgen van garantiservice onder deze wetgeving moet u het bewijs van aankoop kunnen tonen aan IBM, samen met een indicatie dat u een consument bent.

EU-maissa kuluttajilla on kulutustavaroiden myyntiä koskevan paikallisen lainsäädännön mukaiset oikeudet. Tämä lainsäädäntö saattaa koskea teitä, jos olette hankkinut tämän tuotteen kuluttajana (luonnollisena henkilönä kaupankäyntiin, liiketoimintaan tai ammatinharjoittamiseen liittymättömä henkilökohtaiseen käyttöön). Täyttäkää tässä tapauksessa alla olevat tie ja toimittakaa kortti IBM:lle rekisteröintiä varten. IBM käyttää tietoja varmistaakseen, että teille kuuluvat kuluttajan oikeudet toteutuvat.

Konsumenter inom EU har lagliga rättigheter i enlighet med tillämplig lagstiftning i varje land, avseende försäljning av konsumentvaror. Denna lagstiftning kan gälla dig, om du har köpt varan i egenskap av konsument (med konsument avses en fysisk person som köper en vara för personligt bruk, ej relaterat till personens yrkesmässiga verksamhet). Om du vill ha garantiservice i enlighet med denna lagstiftning, måste du visa upp ett inköpsbevis för IBM, tillsammans med något som tyder på att du är

konsument.

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## Appendix C. Notices

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Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

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HelpCenter  
ThinkPad

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## Electronic emission notices

**Machine:** ThinkPad Hard Disk 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



Tested To Comply  
 With FCC Standards

FOR HOME OR OFFICE USE

### **Industry Canada Class B emission compliance statement**

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

### **Avis de conformité a 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)**

Zulassungsbcheinigung laut dem Deutschen Gesetz über die elektromagnetische Verträglichkeit von Geräten (EMVG) vom 30. August 1995 (bzw. der EMC EG Richtlinie 89/336):

Dieses Gerät ist berechtigt in Übereinstimmung mit dem Deutschen EMVG das EG-Konformitätszeichen - CE - zu führen. Verantwortlich für die Konformitätserklärung nach Paragraph 5 des EMVG ist die:

IBM Deutschland Informationssysteme GmbH, 70548 Stuttgart.

Informationen in Hinsicht EMVG Paragraph 3 Abs. (2) 2:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024:1998 und EN 55022:1998 Klasse B.

EN 55022 Hinweis:

“Wird dieses Gerät in einer industriellen Umgebung betrieben (wie in EN 55022:B festgelegt), dann kann es dabei eventuell gestört werden. In solch einem FA11 ist der Abstand bzw. die Abschirmung zu der industriellen Störquelle zu vergrößern.”

Anmerkung:

Um die Einhaltung des EMVG sicherzustellen sind die Geräte, wie in den IBM Handbüchern angegeben, zu installieren und zu betreiben.

### **European Union - emission directive**

This product is in conformity with the protection requirements of EU Council Directive 89/336/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 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.

### **Union Européenne - Directive Conformité électromagnétique**

Ce produit est conforme aux exigences de protection de la Directive 89/336/EEC du Conseil de l'UE sur le rapprochement des lois des États membres en matière de compatibilité électromagnétique.

IBM ne peut accepter aucune responsabilité pour le manquement aux exigences de protection résultant d'une modification non recommandée du produit, y compris l'installation de cartes autres que les cartes IBM.

Ce produit a été testé et il satisfait les conditions de l'équipement informatique de Classe B en vertu de Standard européen EN 55022. Les conditions pour l'équipement de Classe B ont été définies en fonction d'un contexte résidentiel ordinaire afin de fournir une protection raisonnable contre l'interférence d'appareils de communication autorisés.

### **Unione Europea - Directiva 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 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 della 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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Japanese statement of compliance for products less than or equal to 20 A per phase

## 高調波ガイドライン適合品





Part Number: 09N4250

Printed in U.S.A.

(1P) P/N: 09N4250

